

# Data Acquisition Standard Operating Procedures

## Southwest Florida Water Management District - Water Quality Monitoring (ID# 479)

Last Updated: 5/6/2023

### Program Summary

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Water quality monitoring programs of SWFWMD. Several different SWFWMD coastal monitoring projects are included for SEACAR. As of January 2021, the current list of SWFWMD WQ Stations within RCP Managed Areas include the following projects: P108: Data -Stream WQ Monitoring includ. Macroinvertebrate Surveys (n=2); P529: Data - Project COAST Water Quality Monitoring (Pasco Co) (n=19); P529: Data - Project COAST-North WQ Mon (Hernando, Citrus, & Levy) (n=22); P529: Project COAST - Springs Coast Offshore WQ Monitoring (n=3); W526: Ed- CHEC-WQ Data Peace, Myakka, Charlotte Harbor & Lemon Bay (n=91); W526: Planning - Charlotte Harbor National Estuary Program CMP (n=6).

### URLs

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- Program - <http://www.swfwmd.state.fl.us/>
- DDI - <https://data.florida-seacar.org/programs/details/479>

### Contacts

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Contact Name	Organization	Email	Phone
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### Data Tables

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- Data\_479A\_Final
- Data\_479A\_Load

### Data Stored Procedures

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- usp\_Data\_479A\_Load\_insert
- usp\_combined\_wq\_wc\_nut\_insert\_479

# Data Acquisition Standard Operating Procedures: ProgramID 479

Date Created: 04/15/2019

Created By: *Claude Kershaw*

Date Modified: 02/05/2021

Modified By: *Mrudhula Murali*

## Data File Path:

1. STORET and WIN Data Tables already in the SEACAR database. Use OrgID 21FLSWFMD.
2. WIN Data downloaded separately: "\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR\_FDEP\Data\ID\_479\DataToLoad\WIN\_21FLSWFD.txt"
3. Spatial Data: In the "Notes" Section of the DDI.
4. WIN Spatial Data downloaded separately: [\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR\\_FDEP\Data\ID\\_479\DataToLoad\WIN\\_Stations.txt](#)
5. "\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR\_FDEP\Data\ID\_479\DataToLoad\WQDataDownload2021-01-27\_combined.txt"
6. "\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR\_FDEP\Data\ID\_479\DataToLoad\SWFWMD\_Stations\_SEACAR\_Jan2021.xlsx.

DDI URL: <http://dev.seacar.waterinstitute.usf.edu/datadiscovery/programs/details/479>

## Contact Information:

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Contact Phone:

## Procedure Overview:

1. Load the Stations from the table "SWFWMD\_Stations\_SEACAR\_Jan2021.xlsx" into table **Locations\_479A**.
2. Use SQL Server Import Export Wizard to load the data from file "WQDataDownload2021-01-27\_combined.txt" into table **Data\_479A\_Load**.
3. Execute procedure `usp_Data_479A_Load_insert` to load the data into table **Data\_479A\_Final**.
4. Add the Monitoring Locations from table **Locations\_479A** to the **SampleLocation\_Point** table.
5. Add new Monitoring Locations into the **SampleLocation** table. This will generate a LocationID for each Monitoring Location.
6. Update the **SampleLocation\_Point** table with the LocationID generated in the **SampleLocation** table. Run procedure `usp_SampleLocation_Point_update` to do this.

7. Update the LocationID column in table **Data\_479A\_Final** with the LocationID in the **SampleLocation** table. Join on the [SID] column in **Data\_479A\_Final** and the ProgramLocationID column in **SampleLocation**.

#### Data Tables

1. Data\_479A\_Load
2. Data\_479A\_Final

#### Data Stored Procedures

1. usp\_Data\_479A\_Load\_insert
2. usp\_SampleLocation\_Point\_update

#### GIS Procedures

1. The Monitoring Location information is found in the table **Locations\_479A**.
2. Complete steps 7 through 11 in the "Procedure Overview" section of this document.

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
```

```
CREATE PROC [dbo].[usp_combined_wq_wc_nut_insert_479]
```

```
AS
```

```
BEGIN
```

```
SET NOCOUNT ON;
```

```
SET XACT_ABORT ON;
```

```
-- THIS IS JUST FOR STORET/WIN DATA MANUAL LOADS
```

```
-- Constants - PLEASE SET NOW!!
```

```
DECLARE @combinedTable varchar(50) = 'Combined_WQ_WC_NUT'
```

```
DECLARE @dataLoadCode varchar(10)
```

```
-- Temporary
```

```
SET @dataLoadCode = '479A'
```

```
-- Setup data load
```

```
DECLARE @runBy varchar(50) = SYSTEM_USER;
```

```
DECLARE @programID varchar(10);
```

```
DECLARE @dataStreamID varchar(10);
```

```
SELECT @dataStreamID = DataStreamID,
```

```
@programID = ProgramID
```

```
FROM DataStreamProcedure
```

```
WHERE DataLoadCode = @dataLoadCode;
```

```
ÿ
```

```
--delete existing data
```

```
exec usp_delete_combined @datastreamID, 'Combined_WQ_WC_NUT'
```

```
INSERT INTO Combined_WQ_WC_NUT(ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
ActivityDepth_m, TotalDepth_m, RELATIVEDEPTH, ResultValue, DateAdded)
```

```
SELECT @programID, @dataStreamID, c.ParameterID, a.LocationID, a.[Sample Date and Time], a.[Activity
Depth], NULL, NULL, dbo.udf_convert_units(b.OriginalUnits, c.Units, a.[Sample Result]), getdate()
```

```
FROM Data_479A_Final a
```

```
INNER JOIN Combined_Conversion_Parameters b ON a.[Parameter Name] = b.OriginalParameter and
```

```
b.DatastreamID = @dataStreamID --and a.RESULT_UNIT = b.OriginalUnits
```

```
INNER JOIN Combined_Parameters c ON b.TargetParameterID = c.ParameterID
```

```
LEFT JOIN (SELECT [Sample Result], [Measuring Unit], SID, [Sample Date and Time]
```

```
FROM Data_479A_Final
```

```
WHERE [Parameter Name] = '"Depth, bottom (Total)') d ON a.SID = d.SID and a.[Sample Date and
Time]=d.[Sample Date and Time]--a.ACTIVITY_ID = d.ACTIVITY_ID
```

```
WHERE (ISNUMERIC(a.[Sample Result]+'e0') = 1) and a.LocationID is not null
```

```
DELETE Combined_Data_Tracking
```

```
WHERE DataStreamID = @dataStreamID
```

```
AND @combinedTable = @combinedTable
```

```
INSERT INTO Combined_Data_Tracking (ProgramID, IndicatorID, DataStreamID, ParameterID,
CombinedTableName, NumRowsFinal, NumRowsCombined, LastUpdateDate, LastUpdateBy)
```

```
SELECT @ProgramID, b.IndicatorID, a.DataStreamID, a.ParameterID, @CombinedTable,
```

```
COUNT(a.ResultValue), COUNT(a.ResultValue), GETDATE(), @runBy
```

```
FROM Combined_WQ_WC_NUT a
```

```
INNER JOIN Combined_Parameters b on a.ParameterID = b.ParameterID
```

```
WHERE a.ProgramID = @ProgramID
```

```
AND a.DataStreamID = @dataStreamID
```

```
GROUP BY a.ProgramID, b.IndicatorID, a.DataStreamID, a.ParameterID
```

```
/*
```

```
SELECT *
```

```
FROM DataStreamProcedure
```

```
WHERE ProgramID = 479
```

```
SELECT *  
FROM Data_479A_Final  
order by [sample result]
```

```
SELECT *  
FROM Combined_Parameters
```

```
select *  
FROM Combined_WQ_WC_NUT  
WHERE DataStreamID = 1250
```

```
exec usp_delete_combined 1250, 'Combined_WQ_WC_NUT'  
exec usp_delete_combined 1251, 'Combined_WQ_WC_NUT'
```

```
*/
```

```
END
```

```
GO
```

```

SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC [dbo].[usp_Data_479A_Load_insert]
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

INSERT INTO [dbo].Data_479A_Final (SID, [Station Name], [Parameter Name], [Sample Date and Time],
Timezone, [Sample Result],
[Measuring Unit], Remark, [Method Name], Medium, [Value Qualifier], [Analysis Date and Time],
[Measuring program Name],
[Activity Depth], [Activity Depth Unit], [Sampling Agency])
SELECT a.SID, a.[Station Name], a.[Parameter Name], a.[Sample Date and Time], a.Timezone,
a.[Sample Result],
a.[Measuring Unit], a.Remark, a.[Method Name], a.Medium, a.[Value Qualifier], a.[Analysis Date and
Time], a.[Measuring program Name],
a.[Activity Depth], a.[Activity Depth Unit], a.[Sampling Agency]
FROM Data_479A_Load a
INNER JOIN (SELECT LTRIM(RTRIM([Monitoring Location ID])) as stn, MIN(CAST([activity start date
time] as date)) as MinDate
FROM Data_WIN_Final
where LTRIM(RTRIM([Organization ID])) = '21FLSWFD'
group by [Monitoring Location ID]) b on a.SID = b.stn
WHERE CAST(a.[Sample Date and Time] as date) < B.MinDate

END
GO

```