

Selma, Alabama

Flood Risk Management Study
Integrated Feasibility Report and Environmental Assessment

APPENDIX B



US Army Corps
of Engineers
Mobile District

May 17, 2021



APPENDIX-B: Environmental

Table of Contents

APPENDIX-B: Environmental	B-i
B.1. WRRDA 2014 Section 1005 Compliance	B-1
B.1.1. List of Federal and State Agencies Contacted	B-1
B.1.2. Cooperating Agency Agreement Letters	B-2
B.1.3. Agency Scoping Meeting	B-24
B.2. Water Quality	B-27
B.2.1. Water Quality Certification.....	B-27
B.2.2. 404(b)1 Evaluation	B-30
B.3. Endangered Species Act and Fish and Wildlife Coordination Act	B-39
B.4. Hazardous, Toxic, and Radioactive Waste Coordination	B-63
B.5. Public/Agency Comments and Responses	B-64

List of Figures

Figure B-1: Site Location	B-30
Figure B-2: Conceptual Design of Proposed Work.....	B-31

List of Tables

Table B-1: Distribution List	B-1
Table B-2: Quantities for Fill Material	B-32

B.1. WRRDA 2014 Section 1005 Compliance

B.1.1. List of Federal and State Agencies Contacted

Table B-1: Distribution List

AGENCY	ADDRESS	PHONE NUMBER
EPA Region 4	Sam Nunn Federal Building 61 Forsyth Street South West Atlanta, Georgia 30303	
FEMA Region 4	9500 Wynlakes Place Montgomery, Alabama 36117	(334) 274-6350
FHA	9500 Wynlakes Place Montgomery, Alabama 36117	(334) 274-6350
USGS SE Region	U.S. Geological Survey 1170 Corporate Drive, Suite 500 Atlanta, Georgia 30093	
USFWS SE Region	Michael_oetker@fws.gov	
USFWS DFO	bill_pearson@fws.gov	(251) 441-5181
DOI Atlanta Region	Office of Environmental Policy and Compliance, Atlanta Region Suite 1144 75 Ted Turner Drive, S.W. Atlanta, GA 30303	
AHC (SHPO)	468 South Perry Street P.O. Box 300900 Montgomery, Alabama 36130-0900	
ACHP	ljohnson@achp.gov athompson@achp.gov	(202) 517-0215 (202) 517-0225
NPS	100 Alabama Street, SW 1924 Building Atlanta, GA 30303	(404) 507-5600
HUD	U.S. Department of Housing and Urban Development 950 22nd Street N Suite 900 Birmingham, Alabama 35203	
NRCS	3381 Skyway Drive Auburn, AL 33830	(334) 887-4500
ADCNR	64 N. Union Street Montgomery, Alabama 36130	(334) 242-3486
ADCNR WFFRD	64 N. Union Street, Suite 551 Montgomery, Alabama 36130	(334) 242-3465
ADEM	P.O. Box 301463 Montgomery, Alabama 36130-1463	(334) 271-7710
ASOS	P.O. Box 5616 Montgomery, Alabama 36103-5616	(334) 242-7200
AEMA	P.O. Drawer 2160 Clanton, Alabama 35046	
ALDOT	P. O. Box 303050, Montgomery, Alabama 36130-3050	(334) 242-6776
ALDOT Bridge Bureau	P. O. Box 303050, Montgomery, Alabama 36130-3050	(334) 242-6007
ADPH	P.O. Box 303017 Montgomery, Alabama 36130-3017	(334) 295-1000 (251) 275-3772 (334) 206-5375

B.1.2. Cooperating Agency Agreement Letters



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

January 24, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Michaela Noble
Director, Office of Environmental Policy and Compliance
Department of the Interior
1849 C Street, Northwest
Washington, DC 20240

Dear Ms. Noble:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

The Selma Feasibility Study is a cost-share agreement between the USACE and the City of Selma that was initiated on October 9, 2018. The study has identified 10 focused alternatives which meet the goals and objectives. These alternatives will be compared and evaluated based on planning criteria, engineering, cost, and benefits in order to create a final array of alternatives from which a tentatively selected plan will be chosen.

The Council on Environmental Quality (CEQ), Regulations on Implementing National Environmental Policy Act Procedures (NEPA) (40 CFR 1500-1508) emphasizes agency cooperation early in the NEPA process through the establishment of Cooperating Agency status. In essence, any Federal or State agency which has jurisdiction over activities to be considered in the EA has the opportunity to serve as a Cooperating Agency. Responsibilities of a Cooperating Agency include but are not limited to provision of data and/or information, and review of the preliminary draft EA for completeness. Information relative to the rights and responsibilities of lead and cooperating agencies may be found in CEQ's Forty Most Asked Questions Concerning CEQ's NEPA Regulations (<http://ceq.eh.doe.gov/nepa/regs/40>).

As lead agency in the preparation of the integrated feasibility report and EA, USACE, Mobile District is requesting your participation as a cooperating agency in this effort and would appreciate a confirmation of your willingness to do so. We look forward to working with you on this project and if you should have any questions, please contact Ms. Heather Bulger at (251) 694-3889 or via email at heather.p.bulger@usace.army.mil.

Sincerely,

Curtis M. Flakes
Chief, Planning and Environmental
Division



U.S. ARMY
ATTENTION

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36624-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Joyce A. Stanley
Regional Environmental Protection Specialist
Department of the Interior, Office of Environmental Policy and Compliance
Atlanta Region, Suite 1144
75 Ted Turner Drive, Southwest
Atlanta, Georgia 30303

Dear Ms. Stanley:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in black ink, appearing to read "Curtis M. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36625-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Trey Glenn
Regional Administrator
U.S. Environmental Protection Agency, Region 4
Sam Nunn Federal Building
61 Forsyth Street South West
Atlanta, Georgia 30303

Dear Mr. Glenn:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



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BE RETURNED

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36526-0801

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Gracia B. Szczech
Regional Director
Federal Emergency Management Agency, Region 4
3003 Chamblee Tucker Road
Atlanta, Georgia 30341

Dear Ms. Szczech:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



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ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Michael Oetker
Acting S.E. Regional Director
U.S. Fish and Wildlife Service
1875 Century Boulevard
Atlanta, Georgia 30345

Dear Mr. Oetker:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



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ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2289
MOBILE, AL 36625-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Holly Weyers
Regional Director, Southeast Region
U.S. Geological Survey
1170 Corporate Drive, Suite 500
Atlanta, Georgia 30093

Dear Ms. Weyers:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "Curtis M. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2788
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Bob Vogel
Regional Director
National Park Service
100 Alabama Street, SW
1924 Building
Atlanta, Georgia 30303

Dear Mr. Vogel:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "Curtis M. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



UNITED STATES OF AMERICA

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36623-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Ben Malone
State Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
3381 Skyway Drive
Auburn, Alabama 36830

Dear Mr. Malone:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



REPLY TO
OFFICE OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-3001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Patricia A. Hoban-Moore
Director, Alabama Field Office
U.S. Department of Housing and Urban Development
950 22nd Street N Suite 900
Birmingham, Alabama 35203

Dear Ms. Hoban-Moore:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

Curtis M. Flakes
Chief, Planning and Environmental
Division



189-219
JTCM-06-07

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2298
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Amanda McBride
Alabama State Historical Preservation Officer
468 South Perry Street
Post Office Box 300900
Montgomery, Alabama 36130-0900

Dear Ms. McBride:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakes", written over a horizontal line.

Curtis M. Flakes
Chief, Planning and Environmental
Division



HEAD TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36528-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Steven O. Jenkins
Alabama Department Environmental Management
Field Operation Division
Post Office Box 301463
Montgomery, Alabama 36130 1463

Dear Mr. Jenkins:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (IFA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

The Selma Feasibility Study is a cost-share agreement between the USACE and the City of Selma that was initiated on October 9, 2018. The study has identified 10 focused alternatives which meet the goals and objectives. These alternatives will be compared and evaluated based on planning criteria, engineering, cost, and benefits in order to create a final array of alternatives from which a tentatively selected plan will be chosen.

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



334770
AL 1510402

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

The Honorable John H. Merrill
Alabama Secretary of State
Post Office Box 5616
Montgomery, Alabama 36103-5616

Dear Mr. Merrill:

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



OFFICE
ALIBI 10000

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0301

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Chris M. Blankenship
Commissioner
Alabama Department of Conservation and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Dear Mr. Blankenship:

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Sincerely,

A handwritten signature in blue ink, appearing to read "Curtis M. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



HP-VTD
AT 150 LG OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2289
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Charles F. Sykes
Director, Wildlife and Freshwater Fisheries Division
Alabama Department of Conservation and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Dear Mr. Sykes:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

The Selma Feasibility Study is a cost share agreement between the USACE and the City of Selma that was initiated on October 9, 2018. The study has identified 10 focused alternatives which meet the goals and objectives. Those alternatives will be compared and evaluated based on planning criteria, engineering, cost, and benefits in order to create a final array of alternatives from which a tentatively selected plan will be chosen.

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Curtis M. Flakes
Chief, Planning and Environmental
Division



DEPT OF
ATTENTION AT

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36625-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. John R. Cooper
Transportation Director
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36110

Dear Mr. Cooper:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (IFA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakes", written over a horizontal line.

Curtis M. Flakes
Chief, Planning and Environmental
Division



ARMY TO
CIVILIAN

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2289
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. William Colquett, P.E.
Bridge Engineer
Alabama Department of Transportation, Bridge Bureau
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Dear Mr. Colquett:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



PRIVATE
FIRST CLASS

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2269
MOBILE, AL 36620-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Lee Ann Wofford
Alabama Historical Commission
468 South Perry Street
Montgomery, Alabama 36130-0900

Dear Ms. Wofford:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

The Selma Feasibility Study is a cost-share agreement between the USACE and the City of Selma that was initiated on October 9, 2018. The study has identified 10 focused alternatives which meet the goals and objectives. Those alternatives will be compared and evaluated based on planning criteria, engineering, cost, and benefits in order to create a final array of alternatives from which a tentatively selected plan will be chosen.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakes".

Curtis M. Flakes
Chief, Planning and Environmental
Division



FRP VTO
AL1581L10F

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2268
MOBILE, AL 36620 0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Ms. Patti Powell
Director, State Lands Division
Alabama Department of Conservation and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Dear Ms. Powell:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Sincerely,

A handwritten signature in blue ink, appearing to read "C. Flakos".

Curtis M. Flakos
Chief, Planning and Environmental
Division



4-9710
ATTEN: 222

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2280
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Lance R. Lefleur
Director
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

Dear Mr. Lefleur:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

The Selma Feasibility Study is a cost-share agreement between the USACE and the City of Selma that was initiated on October 9, 2018. The study has identified 10 focused alternatives which meet the goals and objectives. These alternatives will be compared and evaluated based on planning criteria, engineering, cost, and benefits in order to create a final array of alternatives from which a tentatively selected plan will be chosen.

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Sincerely,

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Curtis M. Flakes
Chief, Planning and Environmental
Division



OFFICE OF
OPERATIONS

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2289
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Brian Hastings
Director
Alabama Department of Emergency Management
Post Office Box 2160
Clanton, Alabama 35046

Dear Mr. Hastings:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (EA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Curtis M. Flakes
Chief, Planning and Environmental
Division



REPORT TO
211-461 00-00

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL. 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Dr. Scott Harris
State Health Officer
Alabama Department of Public Health
Post Office Box 303017
Montgomery, Alabama 36130-3017

Dear Dr. Harris:

The U.S. Army Corps of Engineers (USACE), Mobile District is preparing an Integrated Feasibility Report and Environmental Assessment (IFA) for the City of Selma Flood Risk Management project located in Dallas County, Alabama.

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Curtis M. Flakes
Chief, Planning and Environmental
Division



RECEIVED
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

February 12, 2019

Inland Environment Team
Planning and Environmental Division

Mr. Mark D. Bartlett
Division Administrator
Alabama Division, Federal Highway Administration
9500 Wynlakes Place
Montgomery, Alabama 36117

Dear Mr. Bartlett:

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Curtis M. Flakes
Chief, Planning and Environmental
Division

B.1.3. Agency Scoping Meeting



REPLY TO

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM PD-EI 10 June 2019
SUBJECT: City of Selma Flood Risk Management (FRM) Feasibility Study Interagency Meeting

Memorandum for the Record

Attendees: Reference Table 1

Table 1: Federal and State Agency Invites and Participants

NAME	AGENCY	RESPONSE	ATTENDANCE
director@adem.alabama.gov	ADEM	None	
Suzanne.terrell@adph.state.al.us	ADPH	None	
Amanda.McBride@ahc.alabama.gov	AHC	Accepted	
Kinder, Christopher	AHC	Accepted	✓
Sipes, Eric	AHC	Accepted	✓
chris.blankenship@dcnr.alabama.gov	ALDCNR	None	
dcnr.wffdirector@dcnr.alabama.gov	ALDCNR	None	
Johnson, Paul	ALDCNR	None	
mark.bartlett@dot.gov	ALDOT	None	✓
cooperjr@dot.state.al.us	ALDOT	None	
colquettw@dot.state.al.us	ALDOT	None	
brian.hastings@ema.alabama.gov	ALEMA	Accepted	✓
Jonathan Gaddy	ALEMA	Accepted	
Ricky Adams	ALEMA	Accepted	
Brett Howard	ALEMA	None	
Michael Johnson	ALEMA	None	✓
Lacy Thorton	ALEMA	None	✓
John.Merrill@sos.alabama.gov	ALSOS	None	
Gracia.szczecz@dhs.gov	DHS	None	
Joyce.Stanley@ios.doi.gov	DOI	None	
Kajumba, Ntale	EPA	Accepted	✓
Warren.Camilla@epa.gov	EPA	Accepted	✓
Glenn, Trey	EPA Region 4	None	
Militscher, Chris	EPA Region 4	Declined	
Patricia.a.hoban-moore@hud.gov	HUD	None	
Hillary.conley@nps.gov	NPS	None	✓
Nissa.fink@nps.gov	NPS	None	
Bulger, Heather P CIV USARMY CESAM (USA)	USACE	None	✓
Perkins, Rita B CIV CESAM CESAD (USA)	USACE	Accepted	
Newell, David P CIV CESAM CESAD (USA)	USACE	Accepted	✓
Smith, Alexandria N CIV USARMY CESAM (USA)	USACE	Accepted	✓



REPLY TO

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM PD-EI 10 June 2019
SUBJECT: City of Selma Flood Risk Management (FRM) Feasibility Study Interagency Meeting

Jacobson, Jennifer L CIV USARMY CESAM (USA)	USACE	Accepted	✓
Boatman, Todd H CIV USARMY CESAM (USA)	USACE	Accepted	✓
Flakes, Curtis M CIV (USA)	USACE	None	✓
Bass, John E CIV USARMY CESAM (USA)	USACE	None	
Black, Joseph M IV CIV (USA)	USACE	Declined	
Caldwell, Timothy J II CIV USARMY CESAM (USA)	USACE	None	
Crane, Ryan B (Bailey) CIV USARMY CESAM (USA)	USACE	None	✓
Durden, Susan E CIV USARMY CEIWR (USA)	USACE	Accepted	✓
Ephriam, Troy L CIV USARMY CESAM (UAS)	USACE	Accepted	✓
Phillips, Stephen P CIV USARMY CESAM (UAS)	USACE	None	
Rooney, Katherine T CIV USARMY CESAM (USA)	USACE	None	✓
Tetreau, John J CIV USARMY CESAM (USA)	USACE	Accepted	✓
Throop, Ashley N CIV USARMY CESAM (USA)	USACE	None	
Var, Vongmany CIV (USA)	USACE	None	
ben.malone@al.usda.gov	USDA	None	
Michael.oetker@fws.gov	USFWS	None	
bill_pearson@fws.gov	USFWS	None	
Ford, Anthony	USFWS	None	✓
hsweyers@usgs.gov	USGS	None	

Meeting Summary: The U.S. Army Corps of Engineers presented the Selma FRM Array of Alternatives and the identified environmental impacts to the participating agencies in order to facilitate discussion regarding each agency's concerns. The Alabama Historical Commission (AHC) informed the USACE that the entire downtown district of Selma is currently proposed for World Heritage Site, as well as the Edmund Pettis Bridge and possibly the Brown Chapel. The AHC also informed the USACE of the City of Selma proposed floating dock. Each alternative discussion is listed below.

LEVEE

SHPO: Serious concerns

- Archaeological sites within alignment of levee
- Cemetery within levee alignment

BUYOUTS

SHPO: Serious concerns

- Potential impacts because of adjacency to downtown historic district



REPLY TO

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, AL 36628-0001

CESAM PD-EI

10 June 2019

SUBJECT: City of Selma Flood Risk Management (FRM) Feasibility Study Interagency Meeting

- Potential Impacts to structures that may qualify for National Register listing
- Adverse effects including community cohesion and economics resulting from demolition of structures

EPA: Serious concerns about extent of buy-outs.

- Maximum identified structures (300) is significant
- May have additional concerns as plan is refined

BANK STABILIZATION

SHPO: Serious concerns

- Significant viewshed impacts
- Landmark status impacts
- Civil war artifacts within river (live ordinances)

NPS: Moderate concerns

- Adverse effects to historic district as a whole

USFWS: Moderate concerns

- Adverse effects to tularoma snail
- Section 6 grant was awarded to survey for tularoma snail and several live ordinances were discovered within the bank stabilization footprint

B.2. Water Quality

B.2.1. Water Quality Certification

LANCE R. LEFLEUR
DIRECTOR



KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

November 10, 2020

SEBASTIEN P. JOLY, COMMANDER AND DISTRICT ENGINEER
MOBILE DISTRICT
US ARMY CORPS OF ENGINEERS
PO BOX 2288
MOBILE, AL 36628-0001

RE: Certification with Special Conditions
City of Selma Flood Risk Management Study
Clean Water Act (CWA) Section 401 Water Quality Certification Issued November 10, 2020
Water Quality Certification Expires November 09, 2025
Corps of Engineers (COE) JPN# FP20-AL01-07 Issued
Dallas County (047)
Proposed construction of a Soldier-Pile Wall for bank stabilization

Dear Mr. Joly:

This office has completed a review of the attached above-referenced joint public notice and all associated materials submitted related to the proposed project. Any comments made during the public notice period have also been forwarded to us for review.

Because action pertinent to water quality certification is required by Section 401(a)(1) of the Clean Water Act, 33 U.S.C. Section 1251, et seq., we hereby issue certification, for a period **not to exceed five (5) years** from the date of issuance, that there is reasonable assurance that the discharge resulting from the proposed activities as submitted will not violate applicable water quality standards established under Section 303 of the Clean Water Act and Title 22, Section 22-22-9(g), Code of Alabama 1975, provided the Corps acts in accordance with the following conditions as specified. We further certify that there are no applicable effluent limitations under Sections 301 and 302 nor applicable standards under Sections 306 and 307 of the Clean Water Act in regard to the activities specified.

To minimize adverse impacts to State waters, by copy of this letter we are requesting the Mobile District Corps of Engineers to incorporate the following conditions into the project specifications.

1. During project implementation, the Corps shall ensure compliance with applicable requirements of ADEM. Admin. Code Chapter 335-6-10 (Water Quality Criteria), and Chapter 335-6-11 (Water Use Classifications for Interstate and Intrastate Waters).
2. Please be advised that ADEM permit coverage may be required prior to commencing and/or continuing certain activities/operations relating to or resulting from the project. If you have any questions regarding ADEM regulated activity or the need for NPDES permit coverage, please contact ADEM's Water Division at h2omail@adem.state.al.us or 334-271-7823. If you have any questions regarding ADEM regulated activity or the need for air permit coverage, please contact ADEM's Air Division at airmail@adem.state.al.us or 334-271-7861. If you have any questions regarding ADEM regulated activity or the need for hazardous, toxic, and/or solid waste permit coverage, please contact ADEM's Land Division at landmail@adem.state.al.us or 334-271-7730.
3. Upon the loss or failure of any treatment facility, best management practice (BMP), or other control, the Corps shall, where necessary to maintain compliance with this certification, suspend, cease, reduce or otherwise control work/activity and all discharges until effective treatment is restored. It shall not be a defense for the Corps in a compliance action that it would have been necessary to halt or reduce work or other activities in order to maintain compliance with the conditions of this certification.

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
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Mobile District Corps of Engineers
COE JPN# FP20-AL01-07
November 10, 2020
Page 2 of 3

4. The Corps shall retain records adequate to document activities authorized by this certification including but not limited to, inspection reports, monitoring information, copies of any reports and all data used to complete the above reports or the application for this certification, for a period of at least three years after completion of work/activity authorized by the certification. Upon written request, the Corps shall provide ADEM with a copy of any record/information required to be retained by this paragraph. The Corps shall notify ADEM in writing upon completion of the proposed project that the pollution control measures specified in the Corps permit and any special conditions specified by ADEM have been properly implemented.
5. The Corps shall prepare a detailed Best Management Practices (BMP) Plan. Effective BMPs shall be implemented and continually maintained for the prevention and control of nonpoint and other sources of pollutants, including measures to ensure permanent revegetation or cover of all disturbed areas, during and after project implementation.
6. The Corps shall implement a Spill Prevention Control and Countermeasures (SPCC) Plan for all temporary and permanent onsite fuel or chemical storage tanks or facilities consistent with the requirements of ADEM Admin. Code R. 335-6-6-.12(r), Section 311 of the Federal Water Pollution Control Act, and 40 CFR Part 112. The Corps shall maintain onsite or have readily available sufficient oil & grease absorbing material and flotation booms to contain and clean-up fuel or chemical spills and leaks. The Corps shall immediately notify ADEM after becoming aware of a significant visible oil sheen in the vicinity of the proposed activity. In the event of a spill with the potential to impact groundwater or other waters of the State, the Corps should immediately call the National Response Center at 1-800-424-8802 and the Alabama Emergency Management Agency at 1-800-843-0699. The caller should be prepared to report the name, address and telephone number of person reporting spill, the exact location of the spill, the company name and location, the material spilled, the estimated quantity, the source of spill, the cause of the spill, the nearest downstream water with the potential to receive the spill, and the actions taken for containment and cleanup.
7. The Corps shall conduct, at a minimum, weekly comprehensive site inspections to ensure that effective Best Management Practices (BMPs) are properly designed, implemented, and regularly maintained (i.e. repair, replace, add to, improve, implement more effective practice, etc.) utilizing good engineering practices to prevent/minimize to the maximum extent practicable discharges of pollutants in order to provide for the protection of water quality. The inspections shall be conducted by a qualified credentialed professional (QCP), qualified personnel under the direct supervision of a QCP, or an ADEM recognized qualified credentialed inspector (QCI), until completion of the proposed activity.
8. Additional, effective BMPs shall be fully implemented and maintained on a daily basis as needed to prevent to the maximum extent possible potential discharges of pollutants from activities authorized by this certification, directly to or to a tributary or other stream segment, that have the potential to impact a State water currently considered impaired [waterbody is identified on the Alabama 303(d) list, a total maximum daily load (TMDL) has been finalized for the waterbody, and/or the waterbody is otherwise considered a Tier 1 water pursuant to ADEM Admin. Code Ch. 335-6-10]. The Corps shall inspect all BMPs as often as is necessary (daily if needed) for effectiveness, need for maintenance, and the need to implement additional, effective BMPs. Additional effective BMPs shall immediately be implemented as needed and may include but are not limited to sediment retention basins, greater capacity in sediment retention structures, hydroseeding with application of non-toxic tackifiers, grass sodding, non-toxic chemical treatment, erosion control blankets, other effective innovative/alternative technologies, etc. to ensure full compliance with ADEM requirements and the protection of water quality in the impaired waterbody.
9. All construction and worker debris (e.g. trash, garbage, etc.) must be immediately removed and disposed in an approved manner. If acceptable offsite options are unavailable, effective onsite provisions for collection and control of onsite worker toilet wastes or gray waste waters (i.e. port-o-let, shower washdown, etc.) must be implemented and maintained. Soil contaminated by paint or chemical spills, oil spills, etc. must be immediately cleaned up or be removed and disposed in an approved manner. Also, the Corps shall manage and dispose of any trash, debris, and solid waste according to applicable state and federal requirements.
10. All materials used as fill, or materials used for construction of structures in a waterbody, must be non-toxic, non-leaching, non-acid forming, and free of solid waste or other debris. This requirement does not preclude the use of construction materials authorized by the COE that are typically utilized in marine or other aquatic applications.
11. The Corps shall implement appropriate measures to minimize the potential for a decrease of instream dissolved oxygen concentrations as a result of project implementation. In addition, the Corps shall ensure that the activities authorized by this

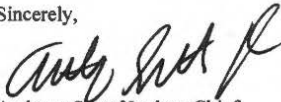
Mobile District Corps of Engineers
COE JPN# FP20-AL01-07
November 10, 2020
Page 3 of 3

certification do not significantly contribute to or cause a violation of applicable water quality standards for instream dissolved oxygen.

12. The Corps shall implement appropriate, effective BMPs, including installation of floating turbidity screens as necessary, to minimize downstream turbidity to the maximum extent practicable. The Corps shall visually monitor or measure background turbidity. The Corps must suspend operations should turbidity resulting from project implementation exceed background turbidity by more than 50 NTUs. Operations may resume when the turbidity decreases to within acceptable levels.
13. The Corps is encouraged to consider additional pollution prevention practices, low impact development (LID), and other alternatives to assist in complying with applicable regulatory requirements and possible reduction/elimination of pollutant discharges. LID is an approach to land development or re-development that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to implement these sustainable ideas such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.
14. The Corps is encouraged to consider and implement a site design plan/strategy for post-construction hydrology to mimic pre-construction hydrology to the extent feasible, and for post-construction stormwater runoff peak flows and total stormwater volume to minimize potential downstream channel and stream bank erosion.
15. In recognition that projects are site specific in nature and conditions can change during project implementation, ADEM reserves the right to require the submission of additional information or require additional management measures to be implemented, as necessary on a case by case basis, in order to ensure the protection of water quality. Liability and responsibility for compliance with this certification are not delegable by contract or otherwise. The Corps shall ensure that any agent, contractor, subcontractor, or other person employed by, under contract, or paid a salary by the Corps complies with this certification. Any violations resulting from the actions of such person shall be considered violations of this certification.
16. Issuance of a certification by ADEM neither precludes nor negates the Corps' responsibility or liability to apply for, obtain, or comply with other ADEM, federal, state, or local government permits, certifications, licenses, or other approvals. This certification does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, and in no way purports to vest in the Corps title to lands now owned by the State of Alabama nor shall it be construed as acquiescence by the State of Alabama of lands owned by the State of Alabama that may be in the Corps' possession.
17. ADEM certification decisions are predicated on current regulatory requirements, established engineering standards and technical considerations, best management practices information, and formal administrative procedures in conformance with Departmental regulations and applicable Alabama law. Issuance of a certification by ADEM neither precludes nor negates the Corps' responsibility or liability to apply for, obtain, or comply with other ADEM, federal, state, or local government permits, certifications, licenses, or other approvals.

Should you have any questions on this or related matters, please do not hesitate to contact **Savannah Daughtry, Office of Field Services**, by email at savannah.daughtry@adem.alabama.gov or by phone at (334) 394-4301.

Sincerely,



Anthony Scott Hughes, Chief
Field Operations Division

File: WQ401/xxx/SMD
c: Wetlands Section, EPA Region IV

B.2.2. 404(b)1 Evaluation

**SECTION 404(B)(1) EVALUATION FOR
BANK STABILIZATION
CITY OF SELMA FLOOD RISK MANAGEMENT STUDY
DALLAS COUNTY, ALABAMA**

I. PROJECT DESCRIPTION:

A. Location. City of Selma, Dallas County, Alabama (**Figure B-1**).

B. General Description. As illustrated in **Figure B-2**, the proposed work would span approximately 1,000 linear feet (ft) and would involve installation of approximately 94 H-Piles from which to insert a retaining wall feature. Riprap would be placed at the upstream and downstream ends.

Figure B-1: Site Location

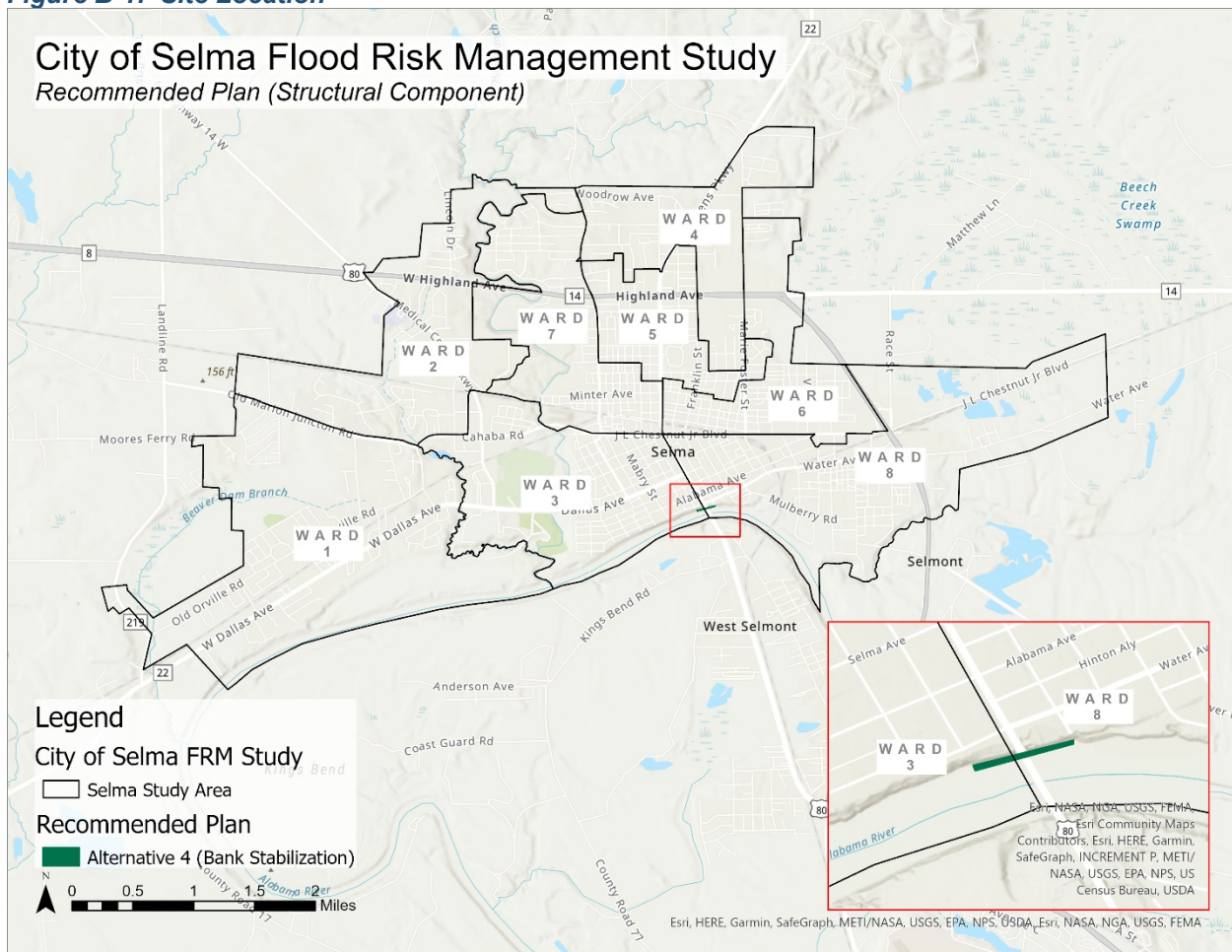
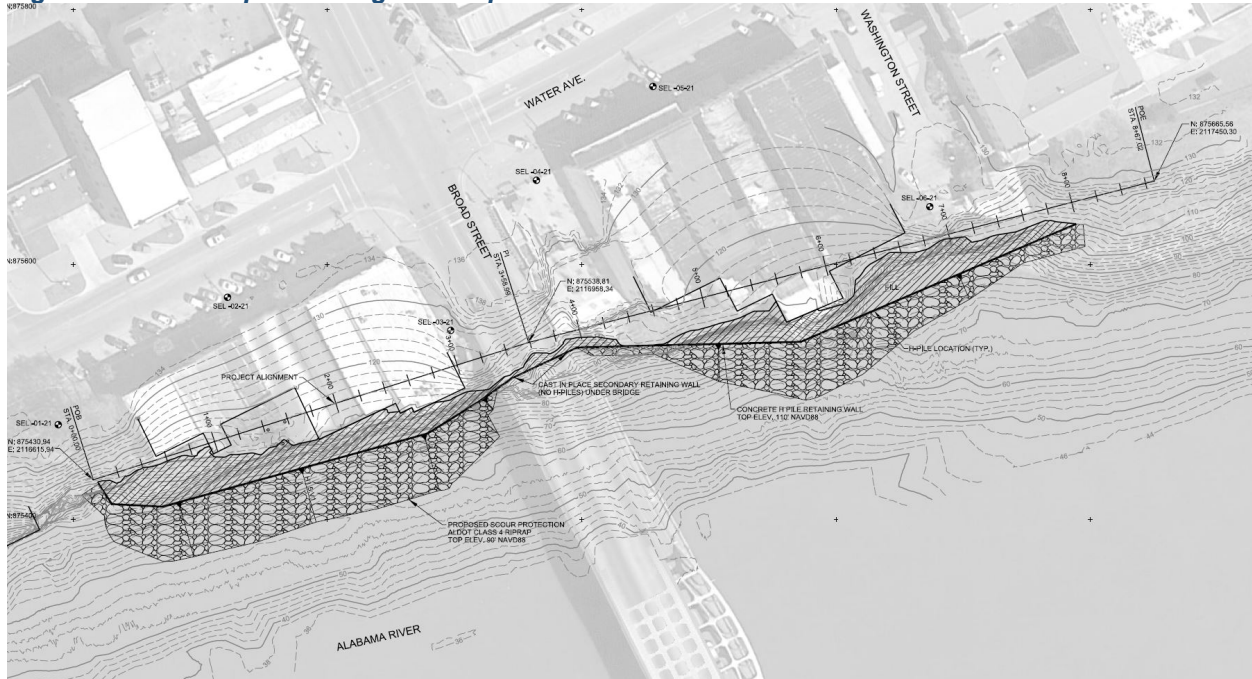


Figure B-2: Conceptual Design of Proposed Work



C. Authority and Purpose.

This feasibility study is authorized by House Resolution No. 66, June 7, 1961:

“Resolved by the Committee on Public Works of the House of Representatives, United States, that the Board of Engineers for Rivers and Harbors be, and is hereby, requested to review the report on Alabama-Coosa Branch of Mobile River, Georgia and Alabama, published as House Document No. 66, Seventy-fourth Congress, first, session, with a view to determining the advisability of providing improvements for flood control on Alabama River in Dallas County, Alabama.”

The Bipartisan Budget Act of 2018 (Public Law (P.L.) 115-123), Division B, Subdivision 1, Title IV, appropriates funding for the study at full Federal expense. As identified under this “Supplemental Appropriation” bill, the study is subject to additional reporting requirements and is expected to be completed within three years and for \$3 million dollars.

In accordance with the memorandum for the Commander dated July 16, 2020 from Headquarters (HQ) United States Army Corps of Engineers (USACE) to the South Atlantic Division (SAD), the investigation of streambank (bankline) erosion measures is being conducted under the authority of Section 1203 of Water Resources Development Act of 2018 as authorized:

“(a) Feasibility Reports.--The Secretary shall expedite the completion of a feasibility study for each of the following projects, and if the Secretary determines that the project is justified in a completed report, may proceed directly to preconstruction planning, engineering, and design of the project: (1) Project for riverbank stabilization, Selma, Alabama.”

D. General Description of Fill Material.

- (1) General Characteristic of Material. Reference **Table B-2.**
- (2) Quantity of Material. Reference **Table B-2.**

Table B-2: Quantities for Fill Material

Material	Quantities per ~1,000 linear ft
H-Piles (lengths vary from 10-ft to 50-ft)	96 (approximate)
Steel Anchor Tiebacks	188 (approximate)
Concrete Lagging	465 cy
Geotextile Fabric	10,000 square yards (sy)
Granular Fill	12,500 cy
Sand Fill	1,900 cy
Riprap	12,333 cy
Total Fill	26,733 cy (approximate)

- (3) Source of Material. The riprap will be selected from a commercial quarry in the region.

E. Description of the Proposed Discharge Site.

- (1) Location. The center of the proposed Soldier-Pile Wall footprint is located approximately 1,500 feet upstream of River Mile 205.
- (2) Size. The proposed length is approximately 1,000 linear ft.
- (3) Type of Site. The proposed work would be performed along the riverbank and riverbed within the Alabama River.
- (4) Type of Habitat. The Alabama River within the Study Area consists of large sized gravel and rock with continuous flow.
- (5) Timing and Duration of Discharge. Duration of construction would take approximately 18 months to complete.

- F. Description of Disposal Method. Pilings would be spaced to allow a retaining wall to slide into place. Fill Material and riprap would be placed behind the retaining wall. Riprap would also be placed on the upstream and downstream ends.

II. Factual Determinations:

A. Physical Substrate Determinations.

- (1) Substrate Elevation and Slope. The Soldier-Pile Wall would be constructed up to 110-ft North American Vertical Datum 88 and would have a vertical slope.

- (2) Sediment Type. Large size gravel and rock.
- (3) Dredged/Fill Material Movement. No dredging would occur. Fill material would be placed inside the retaining wall with riprap at upstream and downstream ends.
- (4) Physical Effects on the Benthos. Benthos would be adversely impacted through direct disturbance to riverbed. Indirect impacts to the immediate vicinity may occur due to increase local turbidity during construction.
- (5) Actions Taken to Minimize Impacts (Subpart H). Construction Best Management Practices (BMPs) and an Erosion, Sediment, and Pollution Control Plan (ESPCP) would be implemented to contain potential increased turbidity resulting from the disposal and construction. Relocation for Federally listed species would occur in accordance with the Biological Opinion dated December 21, 2020 received from the U.S. Fish and Wildlife Service (FWS).

B. Water Circulation, Fluctuation, and Salinity Determinations.

- (1) Salinity. Not applicable.
- (2) Water Chemistry. Water chemistry would not be significantly impacted.
- (3) Clarity. Water clarity would be temporarily decreased in the vicinity of the construction activities. These impacts would subside once construction activities are completed.
- (4) Color. Color would not be significantly impacted.
- (5) Taste. Taste would not be significantly impacted.
- (6) Dissolved Gas Levels. Dissolved gas levels would not be significantly affected.
- (7) Nutrients. Nutrient levels would not be significantly impacted.
- (8) Eutrophication. Eutrophication would not be significantly impacted.

C. Water Circulation, Fluctuation, and Salinity Gradient Determinations:

- (1) Current Patterns and Circulation.
 - (a) Current Patterns and Flow. The construction of the retaining wall would not significantly alter current and flow patterns. No significant induced flooding would occur.
 - (b) Velocity. The immediate vicinity may experience increased velocity during flood events; however, the potential for increased velocities and scouring adjacent to the proposed Soldier-Pile Wall would be considered and

addressed during the Preconstruction, Engineering, and Design (PED) phase of the project.

- (2) Stratification. There would be no impacts on water stratification.
- (3) Hydrologic Regime. There would be no significant impacts on the hydrologic regime.
- (4) Normal Water Level Fluctuations. There would be no significant impacts on water level fluctuations.
- (5) Salinity Gradients. Not applicable.

D. Suspended Particulate/Turbidity Determinants.

- (1) Expected Changes in Suspended Particulate and Turbidity Levels in Vicinity of Disposal Sites. A temporary increase in suspended particulates and turbidity levels would occur in the immediate vicinity of the construction zone. These impacts will subside when the activities are completed.
- (2) Effects on Chemical and Physical Properties of the Water Column.
 - (a) Light Penetration. Increases in suspended solids concentrations will be nominal and temporary. No significant impacts to light penetration are anticipated.
 - (b) Dissolved Oxygen. Dissolved oxygen will not be significantly impacted.
 - (c) Toxic Metals and Organics. No significant increases in toxic metals and organics are expected to occur due to the construction activities.
 - (d) Pathogens. Pathogen levels will not be affected as a result of this project.
 - (e) Aesthetics. The area would be permanently altered from the construction of a retaining wall; however, should no bank stabilization be implemented the Study Area aesthetics would decline due to continual erosion and impacts to properties listed on the National Register of Historic Places.
- (3) Effects on biota.
 - (a) Primary Production, Photosynthesis. Temporary, localized impacts to primary production or photosynthesis levels may result from turbidity plumes generated by construction activities. These effects would be localized and would subside upon project completion.
 - (b) Suspension/Filter Feeders. Suspension/filter feeders in the immediate vicinity of the project footprint would be adversely impacted. Relocation would occur to minimize impacts. Species within the surrounding vicinity

would not be significantly affected by this action. Increased turbidity will be contained using Best Management Practices (BMPs) and an Erosion and Sediment Control Plan (ESCP).

- (c) Sight Feeders. Sight feeders would vacate the vicinity and may be temporarily affected by increased turbidity. These effects would subside upon completion of the construction activities.
- (4) Actions taken to Minimize Impacts (Subpart H). Construction BMPs and an ESPCP would be implemented in order to minimize impacts. Federal and State Agency coordination is ongoing to ensure adverse impacts to federally listed species are minimized.
- E. Contaminant Determinations. The sediment within the riverbed is sand and gravel; therefore, the proposed project site would not act as an environmental sink and temporarily increased turbidity would not spread contaminants to the surrounding area.
- F. Aquatic Ecosystem and Organism Determinations.
- (1) Effects on plankton. There may be temporary effects on plankton in the immediate vicinity of the construction zone due to increased turbidity; however, these effects would be localized and short-term.
- (2) Effects on Benthos. Benthic organisms within the construction zone that are not translocated would be crushed underneath riprap placement. Adjacent benthic communities would be indirectly impacted from increased turbidity. No significant impacts would result from this project.
- (3) Effects on Nekton. Nektonic species are expected to be temporarily affected during disposal and construction and may evacuate the immediate vicinity; however, they are expected to return once turbidity levels return to pre-project conditions. No significant impacts are anticipated.
- (4) Effects on Aquatic Food Web. This project would pose no significant impacts to the aquatic food web.
- (5) Effects on Special Aquatic Sites.
- (a) Sanctuaries and Refuges. No sanctuaries or refuges occur within the proposed project area; therefore, there would be no impacts resulting from this project.
- (b) Wetlands. It is unlikely that jurisdictional wetlands occur within the footprint; however, a survey would be conducted to verify and delineate any existing wetlands.

- (c) Mud Flats. No mud flats exist within the project vicinity; therefore, there would be no impacts as a result of the project.
- (d) Vegetated Shallows. No vegetated shallows would be affected by this
- (e) Coral Reefs. Not applicable.
- (f) Riffle and Pool Complexes. No riffle or pool complexes would be affected by this project.
- (6) Threatened and Endangered Species. The USACE determined that the proposed action may affect and is likely to adversely affect the tulotoma snail (*Tulotoma magnifica*). The USFWS concurred with the determination in a BO dated December 21, 2020.
- (7) Other Wildlife. No significant impacts to wildlife are anticipated.
- (8) Actions to Minimize Impacts. Impacts to the species will be minimized by avoidance of the animal's habitat.

G. Proposed Fill Site Determination.

- (1) Mixing Zone Determination. This activity does not require a mixing zone determination. The nature of the construction activities and constituent concentrations preclude the need for a mixing zone determination.
- (2) Determination of Compliance with Applicable Water Quality Standards. The proposed action will comply with applicable water quality standards as established by the Alabama Department of Environmental Management (ADEM). Water Quality Certification has been obtained via letter dated November 10, 2020.
- (3) Potential Effects on Human Use Characteristics.
 - (a) Municipal and Private Water Supply. This project would not significantly impact municipal or private water supplies.
 - (b) Recreation and Commercial Fisheries. Fishing activities at the sites would be temporarily interrupted during the construction activities. No long-term impacts are anticipated to result from this project.
 - (c) Water Related Recreation. The proposed action would temporarily disrupt water-related recreation at the construction site; however, no negative long-term effects are anticipated from the action. Recreationers would be able to access surrounding areas for enjoyment.
 - (d) Aesthetics. Aesthetics would be permanently impacted as a result of the proposed action. The proposed bank stabilization would convert a portion

of the natural river into a man-made structure designed to reduce erosion; however, should no bank stabilization be implemented the Study Area aesthetics would degrade due to continual erosion and those impacts to the properties listed on the NRHP.

- (e) Parks, National and Historic Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves. No parks, national historic monuments, national seashores, wilderness areas, research sites and similar preserves in the vicinity will be adversely impacted as a result of this project.
 - (f) Other Effects. The proposed project location is located within several cultural resources' Area for Potential Effects. A Memorandum of Agreement was executed with the Alabama Historical Commission and Advisory Council on Historic Preservation and finalized in May 2021.
- (4) Determination of Cumulative Effects on the Aquatic Ecosystem. A thorough cumulative assessment considers past, present, and future action which affect the Study Area. Historical activities to reduce riverbank erosion repairs include lining the bank with debris. Additionally, the Federal Emergency Management Agency has conducted emergency bank stabilization using concrete blocks along the downtown riverfront. Currently, the USACE is conducting a Continuing Authorities Program Section 14 Feasibility Study, Emergency Streambank and Shoreline Protection, Selma, Alabama (referred to as the Selma CAP Section 14 Project) within the City limits. The City of Selma had designed plans to develop the riverfront property to include a riverwalk and revitalization, however, no funding to complete the work has been allocated at this time. Collectively, bank stabilization efforts have resulted in the decreased erosion in the immediate locations; however, each effort in itself has not been substantial enough to reduce erosion throughout the entire reach of the Study Area.
- (5) Determination of Secondary Effects on the Aquatic Ecosystem. Temporary and localized impacts may occur downstream of the construction activities.

III. Findings of Compliance or Noncompliance with the Restrictions on Discharge.

- A. No significant adaptations of the guidelines were made relative to this evaluation.
- B. The proposed discharge represents the least environmentally damaging practicable alternative that would accomplish the project objectives.
- C. Based on the nature of the fill material, the placement of riprap would be in compliance with applicable state Water Quality Standards. Furthermore, Water Quality Certification has been obtained from the State of Alabama via letter dated November 10, 2020.

- D. The fill material would not violate the Toxic Effluent Standard of Section 307 of the Clean Water Act.
- E. The placement of fill material would not jeopardize the continued existence of any Federally listed endangered or threatened species or their critical habitat.
- F. The proposed discharge of fill material would not contribute to significant degradation of waters of the United States. Nor would it result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreation and commercial fishing; life stages of organisms dependent upon the aquatic ecosystem; ecosystem diversity, productivity and stability; or recreational, aesthetic or economic values.
- G. Appropriate and practicable steps to minimize potential adverse impacts of the discharge on the aquatic ecosystem include:
 - (1) Locations, times and duration of the project have been selected to minimize potential adverse impacts to the aquatic ecosystem.
 - (2) An interdisciplinary team has evaluated sites, and project designs have been altered per their recommendations.

DATE: _____

Sebastien P. Joly
Colonel, U.S. Army
District Commander

B.3. Endangered Species Act and Fish and Wildlife Coordination Act

Due to the limited resources of the USFWS, coordination for the FWCA will be included within the Biological Opinion and will be separated and distinct from ESA language. This solution was approved by the Vertical Chain via In Progress Review on February 27, 2020.

Biological Opinion

USACE Soldier-Pile Wall, Alabama River

Selma, Alabama

FWS Log #: 2020-F-1421



Prepared by:

U.S. Fish and Wildlife Service
Alabama Ecological Field Office
Daphne, Alabama

**WILLIAM
PEARSON**

Digitally signed by
WILLIAM PEARSON
Date: 2020.12.21 15:17:05
-06'00'

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iii
CONSULTATION HISTORY	iv
BIOLOGICAL OPINION	1
1. INTRODUCTION	1
2. PROPOSED ACTION	2
2.1. <i>Soldier-Pile Wall</i>	2
2.2. <i>Other Activities Caused by the Action</i>	3
2.3. <i>Action Area</i>	3
2.4. <i>Tables and Figures</i>	5
3. SOURCES OF CUMULATIVE EFFECTS	6
4. TULOTOMA SNAIL	6
4.1. <i>Status of Tulotoma Snail</i>	6
4.2. <i>Environmental Baseline for Tulotoma Snail</i>	11
4.3. <i>Effects of the Action on Tulotoma Snail</i>	12
4.4. <i>Cumulative Effects on Tulotoma Snail</i>	13
4.5. <i>Conclusion for Tulotoma Snail</i>	13
5. INCIDENTAL TAKE STATEMENT	14
5.1. <i>Amount or Extent of Take</i>	15
5.2. <i>Reasonable and Prudent Measures</i>	15
5.3. <i>Terms and Conditions</i>	16
5.4. <i>Monitoring and Reporting Requirements</i>	17
6. CONSERVATION RECOMMENDATIONS	18
7. REINITIATION NOTICE	18
8. FISH AND WILDLIFE COORDINATION ACT	18
9. LITERATURE CITED	19

EXECUTIVE SUMMARY

This Endangered Species Act (ESA) Biological Opinion (BO) of the U.S. Fish and Wildlife Service (Service) addresses the proposed construction of a Soldier-Pile Wall under the Edmund Pettus Bridge (the Action) in the Alabama River. The U.S. Army Corps of Engineers (USACE) is conducting a Flood Risk Management study for the City of Selma, Alabama, and proposes to construct the Soldier-Pile Wall as part of a floodplain management/emergency evacuation plan (FMEEP) to reduce the flood induced threats to cultural resources while also reducing the life-safety risk to citizens affected by flooding within the city.

The USACE determined that the Action is not likely to adversely affect the Alabama sturgeon (*Scaphirhynchus suttkusi*)/critical habitat, oranogenacra mucket (*Lampsilis perovalis*)/critical habitat, and southern clubshell (*Pleurobema decisum*)/critical habitat and requested Service concurrence. The Service concurred with this finding by letter dated October 14, 2020.

The USACE also determined that the Action is likely to adversely affect the tulotoma snail (*Tulotoma magnifica*) and requested formal consultation with the Service. The BO concludes that the Action is not likely to jeopardize the continued existence of this species. This conclusion fulfills the requirements applicable to the Action for completing consultation under §7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended, with respect to this species.

The BO includes an Incidental Take Statement (ITS) that requires the USACE to implement reasonable and prudent measures that the Service considers necessary or appropriate to minimize the impacts of anticipated taking on the listed species. Incidental taking of listed species that is compliance with the terms and conditions of this statement is exempted from the prohibitions against taking under the ESA. As part of the ITS, the USACE agreed to the relocation of the tulotoma snails found within the Action Area and immediate vicinity.

In the Conservation Recommendations section, the BO outlines voluntary actions that are relevant to the conservation of the listed species addressed in this BO and are consistent with the authorities of the USACE.

Reinitiating consultation is required if the USACE retains discretionary involvement or control over the Action (or is authorized by law) when:

- (a) the amount or extent of incidental take is exceeded;
- (b) new information reveals that the Action may affect listed species or designated critical habitat in a manner or to an extent not considered in this BO;
- (c) the Action is modified in a manner that causes effects to listed species or designated critical habitat not considered in this BO; or
- (d) a new species is listed or critical habitat designated that the Action may affect.

CONSULTATION HISTORY

This section lists key events and correspondence during the course of this consultation. A complete administrative record of this consultation is on file in the Service's Alabama Ecological Field Office in Daphne, AL.

- 2020-08-24** – The Service received an email from the USACE with a draft of the Flood Risk Management report for the City of Selma.
- 2020-08-28**– The Service received a letter from the USACE requesting informal consultation for the proposed construction of a Tentatively Selected Plan (TSL) Alternative 4 Soldier-Pile Wall. Attached to the letter was also a draft Biological Assessment (BA).
- 2020-09-02** – Conference call between USACE (H. Bulger and D. Newell) and the Service (E. Padgett). The Service sought clarification for the proposed project design and footprint.
- 2020-09-14**– USACE submitted a finalized BA for the City of Selma Flood Risk Management Feasibility Study and requested formal consultation with the Service.
- 2020-10-14**– The Service concurred with the USACE's "may affect likely to adversely affect" determination for the tulotoma snail and its request to initiate formal consultation. The Service also concurred with the USACE's determination of "may affect not likely to adversely affect" for the Alabama sturgeon, orangenacre mucket, southern clubshell and all associated critical habitats, and acknowledged the USACE's "no effect" determination for the Alabama canebrake pitcher-plant, Georgia rockcress, Prices potato-bean, Alabama moccasinshell, heavy pigtoe, ovate clubshell, red cockaded woodpecker, and wood stork.
- 2020-12-01**–The Service emailed the USACE a draft copy of its Biological Opinion (BO) and inquired as if there were any updates to the Soldier-Pile Wall design that could be included in the BO. USACE responded with updated design images and dimensions. The USACE's email also noted that mention of coordination under the Fish and Wildlife Coordination Act needed to be included in the BO. USACE also indicated that they would submit a formal amendment to the BA which would include design updates.
- 2020-12-04**–The Service received an amendment to the BA which included an update to the design of the Soldier-Pile Wall and established an upstream and downstream linear buffer to capture potential design changes in the preconstruction design phase. Discussion between the Service and USACE regarding finalizing FWCA language and clarifying materials used for the wall.
- 2020-12-09**–Email exchange between the Service and USACE regarding finalizing FWCA language and clarifying materials used for the wall.

2020-12-15–The Service joined the USACE’s Agency Decision Milestone meeting during which the USACE announced that the Tentatively Selected Plan Alternative 4 Soldier-Pile Wall (as stated in the BA) became the Recommended Plan.

BIOLOGICAL OPINION

1. INTRODUCTION

A biological opinion (BO) is the document that states the findings of the U.S. Fish and Wildlife Service (Service) required under section 7 of the Endangered Species Act of 1973, as amended (ESA), as to whether a Federal action is likely to:

- jeopardize the continued existence of species listed as endangered or threatened; or
- result in the destruction or adverse modification of designated critical habitat.

The Federal action addressed in this BO is the U.S. Army Corps of Engineers' (USACE) proposed construction of a Soldier-Pile Wall in the Alabama River for bankline stabilization (the Action). This BO considers the effects of the Action on the tulotoma snail. The Action does not affect designated critical habitat; therefore, this BO does not address critical habitat.

The Service previously concurred with the USACE's determination that the Action is not likely to adversely affect the Alabama sturgeon (*Scaphirhynchus suttkusi*)/critical habitat, oranogenacre mucket (*Lampsilis perovalis*)/critical habitat, and southern clubshell (*Pleurobema decisum*)/critical habitat by letter dated October 14, 2020. This concurrence fulfilled the USACE's responsibilities for the Action under §7(a)(2) of the ESA for these species and critical habitats. We do not address further these species and critical habitats in this BO.

BO Analytical Framework

A BO that concludes a proposed Federal action is *not* likely to *jeopardize the continued existence* of listed species and is *not* likely to result in the *destruction or adverse modification* of critical habitat fulfills the Federal agency's responsibilities under §7(a)(2) of the ESA.

"Jeopardize the continued existence means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species" (50 CFR §402.02).

"Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species" (50 CFR §402.02).

The Service determines in a BO whether we expect an action to satisfy these definitions using the best available relevant data in the following analytical framework (see 50 CFR §402.02 for the regulatory definitions of *action*, *action area*, *environmental baseline*, *effects of the action*, and *cumulative effects*).

- a. *Proposed Action*. Review the proposed Federal action and describe the environmental changes its implementation would cause, which defines the action area.
- b. *Status*. Review and describe the current range-wide status of the species or critical habitat.
- c. *Environmental Baseline*. Describe the condition of the species or critical habitat in the action area, without the consequences to the listed species caused by the proposed action.

The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early consultation, and the impacts of State or private actions which are contemporaneous with the consultation.

- d. *Effects of the Action.* Predict all consequences to species or critical habitat caused by the proposed action, including the consequences of other activities caused by the proposed action, which are reasonably certain to occur. Activities caused by the proposed action would not occur but for the proposed action. Effects of the action may occur later in time and may include consequences that occur outside the action area.
- e. *Cumulative Effects.* Predict all consequences to listed species or critical habitat caused by future non-Federal activities that are reasonably certain to occur within the action area.
- f. *Conclusion.* Add the effects of the action and cumulative effects to the environmental baseline, and in light of the status of the species, formulate the Service's opinion as to whether the action is likely to jeopardize species or adversely modify critical habitat.

2. PROPOSED ACTION

The U.S. Army Corps of Engineers (USACE) is conducting a Flood Risk Management Study for the City of Selma, Alabama. Selma is located adjacent to the Alabama River and is approximately 50 miles (mi) west of Montgomery, Alabama (Figure 1). Selma is home to the largest historic district in Alabama and is divided into wards with each having a representative in the city government. The wards receiving frequent flooding are identified and are the focused project area for the USACE's study. They include: Wards 1, 3, 6, and 8. River Mile(s) (RM) 256 through 261 have been assessed for the study. The USACE is proposing a floodplain management/emergency evacuation plan (FMEEP) to reduce the flood risk to citizens affected by flooding within the USACE's study area. In conjunction with the FMEEP is the construction of a Soldier-Pile Wall in the Alabama River for bankline stabilization (the Action).

2.1. Soldier-Pile Wall

The Soldier-Pile Wall is located upstream, downstream, and under the Edmund Pettus Bridge (Figure 2). Exact construction details will be fully developed during the Preconstruction and Engineering and Design phase; however upcoming site surveys and geotechnical investigations will help in the development of preliminary plans and footprint during the feasibility study phase.

Exact dimensions of the proposed Soldier-Pile Wall are currently being developed and are awaiting a geotechnical survey to determine the necessary requirements. Approximately 1,000 ft. of bank stabilization would be achieved through a Soldier-Pile Wall design with riprap caps on the upstream and downstream ends. The riprap caps would extend approximately 50 ft. from the upstream and downstream portions of the Soldier-Pile Wall. The width of the wall would not extend past 100 ft. into the Alabama River from the Ordinary High Water Mark (OHWM). In summary, the dimensions of the Soldier-Pile Wall with riprap caps is estimated at 1,100 ft. by 100 ft. It is also assumed that an additional buffer of 250 ft. on both upstream and downstream portions of the wall will be incorporated into this assessment to capture potential design changes

during the Preconstruction Engineering and Design Phase. Prior to construction, a survey crew would identify and relocate any civil war era, unexploded ordnances (UXOs) within the footprint. Staging, construction, and access of the Soldier-Pile Wall would occur via the Alabama River.

At this phase of the study it has not been determined if clearing and grubbing of the riverbank would be required; however the maximum potential vegetation removal would encompass eight acres. In total, construction would take approximately 30 months to complete. Best Management Practices (BMPs) (e.g. erosion control blankets, fiber rolls, geotextiles, sediment traps, seeding, silt fences, vegetated buffers) will be specified in a Stormwater Pollution Prevention Plan which would be used to reduce environmental impacts.

The proposed Soldier-Pile Wall would be self-sustaining and would require no regular operation. Species control (e.g. herbaceous, woody, and invasive species growth) measures would be necessary, such as weeding and spraying. Intermittent inspections would be required to review structural integrity for things such as cracks, sloughing, and other signs of structural movement.

2.2. Other Activities Caused by the Action

A BO evaluates all consequences to species or critical habitat caused by the proposed Federal action, including the consequences of other activities caused by the proposed action, that are reasonably certain to occur (see definition of “effects of the action” at 50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities caused by the proposed action (but not part of the proposed action) are reasonably certain to occur. These factors include, but are not limited to:

- (1) past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action;
- (2) existing plans for the activity; and
- (3) any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

In its request for consultation, the USACE did not describe, and the Service is not aware of, any additional activities caused by the Action that are not included in the previous description of the proposed Action. Therefore, this BO does not address further the topic of “other activities” caused by the Action.

2.3. Action Area

The action area is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50 CFR §402.02). Delineating the action area is necessary for the Federal action agency to obtain a list of species and critical habitats that may occur in that area, which necessarily precedes any subsequent analyses of the effects of the action to particular species or critical habitats.

It is practical to treat the action area for a proposed Federal action as the spatial extent of its direct and indirect “modifications to the land, water, or air” (a key phrase from the definition of “action”

at 50 CFR §402.02). Indirect modifications include those caused by other activities that would not occur but for the action under consultation. The action area determines any overlap with critical habitat and the physical and biological features therein that we defined as essential to the species' conservation in the designation final rule. For species, the action area establishes the bounds for an analysis of individuals' exposure to action-caused changes, but the subsequent consequences of such exposure to those individuals are not necessarily limited to the action area.

Figure 1 shows the locations of all activities that the proposed Action would cause and the spatial extent of reasonably certain changes to land, water, or air caused by these activities, based on the descriptions and analyses of these activities in sections 2.1–2.2. The Action Area is contained within the USACE's City of Selma Flood Risk Management Study Area (Figure 1). As shown in Figure 1, much of the Study Area is heavily developed and has undergone a significant amount of habitat degradation. Additionally, the proposed project footprint lies in a continually disturbed area within the Alabama River due to the erosional processes. The Action Area for this BO includes the area directly upstream, downstream, and under the Edmund Pettus Bridge where the 1,000 ft. Soldier Pile-Wall will be constructed. It also includes the area to be covered by the riprap caps on the upstream and downstream ends of the wall and a 250 ft. buffer on either end of the wall to capture potential design changes (500 ft. in total). The approximate length covered by the riprap caps is 50 ft. on either end (100 ft. in total). The width of the wall would not extend past 100 ft. into the Alabama River from the OHWM.

Construction within the river will create some degree of turbidity within the water column in excess of the natural condition. However, impacts from sediment disturbance during construction are expected to be temporary, minimal and similar to conditions seen during high water events. It is expected during construction that suspended particles will settle within a short time frame with no measurable effects on the water column (i.e. water quality).

Given the above, the impacted area's dimensions are 1,600 ft. (1,000 ft. of Soldier-Pile Wall plus 100 ft. of riprap plus 500 ft. of buffer) by 100 ft. (the width within the Alabama River) producing a total impact area of 160,000 square feet (ft²) (14,864.49 square meters (m²)).

2.4. Tables and Figures

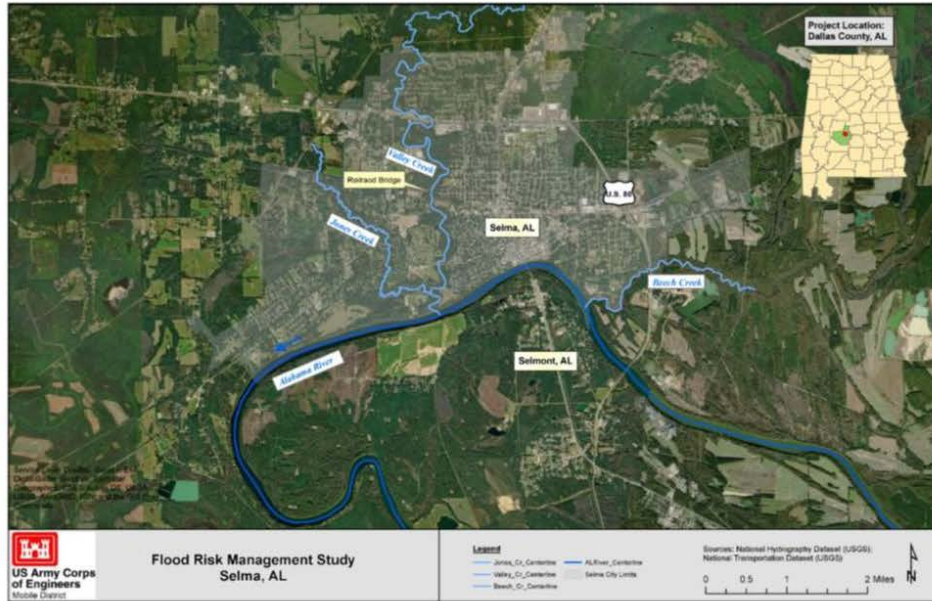


Figure 1. USACE's Study Area in Selma



Figure 2. Soldier-Pile Wall Conceptual Design

3. SOURCES OF CUMULATIVE EFFECTS

A BO must predict the consequences to species caused by future non-Federal activities within the action area, *i.e.*, cumulative effects. “Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation” (50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include, but are not limited to: existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

In its request for consultation, the USACE identified the following future non-Federal activity that is reasonably certain to occur in the Action Area: development of the riverfront property to include a riverwalk and revitalization. No funding to complete the work has been allocated at this time. In addition, this riverwalk is not expected to have any activity within the Alabama River. Therefore, we anticipate no cumulative effects that we must consider in formulating our opinion for the Action.

4. TULTOMA SNAIL

This section provides the Service’s biological opinion of the Action for the tulotoma snail.

4.1. Status of Tulotoma Snail

This section summarizes best available data about the biology and condition of the tulotoma snail (*Tulotoma magnifica*) throughout its range that are relevant to formulating an opinion about the Action. On January 9, 1991, the Service listed the tulotoma snail (tulotoma) as endangered (USFWS 1991). The final recovery plan “Mobile River Basin Aquatic Ecosystem Recovery Plan” was issued in November 17, 2000. On June 2, 2011, the Service published its decision to downlist the tulotoma snail (tulotoma) to threatened (USFWS 2011). The tulotoma’s last five-year review signed on December 11, 2019, recommended no change in listing status (USFWS 2019). However, the five-year review did conclude that the species’ status was improving. Three of the six known (at the time of listing) Coosa River populations have remained stable or have increased in the past five years. In addition, two tulotoma populations that were unknown at time of listing have been discovered and the tulotoma’s range has been reconfirmed and extended in the Alabama River.

4.1.1. Species Description

The tulotoma snail is a gill-breathing, operculate snail in the family Viviparidae. The shell is spherical and can reach a size somewhat larger than a golf ball, and is typically ornamented with spiral lines of knoblike structures (Hershler et al. 1990).

4.1.2. Life History

Tulotoma occur in cool, well-oxygenated, clean, free-flowing streams, including rivers and the lower portions of the rivers' larger tributaries (Hershler et al. 1990). Although this species is typically associated with shoals and riffles with moderate to strong currents, it inhabits rivers that rise and fall (Hartfield 1991), and tulotoma have been collected at depths more than 12 m (40 ft.) (Harper and Powell pers. comm. 2010). The species is strongly associated with boulder, cobble, and bedrock stream bottoms and is generally found clinging tightly to the underside of large rocks or between cracks in bedrock (Christman et al. 1996). Historical habitats included large coastal plain rivers, large high-gradient rivers, and multiple upland tributary streams.

Tulotoma produce live-born offspring year round, but reproduction peaks during the months of May to July and at sizes of about 3 to 5 millimeters (mm) (0.1 to 0.2 inches (in)) height of last whorl (HLW) (Christman et al. 1996). They grow rapidly during their first year reaching sizes of 11 to 14 mm (0.4 to 0.5 in). Females produce an average of 16 offspring in their second year (Christman et al. 1996). Those females that live beyond their second year, grow more slowly and produce an average of 28 juveniles per year (Christman et al. 1996). In the lower Coosa River, it was observed that few tulotoma survived longer than 2 years of life (Christman et al. 1996)

4.1.3. Numbers, Reproduction, and Distribution

The tulotoma is found only in the state of Alabama (Figure 3). Collection records indicate a historical range of approximately 563 kilometers (350 miles) in the Coosa and Alabama River drainages from the upper extent in Coosa River, in St. Clair and Calhoun Counties, Alabama downstream to the Alabama River in Monroe County, Alabama (Hershler et al. 1990). When listed, tulotoma populations were only known from the lower Coosa River below Jordan Dam, Ohatchee, Weogufka, Hatchet, and Kelly Creeks. In the years since, populations have been discovered in Choccolocco Creek, Yellowleaf Creek, Weoka Creek, and most recently, in the Alabama River below the Claiborne Lock and Dam, the R. F. Henry Lock and Dam, and the Millers Ferry Lock and Dam (DeVries 2005; Harper and Powell pers. comm. 2010, 2013; J. Garner pers. comm. 2006; Garner et al. 2016). The following provides a brief status assessment of each of these stream reaches:

Coosa River—Coosa River tulotoma can be divided into two populations: one below the Jordan Dam (lower Coosa River) and the other below the Logan Martin Dam (middle Coosa River). In 1995, the lower Coosa River population was estimated at more than 100 million individuals with annual recruitment rate at 163 million individual snails (Christman et al 1996). Both the lower and middle Coosa River populations have expanded in range since listing.

Ohatchee Creek—No tulotoma have been reported from Ohatchee Creek for more than 20 years, and it is now believed to be extirpated (DeVries 2005).

Weogufka Creek—The Weogufka population was healthy at the time of the 2008 tulotoma 5 year review, but extensive surveys have not been conducted for over 10 years and its current status remains unknown (USFWS 2019).

Hatchet Creek—From surveys in the early 1990s, average densities for the tultoma in Hatchet Creek were estimated at 10.5 snails/m² with a maximum density of 262 snails/m² (Christman et al. 1996). Most recently, a large population of tultoma has been reported from lower Hatchet Creek with evidence of recruitment (P. Johnson pers. comm. 2019).

Kelly Creek—During 1992-1994 surveys, average densities of 17.9 snails/meter² (m²) with a maximum density of 193 snails/m² were observed (USFWS 2019). More recently, the Kelly Creek population has extended into the Coosa River above and below the confluence of the stream (J. Garner pers. comm. 2003, Lochamy pers. comm. 2005). In October 2019, a sizeable population of tultoma was observed in Kelly Creek in St. Clair County (P. Johnson pers. comm. 2019).

Choccolocco Creek—Choccolocco Creek has remained relatively stable since monitoring began in 1995 (DeVries 2005), and abundant populations were recently reported there in October 2019 (P. Johnson pers. comm. 2019).

Yellowleaf Creek—The tultoma occupies a 0.4 kilometer (0.24 mile) reach of Yellowleaf Creek and appear to be extremely localized (USFWS 2011). Approximately 300 individuals were surveyed and relocated during the 2018 Alabama Power's drawdown of Lay Reservoir (K. Chandler pers. comm. 2019).

Weoka Creek—DeVries (2005) noted that colony sizes in Weoka Creek had reached higher average densities than any other tributary populations (175 individuals/rock); however, population trends, at that time, had only been monitored for three years. A tultoma population was reconfirmed here during 2019 surveys (P. Johnson pers. comm. 2019).

Alabama River—At the time of listing, the tultoma had not been located in the Alabama River drainage system for at least 50 years. However, between 2006 and 2008, three new populations were discovered in the Alabama River. One population was below the Claiborne Lock and Dam, Monroe County, Alabama (USFWS 2011). Another population was discovered below the R.F. Henry Lock and Dam (USFWS 2011) and contained both juvenile and adult tultomas. The third colony was located below Millers Ferry Lock and Dam in Wilcox County, Alabama (J. Powell pers. comm. 2008). Surveys conducted in 2010 by Garner et al. (2016) reconfirmed two of these Alabama River populations below the R.F. Henry Lock and Dam. The population below the Claiborne Lock and Dam was reconfirmed by Harper and Powell in 2011. In addition, they discovered three new tultoma populations in the Alabama River: two populations downstream of the R.F. Henry Lock and Dam and one population in the dam's upstream pool (Garner et al. 2016). Recruitment was observed at four of the five sites (Garner et al. 2016).

4.1.4. Conservation Needs and Threats

In all tultoma populations, distribution is limited by impoundments (Figure 3), and/or by habitat conditions (e.g., small channel, lower flows, change in substrata, etc.). Due to their limited extent, all populations are susceptible to stochastic and chronic events (e.g., spills, drought and/or land

use runoff). Population isolation may also result in loss of genetic diversity within populations, which can increase the tulotoma's susceptibility to environmental changes. Agricultural areas located near waterbodies in the tulotoma range pose a threat to the tulotoma through pesticide and fertilizer runoff, excessive water withdrawal and irrigation, and introduction of sedimentation. Urban sprawl and development from the Birmingham and Montgomery metropolitan areas have the potential to greatly modify and/or reduce the current known range of the tulotoma.

According to its recovery plan (USFWS 2000), the tulotoma snail will be considered for delisting from the Federal List of Endangered and Threatened Wildlife when the following criteria have been met:

Criteria (1): Four of the six known Coosa River tributary snail populations (Choccolocco, Hatchet, Kelly, and Weogufka Creeks) are shown to be stable or increasing for at least five years.

Status (1): Choccolocco, Kelley, and Hatchet Creek were surveyed in 2019 and stable populations with signs of recruitment were observed (P. Johnson pers. comm. 2019). Prior to 2019, both Hatchet and Kelly Creeks were last surveyed in 2008, and both populations were reported as stable. P. Johnson and G. Dinkins also surveyed Choccolocco Creek in 2010, and extremely dense populations of tulotoma were observed. Periodic monitoring in Weogufka Creek between 1992 and 2008 had reported consistent and stable populations, but this creek has not been monitored since 2008 (DeVries 2005; DeVries pers. comm. 2008). In addition, other tulotoma populations have been discovered in Yellowleaf Creek and Weoka Creek. It was also believed to have been extirpated from the Alabama River but 2010 surveys confirmed populations in the Alabama River in Montgomery, Dallas, Wilcox, and Monroe counties.

Criteria (2): Community developed watershed plans are implemented to protect and monitor water and habitat quality in the four target watersheds.

Status (2): The Alabama River and Streams Network (ARSN) has developed a management plan for the Lower Coosa Basin; however, specific tributary watershed plans have not been developed or implemented. There is currently no plan for adequately monitoring water or habitat quality in the tributary populations of tulotoma. ARSN continues to work in and monitor the basin.

Criteria (3): A formal agreement has been developed with the Alabama Power Company (APC) to maintain base flows below Jordan Dam (on the Coosa River) that are protective for the snail.

Status (3): Since 1990, the APC has operated under a hydropower license from the Federal Energy Regulatory Commission that requires APC to release minimum base flows below Jordan Dam (FERC 1990). These flows were designed to be protective of the tulotoma snail, as well as meet other obligations of the project (i.e., recreational needs) (FERC 1990).

4.1.5. Tables and Figures

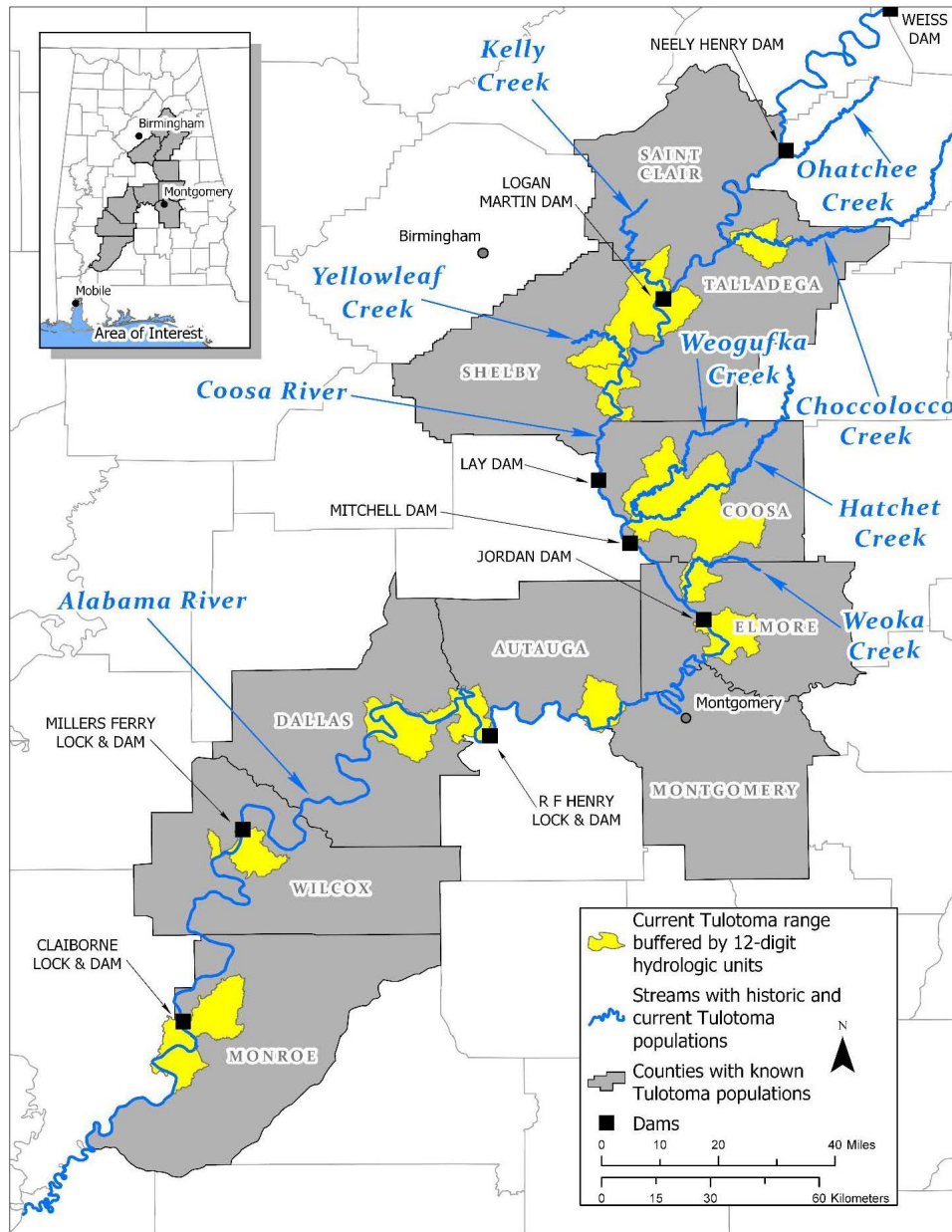


Figure 3. Tulotoma Range and Dam Locations

4.2. Environmental Baseline for Tulotoma Snail

This section describes the best available data about the condition of the tulotoma snail in the Action Area without the consequences caused by the proposed Action.

4.2.1. Action Area Numbers, Reproduction, and Distribution

At the time of listing, the tulotoma had not been located in the Alabama River drainage system for at least 50 years. However, between 2006 and 2008, three new populations were discovered in the Alabama River. One population was below the Claiborne Lock and Dam, Monroe County, Alabama (Garner et. al 2016; Harper and J. Powell 2011 pers. comm.). Another population was discovered below the R.F. Henry Lock and Dam, Autauga and Lowndes Counties, Alabama (USFWS 2011) and contained both juvenile and adult individuals. The third colony was located below Millers Ferry Lock and Dam in Wilcox County, Alabama (J. Powell pers. comm. 2008). Surveys conducted in 2010 by Garner et al. (2016) reconfirmed two of these Alabama River populations below the R.F. Henry Lock and Dam. In addition, they discovered three new tulotoma populations in the Alabama River: two populations downstream of the R.F. Henry Lock and Dam and one population in the dam's upstream pool (Garner et al. 2016). Recruitment was observed at four of the five sites (Garner et al. 2016).

One of the populations located downstream of the R.F. Henry Lock and Dam is directly adjacent to the Edmund Pettus Bridge and is within the Action Area. This tulotoma population was considered to be the largest and most abundant of the 2010 survey sites with some boulders containing over 100 individuals (Gardner et al 2016). However, a thorough population assessment was not able to be conducted at Selma nor any of the other survey sites (Gardner et al 2016).

4.2.2. Action Area Conservation Needs and Threats

Barge traffic and industrial activities can potentially have negative impacts on the tulotoma snail. These include, disrupted behavioral patterns, from propeller wash and large wake action. Adjacent industries may also contribute discharges that further degrade water quality for the species. Other types of water quality degradation, resulting from point and non-point pollution sources, may also affect the species. Discharges into streams from both these sources may result in decreased dissolved oxygen concentrations, increased acidity or conductivity, and other changes in water chemistry which may affect tulotoma snails.

The development of impoundments for recreation, navigation, flood control, water supply, and electricity has also contributed to the decline in tulotoma snails from portions of its historical range. Impoundments have adversely impacted riverine snails by causing mortality during project construction and dredging, suffocation from excessive sedimentation, reducing food and oxygen availability by the reduction of flow. In addition, impoundments have also isolated surviving populations of these snail species, which may result in decreased genetic diversity and also reduce species reproductive and recruitment potential.

Other forms of habitat modification include, dredging, channelization, channel clearing and snagging (that may result in streambed scour and erosion), loss of habitat, increased turbidity, sedimentation, and changes in the aquatic community structure. Human activities that historically and still introduce large quantities of sediment into streams in the Alabama River drainage include, dredging, agriculture, forestry, mining, and industrial and residential development.

4.3. Effects of the Action on Tulotoma Snail

In a BO for a listed species, the effects of the proposed action are all reasonably certain consequences to the species caused by the action, including the consequences of other activities caused by the action. Activities caused by the action would not occur but for the action. Consequences to species may occur later in time and may occur outside the action area.

We identified and described the activities included in the proposed Action in sections 2.1. Our analyses of the consequences caused by this activity follows.

4.3.1. Soldier-Pile Wall

The proposed action would result in minor hydrologic change as flow would be redirected around the proposed bank stabilization structure. The Soldier-Pile Wall would be a permanent feature but would not significantly alter the hydrologic timing, duration, volume, or frequency of the Alabama River. Though flows would be diverted around the structure, no temporary or permanent impounding of water would occur.

The proposed Soldier-Pile Wall would span the length of approximately 1,000 ft. along the Alabama River. Riprap caps placed on the upstream and downstream ends of the wall will extend the footprint of the wall an additional 100 ft. in total. In order to capture potential design changes in the future, it is also assumed that a 250 ft. buffer on either end of the wall (500 ft. in total) will be impacted. The width of the wall would not extend past 100 ft. into the Alabama River from the OHWM. This location lies within one of the largest and healthiest populations of tulotoma snail and would permanently remove suitable habitat from the area.

Snails may be directly affected by bank stabilization when the Soldier-Pile Wall and riprap caps are placed in the river within areas they inhabit; this activity could crush snails on the substrate surface. Snails may be dislodged, crushed and die immediately, or damaged enough to eventually die of the injury. Barge activity could also impact snails by spilling of materials (e.g., riprap) in the river crushing individuals. Increased sedimentation is likely to occur from the tow wash and sloughing of the bank material when riprap is placed.

Instream construction can also cause indirect impacts. Sediment/silt and other suspended particulates can be carried downstream and bury the snails. Disturbance of the substrate also increases turbidity and can release toxins and other pollutants, trapped in the sediments, into the water column.

In response and anticipation of the Soldier-Pile Wall, the USACE will implement appropriate measures to minimize impacts to the species, including relocating snails within and adjacent to the immediate vicinity of the site plan. However, unavoidable adverse impacts to a few individuals may occur if some are not captured during the relocation effort. Additionally, stress inflicted during transport and relocation may cause mortal harm to certain individuals.

4.3.2. Summary

Construction of the Soldier-Pile Wall could impact the tulotoma snail by dislodging, damaging, or crushing individuals. Indirect impacts from substrate disturbances and water column impairment can also be expected. Relocation efforts, however beneficial to the snail, may also result in unintended stress to individual snails. Consequently, we expect all tulotoma individuals within the Action Area to be effected from the proposed Action.

4.4. Cumulative Effects on Tulotoma Snail

In section 3, we did not identify any activities that satisfy the regulatory criteria for sources of cumulative effects. Therefore, cumulative effects to tulotoma snail are not relevant to formulating our opinion for the Action.

4.5. Conclusion for Tulotoma Snail

In this section, we summarize and interpret the findings of the previous sections (status, baseline, effects, and cumulative effects) relative to the purpose of the BO for the tulotoma, which is to determine whether the Action is likely to jeopardize its continued existence.

Status

The Coosa River, Choccolocco Creek, Kelly Creek, Hatchet Creek, Weoka Creek, Yellowleaf Creek, and Alabama River populations are large in numbers and self-sustaining (USFWS 2019). The tulotoma is now believed to be extirpated from the Ohatchee Creek, and due to lack of survey data, the status of the Weogufka Creek population is unknown. Where the tulotoma is found, it continues to be highly localized and isolated from each other by dams and impounded waters (USFWS 2019).

The tulotoma snail's current classification remains threatened. However, stable or increasing populations in the Coosa River and reconfirmed and/or discovery of previously unknown populations in the Alabama River lead us to believe that that tulotoma's status is improving.

Baseline

The Action Area described in this BO likely represents a large tulotoma population. While exact numbers for this population are unknown, 2010 surveys have recorded several boulders with over 100 individuals (Gardner et al 2016).

Effects

Due to the placement of the Soldier-Pile Wall and associated construction activities, the tulotoma will be subject to potential direct crushing, dislodging, or damaged enough to eventually die of injuries. Further stress from habitat removal and degradation also has the potential to impact tulotoma individuals. However, the USACE will implement appropriate measures to minimize impacts to the species, including relocating snails within and adjacent to the immediate vicinity of the site plan.

Opinion

While the Proposed Action would be expected, directly or indirectly, to reduce the reproduction and numbers of the tulotoma within the Action Area, we do not believe that this appreciably reduces the likelihood of both survival and recovery of the species across its range. Evidence of stable and/or improving populations speaks to increasing resiliency. Persistent and new tulotoma populations indicate positive trends in species redundancy and representation. The individuals within the Action Area will be negatively impacted by the Action, but due to relocation efforts, will not be appreciably reduced only appreciably shifted in physical location, and thereby still remain a functioning population of tulotoma.

After reviewing the status of the species, the environmental baseline for the Action Area, the effects of the Action and the cumulative effects, it is the Service's biological opinion that the Action is not likely to jeopardize the continued existence of the tulotoma snail.

5. INCIDENTAL TAKE STATEMENT

ESA §9(a)(1) and regulations issued under §4(d) prohibit the take of endangered and threatened fish and wildlife species without special exemption. The term "take" in the ESA means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (ESA §3(19)). In regulations, the Service further defines:

- "harm" as "an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering;" (50 CFR §17.3) and
- "incidental take" as "takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant" (50 CFR §402.02).

Under the terms of ESA §7(b)(4) and §7(o)(2), taking that is incidental to a Federal agency action that would not violate ESA §7(a)(2) is not considered prohibited, provided that such taking is in compliance with the terms and conditions of an incidental take statement (ITS).

The Action considered in this BO includes a conservation measure to relocate snails within and adjacent to the immediate vicinity of the Action Area. Through this statement, the Service authorizes this conservation measure as an exception to the prohibitions against trapping,

capturing, or collecting listed species. We identify this conservation measure as a Reasonable and Prudent Measure below, and we provide Terms and Conditions for its implementation.

For the exemption in ESA §7(o)(2) to apply to the Action considered in this BO, the USACE must undertake the non-discretionary measures described in this ITS, and these measures must become binding conditions of any permit, contract, or grant issued for implementing the Action. The USACE has a continuing duty to regulate the activity covered by this ITS. The protective coverage of §7(o)(2) may lapse if the USACE fails to:

- assume and implement the terms and conditions; or
- require a permittee, contractor, or grantee to adhere to the terms and conditions of the ITS through enforceable terms that are added to the permit, contract, or grant document.

In order to monitor the impact of incidental take, the USACE must report the progress of the Action and its impact on the species to the Service as specified in this ITS.

5.1. Amount or Extent of Take

This section specifies the amount or extent of take of tulotoma snail that the Action is reasonably certain to cause, which we estimated in the “Effects of the Action” section(s) of this BO.

Recent survey efforts in the Alabama River have not been able to estimate snail density. However, efforts in other streams have resulted in population densities that we will use here to estimate the amount of take within the Action Area.

Surveys conducted in Kelly Creek between 1992 and 1994 found an average density of 17.9 snails/m² (USFWS 2019). Hatchet Creek surveys from the 1990s found average densities of 10.5 snails/m² (Christman et al. 1996). An average of these reported densities is 14.2 snails/m². When applied to the 160,000 ft² (14,864.49 m²) of impact, we estimate that there are approximately 211,076 tulotoma snails. Therefore, take in the amount of 211,076 tulotoma individuals is reasonably certain to occur within the action area.

5.2. Reasonable and Prudent Measures

The Service believes the reasonable and prudent measures (RPMs) we describe in this section for the tulotoma snail are necessary or appropriate to minimize the impact, *i.e.*, the amount or extent, of incidental take caused by the Action.

RPM #1. Snail relocation

No more than 30 days prior to the project construction, a snail relocation survey effort will be conducted in the immediate and adjacent vicinity of the Proposed Action. Any snails that are found will be identified, counted, inventoried, and photographed, and then relocated to suitable habitat outside of the impacted area.

RPM #2. Proposed Action will occur as designed and with the implementation of best management practices

The USACE must ensure that the Proposed Action will occur as designed, planned, and documented within the biological assessment and this biological opinion, and ensure that the applicant will implement best management practices that will minimize the effects from construction activities.

5.3. Terms and Conditions

In order for the exemption from the take prohibitions of §9(a)(1) and of regulations issued under §4(d) of the ESA to apply to the Action, the USACE must comply with the terms and conditions (T&Cs) of this statement, provided below, which carry out the RPMs described in the previous section. These T&Cs are mandatory. As necessary and appropriate to fulfill this responsibility, the USACE must require any permittee, contractor, or grantee to implement these T&Cs through enforceable terms that the USACE includes in the permit, contract, or grant document.

T&C 1 (RPM 1). Snail relocation.

- A relocation plan will be provided to the Service's Alabama Ecological Services Field Office (ALFO) for review and concurrence, identifying the survey methods and identifying the proposed relocation site, at least two weeks prior to the proposed collection and relocation. Snail relocation efforts will be conducted only by divers qualified and experienced in handling snails and must hold valid state and federal permits.
- All snails collected for relocation will be identified, counted, inventoried, and photographed. Snails should be kept in mesh bags in site water prior to removal or kept moist and cool by covering with a wet blanket or sack, and kept out of direct sunlight. If snails are removed from a moist, cool, environment they should not remain unprotected more than 10 minutes. Precautions to minimize stress to snails should be used at all times.
- All snails found within the action area will be collected and relocated to areas of a suitable habitat. The permitted instream construction will begin within 30 days of the conclusion of the survey. If construction is not initiated within the required 30 days, the project area must be resurveyed and snails relocated prior to any of the permitted instream construction.
- A report will be prepared following the completion of all snail relocation work describing efforts, problems and solutions, results, and conclusions. Maps with coordinates should be included, showing the work and relocation areas. This report will be provided to the Service's Alabama Field Office within 90 days after the completion of all snail relocation efforts.

T&C 2 (RPM 2). Proposed Action will occur as designed and with the implementation of best management practices.

- The USACE must ensure that the proposed action will occur as designed and planned in the Biologic Assessment and this Biologic Opinion.
- Riprap used during the project should be clean of foreign/excess sediment prior to installation and should be placed carefully on the substrate in order to reduce the sediment plume introduced into the water column.
- Equipment used to scoop and place riprap will be operated using all precaution to prevent spilled material into the river.
- Best Management Practices (BMPs) (e.g. erosion control blankets, fiber rolls, geotextiles, sediment traps, seeding, silt fences, vegetated buffers) will be specified in a Stormwater Pollution Prevention Plan. A copy of this plan will be provided to the Service's ALFO.

5.4. Monitoring and Reporting Requirements

In order to monitor the impacts of incidental take, the USACE must report the progress of the Action and its impact on the species to the Service as specified in the ITS (50 CFR §402.14(i)(3)). This section provides the specific instructions for such monitoring and reporting (M&R), including procedures for handling and disposing of any individuals of a species actually killed or injured. These M&R requirements are mandatory. We identify whether the USACE, the Applicant, or both are responsible.

As necessary and appropriate to fulfill this responsibility, the USACE must require any permittee, contractor, or grantee to accomplish the M&R through enforceable terms that the USACE includes in the permit, contract, or grant document. Such enforceable terms must include a requirement to immediately notify the USACE and the Service if the amount or extent of incidental take specified in this ITS is exceeded during Action implementation.

M&R#. Disposition of Dead or Injured Tulotoma Snails

Upon locating a dead, injured, or sick individual of an endangered or threatened species, initial notification must be made to the U.S. Fish and Wildlife Service, Law Enforcement Office in Daphne, Alabama (251-441-5787). Additional notification must be made to the U.S. Fish and Wildlife Service's Alabama Ecological Services Field Office in Daphne, Alabama (251-441-5184). Care should be taken in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. The Service believes that 211,076 tulotomas will be incidentally taken. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The USACE must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

6. CONSERVATION RECOMMENDATIONS

§7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by conducting conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary activities that an action agency may undertake to avoid or minimize the adverse effects of a proposed action, implement recovery plans, or develop information that is useful for the conservation of listed species. The Service offers the following recommendations that are relevant to the listed species addressed in this BO and that we believe are consistent with the authorities of the USACE.

- Continue working and coordinating (i.e., early coordination) with the resource agencies to monitor tulotoma snail populations across their range, where they occur in areas adjacent to USACE projects.
- Utilize programs under the USACE purview to fund studies or conservation projects aimed at recovering, conserving, and restoring these T&E species and/or their habitats within their current range (e.g., coordination and participation with the Strategic Habitat Units (<http://www.alh2o.org/>)).
- Post-monitoring of the relocation area to document re-establishment of snails is recommended.

7. REINITIATION NOTICE

Formal consultation for the Action considered in this BO is concluded. Reinitiating consultation is required if the USACE retains discretionary involvement or control over the Action (or is authorized by law) when:

- a. the amount or extent of incidental take is exceeded;
- b. new information reveals that the Action may affect listed species or designated critical habitat in a manner or to an extent not considered in this BO;
- c. the Action is modified in a manner that causes effects to listed species or designated critical habitat not considered in this BO; or
- d. a new species is listed or critical habitat designated that the Action may affect.

In instances where the amount or extent of incidental take is exceeded, the USACE is required to immediately request a reinitiation of formal consultation.

8. FISH AND WILDLIFE COORDINATION ACT

In accordance with the planning aid provisions of the Fish and Wildlife Coordination Act (FWCA), the USFWS coordinated with the USACE regarding the Selma Flood Risk Management Feasibility Study. As a result of this coordination, a Coordination Report will not be issued by USFWS and the FWCA requirements have been satisfied. Pursuant to the authority granted to USFWS, no further coordination is required.

9. LITERATURE CITED

- Christman, S.P., E.L. Mihalcik, and F.G. Thompson. 1996. *Tulotoma magnifica* (Conrad, 1834) (Gastropoda: Viviparidae) status and biology in the Coosa River, Alabama. *Malacological Review* 29: 17-63.
- DeVries, D.R. 2005. Evaluating changes in the *Tulotoma magnifica* populations in the Coosa River and its tributaries during 1992 through 2004. Final Report to U.S. Fish and Wildlife Service, Jackson, MS. 50 pp.
- Federal Energy Regulatory Commission (FERC). 1990. Federal Energy Regulatory Commission order on appeal and on requests for rehearing of denial of stay and for declaratory order (Project Number 618), November 20, 1990.
- Garner, J.T., M.L. Buntin, T.B. Fobian, J.T. Holifield, T.A. Tarpley, and P.D. Johnson. 2016. Use of side-scan sonar to locate *Tulotoma magnifica* (Conrad, 1834) (Gastropoda: Viviparidae) in the Alabama River. *Freshwater Mollusk Biology and Conservation* 19: 51-55.
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- Hershler, R., J.M. Pierson, and R.S. Krotzer. 1990. Rediscovery of *Tulotoma Magnifica* (Conrad) (Gastropoda: Viviparidae). *Proceedings of the Biological Society of Washington* 103(4), 815-824 pp.
- U.S. Fish and Wildlife Service (USFWS). 1991. Endangered and threatened wildlife and plants: endangered status determined for the tulotoma snail. 56 FR 800.
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- U.S. Fish and Wildlife Service (USFWS). 2011. Final reclassification of the Tulotoma Snail from endangered to threatened. 76 FR 31866.
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B.4. Hazardous, Toxic, and Radioactive Waste Coordination

LANCE R. LEFLEUR
DIRECTOR



KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

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May 7, 2021

Ms. Heather Bulger
Biologist, Inland Environment Team
U.S. Army Corps of Engineers, Mobile District
Heather.P.Bulger@usace.army.mil

Dear Ms. Bulger:

RE: Petroleum Contamination in the Area of Washington Street and Water Avenue
Selma, Dallas County, Alabama
ADEM File Code: CORRO2205/UST970714

The Department has received information that petroleum constituents are present in the groundwater at a location near the end of Washington Street in close proximity to the Alabama River in Selma, Alabama. Based on a review of UST records, a closed underground storage tank site is located northwest of the boring drilled by the Corps of Engineers in early 2021 where a petroleum sheen and odor was identified.

The Department will begin evaluating the area and available records to determine potential sources of petroleum contamination that may be present in the area. If resources are available, a soil and groundwater investigation will be performed in the area to identify the source and extent of the petroleum contamination.

The Department will update you with information that is obtained from our evaluations. Should any additional testing results or information become available regarding the petroleum contamination, we would appreciate updates as well.

Should there be any questions regarding this matter, please feel free to contact me at (334)270-5613 or at dsm@adem.alabama.gov.

Sincerely

A handwritten signature in cursive script that reads "Dorothy Malaier".

Dorothy S. Malaier, Chief
UST Corrective Action State and Federal Funds Section
Groundwater Branch
Land Division

DSM/dsm

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

B.5. Public/Agency Comments and Responses

The draft Integrated Feasibility Report and Environmental Assessment (IFR/EA) was made available on the USACE Selma Webpage at <<https://www.sam.usace.army.mil/Missions/Program-and-Project-Management/Civil-Projects/Selma-Alabama-Flood-Risk-Management-Feasibility-Study/Selma-Document-Library/>>, and underwent a 30-day Public and Agency review period which concluded on October 16, 2020. Public and Agency individuals were notified of the draft IFR/EA review period via Public Notice Number FP20-AL01-07, which was posted to the USACE Planning and Environmental Public Notice webpage at <<https://www.sam.usace.army.mil/Missions/Planning-Environmental/Public-Notices/Article/2350917/joint-public-notice-selma-alabama-flood-risk-management-feasibility-study/>> and distributed via email on September 17, 2020. No comments were received.