



REPLY TO  
ATTENTION OF:

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

CESAM-RD-A  
Public Notice Number SAM-2012-01549-LET

March 28, 2013

JOINT PUBLIC NOTICE  
U.S. ARMY CORPS OF ENGINEERS  
AND  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF POLLUTION CONTROL

**REQUEST TO DISCHARGE DREDGED AND FILL MATERIAL IN TURKEY FORK LAKE  
TO DEEPEN SHALLOW AREAS, CONSTRUCT ISLANDS AND LAND PIERS, AND  
IMPROVE FISH HABITAT, GREENE COUNTY, MISSISSIPPI.**

TO WHOM IT MAY CONCERN:

This District has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 USC 1344). This public notice is being distributed to all known interested persons to assist in developing facts on which a decision by the Corps can be based. Please communicate this information to interested parties.

**APPLICANT:** United States Forest Service  
Chickasawhay Ranger District  
968 Highway 15 South  
Laurel, Mississippi 39443

**LOCATION OF WORK:** The proposed project is located south of Mississippi Highway 42 and east of Greene County Road 232 (a.k.a. Turkey Fork Road) in the Turkey Fork Recreation Area within Sections 4 and 5 of Township 4 North and Sections 32 and 33 of Township 5 North, Range 7 West at latitude 31.347408° North and longitude -88.702500° West near the Sand Hill community in Greene County, Mississippi. The project would impact the 250-acre man-made Turkey Fork Lake impoundment on Turkey Fork. The project is located in the Lower Chickasawhay watershed (8-digit HUC 03170003) in Mississippi.

**PROJECT PURPOSE:** The applicant has stated that the purpose of the project is to deepen the lake along the shoreline and other shallow areas of the lake to reduce aquatic weed proliferation problems, improve fisheries habitat and angler access to the lake, and to promote and increase public fishing use. It is also expected that implementing the project will improve the associated campground and recreation area use.

**PROPOSED WORK:** The applicant proposes to improve fish habitat, reduce the aquatic weed problem, restrict wave action and reduce shoreline erosion created by ski boats, and potentially

create some suitable areas for canoeing and kayaking on Turkey Fork Lake through deepening areas of the lake that are currently 2 feet or less in depth, creating channels and other irregular lake bottom features in areas currently 0 to 8 feet in depth, constructing islands and land piers in the lake, installing rip-rap along segments of shoreline to control erosion from wave action, installing gravel fish spawning beds, and installing fish attractor structures including rock piles, wooden stake beds, and brush attractors. These actions are described more specifically as follows:

**Deepening Activities and Island / Land Pier Construction:** This work would consist of using track hoes and bull dozers to deepen approximately 65 acres of the lake by an average of 2 feet in depth. Approximately 209,733 cubic yards of lake-bottom sediment would be mechanically dredged from the 65 acre area and would be re-deposited on waterbottoms in other areas of the lake to construct approximately 40 islands and land pier features. The discharge of dredged material required to construct the islands and land piers would impact approximately 10 acres of lake-bottom; however, actual size and shape of the islands and land piers would vary depending on working conditions of the lake bottom and the actual amount of spoil produced by the deepening project. A land pier extending into the lake from the east bank and one extending into the lake from the west bank (Site 6 map) would be constructed to restrict the wave action created by ski boats. Also, in areas throughout approximately 140 acres of the lake that currently range from 0 to 8 feet in depth, channels would be dug and the spoil from the channel construction would be used to create irregular lake bottom features to improve fish habitat.

**Rip-Rap Installation:** The constructed land piers and segments of upland shoreline would be armored with rip-rap to control erosion. The rip-rap would be placed so it would extend above and below the water line at normal pool to prevent deterioration of the shoreline from wave action. It is estimated that 1,524 cubic yards of rip-rap would be discharged in waterbottoms along 4,115 linear feet of shoreline.

**Spawning Bed Construction:** Approximately 60 gravel spawning beds would be installed to improve fish spawning habitat. The spawning beds would be installed by placing 20-foot long by 20-foot wide by approximately 10-inch high wooden frames where there is level ground and the post construction water depth would be 3 to 6 feet deep. The wooden frames would then be filled with washed pea gravel to complete construction of the spawning beds. It is estimated that a total of 740 cubic yards of gravel would be discharged in 0.55 acre of waterbottoms to construct the spawning beds. Each bed would consist of approximately 12.33 cubic yards of gravel affecting a 0.009 acre area.

**Fish Attractor Construction:** Three types of fish attractors would be installed to provide refuge cover for fish. The total number of attractor structures installed would be approximately 40 and would depend on available channels, points, and drop-offs.

**Rock Pile Attractors:** Approximately 16 rock pile fish attractors, consisting of 14 shallow rock piles and 2 deep rock piles, would be constructed on the lake bottom. This would consist of constructing humps on the lake bottom from spoil material then armoring the earthen humps with

rip-rap, boulders, or broken concrete / brick. Rock piles in shallow water (less than or equal to 6 feet in depth) would be constructed to protrude approximately 2 feet above the normal pool water level. The rock piles in deeper water (greater than or equal to 8 feet in depth) would be constructed to remain at least 4 feet below the normal pool water level. It is estimated that a total of 938 cubic yards of dredged lake bottom material and rip-rap would be discharged in 0.07 acre of waterbottoms to construct the 14 shallow rock pile attractors. Each shallow rock pile would be approximately 15 feet long by 15 feet wide by 8 feet deep and would consist of approximately 67 cubic yards of dredged material and rip-rap affecting a 0.005 acre area. It is estimated that a total of 66 cubic yards of dredged lake bottom material and rip-rap would be discharged in 0.01 acre of waterbottoms to construct the 2 deep rock pile attractors. Each deep rock pile would be approximately 15 feet long by 15 feet wide by 4 feet deep and would consist of approximately 33 cubic yards of dredged material and rip-rap affecting a 0.005 acre area.

Stake Bed Attractors: Approximately 5 wooden stake bed attractors would be constructed in the lake bottom. Each stake bed would be constructed using approximately 100 pressure treated 4-inch by 4-inch by 8-foot long wooden posts spaced 2 feet apart and driven vertically into the lake bottom. Each bed would be approximately 20 feet long by 20 feet wide (0.009 acre) and would extend from 3 to 6 feet in height above the lake bottom. The pressure treated posts would be preserved with chemicals other than creosote or Chromated Copper Arsenate (CCA).

Brush Attractors: Approximately 22 brush fish attractors would be installed in the lake. The brush attractors would be constructed of treetops, brush piles, and root wads placed in water depths ranging from 4 to 8 feet. Each structure would weigh approximately 500 pounds and be anchored to the lake bottom to prevent it from floating away.

To facilitate the proposed work, a draw down of the lake to approximately the 8-foot level would be implemented beginning around June 1, 2013. Work would begin as soon as the lake bed is dry enough to support the track hoes, bull dozers, and other heavy equipment required to construct the project. The draw down would continue until the work is completed and the winter rains re-fill the lake.

**AVOIDANCE & MINIMIZATION:** Forest Service staff conducted a field investigation to identify the locations of potential jurisdictional wetlands surrounding Turkey Fork Lake. Based on the findings of the field investigation it was determined that identified wetland areas are located outside the margin of the lake. To avoid impacts to jurisdictional wetlands, the extent of lake excavation activities have been limited to within the margins of the lake and locations of rip-rap stabilization along the shoreline have been limited to segments of upland shoreline. All mechanical equipment utilized to implement the project would stay out of all areas identified as potential jurisdictional wetlands. Also, project staging areas have been selected to ensure they are located in uplands. The Corps has not verified the adequacy of the applicants' avoidance and minimization statements at this time.

**MITIGATION:** The applicant has not proposed to provide mitigation for the project impacts to waterbottoms in the man-made Turkey Fork Lake. The proposed project is anticipated to improve fish habitat and reduce the current invasive aquatic weed growth problems occurring in areas of the lake; therefore, the overall habitat benefits of the project are expected to off-set the waterbottom impacts. Additionally, the constructed islands would be mulched and seeded with a cool season (winter wheat and/or ryegrass) and warm season (Bermuda and/or Bahia) grass mix to establish temporary vegetation and would then be planted with mayhaw, crabapple, and bald cypress to restore native plant communities and prevent erosion. The Corps has not verified the adequacy of the applicant's mitigation proposal at this time.

**WATER QUALITY:** The applicant has applied for certification from the State of Mississippi in accordance with Section 401(a) (1) of the Clean Water Act, and upon completion of the required advertising, a determination relative to certification will be made by the Mississippi Department of Environmental Quality.

**HISTORIC PROPERTIES:** The applicant has indicated the currently proposed project area is located within portions of the Turkey Fork Reservoir that were reviewed by the Mississippi Department of Archives and History in November 1993 (**MDAH Log # 93-410**). At that time, the sites noted in the 1993 survey report by Melissa H. Reams were determined to be ineligible for listing in the National Register of Historic Places.

In accordance with Section 106 of the National Historic Preservation Act and Appendix C of 33 CFR 325, the undertaking defined in this notice is being considered for the potential to affect cultural and historic properties within the permit area. Although the extent of federal control and responsibility for these considerations are confined to the limits of the permit area for this project, the potential indirect effects that may occur to historic properties as a result of this undertaking is also being considered. In addition to the State Historic Preservation Officer (SHPO), we are seeking comment from the federally-recognized American Indian tribes, local historical societies, museums, universities, the U.S. Department of the Interior, National Park Service, Division of Archeological Services, and concerned citizens regarding the existence or the potential for existence of significant cultural and historic properties within the permit area. The National Register of Historic Places will be consulted for properties listed in or eligible for the National Register which are known to exist and would be affected by the proposed work. This review constitutes the full extent of cultural resources investigations unless comment to this notice is received documenting that significant sites or properties exist which may be affected by this work, or that adequately documents that a potential exists for the location of significant sites or properties within the permit area. Additional notification is being furnished to the State Historic Preservation Officer via this Public Notice.

**ENDANGERED SPECIES:** Based on initial review of information provided in the project application and the U.S. Department of the Interior's list of Endangered and Threatened Wildlife and Plants, the Corps has preliminarily determined the proposed activities will have

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“**No Effect**” on Federally-listed species. There is no listed critical habitat within the project area. The applicant has provided information indicating they have already conducted a Biological Evaluation (BE) of the proposed project area which was submitted to the U.S. Fish and Wildlife Service (FWS) for review. A statement of concurrence with the Forest Service BE, dated January 29, 2013, was received from FWS. The Corps coordination of the project with the U. S. Fish and Wildlife Service is being initiated via this Public Notice.

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the U.S. Army Corps of Engineers (Corps) can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and use of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments.

All factors which may be relevant to the proposals will be considered, including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes, and other interested parties in order to consider and evaluate the impacts of the proposed activities. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for these proposals. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing.

Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will include the application of guidelines established by the Administrator of the U.S. Environmental Protection Agency.

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Correspondence concerning this Public Notice should refer to **SAM-2012-01549-LET** and should be directed to:

District Commander, U.S. Army Engineer District, Mobile  
Attention: Regulatory Division (RD-A)  
Post Office Box 2288  
Mobile, Alabama 36628-0001

With a copy furnished to:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
Environmental Permits Division  
Post Office Box 2261  
Jackson, Mississippi 39225-2261

Comments should be received **no later than 30 days** from the date of this Public Notice.

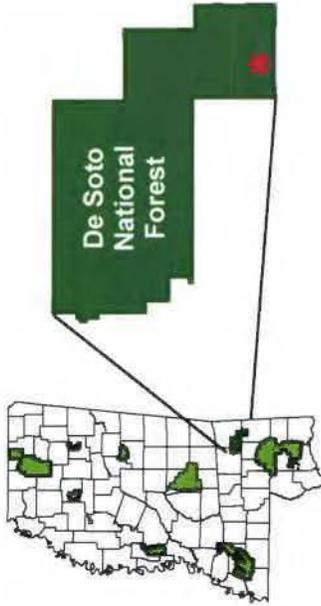
If you have any questions concerning this publication, you may contact the project manager, [leslie.e.turney@usace.army.mil](mailto:leslie.e.turney@usace.army.mil) or telephone number **(251) 694-3873**. Please refer to Public Notice Number SAM-2012-01549-LET.

For additional information about our Regulatory Program or to view this public notice electronically, please visit our web site at: [www.sam.usace.army.mil/Missions/Regulatory.aspx](http://www.sam.usace.army.mil/Missions/Regulatory.aspx), 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.

MOBILE DISTRICT  
U.S. Army Corps of Engineers

Enclosures

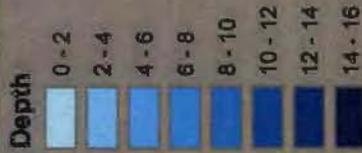
# Vicinity Map



# Turkey Fork Lake

De Soto National Forest  
Chickasawhay Ranger District  
Greene County, MS  
Acres 250

## Description

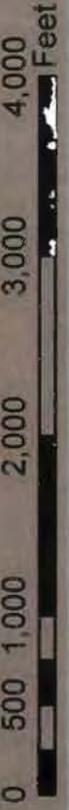


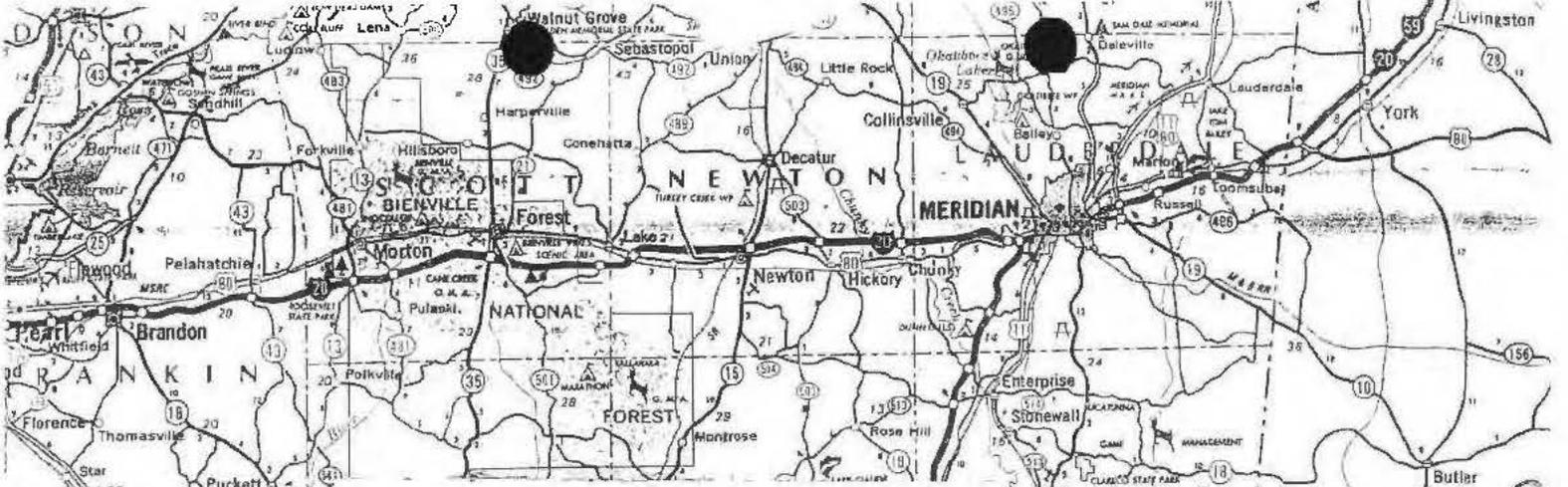
- Creek Channel
- Fish Attractor
- Spawning Bed
- Fishing Pier

## 2' Contour Intervals



The U.S. Forest Service makes no warranties of any kind, either express or implied, for damages arising out of the use of this publication. We have made reasonable efforts to provide you with accurate maps, but we cannot exclude the possibility of errors or changes in actual conditions. Map created by R. Dillard 7/20/2012

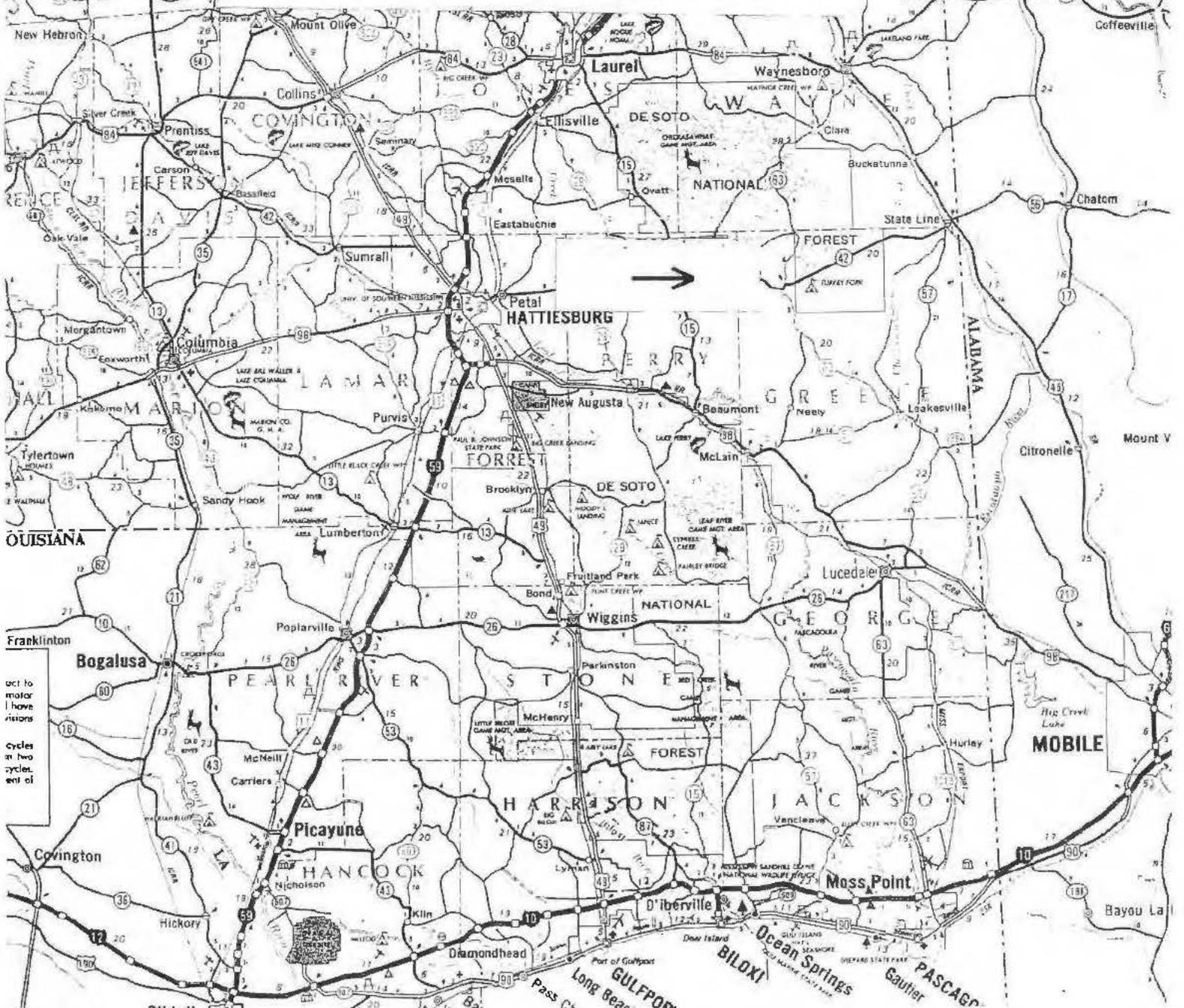




**VICINITY MAP**

**TURKEY FORK LAKE**

**IMPROVEMENT PROJECT**



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**MOBILE**

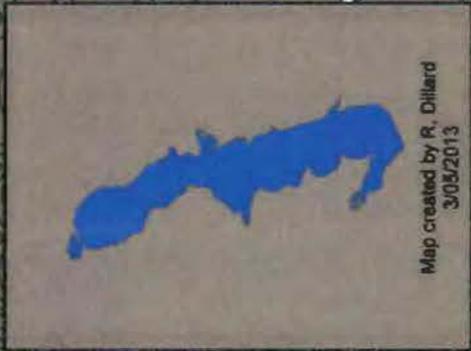
**GULFPORT**

**BILOXI**

**PASCAEN**

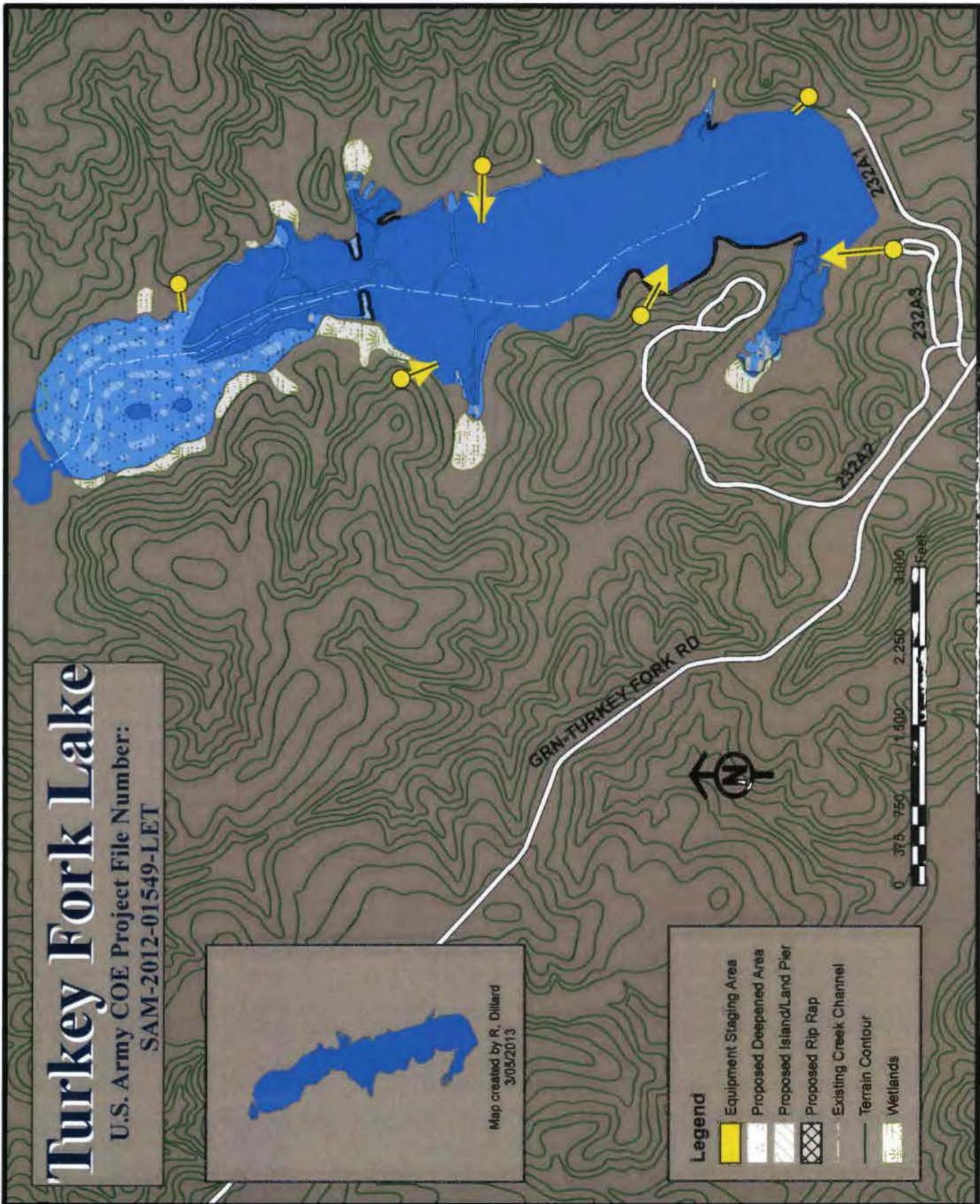
# Turkey Fork Lake

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**Legend**

- Equipment Staging Area
- Proposed Deepened Area
- Proposed Island/Land Pier
- Proposed Rip Rap
- Existing Creek Channel
- Terrain Contour
- Wetlands



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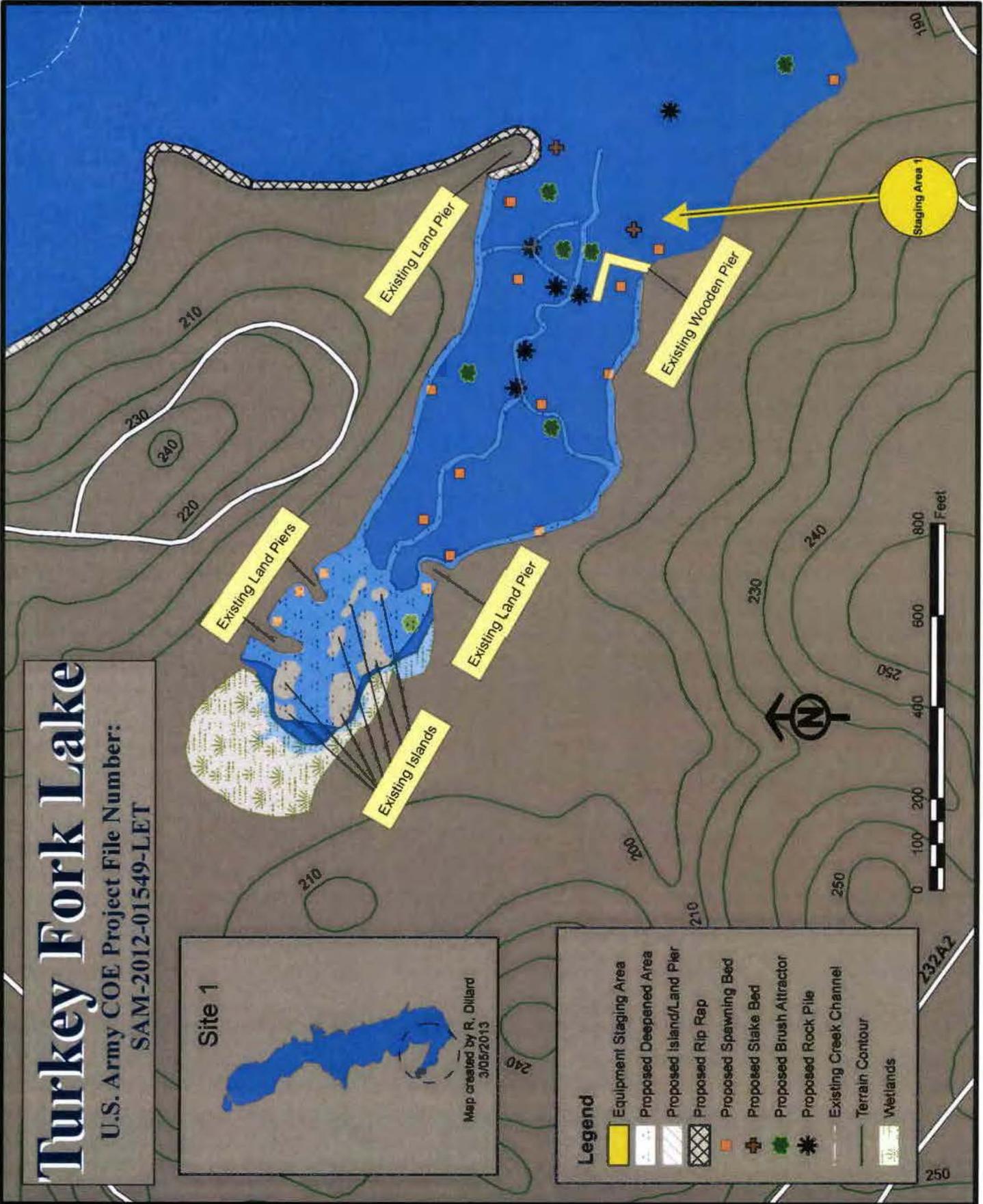
Site 1



Map created by R. Dillard  
3/05/2013

## Legend

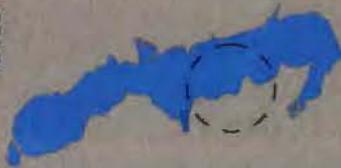
- Equipment Staging Area
- Proposed Deepened Area
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- Proposed Rip Rap
- Proposed Spawning Bed
- Proposed Stake Bed
- Proposed Brush Attractor
- Proposed Rock Pile
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- Wetlands



# Turkey Fork Lake

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Site 2



Map created by R. Dillard  
3/05/2013

## Legend

- Equipment Staging Area
- Proposed Deepened Area
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Staging Area 2



# Turkey Fork Lake

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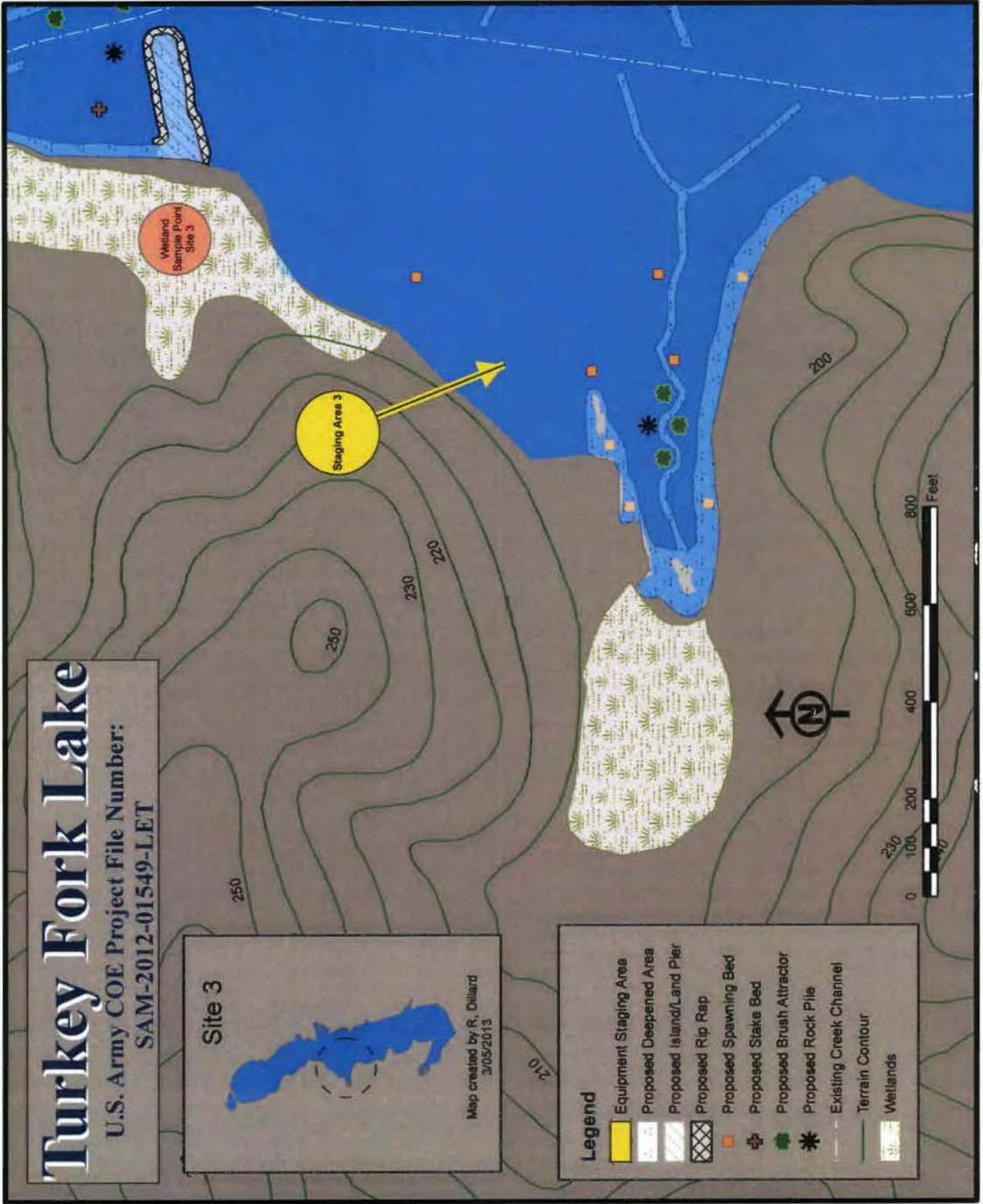
Site 3



Map created by R. Chillard  
3/05/2013

## Legend

- Equipment Staging Area
- Proposed Deepened Area
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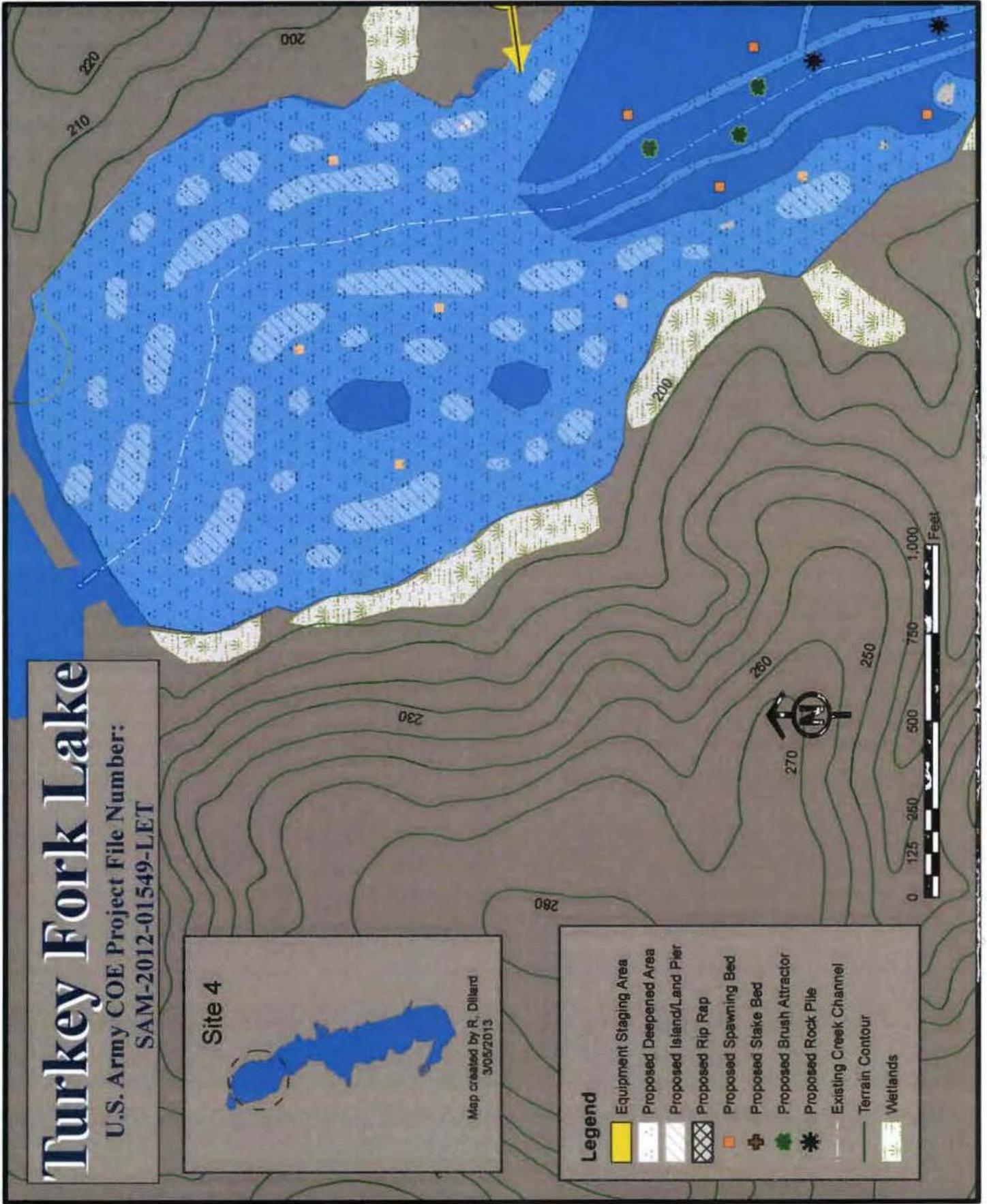
Site 4



Map created by R. Dillard  
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## Legend

- Equipment Staging Area
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# Turkey Fork Lake

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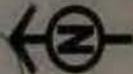
Site 5



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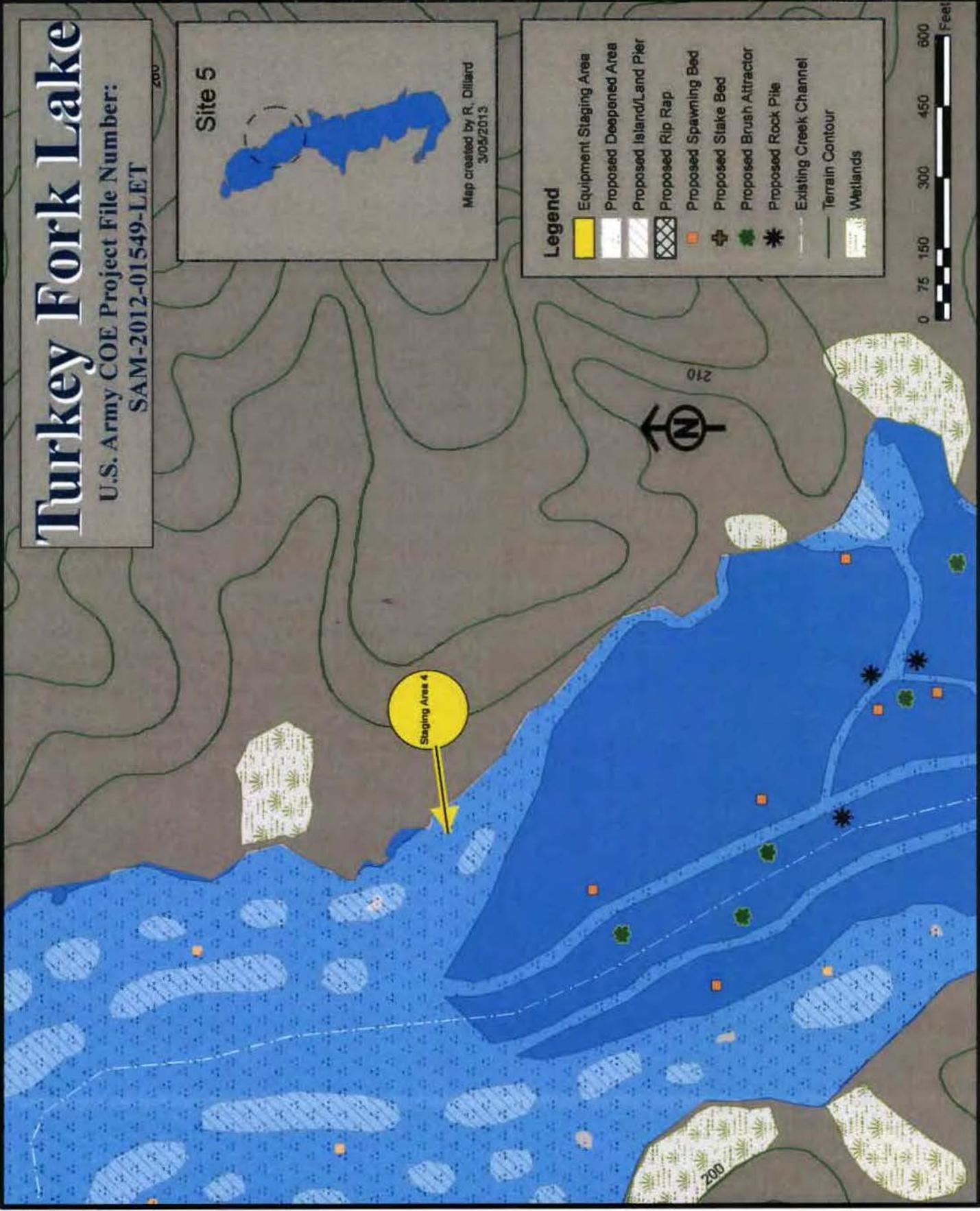
## Legend

- Equipment Staging Area
- Proposed Deepened Area
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210

200



# Turkey Fork Lake

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Site 6



Map created by R. Dillard  
3/05/2013

## Legend

- Equipment Staging Area
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# Turkey Fork Lake

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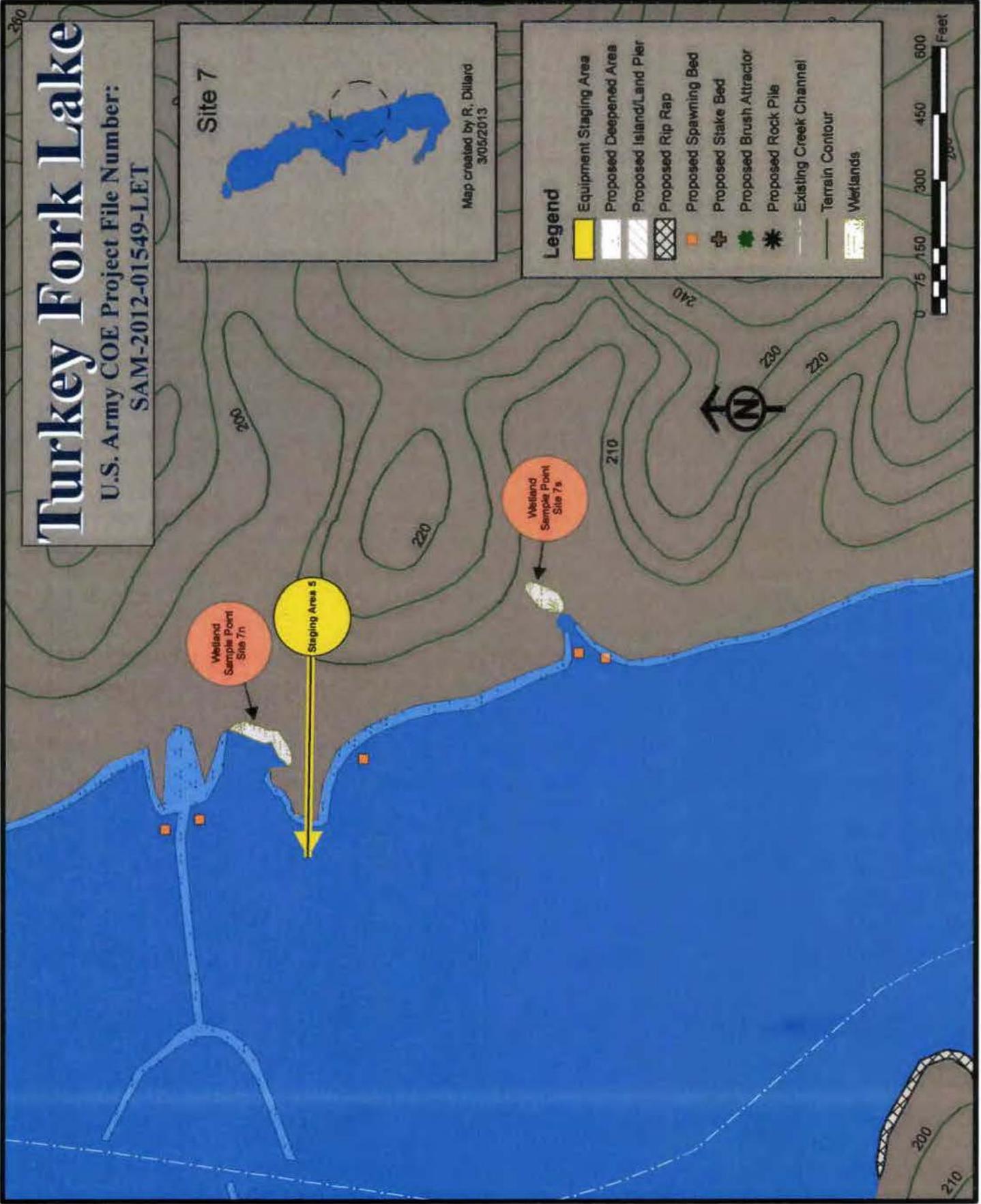
Site 7



Map created by R. Dillard  
3/05/2013

## Legend

- Equipment Staging Area
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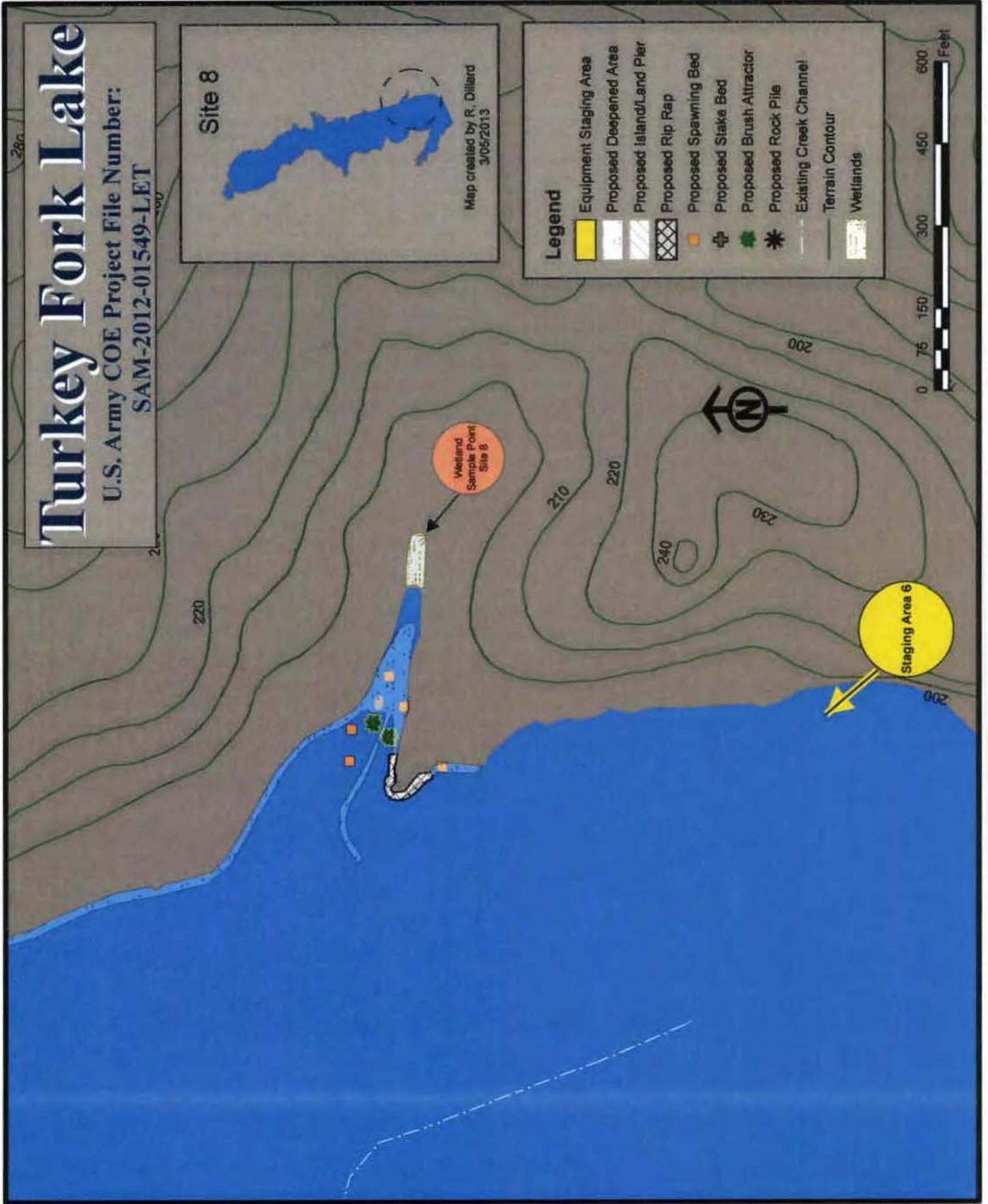
Site 8

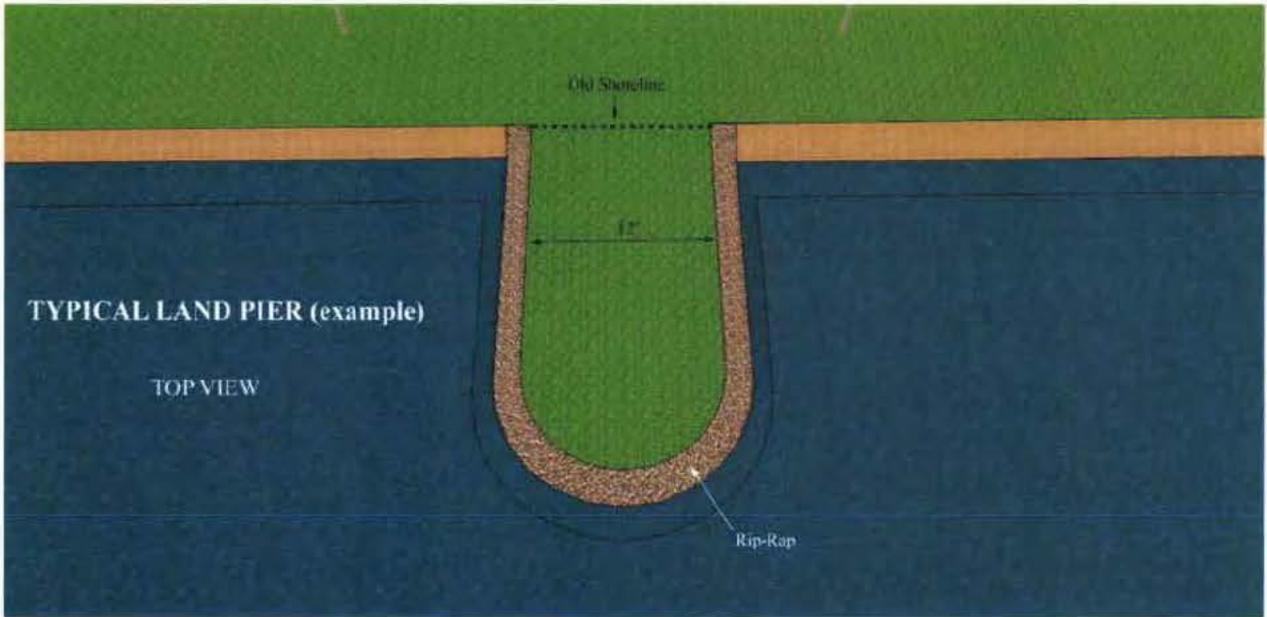
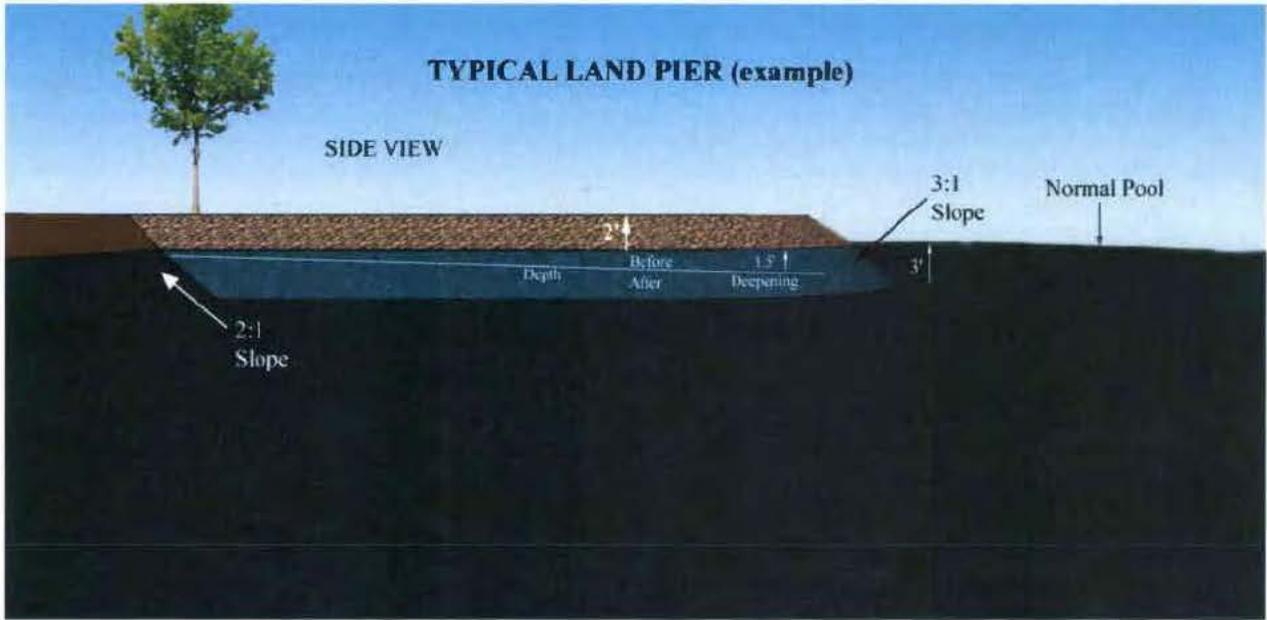


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3/06/2013

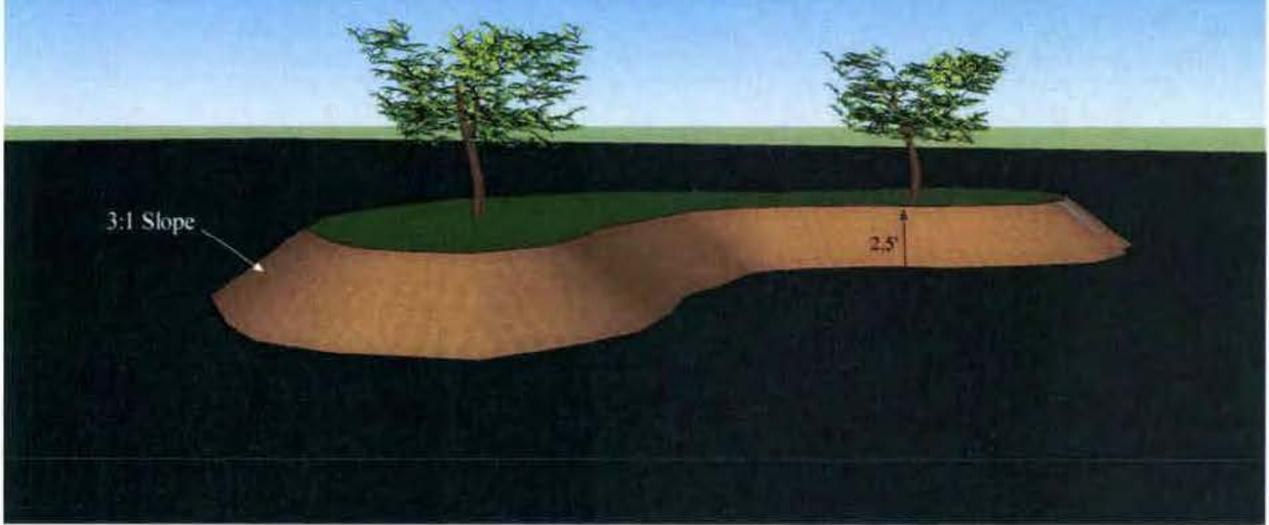
## Legend

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TYPICAL ISLAND (example)  
SIDE VIEW



TYPICAL ISLAND (example)  
TOP VIEW

