Appendix H:

Alabama Nonpoint Source Management Program

Key Components of an Effective State Nonpoint Source Management Program

Section H.1 Overview

The U.S. Environmental Protection Agency (EPA) issued revised guidelines for the award of Clean Water Act Section 319 grants for the implementation of nonpoint source (NPS) management programs. The Nonpoint Source Program and Grant Guidelines for States and Territories 2013 are requirements and will be implemented in fiscal year 2014 and in subsequent years. The new guidelines replace the Nonpoint Source Program and Grants Guidelines for States and Territories that have been in effect since the fiscal year 2004 grant cycle. The 2013 guidelines also emphasize the importance of states, as appropriate, to revise and update their NPS management programs every five years to ensure that Section 319 funds are targeted to the highest priority activities.

An updated, comprehensive NPS management program is critical to the states and EPA. It allows EPA and the states to ensure that Section 319 funding, technical support and other resources are directed in an effective and efficient manner and supports state efforts to address water quality issues on a watershed basis. The 2013 guidelines contain a description of 8 Key Components that characterize an effective NPS management program. The Key Components of an Effective State Nonpoint Source Management Program - Appendix A were developed by EPA and state lead NPS control agencies during the spring of 2012 to enhance Section 319 programmatic focus and direction, increase emphasis on watershed project implementation in watersheds with impaired waters, increase accountability measures, and provide appropriate flexibility.

The Alabama Department of Environmental Management and NPS program partners will incorporate the 8 Key Components during reviews and updates of the AL Nonpoint Source Management Program. <u>Table H.1</u> below presents an index of each of the 8 Key Components and their respective locations (Chapter/Section). The public and private sectors are welcome to assess each Component and provide input to ADEM that will help ensure implementation of an effective and successful nonpoint source and Section 319 grant management program.

Table H.1 Index of Key Components to Assess NPS Program Effectiveness

COMPONENT 1: The program contains explicit short- and long-term goals, objectives, and strategies to restore and protect surface and ground water, as appropriate.	Chapter / Section
The state program includes long-term and shorter-term (e.g., three- to five- year) goals, objectives and milestones that are well integrated with other key environmental and natural resource programs. These goals, objectives will be periodically revised as necessary to reflect progress or problems encountered; strategies to make progress towards achieving the goals, and indicators to measure progress.	
NPS Programmatic Goals, Objectives, and Annual Milestones	Chapter 8

COMPONENT 2: The program strengthens its working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts), private sector groups, citizens groups, and federal agencies.	Chapter/ Section
The state uses a variety of formal and informal mechanisms to form and sustain partnerships:	
Federal and State Agency NPS Management Primacy, Authorities and Mechanisms	Section 2.5 Table 2.5
Wetland Cooperative Projects	Section 3.3
Groundwater Cooperative Projects	Section 3.4
Coastal Cooperative Projects	Section 3.5
ADEM Integrated Water Monitoring approach	Section 4.3.2a
Links and leveraging of resources for wetland protection	Section 4.5
Citizen Volunteer Monitoring	Section 4.7
Fish Tissue Monitoring Program (cooperative agreement between ADEM, ADPH, ADCNR, and the TVA)	Section 4.8
Coastal Zone Act Reauthorization Amendments (CZARA) and Section 319 support	Section 4.8.b
Coastal Beach Monitoring (ADEM , ADPH)	Section 4.8.c
 Groundwater and Source (Drinking) Water Protection (NPS Program integration with the Drinking Water State Revolving Fund (DWSRF), the Clean Water State Revolving Fund (CWSRF), and Source Water Protection) 	Section 4.8.d
Integration with Other Ambient Monitoring and Assessment Programs	Section 4.9
 Integration of Federal, State and Local Community-based Programs and Partners 	Chapter 7
Federal and State-based NPS Management Partners and Approaches	Table 7.1.A
Non-Regulatory-based / Voluntary Partners and Approaches	Table 7.1.B
Memorandums between Alabama agencies, academic institutions, and other organizations	Section 7.7 Appendix F.6 Table F.6
Strategies to Enhance Statewide NPS Education and Outreach	Section I.2
The state works collaboratively with other key state and local NPS entities in the coordinated implementation of NPS control measures in high priority watersheds.	
ADEM Water Resource Site Conditions	Section 3.2
Targeting and Prioritizing NPS Impaired Waters: Prioritizing Partners	Section 3.3
National Water Quality Initiative	Section 4.6 Section 7.4 Section G.7
 Integration of Federal, State and Local Community-based Programs and Partners 	Chapter 7
EPA's Healthy Watersheds Initiative and Protection of High Quality Waters	Section 7.2 Table G.3.1
Programmatic Strategies to Achieve Goal 2 and Objective 2	Section 8.2.1
 Long-term Objective 3.1: Continue to leverage public and private resources to implement BMPs to restore and protect watersheds and water quality and/or to protect human health from nonpoint sources of pollution. 	Section 8.3
 Strategies to Achieve Goal 4 and Objectives 4: b) Continue to leverage Section 319 and other sources of NPS funding to cooperatively implement environmentally-protective and economically-sensible BMPs g) Work collaboratively with state and federal agencies, local watershed groups, and citizens to plan and implement NPS pollution management practices in high priority watersheds (e.g., S. 303(d) List) 	Section 8.4.1

h) Continue to plan, align, and integrate the AL NPS Management Program with relevant state and federal resources to practices to protect and restore state waters and achieve water quality standards	
Relationship to Other Programs	Section 9.1
Eligible Section 319 Activities	Section 9.6
Processes for Assigning Priorities and Addressing Waters and Watersheds	Appendix G
Factors Used By ADEM to Assign Restoration Priority to Impaired Waters and Watersheds	Table G.2
Scenarios Used by ADEM to Assign Priority to Unimpaired and High Quality Waters	Section G.3
EPA Region 4 and ADEM Priority Watershed Targeting Approach	Section G.6
The state seeks public involvement from local, regional, interstate, tribal and federal agencies, and public interest groups industries, academic institutions, private landowners and producers, concerned citizens, and others as appropriate, to comment on significant proposed program changes.	
Management Challenges: a) Overview	Section 5.2.a
 Adaptive Management Approach: c) Processes to Update Programmatic Goals and Watershed-based Management Plans 	Section 6.6
 Chapter 8: Goals, Objectives, Strategies and Milestones: b) Programmatic Goals, Objectives and Annual Milestones Defined (opportunities for public input and participation) c) Strategies and Action Items (Public invited to comment) 	Chapter 8: b, c
Strategies Geared Towards Watershed and Water Quality Protection and Restoration	Section 8.2.2
Annual Programmatic Goals and Objectives for Years 2014 – 2018 (Draft Format)	Section 8.6
Potential Measures and Indicators of Programmatic Progress and Success	Section 8.8
Program Assessment Indices	Section 9.4
Section 319 Grant Implementation Processes: a) Adaptive Management	Section 9.5
Strategies Directed At Section 319 Grant Project-level Awareness	Section I.3

COMPONENT 3: A combination of statewide prograuality benefits; efforts are well-integrated with other	ams and on-the-ground projects are implemented to achieve water r relevant state and federal programs.	Chapter / Section
The state may achieve water quality results through a coregulatory authorities, as appropriate.	mbination of watershed approaches and statewide programs, utilizing	
Federal and State Agency NPS Management	Primacy, Authorities and Mechanisms	Table 2.5
Federal and State Agency NPS Management	Primacy, Authorities and Mechanisms	Table 2.5
State of Alabama Continuing Planning Proce	ss	Section 4.1.A
Targeting and Prioritizing NPS Impaired Wat	ers	Section 4.3.1.1
CWA Section 319 Monitoring: a) Aligning N	PS Programmatic Priorities	Section 4.3.2
Water Quality-Based Strategies Geared Toward	ards Goal 1	Section 8.1.2
The state NPS management program is well integrated valigning priority setting processes and resources to incre	with other relevant programs to restore and protect water quality, ease efficiency and environmental results.	
ADEM Water Resource Site Conditions		Section 3.2
Wetlands		Section 3.3 Section 4.5
Groundwater		Sections 3.4
ADEM Coastal NPS Programs		Section 3.5 Section 7.5
CWA Section 303(d) Impaired Waters List as	nd Total Maximum Daily Limits (TMDLs)	Section 4.3.1
Groundwater and Source (Drinking) Water P (NPS Program integration with the Drinking Revolving Fund (CWSRF), and Source Water	Water State Revolving Fund (DWSRF), the Clean Water State	Section 4.8.d
5-Year Rotational Monitoring and Assessment	nt Approach	Section 4.4
National Water Quality Initiative		Section 4.6 Section 7.4 Section G.7
NRCS Federal agricultural and silvicult	VRCS and FSA are well-integrated throughout the document. USDA- ural interests are also represented on the State Technical Committee in Partnership where water quality and quantity issues are discussed in a	Table 7.3.B
Integration with Other Ambient Monitoring a	nd Assessment Programs	Section 4.9
Watershed-based Management: Overview		Section 6.1

•	Integration of Federal, State and Local Community-based Programs and Partners	Chapter 7
•	Federal and State-based NPS Management Partners and Approaches	Table 7.1.A
•	NPS Programmatic Goals, Objectives, and Annual Milestones	Chapter 8
•	Relationship to Other Programs	Section 9.1.2
•	Eligible Section 319 Activities	Section 9.6
•	Memorandums of Agreements/Understanding between Alabama agencies, academic institutions, and other organizations	Table F.6
•	Processes for Assigning Priorities and Addressing Waters and Watersheds	Appendix G

COMPONENT 4: The program describes how resources are allocated between: (a) Abating known water quality impairments from NPS pollution, and (b) Protecting threatened and high quality waters from significant threats caused by present and future NPS impacts.	Chapter / Section
High Quality and Unimpaired Water Resources	Section 3.6
CWA Section 319 Monitoring : C) Section 319 Applicability	Section 4.3.2
Balancing Watershed Restoration and Protection	Section 6.5
Programmatic Strategies to Achieve Goal 2 and Objective 2	Section 8.2.1
Programmatic Strategies to Achieve Goal 3 and Objective 3.x	Section 8.3.1
Strategies to Achieve Goal 4 and Objectives 4	Section 8.4.1
 Potential Measures and Indicators of NPS Programmatic Progress and Success: III: Protection of High Quality Waters VI: Nonpoint Source Education and Outreach: E) Targets pollution prevention as a NPS pollution management practice 	Table 8.8
 Programmatic and Project-Level Reporting: D) Water Quality Protection and Restoration Progress Reporting (Healthy Watersheds Initiative) 	Section 9.2
Eligible Section 319 Activities	Section 9.6
Pollution Prevention (P2)	Section F.5
Scenarios Used by ADEM to Assign Priority to Unimpaired and High Quality Waters	Section G.3

CWA 305(b) Integrated Water Quality Assessment and Monitoring Report (IR) CWA Section 319 Monitoring Integrated Listing Methodology	Section 4.2
CWA 305(b) Integrated Water Quality Assessment and Monitoring Report (IR) CWA Section 319 Monitoring Integrated Listing Methodology	
CWA Section 319 Monitoring Integrated Listing Methodology	
Integrated Listing Methodology	Section 4.3
	Section 4.3.2 (part C)
5-Year Rotational Monitoring and Assessment Approach	Table 4.3
	Section 4.4
The state identifies the primary categories and subcategories causing water quality impairments, threats, risks across the state.	
CWA Section 303(d) Impaired Waters List and Total Maximum Daily Limits (TMDLs)	Section 4.3.1
Management Challenges: b) Nonpoint Pollution Causes and Sources	Section 5.2
Agriculture - Introduction	Appendix A1
Agriculture - Causes of Agricultural Nonpoint Source Pollution in Alabama	Appendix A2
Silviculture	Appendix B
Urban and Construction	Appendix C
Resource Extraction	Appendix D
Hydrologic Modification	Appendix E
Solid Waste and Litter Remediation Overview	Appendix F.4
Processes for Assigning Priorities and Addressing Waters and Watersheds Overview	Appendix G1
Factors Used by ADEM to Assign Section 319 Grant Funding Priorities to Impaired Waters	Appendix G2
At regular intervals, the state updates the identification of waters impaired or threatened by NPS pollution as part of a single comprehensive state water quality assessment which integrates reports required by the Clean Water Act.	
CWA 305(b) Integrated Water Quality Assessment and Monitoring Report (IR)	
The state establishes a process to assign priority and to address identified waters and watersheds by conducting more detailed	Section 4.3

watershed assessments, developing watershed-based plans, and implementing the plans.	
Targeting and Prioritizing NPS Impaired Waters	Section 4.3.1.1
Integration with Other Ambient Monitoring and Assessment Programs	Section 4.9
Development and Implementation of Watershed-based Management Plans	Section 6.3
Summary of EPA's 9 Key Elements of a Watershed based Management Plan	Table 6.3
Section 319 Grant Implementation Processes	Section 9.5
The state links its prioritization and implementation strategy to other programs and efforts.	
State of Alabama Continuing Planning Process	Section 4.1.A
Targeting and Prioritizing NPS Impaired Waters	Section 4.3.1.1
CWA Section 319 Monitoring – Part A	Section 4.3.2
Wetlands	Section 4.5
National Water Quality Initiative (NWQI)	Section 4.6
Citizen Volunteer Monitoring	Section 4.7
Human and Environmental Health Protection	Section 4.8
Integration with Other Ambient Monitoring and Assessment Programs	Section 4.9
The state considers wellhead protection areas, ground water recharge areas, and zones of significant ground water/surface water interaction, including drinking water sources.	
Nonpoint Source Program Water Quality Monitoring and Assessment Overview	Section 4.1
Groundwater and Source (Drinking) Water Protection	Section 4.8.d
Clean Water State Revolving Fund (SRF)	Section 7.6
EPA Programs Relevant to NPS Pollution Management and Water Quality Restoration - Safe Drinking Water	Appendix G.8

COMPONENT 6: All program components required by section 319(b) of the Clean Water Act are implemented and strategic approaches and adaptive management to achieve and maintain water quality standards as expeditiously as practicable are established. Program components are reviewed and upgraded as appropriate. The program also includes a mix of regulatory, nonregulatory, financial and technical assistance, as needed.	Chapter / Section
6.i An identification of measures (i.e., systems of practices) that will be used to control NPS pollution, focusing on those measures which the state believes will be most effective in achieving and maintaining water quality standards.	
CWA Section 303(d) Impaired Waters List and Total Maximum Daily Limits (TMDLs)	Section 4.3.1
Best Management Practices Overview/EPA Resources	Section 5.3 Table 5.3
 Strategies to Achieve Goal 4 and Objectives 4: E) Enhance the corporate use of BMP manuals, practices, standards, guidelines, models, technical assistance, technology transfer, etc., to help meet the needs of the state NPS management program 	Section 8.4.1
 Programmatic Strategies to Achieve Goal 5 and Objective 5 (2014 - 2019): D) Update or create category-specific NPS brochures, maps, manuals, guidelines, handbooks, reports, news articles, standards, forms, public serve announcements, signs, posters, displays, models, etc. 	Section 8.5.1
Nonpoint Source Pollution Measures for Agriculture	Appendix A
Nonpoint Source Pollution Measures for Silviculture	Appendix B
Nonpoint Source Pollution Measures for Urban and Construction	Appendix C
Nonpoint Source Pollution Measures for Resource Extraction	Appendix D
Nonpoint Source Pollution Measures for Hydrologic Modification	Appendix E
Nonpoint Source Pollution Measures and Climate Change	Table F.2
Nonpoint Source Pollution Measures and Environmental Justice	Table F.3
Measures to Control Nonpoint Source Pollution from Solid Waste Threats	Table F.4
Pollution Prevention Strategies	Table F.5
Management of Household Septage Treatment and Disposal	Table F.6
EPA Programs Relevant to NPS Pollution Management and Water Quality Restoration	Section G.8
Strategies to Address Nonpoint Sources of Nutrients	Table G.4.A
EPA Water Measures: Improve Water Quality on a Watershed Basis	Table G.9
Water Quality Protection and Restoration Framework	Section I.5, Table I.5

6.ii An identification of the key programs to achieve implementation of the measures, including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects.

Chapter / Section

•	Federal and State Agency NPS Management Primacy, Authorities and Mechanisms	Table 2.5
•	Wetland Programs	Section 3.3, 4.5
•	Groundwater and Drinking Water Programs	Section 3.4
•	Coastal Programs	Section 3.5
•	Programs Addressing High Quality and Unimpaired Water Resources	Section 3.6
•	Aligning NPS Programmatic Priorities	Section 4.3.2, a)
•	Integration of Federal, State and Local Community-based Programs and Partners	Chapter 7
	Federal and State-based NPS Management Partners and Approaches	Table 7.1.A
	Non-Regulatory-based / Voluntary Partners and Approaches	Table 7.1.B
•	Key NPS Programs Targeting Agriculture	Appendix A
•	Key NPS Programs Targeting Silviculture	Appendix B
•	Key NPS Programs Targeting Urban and Construction	Appendix C
•	Key NPS Programs Targeting Resource Extraction	Appendix D
•	Key NPS Programs Targeting Hydrologic Modification	Appendix E
•	Strategies to Enhance Statewide NPS Education and Outreach	Section I.2
•	Strategies Directed At Section 319 Grant Project-level Awareness	Section I.3
•	Education and Outreach Audiences and Action Items	Attachment I
	scription of the processes used to coordinate and, where appropriate, integrate the various programs used to t NPS pollution controls in the state.	
•	Wetlands	Section 3.3
•	Groundwater and Drinking Source Waters	Section 3.4
•	Coastal	Section 3.5
•	High Quality and Unimpaired Water Resources	Section 3.6
•	State of Alabama Continuing Planning Process	Section 4.1.A
•	Watershed Management Overview	Section 6.1
•	Adaptive Management Approach	Section 6.6
•	Integration of Federal, State and Local Community-based Programs and Partners Overview	Section 7.1
•	Relationship to Other Programs	Section 9.1.2
•	Processes for Assigning Priorities and Addressing Waters and Watersheds	Appendix G
•	Strategies to Enhance Statewide NPS Education and Outreach	Appendix I.2
•	Education and Outreach Audiences and Action Items	Attachment I
	dedule with goals, objectives, and annual milestones for implementation at the earliest practicable date: legal s to implement the program; available resources; and institutional relationships.	
•	Nonpoint Source Pollution Management Authorities	Chapter 2
•	Goals, Objectives, Strategies and Milestones	Chapter 8
•	Agriculture	Appendix A
•	Silviculture	Appendix B
•	Urban and Construction	Appendix C
•	Resource Extraction	Appendix D
•	Hydrologic Modification	Appendix E
.v Sourc	es of funding from federal (other than section 319), state, local, and private sources.	
•	Federal Partners and Programs Addressing Agricultural Sources of NPS Pollution	Appendix A, Section A.7
•	Federal Partners and Programs Addressing Silvicultural Sources of NPS Pollution	Appendix B
•	Federal Partners and Programs Addressing Sources of NPS Pollution from Urban and Construction	Appendix C
•	Federal Partners and Programs Addressing Sources of NPS Pollution from Resource Extraction	Appendix D
•	Federal Partners and Programs Addressing Sources of NPS Pollution from Hydrologic Modification	Appendix E
.vi. Fede	ral land management programs, development projects and financial assistance programs.	
•	Federal and State-based NPS Management Partners and Approaches	Table 7.1.A
•	Federal Consistency	Section 7.3
•	 Strategies to Achieve Goal 4 and Objectives 4 H) Continue to plan, align, and integrate the AL NPS Management Program with relevant state and federal resources and practices to protect and restore state waters and achieve water quality standards by leveraging the following programs 	Section 8.4.1
•	Relationship to Other Programs	Section 9.1.2
		1

•	S management program effectiveness. Program Assessment Indices	Section 9.4
•	CWA Section 319 Monitoring	Section 4.3.2
•	5-Year Rotational Monitoring and Assessment Approach	Section 4.4
•	Integration with Other Ambient Monitoring and Assessment Programs	Section 4.5
•	Collaboration of the AL Nonpoint Source and Section 319 Programs with EPA's Strategic Plan	Section G.9
•	Programmatic Watershed-based E&O Measures and Indicator Elements	Section I.4
Addition	al baseline requirements	
•	National Water Quality Initiative	Section 4.6 Section 7.4 Section G.7
•	Coastal Zone Act Reauthorization Amendments (CZARA) and Section 319 support Eligible Section 319 Activities : j) CZARA 6217 Set-Aside	Section 4.8.b Section 9.6
•	EPA's Healthy Watersheds Initiative and Protection of High Quality Waters	Section 7.2 Table G.3.1

COMPONENT 7: The state manages and implements its NPS management program efficiently and effectively, including necessary financial management.	Chapter / Section
The state implements its program to solve its water quality problems as effectively and expeditiously as possible and makes satisfactory progress each year in meeting program goals.	
Goals, Objectives, Strategies and Milestones	Chapter 8
Section 319 Nonpoint Source Grant Program Overview	Section 9.1
Eligible Section 319 Activities	Section 9.6
The state employs appropriate programmatic and financial systems that ensure section 319 dollars are used effectively and consistent with its legal obligations, and generally manages all section 319 funds to maximize water quality benefits.	
Programmatic and Project-Level Reporting	Section 9.2
Grants Reporting and Tracking System (GRTS)	Section 9.3
Program Assessment Indices	Section 9.4
Relationship to Other Programs	Section 9.1.2
Section 319 Grant Implementation Processes: d) Accountability and Transparency	Section 9.5
Program Financial Oversight and Grant Cost Share: I) Program Financial Oversight and Grant Cost Share	Section 9.6

COMPONENT 8: The state reviews and evaluates its NPS management program using environmental and functional measures of success, and revises its NPS management program at least every five years.	Chapter / Section
The state establishes measures of progress in meeting programmatic and water quality goals and objectives identified in key component #1 above. The state management program is reviewed every five years.	
 Goal 4 and Objective 4.x Long-term Objective 4: Continue to enhance programmatic efficiency and effectiveness by updating programmatic Goals and Objectives by September 30, 2013; and every 5 years thereafter. (Replicate at minimum, every 5 years) 	Section 8.4
 Annual Programmatic Goals and Objectives for Years 2014 – 2018 (Draft Format) 	Section 8.6
Annual Programmatic Milestones for Fiscal Year 2014 – 2018 (Draft Format)	Section 8.7
Potential Measures and Indicators of Programmatic Progress and Success	Section 8.8, Table 8.8
Section 319 Grant Implementation Processes: c) Program Document Reviews and Revisions	Section 9.5
Eight Key Elements of an Effective State NPS Management Program	Appendix H