Operational Project Monitoring Plan

For

WATER CONSERVATION AREA MATERIAL BUDGET

(CAMB)

Effective Date Upon Final Signature

10/31/2024

X Amanda Gray

Amanda Gray
Field Project Manager
Signed by: Gray, Amanda

10/31/2024

X Christopher Krakowski

Chris Krakowski
Section Leader
Signed by: Krakowski, Christopher

10/31/2024

X Rachel Watts

Rachel Watts
Science Technician Supervisor
Signed by: Watts, Rachel

10/31/2024

X DeeAnna Francisco

WQM QA Scientist
Signed by: Francisco, Deeanna

Water Quality Monitoring Section
Water Quality Bureau, Water Resources Division
South Florida Water Management District

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1.0 Project Organization

The following documents define the procedures used by South Florida Water Management District (SFWMD or District) Water Quality Monitoring Section (WQMS) personnel to meet the Florida Department of Environmental Protection's (FDEP or Department) Quality Assurance (QA) Rule, Florida Administrative Code (F.A.C.) 62-160, and should be referred to for details on key personnel and relevant responsibilities.

- Overall project organization and responsibilities -
  - SFWMD Water Quality Bureau (WQB) and Applied Sciences Bureau (ASB) Quality Management Plan (QMP).
- Field activity and data validation responsibilities -
  - SFWMD WQMS Quality Manual (QM), Field Sampling Manual (FSM), and applicable Standard Operating Procedures (SOP).
- Laboratory analysis and data validation responsibilities –
  - SFWMD Analytical Service's (AS) Chemistry Laboratory Quality Manual (CLQM) and applicable SOPs.

2.0 Project Description

2.1 Project Introduction and Background

This document serves as a reference for surface water quality monitoring for Water Conservation Area (WCA) Material Budget (CAMB), also known as the WCA inflows and outflows. This operational monitoring plan (OMP) contains descriptions of the mandate(s) justifying monitoring including frequency of collection and parameters by station.

Surface water monitoring for CAMB began in April 1973 initially under the Lake Okeechobee Technical Advisory Committee guidance, to provide data to calculate the WCA inflow and outflow loads for various parameters, primarily phosphorus, which is incorporated within the Everglades Protection Area (EvPA). There are three (3) WCAs: WCA 1, which shares common boundaries with the Loxahatchee National Wildlife Refuge (Refuge); WCA 2 which is subdivided into northern WCA 2A, and southern WCA 2B; and WCA 3 which is similarly divided with the northern and western portions belonging to WCA 3A, and WCA 3B occupying the southeast portion. Surface waters within the EvPA are classified as Class III Waters; additionally, the Refuge is considered an Outstanding Florida Waters, pursuant to State of Florida Administrative Rule 62-302.700(9), F.A.C.

CAMB includes 28 stations (Table 1) consisting of 6 in WCA 1, 5 in WCA 2, 11 for WCA 3, 3 stations provide exchange between WCA 1 and WCA 2, and finally 3 stations provide exchange between WCA 2 and WCA 3. The construction, operation and maintenance of this project are mandated by the Technical Oversight Committee (TOC). The guidance contained herein is intended to assist in maintaining consistency of sampling locations, parameter lists, and frequencies. In addition, the plan documents the project's scope and provides an ongoing historical perspective. The Settlement Agreement (SA) monitoring for this project was incorporated through Appendix D. The number of stations and

parameters has changed in response to construction and operational changes, along with the evolution of research and restoration monitoring. Because of infrastructural changes, the CAMB project alone no longer monitors all the inflows and outflows of the WCAs (Appendix 3). Historical changes for autosampler sites S5A, S7, S9, S9A, and grab sampling sites S5AE, S5AS, S5AW, S150, S151, and S31 are detailed in the CAMB Autosampler OMP (SFWMD-FIELD-MP-105).

G64, G94A, G94B, G94C, S142, and S9A were collected initially (from September 1997 – January 2018) under the NECP OMP. These sites were moved to the CAMB OMP on 1/31/2018 to consolidate sampling guidance.

CAMB leverages stations (L3BRS, S8 and USSO) from the Big Cypress Seminole Indian Reservation Water Quality Agreement (SEMI) Project (SFWMD-FIELD-MP-042) and station S6 of the Central Flow-way Stormwater Treatment Area 2 (STA2) Project (SFWMD-FIELD-MP-073). Pesticide monitoring at stations S140, S142, S190, S31, S9 and S11A are detailed in the PEST Project OMP (SFWMD-FIELD-MP-034) and is referenced, but not repeated, in Appendix 1. Appendix 3 provides a summary of the Mandates and OMPs by site.

2.2 Sampling Mandate(s)

Station locations, sampling frequencies, and parameters are dictated by the mandate(s) and/or authorization(s) governing this project (Appendix 1). Appendix 2 lists the stations by mandate. The Compliance Monitoring Plan(s) (CMP) associated with this project are the Non-Everglades Construction Project (SFWMD-FIELD-CMP-036) and the Everglades STA CMP 033.

A history of mandate modifications follows:

1991 Settlement Agreement

The SA issued by the United States District Court on 07/26/1991, this agreement among the United States, Corps of Engineers (USACE), Environmental Protection Agency (EPA) and the National Park Service (NPS) specified monitoring within the EvPA and the Everglades Agricultural Area (EAA).

On 05/23/2006, the TOC approved implementation of the Park Inflow East (PIE) and the Park Inflow North (PIN) projects. The following stations were moved from CAMB to the PIN Project; S12A, S12B, S12C, S12D and S333 when they were initiated on 10/01/2007.

On 03/24/2009, the TOC approved changes to the SA, including an increase in the number of parameters to the monitoring at the following stations: NSID1US, S38, S145,

S11A, S11B, S11C, S150, S7, S6, S10A, S10C, S10D and S39. Collection at S10A, S10C, S10D and S39 was changed to biweekly recorded flow (BWRF) otherwise monthly on 07/6/2009. Collection at S6 was changed to weekly recorded flow (WRF) on 07/6/2009. Collection at NSID1US, S38, S145, S11A, S11B, and S11C was changed to BWRF on 08/1/2009.

On 10/28/2015 the TOC agreed to the District's request to replace TKN with TN for all SA stations.

On 03/24/16 the TOC agreed to the removal of TOTFE as a required parameter from the following water quality monitoring stations: S10A, S10C, S10D, S11A, S11B, S11C, S38, S39, USSO, L3BRS, and L28I.

On 02/14/2017 construction of a bridge and trashrake at S140 began. Grab sampling was temporarily relocated to the AMSWS140 platform downstream from the pump station. The autosampler collection was suspended for the period of construction. Construction was completed on 04/07/2020 and sampling resumed upstream of the pump station; however, the autosampler was not reinstalled.

Rebuilding of S-34 and S-141, as well as demolition of G-123, began on 06/06/2017. During construction, a surrogate water quality station for S34 and S141 was defined as S142-D, which was located on the downstream platform for S-142. The new structures (S-34E and S-141) became operational on 06/11/2019, but access was not available until 02/20/2020. The rebuilt platform is located approximately 120 feet upstream from the previous location and is between S-141 and S-34E. For the purpose of data continuity, the water quality sampling station was named S34. This decision was made at the Naming Authority meeting on 02/18/2020.

Since the inception of the SA, the original research under Appendix D has been completed, water quality standards have been established, and the Comprehensive Everglades Restoration Program (CERP) has been implemented. Both research and restoration monitoring have evolved over time to keep step with initiatives and are governed through CERP monitoring requirements, state, and federal project

permits. The remainder of the monitoring from the original SA Appendix D scope has since been transferred out of being under TOC oversight. As a result, per EMRT 202308-3 approval on 1/31/2024, the SA sampling parameters were removed from stations S6, S8, and S140: removing autosampler collection from S8 and S140. These changes were implemented on 3/4/2024. Per EMRT 202401-1 approval on 07/29/2024, the SA sampling parameters from stations S39, S145, S38, S34, NSID1US, and L3BRS. Changes were implemented on 09/03/2024. The SA Appendix D parameters at other stations listed in this OMP will be reviewed at a future date pending EMRT approval.

Everglades Forever Act (EFA) Permit for Non-Everglades Construction Project (NECP)

- EFA 0237803-010 — Issued on 04/20/1998; in accordance with the EFA (Section 373.4592 (9) and Section 403.151, F.S.) authorized operation and maintenance activities for discharge structures within the control of the District discharging into, within, or from the EvPA, which are not included in the Everglades Construction Project (ECP) Structures. More details on the history and specific NECP requirements can be found in the NECP CMP (SFWMD-FIELD-CMP-036).
- FDEP Concurrence — 11/07/2014; Structure G-123 was decommissioned in 2008 when all pumps were removed, with the structure removal completed in 2017. In December 2014, the ACME1DS structure removal began; however, a sample was still required because the NECP permit had expired and could not be modified at the time and was thus administratively extended. Concurrence to record the G123 and ACME1DS samples as “No bottle” (NOB) until the permit can either be modified or renewed was received from the FDEP on (Appendix 2).
- FDEP Concurrence — 02/14/2017; Construction of a bridge and trashrake at S-140 began. Grab sampling was temporarily relocated to the AMSWS140 platform downstream from the pump station.
- FDEP Concurrence — 06/06/2017; Rebuilding of S-34 and S-141, as well as demolition of G-123. During construction, a surrogate water quality station for S34 and S141 has been defined as S142-D, which is located on the downstream platform for S-142. The new structures (S-34E and S-141) became operational on 06/11/2019, but access was not available until 02/20/2020. The rebuilt platform is located

approximately 120 feet upstream from the previous location and still between S-141 and S-34E. For the purpose of data continuity, the water quality sampling station will be named S34. This decision was made at the Naming Authority meeting on 02/18/2020.

- EFA 0237803-010 Modifications issued on 06/23/2020 to append a NECP CMP to the permit to capture all changes in the ensuing years including changes to SO4 collection frequency from Quarterly to Quarterly if Recorded Flow at stations S140, S190, S145, S151, S31, S34, S39, S9, S9A, S331-173. Sampling frequency for pesticides in surface water at S142 was changed from Quarterly if Flowing to Quarterly, and from Semiannual if Flowing to Semiannual for pesticides in sediment. NOX was eliminated from the autosampler collection at S9. ALKA and CL collection frequency changed from Quarterly to Quarterly if Recorded Flow at S9A.

EFA Permit for Eastern, Central and Western Flowpaths (specifically for S6)

- EFA 0311207-001 Permit issued by FDEP on 09/10/2012, in accordance with the EFA (Section 373.4592(9) and Section 403.151, F.S.). This permit authorized the construction, operation, and maintenance of the STAs at the state level. This includes water quality monitoring, vegetation maintenance, maintenance of water quality control structures including levees and conveyance mechanisms.
- EFA 0311207-002 Issued on 03/06/2013; Installation of new communication tower at S6.
- EFA 0311207-003 Issued on 09/24/2015; Extended the permit to 09/09/2017.
- EFA 0311207-004 Issued on 01/21/2015; Modification to STA 1W. No impact to S-6 monitoring.
- EFA 0311207-005 Issued on 06/12/2015; Modification to STA 1W. On 05/12/2020 the District's Total Nitrogen methodology was accepted and TKN was no longer required.
- EFA 0311207-006 Issued on 08/18/2017; Extended the permit to 09/09/2022 and S6 became the surrogate monitoring point for G-338 and G-339 structures.
- EFA 0311207-007 Issued on 08/12/2020; set an Annual Flow Weighted Mean (FWM) shall not exceed 13 ppb in more than 3 out of 5 water years on a rolling basis; and 19 ppb as an annual flow-weighted mean (AFWM) in any water year for total phosphorus at the STA 2 outflows. No impact to S-6 monitoring. This permit constitutes a finding of consistency

with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456, and constitutes certification of compliance with water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. § 1341.

- EFA 0311207-008 Issued on 09/29/2022; Extended the permit to 09/29/2027. This permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456, and constitutes certification of compliance with water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. § 1341.

Everglades Agricultural Area (EAA) Rule (specifically for G136, G123, and S6)

- Chapter 40E-63, Florida Administrative Code (F.A.C.) Issued on 01/22/92; This rule is based on the assumption that implementation of the regulatory program for the EAA will not reduce the quantity of water discharged from the S2, S3, S5A, S6, S7, S8 and S150 Basins by more than 20% of the quantity discharged historically. The District will evaluate water quantity data collected from the structures, beginning on the effective date of this rule, to determine whether the quantity discharged from the structures after implementation of this regulatory program is less than 80% of the historical amount. If the quantity of water discharged is less than assumed or the water supply for the Everglades is inadequate, the District intends to take appropriate actions in the future to insure water supply for the Everglades.
- Chapter 40E-63, Florida Administrative Code (F.A.C.) Amended 07/03/2001; The regulatory program to address the reduction of total phosphorus loads from the EAA in general was adopted initially by this chapter in December 1991 and was amended in 1992 to add a specific 25% load reduction of phosphorus.
- Chapter 40E-63.461, Florida Administrative Code (F.A.C.) Amended 01/01/2009; G136 collected initially (from June 1994 – December 2008) under the CAMB project, was moved to the C139D project.

National Pollutant Discharge Elimination System Industrial Wastewater Facility Permit (specifically for S6)

- NPDES FL0778451 Federal permit Issued on 09/11/2012 for operation and maintenance of the STAs; 01/02/2019 Waiver issued to extend the Departments Electronic Discharge Monitoring System Reporting until 06/29/2019.

Seminole Agreement (specifically for L3BRS, L28I, S190, S8, and USSO)

- Seminole Agreement Issued on 01/17/1996; This agreement requires the monitoring of surface water quality entering, originating on, and leaving the Seminole Reservation. On 05/12/2020 the Districts Total Nitrogen methodology was accepted and TKN was no longer required.

  On 09/11/2009, the Seminole Tribe agreed to the District's request to change the USSO autosampler weekly flow composite (ACF) to discrete time (ADT), with each bottle containing a composite sample for a 24-hour period. To avoid conflicts with Daylight Savings Time, the aliquots are collected from 02:00am to 02:00am.

  On 06/01/2024, USSO autosampler was changed from ADT to autosampler composite time (ACT), configured to collect a composite sample of sample aliquots based on a timed trigger.

In addition to biweekly mandates, monitoring is conducted at a few legacy stations:

- S140 on a weekly basis for TP as backup for anautosampler that is no longer onsite due to construction of a bridge and trashrake at S140 that began 02/14/2017. Grab sampling was temporarily relocated to the AMSWS140 platform downstream from the pump station during the bridge construction. As of 1/31/2024, weekly TPO4 grab and ACF at S140 has been eliminated per EMRT 202308-3 approval. This adds TP collection on a BWRF/M basis, as well as monthly parameters including Na, K, Ca, Cl, Alk, and SO4. This was implemented on 3/5/2024.
- S190 has an autosampler programmed for ACF collection and TPO4 weekly as a backup grab.
- Per EMRT 202401-1, source control weekly collection of TPO4 was approved and implemented on 09/03/2024.
- Per EMRT authorization 202308-3 approved the collection at S8 on a biweekly basis for TPO4, as well as a monthly frequency for Na, K, Ca, Cl, Alk, and SO4. These changes were implemented on 3/5/2024.
- Per EMRT authorization 202401-1, sample collection at S39, S38, S145, S142, and L3BRS changed to a biweekly recorded flow or monthly frequency for TP and

TNand monthly collection of Na, K, Ca, Cl, Alk, and SO4 were added to the analyte list. This EMRT authorization also approved source control monthly recorded flow of TPO4 at NSID1US and USSO. These changes were implemented on 09/03/2024.

2.3 Project Objectives

The primary objective of this monitoring project is to provide data to assess water quality within the EvPA as part of the SA. Over time, additional mandates and permits have been added. The water quality data obtained under this program will be used to provide nutrient load documentation for:

1. Preserving and restoring the flora and fauna within the Everglades National Park and the Refuge;
2. Documenting the total phosphorus criterion achievement;
3. Complying with Class III nutrient water quality standards and the Outstanding Florida Waters (where required);
4. Determining effectiveness of the implementation of basin management plans in reducing nutrient loadings to the WCAs;
5. Establishing nutrient loading budgets for the WCAs;
6. Documenting discharge concentrations into, within, and from the EvPA.

2.3.1 Modification or Termination Conditions

The monitoring described herein will continue as required by the mandate(s) listed in Section 2.2 and Appendix 1. Conditions for modification or termination of monitoring of this project Detailed in the mandate(s) specifying the conditions of the project.

3.0 Geographic Location

3.1 Regional Area

CAMB is located within and adjacent to or on canals that lead to the WCAs (Figure 1). The project area is located within Palm Beach, Broward, Dade, Hendry, and Collier Counties.

3.2 Station Location and Access

Monitoring stations are depicted in Figure 1 with locations described in Table 1.

The gates on roadways into the WCAs and District Levees are secured with a District Regional Area “M” lock. The lock requires a Regional Area “M” key, which can be obtained through a request made through the Field Project Manager (FPM) and/or Science Technician Supervisor (STS).

Table 1: CAMB Surface Water Monitoring Stations and GPS Coordinates

Station	Latitude (ddmmss.sss)	Longitude (ddmmss.sss)	Description
Water Conservation Area 1 (WCA1)			
ACME1DS	263628.243	801717.165	Culvert downstream of Wellington Pump Station 1 on L-40 levee
G94A	262607.112	801348.626	L-40 borrow canal, 4.4 miles south of Lee Rd (Loxahatchee Wildlife Refuge)
G94B	262856.659	80316.059	L-40 borrow canal, approximately 11.6 miles North of S39
G94C	263228.956	801358.426	L-40 borrow canal 11 approx. 15.8 miles. N. of intersection with Hillsboro canal
G94D	263534.245	801617.163	Two culverts downstream of Wellington Pump Station 2 on L-40 levee
S39	262120.727	801751.628	Gated structure on Hillsboro Canal at the southeast corner of WCA 1
Water Conservation Area 2 (WCA2)			
G123	260858.634	802632.230	Decommissioned Pump Station next to S34
NSID1US	261715.972	801753.561	N. Springs Improvement District Pump Station on L36, 5 miles S. of S39
S145	261319.274	802156.558	Two culverts approximately 1.5 miles east of S144 on L-35B separating WCA2A & WCA2B
S38	261346.064	801754.971	Two culverts at the southeast corner of Conservation Area 2A
Water Conservation Area 3 (WCA3)			
C123SR84	260850.522	803814.599	Walkway west of the I-75 (SR84) bridge (NB) at the Miami Canal C123
G64	261357.096	802742.567	Culvert on L-38W, 6 miles North of Andytown
L28I	261022.089	805338.864	On L28 Interceptor canal at I-75 (SR84)
L3BRS	261951.738	805253.983	L-3 Canal at Oil Well Bridge, C139 Borrow Canal South
S140	261017.244	804939.772	Pump station and spillway in western Broward on SR84, north of I-75 intersection of L-28 and C-60
S142	260936.458	802645.671	One mile North of SR84 located at L-38W between the North New River and Conservation Area 3A W of US27
S190	261702.295	805804.232	Two-gated structure on L28I 2.5 miles south Of SR833
S34	260859.562	802632.912	Two culverts located on N. New River Canal near G123 Pump Station. S34sampling station is located on the headwater platform between S-141 and S-34E.
S8	261953.777	804628.647	Pump Station and spillway on Miami Canal
S344	255509.479	805039.536	Two culverts with manual gates discharging water from WCA 3A to Big Cypress National Preserve. Located on the L-28 about 9 miles north of U.S.41 and approximately 12 miles from S12A
USSO	261948.490	805254.870	Platform downstream of culvert located at the north end of BIA HWY 1296, approximately 2.2 miles North of Snake Road

Station	Latitude (ddmmss.sss)	Longitude (ddmmss.sss)	Description
Exchange between WCA1 and WCA2			
S10A	262135.682	801843.871	Four-gated structure about 1 mile west of S39 on L-39
S10C	262218.451	802108.346	Four-gated structure about 2.6 miles northwest of S10A on L-39
S10D	262319.544	802253.830	Four-gated structure about 2.6 miles northwest of S10C on L-39
Exchange between WCA2 and WCA3			
S11A	261039.019	802655.179	Four-gated structure on US27 where L-38 meets L-35B
S11B	261208.968	802714.718	Four-gated structure on US27 about 2 miles north of S11A
S11C	261348.534	802733.012	Four-gated structure on US27 2 miles north of S11B south of L-38W

The standard positional goal for station coordinates is detailed in the Establishing & Verifying Water Quality Monitoring Station Registration SOP (SFWMD-FIELD-SOP-031). The coordinates are relative to NAD83 HARN horizontal datum.

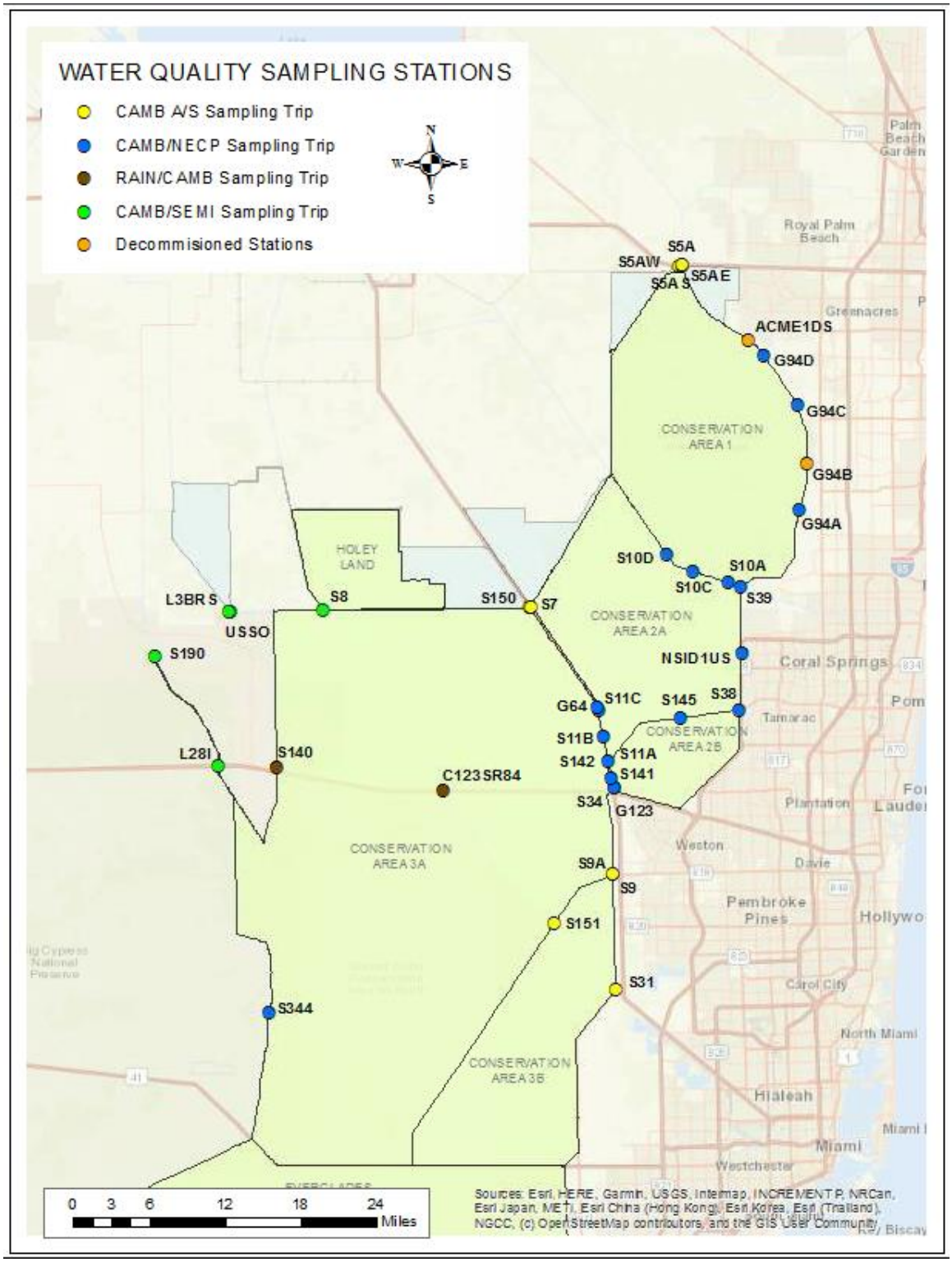

Figure 1: CAMB Station Locations

4.0 Field Activities

4.1 Monitoring Frequencies and Parameters Collected

All monitoring parameters, frequencies of collection and locations are listed in Table 2. Some analytes may be reported by the lab that are not requested by the project.

Stations collected on a frequency determined by recorded flow are sampled following the SOP outlined in the Sampling Flow-Related Stations SOP (SFWMD-FIELD-SOP-027). If no flow (i.e., no operations) is recorded during the prescribed time period, the station is designated as a NOB sample and the structure is not visited unless other parameters (i.e., TP) are required to be collected regardless of flow. Diversion Structures are only monitored if flowing, NOBs are not assigned during nonflow periods.

Table 2: CAMB Station Frequency and Parameter TESTS

Station	Collection Mehtod	Frequency	Parameter Tests
Water Conservation Area 1 (WCA1)			
ACME1DS	Decommisioned[1]	Event Based (EB)	No Bottle (NOB)
		Biweekly Recorded Flow (BWRF)	NOB
G94A G94C	Grab	BWRF	Nitrate + Nitrite (NOX), Total Nitrogen (TN), Total Phosphorus (TP), Turbidity (TURB), Dissolved Oxygen (DO*), pH (PH*), Specific Conductance (SCOND*), Temperature (TEMP*)
		Quarterly if Recorded Flow (QRF)	Sulfate (SO4)
G94B	Decommisioned[1]	Biweekly if Flow (BWF)	NOB
		QRF	NOB
G94D (only required for flow into Refuge)	Grab	BWRF	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		Event Based if ACME Pump 2 operates	Alkalinity (ALKA), Calcium (CA), Chloride (CL), NOX, Orthophosphate (OPO4), SO4, TN, TP, Total Suspended Solids (TSS), TURB DO*, PH*, SCOND*, TEMP*
S39	Grab	BWRF	TURB, NOX, SO4, TN, TP, DO*, PH*, SCOND*, TEMP*
		Monthly (M)	Na, K, Ca, Mg, Cl, Alk, SO4
		Biweekly Recorded Flow, Otherwise Monthly (BWRF/M)	TN, TP, DO*, PH*, SCOND*, TEMP*

Station	Collection Mehtod	Frequency	Parameter Tests
Water Conservation Area 2 (WCA2)			
G123	Decommisioned[1]	EB within 24 HRS of discharge notification	NOB
		EB 2 consecutive days following 1st sampling event above	NOB
		Biweekly if Flow, Otherwise Monthly (BWF/M)	NOB
		Q	NOB
NSID1US (only required if pumping into WCA2A)	Grab	Monthly Recorded Flow (MRF)	TP, DO*, PH*, SCOND*, TEMP*
S145 (S144 and S146 surrogate), S38	Grab	BWRF	NOX, SO4, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
		BWRF/M	TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
		M	Na, K, Ca, Mg, Cl, Alk, SO4
S34 (S141 surrogate)	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
		QRF	SO4
Water Conservation Area 3 (WCA3)			
C123SR84 (S339 and S340 surrogate)	Grab	BWF/M	NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		Q	CA, CL, SO4
G64	Grab	BWF/M	NOX, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		QRF	SO4
L28I	Grab	BWF/M	ALKA, Ammonia (NH4), CL, COLOR, Nitrite (NO2), NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		Q	CA, MG, K, SIO2, NA, SO4, TSS
L3BRS (Surrogate for G409)	Grab	W	TP, TN, DO*, PH*, SCOND*, TEMP*
		M	Na, K, Ca, Mg, Cl, Alk, SO4
S140	Grab	BWRF/M	NOX, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		M	Na, K, Ca, Mg, Cl, Alka, SO4
		QRF	SO4
S142	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
		M	Na, K, Ca, Mg, Cl, Alk, SO4
		QRF	SO4

Station	Collection Mehtod	Frequency	Parameter Tests
S190	ACF	W	TP
	Grab	W	TP DO*, PH*, SCOND*, TEMP*
		BWF/M	NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		BWRF/M	NOX, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
		Biweekly (BW) (May-October and highwater event based dry season)	NOX, OPO4, TN, TP, NH4, TSS, DO*, PH*, SCOND*, TEMP*
		Q	CA, CL, SO4
		QRF	SO4
S8	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
		BWRF/M	TP, DO*, PH*, SCOND*, TEMP*
		M	CA, MG, K,, NA, SO4, Cl, Alka,
S344	Grab	Q	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
USSO	Autosampler Composite Time (ACT)	W	TP
	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
Exchange between WCA1 and WCA2			
S10A S10C S10D	Grab	BWRF	ALKA, NH4, CA, DOC, MG, K, SIO2, NA, TDN, TDP, TOC, TSS DO*, PH*, SCOND*, TEMP*
		BWRF/M	CL, NOX, OPO4, SO4, TN, TP DO*, PH*, SCOND*, TEMP*
Exchange between WCA2 and WCA3			
S11A (S143 surrogate)	Grab	BWRF	ALKA, NH4, CA, CL, DOC, MG, NOX, OPO4, K, SIO2, NA, SO4, TDN, TDP, TN, TOC, TP, TSS, TURB, DO*, PH*, SCOND*, TEMP*
S11B S11C	Grab	BWRF	ALKA, NH4, CA, CL, DOC, MG, NOX, K, SIO2, NA, SO4, TDN, TDP, TN, TOC, TP, TSS, OPO4, DO*, PH*, SCOND*, TEMP*

[1]Details on decommissioned station mandated TEST requirements are in Appendix 2.
*In Situ Grab

4.2 Project Specific Guidelines

Surface water grab samples are collected on the upstream side of the structure, at a depth of 0.5 meters, unless collection of a representative sample is inhibited by vegetation and/or other conditions, or if specific sampling depths are specified in the associated SOP or FSM for the sampling method. USSO, an exception to this rule, has samples routinely

collected on the downstream side of its culvert and should therefore be designated using the downstream collection code of "2". If an alternative sampling location is required, a consultation with a STS and/or the FPM must take place prior to the sampling being collected; this action must be documented in the field notes.

Backup grab samples (TPO4 only) shall accompany the autosampler collections on a weekly basis if no other TPO4 grab is required for the station on that trip. In addition, in situ readings (i.e., Dissolved Oxygen, pH, Specific Conductance, and Temperature) are measured.

Recorded Flow for the USACE structures (S10A, S10C, S10D, S11A, S11B, and S11C) is based on USACE daily reports of flow to DBHYDRO the day is from 12:00AM to 12:00AM.

G-123, ACME1DS, G-94B structures do not exist but are still NOB. Recorded flow at NSID1US rarely occurs. If there is sampling at that location the Project Manager should email Regulation and CARS staff to alert them. G94D is only sampled if there is flow through the structure into the WCA1. Flow out of WCA1 is considered NOB. G-64 sampling platform was removed 01/05/2016 due to safety by the field station and the entire structure was to be rebuilt at some point. As of 01/10/2024, G-64 sampling platform over the culvert has been updated, but not connected to the ground, leaving it inaccessible. Station is considered NOB due to unsafe sampling conditions and inaccessibility.

S-34E and S-141 are surrogate structures. Flow at either structure triggers sampling at S34. S-144, S-145, S-146 are surrogate structures. Flow at any of these sites triggers sampling at S145. S11A and S143 are also surrogates, recorded flow at either structure results in a sample collection. On a Biweekly basis, flow at S-190 triggers sampling at L28I.

On 07/31/2024, EMRT 202403-2 approved the collection of water quality and hydrology samples at S190 for a source control analysis associated with the Western Everglades Restoration Project (WERP). Sampling collection of OPO4, TSS, TN, TPO4, NH4, and NOX on a biweekly sampling basis, regardless of flow. This collection will occur in the months of May through October and during highwater events in the dry season for the next five years, coming to an end in 2029. This collection was implemented on 9/3/2024,

4.3 Grab Sampling Procedures

Sample collection for this project follows the procedures and requirements found in the *Grab Sampling Protocol* section of the WQMS FSM. Project-specific deviations are detailed in Section 4.2.

4.4 Field Parameters

The collection of field parameters follows the procedures and requirements outlined in the *Instrument Calibration and Field Measurements* section of the WQMS FSM.

4.5 Field Quality Control Requirements

Field quality control requirements shall follow the procedures found in the *Field Quality Control Measurements and Requirements* section of the WQMS FSM.

4.6 Autosampler Collection

Autosampler samples are collected in accordance with the WQMS *Autosampler* SOP (SFWMD-FIELD-SOP-038). The intake for the autosampler is affixed to a float or structure at depth.

For this project, samples are collected as flow-proportional (ACF) at stations identified in Table 2. Station-specific "trigger volumes" are established through the protocols described by Abtew and Powell (2004). Discrete bottles within each autosampler are pre-acidified and composited on a weekly basis and analyzed for TP.

As per the Seminole Agreement, USSO has a time-proportional autosampler configured to collect a composite sample of aliquots based on a timed trigger (ACT). Collecting samples at three (3) hour intervals when program is restarted as set by the FPM following discussions with the data's end user(s). This strategy allows for daily characterization of the water quality canal system independent of flow events, while allowing water quality conditions during short-term flow events to be evaluated. This type of monitoring does not require flow calculations or flow monitoring equipment. The bottles within each autosampler are pre-acidified, composited on a weekly basis and analyzed for TPO4.

4.7 Sample Submission

When the District laboratory is used, samples are transported to the laboratory and submitted for analyses in accordance with the requirements specified in the WQMS FSM. Samples are submitted to the laboratory on the same day as collection or via courier the following day. Sample acceptance criteria are detailed in Section 6 of the CLQM. If samples are submitted to another laboratory, it must meet the contract laboratory requirements as specified in Section 5.2 below.

5.0 Data Quality Objectives (DQOs)

5.1 Data Usage and Reporting

The data from this project are compiled and are summarized in an annual report in accordance with the conditions outlined in the mandate(s) named in Appendix 1.

5.2 Data Quality

All monitoring described herein meet the requirements conveyed in the FDEP's QA Rule, 62-160 F.A.C. The District has adopted a uniform set of DQOs following criteria detailed within the *Analytical Methods and Default QA/QC Targets* table of the CLQM.

Field parameter DQOs are described in the *Field Instrument Minimum Accuracy Requirements* table found in the *Instrument Calibration and Field Measurements* section

of the FSM. The most recent version of the FSM details the specific field testing DQOs at the time of sample collection.

Samples are analyzed according to the provisions within the FDEP QA Rule, 62-160 F.A.C. and the CLQM. The most recent version of the CLQM details DQOs at the time of sample collection for each specific laboratory analysis. Data are qualified in accordance with the FSM, CLQM and applicable data validation SOPs.

No contract laboratory is being used.

5.3 Completeness Target

The completeness target (i.e., the number of samples successfully collected and analyzed, as a percentage of those that were planned) has been set at 95% annually for this project. At times a sampling attempt will be made, but samples will not be able to be collected because of no flow or low water conditions, unsafe station conditions, equipment malfunction, vegetation or other site impacts that may affect the representativeness of a sample, tropical storms/hurricanes or other unforeseen problems that might affect sample collection and/or quality. If samples cannot be collected on an attempt, collectors shall document the sample as an "NOB" to indicate an attempt was made and/or the sample could not be collected for the documented reasons. Sampling attempts are included with successfully collected and analyzed samples in the completeness target.

6.0 Data and Records Management

The District evaluates data in accordance with the data quality objectives stated in the District's FSM and CLQM. All data submittals shall conform to existing District guidelines.

6.1 Contract Deliverables

There are no contract deliverables for this project.

6.2 Data and Record Storage

After the data validation process, all data and records are maintained so that end users can retrieve and review information relative to a sampling event. Field records are maintained in accordance with the *Archive Records Storage and Retention* SOP (SFWMD-FIELD-SOP-022). All analytical data and specified metadata are sent to the DBHYDRO database for long-term storage and retrieval.

The District shall maintain master copies of field and laboratory generated records. It is the responsibility of the District to maintain both records of current and historical methodologies and operating procedures so that at any given time the conditions that were applied to a sampling event can be evaluated.

Field records storage protocols are outlined in the *Archive Records Storage and Retention* (SFWMD-FIELD-SOP-022). Corrections of field data, records or data in DBHYDRO must follow the WQMS *Correction of Field Records SOP* (SFWMD-FIELD-SOP-032) and the FSM.

7.0 References

Abtew, Wossenu and Barbara Powell, 2004. Water Quality Sampling Schemes for Variable Flow Canals at Remote Sites. Journal of the American Water Resources Association (JAWRA) 40(5):1197-1204.

FDEP (Florida Department of Environmental Protection). Quality Assurance Rule, 62-160 Florida Administrative Code (F.A.C.). April 16, 2018.

SFWMD (South Florida Water Management District). *Archive Records Storage and Retention*, SFWMD-FIELD-SOP-022, Water Quality Monitoring Section

SFWMD. *Chemistry Laboratory Quality Manual (CLQM)*, SFWMD-LAB-QM-001, most current effective version. Analytical Services Section.

SFWMD. *Correction of Field Records*, SFWMD-FIELD-SOP-032, Water Quality Monitoring Section

SFWMD. *Field Sampling Manual (FSM)*, SFWMD-FIELD-FSM-001, Water Quality Monitoring Section.

SFWMD. *Field Quality Manual (QM)*, SFWMD-FIELD-QM-001, Water Quality Monitoring Section.

SFWMD. *Sampling Flow-Related Stations*, SFWMD-FIELD-SOP-027, Water Quality Monitoring Section.

SFWMD. *Station Registration*, SFWMD-FIELD-SOP-031, Water Quality Monitoring Section

SFWMD. *Water Quality and Applied Sciences Bureaus Quality Management Plan (QMP)*, SFWMD-QS-QM-001. Applied Sciences and Water Quality Bureaus.

8.0 Revisions and Modifications

Version	Date	Section	Notes
01	05/17/2010	All	Initial version
02	12/14/2011	Cover	Change due to Reorganization of District hierarchy: • Division to Section • Added: Water Quality Bureau • Environmental Resource Department to Water Resources Division
		Table 2	Mistakenly omitted on original version at S11A, S145, and S38 Added: • Monthly Grab parameters • SO4 for QTR
			Mistakenly omitted on original version at S6 Added: • Biweekly Grab parameters
		Signature page	Change due to Reorganization of District heirarchy: • Division to Section • Division Director to Section Administrator
03	04/07/2016	Section 3.4.2, Tables 2, and 3, Appendix 1	TOC concurrence received to use a direct measure of TN rather than TKN at the following stations - L28I, L3BRS, S10A, S10C, S10D, S11B, S11C, S150, S5A, S5AE, S5AW, S5AS, S6, S7, S8.
		Table 3	TOC concurrence received to use a direct measure of TN rather than TKN allowing a different preservation technique to be utilized - 5 gallon jug composite preserved by refrigeration at, S5A, S6, S7 changed to 24 bottle non-refrigerated composite preserved by acidification.
		Tables 2, and 3, Appendix 1	TOC concurrence to use a direct measure of TN, also allowed TDKN to be replaced with a direct measure of TDN at the following stations - S10A, S10C, S10D, S11B, S11C, S150, S6, S7.
		Tables 2, and 3, Appendix 1	Added DPM CERPRA Permit to S151 sampling requirements.
04	05/28/2016	Section 3.4.2, Appendix 1	Removed pesticide monitoring details for several sites and referenced as a footnote, the PEST Monitoring Plan (SFWMD-FIELD-MP-034).
05	01/26/2017	Section 4.2, Table 3	Inserted a new Table 3 to provide Technicians specific direction on the coding for Discharge and how flow or recorded flow is determined. Removed text from Project specific guidance that was repeated in Table 3.

Version	Date	Section	Notes
		Table 2, Appendix 1	TOC concurred to the removal of TOTFE from the following sites – L28I, L3BRS, S10A, S10C, S10D, S11A, S11B, S11C, S38, S39.
		Appendix 1	Fixed clerical error – at S7 TKN was replaced with TDN.
		ALL	Reformatted and revised entire plan to conform with new standardized Monitoring Plan Template.
06	04/04/2018	ALL	Reformatted and revised entire plan to conform with new standardized Monitoring Plan Template.
		Sections 2.1, 2.3.1, Figure 1, Tables 1, and 2, Appendix 1	G64, G94A, G94B, G94C, S142, and S9A collected initially (from September 1997 – January 2018) under the NECP OMP. These sites were moved to the CAMB OMP to consolidate sampling guidance and a NECP CMP was created to detail the NECP history. Number of stations was increased from 31 to 37 in the CAMB OMP.
		Section 2.3.1	Defined temporary modifications made to sampling locations due to construction at G123, S34, S141, S140 and S151.
		Table 3	Removed stations where recorded flow guidance is clear according to the Recorded Flow SOP, added clarification for recorded flow based on autosampler numbers for S7, and added G94B and G64.
		Table 1	Latitude and Longitude verified for CAMB sites. The following sites were modified – G94C, S5AW, S5AS, L28I, C123SR84, S142, S31, and S39.
		References	Added NECP CMP reference.
		Table 2, Appendix 1	Revised parameters after review of NECP and Settlement Agreement requirements: • ACME1DS CA, CL removed and SO4 frequncy increased to BWF • S145 removed TOTFE • S9A added ALKA, CL quarterly and NO2, NH4, OPO4, TPO4 to the BWF/M list for NECP
		Appendix 1	Removed specific references to monitoring pesticides and now refence the PEST MP-034.
		Appendix 2	Separated Decommissioned stations into an appendix.
		Appendix 3	New Appendix to clarify which stations are applicable to each mandate.
		Table 2, Appendix 1	Removal of S151 from CERPRA Permit 0304879-008
07	02/13/2020	All	Updated to match the most current MP Template language (Template Version Date April 28, 2021);

Version	Date	Section	Notes
		Sections 2.1, 2.3.1, Tables 1 and 2, Figure 1, Appendix 1, 3	02/12/2019 CAMB Project was divided to remove the following sites S5A, S5AE, S5AS, S5AW, S7, S150, S9, S9A, S151 AND S31. The CAMB Autosampler OMP (MP-105) created in response.
		Sections 4.2, 4.6	Added programming clarification for the autosampler at USSO and clarified sampling is conducted on the downstream side of the structure.
		Table 2, Appendix 1	Correction for the NECP Mandate changing the frequency from BWF/M and Quarterly to BWRF at S38, S39, S145, S11A. S34 moved from WCA3 to WCA2. Confirmed all ACODES alphabetized based on parameter name based on template standardization.
		Table3, Appendix 4	Moved Table 3 Site Specific Guidance for Grab Samples to Appendix 4
		Section 4.2, Appendix 4	Added special notification requirements for NSID1US.
		Section 2.1, 2.2	Additional history added regarding LOTAC guidance, and clarified the original intent was to calculate loads. Additionally, clarified that because of infrastructure changes
		Section 2.3.1	Updated language defining construction at S-34 and S-141. Defining the surrogate at S142-D and the resumption of sampling at the rebuilt S34 platform.
		Figure 1	Updated to identify the field sampling trips for ease oof finding locations while sampling
		Section 4.2	Clarified TPO4 autosampler backup grabs are completed even if TPO4 is not mandated at the station for that sampling event.
08	06/04/2024	All, section 4.2, section 2.1, appendix 1, appendix 2, Table 2, section 2.2, section 4.6	Updated to match the new template version (Version date 11/9/23); updates title page's signatories and dates; 4.2 updates to define surrogate station collection and update on G64 platform as of 2024; 2.1 history of mandates updated, appendix 1 formatting updated and confirmed all mandates are correct and revised, revised Settlement Agreement to document that the requirements for CAMB are specifically Appendix D; Compiled Appendix 2 into appendix; updated formatting for table 2.; updated table 2 and appendices to reflect EMRT changes to S8, S6, and S140; added language in section 2.2 to reflect Appendix D and EMRT changes to S6, S8, and S140; removed S6 from Table 1 and two and Appendix 1, station info can be found in STA 2 OMP; updated section 4.6, app 2, and table 2 to reflect USSO autosampler change from ADT to ACT
09	10/31/2024*	Table 2, Section 2.2, appendix 1, appendix 2,	Updated to reflect EMRT changes to S39, S38, S34, S145, S142, NSID1US, USSO, L3BRS, and S190; Updated signatories

*When the new draft is created, the previous version's Date is changed to the exact Effective Date.

Appendix 1: Station Requirements by Mandate

Station	Mandate	Collection Method	Frequency	Parameters TESTS
G94A, G94C	Everglades Forever Act NECP / 0237803-011	Grab	Bi-weekly Recorded Flow (BWRF)	Nitrate + Nitrite (NOX), Total Nitrogen (TN), Total Phosphorus (TP), Turbidity (TURB) Dissolved Oxygen (DO*), pH (PH*), Specific Conductance (SCOND*), Temperature (TEMP*)
			Quarterly Recorded Flow (QRF)	Sulfate (SO4)
G94D	1991 Settlement Agreement (Append D)	Grab	Event Based (EB)	Alkalinity (ALKA), Calcium (CA), Chloride (CL), NOX, Ortho-Phosphorus (OPO4), SO4, TN, TP, Total Suspended Solids (TSS), TURB DO*, PH*, SCOND*, TEMP*
	Everglades Forever Act NECP / 0237803-011	Grab	BWRF	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
S39	EMRT 202401-1	Grab	Biweekly Recorded Flow, otherwise Monhtly (BWFR/M)	TP, TN, DO*, PH*, SCOND*, TEMP*
			Monthly (M)	Na, K, Ca, Mg, Cl, Alk, SO4, DO*, PH*, SCOND*, TEMP*
	Everglades Forever Act NECP / 0237803-011	Grab	BWRF	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
NSID1US (only required if pumping into WCA2A)	EMRT 202401-1 Source Control	Grab	Monthly Recorded Flow (MRF)	TP, DO*, PH*, SCOND*, TEMP*
S145 (Surrogate for S144 and S146), S38	EMRT 202401-1	Grab	BWRF/M	TN, TP, DO*, PH*, SCOND*, TEMP*
			M	Na, K, Ca, Mg, Cl, Alk, SO4, DO*, PH*, SCOND*, TEMP*
	Everglades Forever Act NECP / 0237803-011	Grab	BWRF	NOX, SO4, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*

Station	Mandate	Collection Method	Frequency	Parameters TESTS
S34[2]	Everglades Forever Act NECP / 0237803-011	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			QRF	SO4
C123SR84 (Surrogate for S339 and S340)	1991 Settlement Agreement (Append D)	Grab	Biweekly if Flow, otherwise Monthly (BWF/M)	NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
			Quarterly (Q)	CA, CL, SO4
	Everglades Forever Act NECP / 0237803-011	Grab	BWF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			Q	SO4
G64 (NOB. Platform for sampling removed culvert to be rebuilt)	Everglades Forever Act NECP / 0237803-011	Grab	BWF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			QRF	SO4
L28I	1991 Settlement Agreement (Append D)	Grab	BWF at S190/M	ALKA, NH4, CL, COLOR, Nitrite (NO2), NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
			Q	CA, MG, K, SIO2, NA, SO4, TSS
L3BRS (Surrogate for G409)	EMRT 202401-1	Grab	Weekly (W)	TP, DO*, PH*, SCOND*, TEMP*
			M	Na, K, Ca, Mg, Cl, Alk, SO4
	Seminole Agreement	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
S140	Everglades Forever Act NECP / 0237803-011	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			QRF	SO4
	EMRT 202308-3	Grab	BWRF/M	TP DO*, PH*, SCOND*, TEMP*
			M	Na, K, Ca, Mg, Cl, Alk, SO4
S142	Everglades Forever Act NECP / 0237803-011	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			QRF	SO4
	EMRT 202401-1	Grab	BWRF/M	TP, TN, DO*, PH*, SCOND*, TEMP*
			M	Na, K, Ca, Mg, Cl, Alk, SO4

Station	Mandate	Collection Method	Frequency	Parameters TESTS
S190	1991 Settlement Agreement (Append D)	Grab	BWF/M	NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
			Q	CA, CL, SO4
	Everglades Forever Act NECP / 0237803-011	Grab	BWRF/M	NOX, TN, TP, TURB, DO*, PH*, SCOND*, TEMP*
			QRF	SO4
	Mission Driven	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
		ACF	W	TP
	EMRT 202403-2	Grab	Biweekly (BW) (May-October and highwater event based dry season)	NOX, OPO4, TN, TP, NH4, TSS
S8	EMRT #202308-3	Grab	BWRF/M	TP, DO*, PH*, SCOND*, TEMP*
			M	Na, K, Ca, Mg, Cl, Alk, SO4
	Seminole Agreement	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
S344	Everglades Forever Act NECP / 0237803-011	Grab	Q	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
USSO	Seminole Agreement	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
		ACT	W	TP
	EMRT 202401-1 Source Control	Grab	W	TP, DO*, PH*, SCOND*, TEMP*
S10A, S10C, S10D	1991 Settlement Agreement (Append D)	Grab	BWRF	ALKA, NH4, CA, DOC, MG, K, SIO2, NA, TDN, TDP, TOC, TSS
			BWRF/M	CL, NOX, OPO4, SO4, TN, TP DO*, PH*, SCOND*, TEMP*
S11A (Surrogate for S143)	1991 Settlement Agreement (Append D)	Grab	BWRF	ALKA, NH4, CA, CL, DOC, MG, NOX, OPO4, K, SIO2, NA, SO4, TDN, TDP, TN, TOC, TP, TSS, DO*, PH*, SCOND*, TEMP*
	Everglades Forever Act NECP / 0237803-011	Grab	BWRF	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
S11B, S11C	1991 Settlement Agreement (Append D)	Grab	BWRF	ALKA, NH4, CA, CL, DOC, MG, NOX, K, SIO2, NA, SO4, TDN, TDP, TN, TOC, TP, TSS, OPO4,

Station	Mandate	Collection Method	Frequency	Parameters TESTS
				DO*, PH*, SCOND*, TEMP*
The Structures Below are Decommissioned and Recorded as NOB				
ACME1DS	1991 Settlement Agreement (Append D)	Grab	EB	ALKA, CA, CL, NOX, OPO4, SO4, TN, TP, TSS, TURB DO*, PH*, SCOND*, TEMP*
	Everglades Forever Act NECP / 0237803-011	Grab	BRWF	NOX, SO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
G94B	Everglades Forever Act NECP / 0237803-011	Grab	BWF	NOX, TN, TPO4, TURB DO*, PH*, SCOND*, TEMP*
			QRF	SO4
G123	1991 Settlement Agreement (Append D)	Grab	BWF/M	NOX, OPO4, TN, TPO4, TURB DO*, PH*, SCOND*, TEMP*
			Q	CA, CL, SO4
	Everglades Forever Act NECP / 0237803-011	Grab	BWF/M	NOX, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
			Q	SO4
	EAA Rule Chapter 40E-63	Grab	EB within 24 HRS of discharge notification	NOX, OPO4, TN, TP, TURB DO*, PH*, SCOND*, TEMP*
			EB 2 consecutive days following 1st sampling event above	TP

*In Situ Grab

[2]S34 is decommissioned. S34E acts as surrogate for both S34 and S141.

Appendix 2: Station Mandates

Mandate / Location	Settlement Agreement	EAA Rule - Chap 40E-63, FAC	NECP – Everglades Forever Act	Everglades Forever Act	NPDES – Clean Water Act	Seminole Agreement	EMRT Authorized
ACME1DS	■		■				
G94A			■				
G94B			■				
G94C			■				
G94D	■		■				
S39			■				■
S5A[1]		■					■
S5AE[1]	■						
S5AS[1]	■						
S5AW[1]		■					■
G123	■	■	■				
NSID1US							■
S145			■				■
S38			■				■
S6[2]		■		■	■		■
C123SR84	■		■				
G64			■				
L28I	■						
L3BRS[3]						■	■
S140			■				■
S142			■				■
S150[1]							■
S151[1]	■		■				■
S190	■		■				■
S31[1]			■				■
S34			■				
S7							■
S8[3]						■	■
S9[1]	■		■				■
S9A[1]	■		■				■
USSO[3]						■	■
S10A	■						
S10C	■						
S10D	■						
S11A	■		■				
S11B	■						
S11C	■						
Total Stations	31	4	20	1	1	3	8

[1]Stations reported within the CAMB Autosampler Monitoring Plan (MP-105)
[2]Stations also associated with the STA2 Monitoring Plan (MP 073)
[3]Stations also associated with the SEMI Monitoring Plan (MP-042)

Appendix 3: Station Specific Guidance for Grab Samples

Station	Reference Point	Primary Direction of Flow	Determination of sampling based on flow or recorded flow
ACME1DS (decommissioned)	Upstream side of culvert	Flow from Village of Wellington through culvert to WCA1.	Station decommissioned and recorded as NOB.
C123SR84 (S339 and S340 surrogate)	Sampling platform at C123SR84	Flow passing platform from the north going under the bridge at Alligator Alley towards S340.	C123SR84 is roughly halfway between S339 and S340. Biweekly if flowing collection is determined by gate openings at either S339 or S340. This check can be done remotely or on site.
G64	From bank, sampling platform has been removed	Flow from North New River Canal to WCA3.	No telemetry onsite. Control Room notifies FPM. Currently NOB due to inaccessibility and unsafe condition at site.
G123[1] (decommissioned)	Sampling platform on downstream side of Station	Flow from south to north through G123 pump station from the North New River Canal to WCA3.	Station decommissioned and recorded as NOB.
G94B	Upstream side of culvert	Flow is not possible. Culverts have been removed.	Station decommissioned and recorded as NOB.
G94D (only if flow into Refuge)	Sampling platform upstream of G94D	Flow from Acme Pump 2 Village of Wellington through G94D culvert to WCA1.	Event based - determination is made based on notification of Village of Wellington operation of Pump Station 2. Control Room notifies FPM. Contact number for ACME is (561) 753-2576.
L28I	Sampling platform at L28I	Flow north to south under Alligator Alley.	Biweekly if flowing determination is made if the gates at S190 are open.
L3BRS (Surrogate for G409)	Platform immediately north of the G409 structure and south of the Bridge over the L3 canal.	Flow from the L3 canal to the north or the L4 canal to the east. Always sample. Designate UD as code 0.	While the permit requires Biweekly if Flowing otherwise Monthly, flow cannot be determined.
S11A (S143 surrogate)	S11A gates	Flow of water from WCA2 to the east through gates to WCA3 to the west.	Recorded flow determination is made if gates are opened at S11A or S143 throughout the prior 2 weeks.
S140	Autosampler platform on southern wing wall	Flow from west to east through the pumps from the L28 canal through to the C60 canal.	Biweekly recorded Flow determination is made if there are pump operations or gate opening throughout the prior two weeks. Determined remotely.
S142	Platform located immediately south and west of the structure	Flow of water from WCA2 to the east through gates to North New River Canal.	Biweekly recorded flow collection is determined by gate opening at S142. This check can be done remotely or on site.
S145	North end of sampling	Flow from WCA2A to the north to	Recorded flow determination is made if gates are opened at

Station	Reference Point	Primary Direction of Flow	Determination of sampling based on flow or recorded flow
(S144 and S146 surrogate)	platform	WCA 2B to the south through S145 culverts.	S144, S145, or S146 throughout the prior 2 weeks.
S190	Sampled from wingwall on the east side of the structure near the autosampler	Flow from north to south on the L-28 Interceptor Canal	Biweekly if flowing determination for both S190 and L28I are made if the S190 gate is open. Determined while onsite. Weekly TPO4 is collected regardless of flow as a backup to the autosampler.
S34 (S141 surrogate)	Platform on upstream, northern side of structure	Flow from north to south through culverts along the North New River Canal.	If either S34 or S141 are open.
S8	Trash rake bridge located immediately northwest of the pumps.	Flow through the pumps from northwest to southeast along the Miami Canal.	Biweekly recorded flow determination is made if the gates are opened throughout the previous two weeks. Determined remotely.
NSID1US	Platform upstream of the pump station. Combination is 5070	Flow into WCA2A through the pump station from east to west.	Recorded flow determination is made if pumps are operated throughout the prior 2 weeks to bring water into WCA 2A only. Flow out from WCA2A through NSID1 is not considered as recorded flow. Control Room notifies FPM.