

Ref #	Indicator	Metric(s) Monitored	Location (RECOVER Regions and/or Other Areas)	Description of Monitoring	Monitoring Objectives
47	Exotic Fauna	Species Richness	All RECOVER Modules	Opportunistic observations of nonnative wildlife.	The FWC (via FWC staff observations and the public observations via the Exotic Species Hotline) on collaboration with the University of Georgia's EddMAPs (IveGot1 application) record opportunistic observations of nonnative wildlife throughout the state of Florida. Both entities share data.
398	Exotic Flora		NE and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
704	Fish	Other - Movement, health metrics	NE	Fish in the Northern Estuaries Monitoring	Link freshwater inflow to fish distribution, abundance and health in the St. Lucie Estuary.
74	Fish	Species Abundance	NE	Large-bodied fish communities are monitored using a 183-m haul seine	The measurable objective of this project is to monitor large-bodied fishes (e.g., common snook, sheepshead, mojarra, pinfish) in the St. Lucie River Estuary and southern Indian River Lagoon.
75	Fish	Species Abundance	NE	Small-bodied fish communities are monitoring using a 21.3-m seine	The measurable objective of this project is to monitor juvenile common snook abundance in the St. Lucie and Loxahatchee rivers. All species collected in seines are worked up and available for analyses associated with species composition, diversity, and richness.

76	Fish	Species Abundance	NE	Smalltooth sawfish abundance, movement, and distribution are monitored in the Caloosahatchee and St. Lucie estuaries	The measurable objective of this project is to monitor changes in smalltooth sawfish distribution and movements (determined from acoustic tagging) and abundance in the Caloosahatchee River Estuary, St. Lucie River Estuary, and southern Indian River Lagoon.
56	Fish	Body Condition	NE	Sport fish (e.g., sheepshead and common snook) movements and health are monitored in the St. Lucie River Estuary	The measurable objective of this project is to monitor changes in sport fish distribution (determined from acoustic tagging) and health (e.g., body condition, physiological biomarkers) resulting from restoration.
256	Fish - Smalltooth Sawfish	Species Abundance - Survey includes point measurements of water quality and habitat parameters at each sample site. All individual sawfish are assessed for health condition.	NE (Surveys conducted in the Caloosahatchee River Estuary and St. Lucie River Estuary)	Long-term smalltooth sawfish monitoring surveys in the northern estuaries	Tracking population abundance of an endangered species in response to management decisions aimed at restoring the population. Ontogenetic habitat shifts
705	Macroinvertebrates	Other - Density; Size	NE	CRE MFL Clam Monitoring	Link freshwater inflow to clam distribution, abundance and size class distribution in the Caloosahatchee River Estuary.

83	Other - Algal Blooms	Other		<p>The Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute (FWRI) harmful algal bloom (HAB) database documents <i>Karenia brevis</i> blooms, also called red tides, from 1953 to the present – one of the longest records of red tide data. The database contains more than 200,000 records from samples provided by more than 190 state and county agencies, private research institutions, universities, and FWC staff. Data include location coordinates, cell counts of <i>Karenia brevis</i> and other HAB species, and a variety of water quality measurements such as temperature, salinity and dissolved oxygen. The database is updated daily and data are routinely provided to FWC scientists, other researchers, resource managers, and the public.</p>	
404	Other - Depth	Depth	<p>All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.</p>	<p>Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).</p>	<p>Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.</p>
409	Other - Dissolved Oxygen	Dissolved Oxygen	<p>All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.</p>	<p>Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).</p>	<p>Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.</p>

262	Other - eDNA Biodiversity	Species Diversity - chlorophyll a; nutrients; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms
687	Other - elevation in treatment areas	Other - elevation	NE - TCSTA Cell 1; LRSTA Phase I; NSSTA	topographical surveys in NSTAs	verify elevation changes over time in STAs online for over 5 years
311	Other - Infauna	Other - Benthic infauna abundance and richness, sediment composition, water quality (surface and bottom water DO, pH, water temperature, turbidity), and salinity	NE	Benthic infaunal sampling is performed quarterly at 15 fixed sites in the ST. Lucie River, St. Lucie Estuary, and Indian River Lagoon to understand changes in salinity regimes, sediment composition, and water quality.	<ol style="list-style-type: none"> <li>1. Evaluate the present health status of the St. Lucie Estuary and southern Indian River Lagoon as baseline data</li> <li>2. record and follow long-term changes in these ecosystems</li> <li>3. attribute causative factors to observed changes (e.g. freshwater runoff/release, natural successions and oscillations, climate change)</li> <li>4. pinpoint and evaluate anthropogenic disturbances</li> <li>5. provide reference data for possible intensive, short-term monitoring programs and other research efforts in the IRL-SLE; and</li> <li>6. evaluate the efficacy of using the M-AMNI health index and calculate values, where possible, to evaluate temporal changes at each site.</li> </ol>
416	Other - Nutrients	Nutrients	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	<p>Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments.</p> <p>Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.</p>

423	Other - Percent Cover	Percent Cover	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
429	Other - Phosphorus	Phosphorus	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
183	Other - porewater	Other - hydrogen sulfide	NE	St. Lucie Estuary Seagrass Restoration Project, analyzing water quality, pore water and seed bank	Objective it to determine the specific preconditions that enable successful seagrass restoration within the specific area of the St. Lucie Estuary. The pilot project will conduct in situ data collection from 4 sites representing 2-40 acres.
236	Other - Sea turtles	Nest Success	NE	Since 1989, the Index Nesting Beach Survey (INBS) has been carried out on a subset of SNBS beaches with the purpose of measuring trends in the number of nests. The index survey uses standardized data-collection criteria including consistent effort by location, fixed dates, and specialized annual training of beach surveyors. As of 2016, 36 beaches participate to the INBS program, representing 275 miles of coastline.	Managers use the results to evaluate and minimize the effects of human activities (e.g., coastal construction, beach renourishment, and recreation) on turtles and their nests and identify important areas for enhanced protection or land acquisition.

237	Other - Sea turtles	Nest Success	NE	The Statewide Nesting Beach Survey (SNBS) program was initiated in 1979 under a cooperative agreement between the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service. Its purpose is to document the total distribution, seasonality and abundance of sea turtle nesting in Florida. Approximately 215 beaches are surveyed annually, representing about 825 miles.	Managers use the results to evaluate and minimize the effects of human activities (e.g., coastal construction, beach renourishment, and recreation) on turtles and their nests and identify important areas for enhanced protection or land acquisition.
685	Other - sediment	Other - pH; loss on ignition (LOI, ash); bulk density; 1N HCl-extractable metals (Fe, Al, Ca and Mg); 1N total inorganic P; water extractable P; total phosphorus (TP, ignition method); 1N KCL extractable nitrate/nitrite N (NOx); 1N extractable ammonia/ammonium N (TAN) ; total nitrogen	NE - LRSTA Phase II, TMC	Baseline soil sampling in NSTAs	Obtain baseline nutrient and other data to compare changes in the STAs over time of operation and allow comparison of soils and WQ
184	Other - sediment	Other - seed bank	NE	St. Lucie Estuary Seagrass Restoration Project, analyzing water quality, pore water and seed bank	Objective it to determine the specific preconditions that enable successful seagrass restoration within the specific area of the St. Lucie Estuary. The pilot project will conduct in situ data collection from 4 sites representing 2-40 acres.
436	Other - Species Abundance	Species Abundance	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.

443	Other - Species Diversity	Species Diversity	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
242	Other - Surface Elevation Change	Other - Surface Elevation Change, Tree Density, DBH	NE - J.N. Ding Darling NWR	Monitor Surface Elevation Change with rSETs to evaluate impacts from rising sea levels in mangrove wetlands.	Monitor changes in mangrove wetland elevation related to rising sea levels
449	Other - Temperature	Temperature	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
694	Other - zooplankton	Species Abundance	NE	Zooplankton abundance and community structure in the Caloosahatchee River Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.
695	Other - zooplankton	Species Diversity	NE	Zooplankton abundance and community structure in the Caloosahatchee River Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.
696	Other - zooplankton	Species Richness	NE	Zooplankton abundance and community structure in the Caloosahatchee River Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.

691	Other - zooplankton	Species Abundance	NE	Zooplankton abundance and community structure in the St. Lucie Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.
692	Other - zooplankton	Species Diversity	NE	Zooplankton abundance and community structure in the St. Lucie Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.
693	Other - zooplankton	Species Richness	NE	Zooplankton abundance and community structure in the St. Lucie Estuary	Link freshwater inflow to zooplankton community composition and abundance within the Caloosahatchee River Estuary. Zooplankton are an important food source for fish.
159	Oysters	Species Abundance - Growth, reproduction, settlement	NE	Oyster community is monitored at fixed sample locations monthly	The measurable objective of this project is to monitor changes in oyster abundance and health in the Caloosahatchee River Estuary, St. Lucie River Estuary, Loxahatchee River and Lake Worth Lagoon.
702	Oysters	Other - Density; Size; Recruitment; Disease	NE	Oyster Monitoring in the Northern Estuaries	Link freshwater inflow to oyster distribution, abundance and health within the St. Lucie, Loxahatchee, and Caloosahatchee River estuaries.
270	Phytoplankton	Density - chlorophyll a; nutrients; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms
456	Phytoplankton	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.



688	Phytoplankton	Other - concentrations/link to satellite data	NE	Water quality monitoring of the northern estuaries to link freshwater inflow impacts to changes in water quality including algal blooms	Understand how freshwater inflow impacts estuarine structure and function linking nutrients to algal blooms and estuarine productivity
699	Salinity	Other - concentration	NE	Loxahatchee Groundwater and surface water monitoring	Monitor groundwater and surface water depth and salinity to detect impact of salt water intrusion into freshwater swamps
462	Salinity	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
689	Salinity	Other - concentration	NE	Water quality monitoring of the northern estuaries to link freshwater inflow impacts to changes in water quality including algal blooms	Understand how freshwater inflow impacts estuarine structure and function linking nutrients to algal blooms and estuarine productivity
703	SAV	Other - Percent Cover; Acreage	NE	Northern Estuaries SAV Ecosystem Assessment	Link freshwater inflow to SAV distribution, abundance and health in the southern IRL, St. Lucie, and Caloosahatchee River estuaries.
189	SAV	Percent Cover	NE	St. Lucie Estuary Seagrass Restoration Project, analyzing water quality, pore water and seed bank	Objective it to determine the specific preconditions that enable successful seagrass restoration within the specific area of the St. Lucie Estuary. The pilot project will conduct in situ data collection from 4 sites representing 2-40 acres.
468	SAV	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.

244	SAV	Species Abundance	NE	This project will support research activities, including assessment of manatee health and behavioral response to the current environmental conditions found in the area of the Unusual Mortality Event (UME). These data will provide information on habitat use, and identify remaining areas with SAV forage species for assessments, spatially correlated with prior years' tracking habitat analysis, and manatee distribution and abundance information from prior aerial surveys.	The objectives of the study are to: 1. Perform assessments to evaluate manatee body condition and health. 2. Determine forage habitat characteristics in Brevard County and other locations in the UME area (species composition, abundance, coverage & density) and utility as forage for manatees 3. Quantify manatee response to current forage availability 4. Compare current findings with previous results, starting before the persistent algae blooms that began in 2010
700	Vegetation	Canopy Height	NE	Loxahatchee Vegetation Monitoring	Monitor cypress swamp to detect impact of salt water intrusion
701	Vegetation	Species Abundance	NE	Loxahatchee Vegetation Monitoring	Monitor cypress swamp to detect impact of salt water intrusion
476	Vegetation	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
245	Wading Birds	Other - Colony size, Nesting effort per species	NE - J.N. Ding Darling NWR	Monitoring colonial wading and water bird rookeries	Monitor changes in colony bird nesting efforts and locations
698	Water Depth	Depth	NE	Loxahatchee Groundwater and surface water monitoring	Monitor groundwater and surface water depth and salinity to detect impact of salt water intrusion into freshwater swamps

490	Water Depth	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
684	Water Quality	Other - Phosphorus; nitrogen; Sulfate; TSS; DO; Spec. conductance; temp	NE	Internal WQ monitoring in LRSTA, TMC WPA, TCSTA above minimum required for permit	Evaluate nutrient trends to make operational recommendations to improve STAs' performance; used in weekly dashboard creation for operations meetings.
280	Water Quality	Dissolved Oxygen - chlorophyll a; nutrients; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms
284	Water Quality	Nutrients - chlorophyll a; dissolved oxygen; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms
288	Water Quality	Phosphorus - chlorophyll a; nutrients; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms
291	Water Quality	Temperature - chlorophyll a; nutrients; ocean acidification; eDNA; temperature; salinity	NE, SCS, SWS, Florida Keys	Monitoring of water quality and other chemistry and biodiversity metrics in the Florida Keys and southwest Florida shelf	To determine how Everglades restoration affects water quality in the nearshore and downstream FKNMS. Also, systematically measure oceanographic conditions and water quality in areas where red tide frequently blooms

506	Water Quality	Other	All RECOVER Modules and SFWMD North of Lake Okeechobee, Kissimmee and Caloosahatchee basins.	Surface water chemistry and biological monitoring for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code). These data are used to assess the waterbody health and for those waterbodies that are verified as impaired, provides data used to develop Total Maximum Daily Loads (TMDLs) and evaluate implementation of Basin Management Action Plans (BMAPs).	Meet data sufficiency for Impaired Waters Rule (Chapter 62-303, Florida Administrative Code) and EPA CWA Section 303(d) surface water assessments. Meets data sufficiency for Total Maximum Daily Loads (TMDLs) development in impaired waterbody segments.
690	Water Quality	Nutrients	NE	Water quality monitoring of the northern estuaries to link freshwater inflow impacts to changes in water quality including algal blooms	Understand how freshwater inflow impacts estuarine structure and function linking nutrients to algal blooms and estuarine productivity
246	Water Quality	Other - Salinity, CDOM, DO, Chlorophyll	NE - J.N. Ding Darling NWR	WQ monitoring in J.N. Ding Darling NWR, Sanibel Island FL	Monitor changes in WQ related to freshwater discharges from S78

Connection to CERP Purpose, Goals, and Objectives	Monitoring Frequency	Start Date	End Date	To be Monitored in the Future?	Comments
Moderate	daily		Present	Yes	
Moderate	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>
High		2022	Present	Yes	
High	monthly	1998	Present	Yes	Monthly seining occurs in the St. Lucie River Estuary and southern Indian River Lagoon. Not currently used as a RECOVER performance measure.
High	monthly	2016	Present	Yes	Not currently used as a RECOVER performance measure. For examples of how data can be used to inform Everglades Restoration, see Stevens, P.W., R. Paperno, J.L. Beal, T.C. MacDonald, H.N. Miller, P.A. Klarmann, and C.R. Malinowski. 2022. Identification of fish habitat hotspots for use in prioritizing conservation and restoration projects in coastal rivers, Environ Biol Fish 106:221-235.

High	monthly - March through September	2013	2025	Funds Dependent	Not currently used as a RECOVER performance measure.
High	biannually	2022	Present	Funds Dependent	Acoustic tagging and fish health occurs biannually (dry season/wet season); fish movements are tracked continuously for duration of tag life (e.g., 1.5 years). This is a joint effort between FWC and SFWMD. Not currently identified as a RECOVER performance measure.
High	other - Monthly sampling March through October	2009	present	Yes	Surveys are expected to continue provided federal funding (NOAA-NMFS) remains in place.
High		2021	Present	Yes	

Low/none					
Moderate	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
Moderate	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>

High	other - every other	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.
High		2022	Present	Funds Dependent	
High	quarterly	2005	Present	through 9/30/2025, and then funds dependent	
Moderate	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>



Moderate	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>
Moderate	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
Moderate					
Low/none	annually - nesting season	1989	Present	Yes	FWC coordinates the collection of nesting data through a network of permit holders consisting of federal, state, and local park personnel; other government agency personnel; members of conservation organizations, university researchers; and private citizens. Florida staff members coordinate data collection, provide training, and compile annual survey data for publications and data recession.

Low/none	annually - nesting season	1979	Present	Yes	FWC coordinates the collection of nesting data through a network of permit holders consisting of federal, state, and local park personnel; other government agency personnel; members of conservation organizations, university researchers; and private citizens. Florida staff members coordinate data collection, provide training, and compile annual survey data for publications and data recession.
Low/none		2022	present	Yes	Resampling performed as necessary based on cell/STA performance
Low/none					
Moderate	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>

Moderate	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>
High	annually	2017	Present	Funds Dependent	
Low/none	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
High		2010	Present	Yes	
High		2010	Present	Yes	
High		2010	Present	Yes	

High		2023	Present	Yes	
High		2023	Present	Yes	
High		2023	Present	Yes	
High	monthly	2005	2024	Funds Dependent	Funds through 2029 dependent on contract renewal from SFWMD and Palm Beach County (PBC not currently in CERP Performance Metric for northern estuaries)
High		2005	Present	Yes	
High	other - every other month	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.
Moderate	other - 4 events, quarterly for 3 consecutive years.	2002	Present	Yes	Phytoplankton is collected in lakes that are verified as impaired for nutrients and or Chlorophyll-a Corrected. The results will be used for data models used for TMDL development.

High		2011	Present	Yes	
High		2005	Present	Yes	
High	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
High		2011	Present	Yes	
High		2017	Present	Yes	
High					
High	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>

High	biannually	2021	2024	Funds Dependent	These assessments will allow us to quantify current manatee condition and movement patterns and establish relationships among ecological factors and health indices, summarize changes in habitat quality and manatee habitat use, and compare their condition to previous records collected from the region, both before and during the current vegetation loss and previous UME.
High		2007	Present	Yes	behind schedule in meeting the 5 year sampling timeframe
High		2007	Present	Yes	behind schedule in meeting the 5 year sampling timeframe
High	other - Two events	2002	Present	Yes	Lake Condition index (LVI) per DEP SOP LVI 1000 and DEP SOP LVI 2000, in lakes. <a href="https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes">https://floridadep.gov/dear/bioassessment/content/bioassessment-methods#Lakes</a>
High	monthly	2012	Present	Funds Dependent	
High		2005	Present	Yes	

High	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
Moderate		Varies with STA coming online; as early as 2008	Present	Yes	
Moderate	other - every other month	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.
Moderate	other - every other month	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.
Moderate	other - every other month	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.
Moderate	other - every other month	1998	present	Yes	We monitor 2 indicators; water quality and phytoplankton.

Moderate	other - Different for every waterbody segment (WBID). Typically 5-6 events annually for 2 - 5 years.	2002	Present	Yes	Current waterbody segments and analytes can be found on DEP Strategic Monitoring Program webpage. <a href="https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans">https://floridadep.gov/dear/watershed-assessment-section/content/strategic-monitoring-plans</a>
Moderate		2011	Present	Yes	
High	daily	2018	Present	Funds Dependent	



Tribe/Agency	Tribe/Agency Point of Contact	Monitoring Point of Contact
FWC	McKayla Spencer, mckayla.spencer@myfwc.com	McKayla Spencer, mckayla.spencer@myfwc.com
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Sarah Webb, swebb@sfwmd.gov
FWC	Gil McRae, Gil.McRae@MyFWC.com	Courtney Saari, Courtney.Saari@MyFWC.com
FWC	Gil McRae, Gil.McRae@MyFWC.com	Courtney Saari, Courtney.Saari@MyFWC.com

FWC	Gil McRae, Gil.McRae@MyFWC.com	Courtney Saari, Courtney.Saari@MyFWC.com
FWC, SFWMD	Gil McRae, Gil.McRae@MyFWC.com	Philip Stevens, Philip.Stevens@MyFWC.com
NOAA	Adam Brame, Adam.Brame@noaa.gov	Gregg Poulakis, Gregg.Poulakis@myfwc.com
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Melanie Parker, mparker@sfwmd.gov

FWC	Gil McRae, Gil.McRae@MyFWC.com	Kate Hubbard, katherine.hubbard@myfwc.com
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov

NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Susan Mason, smason@sfwmd.gov
USACE	Gina Ralph, gina.p.ralph@usace.army.mil	Jenna May, jenna.c.may@usace.army.mil
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov

FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
USEPA	Steven Blackburn, blackburn.steven@epa.gov	Katie Bowes, kbowes@martin.fl.us
USFWS/FWC	Karen Frutchey, karen_frutchey@fws.gov	Karen Frutchey, karen_frutchey@fws.gov

USFWS/FWC	Karen Frutchey, karen_frutchey@fws.gov	Karen Frutchey, karen_frutchey@fws.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Susan Mason, smason@sfwmd.gov
USEPA	Steven Blackburn, blackburn.steven@epa.gov	Katie Bowes, kbowes@martin.fl.us
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov

FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
USFWS	Jeremy Conrad, Jeremy_Conrad@fws.gov	Jeremy Conrad, Jeremy_Conrad@fws.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Melanie Parker, mparker@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Melanie Parker, mparker@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Melanie Parker, mparker@sfwmd.gov

SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Liz Pudlak, epudlak@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Liz Pudlak, epudlak@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Liz Pudlak, epudlak@sfwmd.gov
FWC	Gil McRae, Gil.McRae@MyFWC.com	Stephen Geiger, Stephen.Geiger@MyFWC.com
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Barbara Welch, bwelch@sfwmd.gov
NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@florida ep.gov	Curtis Musson, Curtis.musson@FloridaDEP.go v



SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Tom Behlmer, tbehlmer@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Mark Barton, mabarton@sfwmd.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Tom Behlmer, tbehlmer@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Elizabeth Salewski, esalewsk@sfwmd.gov
USEPA	Steven Blackburn, blackburn.steven@epa.gov	Katie Bowes, kbowes@martin.fl.us
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov

USFWS/USGS	Terri Calleson, Terri_Calleson@fws.gov	Terri Calleson, Terri_Calleson@fws.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Mark Barton, mabarton@sfwmd.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Mark Barton, mabarton@sfwmd.gov
FDEP/DEAR	Kenneth Weaver, kenneth.weaver@florida ep.gov	Curtis Musson, Curtis.musson@FloridaDEP.go v
USFWS	Avery Renshaw, Avery_Renshaw@fws.gov	Avery Renshaw, Avery_Renshaw@fws.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Mark Barton, mabarton@sfwmd.gov

FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Susan Mason, smason@sfwmd.gov
NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov
NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov
NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov
NOAA	Christopher Kelble, chris.kelble@noaa.gov	Ian Smith, Ian.Smith@noaa.gov

FDEP/DEAR	Kenneth Weaver, kenneth.weaver@floridadep.gov	Curtis Musson, Curtis.musson@FloridaDEP.gov
SFWMD	Lawrence Glenn, lglenn@sfwmd.gov	Tom Behlmer, tbehlmer@sfwmd.gov
USFWS	Avery Renshaw, Avery_Renshaw@fws.gov	Avery Renshaw, Avery_Renshaw@fws.gov