UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 09 2017

Mr. Bill Pearson
Field Supervisor
U.S. Fish and Wildlife Service
Alabama Ecological Services Field Office
1208-B Main Street
Daphne, Alabama 35626

Dear Mr. Pearson:

The U.S. Environmental Protection Agency is obligated under Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2), to insure that any action it approves is not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction of adverse modification of critical habitat. The EPA therefore, requests that the U.S. Fish and Wildlife Service (Service) review the enclosed biological evaluation (BE) for the EPA's approval of the revisions to the water quality standards (WQS) by the Alabama Department of Environmental Management, pursuant to Section 303(c) of the Clean Water Act (CWA), 33 U.S.C. § 1313(c).

The revisions are described in the enclosed BE, as are the effects determinations for threatened and endangered species in Alabama waters where the revisions apply. The EPA is submitting this request under the informal consultation provision of the ESA regulations at 50 C.F.R. § 402.13, and has made determinations of no effect or may affect, but not likely to adversely affect for all aquatic and aquatic dependent species and their designated critical habitats within statewide waters as detailed within the enclosed BE. The EPA is currently reviewing the proposed WQS for the State of Alabama.

The Memorandum of Agreement signed by the Service and the EPA regarding enhanced coordination under the CWA and ESA, provision V.B.6., requests that the EPA notify the Service in writing when making a may affect, not likely to adversely affect determination. Additionally, the Service will respond in writing within 30 days of receipt of such determination, unless extended by mutual agreement. The response will state whether the Service concurs or does not concur. If the Service does not concur, it will provide a written explanation that includes the species and/or critical habitat of concern, the perceived adverse effects, supporting information, and a basic rationale. 66 Fed. Reg. 11,202-11,210 (Feb. 22, 2001).

Please contact Ms. Lydia Mayo at (404) 562-9247 or mayo.lydia@epa.gov should you have questions regarding the enclosed BE.

Sincerely,

Joanne Benante

Joanne Benante
Chief
Water Quality Planning Branch

Enclosure

cc: Mr. Jeff Powell, FWS, Daphne, AL (electronic only)
Mr. Leopoldo Miranda, FWS, Atlanta, GA (electronic only)

BIOLOGICAL EVALUATION FOR THE ENDANGERED SPECIES ACT SECTION 7 CONSULTATION FOR THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT'S 2017 WATER QUALITY STANDARDS REVISIONS

Prepared by the Environmental Protection Agency Region 4
May 2017

Table of Contents

Overview 4
Description of the Federal Action 4
Description of Provisions Considered by the EPA for the Endangered Species Act (ESA) Section 7 Consultation 6
Description of the Geographic Areas That May Be Affected by the Action 8
Summary of Species Present in Alabama 8
Species of Interest for the ESA Consultation 12
No Effect Determinations 12
May Affect, Not Likely to Adversely Affect Determinations 13
Life History and Designated Critical Habitat Summaries 14
Effects of the Action on Species of Interest for ESA Consultation 14
Summary of the EPA Analysis and Conclusions 14
Endangered Species Act Section 7 Effects Determinations 15
Presumed Beneficial Effects 15

Overview

The purpose of this Biological Evaluation (BE) is to analyze the effects which may occur to threatened and endangered species and/or designated critical habitat from the revision to water quality standards (WQS) contained in the Alabama Department of Environmental Management's (ADEM or Department) Administrative Code Chapters 335-6-10 and 335-6-11. ADEM held its triennial review public hearing on July 16, 2015 for its proposed revisions and held the public hearing for the finalized revisions on November 10, 2016. The revisions were considered and approved for adoption by the Alabama Environmental Management Commission (EMC) on December 16, 2016. The rule amendments became effective for state purposes on February 3, 2017, and were certified by the Alabama Attorney General on March 16, 2017. The EPA received a letter dated April 3, 2017, from the General Counsel of ADEM to Ms. V. Anne Heard, Acting Regional Administrator, U.S. EPA Region 4, certifying that the amendments were duly adopted pursuant to state law. The revisions were received by the U.S. Environmental Protection Agency on April 20, 2017, for review, pursuant to Section 303(c) of the Clean Water Act (CWA). The revisions to ADEM's Admin. Code Chapters 335-6-10 and 335-6-11 are summarized below.

This BE was prepared by the EPA to determine if the EPA's approval, pursuant to Section 303(c) of the CWA, of the Department's revised WQS is likely to jeopardize the continued existence of, or adversely affect, federally listed endangered or threatened species, or result in the adverse modification of designated critical habitat of such species in fresh waters of the State of Alabama in accordance with section 7(a)(2) of the Endangered Species Act (ESA).

Description of the Federal Action

Under Section 303(c) of the CWA and 40 C.F.R. § 131, States and authorized tribes have primary responsibility to develop and adopt WQS to protect their waters. As required by Section 303(c) of the CWA and 40 C.F.R. § 131, the EPA reviews new and revised WQS that have been adopted by States and authorized tribes. State and Tribal WQS are not considered effective under the CWA until approved by the EPA.

The Federal action being evaluated is the EPA approval of the revised WQS rules as related to the protection of aquatic life uses consistent with the CWA. Section 303(c)(3) of the CWA states in part: If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this Act, such standard shall thereafter, be the water quality standard for the applicable waters of the State…

A. History of ESA Consultation for this CWA Action

Section 7(a)(2) of the ESA requires the EPA, in consultation with the FWS, to ensure that any action authorized by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. As provided in the Memorandum of Agreement between the EPA, the FWS, and the NMFS regarding enhanced coordination of CWA and ESA obligations, the EPA uses a BE to analyze

whether a new or revised water quality WQS prepared to determine whether the EPA's approval of specific aspects of the Department's surface WQS may affect federally-listed endangered or threatened species or the designated critical habitat of such species. If the EPA determines that approval may affect listed species or critical habitat but is not likely to adversely affect listed species or habitat, then formal consultation with the FWS is not required if the EPA obtains concurrence on the "may affect, not likely to adversely affect" finding from the FWS. However, if the EPA determines that the action is likely to adversely affect listed species or critical habitat, then ESA formal consultation with the FWS is required to determine if the action in question is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

The EPA Region 4 staff informed the FWS Daphne Field Office staff regarding ADEM's triennial review public hearing in 2015 and the final hearing in 2016 for proposed WQS revisions. The proposed revisions were provided for ADEM's public hearings on the Alabama EMC public hearings and meetings website at http://adem.alabama.gov/newsEvents/pubHearings.cnt. The complete list of revisions is outlined in Attachment A. The portions of the proposed revisions that are related to aquatic life and which are being addressed in this BE are in yellow highlight in the table in Attachment A. These revisions are specified in the section *Description of Provisions Considered by the EPA for the Endangered Species Act (ESA) Section 7 Consultation* below.

The list of threatened and endangered species for Limestone and Chambers Counties where the revised WQS for Swan Creek and West Point lake relate to aquatic life and not human health and therefore may affect species in the state of Alabama under the jurisdiction of the FWS are contained in the *Summary of Species Present in Alabama* section below.

B. Overview of Water Quality Standards

The CWA provides the statutory basis for the WQS program and defines broad water quality goals. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 101(a)(2) of the CWA sets out a national "fishable/swimmable" goal that wherever attainable, waters achieve a level of quality that provides for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water. 33 U.S.C. § 1251(a). Section 303(c) of the CWA requires that all states adopt WQS and that the EPA review and approve or disapprove these standards. States first identify designated uses they wish to protect in state waters, such as drinking water supply, propagation of fish, or recreation. States then establish water quality criteria that protect those designated uses. Finally, WQS must include an antidegradation policy and implementation procedures consistent with the EPA's policy to protect existing uses, high quality waters, and outstanding national resource waters. 33 U.S.C.§ 1313(c)(2)(A); 40 C.F.R. § 131. States must review those standards every three years and revise the standards, as necessary. This public process, commonly referred to as the triennial review, allows for new technical and scientific data to be considered in order to update the standards. The regulatory requirements governing WQS are established at 40 C.F.R. Part 131.

Any new or revised WQS must be submitted to the EPA for review and the EPA must approve or disapprove those standards. Upon approval by the EPA, the state's standards become effective for CWA purposes. 40 C.F.R. § 131.21(c). If the EPA disapproves the state standards, it must notify the state and specify the changes the state must adopt to meet CWA requirements. 33 U.S.C. § 1313(c)(3). If adequate revisions are not adopted by the state, the EPA must propose federal WQS for the state and promulgate final standards unless, before promulgation, the state adopts standards that the EPA determines to be in compliance with the CWA. 33 U.S.C. § 1313(c)(4).

Description of Provisions Considered by the EPA for the Endangered Species Act (ESA) Section 7 Consultation

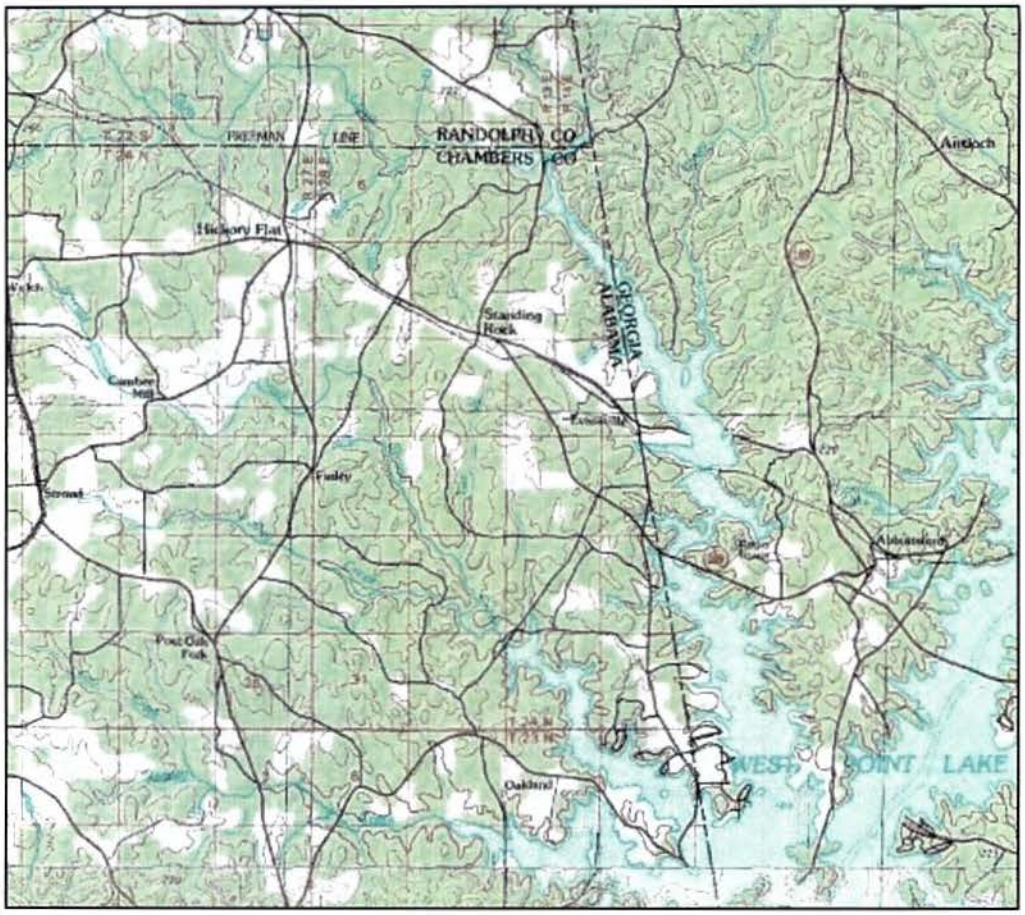
335-6-10 Water Quality Criteria

335-6-10-.11 Water Quality Criteria Applicable to Specific Lakes

335-6-10-.11(2)(c) The Chattahoochee River Basin

> The Department proposes to update the West Point chlorophyll *a* criteria to correspond with Georgia's updated criteria. The revision would change the chlorophyll *a* value taken from the mean of photic-zone composite chlorophyll *a* samples collected monthly April through October from a shall not exceed value of 27 ug/l to a "shall not" exceed value of 22 ug/l as measured at the deepest point, main river channel, dam forebay. The revision would also add the shall not exceed value of 24 ug/l as measured at the LaGrange Water Intake.

The revision to update the chlorophyll *a* criteria for the Alabama portions of West Point Lake in Chambers County to coincide with the criteria adopted by the Georgia Department of Environmental Protection (EPD) for West Point Lake is based on more recent monitoring data and revised hydrodynamic and water quality models utilized by EPD that support the lower chlorophyll *a* value. The criterion of 22 µg/l (revised from 27 µg/l) measured at the deepest point, main river channel, dam forebay is consistent with scientific data supporting this revision. The additional 24 µg/l criterion, as measured at the LaGrange water intake, is consistent with scientific data supporting this revision. The revised values will further support existing uses and protect the water quality of those uses.



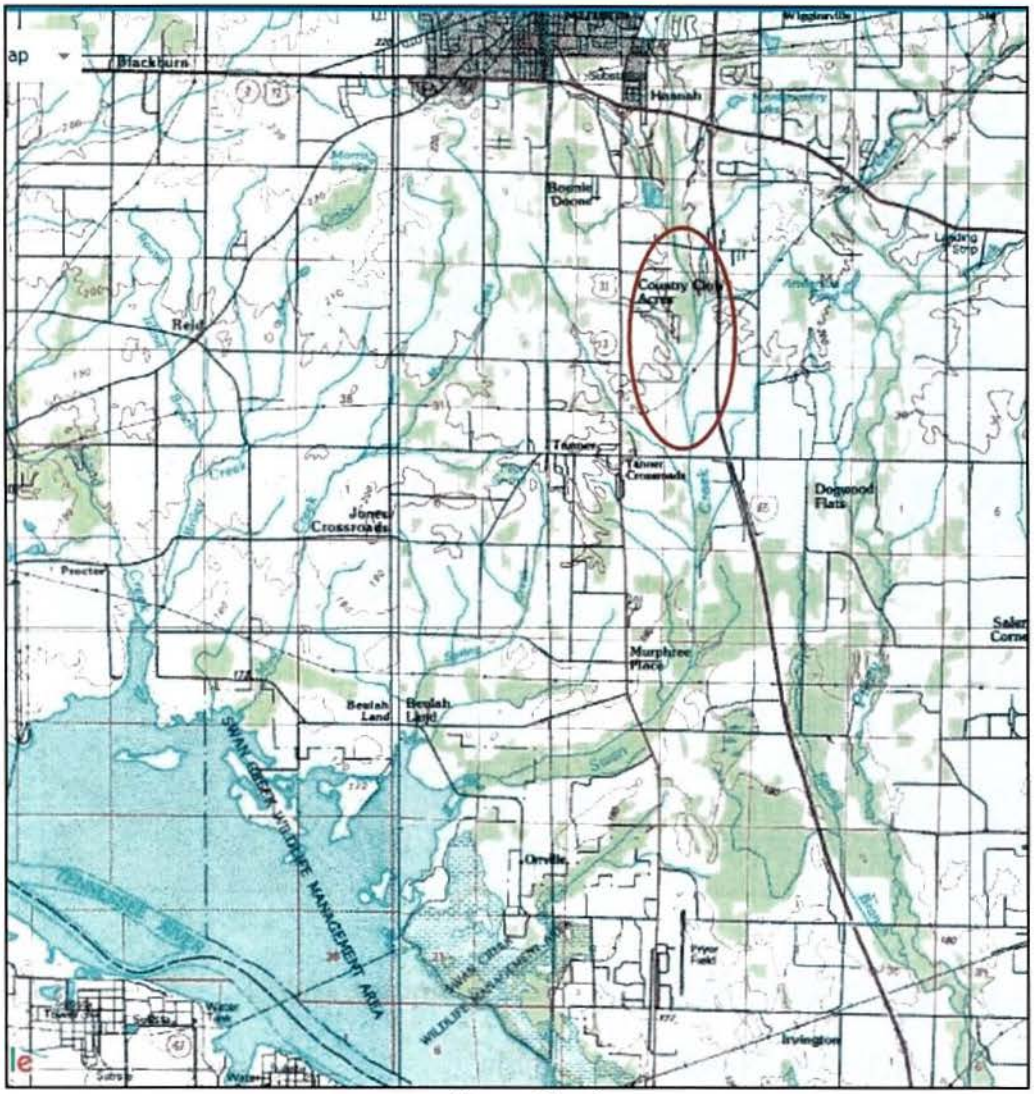
West Point Lake

335-6-11 Water Use Classifications for Interstate and Intrastate Waters

335-6-11-.02(12) The Tennessee River Basin

The Department proposes to upgrade the classification for Swan Creek (from Huntsville Brownsferry Road to Town Creek) in Limestone County, from Agricultural and Industrial Water Supply (A&I) to Fish and Wildlife (F&W). Available water quality data and information for this segment indicate that the F&W use is attainable.

The criteria for the Fish and Wildlife use can be found at Alabama Administrative Code 335-6-10-.09(5), and include best usage of waters, conditions related to the best usage of waters and specific criteria for pollutants. The criteria for the Agriculture and Industrial Water Supply use can be found at Alabama Administrative Code 335-6-10-.09(7), and include best usage of waters, conditions related to best usage of waters and specific criteria for pollutants. The upgrade to F&W results in more stringent WQS for temperature, dissolved oxygen, and bacteria and includes numeric aquatic life and human health criteria. The individual criteria for each use are referenced in the Alabama administrative codes cited above and can be found on ADEM's website at http://adem.alabama.gov/alEnviroRegLaws/files/Division6Vol1.pdf.



Swan Creek

Description of the Geographic Areas That May Be Affected by the Action

The action area for the chlorophyll *a* revision includes the fresh waters within the portions of West Point Lake within Chambers County in the State of Alabama to which the revised lake criteria will apply. The action area for the classification upgrade includes the fresh waters within the upgraded portions of Swan Creek in Limestone County in the State of Alabama to which the revised stream use designation and associated criteria will apply.

Summary of Species Present in Alabama

The list of threatened and endangered species in the tables below were listed for Limestone and Chambers Counties, Alabama on the FWS Environmental Conservation Online System (ECOS) website (https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=01083).

The following FWS websites were also utilized to determine locations of species in Limestone County:
https://www.fws.gov/midwest/endangered/clams/spectaclecase/index.html
https://www.fws.gov/midwest//endangered/clams/crack_fc.html
https://www.fws.gov/midwest/endangered/clams/rayedbean/pdf/FRRayedBeanSnuffboxFinalList.pdf
https://www.fws.gov/MIDWEST/endangered/clams/sheepnose/pdf/FRFinalListRuleSheepnoseSpec March2012.pdf
https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E05B
https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinalListing02April2015.pdf
https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=G098

The list of threatened and endangered species in the table below for Limestone County, Alabama are under the jurisdiction of the FWS and are being considered for this action. The table presents the name, status, description of location, type of habitat and the EPA's final ESA Section 7 determinations of no effect or may affect, not likely to adversely affect (may affect, NLAA).

	Limestone County, Alabama					
Group	**Name**	**Status**	**Description of Location**	**CH**	**Type of Habitat**	**ESA Determination**
Clams	Pink mucket (pearlymussel) (*Lampsilis abrupta*)	E	It does not appear that this species is present in Swan Creek but may be present downstream of the creek in the Tennessee River mainstem.	no	Aquatic	May affect, NLAA
	Littlewing pearlymussel (*Pegias fabula*)	E	It does not appear that this species is present in Swan Creek and does not appear to be present downstream of the creek in the Tennessee River mainstem.	no	Aquatic	No effect
	Rough pigtoe (*Pleurobema plenum*)	E	It does not appear that this species is present in Swan Creek but may be present downstream of the creek in the Tennessee River mainstem.	no	Aquatic	May affect, NLAA
	Spectaclecase (mussel) (*Cumberlandia monodonta*)	E	It does not appear that this species is present in Swan Creek but may be present downstream of the creek in the Tennessee River mainstem.	no	Aquatic	May affect, NLAA
	Cracking pearlymussel (*Hemistena lata*)	E	It does not appear that this species is present in Swan Creek but may be present in the Tennessee River mainstem downstream near the Elk River.	no	Aquatic	May affect, NLAA
	Snuffbox mussel (*Epioblasma triquetra*)	E	It does not appear that this species is present in Swan Creek but may be present downstream	no	Aquatic	May affect, NLAA

	Limestone County, Alabama					
Group	**Name**	**Status**	**Description of Location**	**CH**	**Type of Habitat**	**ESA Determination**
			of the creek in the Tennessee River mainstem.			
	Sheepnose Mussel (*Plethobasus cyphyus*)	E	It does not appear that this species is present in Swan Creek but may be present downstream of the creek in the Tennessee River mainstem and further downstream in the Tennessee River mainstem muscle shoals area.	no	Aquatic	May affect, NLAA
Crustaceans	Alabama cave shrimp (*Palaemonias alabamae*)	E	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	no	Aquatic	No effect
Fishes	Snail darter (*Percina tanasi*)	T	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	no	Aquatic	No effect
	Slackwater darter (*Etheostoma boschungi*)	T	It does not appear that this species is present in the segment of Swan Creek being upgraded or downstream of the segment of Swan Creek being upgraded. This species is reported to be present in Swan Creek upstream of the confluence of Town Creek and Swan Creek.	yes	Aquatic	No effect
	Spring pygmy sunfish (*Elassoma alabamae*)	T	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	yes	Aquatic	No effect
	Boulder darter (*Etheostoma wapiti*)	E	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	no	Aquatic	No effect
Mammals	Indiana bat (*Myotis sodalis*)	E	It appears that this species exists in Limestone County.	yes	Aquatic dependent	May affect, NLAA
	Gray bat (*Myotis grisescens*)	E	It appears that this species exists in Limestone County.	no	Aquatic dependent	May affect, NLAA
	Northern Long-Eared Bat (*Myotis septentrionalis*)	T	It appears that this species exists in Limestone County.	no	Aquatic dependent	May affect, NLAA
Snails	Anthony's riversnail	E	It does not appear that this species is present in Swan Creek	no	Aquatic	May affect, NLAA

	Limestone County, Alabama					
Group	**Name**	**Status**	**Description of Location**	**CH**	**Type of Habitat**	**ESA Determination**
	(*Athearnia anthonyi*)		but may be present in the Tennessee River mainstem downstream near the Elk River.			
	Armored snail (*Pyrgulopsis (=Marstonia) pachyta*)	E	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	no	Aquatic	No effect
	Slender campeloma (*Campeloma decampi*)	E	It does not appear that this species is present in Swan Creek or downstream in the Tennessee River.	no	Aquatic	No effect

https://www.fws.gov/midwest/endangered/clams/spectaclecase/index.html
https://www.fws.gov/midwest//endangered/clams/crack_fc.html
https://www.fws.gov/midwest/endangered/clams/rayedbean/pdf/FRRayedBeanSnuffboxFinalList.pdf
https://www.fws.gov/MIDWEST/endangered/clams/sheepnose/pdf/FRFinalListRuleSheepnoseSpecMarch2012.pdf
https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E05B
https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinalListing02April2015.pdf
https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=G098

The list of threatened and endangered species in the table below for Chambers County, Alabama are under the jurisdiction of the FWS and are being considered for this action. The table presents the name, status, description of location, type of habitat and the EPA's final ESA section 7 determinations of no effect or may affect, NLAA. The information in the table below was taken from the FWS ECOS website (https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=01083).

	Chambers County, Alabama					
Group	**Name**	**Status**	**Description of location**	**CH**	**Type of Habitat**	**ESA Determination**
Clams	Purple bankclimber (mussel) (*Elliptoideus sloatianus*)	T	It does not appear that this species is present in the Alabama portions of West Point Lake or its tributaries.	yes	Aquatic	No effect
	Oval pigtoe (*Pleurobema pyriforme*)	E	It does not appear that this species is present in West Point Lake and its tributaries.	yes	Aquatic	No effect
	Finelined pocketbook (*Lampsilis altilis*)	T	It does not appear that this species is present in the Alabama portions of West Point Lake or its tributaries.	yes	Aquatic	No effect
	Ovate clubshell (*Pleurobema perovatum*)	E	It does not appear that this species is present in the Alabama portions of West Point Lake or its tributaries.	yes	Aquatic	No effect

	Chambers County, Alabama					
Group	**Name**	**Status**	**Description of location**	**CH**	**Type of Habitat**	**ESA Determination**
Flowering Plants	Little amphianthus (*Amphianthus pusillus*)	T	It appears that this species may exist in areas adjacent to the Alabama portions of West Point Lake and its tributaries.	no	Terrestrial	No effect
	White fringeless orchid (*Platanthera integrilabia*)	T	It does not appear that this species is present in areas adjacent to the Alabama portions of West Point Lake and its tributaries.	no	Terrestrial	No effect
Mammals	Indiana bat (*Myotis sodalis*)	E	It appears that this species may exist in areas adjacent to the Alabama portions of West Point Lake and its tributaries.	yes	Aquatic dependent	May affect, NLAA
	Northern Long-Eared Bat (*Myotis septentrionalis*)	T	It does not appear that this species is present in areas adjacent to the Alabama portions of West Point Lake and its tributaries.	no	Aquatic dependent	No effect

Species of Interest for the ESA Consultation

According to the Endangered Species Consultation Handbook, in order for the EPA to determine that a proposed action is a may affect, NLAA action for threatened and endangered species or designated critical habitat, all of the effects of that action must be expected to be discountable, insignificant, or completely beneficial. Also, according to the Draft Framework for Conducting Biological Evaluations of Aquatic Life Criteria Methods Manual, there are three different types of species: "aquatic" which have at least one of their life stages spent as a water-breathing organism or plants that are submerged or emergent; "aquatic dependent" which are not water-breathing organisms, but a meaningful amount of their diet includes aquatic organisms; and "terrestrial," which have only limited amount of exposure to waters of the United States. Due to the fact that the majority of listed species above are not present, the determinations are considered no effect. There are some species located downstream of the segment where the use was revised that were determined as may affect, NLAA. These determinations and all other determinations are discussed in more detail below. The current proposed endangered species, the Black Warrior waterdog, does not occur in the action areas.

No Effect Determinations

No effect determinations:

For the aquatic and aquatic dependent species determined not to exist in or downstream of waters in Limestone or Chambers Counties - the littlewing pearlymussel, Alabama cave shrimp, snail darter, slackwater darter, spring pygmy sunfish, boulder darter, armored snail, slender campeloma, purple bankclimber, finelined pocketbook, ovate clubshell and northern long-eared

bat, the EPA has determined the revisions to water quality standards will have no effect on these species.

For species that are identified as not aquatic dependent or primarily terrestrial species including the little amphianthus and white fringeless orchid in Chambers County, the EPA has determined that the revision to the chlorophyll *a* criteria for West Point lake will have no effect on these species.

The no effect determinations mean there are no impacts, positive or negative, to listed species.

May Affect, Not Likely to Adversely Affect Determinations

For the aquatic species determined to have the possibility to exist downstream of Swan Creek in the Tennessee River mainstem, including the pink mucket, rough pigtoe, spectaclecase, cracking pearlymussel, snuffbox mussel, sheepnose mussel and Anthony's riversnail, the EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the upgrade to Swan Creek may have contemporaneous positive effects on species downstream without any adverse effects to the species or habitat; however, the effects are considered insignificant due to the minimal scope of the impacts downstream based on the quantity of the stream flow as compared to the Tennessee River. In addition, the effects are most likely not able to be detected, measured, or otherwise will not be able to be evaluated.

The aquatic species, the oval pigtoe, was determined to possibly exist in the Alabama portions of West Point Lake. The EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the slight lowering of chlorophyll *a* in the lake may have contemporaneous positive effects without any adverse effects to the species or habitat; however, the effects are considered insignificant due to the minimal scope of the impacts based on the limited (and uncertain) habitat of the species in the Alabama portions of the lake. In addition, the effects will most likely be undetectable, not measurable, or otherwise will not be able to be evaluated.

For the aquatic dependent species that may exist in Chambers County around the Alabama portions of West Point Lake and in Limestone County in and around the upgraded portion of Swan Creek, including the Indiana bat, gray bat and northern long-eared bat, the EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the improved water quality (chlorophyll *a* levels) in West Point Lake and upgraded use classification for Swan Creek may have beneficial effects without adverse effects to the species or habitat. However, the effects are considered insignificant due to the minimal scope of the impacts and due to the fact that the effects may not be measurable or may not be able to be evaluated.

As described above on page 11, the may affect, NLAA determination means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive

effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects would not be applicable here because they may occur but may not be measurable.

Life History and Designated Critical Habitat Summaries

Species information can be found on the FWS's ECOS website or other website references listed in Summary of Species Present in Alabama section above.

Effects of the Action on Species of Interest for ESA Consultation

This section of the BE sets out the basis for the EPA's conclusion that the Department's revised water quality for Swan Creek and the Alabama portions of West Point Lake are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. The EPA has determined that this action will have may affect, NLAA impacts or no effect on the species listed above.

Summary of the EPA Analysis and Conclusions

The use upgrade for Swan Creek will improve water quality in Swan Creek and may improve water quality and provide beneficial effects to the aquatic species that may exist downstream of Swan Creek in the Tennessee River mainstem, including the pink mucket, rough pigtoe, spectaclecase, cracking pearlymussel, snuffbox mussel, sheepnose mussel and Anthony's riversnail, The EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the upgrade to Swan Creek may have contemporaneous positive effects without any adverse effects to the species or habitat; however, the effects are considered insignificant due to the minimal scope of the impacts downstream based on the quantity of the stream flow as compared to the Tennessee River. It is likely that the effects will not be detectable, measurable, or otherwise able to be evaluated.

The aquatic species, the oval pigtoe, may exist in the Alabama portions of West Point Lake. The EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the slight lowering of chlorophyll *a* in the lake may have contemporaneous positive effects without any adverse effects to the species or habitat; however, the effects are considered insignificant due to the minimal scope of the impacts based on the limited (and uncertain) habitat of the species in the Alabama portions of the lake. In addition, the effects will most likely to be undetectable, not measurable, or otherwise not able to be evaluated.

The aquatic dependent species that may exist in Chambers County around the Alabama portions of West Point Lake and in Limestone County in and around the upgraded portion of Swan Creek, including the Indiana bat, gray bat and northern long-eared bat, the EPA has made a determination of may affect, NLAA due to the circumstances that all effects are considered to be

either beneficial or insignificant. The possible beneficial effects due to improved water quality associated with the improved chlorophyll *a* levels in West Point Lake may have beneficial effects without adverse effects to the species or habitat; however, the effects are considered insignificant due to the minimal scope of the impacts and the fact that the effects will most likely be undetectable, not measurable, or otherwise will not be able to be evaluated.

Endangered Species Act Section 7 Effects Determinations

Based upon the information outlined above for the upgrade to the use classification of F&W for Swan Creek and the revised lake chlorophyll *a* criteria for West Point Lake, the EPA has determined that the effects are determined as no effect or may affect, NLAA and, as such, are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of their critical habitat. As described above, the may affect, but not likely to adversely affect determination for the identified species means that all effects are either considered beneficial or insignificant. It is the EPA's opinion that the improved water quality of Swan Creek and West Point Lake may be considered insignificant as they relate to the size of the impact they will have and also that it is likely that the effects and improved water quality will not be measurable or otherwise able to be evaluated directly.

Presumed Beneficial Effects

Because the revised classification for Swan Creek and West Point Lake result in criteria that improve water quality, the EPA presumes that the improved water quality of Swan Creek and West Point Lake will provide beneficial effects without any adverse effects to the species or habitat.

ATTACHMENT A

Summary of Revisions to ADEM Administrative Code Chapters 335-6-10 and 335-6-11 and Details Supporting the Revisions

Administrative Code Reference	**Description of the revision of the Water Quality Criteria or Water Use Classification Revision**
335-6-10 WATER QUALITY CRITERIA	
335-6-10-.02 Definitions	The Department proposes to add the definition of "Coastal Waters".
335-6-10-.05 General Conditions Applicable to All Water Quality Criteria	
335-6-10-.05(5)	The Department proposes to extend the recreational use season from June through September to May through October.
335-6-10-.07 Toxic Pollutant Criteria Applicable to State Waters	
335-6-10-.07(1)(b)	This change is proposed to remove the word "interstate" and add "coastal waters of the Escatawpa River Basin".
335-6-10-.07(1)(g)	This change is proposed to replace "State" with "Alabama" for Department of Public Health
335-6-10-.08 Waste Treatment Requirements	
335-6-10-.08(a)	This change is proposed to remove language to be consistent with 40 C.F.R. 133.
335-6-10-.08(b)	This change is proposed to add correct punctuation.
335-6-10-.09 Specific Water Quality Criteria	
335-6-10-.09(2) PUBLIC WATER SUPPLY	The Department proposes to add language to clarify that incidental water contact occurs year-round and whole body water-contact recreation occurs during the months of May through October.
	The Department proposes to rename "outdoor swimming places" to "outdoor swimming areas".
	The Department proposes to extend the recreational use season from June through September to May through October.
	The Department proposes to correct the E. coli bacteria criteria from 487 colonies/100 ml to 298 colonies/100 ml due to an error.
335-6-10-.09(3) SWIMMING AND OTHER WHOLE BODY WATERCONTACT SPORTS	The Department proposes to rename "outdoor swimming places" to "outdoor swimming areas".
335-6-10-.09(4) SHELLFISH HARVESTING	The Department proposes to add language to recognize that this use classification only applies to coastal waters.
	The Department proposes to update the reference to *National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2011 Revision,* to *National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2015 Revision.*

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
	The Department proposes to add language to clarify that incidental water contact occurs year-round and whole body water-contact recreation occurs during the months of May through October.
	The Department proposes to remove the E. coli bacteria criteria because it does not apply to coastal waters strictly found in shellfish harvesting areas.
	The Department proposes to extend the recreational use season from June through September to May through October.
	The Department proposes to rename "outdoor swimming places" to "outdoor swimming areas".
335-6-10-.09(5) FISH AND WILDLIFE	The Department proposes to remove the language ", and any other usage except for swimming and water contact sports or as a source of water supply for drinking or food processing purposes" to clarify the uses regarding this classification.
	The Department proposes to add language to clarify that incidental water contact occurs year-round and whole body water-contact recreation occurs during the months of May through October.
	The Department proposes to extend the recreational use season from June through September to May through October.
	The Department proposes to correct the E. coli bacteria criteria from 487 colonies/100 ml to 298 colonies/100 ml due to an error.
	The Department proposes to rename "outdoor swimming places" to "outdoor swimming areas".
335-6-10-.11 Water Quality Criteria Applicable to Specific Lakes	
335-6-10-.11(2)	The Department proposes to update the river basin names and reorder the basins in alphabetical order. The Lower Tombigbee River Basin and The Upper Tombigbee River Basin will be combined into The Tombigbee River Basin; The Perdido/Escambia River Basin will be split into The Escambia River Basin and The Yellow River Basin; and The Warrior River Basin will be renamed to The Black Warrior River Basin.
335-6-10-.11(2)(c) The Chattahoochee River Basin	The Department proposes to update the West Point chlorophyll *a* criteria to correspond with Georgia's updated criteria.
335-6-10-.12 Implementation of the Antidegradation Policy	
335-6-10-.12(3)(a)	The Department proposes to revise the language from "EPA approved Section 303(d) list" to "Category 4 or Category 5 waters".
335-6-11 WATER USE CLASSIFICATIONS FOR INTERSTATE AND INTRASTATE WATERS	This change is proposed to update the chapter title from "WATER USE CLASSIFICATIONS FOR INTERSTATE AND INTRASTATE WATERS" to "USE CLASSIFICATIONS FOR SURFACE WATERS".
335-6-11-.01 The Use Classification System	

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
335-6-11-.01(3)	This change is proposed to rename "streams" to "waterbodies" to be consistent with the renaming of the header in 335-6-11-.02 from "Stream" to "Waterbody".
335-6-11-.01(4)	This change is proposed to add Escatawpa River Basin and revise Perdido-Escambia River Basin to Perdido River Basin to reflect the updated river basin names.
335-6-11-.01(5)	This change is proposed to rename "stream" to "waterbody" to be consistent with the renaming of the header in 335-6-11-.02 from "Stream" to "Waterbody".
335-6-11-.02 Use Classifications	This change is proposed to rename the header from "Stream" to "Waterbody" to include other bodies of water in addition to streams.
	This change is proposed to arrange the updated river basin names in alphabetical order.
	This change is proposed to remove the INTERSTATE WATERS and INTRASTATE WATERS headings, as it is antiquated and no longer necessary.
335-6-11-.02(1) THE ALABAMA RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to remove unnamed tributary segments with a classification of "F&W" due to it reiterating the current rule stating that segments not included by name are considered to be acceptable for a "Fish and Wildlife" classification unless demonstrated otherwise.
335-6-11-.02(2) THE CAHABA RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(3) THE CHATTAHOOCHEE RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(4) THE CHIPOLA RIVER BASIN	This change is proposed to correct a "From" location to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(5) THE CHOCTAWHATCHEE RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(6) THE COOSA RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to remove unnamed tributary segments with a classification of "F&W" due to it reiterating the current rule stating that segments not included by name are considered to be acceptable for a "Fish and Wildlife" classification unless demonstrated otherwise.
335-6-11-.02(7) THE ESCATAWPA RIVER BASIN	This change is proposed to add the COASTAL WATERS and NON-COASTAL WATERS headings to distinguish coastal and non-coastal waters.
	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to relocate several waterbodies from the Mobile River Basin to their correct location within The Escatawpa River Basin.
	This change is proposed to add a note regarding shellfish harvesting waters within The Escatawpa River Basin.
335-6-11-.02(8) THE LOWER TOMBIGBEE RIVER BASIN	This change is proposed to combine THE LOWER TOMBIGBEE RIVER BASIN and THE UPPER TOMBIGBEE RIVER BASIN to form THE TOMBIGBEE RIVER BASIN
	This change is proposed to correct grammatical errors and clarify existing language.

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(9) THE MOBILE RIVER-MOBILE BAY BASIN	This change is proposed to add the COASTAL WATERS and NON-COASTAL WATERS headings to distinguish coastal and non-coastal waters.
	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to add "10 feet above MSL" to define coastal waters.
	This change is proposed to relocate several waterbodies from the Mobile River Basin to their correct location within The Escatawpa River Basin.
335-6-11-.02(10) THE PERIDO/ESCAMBIA RIVER BASIN (TO INCLUDE THE BLACKWATER, CONECUH, PERDIDO, AND YELLOW RIVER SUB-BASINS)	This change is proposed to split THE PERDIDO/ESCAMBIA RIVER BASIN (TO INCLUDE THE BLACKWATER, CONECUH, PERDIDO, AND YELLOW RIVER SUB-BASINS) into THE BLACKWATER RIVER BASIN, THE ESCAMBIA RIVER BASIN, THE PERDIDO RIVER BASIN, and THE YELLOW RIVER BASIN.
	This change is proposed to add the COASTAL WATERS and NON-COASTAL WATERS headings to distinguish coastal and non-coastal waters within The Perdido River Basin.
	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to add "10 feet above MSL" to define coastal waters within The Perdido River Basin.
	This change is proposed to remove unnamed tributary segments with a classification of "F&W" due to it reiterating the current rule stating

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
	that segments not included by name are considered to be acceptable for a "Fish and Wildlife" classification unless demonstrated otherwise.
335-6-11-.02(11) THE TALLAPOOSA RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	This change is proposed to remove the Christian Creek segment because it is actually an unnamed tributary classified "F&W" and, therefore, reiterates the current rule stating that segments not included by name are considered to be acceptable for a "Fish and Wildlife" classification unless demonstrated otherwise.
335-6-11-.02(12) THE TENNESSEE RIVER BASIN	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
	Swan Creek from Huntsville Brownsferry Road to Town Creek: The Department proposes to upgrade the classification for this segment from Agricultural and Industrial Water Supply (A&I) to Fish and Wildlife (F&W). Available water quality data and information for this segment indicates that the F&W use is attainable.
335-6-11-.02(13) THE UPPER TOMBIGBEE RIVER BASIN	This change is proposed to combine THE UPPER TOMBIGBEE RIVER BASIN and THE LOWER TOMBIGBEE RIVER BASIN into THE TOMBIGBEE RIVER BASIN.
	This change is proposed to correct grammatical errors and clarify existing language.
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.
	This change is proposed to correct waterbody names to correspond with the GNIS (Geographical Name Information System).
335-6-11-.02(14) THE WARRIOR RIVER BASIN	This change is proposed to rename THE WARRIOR RIVER BASIN to THE BLACK WARRIOR RIVER BASIN.
	This change is proposed to correct grammatical errors and clarify existing language.

Administrative Code Reference	Description of the revision of the Water Quality Criteria or Water Use Classification Revision
	This change is proposed to update the reservoir and reservoir embayment names to the following format: River/Stream Name (Reservoir Name).
	This change is proposed to update the "from" location of a tributary to a reservoir to display the reservoir name.