

Division of Environmental Assessment and Restoration



DIVISION OF ENVIRONMENTAL
ASSESSMENT AND RESTORATION
Florida Department of
Environmental Protection

Business Plan FY 2021-22
Version 22.0

Executive Summary

The **Division of Environmental Assessment and Restoration** (DEAR) is responsible for monitoring and assessing Florida's surface water and groundwater quality; identifying, verifying, and prioritizing pollution problems; developing strategies to resolve pollution problems; and partnering with local stakeholders to implement comprehensive restoration strategies. The department's laboratory is housed in DEAR and is integral to fulfilling the division's responsibilities and supporting other department programs and objectives. In summary, DEAR:

- Develops and adopts Florida's surface water quality standards;
- Monitors and reports on surface water and groundwater quality;
- Assesses rivers, lakes, estuaries, and springs to identify pollution problems;
- Adopts scientific water quality restoration targets, known as Total Maximum Daily Loads (TMDLs);
- Develops and implements Basin Management Action Plans (BMAPs) in concert with local stakeholders to achieve water quality restoration targets;
- Promotes stakeholder-driven reasonable assurance plans and other straight-to-implementation approaches;
- Provides the department and other resource agencies with the highest quality laboratory services available;
- Manages water quality data repositories and related geospatial data for storage and use by the department, other agencies, and the public; and
- Provides technical support to the department and the public regarding appropriate methods for water quality analysis and data quality assurance (QA).

The following programs work in concert to meet DEAR's responsibilities for assessment and restoration of Florida's water resources:

- Water Quality Monitoring;
- Water Quality Evaluation and TMDLs;
- Water Quality Restoration;
- Water Quality Standards;
- Watershed Services; and
- Chemistry, Biology, and Scientific Support Programs.

DEAR is budgeted at \$50.1 million in the state fiscal year (FY) 2021-22 General Appropriations Act, which reflects a continued significant increase in fixed capital outlay (FCO) TMDL funding. As a result, the division's FY 2021-22 budget is supported by trust funds (99.99 %) and general revenue (0.01 %). The budget funds 199 full-time equivalent (FTE) and 51 other personnel services (OPS) positions.

DEAR has established 28 milestone-based goals along with 16 performance-related targets for its programs to accomplish during FY 2021-22. All of the division's goals support one or more of the department's strategic goals and objectives, and all are critical to water quality restoration. The division holds itself accountable to:

- Update Florida's water quality standards to better protect human health and aquatic life;
- Complete or draft comprehensive water quality assessments for Florida's basins as part of its continuous assessment cycle;
- Report annually to the Florida Legislature and biennially to EPA on the status of Florida's water quality.
- Draft and propose water quality restoration targets as part of TMDLs or TMDL alternatives;
- Adopt and advance BMAPs to protect and restore impaired waters, and to implement special Legislative protections for South Florida waters and Outstanding Florida Springs;
- Add and refine cutting-edge laboratory techniques to analyze pollutants, assess environmental conditions, and identify pollutant sources, all while continuing to minimize costs and provide optimal support to department programs; and
- Successfully implement the division's comprehensive water quality database—offering training and support to data providers, enabling public access to water quality data, and planning for inclusion of continuous monitoring (CM) data.

DEAR has established an array of performance metrics to measure the progress of water quality restoration across Florida. These metrics include monitoring statewide water quality status and trends as well as the outcomes of DEAR's water quality assessment process. The division also tracks the adoption of site-specific TMDLs or TMDL alternatives to set restoration targets for those impaired waters that do not meet standards. Other metrics illustrate the expanding coverage of BMAPs and the water quality improvements associated with their implementation. Finally, the division measures the timeliness and quality of laboratory services critical to the department and our external clients.

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Mission, Vision, and Values

The fundamental **mission** of the Florida Department of Environmental Protection (DEP) is to protect, conserve, and manage the state's natural resources and enforce its environmental laws. The department's **vision** is to advance Florida's position as a world leader in protecting natural resources while growing the state's economy.

In pursuing its mission and vision, the department adheres to the following **values**:

- **Leadership.** Serve as an example of how to protect natural resources and economic vitality while adhering to the integrity of our shared vision.
- **Integrity.** Operate ethically, honorably, and respectfully.
- **Accountability.** Accept personal ownership for our actions and responsibilities.
- **Communication.** Operate transparently, sharing information frequently and honestly.
- **Innovation.** Seek innovative ways to improve operations and scientific achievements.
- **Service.** Serve Florida, its environment, the public, stakeholders, and each other.

DEP's executive leadership team has established five **strategic goals** to achieve the department's vision:

- **Coastal Resiliency.** Florida has the most advanced coastal resiliency program in the nation — our communities are prepared for sea-level rise; we have the most advanced coral management system; and our beaches flourish, protect local communities, and allow the public to experience the most iconic beaches in the world.
- **Everglades Restoration.** Florida has the largest and most successful restoration program on the planet to restore America's Everglades and its estuaries.
- **Prized Properties.** Florida is a national leader for conservation stewardship through strategic acquisitions and recreational networks.
- **Water Sustainability.** Florida has the most advanced water protection program in the nation. Quality — Florida is the best at preventing pollution from entering waters; Florida has the best tools to restore impacted waterways. Quantity — Florida has the best tools to ensure future water supply needs to sustain our communities and ecosystems.
- **OneDEP.** The department ensures solutions, resources, and ideas are shared to advance its mission to protect, conserve, and manage Florida's natural resources.

Water and natural resources are the foundation of Florida's communities, economy, and way of life. The department is committed to **achieve more, now** — to work together with all to protect, conserve, and restore Florida's waters. The division fully supports this effort and has established priorities, goals, and targets to achieve **cleaner water, faster**.

Client Services

The **Division of Environmental Assessment and Restoration** is charged with protecting, maintaining, and improving the quality of state waters for domestic, agricultural, industrial, recreational, and other beneficial uses, such as providing high-quality supplies of potable water and an environment conducive to the propagation of fish and wildlife.

In executing its responsibilities, DEAR serves three primary clients:

The Public. The public expects DEAR to use every resource at its disposal to safeguard the state's water resources. The public is entitled to responsiveness, respect, professional treatment, and reliable information. Services provided include:

- Easily accessible information on issues important to the public such as [algal bloom status updates](#); [reporting of new algal blooms](#); [impaired waters, TMDLs, and BMAPs](#); [springs restoration](#); watershed management ([Basin411](#)); and [water quality standards](#);
- Water quality data through the department's interactive water quality data portal and the division's [Watershed Information Network \(WIN\) data repository](#);
- [Interactive report cards](#) for the status and trend monitoring networks, which characterize the overall quality of Florida's waters;
- Periodic review and revision of the state's water quality standards as part of the Clean Water Act's triennial review process;
- Technical assistance to stakeholders on the development and implementation of site-specific alternative criteria (SSAC);
- Laboratory services, including information on sampling and analytical methods, laboratory analyses, QA protocols, data management strategies, and laboratory certification processes (all of which are available on the [DEP Laboratory's website](#), along with a directory of certified laboratories.)

Basin Stakeholders. DEAR has a responsibility to serve those affected by its decisions and actions, which are made and performed to protect and restore regional basins and watersheds. Stakeholders include local governments, businesses, industrial and agricultural interests, and local residents. Each individual basin has unique water quality problems that affect varied and often competing stakeholder interests. The demands for responsiveness, professional treatment, reliable information, responsible science, sound public policy, and a level playing field must be managed according to the unique circumstances that exist from basin to basin. Services provided include:

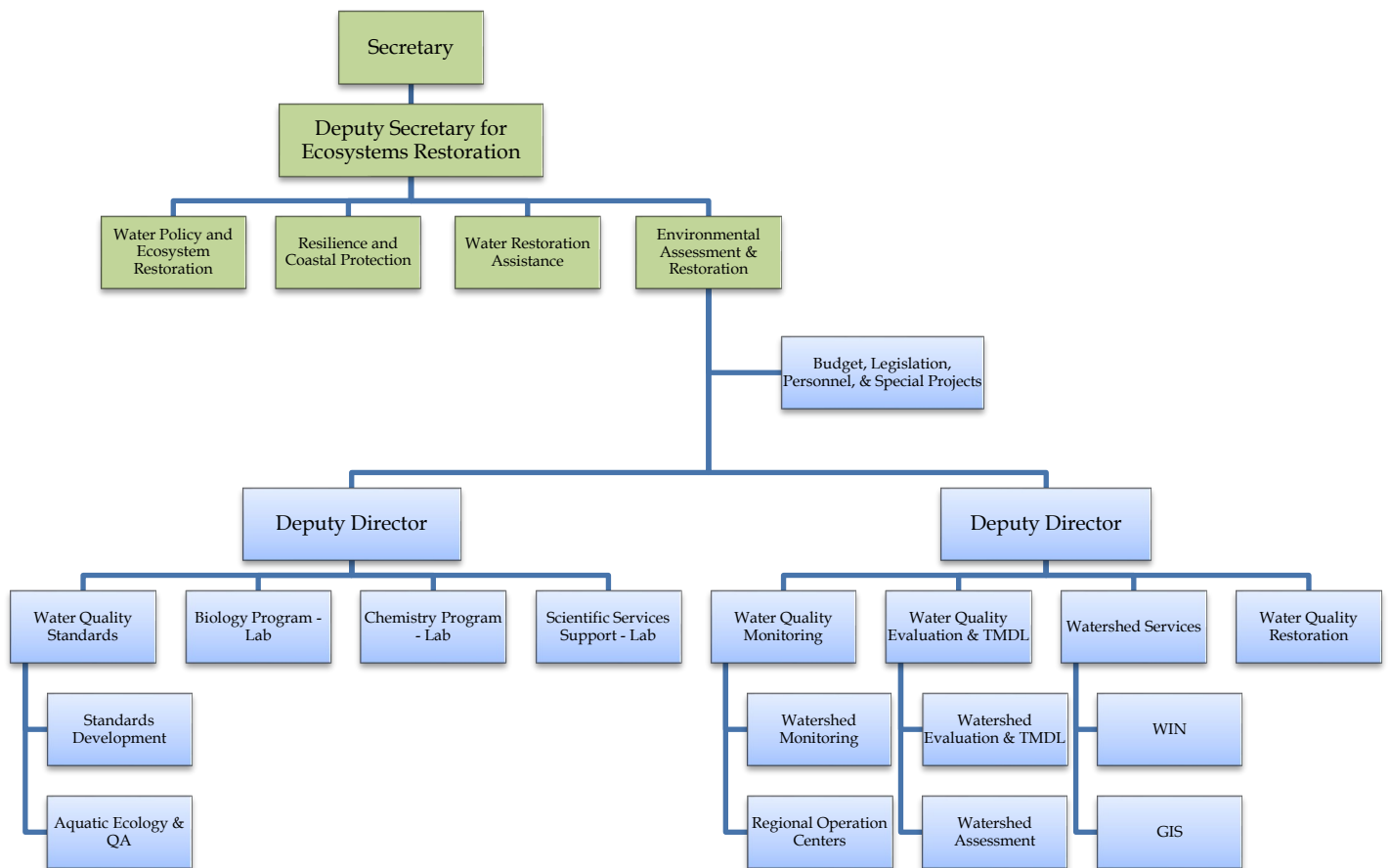
- Water quality data through [WIN](#) Reports & Extracts, the Storage and Retrieval (STORET) database application, and the STORET Public Access (SPA) website;
- Information on [impaired waters](#), including the assessment process, current and historical lists of impairment decisions, strategic monitoring plans, and data used in the assessment and listing processes;
- Draft and final [TMDL](#) documents and other related information detailing water quality restoration targets for impaired waterbodies;

- Review of water quality-based effluent limitations (WQBELs) and mixing zones for entities discharging wastewater to state surface waters;
- [Restoration](#) plans, notices, and documents, including an [annual statewide report](#) detailing the projects, actions, schedules, and costs associated with restoring impaired waterbodies;
- Technical assistance regarding [data QA](#)—including training on environmental sampling and data evaluation, maintenance of field [standard operating procedures](#) (SOPs), and approval of [alternative and modified methods](#)—so that data collected by basin stakeholders can be used by the department; and
- In coordination with the Division of Water Restoration Assistance, information on [financial assistance](#) for local governments and others to build water quality restoration projects and to implement management strategies in priority watersheds.

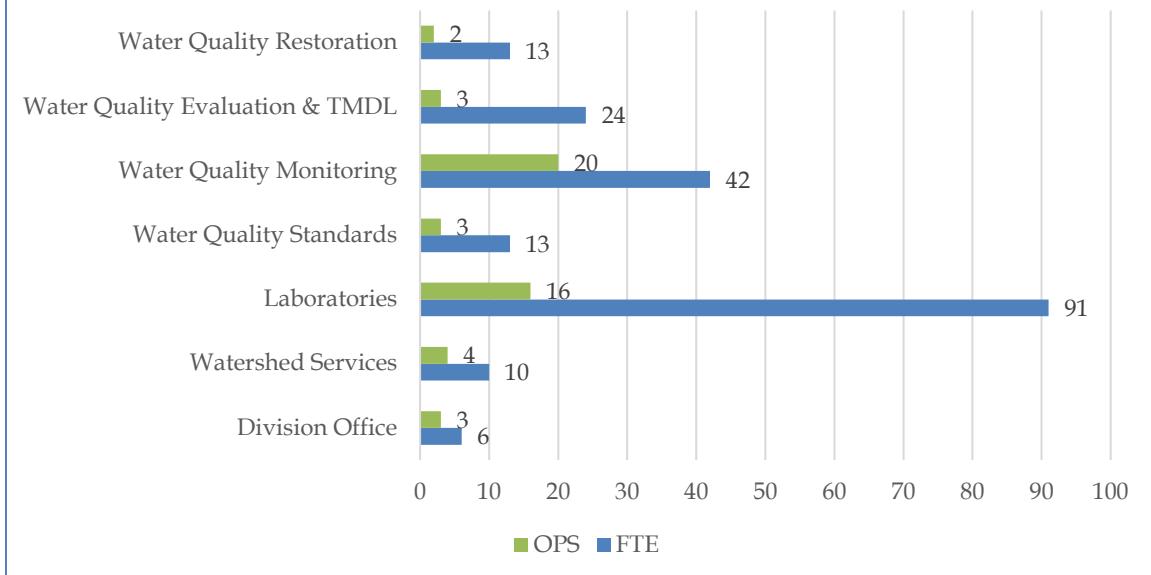
Public Officials. Whether in response to the Governor or Cabinet, members of the Florida Legislature, other state agencies, local governments, the U.S. Congress, or the U.S. Environmental Protection Agency (EPA), DEAR must respond promptly and professionally with reliable information and wise public policy recommendations based on high-quality science. Services provided include:

- Water quality data through [WIN](#) and [SPA](#);
- Laboratory services, including information on sampling and analytical methods, laboratory analyses, QA protocols, data management strategies, and laboratory certification processes;
- Water quality reports, including the biennial "[Integrated Water Quality Assessment for Florida](#)"; and
- Periodic reports to the Governor and Legislature on the status of activities the division undertakes to protect Florida's waters, including an annual statewide report detailing the projects, actions, schedules, and costs associated with restoring impaired waterbodies.

Organizational Structure



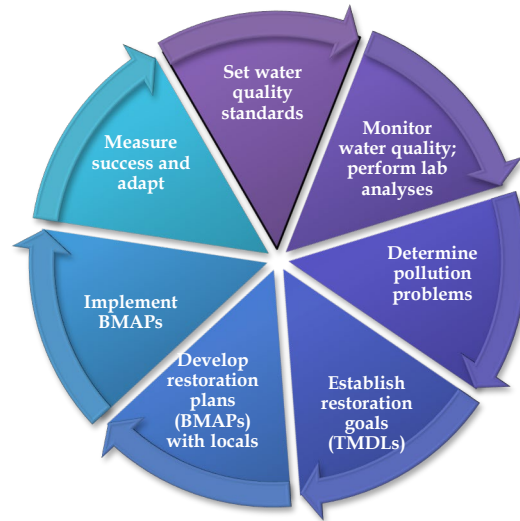
DEAR Staffing 2021-2022



Based on the 2021-22 General Appropriations Act, DEAR has 199 FTE and a budget that supports 51 OPS positions.

Program Descriptions

The watershed management cycle illustrates how DEAR's programs work together through a continuous, adaptive process of evaluation and management of Florida's water resources – building an increasingly sophisticated understanding of surface water and groundwater resources. It also illustrates how this understanding leads to meaningful actions focused on protecting and restoring the state's waters.



Water Quality Standards Program

- Develops, adopts, and updates Florida's water quality standards (i.e., criteria, classifications, antidegradation policy, and moderating provisions);
- Evaluates petitions for reclassifications, designation of Outstanding Florida Waters (OFW), and SSAC;
- Trains staff and outside parties on environmental sampling methods and provides technical support on the design of biological studies to petitioners for reclassification, OFW designation, and SSAC;
- Coordinates the department's bioassessment program through developing methods, providing training, and writing implementation guidance.
- Provides technical support for the review of Level I and II WQBELs;
- Conducts water quality and bioassessment studies to support water quality criteria development; and
- Manages the department's QA program, which includes assisting other programs with the implementation of the department's QA directive, reviewing alternative method requests, and coordinating the department's quality management plan.

Water Quality Monitoring Program

- Monitors statewide surface and groundwater quality through status and trend networks;
- Collects water quality data for site-specific assessments;
- In conjunction with the laboratory, responds to algal blooms, wastewater spills, and other events affecting water quality and public health, which require accurate sampling data and scientific assessment; and

- Collaborates with watershed partners to establish and maintain a monitoring coordination group (the [Florida Water Resources Monitoring Council](#)).

Water Quality Evaluation and TMDL Program

- Assesses water quality to determine those waters that are impaired (i.e., do not meet water quality standards) and those waters requiring additional data or further evaluation, including pollutant source tracking;
- Prioritizes development of TMDLs (water quality restoration targets);
- Evaluates and models pollutant inputs to impaired waterbodies from all sources;
- Develops and adopts by rule TMDL targets for impaired waterbodies, and establishes nutrient TMDLs as site-specific interpretations of the narrative nutrient criteria; and
- Coordinates with stakeholders to develop reasonable assurance plans and other pollution control mechanisms in lieu of TMDLs and BMAPs.

Water Quality Restoration Program

- Develops, adopts, and implements BMAPs (water quality restoration plans) for surface waters including freshwater springs;
- Conducts regular reviews of BMAP implementation progress; adaptively manages and updates BMAP requirements;
- Supports local water quality initiatives through collaboration and technical assistance;
- Reviews and promotes state-of-the-art best management practices to improve water quality; and
- Assists the Division of Water Restoration Assistance with reviewing and prioritizing water quality restoration projects.

Watershed Services Program

- Secures and manages non-regulatory water quality data for the state through the [WIN](#) and [Florida STORET](#) data repositories;
- Manages the analysis, design, construction, and implementation of the planned phases of WIN;
- Manages, edits, analyzes, and depicts geospatial data for use by DEAR, other divisions, and other agencies;
- Serves as Florida's steward of the U.S. Geological Survey ([USGS](#)) [National Hydrography Dataset \(NHD\)](#), updating the Florida portion of the geospatial dataset which provides hydrography data for surface waters across the country for purposes of mapping, modeling, and assessment processes and applications.
- Coordinates the division's data management initiatives; and
- Manages the searchable database of Florida monitoring activities ([Water-CAT](#)).

DEP Laboratory

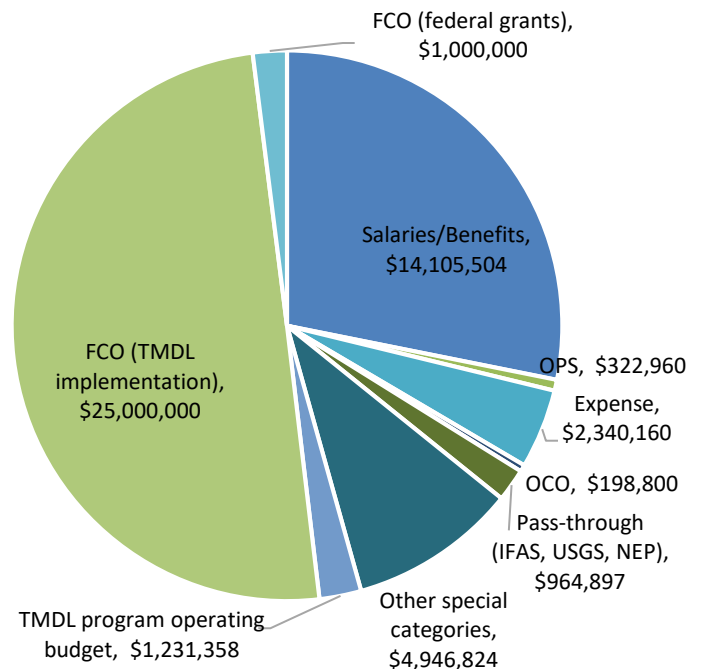
- Performs chemical and biological analyses for the department, water management districts (WMDs), and other state and federal agencies, including the U.S. Department of Homeland Security;
- Develops and validates analytical methods to support regulatory and resource management decisions and policy development;
- Performs scientific study design, technical document development and review, and statistical and narrative interpretation of environmental data;
- Performs field sampling for various department initiatives;
- In conjunction with the water quality monitoring program, provides accurate data analysis and scientific assessment of algal blooms, wastewater spills, and other events affecting water quality and public health; and
- Implements actions associated with the national Environmental Response Laboratory Network.

Budget Overview FY 2021-22

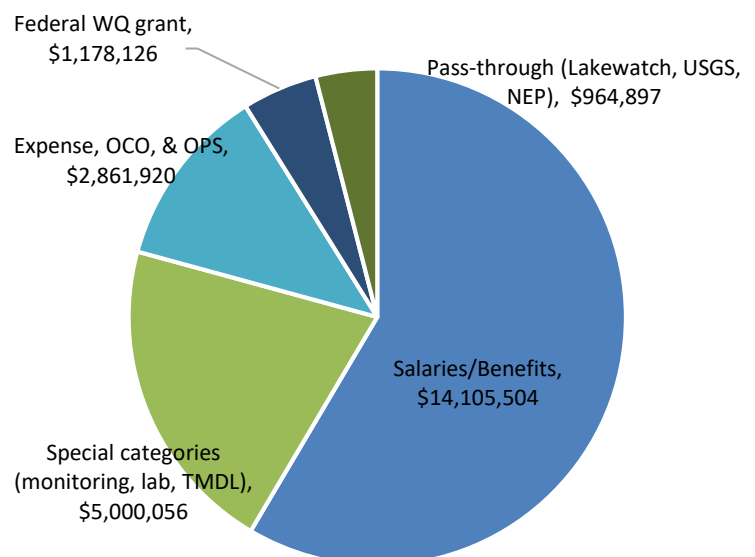
DEAR's operating budget varies from year to year. The operating budget for FY 2021-22 is similar to the last fiscal year. DEAR's total budget for 2021-22 includes Fixed Capital Outlay TMDL funding, appropriated from Land Acquisition Trust Fund. Approximately half the division's total budget comes from Land Acquisition Trust Fund for FY 2021-22.

- The total budget for DEAR is \$50.1 million.
- Salaries and benefits represent 28% of DEAR's total budget and 59% of the operating budget.
- DEAR's operating budget includes nearly \$1 million directly transferred to other entities.
- DEAR's operating budget also includes \$5 million in special category funds, much of which underwrites laboratory services to other divisions and outside entities.
- DEAR manages \$200 million in grant funding to restore impaired waters by monitoring and assessing water quality, setting scientific water quality restoration goals, and guiding the implementation of the projects and actions set forth in adopted Basin Management Action Plans.
- The budget comprises 52% FCO and 48% operating funds.
- 99.99% of DEAR's total budget comes from Trust Funds and 0.01% from General Revenue.

DEAR 2021-2022 Total Budget



DEAR 2021-2022 Operating Budget Appropriations



Division Objectives, Measures, and Key Performance Indicators

Division Objective—What is to be achieved or measured by this division goal?

Division Measure—What are the specific actions to be done to achieve the objective?

Key performance indicator (KPI)—What is the metric or indicator used to evaluate the success of the measure?

Target—What is the performance target for the KPI, and how frequently is progress measured against it—annually (A), quarterly (Q), or quarterly year-to-date (Q, YTD)?

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
Division					
DEAR1	Complete milestones from the division's business plan to further its mission of assessment and restoration	Business plan milestones met	Percent of milestones met	90% (Q, YTD)	Quarterly measure
DEAR2	Develop a DEAR Tracker dashboard	Develop design goals, create scoping documents, and establish project milestones for the DEAR Tracker dashboard	Timely completion	Milestone	10/31/2021
DEP Laboratory					
LABS1	Maintain 95% of sample analyses completed timely	Complete sample analyses per SOP	Percent of sample analyses completed timely	95% (Q)	Quarterly measure
LABS2	Maintain 95% of event reports completed timely	Prepare event reports per SOP	Percent of event reports transmitted	95% (Q)	Quarterly measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
LABS3	Minimize the costs associated with providing laboratory services to department programs	Conduct business analysis to determine which laboratory services are best procured from the private sector and which are best retained in-house; consider both the cost and the level of service needed to support program objectives; establish overflow services with private sector laboratories optimized for those analyses where there are cost savings to the department and where the level of service is appropriate to serve program objectives; document costs saved by establishing overflow services	Timely completion	Milestone	6/30/2022
LABS4	Expand services as necessary to provide optimal support to department programs	Expand and optimize in-house analytical capabilities and procure additional services through overflow contracts where that option is more cost-effective; document number of new or enhanced analyses available to customers	Timely completion	Milestone	6/30/2022
LABS5-1	Achieve an excellent level of performance on the annual customer satisfaction survey	Perform lab duties at an excellent level of service; send lab customers an annual satisfaction survey rating lab performance as excellent, good, or poor; achieve excellent or good ratings	Percent excellent or good ratings on customer survey	97% (A)	Annual measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
LABS5-2	Achieve an excellent level of performance on the annual customer satisfaction survey	Respond to requests for additional support by named customer satisfaction survey respondents	Timely completion	Milestone	6/30/2022
Water Quality Monitoring Program					
WQMP1	Implement the status and trend monitoring networks	Monitor, assess, and report on the water quality of water resources, meeting milestones outlined in the monitoring design document	Percent of monitoring completed	95% (Q)	Quarterly measure
WQMP2-1	Submit biennial Integrated Water Quality Assessment for Florida report	Coordinate with division programs to receive draft input from programs by 10/30/2021	Timely completion	Milestone	10/30/2021
WQMP2-2	Submit biennial Integrated Water Quality Assessment for Florida report	Submit the 2022 Integrated Report to EPA by 4/1/2022	Timely completion	Milestone	4/1/2022
WQMP3	Maintain bioassessment proficiencies appropriate for each regional operations center (ROC) through training, passing audits for certification, and online testing	Promote continuous education and training opportunities, with remedial action when needed	Percent of employees with 3 or more years of experience who have been trained	100% (A)	Annual measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WQMP4	Maintain proficiency and train employees in water quality sampling techniques through participation in the Water Quality Sampling Apprenticeship Program	Promote continuous education and training opportunities, with remedial action when needed	Percent of employees with 6 or more months of experience who have been trained	100% (A)	Annual measure
Water Quality Evaluation and TMDL Program					
WQETP1-1	Implement Statewide Biennial Assessment	Develop statewide draft assessment lists, complete draft lists for internal review, and have draft lists ready for posting.	Timely completion	Milestone	8/31/2021
WQETP1-2	Implement Statewide Biennial Assessment	Hold public meetings / webinars and finalize statewide assessment lists based on public comments.	Timely completion	Milestone	2/28/2022
WQETP1-3	Implement Statewide Biennial Assessment	Submit final adoption package to DEP Secretary for executive review and approval.	Timely completion	Milestone	4/29/2022
WQETP2	Plan and develop the strategic monitoring plans and track annual progress	Identify waterbodies to monitor to support impaired waters assessments and collect data necessary to meet data sufficiency requirements specified in the Impaired Waters Rule	Percent of monitoring completed (for the calendar year 2021)	Water quality samples: 80% completion; Bioassessment samples: 50% completion (A)	Annual measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WQETP3	Deliver data to EPA to meet CWA requirements	Maintain data management processes to upload impaired waters assessment information to the EPA ATTAINS system	Timely completion	Milestone	3/31/2022
WQETP4-1	Develop TMDLs, write TMDL not needed documents, set restoration targets, or provide support for alternative restoration plans	Present Notice of Proposed Rule packages to Secretary; consistent with implementing the current "long-term vision" priority plan or provide a briefing on the final status of TMDL alternatives; or document TMDLs not needed	Timely Completion	Milestone	6/30/2022
WQETP4-2	Develop TMDLs, write TMDL not needed documents, set restoration targets, or provide support for alternative restoration plans	Develop TMDLs or other restoration approaches for copper impairments in South Florida	Timely Completion	Milestone	6/30/2022
WQETP5	Develop a pilot bacteria TMDL	Develop a draft TMDL report and hold a public meeting for a pilot TMDL for Bacteria impairments following the new TMDL approach developed in the previous business plan goal	Timely completion	Milestone	3/31/2022
WQETP6	Long-term TMDL prioritization, including identification and consideration of potential 4b and 4e.	Develop and finalize the long term TMDL Prioritization, which includes environmental justice consideration as well as Alternative Restoration Plans as Reasonable Assurance Plans (category 4b) and documentation in support of 4e assessment determination	Timely completion	Milestone	6/30/2022

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
Water Quality Restoration Program					
WQRP1-1	Update basin management action plans (BMAPs)	Draft an outreach and engagement schedule that outlines a plan for staff efforts to meet with BMAP stakeholders and present draft interim milestones associated with 2025 deadlines; keep the division office informed of progress through routine updates	Timely Completion	Milestone	9/20/2021
WQRP1-2	Update basin management action plans (BMAPs)	Determine areas for updates and revisions to the BMAPs, and develop draft BMAP language	Timely Completion	Milestone	6/30/2022
WQRP2	Revise reporting and outreach tools	Support design and development of a portal for collection of BMAP project data; specifically, develop and implement pilot reporting platform and test using a subset of BMAP stakeholders for the 2021 data collection effort	Timely Completion	Milestone	3/31/2022
WQRP3	Investigate options to reduce nutrients from non-agricultural nonpoint sources	Identify non-agricultural nonpoint areas in BMAPs; investigate nutrient impacts to surface and groundwater and develop an approach to mitigate impacts; specifically, complete the analysis of optional approaches and lead division's effort to select the most appropriate path; document rationale; archive references	Timely Completion	Milestone	9/30/2021

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WQRP4	FSESCI reporting	Complete a summary report on previous training and auditing efforts for the Florida Stormwater, Erosion, and Sedimentation Control Inspector (FSESCI) Qualification Program. Include total individuals trained, the number of training events, audit information, and other pertinent information.	Timely completion	Milestone	6/30/2022
WQRP5	Develop BMAP program online resource tool	Expand the IRL internal online resource tool to all BMAPs to aid in the development and implementation of BMAPs	Timely completion	Milestone	12/31/2021
Water Quality Standards Program					
WQSP1	Complete Triennial Review rulemaking	Prepare Notice of Proposed Rule and supporting information, including a statement of estimated regulatory cost (SERC), brief Secretary on the rulemaking package, and present TR to the ERC	Timely completion	Milestone	12/31/2021
WQSP2	Review WQBELs, stream exclusion "petitions," mixing zone submittals, and submittals demonstrating attainment of the stream numeric nutrient standard	Coordinate with applicant and district; provide review comments within 3 weeks of submittal from district or permit applicant, unless additional time is specifically agreed upon by division management	Percent of submittals that are timely reviewed	90% (A)	Annual measure
WQSP3	Review SSAC and Variance Submittals	Coordinate with applicant and district; provide review comments within 6 weeks of submittal from district or permit applicant	Percent of submittals that are timely reviewed	90% (A)	Annual measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WQSP4-1	Timely conduct lab and field audits in response to program requests, and provide bioassessment proficiency audits as required under SOPs	Coordinate with the entity to be audited, conduct audits, and provide preliminary audit reports within 3 months of audit and receipt of audited records	Percent of preliminary audit reports prepared timely	90% (A)	Annual measure
WQSP4-2	Timely conduct lab and field audits in response to program requests, and provide bioassessment proficiency audits as required under SOPs	Work with audited parties on corrective actions, and prepare final audit report within 3 months of complete response from the audited party	Percent of final audit reports prepared timely	90% (A)	Annual measure
WQSP4-3	Timely conduct lab and field audits in response to program requests, and provide bioassessment proficiency audits as required under SOPs	Conduct 5 or more audits per year	Number of audits performed	5 (A)	Annual measure
WQSP5	Provide QA training to department staff and stakeholders	Conduct 6 or more training events on statewide SOPs, surface and groundwater sampling methods, bioassessment methods; and other QA topics	Number of training events conducted	6 (A)	Annual measure

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WQSP6	Assess the implementation of the department's QA directive (DEP 972)	Survey department QA officers on the status and quality of their program's QA activities; work with department programs to document and improve their quality systems, and draft annual QA report and submit it to the Division Director	Timely completion	Milestone	5/31/2022
WQSP7	Initiate Lake Vegetation Index (LVI) analysis work	Continue to meet schedule for contract deliverables to refine LVI assessment regions and potential lake classes, explore additional metrics and environmental drivers, and develop LVI Stressor ID process	Timely completion of project tasks as laid out in the contract	Milestone	6/30/2022
WQSP8	Maintain Bioassessment Proficiency Program	Offer audit opportunities for first-time SCI samplers 4 times/year, establish new HA testing sites, and respond to requests for SCI refresher audits, HA testing, and online test-taking.	Number of first-time SCI audit opportunities	4 (A)	Annual Measure
Watershed Services Program					
WSP1-1	Improve the Florida NHD	Edit and provide the latest edited NHD layer to OTIS for uploading to the Spatial Data Engine (ArcSDE) library (Fall update)	Timely completion	Milestone	11/15/2021
WSP1-2	Improve the Florida NHD	Edit and provide the latest edited NHD layer to OTIS for uploading to the Spatial Data Engine (ArcSDE) library (Spring update)	Timely completion	Milestone	5/16/2022

Goal Number	Division Objective	Division Measure	Key Performance Indicator (KPI)	Target	Due Date
WSP2	Improve the Florida Land Use Land Cover (LULC) spatial data	Complete 80% of editing the LULC layer for Suwannee River Water Management District.	Timely completion	Milestone	6/30/2022
WSP3	Manage the Watershed Information Network (WIN) Phase 1	Provide quarterly updates to DEAR Program Administrators on WIN Management status of data providers	Timely Completion	Quarterly	7/30/2021 10/29/2021 1/28/2022 4/29/2022
WSP4	Provide ambient water quality data to EPA	Transmit ambient water quality data from WIN and SBIO to the EPA Water Quality Exchange (WQX) data repository in fulfillment of 106 grant funding requirements; submit a status report to EPA	Timely completion	Milestone	3/31/2022
WSP5	Manage WIN Continuous Monitoring (CM) analysis and design	Coordinate within DEAR on additional CM analysis relevant to WIN CM Part 2. Provide a summary of outputs of the analysis	Timely completion	Milestone	2/28/2022
WSP6	Manage WIN CM design and construction	Develop and submit an IT project request to OTIS for support of the design and construction project.	Timely completion	Milestone	3/31/2022
WSP7	Implement division data management priorities	Implement FY21/22 additional division data management priorities as established through DEAR data management strategy activities	Timely completion	Milestone	6/30/2022

Mid- and Long-term Goals

The goals and objectives tables above contain the mid-and long-term goals from prior business plans that are now actionable items for the division in FY 2021-22. Some goals cross DEAR programs, but they are listed under the presumed primary or lead program.

Mid-term Goals (two to three years out)

Division Director's Office

- Develop a formal mentoring program to build leadership capacity and capture programmatic knowledge

Water Quality Monitoring Program

- Fully integrate sampling programs within DEAR, including strategic monitoring plans, status and trends networks, BMAP, TMDL, springs, reference site sampling, and other special projects.
- Phase-out legacy multiparameter water quality meters and replace them with updated models to collect data for status and trends monitoring, Impaired Waters Rule assessments, BMAPs, and other special projects.
- Research potential alternatives to using Trimble units for status network station location and develop a succession plan for use of different technology if an alternative is found.
- Take what we have learned from coordination between lab and samplers to improve the process for sampling teams to notify lab of sample numbers, with a process that would be easy for sampling teams. Possible LIMS enhancement or better use of the current features in LIMS.
- Expand the sampling projects for which tablets can be used for field data collection, and for which monitoring event information will be displayed on the DEAR Monitoring Events webpage.
- Establish QA expectations and data use framework for water quality probe data, including Continuous Monitoring applications, in coordination with the Water Quality Standards Program and the Florida Water Resource Monitoring Council.
- Develop strategies that could be used to assess estuaries for 305(b) reporting and include estuaries in the 2024 Integrated Report.

Water Quality Evaluation & TMDL Program

- Develop strategies and approaches to derive stream nutrient TMDLs, including H1.
- Track, participate in, and influence the national conversation regarding the next long-term work plans (for 2023 and beyond).
- Evaluate alternatives to the current Impaired Waters Rule Assessment Database, currently a Microsoft Access database, including any necessary revisions to data management procedures and output applications that use the assessment information.

Water Quality Restoration Program

- Integrate Bacteria TMDL approach with revised restoration approaches for bacteria impaired waters and implement a streamlined approach to restoring bacteria-impaired waters, adopting rules if necessary.
- Develop and implement a Golf Course Recognition Program.
- Develop voluntary “protection plans” templates for unimpaired areas.

Watershed Services Program

- Construct and implement the approved design for a Continuous Monitoring data system for WIN (WIN CM).
- Redesign WIN search and list screens as a proactive measure to enhance performance as the repository grows.
- Redesign WIN translations process to correct flawed assumptions made during initial analysis and design, streamline the process, and improve performance.
- Undertake an expanded data cleanup identification and resolution process to ensure data quality adheres to WIN minimum data quality standards following removal of autonomous transactions.
- Participate in the OTIS-mandated cloud migration of applications, which includes WIN.
- Evaluate and adapt WIN management with stakeholders relative to any changes made to DEAR business processes (e.g., relative to WIN CM).

- Initiate analysis for bringing biological data to WIN (WIN Phase 3).
- Re-examine and refine or re-design Project Intended Use in WIN.
- Scope and subsequently implement solutions for use of tiered data

Water Quality Standards Program

- Ensure science review for contracts and grants to make sure these agreements have QA requirements as well as a review of study design and deliverables.
- Evaluate options for an OFW "managed areas" update to address name changes to parks, aquatic preserves, and other managed areas; new acquisitions not currently covered under the OFW rule; and, limitations of the current GIS data layer.
- Improve implementation and quality system for bioassessment methods.
- Revise/add methods to DEP SOPs that are incorporated by reference to update existing SOPs (as needed) and to add new SOPs for new methods/procedures or new equipment, like continuous monitoring equipment.
- Develop a recommendation to revise the freshwater specific conductance criterion. The recommendation will consider EPA's draft methodology for developing specific conductance criteria, use Florida's stream condition index data, and will be regionally specific. The analysis supporting the recommendation will include an evaluation of how waterbody type affects the biological response to specific conductance.
- Improve implementation and quality system for bioassessment methods – update the SCI Primer to include guidance for sampling small and large systems, conduct stressor identification analyses for aquatic macroinvertebrates and plants, and modify the implementation of the Lake Vegetation Index if warranted by data analysis.
- Work with EPA to develop conceptual models and candidate assessment endpoints relating nutrient enrichment effects to biological responses in tidal creeks, which may be used to develop numeric nutrient criteria for Florida's tidal creeks.
- Derive and adopt into rule revised human health-based criteria based on the best available fish consumption data for Florida and the latest scientific information on bioaccumulation factors and toxicity.

- Continue working with offices throughout the department to ensure that all programs that generate or use environmental data have documented and active procedures for quality control and review of those data. Establish clear and useful metrics for the annual QA report to the Secretary.
- Develop policy and provide guidance on the use of field measurement probes that are not currently approved by DEP SOPs for use in ambient water assessments.

Chemistry Program

- Continue to update methods and instrumentation to improve the range of services, accuracy and sensitivity of results, and cost-efficiency.
- Develop strategies to stabilize staffing.

Biology Program

- Continue to update methods and instrumentation to improve the range of services, accuracy and sensitivity of results, and cost-efficiency.
- Develop strategies to stabilize staffing.
- Develop biovolume calculations for taxonomic phytoplankton data.
- Complete Microbiological Hold Time Study to evaluate the feasibility of increasing the current 8-hour holding time from collection to incubation for *Escherichia coli* bacteria samples analyzed using the Quanti-Tray method.

Scientific Support Services Program

- Maintain and, where possible, improve laboratory infrastructure in coordination with the Department of Management Services. Identify funding sources for individual projects and utilize DMS monies if available. Mid-Term projects include:
 - Electrical Switchgear and BAS (\$700,000 - \$1,000,000)
 - Labs Bridge Walkway Enclosure (\$600,000)

- Mechanical Chaseway Design Project (\$1.5 - \$2 M)
- ADA Bathroom Construction (includes DEAR in BMC) (\$1.4 M)
- Upgrade of KVA/UPS system (\$18,000)
- Upgrade of exhaust fans in Lab C214 (\$55,000)
- Upgrade of halon fire suppression system - 3rd-floor labs (\$130,000)

Long-term Goals (four to five years out)

Water Quality Evaluation & TMDL Program

- Develop an assessment methodology for narrative nutrient standard, so that we can have a consistent method to place chlorophyll *a* into category 2 with or without a bioassessment.
- Coordinate with WQSP to identify Class IV waters and then assess these waters where appropriate.
- Develop data handling processes and computational approaches to assess continuous monitoring data under the IWR.

Water Quality Restoration Program

- Implement onsite sewage treatment and disposal system (OSTDS) remediation plans for areas around the state's impaired Outstanding Florida Springs. Conduct 5-year evaluations of springs BMAPs, update OSTDS remediation plans, and identify additional management strategies and restoration projects where needed.
- Update all BMAPs to include remediation plans for OSTDS and domestic wastewater treatment facilities.

Watershed Services Program

- Initiate analysis of the merits and approach for consolidating GWIS with WIN.
- Evaluate the scope of DEAR data uses vs. data loading to WIN; determine if there are additional non-regulatory data DEAR desires to have in WIN.

- Explore/develop a LIMS to WIN primary key linkage to assist DEAR data searches between the two.

Water Quality Standards Program

- Evaluate potential biological metrics or indices for use in the assessment of marine and estuarine waters. The first metrics under review will be transparency targets intended to serve as the basis for revised transparency criteria in predominately marine waters.
- Provide increased QA support services, including a 5-year rotation for quality of science reviews.

Chemistry Program

- Implement strategies to stabilize staffing.
- Periodically review scientific literature to determine potential future chemical analysis needs of DEP Programs.

Biology Program

- Implement strategies to stabilize staffing.
- Periodically review scientific literature to determine potential future biological analysis needs of DEP Programs.

Scientific Support Services Program

- Maintain and where possible, improve laboratory infrastructure in coordination with the Department of Management Services (DMS). Identify funding sources for individual projects and utilize DMS monies if available. Long-Term projects include:
- Window and Door Replacement (\$440,000)

Successes, Achievements, and Improvements

- The staff of the WSP WIN section completed the removal of duplicate records between STORET and WIN. This work completed a multi-year process and effort to identify and remove duplication caused when data loaders unintentionally loaded to WIN data they had previously loaded to STORET. This data repositories cleanup is one of many management steps DEAR undertakes to ensure the best quality and context of data are available for use by DEAR, DEP, and the public.
- The WIN CM analysis and design project was initiated, garnering valuable information from key stakeholders. DEAR staff and the project contractor held a series of joint requirements planning sessions and workshops with all DEAR programs, the Office of Resilience and Coastal Protection (RCP), and the WMDs to learn about their CM data collection efforts, sources, storage and uses. The project was undertaken to provide information for the design of a WIN CM system to provide centralized access to CM data with appropriate QA context.
- Through the determined efforts of WIN Coordinators, data providers, and others in DEAR (e.g., WQSP, WQETP, WQRP), WIN gained 9 new data providers this year, and successfully transitioned the following 5 data providers (they began data loading):
 - City of Kissimmee
 - City of Plant City
 - Florida Fish and Wildlife Conservation Commission
 - Florida Keys National Marine Sanctuary
 - Manatee County Parks and Natural Resources Department
- WQMP coordinated with the chair of the Florida Water Resource Monitoring Council to launch a CM workgroup. Members of the workgroup span a range of organizations collecting CM data in the state. Participants to the workgroup within the department include WQMP, WSP, WQSP, and WQETP staff from DEAR and staff from RCP. The CM Workgroup is addressing common issues related to quality assurance, applicability, use, and management of CM data by agencies collecting CM data across the state.
- WQETP coordinated the development and acceptance of 17 4e alternative restoration determinations for 17 waterbodies. These included 7 pollutant reduction plans and 10 bacteria pollution control plans. At least four additional pollutant reduction plans are expected to be accepted in 2021.
- Watershed Assessment Section staff (WQETP) successfully uploaded the G2C2 – G1C3 assessments to the EPA’s ATTAINS national assessment database and EPA accepted the ATTAINS assessment data. Significant progress on the submittal of Groups 2, 3, and 4 was also made.

- The Watershed Assessment Section staff (WQETP) developed a Communications Plan for the new Biennial Assessment of surface waters and successfully conducted public outreach workshops on February 25, 2021, and March 4, 2021.
- The Watershed Assessment Section (WQETP) and Nonpoint Source Section (Division of Water Restoration Assistance) submitted two water quality Florida Success Stories to the EPA Grants Reporting and Tracking System (GRTS). Project funding in these watersheds included NPS 319(h) funds, among other funding sources, and are located in the Alligator Creek and Clam Bayou watersheds. These success stories are published on EPA's [How's My Waterway website](#).
- The TMDL Section (WQETP) developed a new benchmark target-setting process to support TMDL alternatives, BMAPs, and other restoration activities. They also completed Water Quality Benchmark Documents for Lakes Fran, Kozart, Richmond, Walker, Bass, Davis, Wade, Weldon, and Bumby (Kissimmee River Basin).
- The WQETP developed procedures/protocols to simplify and expedite the development of TMDLs for many lakes by applying the generally applicable nutrient criteria rather than requiring the lengthy process of developing site-specific targets and NNC.
- DEAR staff developed a process map for the development of statewide consolidated bacteria TMDLs, which the WQETP used to develop a TMDL development process steps document (i.e., playbook).

Appendix A – Acronym List

— A	Annual
— ATTAINS	Assessment, TMDL Tracking and Implementation System
— BMAP	Basin management action plan
— BMP	Best management practice
— CM	Continuous Monitoring
— DEAR	Division of Environmental Assessment and Restoration
— DEP	Florida Department of Environmental Protection
— EPA	U.S. Environmental Protection Agency
— FCO	Fixed capital outlay
— FTE	Full-time equivalent
— FY	State fiscal year (July 1 through June 30)
— GIS	Geographic information system
— KPI	Key performance indicator
— LIMS	Laboratory Information Management System
— LULC	Land use/land cover
— NHD	National Hydrography Dataset
— OFW	Outstanding Florida Water
— OPS	Other personnel services
— OSTDS	Onsite sewage treatment and disposal system
— OTIS	Office of Technology and Information Systems
— Q	Quarterly
— Q1	Quarter 1, state fiscal year (July through September)
— Q2	Quarter 2, state fiscal year (October through December)
— Q3	Quarter 3, state fiscal year (January through March)
— Q4	Quarter 4, state fiscal year (April through June)
— QA	Quality assurance
— RCP	Office of Resilience and Coastal Protection
— SBIO	Statewide biological database

— SCI	Stream characterization index
— SERC	Statement of estimated regulatory cost
— SOP	Standard operating procedure
— SPA	STORET public access
— SSAC	Site-specific alternative criteria
— STAR	Statewide annual report
— STORET	Storage and Retrieval database
— TMDL	Total maximum daily load
— USGS	U.S. Geological Survey
— WBID	Waterbody Identification (number)
— WIN	Watershed Information Network
— WMD	Water Management District
— WQMP	Water Quality Monitoring Program
— WQBEL	Water quality based effluent limitation
— WQETP	Water Quality Evaluation and TMDL Program
— WQRP	Water Quality Restoration Program
— WQSP	Water Quality Standards Program
— WSP	Watershed Services Program
— WQX	Water Quality Exchange
— YTD	Year-to-date

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