The Alabama Nature Heitage Program

Home > Data> Search Rare Species List> Search by County

Serach results for county Mobile:

Rare, Threatened, & Endangered Species & Natural Communities Documented in Mobile County, Alabama

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	State Priority1
Amphibians						
Ambystoma bishopi	Reticulated Flatwoods Salamander4	G2G3	S1	LT	SP	P1
Ambystoma tigrinum	Tiger Salamander	G5	S3			
Amphiuma means	Two-toed Amphiuma	G5	S3			
Amphiuma pholeter	One-toed Amphiuma	G3	S1		SP	P2
Desmognathus auriculatus	Southern Dusky Salamander	G5	S2		SP	P1
Rana heckscheri	River Frog5	G5	S1			
Rana sevosa	Mississippi Gopher Frog6	G1	SH	LE	SP	P1
Birds						
Ammodramus henslowii	Henslow's Sparrow	G4	S2N		SP	P1
Ammodramus leconteli	Le Conte's Sparrow	G4	S3N		SP	
Ammodramus maritimus	Seaside Sparrow	G4	S2		SP	P2
Ammodramus nelsoni	Nelson's Sparrow	G5	S3N		SP	P2
Anas fulvigula	Mottled Duck	G4	S2N,S3B		SP	
Asio flammeus	Short-eared Owl	G5	S2N		SP	P2
Athene cunicularia	Burrowing Owl	G4	S2N		SP	
Charadrius alexandrinus	Snowy Plover	G4	S1B,S2N		SP	P1
Charadrius melodus	Piping Plover	G3	S1N	LE, LT7	SP	P1
Charadrius wilsonia	Wilson's Plover	G5	S1		SP	P1
Circus cyaneus	Northern Harrier	G5	S3N		SP	P2
Cistothorus palustris	Marsh Wren	G5	S2B,S4N		SP	

Columbina passerina	Common Ground-dove	G5	S3		SP	
Coturnicops noveboracensis	Yellow Rail	G4	S2N		SP	P2
Crotophaga sulcirostris	Groove-billed Ani	G5	S2N		SP	
Egretta rufescens	Reddish Egret	G4	S1B,S3N		SP	P2
Elanoides forficatus	Swallow-tailed Kite	G5	S2		SP	P2
Eudocimus albus	White Ibis	G5	S2B,S3N		SP	
Gelochelidon nilotica	Gull-billed Tern	G5	S2B,S4N		SP	
Haematopus palliatus	American Oystercatcher	G5	S1		SP	P1
Hydroprogne caspia	Caspian Tern	G5	S2B,S4N		SP	
Ixobrychus exilis	Least Bittern	G5	S2N,S4B		SP	P2
Laterallus jamaicensis	Black Rail	G4	S2N		GB	P2
Mycteria americana	Wood Stork	G4	S2N	LE	SP	P2
Numenius americanus	Long-billed Curlew	G5	S2N		SP	
Passerina ciris	Painted Bunting	G5	S2B		SP	
Peucaea aestivalis	Bachman's Sparrow	G3	S3		SP	P2
Plegadis falcinellus	Glossy Ibis	G5	S1B,S3N		SP	
Porphyrio martinica	Purple Gallinule	G5	S3B		GB	
Rallus elegans	King Rail	G4	S2S3B,S4N	SC	GB	
Rallus longirostris	Clapper Rail	G5	S2	SC	GB	
Rynchops niger	Black Skimmer	G5	S2B,S4N		SP	
Scolopax minor	American Woodcock	G5	S3B,S5N		GB	P2
Sterna forsteri	Forster's Tern	G5	S1B,S5N		SP	
Sterna hirundo	Common Tern	G5	S1B,S4N		SP	
Sternula antillarum	Least Tern	G4	S2B,S4N		SP	
Thalasseus maximus	Royal Tern	G5	S2B, S5N		SP	
Thalasseus sandvicensis	Sandwich Tern	G5	S1B,S5N		SP	
Tringa semipalmata	Willet	G5	S2B,S5N		SP	
Tyrannus dominicensis	Gray Kingbird	G5	S2B		SP	
Tyrannus forficatus	Scissor-tailed Flycatcher	G5	S2		SP	
Crustaceans						
Cambarellus diminutus	Least Crayfish	G3	S3			P2
Cambarellus shufeldtii	Cajun Dwarf Crayfish	G5	S2			
Cambarus lesliei	Angular Dwarf Crayfish5	G3	S3			P2

Fallicambarus danielae	Speckled Burrowing Crayfish	G2	S1			P2
Fallicambarus oryktes	Flatwoods Digger5	G4	S1			P2
Procambarus bivittatus	Ribbon Crayfish5	G5	S3S4			
Procambarus clemmeri	Cockscomb Crayfish	G5	S2			
Procambarus evermanni	Panhandle Crayfish	G4	S3			
Procambarus leconteí	Mobile Crayfish	G3G4	S3			
Procambarus penni	Pearl Blackwater Crayfish5	G3	S2			
Procambarus shermani	Gulf Crayfish	G4	S2			
Fish						
Acipenser oxyrinchus desotoi	Gulf Sturgeon3	G3T2	S1	LT	SP	P2
Alosa alabamae	Alabama Shad5	G3	S2	SC8	SP	P2
Ammocrypta vivax	Scaly Sand Darter	G5	S1			
Atractosteus spatula	Alligator Gar	G3G4	S2		CNGF	
Cycleptus meridionalis	Southeastern Blue Sucker	G3G4	S3		CNGF	
Enneacanthus gloriosus	Bluespotted Sunfish	G5	S3		GF	
Etheostoma fusiforme	Swamp Darter	G5	S3			
Etheostoma lynceum	Brighteye Darter	G5	S1		SP	P1
Fundulus blaire	Western Starhead Topminnow	G4	S3			
Fundulus chrysotus	Golden Topminnow	G5	S3			
Fundulus cingulatus	Banded Topminnow	G4	S2			
Fundulus dispar	Starhead Topminnow	G4	S2			
Fundulus jenkinsi	Saltmarsh Topminnow	G3	S1	SC9		
Fundulus pulvereus	Bayou Killifish	G5	S2			
Heterandria formosa	Least Killish	G5	S3			
Hiodon tergisus	Mooneye	G5	S3S4			
Lucania parva	Rainwater Killifish	G5	S3			
Lythrurus roseipinnis	Cherryfin Shiner	G5	S2			
Notropis chalybaeus	Ironcolor Shiner5	G4	SH		SP	P1
Notropis maculatus	Taillight Shiner	G5	S3			
Notropis petersoni	Coastal Shiner	G5	S2			
Noturus mocturnus	Freckled Madtom	G5	S3		CNGF	
Perca flavescens	Yellow Perch	G5	S3		GF	

Poecilia latipinna	Sailfin Molly	G5	S2			
Polyodon spathula	Paddlefish	G4	S3		SP10	
Pteronotropis signipinnis	Flagfin Shiner	G5	S3			
Insects						
Brachycentrus chelatus	Caddisfly	G4	S1			
Ceraclea resurgens	Caddisfly	G5	S1			
Chimarra falculata	Caddisfly	G4	S1			
Hydroptila parastrepha	Caddisfly	G2G3	S1			
Hydroptila scheiringi	A Caddisfly	G1G2	S1			
Neotrichia mobilensis	Caddisfly	G1G2	S1S2			
Nyctiophylax morsei	Caddisfly	G2	S1			
Oxyethira anabola	Caddisfly	G4G5	S1			
Oxyethira sininsigne	Caddisfly	G3G4	S1			
Polycentropus clinei	A Caddisfly	G5	SNR			
Mammals						
Lasiurus intermedius	Northern Yellow Bat	G4G5	S1			P2
Trichechus manatus	West Indian Manatee	G2	S1	LE	SP	P1
Trichechus manatus	West Indian Manatee	G2G3	S1	LE	SP	P1
Ursus americanus	Black Bear	G5T2	S2		GANOS	P1
Mussels						
Glebula rotundata	Round Pearlshell	G4G5	S2		PS	
Ligumia subrostrata	Pondmussel	G5	S3		PS	
Natural Communities						
Aristida beyrichiana - Rhynchospora oligantha - Panicum nudicaule - (Eurybia eryngifolia) Herbaceous Vegetation	East Gulf Coastal Plain Seepage Bog (upper Terrace Type)	G2	S2			
Ceratiola ericoides - (Chrysoma pauciflosculosa) / Polygonella polygama / Cladonia leporina Shrubland	Coastal Rosemary - Woody-goldenrod Scrub	G2?	SNR			
Juncus roemerianus - Herbaceous Vegetation	Needlerush High Marsh	G5	S2S3			
Nyssa biflora/Ilex myrtifolia/Carex glaucescens -	East Gulf Coastal Plain Blackgum Dome Swamp	G2G3	SNR			

Eriocaulon compressum Forest			
Pinus palustris - (Pinus elliottii var. elliottii)/Ctenium aromaticum - Carphephorus pseudoliatris - (Sarracenia alata) Woodland	East Gulf Coastal Plain Wet Longleaf Pine Savanna	G3?	S2
Quercus laurifolia - Magnolia virginiana - Nyssa biflora / Chasmanthium ornithorhynchum Forest	East Gulf Coastal Plain Blackgum Bayhead Forest (clayey Type)	G2?	S2
Quercus virginiana - (Juniperus virginiana) - Zanthoxylum clava-herculis / Sideroxylon lanuginosum Woodland	Gulf Coast Shell Midden Woodland	G2G3	SNR
Sarcocornia perennis - (Batis maritima, Distichlis spicata) Dwarf-shrubland	Salt Flat (woody Glasswort Type)	G4	S1
Spartina alterniflora - Juncus roemerianus - Distichlis spicata Louisianian Zone Salt Tidal Herbaceous Vegetation	Gulf Coast Cordgrass Salt Marsh	G5	S2S3
Spartina patens - Schizachyrium maritimum - Solidago sempervirens Herbaceous Vegetation	East Gulf Coastal Plain Cordgrass Dune Grassland	G3?	SNR
Spartina patens - Schoenoplectus (americanus, pungens) - (Distichlis spicata) Herbaceous Vegetation	Saltmeadow Cordgrass - (chairmaker's Bulrush, Threesquare) - (saltgrass) Herbaceous Vegetation	G4?	SNR
Spartina spartinae - Sporobolus virginicus Tidal Herbaceous	Gulf Coast Irregularly Flooded Tidal Marsh	G4G5	SNR

Vegetation						
Taxodium ascendens - Ilex myrtifolia - Hypericum myrtifolium - Lobelia floridana - Polygala cymosa Woodland	Pond-cypress Dome Swamp	G3	S1			
Reptiles						
Apalone ferox	Florida Softshell	G5	S2		RT	
Caretta caretta	Loggerhead Sea Turtle	G3	S1	LT	SP	P1
Chelonia mydas	Green Sea Turtle11	G3	S1	LE, LT12	SP	P1
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3			P2
Deirochelys reticularia	Chicken Turtle	G5	S3			
Dermochelys coriacea	Leatherback Sea Turtle13	G2	SNA	LE	SP	P1
Drymarchon couperi	Eastern Indigo Snake	G3	S1	LT	SP	P1, possibly extirpated
Farancia erytrogramma	Rainbow Snake	G4	S3		SP	P2
Gopherus polyphemus	Gopher Tortoise	G3	S3	LT14	SP	P2
Graptemys nigrinoda delticola	Delta Map Turtle2	G3T2Q	S2		SP	
Graptemys pulchra	Alabama Map Turtle	G4	S3		SP	
Lampropeltis calligaster rhombomaculata	Mole Kingsnake	G5T5	S3			
Lampropeltis getula getula	Eastern Kingsnake	G5T5	S4		SP	P2
Lampropeltis getula holbrooki	Speckled Kingsnake	G5T5	S4		SP	P2
Lepidochelys kempii	Kemp's Ridley Sea Turtle15	G1	S1	LE	SP	P1
Macrochelys temminckii	Alligator Snapping Turtle	G3G4	S3		SP	P2
Malaclemys terrapin pileata	Mississippi Diamondback Terrapin	G4T3Q	S2		SP	P1
Masticophis flagellum	Coachwhip	G5	S3		SP	
Micrurus fulvius	Eastern Coral Snake	G5	S3		SP	P2

Nerodia clarkii clarkii	Gulf Salt Marsh Snake	G4T4	S2		SP	
Nerodia cyclopion	Green Water Snake	G5	S1S2			
Ophisaurus mimicus	Mimic Glass Lizard16	G3	S2		SP	P2
Pituophis melanoleucus lodingi	Black Pine Snake	G4T2T3	S2	C	SP	P1
Plestiodon anthracinus	Coal Skink17	G5	S3		SP	P2
Plestiodon inexpectatus	Southeastern Five-lined Skink	G5	S3		SP	P2
Pseudemys alabamensis	Alabama Redbelly Turtle	G1	S1	LE	SP	P1
Rhadinaea flavilata	Pine Woods Snake	G4	S2			
Sternotherus carinatus	Razorback Musk Turtle	G5	S1			
Snails						
Ferrissia mcneili	Hood Ancylid2	G2G3	S2			
Vascular Plants						
Agalinis aphylla	Leafless False-foxglove	G3G4	S2			
Agalinis filicaulis	Thin-stemmed False-foxglove	G3G4	S2			
Agalinis linifolia	Flax-leaf False-foxglove	G4?	S2			
Agrimonia incisa	Incised Groovebur	G3	S2			
Andropogon virginicus var. glaucus	Beardgrass	G5T4T5	S2			
Botrychium jenmanii	Alabama Grapefern	G3G4	S1			
Calopogon barbatus	Bearded Grass-pink	G4?	S1			
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S1			
Canna flaccida	Bandana-of-the-everglades	G4?	S1			
Carex striata	Walter's Sedge	G4G5	S1			
Chasmanthium nitidum	Shiny Spikegrass	G3	S1			
Cirsium lecontei	Le Conte's Thistle	G2G3	S1			
Cladium mariscoides	Twig Rush	G5	S1			
Coreopsis gladiata	Southeastern Tickseed	G4G5	S2			
Coreopsis nudata	Georgia Tickseed	G3?	S1			
Eleocharis olivacea	Capitate Spikerush	G5	S1			
Eleocharis robbinsii	Robbins' Spikerush	G4G5	S1			
Eleocharis rostellata	Beaked Spikerush	G5	S1			

Epidendrum magnoliae	Green-fly Orchid	G4	S2
Eriocaulon texense	Texas Pipewort	G4	S2
Eurybia chapmanii	Chapman Aster	G2G3	SH
Gordonia lasianthus	Loblolly Bay	G5	S1
Helianthemum arenicola	Coastal-sand Frostweed	G3	S1
Hibiscus coccineus	Brilliant Hibiscus	G4?	S1
Hypericum reductum	Atlantic St. John's-wort	G5	S2
Ilex amelanchier	Serviceberry Holly	G4	S2
Juncus gymnocarpus	Naked-fruited Rush	G4	S2
Lachnocaulon digynum	Pineland Bogbutton	G3	S2
Lepuropetalon spathulatum	Southern Lepuropetalon5	G4G5	SH
Lilaeopsis carolinensis	Carolina Lilaeopsis	G3G5	S1
Lindera subcoriacea	Bog Spicebush	G2G3	S1
Linum macrocarpum	Flax	G2	S1
Ludwigia arcuata	Pond Seedbox	G4G5	SH
Ludwigia spathulata	Spathulate Seedbox	G2	S1S2
Lycium carolinianum	Christmas Berry	G4	S1S2
Macranthera flammea	Flame Flower	G3	S2
Myriophyllum laxum	Loose Water-milfoil	G3	S2
Orbexllum simplex	Single-stemmed Scurf-pea	G4G5	SH
Panicum nudicaule	Naked-stemmed Panic Grass	G3Q	S2
Peltandra sagittifolia	Spoon-flower	G3G4	S2
Pieris phillyreifolia	Climbing Fetter-bush	G3	S2
Pinguicula planifolia	Chapman's Butterwort	G3?	S1S2
Platanthera blephariglottis var. conspicua	Large White Fringed Orchid	G4G5T3T4	S1S2
Platanthera integra	Yellow Fringeless Orchid	G3G4	S2
Platanthera nivea	Snowy Orchis	G5	S2
Polygala crenata	Crenate Milkwort	G4?	S1
Pteroglossaspis ecristata	Crestless Eulophia	G2	S1
Ptilimnium costatum	Eastern Bishop-weed	G4	S1
Quercus similis	Bottomland-post Oak	G4	S1

Rhynchospora crinipes	Hairy-peduncled Beakrush	G2	S1	
Rhynchospora macra	Southern White Beak Rush	G3	S1	
Rhynchospora stenophylla	Chapman Beakrush	G4	S2	
Rhynchospora tracyi	Tracy's Beak Rush	G4	S1	
Ruellia noctiflora	Night-flowering Wild-petunia	G2	S1	
Sageretia minutiflora	Tiny-leaved Buckthorn	G4	S1	
Sarracenia leucophylla	Whitetop Pitcher-plant	G3	S3	
Sarracenia rubra ssp. wherryi	Wherry's Sweet Pitcher-plant	G4T3	S3	
Schizachyrium maritimum	Gulf Bluestem	G3G4Q	S1	
Schizachyrium scoparium ssp. divergens	Eastern Little Bluestem	G5T5	SH	
Schwalbea americana	Chaffseed5	G2G3	S1	LE
Spiranthes longilabris	Giant Spiral Ladies'-tresses	G3	S1	
Utricularia floridana	Florida Bladderwort	G3G5	S1S2	
Xyris chapmanii	Chapman's Yellow-eyed Grass	G3	S1	
Xyris drummondii	Drummond's Yellow-eyed Grass	G3	S3	
Xyris scabrifolia	Harper's Yellow-eyed Grass	G3	S1S2	

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1 Priority as identified in the State Wildlife Action Plan and its list of Species of Greatest Conservation Concern (for more information on SWAP, see http://www.outdooralabama.com /research-mgmt/swcs/).
2 Alabama endemic.
3 No occurrence record in ALNHP database but the US Fish & Wildlife Service (http://www.fws.gov /daphne/es/specieslst.html#Mobile) lists this species as occurring in Mobile County.
4 Historic occurrence, not documented in Alabama since 1981.
5 Historic occurrence.
6 Historic occurrence, possibly extirpated in Alabama.
7 Listed by USFWS as Endangered in Great Lakes watersheds of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin; Listed as Threatened elsewhere, including Alabama.
8 Listed as a species of concern by the National Marine Fisheries Service (Federal Register

69(73):19975-19979, available at).
9 Listed as a species of concern by the National Marine Fisheries Service (Federal Register 69(73):19975-19979, available at http://www.nmfs.noaa.gov/pr/pdfs/fr/fr64-19975.pdf)
10 Polydon spathula protected by Regulations 220-2-.94, page 63, and 220-2-.43, page 62, of the Alabama Regulations for 2007-2008 on Game, Fish, and Fur Bearing Animals.
11 Possible occurrence
12 Listed as Threatened throughout most of its range, including Alabama, except in Florida and Mexico where it is listed as Endangered.
13 Occasional visitor but not known to nest in state.
14 Listed by USFWS as Threatened west of the Mobile and Tombigbee rivers in Alabama (Choctaw, Mobile, and Washington counties), Mississippi, and Louisiana. Eastern populations were elevated to a candidate for protection under the federal Endangered Species Act 27 July 2011.
15 Possible Occurrence.
16 Historic occurrence
17 Historic Occurrence

USFWS Designated Critical Habitat in Mobile County, Alabama

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	State Priority
Birds						
Charadrius melodus	Piping Plover	G3	S1N	LE, LT	SP	P1

Location: Coastal islands.

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Last Updated: May 18, 2011

MISSISSIPPI
DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

Sam Polles, Ph.D.
Executive Director

February 10, 2012

Marc Hess
SWCA Environmental Consultants
7255 Langtry Street
Suite 100
Houston, TX 77040

Re: Potential Utility Line
Hurley, Big Point, Pascagoula North, Grand Bay SW Quads **R# 8807**
Jackson County, Mississippi

To Whom It May Concern,

In response to your request for information dated February 1, 2012, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our concerns and recommendations below.

Scientific Name	Common Name	Federal Status	State Rank	State Status	County	Quad Name	Alt Quad Name
Rana sevosa	Dark Gopher Frog	LE	S1	LE	Jackson	BIG POINT	HURLEY SW
Lobelia boykinii	Boykin's Lobelia		S1		Jackson	BIG POINT	HURLEY SW
Rhynchospora tracyi	Tracy's Beakrush		S1		Jackson	BIG POINT	HURLEY SW
Stylisma aquatica	Water Southern Morning-glory		S1		Jackson	BIG POINT	HURLEY SW
Pieris phillyreifolia	Climbing Fetter-bush		S1		Jackson	BIG POINT	HURLEY SW
Dichanthelium wrightianum	Wright's Witchgrass		S1S2		Jackson	BIG POINT	HURLEY SW
Chamaecyparis thyoides	Atlantic White Cedar		S2		Jackson	BIG POINT	HURLEY SW
Hypericum myrtifolium	Myrtle-leaved St. Johnswort		S2		Jackson	BIG POINT	HURLEY SW
Gopherus polyphemus	Gopher Tortoise	PS:LT	S2	LE	Jackson	BIG POINT	HURLEY SW
Wet slash (longleaf) pine savanna/forest/flatwoods	Longleaf/slash Pine - Swamp Titi - Giant Cane		S2		Jackson	BIG POINT	HURLEY SW
Grady pond swamp forest	Bald/pond Cypress - Sweetbay Magnolia - Swamp Blackgum		S2		Jackson	BIG POINT	HURLEY SW
Notropis chalybaeus	Ironcolor Shiner		S2	LE	Jackson	BIG POINT	HURLEY SW
Pinguicula planifolia	Chapman's Butterwort		S2		Jackson	BIG POINT	HURLEY SW

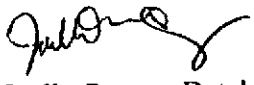
Rhododendron austrinum	Florida Flame Azalea		S2S3		Jackson	BIG POINT	HURLEY SW
Pseudemys alabamensis	Alabama Redbelly Turtle	LE	S1	LE	Jackson	GRAND BAY SW	
Lycium carolinianum	Carolina Wolf-berry		S1?		Jackson	GRAND BAY SW	
Sageretia minutiflora	Tiny-leaved Buckthorn		S2		Jackson	GRAND BAY SW	
Juniperus virginiana var. silicicola	Southern Red Cedar		S2		Jackson	GRAND BAY SW	
Stylisma aquatica	Water Southern Morning-glory		S1		Jackson	HURLEY	HURLEY NW
Sarracenia purpurea var. burkii	Rose Pitcherplant		S1		Jackson	HURLEY	HURLEY NW
Quaking bog	Bog Spicebush - Coastal Sedge - Sphagnum		S1		George	HURLEY	HURLEY NW
Cambarellus diminutus	Least Crayfish		S2		Jackson	HURLEY	HURLEY NW
Wet slash (longleaf) pine savanna/forest/flatwoods	Longleaf/slash Pine - Swamp Titi - Giant Cane		S2		Jackson	HURLEY	HURLEY NW
Chamaecyparis thyoides	Atlantic White Cedar		S2		Jackson	HURLEY	HURLEY NW
Fallicambarus burrisi	Burris' Burrowing Crawfish		S2		Jackson	HURLEY	HURLEY NW
Carex verrucosa	Wartysedge		S2		Jackson	HURLEY	HURLEY NW
Pitcher plant flat/bog/wet savanna	Yellow Trumpets/parrot Pitcherplant - Beaksedge - Stoke's Aster - Goldencrest - Flat Pipewort		S2		Jackson	HURLEY	HURLEY NW
Grady pond swamp forest	Bald/pond Cypress - Sweetbay Magnolia - Swamp Blackgum		S2		Jackson	HURLEY	HURLEY NW
Gopherus polyphemus	Gopher Tortoise	PS:LT	S2	LE	Jackson	HURLEY	HURLEY NW
Platanthera blephariglottis	Large White Fringed Orchid		S2		George	HURLEY	HURLEY NW
Lachnocaulon digynum	Pineland Bogbutton		S2		George	HURLEY	HURLEY NW
Xyris drummondii	Drummond's Yellow-eyed Grass		S2		George	HURLEY	HURLEY NW
Pinguicula planifolia	Chapman's Butterwort		S2		George	HURLEY	HURLEY NW
Lindera subcoriacea	Bog Spice Bush		S2		George	HURLEY	HURLEY NW
Carex exilis	Coast Sedge		S2		George	HURLEY	HURLEY NW
Panicum nudicaule	Naked-stemmed Panic Grass		S2		George	HURLEY	HURLEY NW
Thryomanes bewickii	Bewick's Wren		S2B,S3N	LE	Jackson	HURLEY	HURLEY NW
Calopogon barbatus	Bearded Grass-pink		S2S3		Jackson	HURLEY	HURLEY NW
Rhododendron austrinum	Florida Flame Azalea		S2S3		Jackson	HURLEY	HURLEY NW
Sarracenia leucophylla	Crimson Pitcher-plant		S2S3		Jackson	HURLEY	HURLEY NW
Dalea carnea var. gracilis	Pine Barrens Prairie Clover		S2S3		George	HURLEY	HURLEY NW
Melanthium virginicum	Virginia Bunchflower		S2S3		George	HURLEY	HURLEY NW
Rhynchospora stenophylla	Chapman Beakrush		S2S3		George	HURLEY	HURLEY NW
Eriocaulon texense	Texas Pipewort		S2S3		George	HURLEY	HURLEY NW
Eustoma exaltatum	Tall Prairie-gentain		S1		Jackson	PASCAGOULA NORTH	
Pseudemys alabamensis	Alabama Redbelly Turtle	LE	S1	LE	Jackson	PASCAGOULA NORTH	
Chamaecyparis thyoides	Atlantic White Cedar		S2		Jackson	PASCAGOULA NORTH	
Haliaeetus leucocephalus	Bald Eagle	PS	S2B,S2N		Jackson	PASCAGOULA NORTH	

Sabatia bartramii	Bartram's Rose-gentian		S2		Jackson	PASCAGOULA NORTH	
Andropogon capillipes	Chalky Bluestem		S1S2		Jackson	PASCAGOULA NORTH	
Agalinis aphylla	Coastal Plain False-foxglove		S2S3		Jackson	PASCAGOULA NORTH	
Polygala crenata	Crenate Milkwort		S1S2		Jackson	PASCAGOULA NORTH	
Ilex cassine	Dahoon Holly		S2		Jackson	PASCAGOULA NORTH	
Andropogon gyrans var. stenophyllus	Elliott's Bluestem (Var.2)		S1S2		Jackson	PASCAGOULA NORTH	
Spiranthes longilabris	Giant Spiral Ladies'-tresses		S2		Jackson	PASCAGOULA NORTH	
Epidendrum conopseum	Green-fly Orchid		S2		Jackson	PASCAGOULA NORTH	
Nerodia clarkii clarkii	Gulf Salt Marsh Snake		S2?		Jackson	PASCAGOULA NORTH	
Acipenser oxyrinchus desotoi	Gulf Sturgeon	LT	S1	LE	Jackson	PASCAGOULA NORTH	
Malaclemys terrapin pileata	Mississippi Diamondback Terrapin		S2		Jackson	PASCAGOULA NORTH	
Hypericum myrtifolium	Myrtle-leaved St. Johnswort		S2		Jackson	PASCAGOULA NORTH	
Dalea carnea var. gracilis	Pine Barrens Prairie Clover		S2S3		Jackson	PASCAGOULA NORTH	
Scleria reticularis	Reticulated Nutrush		S1		Jackson	PASCAGOULA NORTH	
Juniperus virginiana var. silicicola	Southern Red Cedar		S2		Jackson	PASCAGOULA NORTH	
Shell midden shrub/woodland	Southern Redcedar - False Buckthorn		S1		Jackson	PASCAGOULA NORTH	
Elanoides forficatus	Swallow-tailed Kite		S2B		Jackson	PASCAGOULA NORTH	
Agalinis filicaulis	Thin Stemmed False-foxglove		S2?		Jackson	PASCAGOULA NORTH	
Sageretia minutiflora	Tiny-leaved Buckthorn		S2		Jackson	PASCAGOULA NORTH	
Cladium mariscoides	Twig Rush		S1		Jackson	PASCAGOULA NORTH	

Portions of this project site may be located in suitable habitat for the federally threatened and state endangered Gopher Tortoise (*Gopherus polyphemus*). There are also documented occurrences of gopher tortoises within the proposed project site. Therefore, we recommend that gopher tortoise burrow surveys be conducted within twenty feet of the project site (particularly in well-drained sandy substrates). If tortoise burrows are found, the following individuals should be contacted: Kathy Shelton (krshelton64@gmail.com) with the MS Dept. of Wildlife, Fisheries, & Parks and David Felder (601-321-1131) of the U.S. Fish and Wildlife Service.

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to this area. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,



Joelle Carney, Database Manager/Biologist
Mississippi Natural Heritage Program
(601) 576-6000

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.

Appendix C

Bald Eagle Survey Map

Moxey, Michael B SAM

From: Moxey, Michael B SAM
Sent: Friday, October 26, 2012 10:20 AM
To: 'Tom Sankey'
Subject: RE: Action IDs SAM-2012-01165-MBM and SAM-2012-00885-MBM (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Thanks for providing the letter authorizing you to serve as the applicant's representative. It appears the project issues regarding gopher tortoises is being resolved. It would be helpful if you could provide a table of contents for the CD's provided to help us evaluate and confirm all the information required to have a complete PCN is provided. Once I can confirm the wetland delineation information is provided (location maps, GPS coordinates, worksheets) I will work with you for identifying locations to visit to verify the delineations (once identified, the wetland lines should be flagged).

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg <http://www.sam.usace.army.mil/RD/reg> , and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

-----Original Message-----
From: Tom Sankey [mailto:tsankey@swca.com]
Sent: Thursday, October 25, 2012 5:24 PM
To: Moxey, Michael B SAM
Subject: Action IDs SAM-2012-01165-MBM and SAM-2012-00885-MBM

Mike:

Here is a letter from Plains formally authorizing me as their designated agent on the subject Action IDs. We dropped the original of this letter in today's mail.

We are sending you a response to your letters of September 19, 2012 by close of business tomorrow.

Thanks,
Tom

-----Original Message-----
From: ricoh@swca.com [mailto:ricoh@swca.com]
Sent: Thursday, October 25, 2012 2:24 PM
To: Eric Munscher; Tom Sankey

Subject: Message from "RNP0026731DD45F"

This E-mail was sent from "RNP0026731DD45F" (Aficio MP C5501A).

Scan Date: 10.25.2012 15:24:20 (-0400)
Queries to: ricoh@swca.com

Classification: UNCLASSIFIED
Caveats: NONE

Moxey, Michael B SAM

From: Tom Sankey [tsankey@swca.com]
Sent: Friday, October 26, 2012 4:41 PM
To: Moxey, Michael B SAM
Cc: DGore@paalp.com; SRLee@paalp.com
Subject: Plains 41-mile pipeline, SAM-2012-01165-MBM, (UNCLASSIFIED) MISSISSIPPI PORTION
Attachments: 10242012 SHP to USACE Mobile.zip.zip.zip

Mike:

As you, Eric Munscher and I discussed yesterday, this email provides our response to your September 19, 2012 letter regarding the subject Action ID for Plains Southcap, LLC's Pipeline Project in Jackson County, MS. It is our understanding that, based on this response, you will keep this Action ID open and active, for now. We, in turn, will be feeding you with the requested information as it becomes available.

Each of your requests a. through h. is listed below, followed by our response:

a. Please provide a permit application with the original signature by the applicant, or a signed letter from the applicant authorizing you to serve as their authorized agent. Please provide a hard copy of the permit application materials for the portion of the project located in Mississippi. You do not have to provide the wetland delineation documents that have already been provided electronically.

We sent you on October 25, 2012, via email, a signed letter on Plains All America Pipeline letterhead authorizing us as their agent. The hard copy of that letter was mailed to you, as well. With regards to hard copies of the permit application materials, we will deliver those materials to you next week.

b. Please identify if the Federal Energy Regulatory Commission is associated as the lead federal agency for your project.

This is not a FERC project.

c. Please provide the GPS points for the boundaries of the wetlands and stream polygons within the project footprint, and data points for the sampling points reflected on each of the wetlands impact maps.

The GIS shapefile with all data points and wetland boundary points is attached to this email.

d. Please provide a scope of work as to how you will cross each of the wetland and waterbody crossings (i.e., horizontal directional drilling, or trench and backfill, etc.). If open-trenching methods would be utilized for any stream or waterbody crossings, then a survey of pre-construction contours should be submitted for each affected crossing.

Table 2 on pages 8-14 of the Wetland Delineation Report (Attachment B of the PCN) shows wetlands that will be avoided by horizontal directional drill (HDD). All other crossings will be by conventional trenching

methods. Table 4 on page 16 of the Wetland Delineation Report (Attachment B of the PCN) shows waterbodies that will be avoided by HDD. All other waterbody crossings will be by conventional trenching methods. Willbros Engineers, the consulting engineer for this project, completed a topographic survey of the proposed centerline. We will forward that to you upon receipt from our client. This will provide you with pre-construction contours in the vicinity of jurisdictional areas.

e. Please provide details regarding how the applicant will mitigate for the loss of wetland functions as a result of the project in Mississippi.

We are crunching the numbers using your mitigation worksheet and will forward that to you, as soon as we have completed our analysis.

f. Please provide an assessment of threatened and endangered species in wetlands and streams (federal permit area) within the project area (coordinate with the U.S. Fish and Wildlife Service and the Mississippi Department of Wildlife, Fisheries and Parks, and provide concurrence letters if any present).

We supplied you threatened and endangered species information in Attachment D of the PCN. Mississippi Natural Diversity Database (NDD) data lists were attached as well as a NDD data map showing known occurrences. The only federally listed or candidate species issues we came up with in the Mississippi portion of the project were gopher tortoise, bald eagle and Gulf sturgeon. These species and their potential habitat are all being avoided by the project construction. Willbros Engineers is in the process of designing HDDs to totally avoid all active gopher tortoise burrows within 30 feet of the proposed construction corridor. We have been in informal consultation with the USFWS and will obtain concurrence letters from the USFWS and the MDWFP, as requested.

g. Please provide information relating to cultural resource locations within the wetlands or streams (federal permit area) along your proposed project (coordinate with Mississippi Department of Archives and History, and provide concurrence letter).

We submitted the archaeological report as Attachment E of the PCN and will submit to the Mississippi State Historical Preservation Office for concurrence, as requested.

h. I will be sending you copies of the electronic spreadsheets for documenting the waters of the U.S., wetlands impacts, and wetland mitigation spreadsheets for the wetlands and streams impacts in Mississippi.

Wetland and water impacts are identified throughout the PCN and Wetland Delineation Report within the CDs that we submitted to you. Nevertheless, we will re-organize the data as you requested using the electronic spreadsheets that you provided, and forward to you.

We appreciate your assistance with this project and will forward these items to you as soon as possible.

Regards,

Tom

R. Thomas Sankey, PWS, CSE
Senior Project Manager / Senior Ecologist SWCA Environmental Consultants
7255 Langtry, Suite 100
Houston, Texas 77040

713-934-9900 (office)
713-252-9291 (mobile)
713-934-9906 (fax)

-----Original Message-----
From: Moxey, Michael B SAM [mailto:michael.b.moxey@usace.army.mil]
Sent: Tuesday, October 23, 2012 10:42 AM
To: Moxey, Michael B SAM; Tom Sankey
Subject: RE: Plains 41-mile pipeline, SAM-2012-00885-MBM, SAM-2012-01165-MBM (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
We provided you a letter dated September 19, 2012, stating your application was incomplete. In our letter we identified items that were needed to consider your application complete, including a permit application with original signatures by the applicant and the agent. We requested the information within 30 days otherwise we would close your file for administrative purposes until the information could be provided. We have not received any response to our letter. Please provide the requested information by October 26, 2012, otherwise we will close the file for administrative purposes, and will reopen the project once received.

Thanks,
Michael Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg <http://www.sam.usace.army.mil/RD/reg> , and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

-----Original Message-----
From: Moxey, Michael B SAM
Sent: Thursday, September 20, 2012 12:06 PM

To: Moxey, Michael B SAM; 'tsankey@swca.com'
Cc: Bruce_Porter@fws.gov
Subject: RE: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
It is my understanding that your pipeline project has avoided most of the gopher tortoise issues except for a 6. So that we can determine how to evaluate the six burrows in relation to our federal permit area, could you provide site plans that show the location of the burrows in relation to the location of waters of the U.S. in the corridor in this vicinity.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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-----Original Message-----
From: Moxey, Michael B SAM
Sent: Monday, September 17, 2012 4:27 PM
To: Moxey, Michael B SAM; 'tsankey@swca.com'
Subject: RE: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
You can also provide an original signed letter from the applicant designating your company as a duly authorized agent, similar to what I on the standard permit application.

Thanks,
Mike Moxey
USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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-----Original Message-----
From: Moxey, Michael B SAM
Sent: Monday, September 17, 2012 3:36 PM
To: 'tsankey@swca.com'
Subject: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
Thanks you for submitting the CD's with the electronic version of your permit application. So that we may evaluate your project, please provide hard copies of the permit application that contains the original signatures.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

PLAINS ALL AMERICAN PIPELINE, L.P.

mobile
RD-I-S

October 8, 2012

Michael B. Moxey
Biologist, Inland Team Leader
Regulatory Division
U.S. Army Corps of Engineers – Mobile District
109 St. Joseph Street
Mobile, AL 36628-0001

Re: Pascagoula Pipeline Project
Pre-Construction Notice (MS and AL)
Action IDs SAM-2012-01165-MBM (MS) and SAM-2012-000885-MBM (AL)

Dear Mr. Moxey:

By this letter, Plains All American Pipeline, L.P. (Plains) provides notification that Mr. R. Thomas Sankey of SWCA Environmental Consultants (SWCA) will be functioning as Plains' authorized agent in the permitting of the referenced project. I would also appreciate being copied on all correspondence between SWCA and the USACE concerning this matter.

If you have any questions or concerns about this letter or any other matter related to the referenced project, please feel free to contact me at (713) 646-4419.

Best Regards,

Wm. Dean Gore, Jr., P.E.
Director, Environmental Project Development

Cc: Tom Sankey, SWCA - Houston
Chuck Fontenot, SWCA - Houston
Steve Lee, Plains - Houston

Moxey, Michael B SAM

From: Moxey, Michael B SAM
Sent: Wednesday, October 24, 2012 11:00 AM
To: Moxey, Michael B SAM; 'Eric Munscher'
Subject: RE: Spread sheet for U.S. Waterbodies (UNCLASSIFIED)
Attachments: Aquatic Resources.xlsx; Impacts.xlsx; Mitigation.xlsx; NWP.XLSX; Old_JD.XLSX

Classification: UNCLASSIFIED
Caveats: NONE

Eric,
I have also attached the data forms we use when downloading large numbers of waters of U.S. into our database. I remember seeing datasheets on the CD's you provided, however I am not sure if these were the ones provided?

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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-----Original Message-----
From: Moxey, Michael B SAM
Sent: Wednesday, October 24, 2012 10:55 AM
To: 'Eric Munscher'
Subject: RE: Spread sheet for U.S. Waterbodies (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Eric,
Attached are our spreadsheets we use for pipeline projects. You will note along the first column that we issue multiple nationwide 12 permits in our letter, based on single and complete project definition, and that we use the pipeline conversions ratios for mitigation in the right columns. I have attached the pipeline mitigation ratio worksheet also.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771

Fax: (251) 690-2660

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-----Original Message-----
From: Eric Munscher [mailto:emunscher@swca.com]
Sent: Wednesday, October 24, 2012 9:13 AM
To: Moxey, Michael B SAM
Subject: RE: Spread sheet for U.S. Waterbodies (UNCLASSIFIED)

Mr. Moxey,

Can you send me the mitigation spredsheets for wetland impacts.

Thanks and cheers,

EM

Eric C. Munscher, M.S.
Ecologist / Herpetologist
7255 Langtry, Suite 100
Houston, Texas 77040
Phone: 717-676-8497

Sound Science. Creative Solutions. ®
www.swca.com <http://www.swca.com/>
<http://www.swca.com/>

From: Moxey, Michael B SAM [mailto:michael.b.moxey@usace.army.mil]
Sent: Mon 8/27/2012 7:40 AM
To: Eric Munscher
Subject: RE: Spread sheet for U.S. Waterbodies (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Eric,
Using the definition in the Nationwide permits for "Single and Complete Project", long pipeline projects can usually be authorized by multiple nationwide permits (using one permit number). If any single component exceeds the 0.5 acre thresh hold and must go IP, then the whole project will go IP. Attached is the worksheet we attach to the permit if we can use multiple nationwide permits.

Thanks,
Mike

USACE, Regulatory Division
Team Leader, Inland South

109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
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-----Original Message-----
From: Eric Munscher [mailto:emunscher@swca.com]
Sent: Monday, August 27, 2012 9:22 AM
To: Moxey, Michael B SAM
Subject: Spread sheet for U.S. Waterbodys

Mr. Moxey,

During our July meeting concerning the Plains Southcap, LLC Pascagoula pipeline project you had mentioned that we need to use a spread sheet that describes waterbody information throughout the entire project line. Could you please send me this table so I can include it in our permit applications.

Thanks and cheers,

EM

Eric C. Munscher, M.S., ES3 (Scientist)

Herpetologist / Ecologist

Certified Gopher Tortoise Agent

Principal Investigator of the CFFTRG

SWCA Environmental Consultants

7255 Langtry Suite, 100

Houston, TX 77040

"And I can only believe, from somewhere deeper than any logic center of the brain, that a life of incomprehensible loneliness awaits a world where the wild things were, but are never to be again." William Stolzenburg. Where the Wild Things Were.

cid:3401782132 144728300

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Moxey, Michael B SAM

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Sent: Wednesday, October 24, 2012 10:55 AM
To: 'Eric Munscher'
Subject: RE: Spread sheet for U.S. Waterbodies (UNCLASSIFIED)
Attachments: Corps Pipeline data worksheet.xlsx; 2008 Pipeline Corridor Mitigation.pdf

Classification: UNCLASSIFIED
Caveats: NONE

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Thanks,
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Eric C. Munscher, M.S., ES3 (Scientist)

Herpetologist / Ecologist

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7255 Langtry Suite, 100

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"And I can only believe, from somewhere deeper than any logic center of the brain, that a life of incomprehensible loneliness awaits a world where the wild things were, but are never to be again." William Stolzenburg. Where the Wild Things Were.

cid:3401782132_144728300

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Table 1

NWP 12 Project No.	FGT Wetland/ Waterbody ID	Local Waterway	Jurisdictional Type (Wetland/ Stream)	Wetland/ Stream Type	Latitude (dd NAD83)	Longitude (dd NAD83)	PFO Wetlands to revert to PFO (0.25:1)	PFO Wetlands converted to PSS (0.5:1)	PFO Wetlands converted to PEM (1:1)	Total 0.25:1 Credits	Total 0.5:1 Credits	Total 1:1 Credits	Total Mitigation Credits
1	W1AMO016	Simmons Branch	Wetland	PFO/PEM	30.6249	-88.3603	0.19	n/a	n/a	0.05	n/a	n/a	0.05
1	S1AMO009	UT to Simmons Branch	Stream	RPW	30.6325	-88.3617	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NPR	W1AMO015	n/a	Wetland	PFO/PEM	30.6217	-88.3603	Isolated wetland - Not jurisdictional						
2	W1AMO014	UT to Miller Creek	Wetland	PEM	30.6168	-88.3589	No Forested Impacts						
2	W1AMO013	UT to Miller Creek	Wetland	PFO/PEM	30.6143	-88.3582	0.24	0.03	0.07	0.06	0.02	0.07	0.15
2	S1AMO008	Miller Creek	Stream	RPW	30.6056	-88.3564	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	S1AMO007	Miller Creek	Stream	RPW	30.6054	-88.3563	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NPR	W1AMO012	n/a	Wetland	PFO	30.5946	-88.3565	Wetland avoided - No impacts						
NPR	W1AMO011	Copeland Island Branch	Wetland	PFO	30.5854	-88.3561	Wetland avoided by use of HDD						
3	W1AMO010	UT to Bay Branch	Wetland	PFO/PEM	30.5794	-88.3563	0.52	0.07	0.14	0.13	0.04	0.14	0.31
3	W1AMO009	UT to Bay Branch	Wetland	PFO/PEM	30.5720	-88.3571	0.29	0.04	0.08	0.07	0.02	0.08	0.17
3	W1AMO007	UT to Bay Branch	Wetland	PFO	30.5614	-88.3570	0.04	0.00	0.01	0.01	0.00	0.01	0.02
NPR	S1AMO006	n/a	n/a	n/a	30.5646	-88.3573	Man made ditch - Not jurisdictional						
NPR	W1AMO008	UT to Bay Branch	Wetland	PFO/PEM	30.5611	-88.3574	Wetland avoided - No impacts						
4	W1AMO004	UT to Bell Branch	Wetland	PEM	30.5528	-88.3546	No Forested Impacts						
4	S1AMO004	UT to Bell Branch	Stream	RPW	30.5533	-88.3547	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	W1AMO003	Bell Branch	Wetland	PFO/PEM	30.5427	-88.3533	0.43	0.06	0.12	0.11	0.03	0.12	0.26
4	S1AMO003	Bell Branch	Stream	RPW	30.5427	-88.3533	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	W1AMO002	UT to Bell Branch	Wetland	PFO	30.5397	-88.3528	0.04	0.00	0.01	0.01	0.00	0.01	0.02
5	W1AMO001	Jackson Creek	Wetland	PFO/PEM	30.5334	-88.3517	1.17	0.17	0.33	0.29	0.09	0.33	0.71
5	S1AMO002	Jackson Creek	Stream	RPW	30.5334	-88.3517	n/a	n/a	n/a	n/a	n/a	n/a	n/a
5	S1AMO001	Jackson Creek	Stream	RPW	30.5334	-88.3517	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NPR	W1AMO006	UT to Jackson Creek	Wetland	PFO/PEM	30.5213	-88.3495	Wetland avoided by use of HDD						
NPR	W1AMO005	UT to Jackson Creek	Wetland	PFO/PEM	30.5195	-88.3493	Wetland avoided by use of HDD						
NPR	S1AMO005	UT to Jackson Creek	Stream	RPW	30.5195	-88.3493	Wetland avoided by use of HDD						
Grand Total							2.9	0.4	0.8	0.7	0.2	0.8	**1.7**

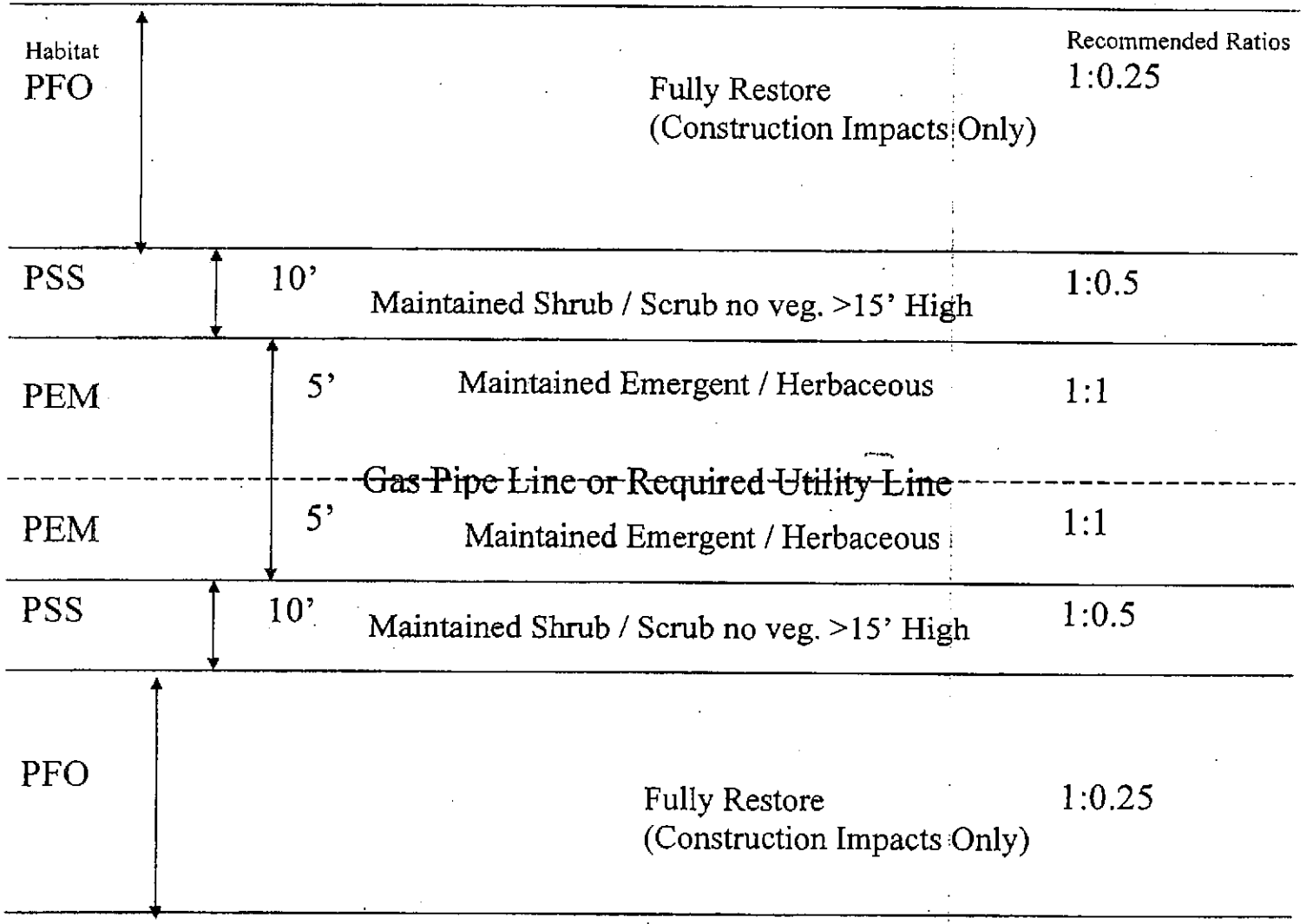
PFO - Palustine Forested Wetlands *PEM - Palustrine Emergent Wetlands*

NPR - No permit required *n/a - not applicable*

Table 1

RPW - relatively permanent water UT - unnamed tributary

Converted Wetland Habitat ROW for Typical Linear Project w/ Typical Recommendation for Compensation due to Vegetation Conversion



Note:
Palustrine forested (PFO)
Palustrine Shrub / Scrub
Palustrine Emergent / Herbaceous (PEM)

Note: Assuming original habitat was a Palustrine forested corridor.

Moxey, Michael B SAM

From: Moxey, Michael B SAM
Sent: Tuesday, October 23, 2012 10:42 AM
To: Moxey, Michael B SAM; tsankey@swca.com
Subject: RE: Plains 41-mile pipeline, SAM-2012-00885-MBM, SAM-2012-01165-MBM (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
We provided you a letter dated September 19, 2012, stating your application was incomplete. In our letter we identified items that were needed to consider your application complete, including a permit application with original signatures by the applicant and the agent. We requested the information within 30 days otherwise we would close your file for administrative purposes until the information could be provided. We have not received any response to our letter. Please provide the requested information by October 26, 2012, otherwise we will close the file for administrative purposes, and will reopen the project once received.

Thanks,
Michael Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg <http://www.sam.usace.army.mil/RD/reg> , and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

-----Original Message-----
From: Moxey, Michael B SAM
Sent: Thursday, September 20, 2012 12:06 PM
To: Moxey, Michael B SAM; 'tsankey@swca.com'
Cc: Bruce_Porter@fws.gov
Subject: RE: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
It is my understanding that your pipeline project has avoided most of the gopher tortoise issues except for a 6. So that we can determine how to evaluate the six burrows in relation to our federal permit area, could you provide site plans that show the location of the burrows in relation to the location of waters of the U.S. in the corridor in this vicinity.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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-----Original Message-----
From: Moxey, Michael B SAM
Sent: Monday, September 17, 2012 4:27 PM
To: Moxey, Michael B SAM; 'tsankey@swca.com'
Subject: RE: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
You can also provide an original signed letter from the applicant designating your company as a duly authorized agent, similar to what I on the standard permit application.

Thanks,
Mike Moxey
USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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-----Original Message-----
From: Moxey, Michael B SAM
Sent: Monday, September 17, 2012 3:36 PM
To: 'tsankey@swca.com'
Subject: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
Thanks you for submitting the CD's with the electronic version of your permit application. So that we may evaluate your project, please provide hard copies of the permit application that contains the original signatures.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

, Michael B SAM

Moxey, Michael B SAM
Thursday, September 20, 2012 1:52 PM
Bruce_Porter@fws.gov; 'tsankey@swca.com'
ject: FW: Pipeline projects and ESA (UNCLASSIFIED)
achments: Pipelines and ESA.pdf

.lassification: UNCLASSIFIED
Caveats: NONE

Attached are the Corps guidelines for addressing ESA/Section 7 limits for pipeline projects.

Thanks,
Mike

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg <http://www.sam.usace.army.mil/RD/reg> , and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

-----Original Message-----
From: Moxey, Michael B SAM
Sent: Thursday, September 20, 2012 1:16 PM
To: 'Bunkley, Bill'; Crosson, S. Brad SAM; 'Moxey, Michael B SAM'; 'Riley, Anthony W SAM'; Turney, Leslie E; Villarreal, Rudolph C SAM; Zettle, Sheri M SAM
Subject: FW: Pipeline projects and ESA (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Team,
Low and behold, I found the following guidance regarding expanding our federal permit area in regards to ESA in my REG II A manual. Seems like some significant criteria must be met before we should ever do this.

Mike

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/RD/reg <http://www.sam.usace.army.mil/RD/reg> , and please take a

Enclosure

the Corps usually would confine its ESA review to the permit area surrounding the river crossing. This permit area includes the jurisdictional reach of the Corps RHA authority (i.e., the area extending up to the ordinary high water mark of the river) and any uplands affected by the river crossing that are within a reasonable distance from the river. Within this permit area, in accordance with National Wildlife Federation v. Coleman, 529 F.2d 359 (5th Cir. 1976) (potential private development stemming from the completion of a 5.7 mile road section and interchange was considered an indirect effect that must be considered in ESA review of Federal project), the Corps considers the direct, indirect and cumulative effects of the river crossing on threatened or endangered species.

In three situations, however, the Corps will assess ESA effects beyond the immediate permit area. In the first situation, in accordance with Riverside Irrigation District v. Andrews, 758 F.2d 508 (10th Cir. 1985), (Corps considered indirect or secondary physical effects of a dam on critical habitat of the whooping crane many miles downstream from the permit area), the Corps will look outside the permit area for ESA effects that have a causal physical link to the activity authorized by the Corps pursuant to the RHA and/or the CWA. In doing so the Corps recognizes that there is a difference between: 1) the Corps de facto legal control over a project which cannot be built "but for" a Corps permit, and 2) the Corps legal responsibility to consider indirect and cumulative physical effects of the actions we permit. That is, when the Corps only has de facto legal or "but for" control over a linear project, the Corps typically will confine its ESA review to the permit area. Conversely, when the activity authorized by the Corps has a physical effect on threatened or endangered species outside the permit area, the Corps will look outside the permit area to evaluate those effects.

This distinction has been recognized in cases such as Winnebago Tribe of Nebraska v. Ray, 621 F.2d 269 (8th Cir.), cert. denied, 449 U.S. 836 (1980), and Save the Bay, Inc. v. United States Corps of Engineers, 610 F.2d 322, (5th Cir.), cert. denied, 449 U.S. 900 (1980). Although Winnebago and Save the Bay involved the application of the National Environmental Policy Act, the Corps believes that this analysis has validity in the context of the ESA with regard to linear projects.

As stated above, typically the Corps will not broaden its review to encompass ESA effects that are the product of the Corps de facto legal control over a linear project. The Corps does not believe that such "but for" control justifies the Corps broadening its jurisdiction to include indirect non-physical effects. By limiting its ESA review to the activity which the Corps permits, and to direct, indirect, and cumulative physical effects resulting from that authorized activity, the Corps can

pragmatically balance Federal interests in protecting the environment with the Corps mission of operating a manageable regulatory program. Although it might seem to be a noble undertaking for the Corps to expand its ESA review to include the entire length of a linear project, the Corps lacks the resources programmatically to conduct such far-reaching examinations. Furthermore, we believe that such extensive regulation would overstep the limits of the Corps regulatory authority.

The second situation in which the Corps will expand its ESA review beyond the permit area is when the FWS or an interested party informs the Corps that a linear project will affect critical habitat outside the permit area, and the Corps, through its control over the placement of a river crossing, can reasonably steer the route of the linear project around the critical habitat. That is, if the Corps can encourage or require the proponent of a linear project to utilize a practicable alternative location for the proposed river crossing site, and thereby lead an applicant to reroute its linear project to avoid the adverse effects on the critical habitat, then the Corps will do so when such a practicable alternative river crossing site is reasonably available.

It should be explicitly clear that by adopting this approach the Corps is not acknowledging any additional legal obligation under the ESA. The Corps is voluntarily taking this action solely in the interests of environmental protection. Furthermore, the Corps, by adopting this approach, is not obligating itself to identify critical habitat outside a permit area. Consequently, before the Corps will investigate whether this approach should be employed for a specific linear project, the FWS or an interested party must provide the Corps with credible information that an area of critical habitat is sufficiently near a river crossing site that it could practicably be protected by this approach. Moreover, it will be totally at the Corps discretion whether to pursue this approach based on such credible information.

In the third situation the Corps may actually enlarge the scope of its ESA review to include an entire linear project. This situation arises when, for instance, a linear project requires the Corps to issue such a significant number of permits, or permits authorizing such a large portion of the project's length, that by granting the permits the Corps essentially would be authorizing the entire project or segments thereof.

When none of these three situations are present, the Corps will confine its ESA review to the permit area. To contend that the Corps should examine the entire length of a linear project for adverse effects to threatened or endangered species, even when the Corps only means of preventing such effects would be to deny the permit, one must rely on the "but for" test. One would

have to reason that, since the linear project could not be constructed "but for" a Corps permit, than an indirect effect of the Corps permit is the possible destruction of critical habitat. Although this test may have validity in certain contexts, it lacks such validity with regard to linear projects. Drawn to its extreme, under this approach, the Corps would be required to take legal responsibility for all environmental effects along a 1000 mile pipeline even if the Corps had actual regulatory responsibility only for one river crossing permit. Not only would such a review cause the Corps to overstep the reasonable limits of its regulatory authority, but it simply would not be practicable.

Despite this, the Corps can help ensure that threatened and endangered species are better protected by assisting the FWS in exercising its authority under section 9 of the ESA. The Corps Regulatory Branch is currently considering guidance concerning ESA reviews to instruct our field offices to include in both individual permits and in general permits for linear projects a special condition requiring applicants to supply the FWS with information concerning the intended route of the linear project. This will apprise the FWS of all linear projects that involve Corps permits. In those cases in which the Corps restricts its review to the permit area alone, the FWS would be free to exercise its authority under section 9 of the ESA to protect critical habitat and prevent takings of threatened and endangered species. As I am sure you are fully aware, the FWS, under Palila v. Hawaii Department of Land and Natural Resources, 639 F.2d 495 (9th Cir. 1981) (degradation of critical habitat alone can be considered a taking), potentially could cause a linear project to be redirected around critical habitat.

We believe that our approach to defining the area of consideration for endangered species impacts is consistent with the ESA, and with the Corps policy on scope of analysis incorporated in the Corps 1988 National Environmental Policy Act (NEPA) compliance regulations. If you wish to discuss this matter further, I would be pleased to meet with you.

Sincerely,

for Arthur E. Williams
Major General, U.S. Army
Director of Civil Works

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, MOBILE
CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

September 19, 2012

Inland Branch
Regulatory Division

SUBJECT: Department of the Army Application Number SAM-2012-01165-MBM, Plains Southcap L.L.C. Pipeline, Jackson County, Mississippi.

Plains Southcap L.L.C.
Attention: Mr. Thomas Sankey
7255 Longtry, Suite 100
Houston, Texas 77040

Dear Mr. Sankey:

Please reference your application for a Department of the Army (DA) permit received in this office September 13, 2012, to install a 41-mile crude oil pipeline from the Plains Ten-Mile Crude Oil Facility in Mobile County, Alabama, to Pascagoula, Mississippi. This project has been divided in to two actions, one for the pipeline located in Alabama, and the portion of the pipeline located in Mississippi. This permit action is evaluating the pipeline that is located in Mississippi. Your application has been assigned file number SAM-2012-01165-MBM, which should be referred to in all future correspondence with this office.

Following an initial review of the application, it appears that there will be no permanent filling activities involving "waters of the U.S." in Mississippi. If this is correct, your project may qualify for a Nationwide Permit 12 verification for Utility Line Activities. To further evaluate your proposed project, this office requests the following information:

a. Please provide a permit application with original signature by the applicant, or a signed letter from the applicant authorizing you to serve as their authorized agent. Please provide a hard copy of the permit application materials for the portion of the project located in Mississippi. You do not have to provide the wetland delineation documents that have already been provided electronically.

b. Please identify if the Federal Energy Regulatory Commission is associated as the lead federal agency for your project. If they are, please provide a copy of the Final FERC EA and a copy of the FERC Ordering Issuing Certificate is required.

c. Please provide the GPS points for the boundaries of the wetlands and stream polygons within the project footprint, and data points for the sampling points reflected on each of the wetlands impact maps in Mississippi.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, MOBILE
CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF

September 19, 2012

Inland Branch South
Regulatory Division

SWCA Environmental Consultants
Attention: Mr. Thomas Sankey
7255 Longtry, Suite 100
Houston, Texas 77040

Dear Mr. Sankey:

We are in receipt of your application for Department of the Army (DA) authorization for Nationwide Permit 12, for Pipeline Project. Project is located in Jackson County, Mississippi.

This request has been assigned project file number **SAM-2012-01165-MBM,** which should be referred to in all future correspondence with this office. The request is also identified as **Plains Southcap, LLC.**

I will be reviewing this project and can be reached by telephone at (251) 694-3771, or by e-mail at michael.b.moxey@usace.army.mil or by mail to U. S. Army Engineer District, Attention: CESAM-RD-I-S, Leslie E. Turney, P.O. Box 2288, Mobile, Alabama, 36628-0001. I will let you know if additional information is needed before we can complete your request..

Please take a moment to visit our website and complete our customer satisfaction survey. Our website is **http://www.sam.usace.army.mil/RD/reg/**

Sincerely,

Michael B. Moxey
Team Leader, Inland Branch
Regulatory Division

Section 6 MS

NWP - Orange

1. ASSIGN TO PM:
   - ✓ Mike Moxey
   - ____ Rudy Villarreal
   - ____ Damon Young
   - ____ Leslie Turney
   - ____ Brad Crosson
   - ____ Sheri Zettle

2. PROJECT NAME: Plains Southcap LLC – MS

WATERWAY: Escatawpa River – SAM 2012-01165-MBM

3. NATIONWIDE PERMIT:

NWP 1 - Aids to Navigation.
NWP 2 - Structures in Artificial Canals
NWP 3 - Maintenance — PCN*
NWP 4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
NWP 5 - Scientific Measurement Devices — CR
NWP 6 - Survey Activities — CR
NWP 7 - Outfall Structures and Associated Intake Structures — PCN
NWP 8 - Oil and Gas Structures on the Outer Continental Shelf — PCN + CR
NWP 9 - Structures in Fleeting and Anchorage Areas
NWP 10 - Mooring Buoys
NWP 11 - Temporary Recreational Structures.
NWP 12 - Utility Line Activities — PCN + CR
NWP 13 - Bank Stabilization — PCN* + CR
NWP 14 - Linear Transportation Projects. PCN + CR
NWP 15 - U.S. Coast Guard Approved Bridges
NWP 16 - Return Water From Upland Contained Disposal Areas
NWP 17 - Hydropower Projects — PCN
NWP 18 - Minor Discharges — PCN
NWP 19 - Minor Dredging
NWP 20 - Oil Spill Cleanup
NWP 21 - Surface Coal Mining Activities — PCN + CR
NWP 22 - Removal of Vessels — PCN + CR
NWP 23 - Approved Categorical Exclusions — PCN
NWP 24 - Indian Tribe or State Administered Section 404 Program
NWP 25 - Structural Discharges
NWP 27 - Aquatic Habitat Restoration, Establishment, & Enhancement Activities —PCN + CR
NWP 28 - Modifications of Existing Marinas
NWP 29 - Residential Developments — PCN + CR
NWP 30 - Moist Soil Management for Wildlife CR
NWP 31 - Maintenance of Existing Flood Control Facilities — PCN + CR
NWP 32 - Completed Enforcement Actions — CR
NWP 33 - Temporary Construction, Access, and Dewatering — PCN + CR
NWP 34 - Cranberry Production Activities — PCN
NWP 35 - Maintenance Dredging of Existing Basins
NWP 36 - Boat Ramps — PCN* + CR.
NWP 37 - Emergency Watershed Protection and Rehabilitation — PCN + CR
NWP 38 - Cleanup of Hazardous and Toxic Waste - PCN
NWP 39 - Commercial and Institutional Developments — PCN + CR
NWP 40 - Agricultural Activities — PCN + CR
NWP 41 - Reshaping Existing Drainage Ditches - - PCN
NWP 42 - Recreational Facilities -PCN + CR
NWP 43 - Stormwater Management Facilities — PCN* + CR
NWP 44 - Mining Activities — PCN + CR
NWP 45 - Repair of Uplands Damaged by Discrete Events — PCN
NWP 46 - Discharges in Ditches — PCN
NWP 47 - Pipeline Safety Program Designated Time Sensitive Inspections and Repairs.
NWP 48 - Commercial Shellfish Aquaculture Activities — PCN
NWP 49 - Coal Remining Activities — PCN* + CR
NWP 50 - Underground Coal Mining — PCN + CR

CR - ALL areas-Cultural Resource clearance required.
PCN* - See NWP Permit for special PCN conditions.

4. NATURE OF ACTIVITY: Section 10 ____ Section 404 ____ Section 10/404 ✓

5. PROJECT PURPOSE: Use will be Residential, Commercial, Municipal, or Governmental

Date received by RD 9/13/2012

TL to AA: By MBL on 9/18/2012

AA to PM: By ____ on 9/19/2012

Moxey, Michael B SAM

From: Moxey, Michael B SAM
Sent: Monday, September 17, 2012 3:36 PM
To: 'tsankey@swca.com'
Subject: Plains 41-mile pipeline (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Sankey,
Thanks you for submitting the CD's with the electronic version of your permit application. So that we may evaluate your project, please provide hard copies of the permit application that contains the original signatures.

Thanks,
Mike Moxey

USACE, Regulatory Division
Team Leader, Inland South
109 St. Joseph Street
Mobile, Alabama 36602
(251) 694-3771
Fax: (251) 690-2660

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Classification: UNCLASSIFIED
Caveats: NONE

Mississippi

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Houston Office
7255 Langtry, Suite 100
Houston, Texas 77040
Tel 713.934.9900 Fax 713.934.9906
www.swca.com

2/36

Moxey

Plains Southcap LLC

September 12, 2012

Michael B. Moxey
U. S. Army Corp of Engineers, Mobile District
CESAM-RD
109 St. Joseph Street
P.O. Box 2288
Mobile, AL 36628-0001

Re: Plains 41-Mile Ten-Mile to Pascagoula Pipeline Project

Mr. Moxey:

Enclosed within this package are three DVD-Rs that include all of the information in regards to the permit application for the Pascagoula 41-Mile Ten Mile to Pascagoula Pipeline Project. DVD-R #1 includes the PCN permit documents for the Alabama portion of the project and one for the Mississippi portion of the project, DVD-R #2 includes separate attachments of the overall permit application (including the Wetland Delineation Report, Threatened and Endangered Species Report, map books, and data sheets, and DVD-R #3 includes a comprehensive photographic log of the wetland Delineation. Our client would like to receive approval for this project by the end of the year.

If you have questions or require additional information regarding this matter, please contact me at 713-934-9900 or tsankey@swca.com.

Sincerely,
SWCA ENVIRONMENTAL CONSUTLANTS

R. Thomas Sankey, PWS, CSE
Senior Project Manager/Senior Ecologist
Houston Natural Resources

SEP 18 2012

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Houston Office
7255 Langtry, Suite 100
Houston, TX 77040
Tel 713.934.9900 Fax 713.934.9906
www.swca.com

September 12, 2012

Michael B. Moxey
U. S. Army Corp of Engineers, Mobile District
CESAM-RD
109 St. Joseph Street
P.O. Box 2288
Mobile, AL 36628-0001

Re: Plains 41-Mile Ten-Mile to Pascagoula Pipeline Project
Mississippi Portion

Mr. Moxey:

Plains Southcap, LLC, (Plains) requested that SWCA Environmental Consultants (SWCA) complete a wetland and waters delineation, a threatened and endangered species evaluation, a cultural resources survey, and a Pre-construction Notification (PCN) for a proposed 41-mile 24-inch diameter crude oil pipeline. The project area begins at the Plains Ten-Mile Crude Oil Facility in Mobile County, Alabama, located approximately 11 miles northwest of downtown Mobile, and extends southwest towards Pascagoula, Mississippi. The line terminates at the Chevron Pascagoula Refinery approximately one mile from the Gulf of Mexico (project area).

This PCN addresses the Mississippi portion (22.37 miles) of this 41-mile pipeline project. A separate PCN document will be submitted for the remaining 18.63 miles of the pipeline project that occurs within Mobile County, Alabama.

Please find attached to this letter the Nationwide Permit 12 Pre-construction Notification, maps and schematics, plan and profile exhibits for horizontal directional drills under Section 10 waters, Preliminary Jurisdictional Determination Form, Wetland Delineation Report, Threatened and Endangered Species Report, and Cultural Resources Report for your review. A mitigation plan will be submitted to you within 21calendar days of the date of this letter.

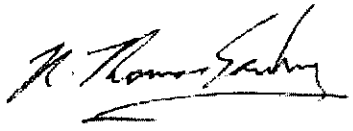
SWCA, as authorized agent for Plains, is requesting a preliminary jurisdictional determination for all potential waters of the United States in the project area, as well as NWP 12 authorization for construction of this project.

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Houston Office
7255 Langtry, Suite 100
Houston, TX 77040
Tel 713.934.9900 Fax 713.934.9906
www.swca.com

If you have questions or require additional information regarding this matter, please contact me at 713-934-9900 or tsankey@swca.com.

Sincerely,
SWCA ENVIRONMENTAL CONSUTLANTS



R. Thomas Sankey, PWS, CSE
Senior Project Manager/Senior Ecologist
Houston Natural Resources

Attachments: Pre-construction Notification

PRE-CONSTRUCTION NOTIFICATION
PLAINS 41-MILE TEN-MILE FACILITY TO PASCAGOULA PIPELINE PROJECT
JACKSON COUNTY, MISSISSIPPI AND MOBILE COUNTY, ALABAMA
(MISSISSIPPI PORTION 22.37 MILES)
September 12, 2012

The following paragraphs contain information relative to Items 1 through 7 as required under General Condition 31 (b) of Nationwide Permit (NWP) 12 (Utility Line Activities), NWP Regional Conditions dated May 12, 2007.

(1) Prospective Permittee Contact Information

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(2) Proposed Project Location

Plains Southcap, LLC (Plains) requested that SWCA Environmental Consultants (SWCA) complete a wetland and waters delineation for a proposed 41-mile 24-inch diameter crude oil pipeline project. The project area begins at the Plains Ten-Mile Crude Oil Facility in Mobile County, Alabama, located approximately 11 miles northwest of downtown Mobile, and extends southwest towards Pascagoula, Mississippi. The line ends at the Chevron Pascagoula Refinery approximately one mile from the Gulf of Mexico (project area). The project area is shown in **Attachment A**.

(3) Proposed Project Description

Construction of the proposed project is slated to begin in March 2013 and end before September 2013. No fill material will be placed within waters or wetlands for more than three months.

The proposed project will consist of the construction and placement of approximately 41 miles of 24-inch diameter pipeline. Construction of the pipeline will be within a 75-foot-wide right-of-way (ROW) and will consist of clearing vegetation, excavating a trench, laying the pipe, replacing the soil, adjusting the topography to match pre-construction contours, and re-establishing vegetation. A permanent 50-foot-wide easement will be maintained and mowed on a regular basis. Please refer to Attachment A for an illustration of the ROW showing both temporary and permanent easements within the project area. Cross-sectional illustrations for open-cut techniques and site-specific plan and profile exhibits for horizontal directional drill (HDD) under Rivers and Harbor Act, Section 10 waters are also included in **Attachment A**.

Project Purpose

The proposed project will be constructed to transport petroleum liquids from the Plains Ten-Mile storage facility in north Mobile County, Alabama to the Chevron Pascagoula Refinery, in southeastern Jackson County, Mississippi.

Conversions

SWCA identified and delineated a total of 262 wetlands within the project area (Alabama and Mississippi). Of those 262 wetlands a total of 141 were delineated within the Mississippi portion of the project. The project plans do not include permanently raising the elevation of any wetland areas or placing impervious materials in wetland areas. All wetlands and other waters in the project area will be restored to pre-construction contours. The proposed project will have no permanent impacts on wetlands, except for the permanent conversion of palustrine scrub/shrub (PSS) wetlands and palustrine forested (PFO) wetlands to palustrine emergent (PEM) wetlands immediately adjacent to existing pipeline and power line corridors.

Plains will use HDDs to avoid and minimize areas of impacts wherever practical. Other areas along the line have had the pipeline foot print reduced or "necked down" in order to minimize disturbances and impacts to gopher tortoise (*Gopherus polyphemus*) pod locations as well as wetland complexes.

Plains' ROW through these wetlands follows an existing power line corridor, minimizing further fragmentation. Given these considerations, Plains finds the use of HDDs at certain locations impracticable, but has completely avoided impacts to all other PSS/PFO wetlands along the project route.

Open-cutting certain wetlands will cause the displacement of woody vegetation which will be permanently maintained (mowed) within the 50-foot-wide permanent easement. The area outside of the permanent easement will be allowed to revegetate naturally, causing only a temporary conversion of these areas from PSS and PFO wetlands to PEM wetlands.

Table 1 provides the total crossing lengths and total acreages for each type of wetland community within the project's 200-foot-wide survey corridor, 50-foot wide permanent easement and 25-foot wide temporary construction easement within the 22.37 miles of proposed line in Jackson County, Mississippi.

Table 1. Wetland Summary Table (Mississippi Portion)

Type	Crossing Length at Centerline (feet)	Total Acreages 200-Foot Survey Corridor	25-Foot Temporary Easement	50-Foot Permanent Easement	Horizontal Directional Drill (HDD)
PEM Wetlands	7,938.89	85.357	2.200	11.723	2.104
EEM Wetlands	3,707.89	17.059	2.675	3.870	0.394
PSS Wetlands	16,665.35	60.645	9.335	16.261	0.779
PFO Wetlands	37,717.22	133.635	19.289	34.501	6.555
Totals:	**66,029.35**	**296.696**	**33.499**	**66.356**	**9.831**

SWCA identified and delineated a total of 25 streams and 2 other waterbodies within the Mississippi portion of the project area. One of the waterbodies (two crossings) delineated in the project area is a Section 10 water. Plains will HDD under both crossings of the Escatawpa River. All Section 10 crossings are illustrated in the map book and plan and profile engineering drawings in **Attachment A**.

SWCA identified a total of two other waterbodies within the Mississippi portion of the project area, most of which were man-made ponds. **Table 2** below provides the crossing lengths and total acreages for each type of stream and other waterbodies within the project area's 200-foot-wide survey corridor and construction corridor.

Table 2. Stream/Waterbody Summary Table (Mississippi Portion)

Type	Crossing Length at Centerline (feet)	Total Acreages 200-Foot Survey Corridor	25-Foot Temporary Easement	50-Foot Permanent Easement
Ephemeral Streams	8.87	0.295	0.005	0.021
Intermittent Streams	81.30	0.343	0.046	0.049
Perennial Streams	875.47	4.487	0.116	0.354
Other Waterbodies	0.00	0.276	0.012	0.000
Totals:	**965.65**	**5.401**	**0.179**	**0.423**

(4) Delineation of Special Aquatic Sites and Other Waters of the U.S.

SWCA conducted a wetland delineation of the areas that will be impacted by the project. SWCA conducted this delineation in accordance with the methods described in the 1987 *USACE Wetland Delineation Manual* (Manual) (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Supplement) (USACE 2010). The results of this delineation are documented in the attached wetland delineation report (**Attachment B**). The attached maps depict all potential waters of the U.S., including wetlands and Section 10 waters located within the temporary and permanent easements crossed by the project.

SWCA has included a preliminary jurisdictional form and aquatics resources and impacts tables in **Attachment C**.

(5) Description of Avoidance, Minimization, and Compensation

Avoidance and Minimization

Plains proposes to construct all activities using currently acceptable and preferable construction methods and best management practices (BMPs) such as silt fencing, matting, and hay bales. These will be in place prior to commencement of construction and will be designed to avoid/minimize soil erosion and sedimentation into adjacent wetland and waterbodies.

Construction activities will take place in accordance with all NWP General Conditions, including the requirements related to aquatic life movements, soil erosion and sediment controls, proper maintenance, endangered species, historic properties and water quality.

Plains has designed the footprint of the construction corridor to be as small as possible, while still serving the project needs in order to minimize impacts to waters of the U.S. After construction, all temporarily impacted waterbodies and wetlands will be restored to pre-construction conditions/contours.

In addition to these minimization measures, Plains will avoid several wetland and stream features that were originally within the construction footprint by implementing HDDs and alterations in the form of "neck down areas" to the construction footprint to the maximum extent practical. All Section 10 water crossings identified within the project area will be avoided by HDDs. In addition to these wetland and waterbody crossings, gopher tortoise pods will also be avoided by the use of HDD and/or narrowing of the construction footprint whenever practical.

Table 3 lists Section 10 waters of the U.S. within the project area that Plains will avoid by using HDD and reduction of the construction footprint.

Table 3. Section 10 Waters Avoidance by Horizontal Directional Drill and Reduction of Construction Corridor.

Type	Total Avoidance Acreages	
	HDD	Reduced Construction Footprint
Lower Escatawpa River Crossing	1.19	1.08
Upper Escatawpa River Crossing	4.59	2.24
Totals:	**5.78**	**3.32**

Mitigation and Compensation

Emergent wetlands will be restored to pre-construction contours and allowed to naturally re-vegetate, causing a temporary impact only. Mitigation is not proposed for temporary impacts to emergent wetlands. Plains proposes to mitigate for permanent conversion of PSS and PFO wetlands that will be open-cut and will be permanently converted into PEM wetlands. A Mitigation Plan that describes the proposed compensation for these conversions will sent within 21 calendar days from the date of this document.

(6) Threatened and Endangered Species Review

SWCA conducted a threatened and endangered species assessment for the proposed project in order to facilitate compliance with the Endangered Species Act of 1973, as amended. The Mississippi Department of Wildlife, Fisheries, and Parks NDD data (2011) lists a total of 16 federally threatened or endangered species that have the potential to occur in Jackson County Mississippi, in addition to one candidate species as well as one delisted species that has the potential to occur in the county. The attached Threatened and Endangered Species Report summarizes the habitat requirements, the potential for occurrence, and possible effects on these species. All currently listed candidate, threatened, or endangered species that are assigned the occurrence categories "known to occur" or "may occur" and which may be affected, are discussed in detail in Sections 3.4.1 through 3.4.13 of the attached Threatened and Endangered Species Report (**Attachment D**).

SWCA determined that six protected species may occur within the project area, including the bald eagle (*Haliaeetus leucocephalus*), the yellow-blotched map turtle (*Graptemys flavimaculata*), the eastern indigo snake (*Drymarchon corais couperi*), the black pine snake (*Pituophis melanoleucus lodingi*), the Gulf sturgeon (*Acipenser oxyrinchus desotoi*), and the iron color shiner (*Notropis chaybacus*). SWCA also determined that the gopher tortoise (*Gopherus polyphemus*) is likely to occur in the project area. Of these species, the bald eagle and the gopher tortoise are the most likely to occur in the project area and are discussed below.

SWCA biologists conducted a helicopter survey of the project area to identify the location of bald eagle nests near the Escatawpa River. According to the National Bald Eagle Management Guidelines published by the USFWS, oil and gas construction projects should be constructed no closer than 660 feet (0.125-mile) from bald eagle nests. One potential bald eagle nest was identified within a 660-foot range from the proposed project area. To avoid construction in this area, Plains Southcap, LLC will expand the length of their HDD at the Escatawpa River to a distance greater than 660 feet from the eagle nest. No other bald eagle nests are located within 660 feet of the project area; therefore, it is SWCA's opinion that the proposed project may affect, but is likely to not adversely affect bald eagles. A second helicopter survey will be conducted in late December 2012 or early January 2013 to verify that the project will not adversely affect this species.

SWCA Certified Gopher Tortoise Agent Mr. Eric Munscher (Permit # GTA-09-00286A) surveyed the entire 41-mile project route for the presence/absence of gopher tortoises. Mr. Munscher documented 254 burrows along the project route. Of the 254 burrows 145 burrows are located within the 200' survey corridor. Of the burrows located within the survey corridor 109 were considered active.

A total of 80 burrows were documented in the Mississippi portion of the project. Of the 80 burrows identified within the Mississippi portion of the project, 29 of them were considered active. Due to Plains ability to narrow the ROW, the majority of these burrows have been avoided. Only one active burrow occurs within the Mississippi portion of the construction ROW.

Please refer to the attached Threatened and Endangered Species Report in **Attachment D** for the results of our threatened and endangered species assessment, as well as recommended mitigation measures.

(7) Cultural and Historical Resources Review

SWCA has conducted a cultural resources survey for the project area. The results of this survey are provided in the attached Cultural Resources Report (**Attachment E**).

SWCA
ENVIRONMENTAL CONSULTANTS

WETLAND DELINEATION REPORT

PLAINS SOUTHCAP, LLC 41-MILE TEN-MILE FACILITY TO PASCAGOULA PIPELINE PROJECT

MOBILE COUNTY, ALABAMA AND
JACKSON COUNTY, MISSISSIPPI

Prepared for:

Plains Southcap, LLC
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SWCA Project No. 22932

September 12, 2012

WETLAND DELINEATION REPORT
PLAINS SOUTHCAP, LLC 41-MILE-LONG TEN-MILE FACILITY TO PASCAGOULA PIPELINE PROJECT

MOBILE COUNTY, ALABMA AND JACKSON COUNTY, MISSISSIPPI

Prepared for:

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SWCA Project No. 22932

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September 9, 2012

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Appendix A: Vicinity and Site Layout Maps
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Appendix E: Nationwide Permit 12 Conditions

1.0 INTRODUCTION

Plains Southcap, LLC (Plains) requested that SWCA Environmental Consultants (SWCA) complete a wetland and waters delineation for approximately 41 miles of proposed 24-inch diameter crude oil pipeline. The project area begins at the Plains Southcap Ten-Mile Crude Oil Facility in Mobile County, Alabama located approximately 11 miles northwest of downtown Mobile and extends southwest towards Pascagoula, Mississippi. The line ends at the Chevron Pascagoula Refinery approximately one mile from the Gulf of Mexico (project route).

This wetland delineation includes the identification of areas likely to be considered jurisdictional "waters of the U.S.," as defined by Section 404 of the Clean Water Act (CWA) and regulated by the U.S. Army Corps of Engineers (USACE). "Waters of the U.S." include most wetlands, rivers, creeks, streams, lakes, tributaries, and so forth. Only the USACE has final and/or legal authority in determining the presence of jurisdictional "waters of the U.S." and the extent of their boundaries. This report provides a brief description of the methods utilized for SWCA's wetland delineation and results of the information collected from the on-site delineations conducted in April, May, and June 2012. Please refer to Figures 1 and 2 in **Appendix A** for the location and setting of the project route.

2.0 METHODS

SWCA conducted on-site wetland delineations along an approximate 41-mile proposed crude oil pipeline. The delineations were conducted in accordance with routine determination guidelines provided in both the *USACE Wetland Delineation Manual* (Manual) (USACE 1987) and the newly published *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Supplement) (USACE 2010). SWCA conducted wetland delineations within a 200-foot-wide survey corridor centered on a 75-foot-wide construction right-of-way (ROW) (project area). Two-person teams were utilized to complete the field work portion of this project.

2.1 Wetlands

According to both the Manual and Supplement, an area is a wetland if positive indicators for the three mandatory wetland criteria are identified in a given area, with special exceptions. These criteria include the presence of hydrophytic vegetation, wetland hydrology, and hydric soils. Identification of dominant vegetation species and their United States Fish and Wildlife Service (USFWS)-designated wetland indicator statuses dictates the presence of hydrophytic vegetation. Typically, a soil pit is dug to identify the presence of hydric soils. Inundation, saturation, and other physical indicators suggesting the presence of water may be used to determine wetland hydrology at each site. All wetlands mapped within the project area are shown on the map book found in **Appendix A**.

Biologists generally took two wetland data points and two upland data points for each wetland delineated along the 200-foot environmental survey corridor. Additional wetland data points were taken in wetlands displaying multiple wetland habitats. In select locations, a single upland data point may have been used to describe a series of upland ridges within a large wetland complex. Data points were generally taken in undisturbed areas, as close to the proposed centerline as possible. A soil pit was typically dug to a depth of approximately 20 inches at each data point to document the presence or absence of hydric soils.

Each data point identified within the proposed pipeline corridor was categorized as herbaceous upland, scrub-shrub upland, forested upland, palustrine emergent (PEM) wetland, palustrine scrub-shrub (PSS) wetland, palustrine forested (PFO) wetland, or estuarine emergent (EEM) wetland communities. Within each community, the vegetation was sub-divided into tree, sapling, shrub, herbaceous, and woody vine vegetative layers. All species within a 30-foot radius were recorded for each vegetative layer and their USFWS indicator statuses were included as well. USFWS indicator statuses include upland (UPL), facultative upland (FACU), facultative (FAC), facultative wetland (FACW), and obligate (OBL). A vegetative community was determined to be hydrophytic if greater than 50 percent of dominant species had an indicator status of FAC, FACW, or OBL. A data point was determined to have wetland hydrology if it displayed at least one primary hydrology indicator or if it displayed at least two notable secondary hydrology indicators as defined in the Supplement (USACE 2010). A data point was determined to have hydric soils if it displayed at least one significant hydric soil indicator as defined in the Supplement (USACE 2010).

Wetland Determination Data Forms (data sheets), which document the presence or absence of the three required wetland criteria, were completed for different vegetation communities along the proposed pipeline route. Data points represent areas of uniformity and allow comparisons between wetland and non-wetland areas. Refer to the data sheets located in **Appendix B** for detailed descriptions of each data point.

2.2 Waterbodies

Streams (i.e., creeks, rivers, etc.,) were identified by the presence of an ordinary high water mark (OHWM), usually identifiable by indicators such as the level of water present, scouring of the channel, or the presence of a vegetation line within the channel. The OHWM typically represents the outer limits of the waterbody's potential USACE jurisdictional limits.

Streams were classified as ephemeral, intermittent, or perennial based on field observations. According to the USACE, an ephemeral stream has flowing water only during, and for a short duration following precipitation events in a typical year and is not fed by groundwater. An intermittent stream has flowing water during times of the year when groundwater provides water for stream flow. Rainfall is supplemental to the stream flow. Perennial streams flow year round under normal hydrologic conditions and are primarily supplied by groundwater. Rainfall is supplemental to the stream flow. Common information recorded for streams included flow, OHWM, observed water, bank slope, substrate, and quality. All streams that occur within the project area are shown on the map book in **Appendix A**.

2.3 Mapping

SWCA used Trimble GeoXH 6000 series global positioning systems (GPS) to geographically reference features, such as data points and wetland boundaries, obtained during the field survey. These units typically have real-time and post-processed sub-meter accuracy. Geographic Information System (GIS) software was used to analyze collected features, calculate areas, and generate attached vicinity and site layout maps, located in **Appendix A**. Please note that all point, line, and polygon data collected using the GPS, and displayed on the attached maps, are for review purposes only and do not represent a professional civil survey.

3.0 RESULTS

3.1 Vegetation Communities

Seven vegetation communities were identified within the project area. Wetlands occurred as PEM, PSS, PFO, and EEM, and non-wetlands occur as herbaceous upland, scrub-shrub upland, and forested upland communities.

3.1.1 Wetland Vegetation

PEM Wetland: PEM wetlands occur throughout the project area and are found within existing maintained ROW. Common dominant herbaceous species within the PEM wetland communities include swamp smartweed (*Polygnum hydropiperoides*, OBL), pale pitcher plant (*Sarracenia alata*, OBL), crimson pitcher plant (*Sarracenia leucophylla*, OBL), parrot pitcher plant (*Sarracenia psittacina*, OBL), roundleaf sundew (*Drosera rotundifolia,* OBL), netted chainfern (*Woodwardia areolata*, OBL), Virginia chainfern (*Woodwardia virginica*, OBL), royal fern (*Osmunda regalis*, OBL), common rush (*Juncus effusus*, OBL), roundhead rush (*Juncus validus*, FACW), roundpod St. Johnswort (*Hypericum cistifolium*, FACW), St. Andrew's cross (*Hypericum hypercoides*, FAC), candyweed (*Polygala lutea*, FACW), low pinebarren milkwort (*Polygala ramosa*, OBL), largeflower milkweed (*Asclepias connivens*, OBL), Frank's sedge (*Carex frankii*, OBL), false hopsedge (*Carex lupuliformis*, OBL), whitehead bogbutton (*Lachnocaulon anceps*, OBL), foxtail clubmoss (*Lycopodiella alopecuroides*, OBL), broadleaved cattail (*Typha latifolia*, OBL), bushy broom grass (*Andropogon glomeratus*, FACW), cogon grass* (*Imperata cylindrical*, UPL), Carolina spider lily (*Hymenocallis caroliniana*, FACW), savannah meadowbeauty (*Rhexia alifanus*, FACW), creeping primrose willow (*Ludwigia repens*, OBL), floating primrose willow (*Ludwigia peploides*, OBL), velvet panicum (*Dicanthelium scoparium*, FACW), disk waterhyssop (*Bacopa rotundifoloia*, OBL), and anglestem beaksedge (*Rhynchospora caduca*, FACW). In occasional instances trees such as slash pine (*Pinus elliottii*, FACW), saplings such as red maple (*Acer rubrum,* OBL) and sweetbay (*Magnolia virginiana*, FACW), shrubs such as wax myrtle (*Myrica cerifera*, FAC) and swamp titi (*Cyrilla racemiflora*, FACW), or woody vines such as sawtooth blackberry (*Rubus argutus*, FAC) and coral greenbriar (*Smilax walteri*, OBL) were identified as minor components within PEM wetlands.

PSS Wetland: PSS wetlands occur within the project area and are found within the existing ROW and along the edges of existing maintained ROWs. The dominant shrub and sapling species within the PSS wetland communities include swamp titi, buckwheat titi (*Cliftonia monophylla*, OBL), gall berry (*Ilex glabra*, FACW), large gallberry (*Ilex coriacea*, FACW), fetterbush (*Lyonia lucida*, FACW), swamp bay (*Persea palustris*, NI), eastern baccharis (*Baccharis halimifolia,* FACW), wax myrtle, sweetleaf (*Symplocos tinctoria*, FAC), highbush blueberry (*Vaccinium corymbosum*, FACW), pawpaw (*Asimina triloba*, FAC), and yaupon (*Ilex vomitoria*, FAC). In occasional instances trees, herbaceous species, or woody vines were identified as minor components within PSS wetlands. Tree species which occur in these instances include red maple, sweetgum (*Liquidambar styraciflua*, FAC), sweetbay, slash pine, Chinese tallow*(*Triadica serbifera*, FAC), laurel oak (*Quercus laurifolia*, FACW), and overcup

oak (*Quercus lyrata*, OBL), Common dominant herbaceous species which occur in these instances include bushy broom grass, netted chainfern, Virginia chainfern, royal fern, bogbutton, foxtail clubmoss, roundpod St. Johnswort, common rush, and Frank's sedge. Common dominate vine species observed inculded coral greenbriar, southern dewberry (*Rubus trivialis*, FAC), and Florida grape (*Vitis cinerea*, FACW).

PFO Wetland: PFO wetlands occur within the project area and are found within the existing ROW and along the edges of existing maintained ROWs. The dominant shrub and sapling species within the PFO wetland communities include swamp tupelo (*Nyssa biflora*, OBL), tulip poplar (*Liriodendron tulipifera*, FAC), sweetbay, slash pine, bald cypress (*Taxodium distichum*, OBL), water oak (*Quercus nigra*, FAC), cherrybark oak (*Quercus pagoda*, FACW), overcup oak, laurel oak, swamp chestnut oak (*Quercus michauxii*, FACW), and boxelder (*Acer negundo*, FACW). On occasion, shrubs such as wax myrtle, swamp titi, sweetleaf, gallberry, and fetterbush dominated the understory. Woody vines such as sawtooth blackberry, coral greenbriar, and saw greenbriar (*Smilax bona-nox*, FAC) were identified as minor components within PFO wetlands.

EEM Wetland: EEM wetlands occur within the project area around the southern Escawtapa River crossing. The dominant vegetation within these communities include giant cut grass (*Zizaniopsis miliacea*, OBL), broadleaved cattail, California bulrush (*Schoenoplectus californicus*, OBL), and on occasion trees such as bald cypress and swamp tupelo.

3.1.2 Non-wetland Vegetation

Herbaceous Upland: Herbaceous upland communities occur throughout the project area and are found within existing maintained ROW. Common dominant herbaceous species within the herbaceous upland communities include Bermudagrass (*Cynodon dactylon,* FACU), Italian ryegrass (*Lolium multiflorum,* FACU), Canada goldenrod (*Solidago canadensis,* FACU), roundpod St. Johnswort, broom grass (*Andropogon virginicus*, FAC), candyroot (*Polygala nana*, FAC), heartwing sorrel (*Rumex hastatulus*, FAC), cogon grass*, poverty rush (*Juncus tenuis*, FAC), slender crab grass (*Digitaria filiformis*, UPL), tapered rosette grass (*Dichanthelium acuminatum*, FAC), cuman ragweed (*Ambrosia psilostachya*, FAC), perennial rye grass (*Lolium perenne*, FACU), romerillo (*Bidens alba*, UPL), and American beauty berry (*Callicarpa americana*, UPL). In occasional instances trees, saplings, shrubs, or woody vines were identified as minor components of herbaceous uplands. Common dominant tree, sapling, shrub or vine species which occur in these instances include red maple, slash pine, long leaf pine (*Pinus palustris*, UPL), sweetbay, Chinese tallow*, dwarf live oak (*Quercus minima*), American holly (*Ilex opaca*, FAC), and saw greenbriar.

Scrub-Shrub Upland: Scrub-shrub upland communities occur throughout the project area and are mostly found along the edges of existing maintained ROW. Common dominant sapling or shrub species within scrub-shrub upland communities include yaupon, fetterbush, gallberry, swamp titi, eastern sweet shrub (*Calycanthus floridus*, FACU), swamp bay, wax myrtle, American holly, slash pine, and highbush blueberry. In occasional instances trees, herbaceous species, or woody vines which were identified as minor components in scrub-shrub uplands include longleaf pine,

southern magnolia (*Magnolia grandiflora*, UPL), dwarf live oak, red maple, and herbaceous species such as American beauty berry, broom grass, saw palmetto (*Serenoa repens*, FACU), and man of the Earth (*Ipomoea pandurata*, FACU) were also identified.

Forested Upland: Forested upland communities occur throughout forested portions of the project area and along the edge of the existing maintained ROW. Common dominant tree or sapling species within the forested upland communities include slash pine, longleaf pine, southern magnolia, sweetbay, tulip poplar, dwarf live oak, water oak, and laurel oak. In occasional instances shrubs, herbaceous species, or woody vines were identified as minor components of forested uplands. Common dominant shrub species which occur in these instances include fetterbush, gallberry, yaupon, and eastern sweetbush. Common herbaceous plants included western bracken fern (*Pteridium aquilinum*, FACU), cogon grass*, broom grass, American beauty berry, St. Andrew's cross and Bermudagrass.

Refer to the data sheets presented in **Appendix B** for specific vegetation species recorded at each data point. Refer to the photographic log in **Appendix C** for a pictorial representation of vegetation communities within the survey corridor. Several exotic species were encountered during the field survey. An asterisk (*) symbol indicates the exotics species identified.

3.2 Hydrology

Wetland communities observed during the delineation effort typically displayed primary hydrology indicators such as inundation, soil saturation in the upper 12 inches, watermarks, water stained leaves, sphagnum moss, root buttressing or hummocks, adventitious roots, and sediment deposits indicative of wetlands. Less common primary hydrology indicators as well as multiple secondary hydrology indicators were also observed in the wetland communities. Refer to the data sheets presented in **Appendix B** for specific hydrology data recorded at each data point.

Alabama and Mississippi received less than average rainfall over the past several months. According to the National Weather Service (NWS)/National Oceanic and Atmospheric Administration (NOAA) NOWData for the Mobile Regional Airport recording location, which is approximately mid-way along the proposed project route, the project area was deficient in rainfall before and during the field delineation effort. **Table** 1 shows the recorded and normal rainfall amounts per month.

Table 1. Monthly Recorded Rainfall at the NWS/NOAA Mobile Alabama recording station.

Month	Recorded Rainfall (inches)	Normal Rainfall (inches)	Departure from Normal (inches)
December 2011	1.88	5.06	-3.18
January 2012	2.24	5.65	-3.41
February 2012	7.25	5.12	+2.13
March 2012	6.69	6.14	+0.55
April 2012	2.51	4.79	-2.28
May 2012	7.82	5.14	+2.68
June 2nd 2012	0.35	0.37	-0.02
Total	**28.74**	**32.27**	**-3.53**

3.3 Soils

Wetland communities displayed hydric soil indicators as described in the Supplement (USACE 2010) such as depleted matrix, 5 cm mucky mineral, hydrogen sulfide, and histic epipedon. Upland communities either failed to display hydric soil indicators or they displayed hydric soils, but failed to meet vegetation and/or hydrology criteria. Refer to **Appendix B** for specific soil data recorded at each data point.

According to the Natural Resource Conservation Service Soil Surveys for Mobile County, Alabama and Jackson County, Mississippi, 51 soil map units are present within the proposed project area (NRCS 2012). Seventeen of the 51 soil map units are hydric (USDA 2012). A list of the 51 soil series along with official soil series descriptions and hydric soil statuses can be found in **Appendix D**.

3.4 Wetlands

The wetland delineation identified 262 wetlands including 109 PEM, 22 PSS, 129 PFO, and two EEM within the project area. The vast majority of these wetland crossings had transitional zones where the wetland transitioned from one wetland cover type to another. Some of these wetland crossings were complex, transitioning multiple times within the survey corridor. To gather crossing lengths and acreages by wetland type, we devised a naming system to name each transitional zone within each wetland; for example the label [WETA003-E0], the 003 indicates the third wetland that Team-A mapped; E0-indicates the first emergent wetland that Team-A mapped within this wetland complex. Another such example, the label WETA003-F1 indicates the second forested wetland that Team-A mapped within this third wetland. Refer to the maps located in **Appendix A** for all wetland boundaries and supporting data points. Refer to the data sheets in **Appendix B** for specific characteristics of each wetland such as vegetation, soils, and hydrology observed. The wetland ID, type, centerline crossing length, and temporary, permanent, and horizontal directional drill (HDD) easement acreages are provided in **Table 2** below.

Table 2. Wetland Data

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Book Page #
WETA002-E0	PEM	-	-	-	-	47
WETA002-F0	PFO	1590.8	1.890	0.817	-	46-47
WETA002-S0	PSS	468.9	0.529	0.031	-	47
WETA003-E0	PEM	83.6	0.096	0.253	-	46-47
WETA003-E1	PEM	3020.6	3.190	0.472	-	44-46
WETA003-F0	PFO	2306.7	2.649	1.163	-	46
WETA003-F1	PFO	19.5	0.022	0.003	-	46
WETA003-F2	PFO	1636.0	1.513	0.988	-	45-46
WETA003-F3	PFO	1921.2	1.789	1.101	-	45
WETA003-F4	PFO	44.4	0.049	0.028	-	45
WETA003-F5	PFO	1175.9	1.351	0.675	-	44-45
WETA003-F6	PFO	340.8	1.474	1.337	-	44
WETA003-F7	PFO	994.3	1.127	0.654	-	43-44
WETA003-S0	PSS	1827.3	2.095	1.039	-	45-46
WETA005-E0	PEM	599.7	0.634	0.203	0.035	43-44
WETA005-F0	PFO	366.8	0.446	0.255	-	43-44
WETA005-F1	PFO	370.7	0.547	0.336	-	43
WETA005-F2	PFO	501.6	0.518	0.064	-	43
WETA005-F3	PFO	784.8	0.522	0.311	0.309	43
WETA006-E0	PEM	-	-	-	0.000	43
WETA006-F0	PFO	63.9	-	-	0.074	43
WETA007-E0	PEM	275.3	0.316	0.164	-	42
WETA007-F0	PFO	226.9	0.261	0.129	-	42
WETA008-E0	PEM	121.0	0.173	0.069	-	42
WETA008-F0	PFO	96.0	0.093	0.022	-	42
WETA009-E0	PEM	419.1	0.484	0.241	-	40-41
WETA010-E0	PEM	875.8	-	-	1.050	40
WETA010-E1	PEM	-	-	-	0.056	40
WETA010-F0	PFO	43.4	-	-	0.037	40
WETA010-S0	PSS	56.1	-	-	0.050	40
WETA010-S1	PSS	366.8	-	-	0.360	40
WETA011-E0	PEM	5.5	0.011	-	-	40
WETA011-F0	PFO	103.6	0.139	0.045	-	40
WETA012-E0	PEM	261.1	0.302	0.095	-	40
WETA013-E0	PEM	232.7	0.270	0.123	-	39-40
WETA013-F0	PFO	119.6	0.140	0.056	-	39-40
WETA014-E0	PEM	-	-	-	-	39

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Book Page #
WETA015-E0	PEM	120.8	0.184	0.032	-	39
WETA015-F0	PFO	91.3	0.092	0.066	-	39
WETA016-E0	PEM	137.0	0.362	0.000	-	38-39
WETA016-F0	PFO	165.9	0.114	0.121	-	38-39
WETA017-E0	PEM	48.4	0.054	0.041	-	38
WETA017-F0	PFO	219.9	0.253	0.111	-	38
WETA018-E0	PEM	157.0	0.189	0.061	-	38
WETA019-E0	PEM	-	0.005	-	-	38
WETA019-F0	PFO	925.9	0.849	0.588	-	38
WETA020-E0	PEM	38.8	0.047	0.022	-	37-38
WETA020-F0	PFO	278.7	0.319	0.158	-	37-38
WETA021-F0	PFO	212.1	0.241	0.129	-	37
WETA022-E0	PEM	103.4	0.119	0.057	-	36
WETA022-E1	PEM	445.4	0.561	0.246	-	36
WETA022-F0	PFO	1312.0	1.509	0.741	-	36
WETA022-F1	PFO	291.1	0.325	0.187	-	36
WETA022-S0	PSS	91.3	0.104	0.050	-	36
WETA023-F0	PFO	154.4	0.181	0.091	-	36
WETA023-F1	PFO	325.1	0.377	0.141	-	36
WETA024-F0	PFO	89.0	-	-	0.156	35
WETA024-F1	PFO	197.7	-	-	0.332	35
WETA024-F2	PFO	213.8	-	-	0.326	35
WETA024-F3	PFO	14.9	-	-	0.054	35
WETA025-F0	PFO	1882.6	2.161	1.079	-	32
WETA026-F0	PFO	1452.1	1.676	0.825	-	31-32
WETA026-F1	PFO	113.0	0.106	0.080	-	31-32
WETB003-E0	PEM	-	0.287	-	-	28
WETB003-F0	PFO	773.9	0.585	0.481	-	28
WETB004-E0	PEM	-	-	-	-	28
WETB004-E1	PEM	-	-	-	-	28
WETB004-E2	PEM	-	-	-	-	28
WETB004-E3	PEM	-	-	-	0.002	28
WETB004-E4	PEM	-	-	-	0.000	28
WETB004-E5	PEM	-	-	-	0.008	28
WETB004-F0	PFO	1039.0	-	-	1.179	28-29
WETB004-F1	PFO	52.0	-	-	0.055	28
WETB004-F2	PFO	27.0	-	-	0.041	28
WETB004-F3	PFO	60.5	-	-	0.059	28
WETB004-F4	PFO	80.1	-	-	0.089	28

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Book Page #
WETB005-E0	PEM	-	-	-	0.018	28-29
WETB005-S0	PSS	349.9	-	-	0.369	28-29
WETB006-E0	PEM	-	-	-	-	29
WETB006-F0	PFO	99.1	0.101	0.070	-	29
WETB007-E0	PEM	12.3	0.014	0.005	-	29
WETB007-S0	PSS	506.3	0.581	0.290	-	29
WETB008-E0	PEM	-	0.034	-	0.268	25-26
WETB008-F0	PFO	3138.8	1.646	0.856	1.653	25-26
WETB009-E0	PEM	-	0.025	-	-	24-25
WETB009-F0	PFO	328.7	0.358	0.169	-	24-25
WETC001-E0	PEM	-	0.002	-	-	21
WETC001-F0	PFO	154.8	0.175	0.077	-	21
WETC002-E0	PEM	-	-	-	-	21
WETC002-E1	PEM	-	-	-	-	21
WETC002-F0	PFO	66.0	0.070	0.045	-	21
WETC002-F1	PFO	21.7	0.029	0.007	-	21
WETC003-E0	PEM	-	0.057	-	-	20-21
WETC003-E1	PEM	-	0.008	-	-	20
WETC003-F0	PFO	-	-	0.001	-	30
WETC003-F1	PFO	62.0	0.056	0.002	-	20-21
WETC003-F2	PFO	45.9	0.025	-	-	20
WETC004-E0	PEM	-	0.007	-	-	20
WETC004-F0	PFO	71.2	0.075	-	-	20
WETC005-E0	PEM	-	0.014	-	-	20
WETC005-F0	PFO	45.2	0.035	-	-	20
WETC006-E0	PEM	-	-	-	-	20
WETC007-E0	PEM	-	0.005	-	-	20
WETC007-E1	PEM	-	-	-	-	20
WETC007-F0	PFO	179.3	0.195	0.119	-	20
WETC007-F1	PFO	13.3	0.011	0.015	-	20
WETC008-E0	PEM	-	0.063	-	-	20
WETC008-F0	PFO	328.7	0.327	0.087	-	20
WETC009-E0	PEM	-	0.003	-	-	19-20
WETC009-F0	PFO	42.3	0.045	0.025	-	19-20
WETC010-E0	PEM	57.0	0.071	0.009	-	19
WETC011-S0	PSS	-	-	0.001	-	35
WETC011-S1	PSS	3309.6	3.799	1.901	-	35
WETC011-S2	PSS	748.7	0.854	0.410	-	34
WETC012-E0	PEM	464.1	1.900	-	-	33-34

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Bok Page #
WETC012-S0	PSS	3023.6	2.111	2.003	-	33-34
WETC012-S1	PSS	-	-	-	-	33-34
WETC013A-E0	PEM	-	0.006	-	-	33
WETC013A-F0	PFO	111.2	0.113	0.010	-	33
WETC013B-E1	PEM	-	0.184	-	-	33
WETC013B-S0	PSS	1233.3	1.230	0.704	-	33
WETC014-E0	PEM	-	0.044	-	-	32-33
WETC015-E0	PEM	121.4	0.104	-	-	32
WETC015-E1	PEM	160.7	0.103	-	-	32
WETC015-F0	PFO	11.1	0.091	0.044	-	32
WETC015-F1	PFO	89.3	0.136	0.128	-	32
WETC016-E0	PEM	-	-	-	-	22-23
WETC016-E1	PEM	-	-	-	-	22-23
WETC017-F0	PFO	268.4	0.332	0.221	-	22-23
WETC017-F1	PFO	128.5	0.141	0.079	-	22
WETC018-E0	PEM	-	-	-	-	15
WETC018-F0	PFO	194.3	0.143	0.124	-	15
WETC019-E0	PEM	-	0.255	-	-	14-15
WETC019-E1	PEM	73.1	0.340	-	-	14
WETC019-E2	PEM	0.3	0.032	-	-	14
WETC019-F0	PFO	911.6	0.794	0.521	-	14-15
WETC019-F1	PFO	1071.6	0.978	0.631	-	14
WETC019-F2	PFO	73.6	0.046	0.062	-	14
WETC020A-E0	PEM	-	0.023	-	-	14
WETC020B-E1	PEM	-	0.071	-	-	13
WETC020B-F0	PFO	43.0	0.025	0.001	-	14
WETC021-E0	PEM	-	-	-	-	10
WETC021-E1	PEM	112.6	0.213	0.065	-	9-10
WETC021-F0	PFO	413.9	0.471	0.254	-	10
WETC021-F1	PFO	191.0	0.209	0.141	-	10
WETC021-F2	PFO	2136.0	2.370	0.911	-	9-10
WETC022-F0	PFO	98.5	0.079	0.043	-	9
WETC022-F1	PFO	368.8	0.346	0.352	-	9
WETC022-F2	PFO	118.3	0.129	0.093	-	9
WETC022-S0	PSS	86.1	0.143	-	-	9
WETC022-S1	PSS	425.7	0.568	0.062	-	9
WETC024-E0	PEM	971.9	-	-	1.137	6-7

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Book Page #
WETC025-E0	PEM	-	-	-	-	6
WETC025-F0	PFO	84.6	-	-	0.096	6
WETC026-E0	PEM	-	-	-	-	6
WETC026-F0	PFO	408.9	0.471	0.229	-	6
WETC027-E0	PEM	-	-	-	-	5-6
WETC027-F0	PFO	1314.6	1.513	0.740	-	5-6
WETC028-E0	PEM	-	0.106	-	-	27
WETC028-F0	PFO	251.7	0.196	0.141	-	27
WETC029-E0	PEM	-	0.042	-	-	15-16
WETC029-F0	PFO	87.1	0.068	0.054	-	15-16
WETC030-E0	PEM	-	0.521	-	0.578	26-27
WETC030-E1	PEM	-	-	-	0.006	26
WETC030-E2	PEM	-	-	-	0.082	26
WETC030-F0	PFO	3199.8	1.760	1.192	0.829	26-27
WETC030-F1	PFO	-	-	-	0.012	26
WETC030-F2	PFO	859.3	-	-	0.857	26
WETC031-E1	PEM	-	0.035	-	-	19
WETC031-E2	PEM	-	-	-	-	19
WETC031-E3	PEM	-	0.022	-	-	19
WETC032-E0	PEM	-	0.018	-	-	19
WETC033-E0	PEM	-	0.009	-	-	19
WETD001-E0	PEM	-	0.002	-	-	43
WETD001-F0	PFO	44.7	0.045	0.032	-	43
WETD002-F0	PFO	-	-	-	-	42
WETD003-F0	PFO	1160.2	1.322	-	-	42
WETD004-F0	PFO	2217.8	2.061	1.736	0.491	42
WETD005-F0	PFO	632.7	0.734	0.342	-	31
WETD006-F0	PFO	134.0	0.143	0.121	-	31
WETD006-F1	PFO	46.7	0.059	0.011	-	31
WETD006-F2	PFO	-	-	-	-	31
WETD007-F0	PFO	-	0.006	-	-	31
WETD008-E0	PEM	35.7	0.233	-	-	31
WETD008-F0	PFO	676.3	0.642	0.439	-	31-32
WETD008-S0	PSS	125.2	0.090	0.036	-	31
WETD009-E0	PEM	-	0.833	-	-	30-31
WETD009-E1	PEM	-	0.098	-	-	29-30
WETD009-F0	PFO	1404.4	1.094	0.797	-	30-31
WETD009-F1	PFO	431.4	0.450	0.244	-	30
WETD009-F2	PFO	60.6	0.066	0.029	-	29-30

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)[1]	Map Book Page #
WETD009-F3	PFO	140.6	0.161	0.081	-	29-30
WETD009-S0	PSS	1212.9	1.124	0.702	-	30
WETD009-S1	PSS	1349.3	1.461	0.778	-	29-30
WETD009-S2	PSS	285.7	0.321	0.169	-	29-30
WETD010-E0	PEM	-	-	-	-	22
WETD010-E1	PEM	-	-	-	-	22
WETD010-F0	PFO	997.3	0.733	0.400	0.399	22
WETD010-F1	PFO	412.8	-	-	0.461	22
WETD011-E0	PEM	-	-	-	-	22
WETD011-E1	PEM	-	-	-	-	22
WETD011-E2	PEM	-	0.195	-	-	21-22
WETD011-F0	PFO	809.4	0.928	0.478	-	22
WETD011-F1	PFO	1150.9	1.142	0.627	-	21-22
WETD012A-E0	PEM	34.2	0.039	0.015	-	11
WETD012A-E1	PEM	-	-	0.002	-	11
WETD012A-E2	PEM	-	-	-	-	11
WETD012A-E3	PEM	3.0	0.007	-	-	11
WETD012A-E4	PEM	-	0.000	0.001	-	11
WETD012A-E5	PEM	315.3	0.333	0.121	-	11
WETD012A-F0	PFO	-	-	0.003	-	11
WETD012A-F1	PFO	92.1	0.084	0.091	-	11
WETD012A-F2	PFO	42.5	0.054	0.004	-	11
WETD012A-F3	PFO	484.3	0.558	0.338	-	11
WETD012B-E0	PEM	-	-	-	-	10-11
WETD012B-E1	PEM	-	-	-	-	10-11
WETD012B-F0	PFO	1128.8	1.287	0.676	-	10-11
WETD013-E0	PEM	-	0.031	-	-	8-9
WETD013-E1	PEM	-	0.004	-	-	8
WETD013-E2	PEM	-	0.004	-	-	8
WETD013-F0	PFO	2496.8	2.863	1.452	-	8-9
WETD013-F1	PFO	180.2	0.153	0.160	-	8
WETD013-F2	PFO	538.3	0.696	0.291	-	8
WETD013-F3	PFO	-	-	-	-	8
WETD013-F4	PFO	63.4	0.064	0.051	-	8
WETD014-E0	PEM	-	-	-	-	7-8
WETD014-F0	PFO	64.3	0.169	-	-	8
WETD015-E0	PEM	-	0.021	-	-	4
WETD015-F0	PFO	488.5	0.502	0.152	-	4
WETD016-E0	PEM	-	-	-	-	4
WETD017-F0	PFO	149.5	0.166	0.102	-	5

Table 2. Wetland Data Continued

Wetland ID	Type	Centerline Crossing Length (feet)	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Impacts Avoided by HDD (ac)*	Map Book Page #
WETD017-F1	PFO	208.5	0.208	0.120	-	5
WETD018-E0	PEM	-	-	-	-	5
WETD018-F0	PFO	89.5	0.112	0.036	-	5
WETG001-E0**	EEM	2847.4	2.872	2.158	0.394	41-42
WETG002-E0	EEM	860.5	0.998	0.517	-	42
WETG003-E0	PEM	20.0	0.225	-	-	16
WETG003-F0	PFO	359.9	0.242	0.273	-	16
WETG004-E0	PEM	-	0.107	-	-	16
WETG004-F0	PFO	302.3	0.235	0.180	-	16
WETG005-E0	PEM	36.2	0.042	0.021	-	47
WETG005-E1	PEM	140.1	0.161	0.080	-	47
WETG005-E2	PEM	23.0	0.026	0.013	-	47
WETG005-F0	PFO	-	-	0.063	-	47
WETG005-S0	PSS	479.9	0.564	0.478	-	47
WETG005-S1	PSS	564.5	0.647	0.324	-	47
WETG005-S3	PSS	666.0	0.753	0.420	-	47
WETG006-E0	PEM	-	0.027	-	-	18-19
WETG006-F0	PFO	97.0	0.103	0.069	-	18-19
WETG006-F1	PFO	122.1	0.127	0.070	-	18
WETG007-E0	PEM	-	0.119	-	-	18
WETG007-F0	PFO	402.7	0.306	0.198	-	18
WETG008-F0	PFO	509.7	0.550	0.179	-	17-18
WETG008-F1	PFO	219.3	0.249	0.109	-	17
WETG008-F2**	PFO	136.8	0.163	0.097	-	17
WETGT001-F0	PFO	264.4	0.251	0.048	-	19
WETGT001-F1	PFO	29.9	0.058	-	-	19
WETGT002-F0	PFO	69.4	0.067	0.029	-	19
WETGT003-F0	PFO	91.1	0.095	0.051	-	19
WETGT007-F0	PFO	1.6	0.009	0.030	-	17
WETGT008-E0	PEM	-	-	-	-	23
WETGT008-F0	PFO	139.1	0.156	0.089	-	23
Totals		**89,214.0**	**90.957**	**45.012**	**11.924**	-

Wetland ID shown in RED indicates a wetland: 1) that will be completely avoided; or 2) where impacts will be minimized by HDD
*Amount of wetland acreage that is being preserved and not converted by HDD
** The WETG Series (WETG001-EO through WETG008-F2) was determined through interpretation of aerial imagery due to site access issues

Approximately 16.85 miles of wetlands were mapped along this proposed route. **Table 3** shows total crossing lengths in feet and acres for each wetland type.

Table 3. Wetland Summary Table

Type of Wetland	Crossing Length (Centerline feet)	Total Acreages			
		200-foot Survey Corridor	75-foot Wide Temporary Construction Easement	50-foot Wide Permanent Easement	Horizontal Directional Drill (ac)
PEM Wetlands	9,256.40	122.314	2.412	14.126	3.241
EEM Wetlands	3,707.89	17.056	2.675	3.870	0.394
PSS Wetlands	17,177.143	63.331	9.396	16.972	0.779
PFO Wetlands	58,802.62	200.240	30.528	55.989	7.511
Totals:	**88,944.05**	**402.941**	**45.011**	**90.957**	**11.925**

3.5 Waterbodies

The wetland delineation identified 52 streams and seven ponds within the 200-foot survey area. Of the 52 streams delineated, six are ephemeral, 13 are intermittent, and 33 are perennial. The seven ponds are a mixture of man-made and natural waterbodies. Refer to Figure 2 located in **Appendix A** for locations of waterbody crossings along the pipeline route.

Table 4. Waterbody Data

Name	OHWM Width (feet)	OHWM Depth (feet)	TOB Width (feet)	Flow/Type	Substrate	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Centerline Crossing Length
WBA001	8	1.5	20	Intermittent	Clay	0.035	0.040	31.5
WBA002	40	2	50	Perennial	Clay	-	-	37.0
WBA003	2	0.5	2.5	Ephemeral	Clay	0.011	0.001	2.1
WBA004	35	10	40	Perennial	Clay	0.050	0.014	41.0
WBA005	8	3	10	Perennial	Clay	0.013	0.006	20.5
WBA006	3	1	10	Perennial	Clay	0.003	0.002	8.3
WBA007	8	1.5	10	Perennial	Clay	0.019	0.009	8.5
WBB001	75	4	80	Perennial	Clay	-	-	234.3
WBB004	4	2	20	Intermittent	Organic	-	-	4.1
WBB005	3	2	5	Intermittent	Sand	-	-	6.6
WBB006	2.5	1	7	Intermittent	Sand	-	-	2.8
WBB007	5	2	10	Perennial	Sand	-	-	5.0
WBB008	110	5	120	Perennial	Sand	-	-	-
WBC001	1.5	1	2	Perennial	Organic	0.002	0.001	1.5
WBC002	2	0.5	3	Perennial	Clay	0.003	0.001	2.5
WBC003	10	2	12	Perennial	Sandy Clay	0.009	0.005	8.0
WBC004	4	0.5	8	Ephemeral	Sandy Clay	0.003	0.002	4.1

Name	OHWM Width (feet)	OHWM Depth (feet)	TOB Width (feet)	Flow/Type	Substrate	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Centerline Crossing Length
WBC005	40	4	50	Perennial	Clay	0.035	0.055	29.4
WBC006	2.5	1	3	Perennial	Sandy Clay	0.003	0.002	3.1
WBC007	3	1	4	Perennial	Sandy Clay	0.004	0.002	3.0
WBC008	10	3	12	Perennial	Clay	0.017	0.006	11.1
WBC009	2	0.75	4	Ephemeral	Clay	-	-	-
WBC010A	0	0	10	Ephemeral	Concrete	0.017	0.009	15.0
WBC010B	1.5	0.75	2	Intermittent	Clay	0.011	0.005	9.9
WBC011	25	3	30	Perennial	Clay	0.035	0.049	30.8
WBC012	100	5	120	Perennial	Clay	0.105	-	116.1
*WBC013	6	2	12	Intermittent	Clay	-	-	23.7
WBC112A	0	0	0	Perennial		0.026	0.019	21.9
WBC112B	0	0	0	Perennial		-	-	-
WBD001	2	2	3	Ephemeral	Sand	0.007	0.002	2.7
WBD002	63	10	65	Perennial	Sand	0.182	-	158.5
WBD003A	6	1	10	Intermittent	Sand	0.010	0.004	9.7
*WBD003B	20	2	40	Perennial	Clay	-	-	-
WBD004A	3	1	5	Intermittent	Sand	0.003	0.002	3.0
*WBD004B	40	3	50	Perennial	Sand	-	-	64.4
WBD005	3	1	4	Intermittent	Clay	0.004	0.002	3.5
WBD006	5	2	6	Perennial	Sand	0.006	0.014	5.2
WBD007	10	2	12	Perennial	Sand	0.036	0.022	17.1
WBD008	30	5	30	Perennial	Clay	0.040	0.001	47.1
WBD009A	5	2	8	Perennial	Clay	0.016	0.003	42.8
WBD009B	5	2	8	Perennial	Clay	-	-	-
WBD009C	5	2	8	Perennial	Clay	0.006	0.003	5.7
WBD009D	0	0	0	Intermittent		-	-	-
*WBD010	60	6	65	Perennial	Clay	-	-	-
WBD011	5	3	7	Perennial	Clay	0.006	0.003	5.0
WBG003	0	0	0	Perennial		-	0.012	-
WBG004	0	0	0	Perennial		-	-	-
WBG005	3	0	0	Intermittent	Clay	0.004	0.002	3.6
*WBG006	20	0	0	Perennial	Clay	-	-	19.8
*WBG007	270	0	0	Perennial	Clay	-	-	266.5
WBG008	15	0	0	Perennial	Clay	0.023	0.016	22.8
*WBG009	195	0	0	Perennial	Clay	-	-	-
WBG010	0	0	0	Intermittent		0.003	0.002	2.3
WBG011	12	0	12	Perennial		0.014	0.007	12.0
WBG012	12	0	12	Perennial		0.014	0.007	12.0
WBGT001	3	0.5	5	Intermittent	Sandy Clay	0.013	0.002	34.6

Name	OHWM Width (feet)	OHWM Depth (feet)	TOB Width (feet)	Flow/Type	Substrate	50-foot Permanent Easement (ac)	25-foot Temporary Easement (ac)	Centerline Crossing Length
WBGT004	10	2	18	Perennial	Sandy Silt	0.021	0.010	12.1
WBGT005	12	3	15	Ephemeral	Sandy Clay	0.005	0.010	5.6
WBGT006	25	3	35	Perennial	Sandy Clay	0.010	0.006	11.8
Totals						**0.824**	**0.358**	**1,449.3**

*Waterbodies that will be horizontally directional drilled. **Waterbodies that have 0 within the typical waterbody data (OHWM, Top of Bank etc.) were aerially interpreted.

SWCA identified and delineated a total of 52 streams within the project area. Many of the streams were small perennial hillside seeps. Another 7 waterbodys were delineated within the project area. Most of these were man-made ponds.

Only one of the waterbodies (two crossings) delineated (Escatawpa River) in the project area are considered Section 10 navigable waters. Plains Southcap, LLC will use a HDD to proceed under both the lower and upper crossings of the Escatawpa River.

SWCA identified a total of seven other waterbodies within the project area, most of which were man-made ponds. **Table 5** below provides the crossing lengths and total acreages for waterbodies within the survey corridor and project area.

Table 5. Stream/Waterbody Summary Table

Type	Crossing Length (feet)	Total Acreages		
	Centerline (feet)	within the Permanent Easement	within the Temporary Easement
Ephemeral Streams	29.46	0.416	0.0431	0.023
Intermittent Streams	135.15	0.516	0.084	0.059
Perennial Streams	1,121.5	5.717	0.552	0.262
Other Waterbodies	163.23	1.166	0.145	0.013
Totals:	**1,424.35**	**7.705**	**1.624**	**0.363**

All wetlands and waterbodies delineated within the project area are subject to USACE jurisdiction under section 404 of the CWA. It should be understood that the scope of these delineations was to ascertain the presence of potential jurisdictional areas. In SWCA's professional opinion, physical features identified during site visits may be considered "waters of the U.S." (i.e. wetlands and waterbodies); however, this report is not a legal delineation of the boundaries of "waters of the U.S." or a determination of their jurisdictional status. Only the USACE has final and/or legal authority in determining the presence of jurisdictional "waters of the U.S." and the extent of their boundaries.

4.0 PERMITTING

Based on survey findings, the project could be constructed under Nationwide Permit (NWP) 12 – Utility Line Activities. NWP 12 conditions are provided in **Appendix E**. In accordance with NWP 12, a project sponsor must submit a pre-construction notification (PCN) to the USACE

prior to commencing the activity in waters and wetlands if any of the following criteria are met:

(1) The activity involves mechanized land clearing in a forested wetland for the utility line right-of-way.

(2) A Section 10 Permit is required.

(3) The utility line in "waters of the U.S.," excluding overhead lines, exceeds 500 feet.

(4) The utility line is placed within a jurisdictional area, and it runs parallel to a stream bed that is within that jurisdictional area.

(5) Discharges that result in a loss greater than $1/10^{th}$ acre of waters of the United States.

(6) Permanent access roads are constructed above grade in waters of the United States for a distance more than 500 feet.

(7) Permanent access roads are constructed in waters of the United States with impervious materials.

Regulatory Analysis

The following responses are given for each of the seven criteria mentioned above:

(1) A total of 129 forested wetlands and 22 scrub shrub wetlands were delineated within the project area. The majority of these wetlands will be avoided by HDD. However, in some areas using HDD practices will not be possible and as a result the project will require mechanized land clearing in some forested wetlands for the utility line right-of-way throughout the proposed project line.

(2) SWCA examined the existing USACE List of Navigable Waters of the U.S. (Section 10 waters), and the section 10 waters found within the project area are the two crossings of the Escawtapa River.

(3) The pipeline crossing at the Escatawpa River and the associated wetlands is over 500 feet long. Plains proposes to HDD under the river and adjacent EEM wetland.

(4) The pipeline does not run parallel to a stream bed that is within a jurisdictional area.

(5) It is our understanding that permanent conversions for wetlands or waters as a result of project construction will be inevitable due to construction constraints. Mitigation for permanent conversions of forested and scrub shrub wetlands into emergent wetlands will be completed by purchasing credits through a local mitigation bank. A mitigation plan for the use of that mitigation bank will be provided within 21 calendar days of the submission of this document.

(6) It is our understanding that pre-existing roads will be utilized and new roads within "waters of the U.S." are not proposed as part of this project.

(7) It is our understanding that permanent access road crossing of waterbodies using impervious materials will not be constructed as part of this project.

5.0 SUMMARY

In April, May, and June of 2012, SWCA biologists conducted a wetland delineation survey for approximately 41 miles of crude oil pipeline for Plains Southcap, LLC, in Mobile County, Alabama and Jackson County, Mississippi. Under Section 404 of the CWA, the USACE regulates the discharge of dredged or fill material into "waters of the United States," including wetlands. SWCA's scope of work was to determine the location of potential jurisdictional "waters of the U.S.," including wetlands. SWCA identified and delineated 248 wetlands and 57 waterbodies within the boundaries of the project area. Based on our regulatory analysis, the proposed project could be constructed under the conditions of NWP 12 with submittal of a PCN.

All wetlands and waterbodies delineated along the pipeline route are subject to USACE jurisdiction under Section 404 of the CWA. It should be understood that the scope of these delineations was to ascertain the presence of potential jurisdictional areas. In SWCA's professional opinion, physical features identified during site visits may be considered "waters of the U.S." (i.e. wetlands and waterbodies). This report is not a legal delineation of the boundaries of "waters of the U.S." or a determination of their jurisdictional status. Only the USACE has final and/or legal authority in determining the presence of jurisdictional "waters of the U.S." and the extent of their boundaries.

6.0 REFERENCES

NOAA Online Weather Data (NOWData), National Oceanic and Atmospheric Administration. Climatology data for Mobile, Alabama. Available online at http://www.weather.gov/climate. Accessed 7/5/2012.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Mobile county Alabama and Jackson county Mississippi. Available online at http://soildatamart.nrcs.usda.gov . Accessed 07/21/2012.

United States Army Corps of Engineers (USACE) (1987) Corps of Engineers Wetland Delineation Manual. United States Corps of Engineers Research and Development Center, Vicksburg, MS. Techinal ReportY-87-1.

United States Army Corps of Engineers (USACE) (2010) Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic andGulf Coastal Plain Region (Version 2.0). United States Corps of Engineers Research and Development Center, Vicksburg, MS. ERDC/EL TR-10-20

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 08/31/2012

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

R. Thomas Sankey, Senior Project Manager, SWCA
7255 Langtry, Suite 100
Houston, TX 77040

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Mobile District,

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

Plains Southcap, LLC (Plains) requested that SWCA Environmental Consultants (SWCA) complete a wetland and waters delineation for the approximately 41 miles of 24-inch crude oil pipeline. The project area begins at the Plains Ten-Mile Crude Oil Facility in Mobile Alabama, located approximately 11 miles northwest of downtown Mobile, and extends southwest towards Pascagoula, Mississippi. The line ends at the Chevron Pascagoula Refinery approximately one mile from the Gulf of Mexico (project site).

Construction of the proposed project is slated to begin in March 2013 and end before September 2013. No fill material will be placed within waters or wetlands for more than three months.

The proposed project will consist of the construction and placement of approximately 41 miles of 24-inch diameter pipeline from Ten-Mile, Alabama to Pascagoula, Mississippi. Construction of the pipeline will be within a 75-foot-wide right-of-way (ROW) and will consist of clearing vegetation, excavating a trench, laying the pipe, replacing the soil, adjusting the topography to match pre-construction contours, and re-establishing vegetation. A permanent 50-foot-wide easement will be maintained and mowed on a regular basis. Please refer to the permit application map book for an illustration of the ROW showing both temporary and permanent easements within the project area, cross-sectional illustrations for open-cut techniques and site-specific plan and profile exhibits for horizontal directional drills (HDD) under Rivers and Harbor Act, Section 10 waters.

(USE THE WATER RESOURCES TABLE ATTACHED TO THIS PACKET THAT DOCUMENTS MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: Alabama / Mississippi County/parish/borough: Mobile / Jackson
City: Mobile and Pascagoula
Center coordinates of site (lat/long in degree decimal format): Lat. 30° 36' 46.437"° N, Long. -88° 25' 24.257"° W.

Universal Transverse Mercator: 15

Name of nearest waterbody: Escatawpa River Project crosses this river twice.

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 1425.4 linear feet: width (ft) and/or 7.70 acres.

Cowardin Class: Riverine
Stream Flow: Perennial
Wetlands: 386.2 acres
Cowardin Class: Emergent Wetland

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: Escatawpa River and associated estuarine wetlands for the southern crossing.

Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☒ Field Determination. Date(s): April, May, and the first week of June.

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting

an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: SWCA delineation maps .

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

- ☐ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .

- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name: .

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

.

☐ National wetlands inventory map(s). Cite name: .

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☐ Aerial (Name & Date): .

or ☒ Other (Name & Date): See Attached. Photographs prepared/submitted by or on behalf of the applicant/consultant.

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

R. Thomas Tarpley 9/9/12

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

		HGM_Code							Local_Waterway
WBA001	R4	RIVERINE	AREA	0.098092	ACRE	RPW	30.362179	-88.483413	Pt Aux Chenes Bay-Mississippi Sound
WBA002	R5	RIVERINE	AREA	0.193311	ACRE	RPW	30.441738	-88.495247	Little Black Creek
WBA003	R6	RIVERINE	AREA	0.021527	ACRE	NRPW	30.453589	-88.496405	Black Creek-Escatawpa River
WBA004	R5	RIVERINE	AREA	0.147623	ACRE	RPW	30.480654	-88.499077	Black Creek-Escatawpa River
WBA005	R5	RIVERINE	AREA	0.276305	ACRE	RPW	30.496089	-88.497469	Black Creek-Escatawpa River
WBA006	R5	RIVERINE	AREA	0.103812	ACRE	RPW	30.500321	-88.495286	Black Creek-Escatawpa River
WBA007	R5	RIVERINE	AREA	0.058694	ACRE	RPW	30.54165	-88.4716	Black Creek-Escatawpa River
WBB001	R5	RIVERINE	AREA	1.088488	ACRE	RPW	30.600421	-88.440078	Escatawpa River
WBB004	R4	RIVERINE	AREA	0.022758	ACRE	NRPW	30.578524	-88.452051	Rocky Creek-Escatawpa River
WBB005	R4	RIVERINE	AREA	0.02304	ACRE	NRPW	30.578401	-88.452114	Rocky Creek-Escatawpa River
WBB006	R4	RIVERINE	AREA	0.009998	ACRE	NRPW	30.578317	-88.452218	Rocky Creek-Escatawpa River
WBB007	R4	RIVERINE	AREA	0.025588	ACRE	RPW	30.578203	-88.452216	Rocky Creek-Escatawpa River
WBB008	L2	DEPRESS	AREA	0.211361	ACRE	ISOLATE	30.56868	-88.454774	Rocky Creek-Escatawpa River
WBC001	R5	RIVERINE	AREA	0.00735	ACRE	RPW	30.640651	-88.379625	Upper Big Creek
WBC002	R5	RIVERINE	AREA	0.00904	ACRE	RPW	30.643378	-88.374183	Upper Big Creek
WBC003	R5	RIVERINE	AREA	0.03992	ACRE	RPW	30.647379	-88.365877	Wolf Branch
WBC004	R6	RIVERINE	AREA	0.260021	ACRE	NRPW	30.505584	-88.493876	Black Creek-Escatawpa River
WBC005	R5	RIVERINE	AREA	0.259906	ACRE	RPW	30.529756	-88.473698	Black Creek-Escatawpa River
WBC006	R5	RIVERINE	AREA	0.016304	ACRE	RPW	30.628735	-88.399393	Upper Big Creek
WBC007	R5	RIVERINE	AREA	0.01461	ACRE	RPW	30.629391	-88.39816	Upper Big Creek
WBC008	R6	RIVERINE	AREA	0.05965	ACRE	RPW	30.688826	-88.304762	Upper Big Creek
WBC009	R6	RIVERINE	AREA	0.008356	ACRE	NRPW	30.68892	-88.30505	Upper Big Creek
WBC010A	R6	RIVERINE	AREA	0.068935	ACRE	NRPW	30.73353	-88.265678	Upper Big Creek
WBC010B	R4	RIVERINE	AREA	0.077735	ACRE	RPW	30.69158	-88.301973	Upper Big Creek
WBC011	R5	RIVERINE	AREA	0.19062	ACRE	RPW	30.740001	-88.259513	Upper Big Creek
WBC012	L2	DEPRESS	AREA	0.291451	ACRE	ISOLATE	30.763655	-88.24497	Chickasaw Creek
WBC013	R4	RIVERINE	AREA	0.062134	ACRE	RPW	30.598884	-88.442303	Rocky Creek-Escatawpa River
WBC112A	R5	RIVERINE	AREA	0.144441	ACRE	RPW	30.776981	-88.226859	Double Branch
WBC112B	R5	RIVERINE	AREA	0.012339	ACRE	RPW	30.777217	-88.226265	Double Branch
WBD001	R6	RIVERINE	AREA	0.013549	ACRE	NRPW	30.406902	-88.483617	Black Creek-Escatawpa River
WBD002	R5	RIVERINE	AREA	0.721735	ACRE	RPW	30.417491	-88.482852	Black Creek-Escatawpa River
WBD003A	R4	RIVERINE	AREA	0.033335	ACRE	RPW	30.545427	-88.471696	Black Creek-Escatawpa River
WBD003B	L2	DEPRESS	AREA	0.042289	ACRE	ISOLATE	30.631695	-88.394076	Upper Big Creek
WBD004A	R4	RIVERINE	AREA	0.093728	ACRE	RPW	30.548429	-88.471501	Black Creek-Escatawpa River
WBD004B	R5	RIVERINE	AREA	0.246155	ACRE	RPW	30.631923	-88.393515	Big Creek
WBD005	R4	RIVERINE	AREA	0.014663	ACRE	RPW	30.635896	-88.388556	Upper Big Creek
WBD006	R5	RIVERINE	AREA	0.065427	ACRE	RPW	30.723109	-88.275295	Upper Big Creek
WBD007	R5	RIVERINE	AREA	0.139855	ACRE	RPW	30.7244	-88.27433	Hamilton Creek
WBD008	L2	DEPRESS	AREA	0.043001	ACRE	ISOLATE	30.75326	-88.254497	Upper Big Creek
WBD009A	L2	DEPRESS	AREA	0.051053	ACRE	RPW	30.753782	-88.254431	Upper Big Creek
WBD009B	R5	RIVERINE	AREA	0.017824	ACRE	RPW	30.754468	-88.254234	Upper Big Creek
WBD009C	R5	RIVERINE	AREA	0.02993	ACRE	RPW	30.755055	-88.253672	Upper Big Creek
WBD009D	R4	RIVERINE	AREA	0.007417	ACRE	RPW	30.757013	-88.252598	Upper Big Creek
WBD010	L2	DEPRESS	AREA	0.198141	ACRE	ISOLATE	30.759935	-88.251594	Upper Big Creek
WBD011	R5	RIVERINE	AREA	0.023308	ACRE	RPW	30.77766	-88.222117	Red Creek
WBG003	L2	DEPRESS	AREA	0.064323	ACRE	ISOLATE	30.464371	-88.497297	Black Creek-Escatawpa River
WBG004	R5	RIVERINE	AREA	0.040654	ACRE	RPW	30.480747	-88.49869	Black Creek-Escatawpa River
WBG005	R4	RIVERINE	AREA	0.016445	ACRE	RPW	30.794895	-88.210302	Chickasaw Creek
WBG006	R5	RIVERINE	AREA	0.109093	ACRE	RPW	30.498219	-88.49696	Black Creek
WBG007	R5	RIVERINE	AREA	1.231759	ACRE	TNW	30.421551	-88.488024	Escatawpa River
WBG008	R5	RIVERINE	AREA	0.120238	ACRE	RPW	30.428795	-88.492343	Black Creek-Escatawpa River
WBG009	L2	DEPRESS	AREA	0.315826	ACRE	ISOLATE	30.760948	-88.249771	Chickasaw Creek
WBG010	R4	RIVERINE	AREA	0.013918	ACRE	RPW	30.719949	-88.277235	Upper Big Creek
WBG011	R5	RIVERINE	AREA	0.055186	ACRE	RPW	30.35603	-88.487115	Pt Aux Chenes Bay-Mississippi Sound
WBG012	R5	RIVERINE	AREA	0.05488	ACRE	RPW	30.355344	-88.488586	Pt Aux Chenes Bay-Mississippi Sound
WBGT001	R4	RIVERINE	AREA	0.042462	ACRE	RPW	30.650564	-88.359404	Upper Big Creek
WBGT004	R5	RIVERINE	AREA	0.059167	ACRE	RPW	30.669693	-88.333594	Upper Big Creek
WBGT005	R5	RIVERINE	AREA	0.043246	ACRE	NRPW	30.672919	-88.328116	Pierce Creek
WBGT006	R5	RIVERINE	AREA	0.061181	ACRE	RPW	30.673152	-88.328035	Pierce Creek
WETA002-E0	PEM	MINSOILFLT	AREA	0.050596	ACRE	TNWW	30.355817	-88.483218	Pt Aux Chenes Bay-Mississippi Sound
WETA002-F0	PFO	MINSOILFLT	AREA	6.777804	ACRE	TNWW	30.359738	-88.483396	Pt Aux Chenes Bay-Mississippi Sound
WETA002-S0	PSS	MINSOILFLT	AREA	1.526831	ACRE	TNWW	30.356521	-88.483371	Pt Aux Chenes Bay-Mississippi Sound
WETA003-E0	PEM	MINSOILFLT	AREA	3.696245	ACRE	TNWW	30.366111	-88.483571	Pt Aux Chenes Bay-Mississippi Sound

WETA003-E1	PEM	MINSOILFLT	AREA	18.075825	ACRE	RPWWN	30.386137	-88.479995	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F0	PFO	MINSOILFLT	AREA	7.803755	ACRE	TNWW	30.366167	-88.483281	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F1	PFO	MINSOILFLT	AREA	0.06148	ACRE	TNWW	30.369471	-88.483237	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F2	PFO	MINSOILFLT	AREA	4.466564	ACRE	TNWW	30.376091	-88.480074	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F3	PFO	MINSOILFLT	AREA	5.169493	ACRE	RPWWN	30.381474	-88.480167	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F4	PFO	MINSOILFLT	AREA	0.187013	ACRE	RPWWN	30.384309	-88.480314	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F5	PFO	MINSOILFLT	AREA	4.36282	ACRE	RPWWN	30.386262	-88.480282	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F6	PFO	MINSOILFLT	AREA	5.013388	ACRE	RPWWN	30.391451	-88.48036	Pt Aux Chenes Bay-Mississippi Sound
WETA003-F7	PFO	MINSOILFLT	AREA	4.182854	ACRE	RPWWN	30.397319	-88.480301	Pt Aux Chenes Bay-Mississippi Sound
WETA003-S0	PSS	MINSOILFLT	AREA	8.351466	ACRE	TNWW	30.371704	-88.481687	Pt Aux Chenes Bay-Mississippi Sound
WETA005-E0	PEM	MINSOILFLT	AREA	5.222936	ACRE	RPWWN	30.40253	-88.480762	Pt Aux Chenes Bay-Mississippi Sound
WETA005-F0	PFO	MINSOILFLT	AREA	1.28969	ACRE	RPWWN	30.399673	-88.480255	Pt Aux Chenes Bay-Mississippi Sound
WETA005-F1	PFO	MINSOILFLT	AREA	1.741713	ACRE	RPWWN	30.401093	-88.480228	Pt Aux Chenes Bay-Mississippi Sound
WETA005-F2	PFO	MINSOILFLT	AREA	1.558333	ACRE	RPWWN	30.402922	-88.480294	Pt Aux Chenes Bay-Mississippi Sound
WETA005-F3	PFO	MINSOILFLT	AREA	2.20656	ACRE	RPWWN	30.40473	-88.481768	Pt Aux Chenes Bay-Mississippi Sound
WETA006-E0	PEM	MINSOILFLT	AREA	0.108332	ACRE	RPWWN	30.405627	-88.482907	Pt Aux Chenes Bay-Mississippi Sound
WETA006-F0	PFO	MINSOILFLT	AREA	0.181672	ACRE	RPWWN	30.405783	-88.482651	Pt Aux Chenes Bay-Mississippi Sound
WETA007-E0	PEM	ORGSOILFLT	AREA	1.440423	ACRE	RPWWN	30.431792	-88.494193	Black Creek-Escatawpa River
WETA007-F0	PFO	MINSOILFLT	AREA	0.824381	ACRE	RPWWN	30.431216	-88.493949	Black Creek-Escatawpa River
WETA008-E0	PEM	DEPRESS	AREA	0.998822	ACRE	NRPWW	30.433368	-88.494576	Black Creek-Escatawpa River
WETA008-F0	PFO	DEPRESS	AREA	0.11627	ACRE	NRPWW	30.433225	-88.494448	Black Creek-Escatawpa River
WETA009-E0	PEM	ORGSOILFLT	AREA	1.979721	ACRE	NRPWW	30.435943	-88.494702	Black Creek-Escatawpa River
WETA010-E0	PEM	RIVERINE	AREA	4.468533	ACRE	RPWWD	30.440197	-88.495105	Black Creek-Escatawpa River
WETA010-E1	PEM	RIVERINE	AREA	0.62285	ACRE	RPWWD	30.442262	-88.495436	Black Creek-Escatawpa River
WETA010-F0	PFO	RIVERINE	AREA	0.079146	ACRE	RPWWN	30.43919	-88.494887	Black Creek-Escatawpa River
WETA010-S0	PSS	RIVERINE	AREA	0.157278	ACRE	RPWWD	30.441596	-88.495044	Black Creek-Escatawpa River
WETA010-S1	PSS	RIVERINE	AREA	0.998642	ACRE	RPWWD	30.442285	-88.495122	Black Creek-Escatawpa River
WETA011-E0	PEM	DEPRESS	AREA	0.616275	ACRE	NRPWW	30.444244	-88.495643	Black Creek-Escatawpa River
WETA011-F0	PFO	DEPRESS	AREA	0.309868	ACRE	NRPWW	30.444481	-88.495397	Black Creek-Escatawpa River
WETA012-E0	PEM	RIVERINE	AREA	0.879316	ACRE	NRPWW	30.445833	-88.495656	Black Creek-Escatawpa River
WETA013-E0	PEM	RIVERINE	AREA	1.251247	ACRE	NRPWW	30.447739	-88.495778	Black Creek-Escatawpa River
WETA013-F0	PFO	RIVERINE	AREA	0.290464	ACRE	NRPWW	30.447662	-88.495649	Black Creek-Escatawpa River
WETA014-E0	PEM	MINSOILFLT	AREA	0.158506	ACRE	NRPWW	30.456093	-88.497043	Black Creek-Escatawpa River
WETA015-E0	PEM	MINSOILFLT	AREA	0.767089	ACRE	NRPWW	30.457236	-88.497125	Black Creek-Escatawpa River
WETA015-F0	PFO	MINSOILFLT	AREA	0.191209	ACRE	NRPWW	30.45685	-88.496861	Black Creek-Escatawpa River
WETA016-E0	PEM	MINSOILFLT	AREA	1.245398	ACRE	NRPWW	30.459875	-88.497613	Black Creek-Escatawpa River
WETA016-F0	PFO	MINSOILFLT	AREA	0.311735	ACRE	NRPWW	30.459861	-88.497376	Black Creek-Escatawpa River
WETA017-E0	PEM	RIVERINE	AREA	0.621626	ACRE	NRPWW	30.461878	-88.497633	Black Creek-Escatawpa River
WETA017-F0	PFO	RIVERINE	AREA	0.632249	ACRE	NRPWW	30.462061	-88.497429	Black Creek-Escatawpa River
WETA018-E0	PEM	LACUSTRINF	AREA	0.697045	ACRE	NRPWW	30.464232	-88.497612	Black Creek-Escatawpa River
WETA019-E0	PEM	RIVERINE	AREA	0.504257	ACRE	NRPWW	30.468055	-88.497708	Black Creek-Escatawpa River
WETA019-F0	PFO	RIVERINE	AREA	2.674708	ACRE	NRPWW	30.469302	-88.497375	Black Creek-Escatawpa River
WETA020-E0	PEM	RIVERINE	AREA	0.566355	ACRE	NRPWW	30.472781	-88.497653	Black Creek-Escatawpa River
WETA020-F0	PFO	RIVERINE	AREA	0.882001	ACRE	NRPWW	30.47276	-88.497407	Black Creek-Escatawpa River
WETA021-F0	PFO	RIVERINE	AREA	0.964981	ACRE	RPWWD	30.480986	-88.499295	Black Creek-Escatawpa River
WETA022-E0	PEM	DEPRESS	AREA	0.337353	ACRE	NRPWW	30.490184	-88.498532	Black Creek-Escatawpa River
WETA022-E1	PEM	DEPRESS	AREA	1.706126	ACRE	NRPWW	30.491844	-88.498114	Black Creek-Escatawpa River
WETA022-F0	PFO	DEPRESS	AREA	4.407486	ACRE	NRPWW	30.488128	-88.499075	Black Creek-Escatawpa River
WETA022-F1	PFO	DEPRESS	AREA	1.031724	ACRE	NRPWW	30.490728	-88.498365	Black Creek-Escatawpa River
WETA022-S0	PSS	DEPRESS	AREA	0.218029	ACRE	NRPWW	30.488449	-88.499027	Black Creek-Escatawpa River
WETA023-F0	PFO	RIVERINE	AREA	0.606651	ACRE	RPWWD	30.494338	-88.498085	Black Creek-Escatawpa River
WETA023-F1	PFO	RIVERINE	AREA	0.903965	ACRE	RPWWD	30.495022	-88.497936	Black Creek-Escatawpa River
WETA024-F0	PFO	RIVERINE	AREA	0.357641	ACRE	RPWWD	30.497594	-88.49726	Black Creek-Escatawpa River
WETA024-F1	PFO	RIVERINE	AREA	0.699237	ACRE	RPWWD	30.497965	-88.497104	Black Creek-Escatawpa River
WETA024-F2	PFO	RIVERINE	AREA	0.633631	ACRE	RPWWD	30.498524	-88.498924	Black Creek-Escatawpa River
WETA024-F3	PFO	RIVERINE	AREA	0.164001	ACRE	RPWWD	30.498808	-88.497026	Black Creek-Escatawpa River
WETA025-F0	PFO	MINSOILFLT	AREA	8.637816	ACRE	NRPWW	30.533543	-88.471512	Black Creek-Escatawpa River
WETA026-F0	PFO	RIVERINE	AREA	6.74688	ACRE	RPWWD	30.539633	-88.471603	Black Creek-Escatawpa River
WETA026-F1	PFO	RIVERINE	AREA	0.384105	ACRE	RPWWD	30.541777	-88.471558	Black Creek-Escatawpa River
WETB003-E0	PEM	RIVERINE	AREA	1.397578	ACRE	NRPWW	30.582457	-88.450813	Rocky Creek-Escatawpa River
WETB003-F0	PFO	RIVERINE	AREA	2.162059	ACRE	NRPWW	30.582521	-88.450453	Rocky Creek-Escatawpa River
WETB004-E0	PEM	RIVERINE	AREA	0.297522	ACRE	RPWWN	30.575998	-88.453263	Rocky Creek-Escatawpa River
WETB004-E1	PEM	RIVERINE	AREA	0.373762	ACRE	RPWWD	30.577901	-88.452538	Rocky Creek-Escatawpa River

WETB004-E2	PEM	RIVERINE	AREA	0.056904	ACRE	RPWWD	30.578328	-88.452368	Rocky Creek-Escatawpa River
WETB004-E3	PEM	RIVERINE	AREA	0.10662	ACRE	NRPWW	30.57849	-88.452314	Rocky Creek-Escatawpa River
WETB004-E4	PEM	RIVERINE	AREA	0.047637	ACRE	NRPWW	30.578645	-88.452266	Rocky Creek-Escatawpa River
WETB004-E5	PEM	RIVERINE	AREA	0.192522	ACRE	NRPWW	30.578865	-88.452177	Rocky Creek-Escatawpa River
WETB004-F0	PFO	RIVERINE	AREA	4.010395	ACRE	RPWWD	30.576537	-88.452708	Rocky Creek-Escatawpa River
WETB004-F1	PFO	RIVERINE	AREA	0.070569	ACRE	RPWWD	30.57825	-88.452198	Rocky Creek-Escatawpa River
WETB004-F2	PFO	RIVERINE	AREA	0.106653	ACRE	RPWWD	30.578286	-88.452081	Rocky Creek-Escatawpa River
WETB004-F3	PFO	RIVERINE	AREA	0.168199	ACRE	NRPWW	30.578403	-88.452019	Rocky Creek-Escatawpa River
WETB004-F4	PFO	RIVERINE	AREA	0.217404	ACRE	NRPWW	30.578577	-88.451959	Rocky Creek-Escatawpa River
WETB005-E0	PEM	RIVERINE	AREA	0.573594	ACRE	NRPWW	30.57361	-88.454134	Rocky Creek-Escatawpa River
WETB005-S0	PSS	RIVERINE	AREA	1.18764	ACRE	NRPWW	30.573455	-88.453845	Rocky Creek-Escatawpa River
WETB006-E0	PEM	RIVERINE	AREA	0.118438	ACRE	NRPWW	30.571167	-88.455076	Rocky Creek-Escatawpa River
WETB006-F0	PFO	RIVERINE	AREA	0.36774	ACRE	NRPWW	30.571003	-88.454785	Rocky Creek-Escatawpa River
WETB007-E0	PEM	RIVERINE	AREA	0.212794	ACRE	NRPWW	30.570023	-88.455463	Rocky Creek-Escatawpa River
WETB007-S0	PSS	RIVERINE	AREA	2.195501	ACRE	NRPWW	30.569456	-88.454944	Rocky Creek-Escatawpa River
WETB008-E0	PEM	RIVERINE	AREA	5.183512	ACRE	RPWWN	30.603578	-88.43586	Rocky Creek-Escatawpa River
WETB008-F0	PFO	RIVERINE	AREA	9.254825	ACRE	RPWWD	30.603197	-88.435919	Rocky Creek-Escatawpa River
WETB009-E0	PEM	DEPRESS	AREA	0.297585	ACRE	NRPWW	30.614633	-88.422257	Upper Big Creek
WETB009-F0	PFO	DEPRESS	AREA	0.907899	ACRE	NRPWW	30.614258	-88.422211	Upper Big Creek
WETC001-E0	PEM	RIVERINE	AREA	0.256998	ACRE	NRPWW	30.639812	-88.381936	Upper Big Creek
WETC001-F0	PFO	RIVERINE	AREA	0.389776	ACRE	NRPWW	30.639595	-88.38177	Upper Big Creek
WETC002-E0	PEM	RIVERINE	AREA	0.058544	ACRE	RPWWD	30.640767	-88.379847	Upper Big Creek
WETC002-E1	PEM	RIVERINE	AREA	0.051943	ACRE	RPWWD	30.640811	-88.379725	Upper Big Creek
WETC002-F0	PFO	RIVERINE	AREA	0.210768	ACRE	RPWWD	30.640621	-88.379441	Upper Big Creek
WETC002-F1	PFO	RIVERINE	AREA	0.051337	ACRE	RPWWD	30.640629	-88.37965	Upper Big Creek
WETC003-E0	PEM	RIVERINE	AREA	0.419841	ACRE	RPWWD	30.643439	-88.374429	Upper Big Creek
WETC003-E1	PEM	RIVERINE	AREA	0.040246	ACRE	RPWWD	30.643563	-88.374103	Upper Big Creek
WETC003-F0	PFO	RIVERINE	AREA	0.002593	ACRE	RPWWD	30.643158	-88.37424	Upper Big Creek
WETC003-F1	PFO	RIVERINE	AREA	0.053158	ACRE	RPWWD	30.643308	-88.374281	Upper Big Creek
WETC003-F2	PFO	RIVERINE	AREA	0.025146	ACRE	RPWWD	30.643421	-88.374096	Upper Big Creek
WETC004-E0	PEM	RIVERINE	AREA	0.15022	ACRE	NRPWW	30.645313	-88.370568	Upper Big Creek
WETC004-F0	PFO	RIVERINE	AREA	0.197123	ACRE	NRPWW	30.645109	-88.370329	Upper Big Creek
WETC005-E0	PEM	RIVERINE	AREA	0.078672	ACRE	NRPWW	30.645965	-88.369154	Upper Big Creek
WETC005-F0	PFO	RIVERINE	AREA	0.052799	ACRE	NRPWW	30.645742	-88.369158	Upper Big Creek
WETC006-E0	PEM	RIVERINE	AREA	0.056394	ACRE	NRPWW	30.646808	-88.367435	Upper Big Creek
WETC007-E0	PEM	RIVERINE	AREA	0.221863	ACRE	RPWWD	30.647411	-88.366185	Upper Big Creek
WETC007-E1	PEM	RIVERINE	AREA	0.004867	ACRE	RPWWD	30.647581	-88.366054	Upper Big Creek
WETC007-F0	PFO	RIVERINE	AREA	0.619515	ACRE	RPWWD	30.647122	-88.366107	Upper Big Creek
WETC007-F1	PFO	RIVERINE	AREA	0.051916	ACRE	RPWWD	30.647286	-88.365724	Upper Big Creek
WETC008-E0	PEM	RIVERINE	AREA	0.818636	ACRE	NRPWW	30.648484	-88.363962	Upper Big Creek
WETC008-F0	PFO	RIVERINE	AREA	0.427921	ACRE	NRPWW	30.648343	-88.363788	Upper Big Creek
WETC009-E0	PEM	RIVERINE	AREA	0.078543	ACRE	NRPWW	30.649058	-88.362754	Upper Big Creek
WETC009-F0	PFO	RIVERINE	AREA	0.107255	ACRE	NRPWW	30.648888	-88.362503	Upper Big Creek
WETC010-E0	PEM	RIVERINE	AREA	0.281293	ACRE	NRPWW	30.649732	-88.361268	Upper Big Creek
WETC011-S0	PSS	MINSOILFLT	AREA	1.56063	ACRE	NRPWW	30.505764	-88.493845	Black Creek-Escatawpa River
WETC011-S1	PSS	MINSOILFLT	AREA	11.026636	ACRE	NRPWW	30.506044	-88.493181	Black Creek-Escatawpa River
WETC011-S2	PSS	MINSOILFLT	AREA	3.419148	ACRE	NRPWW	30.506763	-88.488886	Black Creek-Escatawpa River
WETC012-E0	PEM	MINSOILFLT	AREA	5.76064	ACRE	NRPWW	30.517279	-88.482759	Black Creek-Escatawpa River
WETC012-S0	PSS	MINSOILFLT	AREA	8.114123	ACRE	NRPWW	30.516975	-88.482432	Black Creek-Escatawpa River
WETC012-S1	PSS	MINSOILFLT	AREA	2.14487	ACRE	NRPWW	30.517238	-88.482911	Black Creek-Escatawpa River
WETC013A-E0	PEM	DEPRESS	AREA	0.100501	ACRE	NRPWW	30.525166	-88.482827	Black Creek-Escatawpa River
WETC013A-F0	PFO	DEPRESS	AREA	0.123088	ACRE	NRPWW	30.525218	-88.482971	Black Creek-Escatawpa River
WETC013B-E1	PEM	MINSOILFLT	AREA	2.370972	ACRE	NRPWW	30.527375	-88.48114	Black Creek-Escatawpa River
WETC013B-S0	PSS	MINSOILFLT	AREA	3.367778	ACRE	NRPWW	30.5278	-88.481203	Black Creek-Escatawpa River
WETC014-E0	PEM	DEPRESS	AREA	0.323622	ACRE	NRPWW	30.529048	-88.478363	Black Creek-Escatawpa River
WETC015-E0	PEM	DEPRESS	AREA	0.466837	ACRE	RPWWD	30.529502	-88.474329	Black Creek-Escatawpa River
WETC015-E1	PEM	DEPRESS	AREA	0.369828	ACRE	RPWWD	30.529558	-88.473648	Black Creek-Escatawpa River
WETC015-F0	PFO	DEPRESS	AREA	0.14328	ACRE	RPWWD	30.529746	-88.473573	Black Creek-Escatawpa River
WETC015-F1	PFO	DEPRESS	AREA	0.567775	ACRE	RPWWD	30.529838	-88.474139	Black Creek-Escatawpa River
WETC016-E0	PEM	RIVERINE	AREA	0.496546	ACRE	RPWWD	30.628492	-88.400305	Upper Big Creek
WETC016-E1	PEM	RIVERINE	AREA	0.177762	ACRE	RPWWD	30.628914	-88.399515	Upper Big Creek
WETC017-F0	PFO	RIVERINE	AREA	1.048957	ACRE	RPWWD	30.629009	-88.398696	Upper Big Creek
WETC017-F1	PFO	RIVERINE	AREA	0.410182	ACRE	RPWWD	30.629415	-88.397944	Upper Big Creek

WETC018-E0	PEM	RIVERINE	AREA	0.354998	ACRE	NRPWW	30.685166	-88.309026	Upper Big Creek
WETC018-F0	PFO	RIVERINE	AREA	0.572532	ACRE	NRPWW	30.684938	-88.306831	Upper Big Creek
WETC019-E0	PEM	RIVERINE	AREA	1.87554	ACRE	RPWWD	30.687829	-88.305532	Upper Big Creek
WETC019-E1	PEM	RIVERINE	AREA	2.424476	ACRE	RPWWD	30.690284	-88.303743	Upper Big Creek
WETC019-E2	PEM	RIVERINE	AREA	0.044259	ACRE	RPWWD	30.691331	-88.302265	Upper Big Creek
WETC019-F0	PFO	RIVERINE	AREA	2.348845	ACRE	RPWWD	30.687585	-88.305322	Upper Big Creek
WETC019-F1	PFO	RIVERINE	AREA	2.87088	ACRE	RPWWD	30.689981	-88.303637	Upper Big Creek
WETC019-F2	PFO	RIVERINE	AREA	0.245906	ACRE	RPWWD	30.691062	-88.302278	Upper Big Creek
WETC020A-E0	PEM	SLOPE	AREA	0.050603	ACRE	NRPWW	30.692306	-88.297295	Upper Big Creek
WETC020B-E1	PEM	DEPRESS	AREA	0.719485	ACRE	NRPWW	30.700355	-88.289889	Upper Big Creek
WETC020B-F0	PFO	SLOPE	AREA	0.02627	ACRE	NRPWW	30.692282	-88.297174	Upper Big Creek
WETC021-E0	PEM	RIVERINE	AREA	0.443471	ACRE	NRPWW	30.732862	-88.266833	Upper Big Creek
WETC021-E1	PEM	RIVERINE	AREA	4.215765	ACRE	NRPWW	30.736114	-88.262791	Upper Big Creek
WETC021-F0	PFO	RIVERINE	AREA	1.464878	ACRE	NRPWW	30.732632	-88.266637	Upper Big Creek
WETC021-F1	PFO	RIVERINE	AREA	0.770529	ACRE	NRPWW	30.733924	-88.26501	Upper Big Creek
WETC021-F2	PFO	RIVERINE	AREA	6.179392	ACRE	NRPWW	30.736393	-88.262045	Upper Big Creek
WETC022-F0	PFO	RIVERINE	AREA	0.12647	ACRE	RPWWD	30.739797	-88.259569	Upper Big Creek
WETC022-F1	PFO	RIVERINE	AREA	1.433291	ACRE	RPWWD	30.740883	-88.259071	Upper Big Creek
WETC022-F2	PFO	RIVERINE	AREA	0.534549	ACRE	RPWWD	30.742536	-88.259254	Upper Big Creek
WETC022-S0	PSS	RIVERINE	AREA	0.55064	ACRE	RPWWD	30.73983	-88.259794	Upper Big Creek
WETC022-S1	PSS	RIVERINE	AREA	2.135625	ACRE	RPWWD	30.741389	-88.259248	Upper Big Creek
WETC024-E0	PEM	RIVERINE	AREA	4.914226	ACRE	NRPWW	30.769326	-88.239646	Chickasaw Creek
WETC025-E0	PEM	RIVERINE	AREA	0.107317	ACRE	NRPWW	30.771793	-88.237498	Chickasaw Creek
WETC025-F0	PFO	RIVERINE	AREA	0.305326	ACRE	NRPWW	30.772049	-88.237704	Chickasaw Creek
WETC026-E0	PEM	RIVERINE	AREA	0.397333	ACRE	NRPWW	30.776212	-88.233774	Chickasaw Creek
WETC026-F0	PFO	RIVERINE	AREA	1.536409	ACRE	NRPWW	30.776133	-88.233455	Chickasaw Creek
WETC027-E0	PEM	RIVERINE	AREA	1.466568	ACRE	RPWWD	30.777143	-88.227931	Chickasaw Creek
WETC027-F0	PFO	RIVERINE	AREA	4.585799	ACRE	RPWWD	30.776874	-88.228398	Chickasaw Creek
WETC028-E0	PEM	RIVERINE	AREA	0.832808	ACRE	NRPWW	30.588265	-88.448732	Rocky Creek-Escatawpa River
WETC028-F0	PFO	RIVERINE	AREA	0.607717	ACRE	NRPWW	30.587934	-88.448508	Rocky Creek-Escatawpa River
WETC029-E0	PEM	RIVERINE	AREA	0.258927	ACRE	NRPWW	30.680046	-88.317181	Upper Big Creek
WETC029-F0	PFO	RIVERINE	AREA	0.257321	ACRE	NRPWW	30.679735	-88.317108	Upper Big Creek
WETC030-E0	PEM	RIVERINE	AREA	7.301266	ACRE	RPWWD	30.595793	-88.445514	Rocky Creek-Escatawpa River
WETC030-E1	PEM	RIVERINE	AREA	0.006476	ACRE	RPWWD	30.598805	-88.442463	Rocky Creek-Escatawpa River
WETC030-E2	PEM	RIVERINE	AREA	1.150606	ACRE	RPWWD	30.599762	-88.441304	Rocky Creek-Escatawpa River
WETC030-F0	PFO	RIVERINE	AREA	7.712206	ACRE	RPWWD	30.595236	-88.445532	Rocky Creek-Escatawpa River
WETC030-F1	PFO	RIVERINE	AREA	0.01204	ACRE	RPWWD	30.598906	-88.442272	Rocky Creek-Escatawpa River
WETC030-F2	PFO	RIVERINE	AREA	2.420431	ACRE	RPWWD	30.599376	-88.441362	Rocky Creek-Escatawpa River
WETC031-E1	PEM	RIVERINE	AREA	0.293918	ACRE	RPWWD	30.650445	-88.359783	Upper Big Creek
WETC031-E2	PEM	RIVERINE	AREA	0.067991	ACRE	RPWWD	30.650438	-88.360046	Upper Big Creek
WETC031-E3	PEM	RIVERINE	AREA	0.127605	ACRE	RPWWD	30.650694	-88.359244	Upper Big Creek
WETC032-E0	PEM	RIVERINE	AREA	0.292563	ACRE	NRPWW	30.653086	-88.354388	Upper Big Creek
WETC033-E0	PEM	RIVERINE	AREA	0.182373	ACRE	NRPWW	30.654081	-88.352298	Upper Big Creek
WETD001-E0	PEM	RIVERINE	AREA	0.069525	ACRE	NRPWW	30.409225	-88.483968	Black Creek-Escatawpa River
WETD001-F0	PFO	RIVERINE	AREA	0.103938	ACRE	NRPWW	30.409143	-88.48355	Black Creek-Escatawpa River
WETD002-F0	PFO	RIVERINE	AREA	0.008546	ACRE	RPWWN	30.413603	-88.482927	Black Creek-Escatawpa River
WETD003-F0	PFO	ORGSOILFLT	AREA	4.754328	ACRE	RPWWN	30.415632	-88.482824	Black Creek-Escatawpa River
WETD004-F0	PFO	ORGSOILFLT	AREA	10.149707	ACRE	TNWW	30.419186	-88.485628	Black Creek-Escatawpa River
WETD005-F0	PFO	RIVERINE	AREA	3.101092	ACRE	NRPWW	30.544185	-88.471693	Black Creek-Escatawpa River
WETD006-F0	PFO	RIVERINE	AREA	0.680649	ACRE	RPWWD	30.546176	-88.47158	Black Creek-Escatawpa River
WETD006-F1	PFO	RIVERINE	AREA	0.3017	ACRE	RPWWD	30.546532	-88.471817	Black Creek-Escatawpa River
WETD006-F2	PFO	RIVERINE	AREA	0.014472	ACRE	RPWWD	30.545699	-88.471409	Black Creek-Escatawpa River
WETD007-F0	PFO	MINSOILFLT	AREA	0.027838	ACRE	RPWWD	30.549742	-88.471867	Black Creek-Escatawpa River
WETD008-E0	PEM	MINSOILFLT	AREA	1.341908	ACRE	RPWWN	30.552149	-88.471554	Black Creek-Escatawpa River
WETD008-F0	PFO	MINSOILFLT	AREA	2.494545	ACRE	RPWWN	30.551646	-88.471437	Black Creek-Escatawpa River
WETD008-S0	PSS	MINSOILFLT	AREA	0.127711	ACRE	RPWWN	30.552008	-88.471432	Black Creek-Escatawpa River
WETD009-E0	PEM	MINSOILFLT	AREA	6.15087	ACRE	NRPWW	30.556909	-88.467092	Rocky Creek-Escatawpa River
WETD009-E1	PEM	MINSOILFLT	AREA	3.328962	ACRE	NRPWW	30.5625	-88.461803	Rocky Creek-Escatawpa River
WETD009-F0	PFO	MINSOILFLT	AREA	3.495099	ACRE	NRPWW	30.555082	-88.468406	Black Creek-Escatawpa River
WETD009-F1	PFO	MINSOILFLT	AREA	1.177936	ACRE	NRPWW	30.559597	-88.464144	Rocky Creek-Escatawpa River
WETD009-F2	PFO	MINSOILFLT	AREA	0.150657	ACRE	NRPWW	30.563347	-88.460597	Rocky Creek-Escatawpa River
WETD009-F3	PFO	MINSOILFLT	AREA	0.419219	ACRE	NRPWW	30.564177	-88.459807	Rocky Creek-Escatawpa River
WETD009-S0	PSS	MINSOILFLT	AREA	3.211557	ACRE	NRPWW	30.557863	-88.46578	Rocky Creek-Escatawpa River

WETD009-S1	PSS	MINSOILFLT	AREA	3.791372	ACRE	NRPWW	30.561855	-88.462	Rocky Creek-Escatawpa River
WETD009-S2	PSS	MINSOILFLT	AREA	0.839516	ACRE	NRPWW	30.563713	-88.460237	Rocky Creek-Escatawpa River
WETD010-E0	PEM	RIVERINE	AREA	1.097842	ACRE	RPWWD	30.631308	-88.395026	Upper Big Creek
WETD010-E1	PEM	RIVERINE	AREA	0.024054	ACRE	RPWWD	30.632271	-88.393153	Upper Big Creek
WETD010-F0	PFO	RIVERINE	AREA	3.356577	ACRE	RPWWD	30.631008	-88.394994	Upper Big Creek
WETD010-F1	PFO	RIVERINE	AREA	1.492907	ACRE	RPWWD	30.632109	-88.392937	Upper Big Creek
WETD011-E0	PEM	RIVERINE	AREA	0.267921	ACRE	RPWWD	30.634424	-88.389233	Upper Big Creek
WETD011-E1	PEM	RIVERINE	AREA	0.025497	ACRE	RPWWD	30.635658	-88.388836	Upper Big Creek
WETD011-E2	PEM	RIVERINE	AREA	2.217785	ACRE	RPWWD	30.637052	-88.387411	Upper Big Creek
WETD011-F0	PFO	RIVERINE	AREA	3.376432	ACRE	RPWWD	30.634901	-88.388618	Upper Big Creek
WETD011-F1	PFO	RIVERINE	AREA	3.169254	ACRE	RPWWD	30.636755	-88.387367	Upper Big Creek
WETD012A-E0	PEM	RIVERINE	AREA	0.055602	ACRE	RPWWD	30.722908	-88.275335	Upper Big Creek
WETD012A-E1	PEM	RIVERINE	AREA	0.04465	ACRE	RPWWD	30.72293	-88.275084	Upper Big Creek
WETD012A-E2	PEM	RIVERINE	AREA	0.171493	ACRE	RPWWD	30.723253	-88.275426	Upper Big Creek
WETD012A-E3	PEM	RIVERINE	AREA	0.505144	ACRE	RPWWD	30.723732	-88.27507	Upper Big Creek
WETD012A-E4	PEM	RIVERINE	AREA	0.001448	ACRE	RPWWD	30.724489	-88.274165	Upper Big Creek
WETD012A-E5	PEM	RIVERINE	AREA	1.107156	ACRE	RPWWD	30.724638	-88.274326	Upper Big Creek
WETD012A-F0	PFO	RIVERINE	AREA	0.216571	ACRE	RPWWD	30.722625	-88.275257	Upper Big Creek
WETD012A-F1	PFO	RIVERINE	AREA	0.299958	ACRE	RPWWD	30.722523	-88.275453	Upper Big Creek
WETD012A-F2	PFO	RIVERINE	AREA	0.067504	ACRE	RPWWD	30.723006	-88.275325	Upper Big Creek
WETD012A-F3	PFO	RIVERINE	AREA	1.752276	ACRE	RPWWD	30.723723	-88.274718	Upper Big Creek
WETD012B-E0	PEM	RIVERINE	AREA	0.214836	ACRE	RPWWN	30.726483	-88.273322	Upper Big Creek
WETD012B-E1	PEM	RIVERINE	AREA	0.910757	ACRE	RPWWN	30.7278	-88.272534	Upper Big Creek
WETD012B-F0	PFO	RIVERINE	AREA	3.884942	ACRE	RPWWN	30.727285	-88.272484	Upper Big Creek
WETD013-E0	PEM	RIVERINE	AREA	4.14495	ACRE	RPWWD	30.749765	-88.255782	Upper Big Creek
WETD013-E1	PEM	RIVERINE	AREA	0.121235	ACRE	RPWWD	30.754876	-88.253589	Upper Big Creek
WETD013-E2	PEM	RIVERINE	AREA	0.088152	ACRE	RPWWD	30.755205	-88.253391	Upper Big Creek
WETD013-F0	PFO	RIVERINE	AREA	7.978576	ACRE	RPWWN	30.748971	-88.256467	Upper Big Creek
WETD013-F1	PFO	RIVERINE	AREA	0.684939	ACRE	RPWWD	30.753382	-88.254607	Upper Big Creek
WETD013-F2	PFO	RIVERINE	AREA	1.519709	ACRE	RPWWD	30.75427	-88.254123	Upper Big Creek
WETD013-F3	PFO	RIVERINE	AREA	0.038259	ACRE	RPWWD	30.754467	-88.254248	Upper Big Creek
WETD013-F4	PFO	RIVERINE	AREA	0.271189	ACRE	RPWWD	30.755175	-88.253822	Upper Big Creek
WETD014-E0	PEM	RIVERINE	AREA	1.034138	ACRE	RPWWD	30.757682	-88.252336	Upper Big Creek
WETD014-F0	PFO	RIVERINE	AREA	0.298207	ACRE	RPWWD	30.757697	-88.252502	Upper Big Creek
WETD015-E0	PEM	RIVERINE	AREA	0.489713	ACRE	NRPWW	30.783799	-88.210156	Chickasaw Creek
WETD015-F0	PFO	RIVERINE	AREA	0.89531	ACRE	NRPWW	30.783947	-88.210388	Chickasaw Creek
WETD016-E0	PEM	RIVERINE	AREA	0.091577	ACRE	NRPWW	30.778756	-88.210106	Chickasaw Creek
WETD017-F0	PFO	RIVERINE	AREA	0.653654	ACRE	RPWWD	30.777539	-88.222337	Chickasaw Creek
WETD017-F1	PFO	RIVERINE	AREA	0.844291	ACRE	RPWWD	30.777871	-88.221913	Chickasaw Creek
WETD018-E0	PEM	RIVERINE	AREA	0.462034	ACRE	RPWWN	30.777002	-88.224506	Chickasaw Creek
WETD018-F0	PFO	RIVERINE	AREA	0.21714	ACRE	RPWWN	30.776752	-88.224726	Chickasaw Creek
WETG001-E0	E2EM	ORGSOILFLT	AREA	12.953944	ACRE	TNWW	30.425354	-88.49021	Black Creek-Escatawpa River
WETG002-E0	E2EM	ORGSOILFLT	AREA	4.104646	ACRE	RPWWD	30.429913	-88.493043	Black Creek-Escatawpa River
WETG003-E0	PEM	RIVERINE	AREA	0.74079	ACRE	NRPWW	30.675501	-88.324451	Upper Big Creek
WETG003-F0	PFO	RIVERINE	AREA	1.060939	ACRE	NRPWW	30.675566	-88.323624	Upper Big Creek
WETG004-E0	PEM	RIVERINE	AREA	0.579371	ACRE	NRPWW	30.678303	-88.319991	Upper Big Creek
WETG004-F0	PFO	RIVERINE	AREA	0.800754	ACRE	NRPWW	30.67797	-88.319984	Upper Big Creek
WETG005-E0	PEM	MINSOILFLT	AREA	0.186405	ACRE	RPWWD	30.35541	-88.488585	Pt Aux Chenes Bay-Mississippi Sound
WETG005-E1	PEM	MINSOILFLT	AREA	0.643341	ACRE	RPWWD	30.355135	-88.488585	Pt Aux Chenes Bay-Mississippi Sound
WETG005-E2	PEM	MINSOILFLT	AREA	0.105511	ACRE	RPWWD	30.354811	-88.488588	Pt Aux Chenes Bay-Mississippi Sound
WETG005-F0	PFO	MINSOILFLT	AREA	1.049851	ACRE	TNWW	30.358698	-88.48372	Pt Aux Chenes Bay-Mississippi Sound
WETG005-S0	PSS	MINSOILFLT	AREA	2.756574	ACRE	TNWW	30.356174	-88.484182	Pt Aux Chenes Bay-Mississippi Sound
WETG005-S1	PSS	MINSOILFLT	AREA	2.591749	ACRE	RPWWD	30.356028	-88.486201	Pt Aux Chenes Bay-Mississippi Sound
WETG005-S3	PSS	MINSOILFLT	AREA	3.057929	ACRE	RPWWD	30.355964	-88.48811	Pt Aux Chenes Bay-Mississippi Sound
WETG006-E0	PEM	RIVERINE	AREA	0.618791	ACRE	RPWWD	30.65569	-88.348937	Upper Big Creek
WETG006-F0	PFO	RIVERINE	AREA	0.388317	ACRE	RPWWD	30.655147	-88.349333	Upper Big Creek
WETG006-F1	PFO	RIVERINE	AREA	0.342439	ACRE	RPWWD	30.655623	-88.348409	Upper Big Creek
WETG007-E0	PEM	RIVERINE	AREA	0.353979	ACRE	NRPWW	30.660884	-88.338054	Upper Big Creek
WETG007-F0	PFO	RIVERINE	AREA	0.810123	ACRE	NRPWW	30.660457	-88.3384	Upper Big Creek
WETG008-F0	PFO	RIVERINE	AREA	1.799484	ACRE	NRPWW	30.663781	-88.335818	Upper Big Creek
WETG008-F1	PFO	RIVERINE	AREA	1.381855	ACRE	NRPWW	30.665548	-88.335785	Upper Big Creek
WETG008-F2	PFO	RIVERINE	AREA	0.702847	ACRE	NRPWW	30.667392	-88.335876	Upper Big Creek
WETGT001-F0	PFO	RIVERINE	AREA	0.298388	ACRE	RPWWD	30.650392	-88.359536	Upper Big Creek

WETGT001-F1	PFO	RIVERINE	AREA	0.058248	ACRE	RPWWD	30.650659	-88.359067	Upper Big Creek
WETGT002-F0	PFO	RIVERINE	AREA	0.15239	ACRE	NRPWW	30.652879	-88.354183	Upper Big Creek
WETGT003-F0	PFO	RIVERINE	AREA	0.273426	ACRE	NRPWW	30.653826	-88.352143	Upper Big Creek
WETGT007-F0	PFO	RIVERINE	AREA	0.118194	ACRE	RPWWD	30.668523	-88.333452	Upper Big Creek
WETGT008-E0	PEM	RIVERINE	AREA	0.160186	ACRE	NRPWW	30.625392	-88.40578	Upper Big Creek
WETGT009-F0	PFO	RIVERINE	AREA	0.483707	ACRE	NRPWW	30.625199	-88.405478	Upper Big Creek

					Initially_Proposed_Area	Proposed_Area	Authorized_Area	Units_Area
WBA001.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA001.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA001.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA001.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA002.0	Little Black Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA003.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA003.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA004.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA004.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA005.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA005.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA005.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA006.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA006.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA006.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA006.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA007.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA007.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBA007.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBB001.0	Escatawpa River	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBB004.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBB005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBB006.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBB007.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC001.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC001.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC002.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC002.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC003.0	Wolf Branch	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC003.1	Wolf Branch	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC003.2	Wolf Branch	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC004.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC004.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC005.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC005.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC006.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC006.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC006.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC007.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC007.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC008.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC008.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010A.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010A.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010A.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010A.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010A.4		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010B.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC010B.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC011.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC011.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC012.0		Other (directional boring, crossir Pond	No	Temporary	0	0	0	ACRE
WBC013.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC013.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBC112A.0	Double Branch	Conversion of waters type (fores Non-Tidal Wetland	No	Temporary	0	0	0	ACRE
WBC112A.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD001.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD001.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD002.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD003A.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD003A.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD003A.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD003A.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD003B.0		Other (directional boring, crossir Pond	No	Temporary	0	0	0	ACRE
WBD004A.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD004A.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD004A.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD004B.0	Big Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD005.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD006.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD006.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.0	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.1	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.2	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.3	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.4	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD007.5	Hamilton Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD008.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD008.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD009A.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD009A.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD009C.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD009C.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD010.0		Other (directional boring, crossir Pond	No	Temporary	0	0	0	ACRE
WBD011.0	Red Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD011.1	Red Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBD011.2	Red Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG003.0		Other (directional boring, crossir Pond	No	Temporary	0	0	0	ACRE
WBG005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG005.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG006.0	Black Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG006.1	Black Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG007.0	Escatawpa River	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG008.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG008.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG009.0		Other (directional boring, crossir Pond	No	Temporary	0	0	0	ACRE
WBG010.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBG010.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT001.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT001.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT004.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT004.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT004.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT005.0		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT005.1		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT005.2		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT005.3		Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE
WBGT006.0	Pierce Creek	Other (directional boring, crossir River/Stream	No	Temporary	0	0	0	ACRE

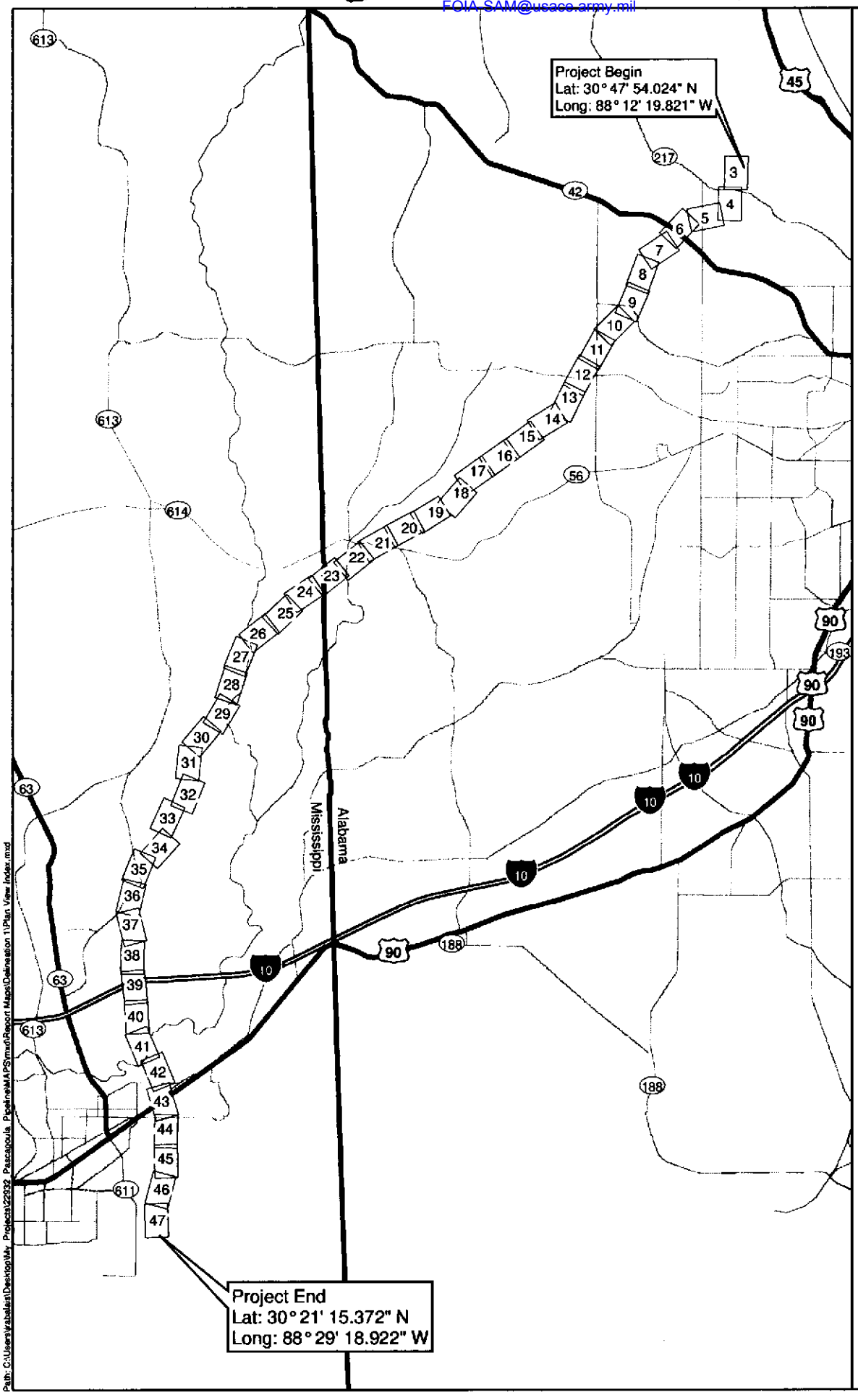
WBGT006.1	Pierce Creek	Other (directional boring, crossir	River/Stream	No	Temporary	0	0	0 ACRE
WETA002-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA002-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA002-F0.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA002-S0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA002-S0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.2		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.3		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.4		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.5		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.6		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.7		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.8		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E0.9		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.10		Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-E1.11		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.12		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.13		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.2		Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-E1.3		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.4		Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-E1.5		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.6		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.7		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.8		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-E1.9		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	3	0 ACRE
WETA003-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F1.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F1.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F2.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA003-F2.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F3.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F3.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA003-F4.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F4.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F5.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F5.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F6.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F6.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F7.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA003-F7.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-F7.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA003-S0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA003-S0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA005-E0.0		Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.2		Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA005-E0.3		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.4		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.5		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.6		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-E0.7		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F0.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F1.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F1.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F1.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA005-F2.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F2.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA005-F2.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F3.0		Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F3.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F3.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA005-F3.3		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA008-E0.0		Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA008-F0.0		Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA007-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA007-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA007-E0.2		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA007-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA007-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA008-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA008-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA008-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA008-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA009-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA009-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA010-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA010-E1.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA010-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA010-S0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA010-S1.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA011-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA011-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA011-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA012-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA012-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-E0.2		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-E0.3		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA013-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA015-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA015-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA015-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA015-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA015-F0.2		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA016-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA016-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA016-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA016-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA017-E0.0		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA017-E0.1		Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA017-F0.0		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA017-F0.1		Conversion of waters type (fores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE

WETA018-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA018-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA019-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA019-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA019-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA020-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA020-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA020-E0.2	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA020-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA020-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA020-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA021-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA021-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA022-E1.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA022-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA022-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA022-S0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA023-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA023-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA023-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA023-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA023-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F0.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F1.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F1.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F2.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F2.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F3.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA024-F3.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA025-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA025-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA025-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA026-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA026-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETA026-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETA026-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETA026-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB003-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB003-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETB003-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-E3.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-E4.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-E5.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-F0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-F1.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-F2.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-F3.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB004-F4.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB005-E0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB005-S0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB006-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB006-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB007-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB007-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB007-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB007-S0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETB008-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB008-E0.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB008-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETB008-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETB008-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB008-F0.3	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB009-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB009-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETB009-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC001-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC001-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC001-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC002-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC002-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC002-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC002-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC003-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC004-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC004-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC005-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC005-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC007-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC008-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC008-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC008-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC008-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC009-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC009-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC009-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC010-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC010-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC011-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC011-S1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC011-S1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	4	0 ACRE
WETC011-S1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC011-S1.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE

WETC011-S2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC011-S2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC011-S2.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC012-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC012-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC012-S0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC013A-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC013A-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC013A-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC013B-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC013B-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC013B-S0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC014-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC015-F1.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC017-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC017-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC017-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC017-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC018-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC018-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-E1.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-E2.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC019-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC019-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC019-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC019-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC019-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC020A-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC020B-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC020B-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC020B-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.2	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.3	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.4	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.5	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-E1.6	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F1.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F1.4	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC021-F2.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC021-F2.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.4	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.5	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.6	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.7	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.8	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC021-F2.9	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F1.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-S1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-S1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-S1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC022-S1.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC024-E0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC024-E0.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC025-F0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC026-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC026-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC027-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC027-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC028-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC028-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC028-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC029-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC029-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC029-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-E0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-E0.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-E0.2	Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC030-E1.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-E2.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-F0.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETC030-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	2	0 ACRE
WETC030-F1.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC030-F2.0	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC031-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC031-E3.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC032-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETC033-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD001-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD001-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD001-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE

WETD003-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD004-F0.0	Other (directional boring, crossir	Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD004-F0.1	Conversion of waters type (flores	Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD004-F0.2	Conversion of waters type (flores	Tidal Wetland	No	Temporary	0	2	0 ACRE
WETD004-F0.3	Conversion of waters type (flores	Tidal Wetland	No	Temporary	0	2	0 ACRE
WETD005-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD005-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD005-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD005-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD006-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD007-F0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-E0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD008-S0.1	Work	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-E1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F3.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-F3.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-S0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-S0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-S1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD009-S1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-S2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD009-S2.1	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD010-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD010-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD010-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD010-F0.3	Other (directional boring, crossir	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD010-F1.4	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD011-E2.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD011-E2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD011-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD011-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD011-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD011-F1.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E2.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E4.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E4.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E5.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E5.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E5.2	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-E5.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F3.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F3.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F3.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD012A-F3.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD012A-F3.4	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD012B-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD012B-F0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-E0.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-E1.0	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-E2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	3	0 ACRE
WETD013-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD013-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F2.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD013-F2.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F4.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD013-F4.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD014-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD014-F0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD015-E0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	1	0 ACRE
WETD015-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD015-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F0.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F0.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F0.3	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F1.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F1.1	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD017-F1.2	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD018-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETD018-F0.1	Work	Tidal Wetland	No	Temporary	0	1	0 ACRE
WETG001-E0.0	Work	Tidal Wetland	No	Temporary	0	3	0 ACRE
WETG001-E0.1	Work	Tidal Wetland	No	Temporary	0	1	0 ACRE
WETG001-E0.2	Work	Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG001-E0.3	Other (directional boring, crossir	Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG001-E0.4	Work	Tidal Wetland	No	Temporary	0	1	0 ACRE
WETG002-E0.0	Work	Tidal Wetland	No	Temporary	0	1	0 ACRE
WETG002-E0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG003-E0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG003-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG003-F0.1	Work	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG004-E0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG004-F0.0	Conversion of waters type (flores	Non-Tidal Wetland	No	Temporary	0	0	0 ACRE
WETG004-F0.1							

WETGT001-F0.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT001-F0.1	[redacted]	No	Temporary	0	0	0 ACRE
WETGT001-F0.2	[redacted]	No	Temporary	0	0	0 ACRE
WETGT001-F1.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT002-F0.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT002-F0.1	[redacted]	No	Temporary	0	0	0 ACRE
WETGT003-F0.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT003-F0.1	[redacted]	No	Temporary	0	0	0 ACRE
WETGT007-F0.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT007-F0.1	[redacted]	No	Temporary	0	0	0 ACRE
WETGT007-F0.2	[redacted]	No	Temporary	0	0	0 ACRE
WETGT007-F0.3	[redacted]	No	Temporary	0	0	0 ACRE
WETGT008-F0.0	[redacted]	No	Temporary	0	0	0 ACRE
WETGT008-F0.1	[redacted]	No	Temporary	0	0	0 ACRE



Path: C:\Users\rabalas\Desktop\My Projects\22032 Pascagoula PipelineMAPSmxd\Report Maps\Delineation 1\Plan View Index.mxd

PLAINS SOUTHCAP L.L.C.

PLAN VIEW INDEX
41-MILE-LONG TEN-MILE FACILITY TO PASCAGOULA PIPELINE PROJECT

JACKSON COUNTY, MS
MOBILE COUNTY, AL

LEGEND

Plan View

Background/GIS Type maps (SWCA Processing)
Topographic Quad Maps:
Mapped: JR
Approved By: RB
SWCA Project No: 22032
Date Produced: 08/25/2012
Revision Date:

North American Datum 1983
Transverse Mercator
Zone 16
U.S. Survey Foot

0 2 4 Miles

SWCA, Environmental Consultants
7550 Langley, Suite 100
Houston, Texas 77040
(713) 934-8000 phone
(713) 934-8001 fax
www.swca.com

SWCA
ENVIRONMENTAL CONSULTANTS

PROJECT QUANTITIES

WETLANDS	
PEM	122.314 ac.
PFO	200.240 ac.
PSS	63.331 ac.
EEM	17.056 ac.
TOTAL-	402.941 ac.
RIVERS / STREAMS	
EPHEMERAL	0.416 ac.
INTERMITTENT	0.516 ac.
PERENNIAL	5.717 ac.
TOTAL-	6.539 ac.
WATERBODIES	
PERRENIAL	1.166 ac.
UPLANDS	590.400 ac.
SITE TOTAL	1,001.047 ac.

LEGEND

Project Area

m:\gis\22892 Pascagoula Pipeline\MAPS\mxd\Report Maps\Delineation 11\Vicinity map.mxd

Appendix B

Wetland and Upland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA003_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.35573 Long: -88.48323 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**6**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA003_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	5	Yes	FAC
2. *Sesbania drummondii*	1	No	FACW
3. *Baccharis halimifolia*	3	Yes	FAC
4.			
5.			
6.			
	9 = Total Cover		
50% of total cover: 4.5	20% of total cover: 1.8		
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	85	Yes	FACW
2. *Panicum repens*	10	No	FACW
3. *Juncus marginatus*	3	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	98 = Total Cover		
50% of total cover: 49	20% of total cover: 19.6		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**99**	x 2 =	**198**
FAC species	**8**	x 3 =	**24**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**107** (A)		**222** (B)

Prevalence Index = B/A = **2.07**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA003_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	80	10YR 7/2	20	D	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA004_PSS
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.35694 Long: -88.48328 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**8**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA004_PSS**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	40	Yes	FAC
2. *Morella cerifera*	30	Yes	FAC
3. *Pinus elliottii*	10	No	FACW
4.			
5.			
6.			
	80 = Total Cover		
50% of total cover: 40	20% of total cover: 16		
Herb Stratum (Plot size: 30 ft.)			
1. *Paspalum urvillei*	10	No	FAC
2. *Polygonum hydropiperoides*	20	Yes	OBL
3. *Ptilimnium capillaceum*	30	Yes	OBL
4. *Panicum repens*	30	Yes	FACW
5. *Toxicodendron radicans*	15	No	FAC
6. *Carex longii*	15	No	OBL
7. *Juncus marginatus*	5	No	FACW
8.			
9.			
10.			
11.			
	125 = Total Cover		
50% of total cover: 62.5	20% of total cover: 25		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**65**	x 1 =	**65**
FACW species	**45**	x 2 =	**90**
FAC species	**95**	x 3 =	**285**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**205** (A)		**440** (B)

Prevalence Index = B/A = **2.15**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA004_PSS**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-20	10YR 3/1	80	10YR 7/2	20	D	M	Sandy Loam	areas of stripping

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- X Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA005_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.35740 Long: -88.48327 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**6**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA005_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Persea borbonia*	30	Yes	FACW
2. *Pinus elliottii*	30	Yes	FACW
3. *Triadica sebifera*	15	Yes	FAC
4.			
5.			
6.			
	75 = Total Cover		
	50% of total cover: 37.5	20% of total cover:	15
Sapling Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	10	Yes	FAC
2. *Quercus nigra*	10	Yes	FAC
3. *Pinus elliottii*	10	Yes	FACW
4.			
5.			
6.			
	30 = Total Cover		
	50% of total cover: 15	20% of total cover:	6
Shrub Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	60	Yes	FAC
2. *Triadica sebifera*	5	No	FAC
3. *Acer rubrum*	5	No	FAC
4.			
5.			
6.			
	70 = Total Cover		
	50% of total cover: 35	20% of total cover:	14
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	10	Yes	FACW
2. *Triadica sebifera*	2	No	FAC
3. *Toxicodendron radicans*	5	No	FAC
4. *Juncus effusus*	10	Yes	FACW
5. *Cyperus entrerianus*	5	No	FAC
6. *Ptilimnium capillaceum*	10	Yes	OBL
7. *Juncus scirpoides*	5	No	FACW
8.			
9.			
10.			
11.			
	47 = Total Cover		
	50% of total cover: 23.5	20% of total cover:	9.4
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover:	0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **10** (A)

Total Number of Dominant Species Across All Strata: **10** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**95**	x 2 =	**190**
FAC species	**117**	x 3 =	**351**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**222** (A)		**551** (B)

Prevalence Index = B/A = **2.48**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA005_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	80	NONE	—	—	—	Sandy Loam	
0-20	10YR 5/1	20	NONE	—	—	—	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA006_U
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.36194 Long: -88.48333 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA006_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Quercus nigra*	30	Yes	FAC
2. *Triadica sebifera*	20	Yes	FAC
3. *Quercus laurifolia*	10	No	FACW
4.			
5.			
6.			
	60 = Total Cover		
	50% of total cover: 30	20% of total cover:	12
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover:	0
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	5	No	FAC
2. *Ilex vomitoria*	30	Yes	FAC
3. *Morella cerifera*	15	Yes	FAC
4.			
5.			
6.			
	50 = Total Cover		
	50% of total cover: 25	20% of total cover:	10
Herb Stratum (Plot size: 30 ft.)			
1. *Ampelopsis arborea*	20	Yes	FAC
2. *Ilex vomitoria*	10	Yes	FAC
3. *Smilax bona-nox*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35 = Total Cover		
	50% of total cover: 17.5	20% of total cover:	7
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover:	0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**10**	x 2 =	**20**
FAC species	**135**	x 3 =	**405**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**145** (A)		**425** (B)

Prevalence Index = B/A = **2.93**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA006_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100	NONE	—	—	—	Sandy Loam	
6-20	10YR 5/2	90	NONE	—	—	—	Sandy Loam	
6-20	7.5YR 5/8	10	NONE	—	—	—	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA007_U
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.36305 Long: -88.48333 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No **X**	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of all three wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA007_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Cynodon dactylon*	50	Yes	FACU
2. *Briza minor*	15	Yes	FAC
3. *Ambrosia psilostachya*	10	No	FAC
4. *Rubus trivialis*	10	No	FAC
5. *Trifolium repens*	10	No	FACU
6. *Ampelopsis arborea*	5	No	FAC
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**0**	x 2 =	**0**
FAC species	**40**	x 3 =	**120**
FACU species	**60**	x 4 =	**240**
UPL species	**0**	x 5 =	**0**
Column Totals:	**100** (A)		**360** (B)

Prevalence Index = B/A = **3.60**

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤ 3.0[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** **X**

Remarks: (if observed, list morphological adaptations below).

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC− or drier).

SOIL

Sampling Point: **DPA007_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 2/1	100	None	—	—	—	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 18, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA008_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): Levee Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.36297 Long: -88.48333 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No ___	Depth (inches): **24**
Water Table Present?	Yes ___	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA008_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	10	Yes	OBL
2. *Pinus elliottii*	10	Yes	FACW
3. *Triadica sebifera*	5	Yes	FAC
4.			
5.			
6.			
	25 = Total Cover		
	50% of total cover: 12.5	20% of total cover: 5	
Sapling Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	15	Yes	OBL
2. *Quercus nigra*	10	Yes	FAC
3. *Pinus elliottii*	10	Yes	FACW
4.			
5.			
6.			
	35 = Total Cover		
	50% of total cover: 17.5	20% of total cover: 7	
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	
Herb Stratum (Plot size: 30 ft.)			
1. *Schoenoplectus californicus*	10	No	OBL
2. *Hydrocotyle umbellata*	15	Yes	OBL
3. *Polygonum hydropiperoides*	5	No	OBL
4. *Lemna minor*	30	Yes	OBL
5. *Paspalum urvillei*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	65 = Total Cover		
	50% of total cover: 32.5	20% of total cover: 13	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **8** (A)

Total Number of Dominant Species Across All Strata: **8** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**85**	x 1 =	**85**
FACW species	**20**	x 2 =	**40**
FAC species	**20**	x 3 =	**60**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**125** (A)		**185** (B)

Prevalence Index = B/A = **1.48**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA008_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Water

Depth (inches): 24

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

Unable to dig due to local inundation

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: June 22, 2014
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA009_PEM
Investigator(s): M Hess and L Ray Section, Township, Range: Sec. 9, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region (T) Lat: 30.36305 Long: -88.48333 Datum: UTM 16N N83 USFT
Soil Map Unit Name: #N/A NWI Classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**12**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA009_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	1	Yes	FAC
2. *Salix nigra*	1	Yes	OBL
3.			
4.			
5.			
6.			
	2 = Total Cover		
50% of total cover: 1	20% of total cover: 0.4		
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	90 = Total Cover		
50% of total cover: 45	20% of total cover: 18		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**1**	x 1 =	**1**
FACW species	**90**	x 2 =	**180**
FAC species	**1**	x 3 =	**3**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**92** (A)		**184** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA009_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Water

Depth (inches): 12

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

Unable to dig soils due to local inundation.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA011_PSS
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.36964 Long: -88.48326 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**10**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA011_PSS**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5	Yes	OBL
2. *Pinus elliottii*	10	Yes	FACW
3.			
4.			
5.			
6.			
	15 = Total Cover		
50% of total cover: 7.5	20% of total cover: 3		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Baccharis halimifolia*	50	Yes	FAC
2. *Triadica sebifera*	2	No	FAC
3.			
4.			
5.			
6.			
	52 = Total Cover		
50% of total cover: 26	20% of total cover: 10.4		
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	10	Yes	FACW
2. *Andropogon virginicus*	5	No	FAC
3. *Carex tribuloides*	10	Yes	FACW
4. *Ptilimnium capillaceum*	15	Yes	OBL
5. *Iva annua*	10	Yes	FAC
6. *Sagittaria lancifolia*	5	No	OBL
7. *Solidago sempervirens*	5	No	FACW
8.			
9.			
10.			
11.			
	60 = Total Cover		
50% of total cover: 30	20% of total cover: 12		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **7** (A)

Total Number of Dominant Species Across All Strata: **7** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**25**	x 1 =	**25**
FACW species	**35**	x 2 =	**70**
FAC species	**67**	x 3 =	**201**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**127** (A)		**296** (B)

Prevalence Index = B/A = **2.33**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA011_PSS**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	75	10YR 5/2	25	D	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA012_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.37445 Long: -88.47983 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **6**		
Water Table Present?	Yes	No **X**	Depth (inches): **>20**		
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**	**Wetland Hydrology Present?**	**Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA012_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Andropogon virginicus*	50	Yes	FAC
2. *Ptilimnium capillaceum*	5	No	OBL
3. *Juncus marginatus*	20	No	FACW
4. *Panicum repens*	30	Yes	FACW
5. *Paspalum urvillei*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	107 = Total Cover		
50% of total cover: 53.5	20% of total cover: 21.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**5**	x 1 =	**5**
FACW species	**50**	x 2 =	**100**
FAC species	**52**	x 3 =	**156**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**107** (A)		**261** (B)

Prevalence Index = B/A = **2.44**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA012_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10YR 4/2	100	None	—	—	—	Loamy Sand	
4-5	10YR 6/3	100	None	—	—	—	Loamy Sand	
5-20	10YR 3/1	45	NONE	—	—	—	Loamy Sand	
5-20	10YR 4/2	45	10YR 3/3	10	—	—	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA013_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.37404 Long: -88.47998 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: PFO1/4C
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No		
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	Yes **X** No
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **6**		
Water Table Present?	Yes	No **X**	Depth (inches): **>20**		
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**	**Wetland Hydrology Present?**	Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA013_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	40	Yes	FACW
2. *Triadica sebifera*	5	No	FAC
3.			
4.			
5.			
6.			
	45 = Total Cover		
50% of total cover: 22.5		20% of total cover: 9	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5	No	OBL
2. *Morella cerifera*	25	Yes	FAC
3. *Triadica sebifera*	10	Yes	FAC
4. *Magnolia virginiana*	10	Yes	FACW
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	80	Yes	FACW
2. *Andropogon virginicus*	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	85 = Total Cover		
50% of total cover: 42.5		20% of total cover: 17	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**5**	x 1 =	**5**
FACW species	**130**	x 2 =	**260**
FAC species	**45**	x 3 =	**135**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**180** (A)		**400** (B)

Prevalence Index = B/A = **2.22**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA013_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 5/1	90	10YR 6/2	10	D	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA014_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.37860 Long: -88.47999 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**24**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA014_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	2	Yes	FAC
2. *Morella cerifera*	5	Yes	FAC
3. *Taxodium distichum*	2	Yes	OBL
4. *Pinus elliottii*	2	Yes	FACW
5.			
6.			
	11 = Total Cover		
50% of total cover: 5.5	20% of total cover: 2.2		
Herb Stratum (Plot size: 30 ft.)			
1. *Polygonum hydropiperoides*	5	Yes	OBL
2. *Juncus validus*	20	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	25 = Total Cover		
50% of total cover: 12.5	20% of total cover: 5		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**7**	x 1 =	**7**
FACW species	**22**	x 2 =	**44**
FAC species	**7**	x 3 =	**21**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**36** (A)		**72** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA014_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see remark below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA015_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.37901 Long: -88.48009 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: PFO4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**4**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA015_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	No	FACW
2. *Quercus nigra*	10	Yes	FAC
3. *Triadica sebifera*	10	Yes	FAC
4. *Morella cerifera*	10	Yes	FAC
5.			
6.			
	35 = Total Cover		
	50% of total cover: 17.5	20% of total cover: 7	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5	No	OBL
2. *Acer rubrum*	10	Yes	FAC
3. *Morella cerifera*	25	Yes	FAC
4. *Pinus elliottii*	10	Yes	FACW
5.			
6.			
	50 = Total Cover		
	50% of total cover: 25	20% of total cover: 10	
Herb Stratum (Plot size: 30 ft.)			
1. *Sagittaria lancifolia*	5	Yes	OBL
2. *Acer rubrum*	2	No	FAC
3. *Saururus cernuus*	10	Yes	OBL
4. *Toxicodendron radicans*	5	Yes	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	22 = Total Cover		
	50% of total cover: 11	20% of total cover: 4.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **9** (A)

Total Number of Dominant Species Across All Strata: **9** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**20**	x 1 =	**20**
FACW species	**15**	x 2 =	**30**
FAC species	**72**	x 3 =	**216**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**107** (A)		**266** (B)

Prevalence Index = B/A = **2.49**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA015_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	60	10YR 6/1	40	D	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 19, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA016_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 4, T8SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38413 Long: -88.48022 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**6**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes **X** No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA016_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	2	No	FACW
2. *Rubus arvensis*	5	No	FAC
3. *Panicum repens*	40	Yes	FACW
4. *Andropogon virginicus*	20	Yes	FAC
5. *Triadica sebifera*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	72 = Total Cover		
50% of total cover: 36	20% of total cover: 14.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**42**	x 2 =	**84**
FAC species	**30**	x 3 =	**90**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**72** (A)		**174** (B)

Prevalence Index = B/A = **2.42**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA016_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100	None	—	—	—	Loamy Sand	
4-20	10YR 3/2	50	10YR 5/1	30	D	M	Loamy Sand	
			2.5Y 5/6	20	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA017_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38430 Long: -88.48024 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**6**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA017_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2. *Quercus nigra*	10	Yes	FAC
3. *Triadica sebifera*	10	Yes	FAC
4.			
5.			
6.			
	50 = Total Cover		
	50% of total cover: 25	20% of total cover: 10	
Sapling Stratum (Plot size: 30 ft.)			
1. *Magnolia virginiana*	10	Yes	FACW
2. *Triadica sebifera*	5	Yes	FAC
3. *Ilex vomitoria*	5	Yes	FAC
4.			
5.			
6.			
	20 = Total Cover		
	50% of total cover: 10	20% of total cover: 4	
Shrub Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	30	Yes	FAC
2. *Ilex vomitoria*	5	No	FAC
3.			
4.			
5.			
6.			
	35 = Total Cover		
	50% of total cover: 17.5	20% of total cover: 7	
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus validus*	10	No	FACW
2. *Panicum repens*	15	Yes	FACW
3. *Carex crus-corvi*	20	Yes	OBL
4. *Acer negundo*	5	No	FACW
5. *Iva annua*	5	No	FAC
6. *Hydrocotyle verticillata*	2	No	OBL
7.			
8.			
9.			
10.			
11.			
	57 = Total Cover		
	50% of total cover: 28.5	20% of total cover: 11.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **9** (A)

Total Number of Dominant Species Across All Strata: **9** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**22**	x 1 =	**22**
FACW species	**70**	x 2 =	**140**
FAC species	**70**	x 3 =	**210**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**162** (A)		**372** (B)

Prevalence Index = B/A = **2.30**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA017_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	10	10YR 5/2	85	D	M	Loamy Sand	
			10YR 3/6	5	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA018_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38450 Long: -88.48023 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes** **X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches):	**N/A**	
Water Table Present?	Yes **X**	No	Depth (inches):	**0**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present?** **Yes** **X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA018_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	5	Yes	FAC
2. *Pinus elliottii*	5	Yes	FACW
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		
Herb Stratum (Plot size: 30 ft.)			
1. *Hypericum hypericoides*	15	No	FAC
2. *Osmunda regalis*	10	No	OBL
3. *Spartina patens*	80	Yes	FACW
4. *Andropogon glomeratus*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	115 = Total Cover		
50% of total cover: 57.5	20% of total cover: 23		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**95**	x 2 =	**190**
FAC species	**20**	x 3 =	**60**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**125** (A)		**260** (B)

Prevalence Index = B/A = **2.08**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA018_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100	None	—	—	—	Loamy Sand	
2-6	10YR 2/1	80	10YR 5/2	20	D	M	Loamy Sand	
6-20	10YR 2/1	2	NONE	—	—	—	Loamy Sand	
6-20	10YR 4/2	83	10YR 3/6	15	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA019_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38667 Long: -88.48021 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**2**
Water Table Present?	Yes **X** No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X** No	Depth (inches):	**0**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA019_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	70	Yes	FACW
2. *Quercus nigra*	20	Yes	FAC
3. *Magnolia virginiana*	5	No	FACW
4.			
5.			
6.			
	95 = Total Cover		
	50% of total cover: 47.5	20% of total cover: 19	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	20	Yes	FACW
2. *Triadica sebifera*	15	Yes	FAC
3. *Acer rubrum*	10	No	FAC
4. *Morella cerifera*	20	Yes	FAC
5. *Magnolia virginiana*	10	No	FACW
6. *Ilex vomitoria*	5	No	FAC
	80 = Total Cover		
	50% of total cover: 40	20% of total cover: 16	
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	10	Yes	FACW
2. *Osmunda regalis*	5	Yes	OBL
3. *Rubus trivialis*	2	No	FAC
4. *Toxicodendron radicans*	5	Yes	FAC
5. *Vitis rotundifolia*	5	Yes	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	27 = Total Cover		
	50% of total cover: 13.5	20% of total cover: 5.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **9** (A)

Total Number of Dominant Species Across All Strata: **9** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**5**	x 1 =	**5**
FACW species	**115**	x 2 =	**230**
FAC species	**82**	x 3 =	**246**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**202** (A)		**481** (B)

Prevalence Index = B/A = **2.38**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA019_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	90	10YR 5/2	10	D	M	Loamy Sand	
10-20	10YR 2/1	5	NONE	—	—	—	Loamy Sand	
10-20	10YR 5/2	80	10YR 5/6	15	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA020_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38795 Long: -88.48023 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes** **X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- **X** Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- **X** Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No ___	Depth (inches):	**3**	
Water Table Present?	Yes ___	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes **X**	No ___	Depth (inches):	**0**	**Wetland Hydrology Present?** **Yes** **X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA020_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	3	Yes	FACW
2. *Triadica sebifera*	1	Yes	FAC
3. *Morella cerifera*	1	Yes	FAC
4.			
5.			
6.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	85	Yes	FACW
2. *Andropogon glomeratus*	10	No	FACW
3. *Centella asiatica*	5	No	FACW
4. *Rhynchospora corniculata*	2	No	OBL
5. *Spartina patens*	15	No	FACW
6.			
7.			
8.			
9.			
10.			
11.			
	117 = Total Cover		
50% of total cover: 58.5	20% of total cover: 23.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**2**	x 1 =	**2**
FACW species	**118**	x 2 =	**236**
FAC species	**2**	x 3 =	**6**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**122** (A)		**244** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA020_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10YR 3/1	100	None	—	—	—	Loamy Sand	
4-20	10YR 4/2	50	10YR 6/2	20	D	M	Loamy Sand	
			10YR 5/8	20	C	M	Loamy Sand	
4-20	10YR 2/1	10	NONE	—	—	—	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA021_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.38938 Long: -88.48030 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**1**
Water Table Present?	Yes **X**	No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA021_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	60	Yes	FACW
2. *Quercus nigra*	5	No	FAC
3.			
4.			
5.			
6.			
	65 = Total Cover		
50% of total cover: 32.5		20% of total cover: 13	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	5	No	FAC
2. *Acer rubrum*	25	Yes	FAC
3. *Morella cerifera*	15	Yes	FAC
4. *Ilex vomitoria*	5	No	FAC
5. *Quercus nigra*	10	No	FAC
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	80	Yes	FACW
2. *Juncus effusus*	15	No	FACW
3. *Andropogon glomeratus*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
50% of total cover: 50		20% of total cover: 20	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**160**	x 2 =	**320**
FAC species	**65**	x 3 =	**195**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**225** (A)		**515** (B)

Prevalence Index = B/A = **2.29**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA021_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	80	10YR 6/1	20	D	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA022_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.39532 Long: -88.48041 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- **X** Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**3**
Water Table Present?	Yes **X**	No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA022_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Eleocharis parvula*	5	Yes	OBL
2. *Cyperus virens*	5	Yes	FACW
3. *Juncus marginatus*	5	Yes	FACW
4. *Myriophyllum spicatum*	2	No	OBL
5. *Eleocharis montevidensis*	5	Yes	FACW
6. *Cyperus retrorsus*	5	Yes	FACU
7. *Rhynchospora macrostachya*	10	Yes	OBL
8.			
9.			
10.			
11.			
	37 = Total Cover		
50% of total cover: 18.5	20% of total cover: 7.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **83%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	17	x 1 =	17
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	37 (A)		67 (B)

Prevalence Index = B/A = **1.81**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA022_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10R 7/1	85	10YR 6/8	15	C	M	Clay	
6-20	10YR 3/1	90	10YR 4/6	10	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 20, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA023_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 33, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.39640 Long: -88.48031 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___ No **X**	Depth (inches):	**N/A**
Water Table Present?	Yes **X** No ___	Depth (inches):	**3**
Saturation Present? (includes capillary fringe)	Yes **X** No ___	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA023_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	70	Yes	FACW
2. *Quercus nigra*	5	No	FAC
3. *Triadica sebifera*	15	No	FAC
4.			
5.			
6.			
	90 = Total Cover		
	50% of total cover: 45	20% of total cover: 18	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	15	Yes	FAC
2. *Morella cerifera*	20	Yes	FAC
3. *Quercus nigra*	5	No	FAC
4. *Magnolia virginiana*	3	No	FACW
5.			
6.			
	43 = Total Cover		
	50% of total cover: 21.5	20% of total cover: 8.6	
Herb Stratum (Plot size: 30 ft.)			
1. *Thelypteris thelypteroides*	90	Yes	FACW
2. *Andropogon glomeratus*	1	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	91 = Total Cover		
	50% of total cover: 45.5	20% of total cover: 18.2	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
	50% of total cover: 0	20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**164**	x 2 =	**328**
FAC species	**60**	x 3 =	**180**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**224** (A)		**508** (B)

Prevalence Index = B/A = **2.27**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA023_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	95	10YR 4/6	5	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA024_U
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.39899 Long: -88.48016 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No **X**	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of all three wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA024_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Briza minor*	5	No	FAC
2. *Verbena brasiliensis*	2	No	FAC
3. *Imperata cylindrica*	90	Yes	UPL
4. *Tridens strictus*	2	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	99 = Total Cover		
50% of total cover: 49.5	20% of total cover: 19.8		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **0** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**2**	x 2 =	**4**
FAC species	**7**	x 3 =	**21**
FACU species	**0**	x 4 =	**0**
UPL species	**90**	x 5 =	**450**
Column Totals:	**99** (A)		**475** (B)

Prevalence Index = B/A = **4.80**

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤ 3.0[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** **X**

Remarks: (if observed, list morphological adaptations below).

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC− or drier).

SOIL

Sampling Point: **DPA024_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	100	None	—	—	—	Sandy Clay Loam	
3-20	10YR 5/3	85	10YR 5/6	2	C	M	Sandy Clay Loam	
		13	NONE	—	—	—		shell material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

Soils disturbed; fill material to build up area for road.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA025_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.39930 Long: -88.48012 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**12**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA025_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	5	No	FACW
2. *Juncus validus*	5	No	FACW
3. *Rhynchospora macrostachya*	5	No	OBL
4. *Myriophyllum spicatum*	10	No	OBL
5. *Hypericum hypericoides*	15	No	FAC
6. *Panicum repens*	5	No	FACW
7. *Polygonum hydropiperoides*	70	Yes	OBL
8.			
9.			
10.			
11.			
	115 = Total Cover		
50% of total cover: 57.5	20% of total cover: 23		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**85**	x 1 =	**85**
FACW species	**15**	x 2 =	**30**
FAC species	**15**	x 3 =	**45**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**115** (A)		**160** (B)

Prevalence Index = B/A = **1.39**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA025_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see remarks below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA026_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.39971 Long: -88.48013 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: PSS1/4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**6**
Water Table Present?	Yes **X** No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X** No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA026_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2. *Triadica sebifera*	5	No	FAC
3.			
4.			
5.			
6.			
	35 = Total Cover		
50% of total cover: 17.5		20% of total cover: 7	
Sapling Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	20	Yes	FAC
2. *Triadica sebifera*	5	Yes	FAC
3.			
4.			
5.			
6.			
	25 = Total Cover		
50% of total cover: 12.5		20% of total cover: 5	
Shrub Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	50	Yes	FAC
2. *Triadica sebifera*	10	No	FAC
3. *Ilex vomitoria*	15	Yes	FAC
4.			
5.			
6.			
	75 = Total Cover		
50% of total cover: 37.5		20% of total cover: 15	
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus effusus*	15	Yes	FACW
2. *Spartina patens*	15	Yes	FACW
3. *Osmunda regalis*	5	No	OBL
4. *Panicum repens*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 = Total Cover		
50% of total cover: 20		20% of total cover: 8	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **7** (A)

Total Number of Dominant Species Across All Strata: **7** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**5**	x 1 =	**5**
FACW species	**65**	x 2 =	**130**
FAC species	**105**	x 3 =	**315**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**175** (A)		**450** (B)

Prevalence Index = B/A = **2.57**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA026_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	90	10YR 5/6	10	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA027_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40180 Long: -88.48020 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: PSS1/4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___ No **X**	Depth (inches):	**N/A**
Water Table Present?	Yes ___ No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes **X** No ___	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA027_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Morella cerifera*	20	Yes	FAC
2. *Ilex vomitoria*	10	Yes	FAC
3. *Persea palustris*	5	No	UPL
4. *Pinus elliottii*	10	Yes	FACW
5.			
6.			
	45 = Total Cover		
50% of total cover: 22.5		20% of total cover: 9	
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	90	Yes	FACW
2. *Rubus trivialis*	2	No	FAC
3. *Panicum repens*	2	No	FACW
4. *Andropogon virginicus*	2	No	FAC
5. *Toxicodendron radicans*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	98 = Total Cover		
50% of total cover: 49		20% of total cover: 19.6	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**162**	x 2 =	**324**
FAC species	**36**	x 3 =	**108**
FACU species	**0**	x 4 =	**0**
UPL species	**5**	x 5 =	**25**
Column Totals:	**203** (A)		**457** (B)

Prevalence Index = B/A = **2.25**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA027_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100	None	—	—	—	Loamy Sand	
4-20	10YR 5/1	70	10YR 5/6	30	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA028_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40213 Long: -88.48009 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **6**		
Water Table Present?	Yes	No **X**	Depth (inches): **>20**		
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**	**Wetland Hydrology Present?**	**Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA028_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	No	FACW
2. *Panicum repens*	70	Yes	FACW
3. *Rhynchospora macrostachya*	5	No	OBL
4. *Centella asiatica*	5	No	FACW
5. *Sagittaria lancifolia*	5	No	OBL
6. *Myriophyllum spicatum*	5	No	OBL
7.			
8.			
9.			
10.			
11.			
	95 = Total Cover		
50% of total cover: 47.5	20% of total cover: 19		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**15**	x 1 =	**15**
FACW species	**80**	x 2 =	**160**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**95** (A)		**175** (B)

Prevalence Index = B/A = **1.84**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA028_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	95	10YR 3/6	5	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA029_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40254 Long: -88.48007 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**1**	
Water Table Present?	Yes **X**	No	Depth (inches):	**0**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA029_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	50	Yes	FACW
2. *Magnolia virginiana*	10	No	FACW
3.			
4.			
5.			
6.			
	60	= Total Cover	
50% of total cover:	30	20% of total cover:	12
Sapling Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	20	No	FAC
2. *Pinus elliottii*	40	Yes	FACW
3. *Morella cerifera*	25	Yes	FAC
4. *Acer rubrum*	20	No	FAC
5.			
6.			
	105	= Total Cover	
50% of total cover:	52.5	20% of total cover:	21
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	20	Yes	FACW
2. *Acer rubrum*	30	Yes	FAC
3. *Morella cerifera*	20	Yes	FAC
4. *Persea palustris*	15	No	UPL
5.			
6.			
	85	= Total Cover	
50% of total cover:	42.5	20% of total cover:	17
Herb Stratum (Plot size: 30 ft.)			
1. *Carex elliottii*	10	Yes	OBL
2. *Panicum repens*	20	Yes	FACW
3. *Toxicodendron radicans*	10	Yes	FAC
4. *Osmunda regalis*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	
50% of total cover:	22.5	20% of total cover:	9
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0	= Total Cover	
50% of total cover:	0	20% of total cover:	0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **9** (A)

Total Number of Dominant Species Across All Strata: **9** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**15**	x 1 =	**15**
FACW species	**140**	x 2 =	**280**
FAC species	**125**	x 3 =	**375**
FACU species	**0**	x 4 =	**0**
UPL species	**15**	x 5 =	**75**
Column Totals:	**295** (A)		**745** (B)

Prevalence Index = B/A = **2.53**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA029_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	97	10YR 3/6	3	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA030_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40444 Long: -88.48167 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Ocilla loamy sand, 0 to 2 percent, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**1**
Water Table Present?	Yes **X** No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X** No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA030_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	40	Yes	FAC
2. *Pinus elliottii*	30	Yes	FACW
3.			
4.			
5.			
6.			
	70 = Total Cover		
50% of total cover: 35		20% of total cover: 14	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Persea palustris*	5	No	UPL
2. *Acer rubrum*	15	Yes	FAC
3. *Ilex glabra*	40	Yes	FACW
4. *Pinus elliottii*	5	No	FACW
5.			
6.			
	65 = Total Cover		
50% of total cover: 32.5		20% of total cover: 13	
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus effusus*	40	Yes	FACW
2. *Osmunda regalis*	20	Yes	OBL
3. *Ilex glabra*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	70 = Total Cover		
50% of total cover: 35		20% of total cover: 14	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**20**	x 1 =	**20**
FACW species	**125**	x 2 =	**250**
FAC species	**55**	x 3 =	**165**
FACU species	**0**	x 4 =	**0**
UPL species	**5**	x 5 =	**25**
Column Totals:	**205** (A)		**460** (B)

Prevalence Index = B/A = **2.24**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA030_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	96	10YR 3/4	4	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA031_PEM
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region (T) Lat: 30.40566 Long: -88.48285 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**6**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA031_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Typha latifolia*	50	Yes	OBL
2. *Eleocharis montevidensis*	50	Yes	FACW
3. *Hydrocotyle umbellata*	10	No	OBL
4. *Panicum repens*	10	No	FACW
5. *Cyperus virens*	5	No	FACW
6. *Ptilimnium capillaceum*	5	No	OBL
7. *Saururus cernuus*	5	No	OBL
8.			
9.			
10.			
11.			
	135 = Total Cover		
50% of total cover: 67.5	20% of total cover: 27		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**70**	x 1 =	**70**
FACW species	**65**	x 2 =	**130**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**135** (A)		**200** (B)

Prevalence Index = B/A = **1.48**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA031_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	95	10YR 4/6	5	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA032_PFO
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40575 Long: -88.48277 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**8**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA032_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	40	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	40 = Total Cover		
50% of total cover: 20		20% of total cover: 8	
Sapling Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	50	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	20	Yes	FAC
2. *Morella cerifera*	20	Yes	FAC
3. *Salix nigra*	5	No	OBL
4.			
5.			
6.			
	45 = Total Cover		
50% of total cover: 22.5		20% of total cover: 9	
Herb Stratum (Plot size: 30 ft.)			
1. *Asclepias perennis*	30	Yes	OBL
2. *Sagittaria lancifolia*	10	No	OBL
3. *Sagittaria platyphylla*	10	No	OBL
4. *Juncus effusus*	15	Yes	FACW
5. *Thelypteris thelypteroides*	15	Yes	FACW
6.			
7.			
8.			
9.			
10.			
11.			
	80 = Total Cover		
50% of total cover: 40		20% of total cover: 16	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **7** (A)

Total Number of Dominant Species Across All Strata: **7** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**55**	x 1 =	**55**
FACW species	**70**	x 2 =	**140**
FAC species	**90**	x 3 =	**270**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**215** (A)		**465** (B)

Prevalence Index = B/A = **2.16**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA032_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	10	NONE	—	—	—	Sandy Loam	
0-20	10YR 5/2	85	10YR 3/6	5	C	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- **X** Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 21, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA033_U
Investigator(s): M. Hess and L. Ray Section, Township, Range: Sec. 28, T7SR5W
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.40584 Long: -88.48281 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No **X**	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of all three wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **8**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA033_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Hydrocotyle umbellata*	10	Yes	OBL
2. *Lolium perenne*	10	Yes	FACU
3. *Verbena brasiliensis*	8	Yes	FAC
4. *Bidens alba*	10	Yes	UPL
5. *Briza minor*	3	No	FAC
6. *Ambrosia psilostachya*	3	No	FAC
7. *Salvia lyrata*	2	No	FAC
8. *Allium vineale*	3	No	FACU
9. *Cynodon dactylon*	5	Yes	FACU
10.			
11.			
	54 = Total Cover		
50% of total cover: 27	20% of total cover: 10.8		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **0** (A)

Total Number of Dominant Species Across All Strata: **0** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**0**	x 2 =	**0**
FAC species	**16**	x 3 =	**48**
FACU species	**18**	x 4 =	**72**
UPL species	**10**	x 5 =	**50**
Column Totals:	**54** (A)		**180** (B)

Prevalence Index = B/A = **3.33**

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤ 3.0[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** **X**

Remarks: (if observed, list morphological adaptations below).

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC− or drier).

SOIL

Sampling Point: **DPA033_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	97	10YR 6/6	3	D	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA034_EEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): Marsh, Freshwater Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43085 Long: -88.49365 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Axis mucky sandy clay loam, frequently flooded NWI Classification: PFO1/2F
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes** **X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**1**	
Water Table Present?	Yes **X**	No	Depth (inches):	**0**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present?** **Yes** **X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA034_EEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	1	Yes	OBL
2.			
3.			
4.			
5.			
6.			
	1 = Total Cover		
50% of total cover: 0.5		20% of total cover: 0.2	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Herb Stratum (Plot size: 30 ft.)			
1. *Zizaniopsis miliacea*	99	Yes	OBL
2. *Sagittaria graminea*	2	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	101 = Total Cover		
50% of total cover: 50.5		20% of total cover: 20.2	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**102**	x 1 =	**102**
FACW species	**0**	x 2 =	**0**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**102** (A)		**102** (B)

Prevalence Index = B/A = **1.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA034_EEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100	NONE	—	—	—	Organic Soil Layer	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- X Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA035_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43109 Long: -88.49374 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___ No **X**	Depth (inches):	**N/A**
Water Table Present?	Yes ___ No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes **X** No ___	Depth (inches):	**8**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA035_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	45	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	45 = Total Cover		
50% of total cover: 22.5		20% of total cover: 9	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Ilex vomitoria*	30	Yes	FAC
2. *Magnolia virginiana*	30	Yes	FACW
3. *Triadica sebifera*	10	No	FAC
4.			
5.			
6.			
	70 = Total Cover		
50% of total cover: 35		20% of total cover: 14	
Herb Stratum (Plot size: 30 ft.)			
1. *Zizaniopsis miliacea*	80	Yes	OBL
2. *Sabal minor*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	90 = Total Cover		
50% of total cover: 45		20% of total cover: 18	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**80**	x 1 =	**80**
FACW species	**85**	x 2 =	**170**
FAC species	**40**	x 3 =	**120**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**205** (A)		**370** (B)

Prevalence Index = B/A = **1.80**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA035_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	80	10YR 6/2	18	D	M	Loamy Sand	
			10YR 3/6	2	C	M	Loamy Sand	
16-20	10YR 6/2	85	10YR 5/6	15	C	M	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA036_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43197 Long: -88.49414 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	Yes **X** No
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**8**
Water Table Present?	Yes ___ No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes ___ No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA036_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	50	Yes	FACW
2. *Sagittaria lancifolia*	5	No	OBL
3. *Zizaniopsis miliacea*	50	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	105 = Total Cover		
50% of total cover: 52.5	20% of total cover: 21		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**55**	x 1 =	**55**
FACW species	**50**	x 2 =	**100**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**105** (A)		**155** (B)

Prevalence Index = B/A = **1.48**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA036_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5YR 4/1	75	7.5YR 5/8	25	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA037_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43244 Long: -88.49441 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No **X**	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of all three wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA037_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Imperata cylindrica*	70	Yes	UPL
2. *Andropogon virginicus*	30	Yes	FAC
3. *Ilex vomitoria*	5	No	FAC
4. *Rubus trivialis*	4	No	FAC
5. *Pinus elliottii*	2	No	FACW
6. *Axonopus affinis*	5	No	FACW
7.			
8.			
9.			
10.			
11.			
	116 = Total Cover		
50% of total cover: 58	20% of total cover: 23.2		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**7**	x 2 =	**14**
FAC species	**39**	x 3 =	**117**
FACU species	**0**	x 4 =	**0**
UPL species	**70**	x 5 =	**350**
Column Totals:	**116** (A)		**481** (B)

Prevalence Index = B/A = **4.15**

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤ 3.0[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** **X**

Remarks: (if observed, list morphological adaptations below).

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FAC− or drier).

SOIL

Sampling Point: **DPA037_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-10	10YR 3/1	100	None	—	—	—	Loamy Sand	
10-20	10YR 6/8	100	None	—	—	—	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA038_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43280 Long: -88.49434 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: PFO4Ad
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA038_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	Yes	FACW
2. *Quercus nigra*	40	Yes	FAC
3.			
4.			
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Sapling Stratum (Plot size: 30 ft.)			
1. *Ilex vomitoria*	40	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	40 = Total Cover		
50% of total cover: 20		20% of total cover: 8	
Shrub Stratum (Plot size: 30 ft.)			
1. *Ilex vomitoria*	40	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	40 = Total Cover		
50% of total cover: 20		20% of total cover: 8	
Herb Stratum (Plot size: 30 ft.)			
1. *Sabal minor*	25	Yes	FACW
2. *Toxicodendron radicans*	5	No	FAC
3. *Magnolia grandiflora*	2	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	32 = Total Cover		
50% of total cover: 16		20% of total cover: 6.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**35**	x 2 =	**70**
FAC species	**127**	x 3 =	**381**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**162** (A)		**451** (B)

Prevalence Index = B/A = **2.78**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA038_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 2/1	100	None	—	—	—	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA039_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43322 Long: -88.49450 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes** **X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**3**	
Water Table Present?	Yes **X**	No	Depth (inches):	**0**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present?** **Yes** **X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA039_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Triadica sebifera*	5	No	FAC
2. *Pinus elliottii*	40	Yes	FACW
3.			
4.			
5.			
6.			
	45 = Total Cover		
50% of total cover: 22.5		20% of total cover: 9	
Sapling Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	90	Yes	FACW
2. *Andropogon glomeratus*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	95 = Total Cover		
50% of total cover: 47.5		20% of total cover: 19	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**155**	x 2 =	**310**
FAC species	**5**	x 3 =	**15**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**160** (A)		**325** (B)

Prevalence Index = B/A = **2.03**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA039_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	90	10YR 3/6	10	C	M	Loam	
8-20	10YR 6/2	85	10YR 5/6	15	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA040_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43347 Long: -88.49455 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: PFO4Ad
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes** **X**	**No**
Hydric Soil Present?	Yes **X**	No			
Wetland Hydrology Present?	Yes **X**	No			

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**1**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches):	**0**	**Wetland Hydrology Present?** **Yes** **X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA040_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Centella asiatica*	30	Yes	FACW
2. *Rhynchospora cephalantha*	70	Yes	OBL
3. *Panicum repens*	10	No	FACW
4. *Andropogon virginicus*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	120 = Total Cover		
50% of total cover: 60	20% of total cover: 24		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**70**	x 1 =	**70**
FACW species	**40**	x 2 =	**80**
FAC species	**10**	x 3 =	**30**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**120** (A)		**180** (B)

Prevalence Index = B/A = **1.50**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA040_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	80	10YR 7/6	20	C	PL	Silty Clay	
10-12	10YR 2/1	40	7.5YR 6/8	30	C	M	Silty Clay	
			7.5YR 7/1	30	D	M	Silty Clay	
12-20	10YR 2/1	70	7.5YR 3/4	15	C	PL	Silty Clay	
			10YR 5/2	15	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA041_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43456 Long: -88.49463 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA041_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	30 = Total Cover		
50% of total cover: 15		20% of total cover: 6	
Sapling Stratum (Plot size: 30 ft.)			
1. *Quercus nigra*	30	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	30 = Total Cover		
50% of total cover: 15		20% of total cover: 6	
Shrub Stratum (Plot size: 30 ft.)			
1. *Persea borbonia*	40	Yes	FACW
2. *Ilex vomitoria*	40	Yes	FAC
3.			
4.			
5.			
6.			
	80 = Total Cover		
50% of total cover: 40		20% of total cover: 16	
Herb Stratum (Plot size: 30 ft.)			
1. *Sabal minor*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	5 = Total Cover		
50% of total cover: 2.5		20% of total cover: 1	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**75**	x 2 =	**150**
FAC species	**70**	x 3 =	**210**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**145** (A)		**360** (B)

Prevalence Index = B/A = **2.48**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA041_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100	None	—	—	—	Loamy Sand	
12-20	10YR 6/6	95	NONE	—	—	—	Loamy Sand	
12-20	10YR 5/2	5	NONE	—	—	—	Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA042_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43564 Long: -88.49470 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **8**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA042_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Eleocharis equisetoides*	60	Yes	OBL
2. *Nymphaea odorata*	80	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	140 = Total Cover		
50% of total cover: 70	20% of total cover: 28		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

	Total % Cover of:		Multiply by:
OBL species	**140**	x 1 =	**140**
FACW species	**0**	x 2 =	**0**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**140** (A)		**140** (B)

Prevalence Index = B/A = **1.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA042_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see remarks below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA043_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43677 Long: -88.49476 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA043_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	40	Yes	FACW
2. *Triadica sebifera*	10	Yes	FAC
3.			
4.			
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Quercus nigra*	10	No	FAC
2. *Triadica sebifera*	40	Yes	FAC
3. *Acer rubrum*	20	Yes	FAC
4. *Magnolia virginiana*	5	No	FACW
5.			
6.			
	75 = Total Cover		
50% of total cover: 37.5		20% of total cover: 15	
Herb Stratum (Plot size: 30 ft.)			
1. *Toxicodendron radicans*	35	Yes	FAC
2. *Carex elliottii*	5	No	OBL
3. *Osmunda regalis*	2	No	OBL
4. *Rubus trivialis*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	47 = Total Cover		
50% of total cover: 23.5		20% of total cover: 9.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**7**	x 1 =	**7**
FACW species	**45**	x 2 =	**90**
FAC species	**120**	x 3 =	**360**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**172** (A)		**457** (B)

Prevalence Index = B/A = **2.66**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA043_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-10	10YR 2/1	85	10YR 3/6	15	C	PL	Sandy Loam	
10-20	10YR 5/2	50	10YR 5/6	50	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA044_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43924 Long: -88.49489 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**3**
Water Table Present?	Yes **X** No	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA044_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	40	Yes	OBL
2. *Magnolia virginiana*	2	No	FACW
3.			
4.			
5.			
6.			
	42 = Total Cover		
50% of total cover: 21		20% of total cover: 8.4	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Herb Stratum (Plot size: 30 ft.)			
1. *Zizaniopsis miliacea*	99	Yes	OBL
2. *Sagittaria platyphylla*	15	No	OBL
3. *Osmunda regalis*	10	No	OBL
4. *Hypericum hypericoides*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	129 = Total Cover		
50% of total cover: 64.5		20% of total cover: 25.8	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**164**	x 1 =	**164**
FACW species	**2**	x 2 =	**4**
FAC species	**5**	x 3 =	**15**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**171** (A)		**183** (B)

Prevalence Index = B/A = **1.07**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA044_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 2/1	100	None	—	—	—	Organic Soil Layer	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- X Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA045_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.43930 Long: -88.49502 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: PFO1F
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- **X** Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**24**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA045_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus marginatus*	50	Yes	FACW
2. *Zizaniopsis miliacea*	99	Yes	OBL
3. *Osmunda regalis*	5	No	OBL
4. *Hypericum hypericoides*	10	No	FAC
5. *Sagittaria platyphylla*	2	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
	166 = Total Cover		
50% of total cover: 83	20% of total cover: 33.2		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**106**	x 1 =	**106**
FACW species	**50**	x 2 =	**100**
FAC species	**10**	x 3 =	**30**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**166** (A)		**236** (B)

Prevalence Index = B/A = **1.42**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA045_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see remarks below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA046_PSS
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 16, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44199 Long: -88.49521 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Handsboro mucky silt loam, frequently flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **3**	**Wetland Hydrology Present?**	**Yes X** **No**
Water Table Present?	Yes **X**	No	Depth (inches): **0**		
Saturation Present? (includes capillary fringe)	Yes **X**	No	Depth (inches): **0**		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA046_PSS**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5		OBL
2.			
3.			
4.			
5.			
6.			
	5 = Total Cover		
50% of total cover: 2.5		20% of total cover: 1	
Sapling Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	10	Yes	OBL
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Shrub Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	20	Yes	FAC
2. *Fraxinus caroliniana*	10	Yes	OBL
3. *Taxodium distichum*	10	Yes	OBL
4. *Baccharis halimifolia*	5	No	FAC
5. *Magnolia virginiana*	2	No	FACW
6.			
	47 = Total Cover		
50% of total cover: 23.5		20% of total cover: 9.4	
Herb Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**35**	x 1 =	**35**
FACW species	**2**	x 2 =	**4**
FAC species	**25**	x 3 =	**75**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**62** (A)		**114** (B)

Prevalence Index = B/A = **1.84**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA046_PSS**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA047_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44354 Long: -88.49540 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Harleston fine sandy loam, 0 to 2 percent slopes NWI Classification: PFO1F
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA047_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Sapling Stratum (Plot size: 30 ft.)			
1. *Acer rubrum*	10	Yes	FAC
2. *Cyrilla racemiflora*	15	Yes	FACW
3.			
4.			
5.			
6.			
	25 = Total Cover		
50% of total cover: 12.5		20% of total cover: 5	
Shrub Stratum (Plot size: 30 ft.)			
1. *Magnolia grandiflora*	2	No	FAC
2. *Cyrilla racemiflora*	30	Yes	FACW
3. *Ilex vomitoria*	30	Yes	FAC
4. *Acer rubrum*	10	No	FAC
5.			
6.			
	72 = Total Cover		
50% of total cover: 36		20% of total cover: 14.4	
Herb Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**105**	x 2 =	**210**
FAC species	**52**	x 3 =	**156**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**157** (A)		**366** (B)

Prevalence Index = B/A = **2.33**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA047_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR 3/1	100	None	—	—	—	Sandy Loam	
8-20	10YR 5/4	50					Loam	Dual matrix
	10YR 5/6	50					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA048_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44406 Long: -88.49557 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**6**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA048_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus validus*	5	No	FACW
2. *Andropogon virginicus*	15	Yes	FAC
3. *Paspalum urvillei*	20	Yes	FAC
4. *Sagittaria lancifolia*	20	Yes	OBL
5. *Carex elliottii*	10	No	OBL
6. *Myriophyllum spicatum*	5	No	OBL
7.			
8.			
9.			
10.			
11.			
	75 = Total Cover		
50% of total cover: 37.5	20% of total cover: 15		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**35**	x 1 =	**35**
FACW species	**5**	x 2 =	**10**
FAC species	**35**	x 3 =	**105**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**75** (A)		**150** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA048_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	80	7.5YR 4/6	20	C	PL	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA049_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44450 Long: -88.49552 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Bayou sandy loam, 0 to 1 percent slopes NWI Classification: PSS7/EM1Bd
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**3**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA049_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	30 = Total Cover		
50% of total cover: 15	20% of total cover: 6		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Cyrilla racemiflora*	20	Yes	FACW
2. *Morella cerifera*	15	Yes	FAC
3. *Ilex vomitoria*	5	No	FAC
4. *Acer rubrum*	10	Yes	FAC
5.			
6.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		
Herb Stratum (Plot size: 30 ft.)			
1. *Andropogon virginicus*	30	Yes	FAC
2. *Rhynchospora macrostachya*	5	No	OBL
3. *Panicum repens*	15	Yes	FACW
4. *Asclepias incarnata*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	52 = Total Cover		
50% of total cover: 26	20% of total cover: 10.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**7**	x 1 =	**7**
FACW species	**65**	x 2 =	**130**
FAC species	**60**	x 3 =	**180**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**132** (A)		**317** (B)

Prevalence Index = B/A = **2.40**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA049_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	85	10YR 5/8	15	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA050_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44522 Long: -88.49557 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA050_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	40	Yes	FACW
2. *Acer rubrum*	10	Yes	FAC
3.			
4.			
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Cyrilla racemiflora*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum repens*	50	Yes	FACW
2. *Rubus trivialis*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**150**	x 2 =	**300**
FAC species	**20**	x 3 =	**60**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**170** (A)		**360** (B)

Prevalence Index = B/A = **2.12**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA050_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 2/1	100	None	—	—	—	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA051_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44568 Long: -88.49558 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**8**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA051_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5	Yes	OBL
2. *Cyrilla racemiflora*	5	Yes	FACW
3. *Pinus elliottii*	5	Yes	FACW
4.			
5.			
6.			
	15 = Total Cover		
50% of total cover: 7.5	20% of total cover: 3		
Herb Stratum (Plot size: 30 ft.)			
1. *Sagittaria lancifolia*	10	No	OBL
2. *Panicum repens*	80	Yes	FACW
3. *Hypericum hypericoides*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**15**	x 1 =	**15**
FACW species	**90**	x 2 =	**180**
FAC species	**10**	x 3 =	**30**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**115** (A)		**225** (B)

Prevalence Index = B/A = **1.96**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA051_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	85	7.5YR 3/4	15	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 23, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA052_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44714 Long: -88.49569 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Daleville silt loam, 0 to 1 percent slopes NWI Classification: PFO1/4C
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA052_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	15	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	15 = Total Cover		
50% of total cover: 7.5		20% of total cover: 3	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	Yes	FACW
2. *Cyrilla racemiflora*	5	Yes	FACW
3.			
4.			
5.			
6.			
	15 = Total Cover		
50% of total cover: 7.5		20% of total cover: 3	
Herb Stratum (Plot size: 30 ft.)			
1. *Hypericum hyrpericoides*	20	No	FAC
2. *Dichanthelium scoparium*	90	Yes	FACW
3. *Pinus elliottii*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	115 = Total Cover		
50% of total cover: 57.5		20% of total cover: 23	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**125**	x 2 =	**250**
FAC species	**20**	x 3 =	**60**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**145** (A)		**310** (B)

Prevalence Index = B/A = **2.14**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA052_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/1	98	7.5YR 5/8	2	C	M	Silty Clay	
6-20	7.5YR 6/1	50	NONE	---	—	—	Silty Clay	
	5YR 5/8	50	NONE	—	—	—	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA053_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44741 Long: -88.49575 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No ___	Depth (inches):	**2**
Water Table Present?	Yes ___ No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes ___ No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA053_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	5	Yes	OBL
2. *Morella cerifera*	2	Yes	FAC
3.			
4.			
5.			
6.			
	7 = Total Cover		
50% of total cover: 3.5	20% of total cover: 1.4		
Herb Stratum (Plot size: 30 ft.)			
1. *Panicum virgatum*	20	Yes	FAC
2. *Hypericum hypericoides*	15	Yes	FAC
3. *Dichanthelium scoparium*	10	No	FACW
4. *Centella asiatica*	10	No	FACW
5. *Taxodium distichum*	2	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
	57 = Total Cover		
50% of total cover: 28.5	20% of total cover: 11.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**7**	x 1 =	**7**
FACW species	**20**	x 2 =	**40**
FAC species	**37**	x 3 =	**111**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**64** (A)		**158** (B)

Prevalence Index = B/A = **2.47**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA053_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	96	10YR 3/4	4	C	PL	Silt Loam	
3-20	10YR 6/2	50	5YR 5/8	50	C	PL	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA054_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44766 Long: -88.49573 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Hyde silt loam NWI Classification: E2EM1Pd
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**12**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA054_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	30	Yes	OBL
2.			
3.			
4.			
5.			
6.			
	30 = Total Cover		
50% of total cover: 15		20% of total cover: 6	
Sapling Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	10	Yes	OBL
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Herb Stratum (Plot size: 30 ft.)			
1. *Sagittaria latifolia*	10	No	OBL
2. *Nymphaea odorata*	50	Yes	OBL
3. *Eleocharis montevidensis*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80 = Total Cover		
50% of total cover: 40		20% of total cover: 16	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**100**	x 1 =	**100**
FACW species	**20**	x 2 =	**40**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**120** (A)		**140** (B)

Prevalence Index = B/A = **1.17**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA054_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA055_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.44891 Long: -88.49583 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: PFO4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA055_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	5 = Total Cover		
50% of total cover: 2.5		20% of total cover: 1	
Sapling Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	20 = Total Cover		
50% of total cover: 10		20% of total cover: 4	
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	No	FACW
2. *Iva frutescens*	5	No	FACW
3. *Cyrilla racemiflora*	30	Yes	FACW
4. *Ilex vomitoria*	30	Yes	FAC
5. *Acer rubrum*	2	No	FAC
6.			
	77 = Total Cover		
50% of total cover: 38.5		20% of total cover: 15.4	
Herb Stratum (Plot size: 30 ft.)			
1. *Andropogon virginicus*	15	Yes	FAC
2. *Panicum virgatum*	5	No	FAC
3. *Sagittaria latifolia*	10	No	OBL
4. *Spartina patens*	10	No	FACW
5. *Dichanthelium scoparium*	15	Yes	FACW
6.			
7.			
8.			
9.			
10.			
11.			
	55 = Total Cover		
50% of total cover: 27.5		20% of total cover: 11	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**95**	x 2 =	**190**
FAC species	**52**	x 3 =	**156**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**157** (A)		**356** (B)

Prevalence Index = B/A = **2.27**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA055_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100	None	—	—	—	Silty Clay	
4-20	10YR 3/1	98	10YR 3/6	2	C	PL	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA056_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 9, T7SR5W
Landform (hillslope, terrace, etc.): Hilltop Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45167 Long: -88.49610 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA056_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	5 = Total Cover		
50% of total cover: 2.5		20% of total cover: 1	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	10	No	FACW
2. *Baccharis halimifolia*	2	No	FAC
3. *Ilex glabra*	30	Yes	FACW
4. *Ilex vomitoria*	15	No	FAC
5. *Magnolia virginiana*	5	No	FACW
6. *Cyrilla racemiflora*	30	Yes	FACW
	92 = Total Cover		
50% of total cover: 46		20% of total cover: 18.4	
Herb Stratum (Plot size: 30 ft.)			
1. *Hypericum hypericoides*	30	Yes	FAC
2. *Andropogon virginicus*	20	Yes	FAC
3. *Panicum virgatum*	15	Yes	FAC
4. *Carex frankii*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	75 = Total Cover		
50% of total cover: 37.5		20% of total cover: 15	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *Smilax smallii*	2	Yes	FACU
2. *Smilax rotundifolia*	2	Yes	FAC
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **7** (A)

Total Number of Dominant Species Across All Strata: **8** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **88%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**80**	x 2 =	**160**
FAC species	**84**	x 3 =	**252**
FACU species	**2**	x 4 =	**8**
UPL species	**0**	x 5 =	**0**
Column Totals:	**176** (A)		**430** (B)

Prevalence Index = B/A = **2.44**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA056_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	97	10YR 4/6	3	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA057_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45606 Long: -88.49697 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**24**	
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**	
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**	**Wetland Hydrology Present? Yes X No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA057_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Sagittaria lancifolia*	15	Yes	OBL
2. *Panicum repens*	30	Yes	FACW
3. *Eleocharis montevidensis*	15	Yes	FACW
4. *Eleocharis equisetoides*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	65 = Total Cover		
50% of total cover: 32.5	20% of total cover: 13		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**20**	x 1 =	**20**
FACW species	**45**	x 2 =	**90**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**65** (A)		**110** (B)

Prevalence Index = B/A = **1.69**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA057_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	25	10YR 6/2	25	C	PL	Clay	
	10YR 5/1	25	10YR 5/8	25	C	PL	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA058_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45585 Long: -88.49676 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: PFO4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA058_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Dichanthelium scoparium*	80	Yes	FACW
2. *Spartina patens*	2	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	82 = Total Cover		
50% of total cover: 41	20% of total cover: 16.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**82**	x 2 =	**164**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**82** (A)		**164** (B)

Prevalence Index = B/A = **2.00**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA058_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1	80	10YR 3/6	2	C	M	Loam	
	10YR 8/4	15	10YR 5/8	3	C	M	Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA059_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): None Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45647 Long: -88.49686 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: PFO4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA059_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus palustris*	50	Yes	FACU
2.			
3.			
4.			
5.			
6.			
	50 = Total Cover		
50% of total cover: 25		20% of total cover: 10	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Ilex glabra*	50	Yes	FACW
2. *Ilex vomitoria*	40	Yes	FAC
3. *Pinus palustris*	5	No	FACU
4.			
5.			
6.			
	95 = Total Cover		
50% of total cover: 47.5		20% of total cover: 19	
Herb Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **67%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**50**	x 2 =	**100**
FAC species	**40**	x 3 =	**120**
FACU species	**55**	x 4 =	**220**
UPL species	**0**	x 5 =	**0**
Column Totals:	**145** (A)		**440** (B)

Prevalence Index = B/A = **3.03**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

SOIL

Sampling Point: **DPA059_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100	NONE	—	—	—	Clay	
10-20	10YR 5/4	95	5YR 5/6	5	C	PL	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA060_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45686 Long: -88.49692 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- **X** High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___ No **X**	Depth (inches):	**N/A**
Water Table Present?	Yes **X** No ___	Depth (inches):	**8**
Saturation Present? (includes capillary fringe)	Yes ___ No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA060_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2. *Acer rubrum*	5	No	FAC
3. *Cyrilla racemiflora*	5	No	FACW
4.			
5.			
6.			
	40	= Total Cover	
50% of total cover:	20	20% of total cover:	8
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0	= Total Cover	
50% of total cover:	0	20% of total cover:	0
Shrub Stratum (Plot size: 30 ft.)			
1. *Magnolia virginiana*	10	Yes	FACW
2. *Cyrilla racemiflora*	15	Yes	FACW
3. *Pinus elliottii*	5	No	FACW
4. *Ilex myrtifolia*	15	Yes	FACW
5.			
6.			
	45	= Total Cover	
50% of total cover:	22.5	20% of total cover:	9
Herb Stratum (Plot size: 30 ft.)			
1. *Ilex glabra*	5	No	FACW
2. *Ilex myrtifolia*	10	Yes	FACW
3. *Hypericum hypericoides*	15	Yes	FAC
4. *Andropogon virginicus*	10	Yes	FAC
5. *Carex spp*	2	No	#N/A
6.			
7.			
8.			
9.			
10.			
11.			
	42	= Total Cover	
50% of total cover:	21	20% of total cover:	8.4
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0	= Total Cover	
50% of total cover:	0	20% of total cover:	0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **7** (A)

Total Number of Dominant Species Across All Strata: **7** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**95**	x 2 =	**190**
FAC species	**30**	x 3 =	**90**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**125** (A)		**280** (B)

Prevalence Index = B/A = **2.24**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA060_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	95	10YR 4/6	5	C	PL	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA061_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45703 Long: -88.49697 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X** No	Depth (inches):	**6**
Water Table Present?	Yes No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes **X** No	Depth (inches):	**0**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA061_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	2	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	2 = Total Cover		
50% of total cover: 1	20% of total cover: 0.4		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	Yes	FACW
2. *Cyrilla racemiflora*	5	Yes	FACW
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		
Herb Stratum (Plot size: 30 ft.)			
1. *Hypericum hypericoides*	70	Yes	FAC
2. *Andropogon virginicus*	10	No	FAC
3. *Pinus elliottii*	5	No	FACW
4. *Paspalum urvillei*	5	No	FAC
5. *Rhynchospora macrostachya*	10	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**10**	x 1 =	**10**
FACW species	**17**	x 2 =	**34**
FAC species	**85**	x 3 =	**255**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**112** (A)		**299** (B)

Prevalence Index = B/A = **2.67**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA061_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	90	10YR 4/6	10	C	PL	Clay Loam	
8-20	10YR 6/2	60	7.5YR 5/8	40	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA062_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 8, T7SR5W
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45773 Long: -88.49707 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Lenoir silt loam, 0 to 1 percent slopes NWI Classification: PFO4A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area within a Wetland?** Yes No **X**
Wetland Hydrology Present?	Yes	No **X**	

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? Yes No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA062_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Sapling Stratum (Plot size: 30 ft.)			
1. *Ilex vomitoria*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Shrub Stratum (Plot size: 30 ft.)			
1. *Ilex vomitoria*	15	Yes	FAC
2. *Ilex coriacea*	50	Yes	FACW
3.			
4.			
5.			
6.			
	65 = Total Cover		
50% of total cover: 32.5		20% of total cover: 13	
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	5	Yes	FACW
2. *Ilex coriacea*	5	Yes	FACW
3. *Smilax smallii*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	12 = Total Cover		
50% of total cover: 6		20% of total cover: 2.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**120**	x 2 =	**240**
FAC species	**25**	x 3 =	**75**
FACU species	**2**	x 4 =	**8**
UPL species	**0**	x 5 =	**0**
Column Totals:	**147** (A)		**323** (B)

Prevalence Index = B/A = **2.20**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA062_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100	None	—	—	—	Loam	
6-20	10YR 5/3	50	7.5YR 5/8	50	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA063_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 5, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.45998 Long: -88.49744 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Daleville silt loam, 0 to 1 percent slopes NWI Classification: PEM1/SS1T
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- **X** High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes **X**	No ___	Depth (inches): **3**
Saturation Present? (includes capillary fringe)	Yes **X**	No ___	Depth (inches): **0**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA063_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	30	Yes	FACW
2.	40		
3.			
4.			
5.			
6.			
	70	= Total Cover	
50% of total cover:	35	20% of total cover:	14
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0	= Total Cover	
50% of total cover:	0	20% of total cover:	0
Shrub Stratum (Plot size: 30 ft.)			
1. *Cyrilla racemiflora*	40	Yes	FACW
2. *Morella cerifera*	15	Yes	FAC
3. *Ilex myrtifolia*	2	No	FACW
4. *Ilex glabra*	5	No	FACW
5.			
6.			
	62	= Total Cover	
50% of total cover:	31	20% of total cover:	12.4
Herb Stratum (Plot size: 30 ft.)			
1. *Spartina patens*	10	Yes	FACW
2. *Panicum repens*	5	No	FACW
3. *Eriocaulon compressum*	2	No	OBL
4. *Rhynchospora caduca*	10	Yes	OBL
5. *Hypericum hypericoides*	10	Yes	FAC
6.			
7.			
8.			
9.			
10.			
11.			
	37	= Total Cover	
50% of total cover:	18.5	20% of total cover:	7.4
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0	= Total Cover	
50% of total cover:	0	20% of total cover:	0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**12**	x 1 =	**12**
FACW species	**92**	x 2 =	**184**
FAC species	**25**	x 3 =	**75**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**129** (A)		**271** (B)

Prevalence Index = B/A = **2.10**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA063_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	95	10YR 3/6	5	C	PL	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA064_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 5, T7SR5W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.46025 Long: -88.49753 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Daleville silt loam, 0 to 1 percent slopes NWI Classification: PEM1/SS1T
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches): **6**		
Water Table Present?	Yes	No **X**	Depth (inches): **>20**		
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**	**Wetland Hydrology Present?**	**Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA064_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		
Herb Stratum (Plot size: 30 ft.)			
1. *Juncus validus*	15	Yes	FACW
2. *Rhynchospora macrostachya*	15	Yes	OBL
3. *Sagittaria lancifolia*	15	Yes	OBL
4. *Sarracenia alata*	5	No	OBL
5. *Lachnocaulon anceps*	2	No	OBL
6. *Panicum repens*	5	No	FACW
7.			
8.			
9.			
10.			
11.			
	57 = Total Cover		
50% of total cover: 28.5	20% of total cover: 11.4		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**37**	x 1 =	**37**
FACW species	**25**	x 2 =	**50**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**62** (A)		**87** (B)

Prevalence Index = B/A = **1.40**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA064_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/1	95	10YR 4/6	5	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA065_U
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 5, T7SR5W
Landform (hillslope, terrace, etc.): Hilltop Local relief (concave, convex, none): Convex Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.46094 Long: -88.49758 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Daleville silt loam, 0 to 1 percent slopes NWI Classification: PFO4C
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No		
Hydric Soil Present?	Yes	No **X**	**Is the Sampled Area**	
Wetland Hydrology Present?	Yes	No **X**	**within a Wetland?**	**Yes** **No X**

Remarks:

This point was determined not to be within a wetland due to the lack of hydric soils and wetland hydrology.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No **X**	Depth (inches): **N/A**
Water Table Present?	Yes	No **X**	Depth (inches): **>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches): **>20**

Wetland Hydrology Present? **Yes** **No X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA065_U**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Pinus elliottii*	50	Yes	FACW
2. *Ilex coriacea*	10	No	FACW
3.			
4.			
5.			
6.			
	60 = Total Cover		
50% of total cover: 30		20% of total cover: 12	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Ilex coriacea*	75	Yes	FACW
2. *Quercus nigra*	5	No	FAC
3. *Pinus elliottii*	10	No	FACW
4.			
5.			
6.			
	90 = Total Cover		
50% of total cover: 45		20% of total cover: 18	
Herb Stratum (Plot size: 30 ft.)			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Rubus trivialis*	2	No	FAC
3. *Ilex coriacea*	5	Yes	FACW
4. *Cynodon dactylon*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	14 = Total Cover		
50% of total cover: 7		20% of total cover: 2.8	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**0**	x 1 =	**0**
FACW species	**150**	x 2 =	**300**
FAC species	**12**	x 3 =	**36**
FACU species	**2**	x 4 =	**8**
UPL species	**0**	x 5 =	**0**
Column Totals:	**164** (A)		**344** (B)

Prevalence Index = B/A = **2.10**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA065_U**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100	None	—	—	—	Loam	
8-20	10YR 5/2	50	NONE	—	—	—	Clay Loam	
	10YR 6/6	50	NONE	—	—	—	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** **X**

Remarks:

No positive indication of hydric soils was observed.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA066_PEM
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 5, T7SR5W
Landform (hillslope, terrace, etc.): Swamp Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.46168 Long: -88.49752 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Stough loam, 0 to 2 percent slopes NWI Classification: PFO4C
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	
Hydric Soil Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?** Yes **X** No
Wetland Hydrology Present?	Yes **X**	No	

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**12**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? Yes **X** No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA066_PEM**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Shrub Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft.)			
1. *Cyperus virens*	70	Yes	FACW
2. *Taxodium distichum*	2	No	OBL
3. *Juncus validus*	5	No	FACW
4. *Nymphaea odorata*	2	No	OBL
5. *Eleocharis equisetoides*	20	No	OBL
6. *Ptilimnium capillaceum*	2	No	OBL
7. *Centella asiatica*	5	No	FACW
8.			
9.			
10.			
11.			
	106 = Total Cover		
50% of total cover: 53	20% of total cover: 21.2		
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**26**	x 1 =	**26**
FACW species	**80**	x 2 =	**160**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**106** (A)		**186** (B)

Prevalence Index = B/A = **1.75**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA066_PEM**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Pascagoula P.L. - AL, MS County: Jackson Sampling Date: April 24, 2012
Applicant/Owner: Plains Southcap LLC State: Mississippi Sample Point: DPA067_PFO
Investigator(s): M. Hess and M. Wood-Ramirez Section, Township, Range: Sec. 5, T7SR5W
Landform (hillslope, terrace, etc.): Swamp Local relief (concave, convex, none): Concave Slope (%): 00-05
Subregion (LRR or MLRA): Atlantic and Gulf Coast Lowland Forest and Crop Region(T) Lat: 30.46194 Long: -88.49750 Datum: UTM 16N N83 USFT
Soil Map Unit Name: Stough loam, 0 to 2 percent slopes NWI Classification: PEM1/SS1T
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation **NO**, Soil **NO**, or Hydrology **NO** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No
Are Vegetation **NO**, Soil **YES**, or Hydrology **NO** naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No	**Is the Sampled Area within a Wetland?**	**Yes X** **No**
Hydric Soil Present?	Yes **X**	No		
Wetland Hydrology Present?	Yes **X**	No		

Remarks:

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

HYDROLOGY

Wetland hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots(C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes **X**	No	Depth (inches):	**12**
Water Table Present?	Yes	No **X**	Depth (inches):	**>20**
Saturation Present? (includes capillary fringe)	Yes	No **X**	Depth (inches):	**>20**

Wetland Hydrology Present? **Yes X** **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

VEGETATION (Five Strata) - Use scientific names of plants.

Sampling Point: **DPA067_PFO**

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1. *Taxodium distichum*	80	Yes	OBL
2. *Quercus laurifolia*	10	No	FACW
3.			
4.			
5.			
6.			
	90 = Total Cover		
50% of total cover: 45		20% of total cover: 18	
Sapling Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
6.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	
Shrub Stratum (Plot size: 30 ft.)			
1. *Quercus laurifolia*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
	10 = Total Cover		
50% of total cover: 5		20% of total cover: 2	
Herb Stratum (Plot size: 30 ft.)			
1. *Cyperus virens*	15	Yes	FACW
2. *Iva frutescens*	2	No	FACW
3. *Najas guadalupensis*	30	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	47 = Total Cover		
50% of total cover: 23.5		20% of total cover: 9.4	
Woody Vine Stratum (Plot size: 30 ft.)			
1. *None Observed*			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0		20% of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **4** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**110**	x 1 =	**110**
FACW species	**37**	x 2 =	**74**
FAC species	**0**	x 3 =	**0**
FACU species	**0**	x 4 =	**0**
UPL species	**0**	x 5 =	**0**
Column Totals:	**147** (A)		**184** (B)

Prevalence Index = B/A = **1.25**

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- **X** 2 - Dominance Test is >50%
- **X** 3 - Prevalence Index is ≤ 3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** **X** **No** ___

Remarks: (if observed, list morphological adaptations below).

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00).

SOIL

Sampling Point: **DPA067_PFO**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								see below

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- **X** Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

A positive indication of hydric soil was observed.

Due to inundation a clear soil profile was unobtainable. Soils are assumed to be hydric.