Vision Statement:

LDEQ will continue to work cooperatively with federal, state and local partners that assist them in implementation of statewide educational programs and watershed protection and restoration projects. Through this implementation, water bodies in the state that are presently impaired because of NPS pollution should improve and meet their designated uses for fishing, swimming and drinking water supplies.

The short-term goal is to implement statewide and watershed programs that result in implementation of BMPs to reduce the concentration of fecal coliform bacteria, sediment, and nutrients that contribute to DO problems in state waters. These short-term goals are evaluated on an annual basis with analysis of ambient water quality data. Water quality improvements are reported in LDEQ's NPS Annual Reports to USEPA Region 6 and posted on LDEQ's website.

The long-range goal of the NPS program is to restore use support in waters identified as impaired by nonpoint sources in the 305(b) list of the Integrated Report.

Short and long term goals for the NPS Management Plan include:

- By October 2022, work to improve and/or restore 33 water bodies impaired for NPS pollution; Implement NPS targeted watershed monitoring in 20 water bodies in order to develop WIPs or evaluate water quality improvement in water bodies targeted for improvement/restoration by 2022;
- Produce two NPS Success Stories every two years as a result of reducing NPS pollutants for one or more parameters so the water body meets water quality standards;
- Track expenditure of federal and matching funds efficiently to solve NPS water quality problems; and
- By 2022, SWPP will minimize risks to public health in 281 community water systems in 15 parishes that serve a population of 644,371.

All activities described in the NPS Management Plan are designed to achieve these water quality goals. Statewide programs are designed to improve water quality generally in all parts of the state, through institutionalizing NPS water quality goals in on-going programs of state, federal and local governments. Watershed programs are designed to solve specific water quality problems identified through Louisiana's NPS Program and included in the state's IR.

Interim measures of achieving water quality goals include:

- Reduce in-stream concentrations of total suspended and dissolved solids, nitrogen, phosphorus, and fecal coliform in 33 priority watersheds (analyzed every two years with results included in NPS Annual Report);
- Increase in-stream concentrations of dissolved oxygen (DO) during critical periods (sensitive aquatic life stages and hot weather/low flow conditions) in water bodies targeted for NPS Program implementation;
- Reduce the number of impairments on the 305(b) list (reported annually through NPS Annual report and also through the biannual IR);

- Increase the number of local watershed groups established for watershed restoration and protection to reach goal of restoring/improving water quality in 33 water bodies;
- Increase the number of water bodies delisted because of NPS pollution activities; and
- Increase the number of "Success Stories" describing water bodies that have been de-listed for one or more parameters (A minimum of two Success Stories every two years).

Future objectives of the program are to continue this process of collaborating and leveraging federal and state programs in priority basins and watersheds, where water quality problems have been identified. As long as water quality improvements continue to be made and water bodies are delisted, then this collaborative process will be viewed as effective and successful for reaching water quality goals of the NPS Program. However, if NPS reductions and water quality improvements are not made, then additional steps may be necessary to ensure water bodies are restored and meet their designated uses. These additional steps will be scientifically based, including natural background conditions and NPS inputs, as identified in TMDLs. Additional controls may include back-up authorities, if necessary, to achieve water quality goals and restore designated uses for the water bodies. Section 319(B) (2)(c) of the CWA required NPS Management Plans to contain a set of milestones for program implementation, therefore these milestones provide tasks and timelines to complete those tasks:

- Continue to evaluate on an annual basis the number of watersheds where LDEQ has partnered with NRCS and other cooperating federal, state and local agencies on statewide and watershed priorities (2018 - 2022);
- Continue to evaluate on an annual basis progress that has been made on coordination of federal and state agencies and local watershed groups on prioritization of statewide educational programs and watershed implementation projects in the state (2018-2022);
- Continue to solicit proposals through interagency partners and the public, targeted at reduction/ control of NPS pollutants in agricultural watersheds of the state (2018-2022);
- Continue to partner with other agencies on improving statewide educational and outreach activities in areas of the state with water quality problems associated with agriculture (2018-2022);
- Continue to report annually/bi-annually on the number of water bodies delisted because of implementation of BMPs to reduce/control agricultural NPS pollutants (2018-2022);
- Evaluate water quality improvement on an annual basis in priority watersheds to determine if water quality is improving as a result of increased education and implementation of BMPs (2018- 2022);
- Continue to expand use of the internet as an educational outreach tool for environmental communities, concerned citizens, landowners, farmers, and the public on steps that have been taken to reduce agricultural NPS pollution in the state (2018-2022);
- Utilize the basin-monitoring program combined with in-stream surveys to determine where participation in the program (i.e. BMP implementation) has resulted in water quality improvements (2018-2022);
- Determine if additional steps are necessary to restore designated uses to water bodies identified as having use support impairments due to nonpoint sources on the 305(b) list and whether back-up authority is necessary to achieve BMP implementation and reduce NPS pollution in state water bodies (2018-2022); and

- Remove use support impairments caused by nonpoint sources identified in the 305(b) list as a result of cooperative efforts on agricultural BMPs (2018-2022).

A continued goal of Louisiana is to assist USEPA in meeting national water quality goals described in their 2016-2020 Strategic Plan This plan includes performance measures for protecting public drinking water supplies, protecting healthy waters and restoring impaired waters. For drinking water supplies, the performance measures include SP4(a) and SP4(b), as follows:

- the percent of community water systems where the risk to public health is minimized through source water protection - the target number is 50 percent; and
- the percent of the population served by community water systems where risk to public health is minimized through source water protection - the target number is 57 percent;

This latter measure is linked to grant commitments and is a priority for Louisiana's Source Water Protection Program (SWPP).

The SWPP will work toward helping Louisiana meet its NPS goals in priority watersheds by addressing specific nonpoint sources of pollution that have been identified near public water sources. The SWPP will achieve this by identifying and inventorying potential nonpoint sources of pollution of drinking water sources. Working from this inventory, the SWPP educates local citizens and officials, and operators of potential nonpoint sources of pollution on best management practices to prevent nonpoint source pollution from entering and contaminating their drinking water source. The SWPP also presents and assists in the adoption of a local drinking water protection ordinance that prevents specific potential nonpoint sources of pollution from being located near a drinking water source. In addition to these activities, the SWPP also works to reduce specific nonpoint source pollution causing impairment in drinking water bodies and implements activities to maintain water quality in drinking water bodies that are fully meeting their standards.

Source Water staff will continue the following:

- Utilize public presentations, brochures, videos, road signs, press releases, public service announcements, promotional materials, youth educational materials, and collaborate with other organizations to educate the public on where their drinking water sources comes from, why it's important and how it can be protected.
- Work with water systems to develop and/or update contingency plans in case of an emergency or loss of water supply. These plans are provided to USEPA and the local Office of Emergency Preparedness. Groundwater systems are also certified under the Wellhead Protection Program.
- Enlist the help of local volunteers through citizen committees in each parish/region. The volunteers assist LDEQ in setting goals based on local issues with water sources and assists LDEQ in addressing these issues. LDEQ, with assistance from volunteers, educate the general public about the importance of protecting water sources and educate area businesses on the implementation of BMPs to prevent or reduce the possibility of contamination.
- With assistance from volunteers, visit businesses/facilities identified near drinking water sources that have the potential to become sources of contamination and distribute drinking water protection and BMP (including NPS BMPs) information.

- Work with local governments to encourage adoption of ground water protection ordinances intended to protect public water wells.
- Continue development and improvement of geographic information system (GIS)-based database by updating source water assessment data. As needed, SWPP staff will coordinate source water assessment data collection to include watersheds/basins where non-point source projects are being implemented.
- Work with other sections within LDEQ and other entities on environmental water quality issue related to drinking water.
- Respond to requests for aquifer recharge maps from various entities. The location of recharge areas is important to know as aquifers in these areas are especially susceptible to NPS and other contamination through spillage or storm water runoff with contaminants.
- Assist NPS watershed coordination team in priority watersheds, as needed.

The Aquifer Sampling and Assessment Program (ASSET) is an ambient monitoring program established to determine and monitor the quality of groundwater in Louisiana's major freshwater aquifers. Monitoring the state's principle aquifers is as important as monitoring surface water bodies because of inherent interaction and connection of the two media. A contaminated aquifer below the surface could cause NPS contamination to a surface water drinking water source.

- Maintain a well grid of at least 180 water wells. As existing ASSET wells become inactive (out of service, plugged, or on standby), additional wells must be located to replace these wells in order to maintain the required well count. Replacement wells must match, as closely as possible, the characteristics of the well it is replacing; such as geographic location, depth, and aquifer.
- Sample at least 60 water wells per year. A target of 60 wells per year ensures that the goal of sampling 180 wells for the three-year rotation will be reached. Typically, all ASSET wells producing from a particular aquifer are sampled in a short time frame. From one to four sampling episodes may be required to complete an aquifer, where each episode may require from one to three days to complete. The number of wells assigned to an aquifer determines the number of sampling episodes, which is dependent upon the areal extent of the aquifer.
- Report data to well owners. Once all field and analytical data is received and validated, the information is transmitted to each well owner with an accompanying explanation of the data. The owners are lauded for their efforts in participating in the ASSET program.
- Produce summary reports of the data derived from the ASSET Program activities. Individual aquifer summaries are produced once all field and analytical data is received, reviewed, and validated. After each three-year sample rotation is completed, and all aquifer summaries are written and finalized, a Triennial Summary Report is produced. The Triennial Report tabulates and summarizes all data collected and combines all 14 aquifer summaries for that sampling cycle.
- Review and revise the quality assurance project plan (QAPP) for the ASSET Program biennially, as necessary, and submitted to USEPA Region 6 for review and approval.
- Develop, biennially, Part 4 (the groundwater portion) of the state's Integrated Report (IR), in accordance with USEPA guidelines and select a common hydrologic or geo-hydrologic setting for inclusion in the IR. Usually, one of the larger aquifers or aquifer systems, or a grouping of aquifers of similar geologic age is selected for reporting.

CZARA

Goal:

The goal is to reduce nonpoint source pollution to coastal waters through establishing a set of management measures to use in controlling nonpoint source pollution from five main sources: agriculture, forestry, urban areas, marinas, and hydromodification (shoreline and stream channel modification).

Objective:

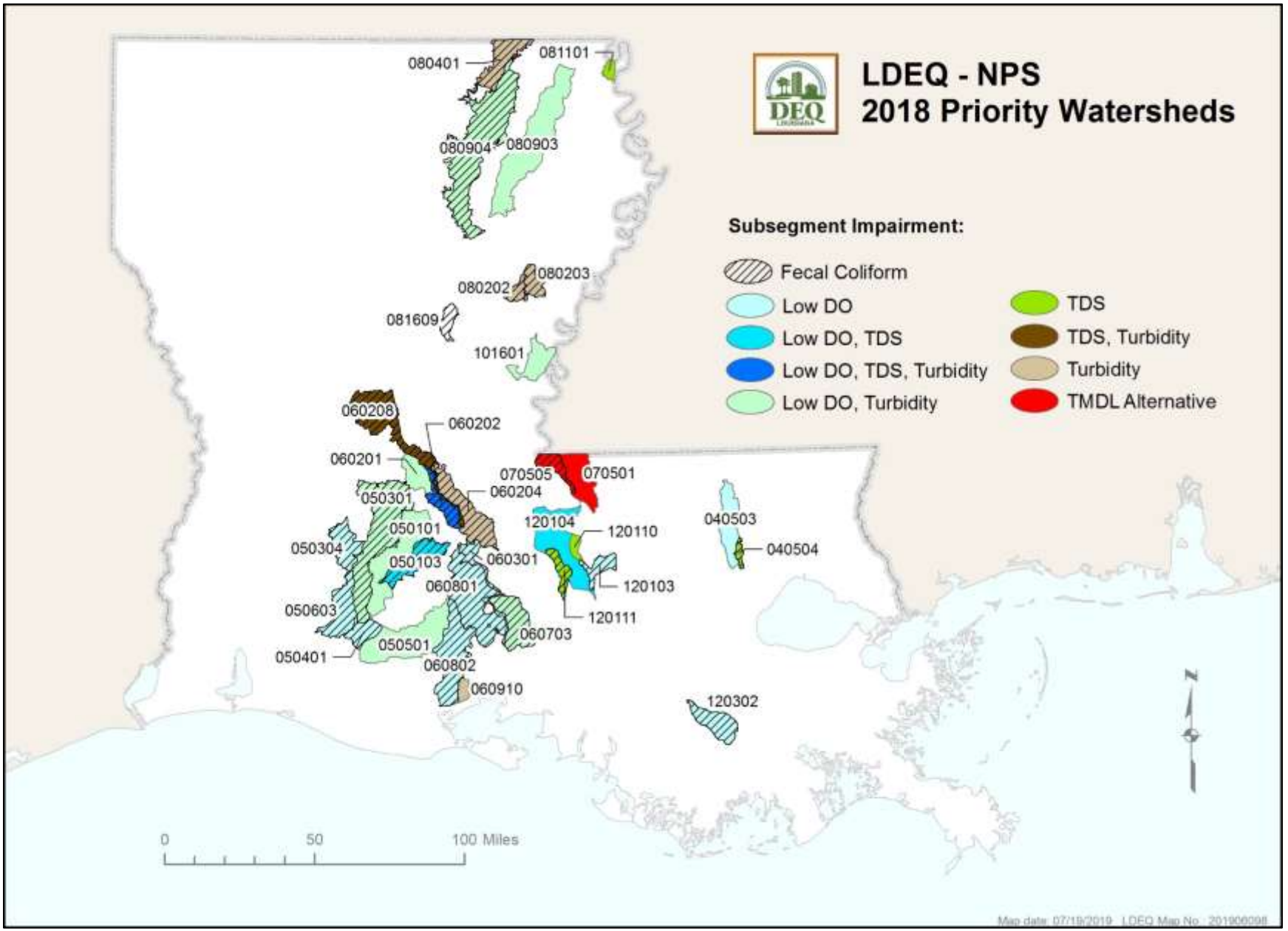
To abide by LDEQ measures and commitments as outlined in the (draft) LDEQ NPS CZARA Management Plan. Acceptance of the plan submitted is pending as of April, 2019.

2018-2022 Milestones:

Statewide Milestones for Water Quality Improvement	2018	2019	2020	2021	2022
Number of water bodies identified in LDEQ's Integrated Report as being primarily NPS impaired that are partially or fully--restored (WQ--10): Identify fully restored water bodies in Appendix C of state's IR primarily impaired by NPS pollutants in 1999 court ordered 303(d) list or 1998/2000 IR; review NPS related activities in watershed where water body was restored; write NPS success story; and identify activities to maintain water quality.	2		2		3
Estimated annual reductions in tons of nitrogen from NPS to water bodies (from Section 319 funded projects) (WQ--9a): Annually review information from LDAF, USDA, watershed coordinators, NPS staff and stakeholders for NPS load reductions of nitrogen; and include information in NPS annual report.	12	12	12	12	15
Estimated annual reductions in tons of phosphorus from NPS to water bodies (from Section 319 funded projects) (WQ--9b): Annually review information from LDAF, USDA, watershed coordinators, NPS staff and stakeholders for NPS load reductions of phosphorus: and include information in NPS annual report.	2	2	2	3	5
Estimated annual reductions in tons of Sediment from NPS to Water Bodies (from Section 319 funded projects) (WQ--9c): Annually review information from LDAF, USDA, watershed coordinators, NPS staff and stakeholders for NPS load reductions of sediment: include information in NPS annual report.	1,000	1,000	1,000	1,200	1,200
Number of water bodies where instream concentrations of NPS parameters have been reduced (i.e. sediment, fecal coliform bacteria, nutrients): Annually review water quality data for data trends indicating reductions in sediment, fecal coliform bacteria and nutrients as a result of NPS activities and include information in NPS annual report.	10	10	12	14	16
Progress in reducing unliquidated obligations (ULO): Percentage of ULO funds anticipated yearly for both LDEQ and LDAF combine d (total remaining funds/total awarded = percentage ULO).	20%	20%	20%	20%	20%

2018-2022 Priority Watersheds:

SUBSEGMENT	NAME	DESCRIPTION	BASIN	CURRENT ACTIVITY
040503	Natalbany River	From headwaters to La. Highway 22	PONTCHARTRAIN	New Vision
040504	Little River	From headwaters to West Fork Calcasieu River	CALCASIEU	
050101	Bayou des Cannes	Headwaters to Mermentau River	MERMENTAU	Implementation
050103	Bayou Mallet	Headwaters to Bayou Des Cannes	MERMENTAU	Implementation
050301	Bayou Nezpique	Headwaters to Mermentau River	MERMENTAU	
050304	Bayou Blue	Headwaters to Bayou Nezpique	MERMENTAU	
050401	Mermentau River	Headwaters to Lake Arthur	MERMENTAU	
050501	Bayou Queue de Tortue	Headwaters to Mermentau River	MERMENTAU	Implementation
050603	Bayou Chene	Includes Bayou Grand Marais	MERMENTAU	Implementation
060201	Bayou Cocodrie	US-167 to Bayou Boeuf - Cocodrie Diversion Canal	VERMILION-TECHE	
060202	Bayou Cocodrie	Cocodrie Diversion Canal to Bayou Boeuf	VERMILION-TECHE	
060204	Bayou Courtableau	Headwaters to West Atchafalaya Borrow Pit Canal	VERMILION-TECHE	
060208	Bayou Boeuf	Headwaters to Bayou Courtableau	VERMILION-TECHE	
060301	Bayou Teche	Headwaters at Bayou Courtableau to Keystone Locks and Dam	VERMILION-TECHE	
060703	Bayou du Portage	Bayou du Portage	VERMILION-TECHE	Baseline Monitoring
060801	Vermilion River	Headwaters to LA-3073 bridge	VERMILION-TECHE	Baseline Monitoring
060802	Vermilion River	LA-3073 bridge to ICWW	VERMILION-TECHE	
060910	Boston Canal	Includes associated canals	VERMILION-TECHE	Post-Implementation
070501	Bayou Sara	Mississippi state line to Mississippi River	MISSISSIPPI	New Vision
070505	Tunica Bayou	Headwaters to Mississippi River	MISSISSIPPI	New Vision
080202	Bayou Louis	Lake Louis to Ouachita River	OUACHITA	Post-Implementation
080203	Lake Louis	Lake Louis	OUACHITA	Post-Implementation
080401	Bayou Bartholomew	Arkansas state line to Dead Bayou (Lake Bartholomew)	OUACHITA	
080903	Big Creek	Headwaters to Boeuf River; includes Big Colewa Bayou	OUACHITA	Implementation
080904	Bayou Lafourche	Near Oakridge to Boeuf River near Columbia	OUACHITA	Implementation
081101	Lake Providence	Lake Providence	OUACHITA	USDA - Monitoring
081609	Hemphill Creek	Headwaters to Catahoula Lake; includes Hair Creek	OUACHITA	Implementation
101601	Bayou Cocodrie	Little Cross Bayou to Wild Cow Bayou	RED	
120103	Bayou Choctaw	Bayou Poydras confluence to Bayou Grosse Tete	TERREBONNE	
120104	Bayou Grosse Tete	Headwaters to ICWW near Wilbert Canal	TERREBONNE	Planning
120110	Bayou Cholpe	Headwaters to Bayou Choctaw	TERREBONNE	
120111	Bayou Maringouin	Headwaters to East Atchafalaya Basin levee	TERREBONNE	Planning
120302	Bayou Folse	Headwaters to Company Canal	TERREBONNE	USDA - Monitoring


LDEQ - NPS
2018 Priority Watersheds
Subsegment Impairment:
Fecal Coliform
Low DO
Low DO, TDS
Low DO, TDS, Turbidity
Low DO, Turbidity
TDS
TDS, Turbidity
Turbidity
TMDL Alternative
080401
081101
080904
080903
080203
080202
081609
101601
060208
060202
060201
070505
070501
060204
050301
050101
050304
050103
060301
060801
050603
050501
050401
060802
060910
060703
120104
120110
120103
120111
040503
040504
120302
0
50
100 Miles
N
Map date: 07/19/2019 LDEQ Map No.: 20190098