Charlotte County Project Plan

For

Ambient Surface Water Monitoring Program

Field-CCPP-001-01

06/20/2022

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1. Acronyms and Definitions

CCBOCC- Charlotte County Board of County Commissioners

FDEP- Florida Department of Environmental Protection

FDEP SOP 001/01- FDEP Standard Operating Procedures for Field Activities, revised January 2017

FY- Fiscal Year for Charlotte County, which spans October 1st – September 30th

MSBU- Municipal Service Business Unit

TMDL- Total Maximum Daily Load

WBID- Water Body Identification Number, as defined by FDEP

WIN- Watershed Information Network database managed by FDEP

2. Project Introduction and Organization

This document serves as a reference for Charlotte County's ambient surface water monitoring program, detailing the history, site locations, sample collection requirements, and personnel responsibilities for management and execution of this project. This project was initiated in 2022 at the direction of the Board of County Commissioners, as described in the county's 2022-2023 Strategic Plan. Funding is provided by county stormwater MSBUs. This project is currently executed by Environmental Science Associates and Janicki Environmental, and is managed by Charlotte County staff. Project organization and management is described in Tables 1 and 2 below:

Table 1: CCPP-001 Organizational Responsibility

Task	Organization
Project Management	Charlotte County Administration
Project Management	Environmental Science Associates
Project Funding	Charlotte County Stormwater MSBUs
Field Sample Collection and Documentation	Environmental Science Associates
Field Sample QA	Environmental Science Associates & Janicki Environmental
Laboratory Analysis and QAPP	Benchmark Enviroanalytical
Data Management and Reporting	Environmental Science Associates & Janicki Environmental

Table 2: CCPP-001 Funding Allocation

Funding Source[1]	Funding Amount	Confirmed Funding Duration[3]
West County MSBU	$82,000 /Fiscal Year[2]	Two years (FY2021-2022, FY2022-2023)
Middle County MSBU	FY22: $163,000 FY23: $242,000	Two years (FY2021-2022, FY2022-2023)
South County MSBU	$75,000 /Fiscal Year	Two years (FY2021-2022, FY2022-2023)

1. Note that funding provided by an MSBU must be spent on activities within the boundaries of that MSBU.
2. Charlotte County Fiscal Years are October 1st-September 30th. Surplus funds not spent during the FY are absorbed into the respective MSBU's general budget.
3. The amount of funding to be provided beyond FY2022-2023 has yet to be determined.

2.1 Project Objectives

The goal of this project is to obtain information on the condition of surface waters flowing within Charlotte County. The data collected is intended to be utilized as follows:

- Identification of long-term trends and ambient water quality conditions within:
  - waters discharging to Charlotte Harbor, Lemon Bay, and the Caloosahatchee River,
  - waters within WBIDs located in Charlotte County's boundaries, and
  - waters entering Charlotte County (where warranted/possible);
- Inform potential needs for source tracking and opportunities for water quality improvement;
- Conduct investigatory work as warranted in order to identify or clarify the origin and/or impact of in-stream conditions identified through the ambient monitoring activities of this project;
- Submission of data to FDEP WIN for the purpose of assessing Charlotte County WBIDs per 62-302, 62-303, and 62-304, F.A.C;
- Development of models that will allow for the identification and prediction of loading characteristics and trends and in Charlotte County;
- Presentation of sample results to the public in a manner that clearly describes water quality trends in relation to applicable water quality criteria.

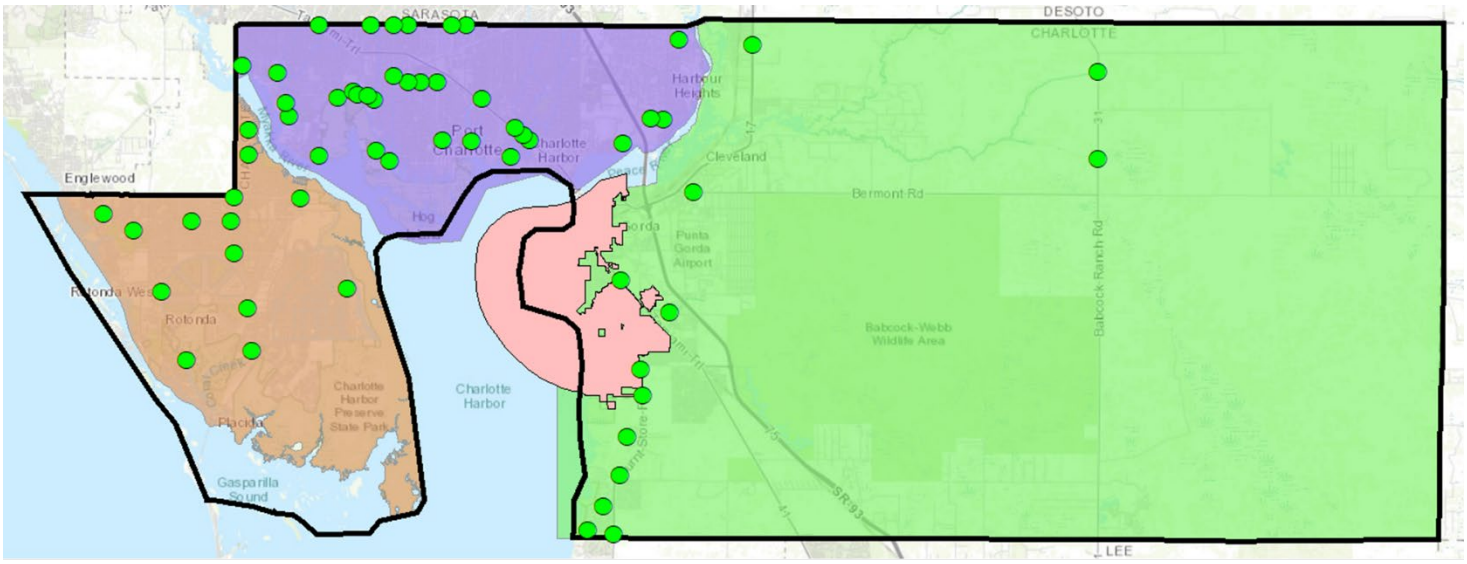
2.2 Project Duration

Monitoring for this project was initiated in June 2022, and will continue as described herein until otherwise terminated by the Charlotte County BOCC. The scope of the project may fluctuate depending on available annual funding and changes in cost for sample collection.

3.0 Geographic Location

The monitoring locations for this project are within the boundaries of the three county stormwater MSBUs; see Figure 1. Location information is described in Table 3 below. Funds provided by an MSBU must be spent on activities within the boundary of that MSBU. General Funds may be spent in any location throughout the county.

Figure 1: CCPP-001 Funding Regions and Monitoring Locations[1]



1. Punta Gorda does not currently fund monitoring under this project, nor are monitoring activities conducted within the city limits.

Table 3: Monitoring Stations and GPS Coordinates

Station ID	Station Name	Latitude[1]	Longitude	MSBU	WBID (Class)	Salinity[2]
MC1991B01	Cheshire Waterway at Eisenhower Drive	27.01204	-82.2509	Middle	1991B (2)	Marine
MC204301	Apollo and Jupiter Waterways near Windcrest Drive	27.00834	-82.2307	Middle	2043 (3M)	Marine
MC2048A01	Trib to Sam Knight Creek at El Jobean Rd	26.99575	-82.196	Middle	2048A (3M)	Marine
MC2048A02	Trib to Myakka River at El Jobean Road	26.99872	-82.1874	Middle	2048A (3M)	Marine
MC204701	Como Waterway at Ohara Dr	26.9632	-82.1667	Middle	2047 (3M)	Marine
MC204702	Trib to Myakka River near Ohara Drive	26.96873	-82.1744	Middle	2047 (3M)	Marine
MC204601	Pellam Waterway at Edgewater Drive	26.97376	-82.1362	Middle	2046 (3M)	Marine
MC2056E01	Little Alligator Creek at Edgewater Drive	26.97337	-82.1197	Middle	2056E (3M)	Marine
MC2056E02	Trib to Alligator Bay At Edgewater Drive	26.96552	-82.0968	Middle	2056E (3M)	Marine
MC2056E03	Trib to Middle Peace River Estuary at Harbor View Rd	26.97207	-82.0327	Middle	2056E (3M)	Marine

Station ID	Station Name	Latitude[1]	Longitude	MSBU	WBID (Class)	Salinity[2]
MC2056E04	Desoto Canal at Harbor View Rd	26.98457	-82.0097	Middle	2056E (3M)	Marine
MC2056E05	Deep Creek near Santos Drive	27.02523	-82.0006	Middle	2056E (3M)	Fresh[3]
MC205301	Hayward Canal near Pambar Avenue	26.9661	-82.2069	Middle	2053 (2)	Marine
MC1991A01	Tributary to Myakka at Riverwood Drive	26.98636	-82.224	Middle	1991A (2)	Marine
MC1991B02	Dickens Waterway at Riverwood Drive	26.99311	-82.2261	Middle	1991B (2)	Marine
MC2056E06	Trib to Peace River at Harbor View Rd and Rio De Janeiro Ave	26.9848	-82.0166	Middle	2056E (3M)	Marine
MC2048B01	Flamingo Waterway Near Tippecanoe Park	26.99464	-82.1754	Middle	2048B (3M)	Marine
MC2056EA01	Pompano Waterway at North Tamiami Trail	26.97368	-82.0862	Middle	2056EA (1)	Fresh[3]
MC2056EA02	Fordham Waterway at North Tamiami Trail	26.97642	-82.0896	Middle	2056EA (1)	Fresh[3]
MC2056EA03	Elkcam Waterway At North Tamiami Trail	26.98038	-82.0948	Middle	2056EA (1)	Fresh[3]
MC2056E07	Morningstar Waterway Near Lakeshore Drive	26.99498	-82.1134	Middle	2056E (3M)	Fresh[3]
MC204602	Pellam Waterway at Cochran Blvd	27.0036	-82.1394	Middle	2046 (3M)	Fresh[3]
MC204603	Courtland Waterway at Cochran Blvd	27.00362	-82.1486	Middle	2046 (3M)	Fresh[3]
MC204604	Auburn Waterway at Cochran Blvd	27.00343	-82.156	Middle	2046 (3M)	Fresh[3]
MC204703	Como Waterway at El Jobean Road	27.00695	-82.1641	Middle	2047 (3M)	Marine[4]
MC2048A03	West Pond Outfall at Charlotte Sports Park	26.99703	-82.1847	Middle	2048A (3M)	Marine[4]
MC2048B02	East Pond Outfall at Charlotte Sports Park	26.99683	-82.1792	Middle	2048B (3M)	Marine[4]
MC2056E07D	Lionheart Waterway at Hillsborough Blvd	27.03251	-82.1226	Middle	2056E	Fresh
MC2056E08D	Crestview Waterway at Hillsborough Blvd	27.03259	-82.1306	Middle	2056E	Fresh
MC204605D	Auburn Waterway at Hillsborough Blvd	27.03274	-82.1558	Middle	2046	Fresh
MC204704D	Como Waterway at Hillsborough Blvd	27.03274	-82.164	Middle	2047	Fresh
MC2048A04D	Crestwood Waterway at Hillsborough Blvd	27.03282	-82.1772	Middle	2048A	Fresh

Station ID	Station Name	Latitude[1]	Longitude	MSBU	WBID (Class)	Salinity[2]
MC204303D	Jupiter Waterway at Chancellor Blvd	27.03286	-82.2071	Middle	2043	Marine[4]
MC2056E07U	Cocoplum Canal at Lionheart Waterway	27.03293	-82.1224	Middle	2010B	Fresh
MC204605U	Cocoplum Canal at Auburn Waterway	27.03293	-82.1558	Middle	2010B	Fresh
MC2048A04U	Cocoplum Canal at Crestwood Waterway	27.03304	-82.1772	Middle	2010B	Fresh
MC204303U	Jupiter Waterway at Cocoplum Canal	27.03301	-82.2071	Middle	2010B	Fresh
SC2093A01	Hog Branch Near Comingo Lane	26.77453	-82.0532	South	2093A (3F)	Fresh
SC209401	Bear Branch at Cape Horn Road	26.78675	-82.0442	South	2094 (3F)	Fresh
SC2082A01	Pirate Canal at Burnt Store Road	26.80268	-82.0345	South	2082A (3F)	Fresh
SC208601	Trib to Charlotte Harbor at Heritage Landing Blvd	26.82261	-82.0304	South	2086 (3F)	Fresh
SC208101	Trib to Whidden Branch at Burnt Store Road	26.85667	-82.0229	South	2081 (3F)	Fresh
SC207401	Alligator Creek at Taylor Rd	26.88591	-82.0059	South	2074 (1)	Fresh
SC208102	Unnamed Canal to Charlotte Harbor at Burnt Store Road	26.84378	-82.0215	South	2081 (3F)	Fresh
SC205901	Trib to Peace River at Bermont Road	26.94718	-81.9927	South	2059 (3M)	Marine[4]
SC2093A02	Hog Branch at Burnt Store Road	26.77262	-82.0381	South	2093A (3F)	Fresh
SC206301	North Fork Alligator Creek at Tamiami Trail	26.9022	-82.0339	South	2063 (3M)	Marine
SC204001	Myrtle Slough at Babcock Ranch Road	27.0088	-81.7604	South	2040 (1)	Fresh
SC204101	Shell Creek at SR 31	26.9646	-81.7607	South	2041 (1)	Fresh
SC203501	Lee Branch at Duncan Road	27.022829	-81.95841	South	2035 (3F)	Fresh
WC1991B01	Blitman Waterway at Gillot Blvd	26.97932	-82.2472	West	1991B (2)	Marine[4]
WC1991A02	Bacchus Waterway at Gillot Blvd	26.96677	-82.2473	West	1991A (2)	Marine[4]
WC1991A03	Trib to Lafitte Waterway near Bennett Drive	26.94433	-82.2177	West	1991A (2)	Marine[4]
WC206801	Trib to Buck Creek at Boundary Blvd	26.89651	-82.2971	West	2068 (3M)	Fresh[3]
WC205201	Ainger Creek on South McCall Road	26.9362	-82.3308	West	2052 (3M)	Marine

Station ID	Station Name	Latitude[1]	Longitude	MSBU	WBID (Class)	Salinity[2]
WC206802	Eastern Inflow to Rotonda at Boundary Blvd	26.88795	-82.2478	West	2068 (3M)	Fresh
WC1991A04	Lafitte Waterway at Jennings Blvd.	26.94463	-82.2556	West	1991A (2)	Marine[3 4]
WC1991A05	Seamist Waterway at South McCall Road	26.93271	-82.2575	West	1991A (2)	Marine[4]
WC2078B01	Trib To East Branch Coral Creek at Brig Circle South	26.86617	-82.2454	West	2078B (2)	Fresh
WC206703	Oyster Creek at San Casa Drive	26.92775	-82.313	West	2067 (3M)	Marine
WC206602	Zephyr Waterway at St Paul Drive	26.89801	-82.1906	West	2066 (3M)	Marine
WC2078A01	West Branch Coral Creek Near Anne Underwood Drive	26.86171	-82.283	West	2078A (2)	Marine
WC206803	Butterford Waterway Near Ritz Street	26.91609	-82.2554	West	2068 (3M)	Marine[3 4]
WC1991A06	March Waterway at North Access Road	26.933111	-82.280530	West	1991A (2)	Marine[4]

1. Coordinates are relative to WGS84 horizontal datum.
2. Salinity designation is based on WBID Class and/or known conditions at the upstream portion of the site.
3. An elevation control structure is present at this site and/or downstream of this site, which acts as a delineator between fresh and tidal waters in this drainage area. Samples are to be collected upstream of the control structure.
4. Conditions at this location should be evaluated to verify appropriate salinity status based on average SpC values within the bottom half of the water column.

3.1 Access and Authority

Most sample locations are accessible via public right-of-way. Those that require access through private property are described in Table 4 below.

Table 4: Private Property or Restricted Access Information

Station	Ownership	Access Details
MC204301	Riverbend HOA	Access approval is valid only through June 2023; After that time, access will need to be requested for another year. 1-2 days advance notice requested.
MC1991A01	Riverwood Community Development District	No advance notice needed.

MC1991B02	Riverwood Community Association	No advance notice needed.
SC2093A01	Burnt Store Lakes POA	Samples are only collected monthly from July-October when discharging. Samples must be collected at SC2093A02 on the same day.
WC2078A01	Rotonda Owners Assn	No advance notice needed.
MC2056E05	Deep Creek POA	5 day advance notice required.
WC1991A03	Gardens of Gulf Cove	No advance notice needed.
SC208601	Heritage Landing	No advance notice needed.
MC2048B02	Charlotte County	24-48 hour notice required; access can be granted after 11:00 AM
MC2056E07U MC204605U MC2048A04U MC204303U	City of North Port	No advance notice needed, but city has requested to be kept informed on sampling schedule, parameters, and results.

4.0 Field Activities

4.1 Station Monitoring Frequencies and Sample Collection Requirements

The frequency and parameters associated with routine sample collection events under this project are provided in Table 5. Unless otherwise noted in Section 4.2, all surface water samples are collected at a depth of 0.5 meters on the upstream side of any access or control structure at the coordinates provided in Table 3. If the site depth at the time of sample collection is less than 1 meter, samples are collected at half depth. Samples are not collected if the site depth is less than 10 cm.

Samples may be collected at an alternate location if safety concerns, aquatic vegetation or other obstructions prevent collection of a representative sample within the water column. Alternate sample locations must be positioned upstream as close as possible to the established site such that the collected sample is still representative of the target water body. Alternate locations must be represent contributing tributaries that is ordinarily captured at the established site. The coordinates of the alternative location must be documented at the time of sample collection, and the project manager must be notified of that sample event as soon as is practicable.

Table 5: Sample Frequency and Parameters

Site(s)	Frequency	Parameters
All sites not otherwise described below	Monthly	Total Phosphorus Dissolved Orthophosphate Total Ammonia Nitrogen Nitrate-Nitrite Nitrogen Total Kjeldahl Nitrogen Chlorophyll-a (corrected for pheophytin) Total Organic Carbon True Color Turbidity Total Suspended Solids pH DO (mg/L and % Sat) Specific Conductance Salinity Temperature Bacteria (Fecal Coliform, E. coli or Enterococci)
SC2093A01	Monthly from July-October when discharging. Samples must be collected at SC2093A02 on the same day.	
MC2056E07U MC204605U MC2048A04U MC204303U	Monthly when discharging	

Table 6: Sample Analysis Information

Parameter	Laboratory	Method	MDL
AMMONIA NITROGEN	Benchmark EnviroAnalytical	USEPA 350.1	0.008 mg/L
NITRATE+NITRITE AS N	Benchmark EnviroAnalytical	STANDARD METHODS SYSTEA EASY	0.006 mg/L
NITRATE+NITRITE AS N	Benchmark EnviroAnalytical	USEPA 353.2	0.004 mg/L
TOTAL KJELDAHL NITROGEN	Benchmark EnviroAnalytical	USEPA 351.2	0.05 mg/L
TOTAL NITROGEN	Benchmark EnviroAnalytical	STANDARD METHODS SYSTEA+351	0.05 mg/L
TOTAL NITROGEN	Benchmark EnviroAnalytical	USEPA 353+351	0.05 mg/L
TOTAL PHOSPHORUS AS P	Benchmark EnviroAnalytical	USEPA 365.3	0.008 mg/L
ORTHO PHOSPHORUS AS P	Benchmark EnviroAnalytical	USEPA 365.3	0.002 mg/L

Parameter	Laboratory	Method	MDL
CHLOROPHYLL A, CORRECTED	Benchmark EnviroAnalytical	USEPA 445.0	0.25 mg/M3
TOTAL ORGANIC CARBON	Benchmark EnviroAnalytical	STANDARD METHODS SM5310B	0.271 mg/L
TOTAL SUSPENDED SOLIDS	Benchmark EnviroAnalytical	STANDARD METHODS SM2540D	0.57 mg/L
TURBIDITY	Benchmark EnviroAnalytical	USEPA 180.1	0.11 NTU
COLOR PH	Benchmark EnviroAnalytical	STANDARD METHODS SM4500H+B	
COLOR, APPARENT	Benchmark EnviroAnalytical	STANDARD METHODS SM2120B	2.5 PCU
E- COLI BY IDEXX QUANTITRAY	Benchmark EnviroAnalytical	STANDARD METHODS SM9223B	10 #/100 ML
ENTEROCOCCI	Benchmark EnviroAnalytical	ENTEROLERT	10 #/100 ML

4.2 Project and Site-Specific Sample Collection Considerations and Deviations

4.2.1 Bacteria Sample Collection Considerations

For this project, bacteria samples may adhere to a maximum hold time of 24 hours from the date/time of sample collection. The specific type of bacteria sample to be collected is determined by the salinity status associated with that site in Table 3:

- "Fresh" Sites- E. coli samples are collected.
- "Marine" Sites- Enterococci samples are collected.

The salinity status is based on the WBID Class designation associated with each site, except:

- Sites at which a water control structure serves as a boundary between freshwater flow and tidally-influenced waters. In those instances, samples are collected on the freshwater side of the structure.
- Sufficient volume of chloride and/or specific conductance data has been captured at a site indicating the WBID class designation at that site may not be correct. Data must represent the conditions of waters within the bottom half of the water column. Per 62-302, F.A.C.:
    - Predominantly fresh waters = chloride < 1,500 mg/L OR SpC < 4,580 µmhos/cm
    - Predominantly tidal waters = chloride ≥ 1,500 mg/L OR SpC ≥ 4,580 µmhos/cm

4.2.2 Mid County Canal Sample Collection- Sarasota County/Cocoplum

Sites located on Hillsborough Blvd (the northern border of Charlotte County) must be collected on the downstream side of the road, as MSBU funds cannot be expended on sample collection efforts in other counties (waters north of Hillsborough lie within Sarasota County). The affected sites are:

- MC2056E07D (Lionheart Waterway at Hillsborough Blvd)
- MC2056E08D (Crestview Waterway at Hillsborough Blvd)
- MC204605D (Auburn Waterway at Hillsborough Blvd)
- MC204704D (Como Waterway at Hillsborough Blvd)
- MC2048A04D (Crestwood Waterway at Hillsborough Blvd)
- MC204303D (Jupiter Waterway at Hillsborough Blvd)

Pending availability of General Funds, additional samples are collected on the upstream side of water control structures regulating discharges from the Cocoplum Waterway (Sarasota County) into the following Charlotte County canal systems:

- MC2056E07U (Lionheart Waterway at Hillsborough Blvd)
- MC204605U (Auburn Waterway at Hillsborough Blvd)
- MC2048A04U (Crestwood Waterway at Hillsborough Blvd)
- MC204303U (Jupiter Waterway at Hillsborough Blvd)

Samples are collected only during periods of discharge through the associated elevation control structures.

4.3 Field Quality Control Requirements

Blank and QC sample collection shall follow the procedures found in FDEP SOP 001/01. Blanks and duplicates are collected at the frequencies described in Table 7 below. Field-cleaned equipment blanks are collected during trips in which sampling equipment decontamination occurs in the field; otherwise, an equipment blank or field blank are collected.

Table 7: Quality Control Checks and Requirements

QC Type	Frequency (All Parameter Groups)	Sample/QC Associations	Review Element Criteria
Field Cleaned Equipment Blank (FCEB)	One per trip or 5% of all samples collected for the duration of this Project; collected during trips in which intermediate sample collection equipment is utilized and decontaminated in the field.	Associated samples include all samples collected on the same sampling trip (day) by the same sampling crew and equipment.	Acceptance Criteria = <MDL. Qualify the FCEB result if ≥ tested analyte's MDL. Qualify all sample associated results with concentrations ≤ 10 times blank value.
Field Blank (FB)	Required in lieu of FCEB when no intermediate sample collection equipment is used during a trip (samples collected directly into sample bottle). May also be collected if environmental contamination is suspected.	Associated samples include all samples collected on the same sampling trip (day) by the same sampling crew and equipment.	Acceptance Criteria = <MDL. Qualify FB result if it is ≥ tested analyte's MDL. Qualify associated sample results ≤ 10 times blank value.
Equipment Blank (EB)	When an FCEB or FB is not collected.	Associated samples include all samples collected on the same sampling trip (day) by the same sampling crew and equipment.	Acceptance Criteria = <MDL. Qualify EB result if ≥ tested analyte's MDL. Qualify associated sample(s) if the result is ≤ 10 times the blank value.

QC Type	Frequency (All Parameter Groups)	Sample/QC Associations	Review Element Criteria
Duplicate Sample (DS)	One per trip or 5% of all samples collected for the duration of this Project. Duplicates are collected by repeating the entire sample collection, processing, and equipment decontamination process.	Associated samples include all samples collected on the same sampling trip (day) by the same sampling crew and equipment.	Acceptance Criteria = <20% RPD. Qualify DS result if it is ≥ RPD. Provide feedback to the affected group and initiate troubleshooting or other corrective action.

4.4 Sample Submission

Following completion of sample collection for each day, samples are transported to the laboratory for analyses in accordance with the requirements specified in that laboratory's Quality Manual. Samples are submitted to the laboratory on the same day as collection or as soon as possible the following day. Samples are submitted in accordance to hold time requirements provided in the documentation described in Table 2, except for those analytes exempted per Section 4.2 of this document.

5.0 Data Quality Objectives (DQOs)

5.1 Data Usage

Field and laboratory analytical results and associated information must be submitted in a standardized electronic format in accordance with Rule 62-40.540, 62-160.240, and 62-160.340, F.A.C., and as described within the Watershed Information Network Minimum Data Quality Standards (WIN MDQS). All information provided in this manner must be organized and formatted per WIN's data upload requirements. Information on WIN MDQS, including example template upload files, may be obtained at http://publicfiles.dep.state.fl.us/DEAR/WIN/

5.2 Data Quality

All monitoring described herein shall meet the requirements conveyed in the FDEP's Quality Assurance Rule, 62-160 F.A.C.

Field parameter DQOs are described in the Field Quality Assurance Objectives table found in the Field Testing section of the Charlotte County FSM and FQM. The most recent version of these documents details the specific field testing DQOs at the time of sample collection.

Samples are analyzed according to the provisions within the FDEP Rule 62-160 F.A.C. and the contract laboratory quality manual. Data are qualified in accordance with the FQM and applicable laboratory quality manual. Contract laboratories must be certified through the National Environmental Laboratory Accreditation Program (NELAP) for the submitted samples' analyses.

5.3 Completeness Target

At times samples will not be able to be collected due to no flow or low water conditions, unsafe station conditions, equipment malfunction, site maintenance, 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 reason.

The completeness target (i.e., the number of samples successfully collected and analyzed) has been set at 92% annually for this project. Sampling attempts shall be included in the completeness target.

6.0 Data and Records Management

Contract laboratory and/or field data and documentation are submitted to the County in the necessary format for transmittal to FDEP's WIN database as described in the associated contract for this project. Copies of all supplemental information, including field notes, laboratory reports, and revisions to procedural/quality manuals are also retained by the county such that a complete record of sample event conditions, results, and supporting information may be maintained for storage and review. It is the responsibility of the County 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.

7.0 References

Florida Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, Revised January 2017

8.0 Revisions and Modifications

Revision Number	Effective Date	Section/Page	Change/Reason
01	06/20/2022	All	Initial version of Field-CCPP-001

Appendix 1: Site Identification and Naming History

The following table serves as a reference describing any changes made to IDs for sites sampled under this project.

Current Site Name	Previous Site Name (Date of Retirement)
MC1991A01	CCCS0079 (June 2022)
MC1991B01	CCCS0001 (June 2022)
MC1991B02	CCCS0082 (June 2022)
MC2010A01	CCUS0005 (June 2022)
MC2010B01	CCUS0006 (June 2022)
MC2010B02	CCUS0009 (June 2022)
MC2010B03	CCUS0010 (June 2022)
MC2010B04	CCUS0012 (June 2022)
MC204301	CCCS0006 (June 2022)
MC204302	CCUS0015 (June 2022)
MC204601	CCCS0023 (June 2022)
MC204602	CCUS0039 (June 2022)
MC204603	CCUS0040 (June 2022)
MC204604	CCUS0041 (June 2022)
MC204701	CCCS0013 (June 2022)
MC204702	CCCS0016 (June 2022)
MC204703	CCUS0042 (June 2022)
MC2048A01	CCCS0009 (June 2022)
MC2048A02	CCCS0010 (June 2022)

Current Site Name	Previous Site Name (Date of Retirement)
MC2048A03	ComServ01 (June 2022)
MC2048B01	CCUS0030 (June 2022)
MC2048B02	ComServ02 (June 2022)
MC205301	CCCS0078 (June 2022)
MC2056E01	CCCS0024 (June 2022)
MC2056E02	CCCS0028 (June 2022)
MC2056E03	CCCS0034 (June 2022)
MC2056E04	CCCS0040 (June 2022)
MC2056E05	CCCS0042 (June 2022)
MC2056E06	CCCS0083 (June 2022)
MC2056E07	CCUS0036 (June 2022)
MC2056EA01	CCUS0032 (June 2022)
MC2056EA02	CCUS0033 (June 2022)
MC2056EA03	CCUS0034 (June 2022)
SC204001	CCUS0024 (June 2022)
SC204101	CCUS0026 (June 2022)
SC205901	CCCS0096 (June 2022)
SC206301	CCUS0019 (June 2022)
SC207401	CCCS0073 (June 2022)
SC2074B01	CCCS0074 (June 2022)
SC208101	CCCS0068 (June 2022)
SC208102	CCCS0087 (June 2022)

Current Site Name	Previous Site Name (Date of Retirement)
SC2082A01	CCCS0063 (June 2022)
SC208601	CCCS0065 (June 2022)
SC2093A01	CCCS0058 (June 2022)
SC2093A02	CCCS0101 (June 2022)
SC209401	CCCS0060 (June 2022)
WC1991A01	CCCS0045 (June 2022)
WC1991A02	CCCS0046 (June 2022)
WC1991A03	CCCS0047 (June 2022)
WC1991A04	CCCS0094 (June 2022)
WC1991A05	CCCS0095 (June 2022)
WC1991A06	CCUS0046 (June 2022)
WC1991B01	CCCS0044 (June 2022)
WC205201	CCCS0052 (June 2022)
WC206602	CCCS0103 (June 2022)
WC206703	CCCS0102 (June 2022)
WC206801	CCCS0050 (June 2022)
WC206802	CCCS0092 (June 2022)
WC206803	CCUS0045 (June 2022)
WC2078A01	CCUS0027 (June 2022)
WC2078B01	CCCS0100 (June 2022)