Data Acquisition Standard Operating Procedures

Florida LAKEWATCH Program (ID# 514)

Last Updated: 5/6/2023

Program Summary

Water quality

URLs

- Program - http://lakewatch.ifas.ufl.edu/#webcast
- DDI - https://data.florida-seacar.org/programs/details/514

Contacts

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Data Tables

- Data_514A_Final
- Data_514A_Load
- Data_514B_Final
- Data_514B_Load

Data Stored Procedures

- usp_Data_514A_Load_insert
- usp_Data_514B_Load_insert
- usp_combined_wq_wc_nut_insert_514A
- usp_combined_wq_wc_nut_insert_514B

Data Acquisition Standard Operating Procedures: ProgramID *514*

Date Created: *04/10/2019*

Created By: *Claude Kershaw*

Date Modified: *04/10/2019*

Modified By: *Claude Kershaw*

Data File Paths:

1. Data: "\\forest.usf.edu\data\PDrive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_0514_UWF_CTD\DataToLoad\LakewatchData_AsOfJan2020\All Data A-Z 1-17-20.xlsx"
2. Data: "\\forest.usf.edu\data\PDrive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_0514_UWF_CTD\DataToLoad\LakewatchData_AsOfJan2020\Periodic All C&C 1-22-2020 copy.xlsx"
3. Spatial Information: "\\forest.usf.edu\data\PDrive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_0514_UWF_CTD\DataToLoad\LAKEWATCH_InBufferedManagedAreas.xlsx"

DDI URL: http://dev.seacar.waterinstitute.usf.edu/datadiscovery/programs/details/514

Contact Information:

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Procedure Overview:

1. Use SQL Server Import Export Wizard to load the file "LAKEWATCH_InBufferedManagedAreas.xlsx" into table **Locations_514A.**
2. Use SQL Server Import Export Wizard to load the file "All Data A-Z 1-17-20.xlsx" into table **Data_514A_Load.**
3. Use SQL Server Import Export Wizard to load the file "Periodic All C&C 1-22-2020 copy.xlsx" into table **Data_514B_Load.**
4. Update columns [TN (µg/L), TP to mg/L] to mg/L in table **Data_514A_Load** by dividing the columns by 1000.
5. Update columns [Cond# (µS)] to mS in table **Data_514B_Load** by dividing the columns by 1000.
6. Execute procedures usp_Data_514*_Load_insert to load the data into Final tables.
7. Add new Monitoring Locations from table **Locations_514A** into the **SampleLocation_Point** table. Use [County]-[Lake]-[Station] as the ProgramLocationID.
8. Add new Monitoring Locations into the **SampleLocation** table. This will generate a LocationID for each Monitoring Location.

9. Update the **SampleLocation_Point** table with the LocationID generated in the **SampleLocation** table. Run procedure usp_SampleLocation_Point_update to do this.
10. Update the LocationID column in table **Data_514A_Final** and **Data_514B_Final** with the LocationID in the **SampleLocation** table. Join on the StationID column in **Data_514A_Final and Data_514B_Final** and the ProgramLocationID column in **SampleLocation.**
11. Delete records from **Data_514A_Final** and **Data_514B_Final** tables with null LocationID**.**

Data Tables

1. Data_514*_Load
2. Data_514*_Final

Data Stored Procedures

1. usp_Data_514*_Load_insert
2. usp_SampleLocation_Point_update

GIS Procedures

1. Complete steps 4 through 7 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_514A]
AS
BEGIN
SET NOCOUNT ON;
SET XACT_ABORT ON;

-- Constants - PLEASE SET NOW!!
DECLARE @dataLoadCode varchar(10) = '514A';
DECLARE @combinedTable varchar(50) = 'Combined_WQ_WC_NUT';
DECLARE @ParameterID int;
ÿ
-- Setup data load
DECLARE @runBy varchar(50) = SYSTEM_USER;
DECLARE @programID int, @dataStreamID int;

SELECT@dataStreamID = DataStreamID,
@programID = ProgramID
FROMDataStreamProcedure
WHEREDataLoadCode = @dataLoadCode;
ÿ
ÿ
-- Delete Existing records
exec usp_delete_combined @dataStreamID, @combinedTable

-- Insert data
Set @ParameterID = 19-- Total Phosphorus

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, 'Surface',
CAST(dbo.[udf_convert_units]('ug/L','mg/L',a.[TP (µg/L)]) AS NUMERIC(25,8)), NULL, GETDATE()
FROMData_514A_Final a
WHEREa.[TP (µg/L)] IS NOT NULL

exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

-- Insert data
Set @ParameterID = 15-- Total Nitrogen

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, 'Surface',
CAST(dbo.[udf_convert_units]('ug/L','mg/L',a.[TN (µg/L)])AS NUMERIC(25,8)), NULL, GETDATE()
FROMData_514A_Final a
WHEREa.[TN (µg/L)] IS NOT NULL

exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

-- Insert data
Set @ParameterID = 9-- Chlorophyll a uncorrected for pheophytin

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, 'Surface',
CAST(dbo.[udf_convert_units]('ug/L','ug/L',a.[CHL (µg/L)])AS NUMERIC(25,8)), NULL, GETDATE()
```

```
FROMData_514A_Final a
WHEREa.[CHL (µg/L)] IS NOT NULL

exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

-- Insert data
Set @ParameterID = 11-- Secchi Depth

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, 'Surface',
NULLIF(COALESCE(dbo.[udf_convert_units]('ft','m',a.[SECCHI
(ft)]),dbo.[udf_convert_units]('ft','m',dbo.udf_stripAlphaChar_decimal(a.[SECCHI 2]))),'')/* hand
"on Bottom" */,NULL, GETDATE()
FROMData_514A_Final a
WHERENULLIF(NULLIF(COALESCE(dbo.[udf_convert_units]('ft','m',a.[SECCHI
(ft)]),dbo.[udf_convert_units]('ft','m',dbo.udf_stripAlphaChar_decimal(a.[SECCHI 2]))) ,''),'.') i
not null


exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

/*
SELECT *
FROM Combined_WQ_WC_NUT

SELECT *
FROM Data_514A_Final

SELECT *
FROM Combined_Parameters a
join Indicator b on a.IndicatorID = b.IndicatorID
where b.Habitat = 'Water Column'
and b.IndicatorName <> 'Nekton'

SELECT *
FROM DataStreamProcedure
WHERE ProgramID = 514

SELECT *
FROM Combined_Data_tracking
where  programid = 557
and datastreamID = 7
ÿ
exec usp_delete_combined 1248, 'Combined_WQ_WC_NUT'
*/

END




GO
```

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON

CREATE PROC [dbo].[usp_combined_wq_wc_nut_insert_514B]
AS
BEGIN
SET NOCOUNT ON;
SET XACT_ABORT ON;

-- Constants - PLEASE SET NOW!!
DECLARE @dataLoadCode varchar(10) = '514B';
DECLARE @combinedTable varchar(50) = 'Combined_WQ_WC_NUT';
DECLARE @ParameterID int;
ÿ
-- Setup data load
DECLARE @runBy varchar(50) = SYSTEM_USER;
DECLARE @programID int, @dataStreamID int;

SELECT@dataStreamID = DataStreamID,
@programID = ProgramID
FROMDataStreamProcedure
WHEREDataLoadCode = @dataLoadCode;
ÿ

-- Delete Existing records
exec usp_delete_combined @dataStreamID, @combinedTable

ÿ
-- Insert data
Set @ParameterID = 6-- Specific Conductivity

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, NULL,
CAST(dbo.[udf_convert_units]('us/cm','mS/cm',a.[Cond# (µS)]) AS NUMERIC(25,8)), NULL, GETDATE()
FROMData_514B_Final a
WHEREa.[Cond# (µS)] IS NOT NULL

exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

-- Insert data
Set @ParameterID = 13-- Colored dissolved organic matter, CDOM

INSERT INTO Combined_WQ_WC_NUT (ProgramID, DataStreamID, ParameterID, LocationID,
Activity_Start_Date_Time, ACTIVITY_DEPTH, Activity_Depth_Unit, RELATIVE_DEPTH, Org_Result_Value,
VALUE_QUALIFIER, DateAdded)
SELECT@programID, @dataStreamID, @ParameterId, a.LocationID, a.Date, NULL, NULL, NULL,
CAST(dbo.[udf_convert_units]('PCU','PCU',a.[Color (Pt-Co Units)])AS NUMERIC(25,8)), NULL, GETDATE(
FROMData_514B_Final a
WHEREa.[Color (Pt-Co Units)] IS NOT NULL

exec usp_combined_data_tracking_insert @parameterID = @ParameterId, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

/*
SELECT *
FROM Combined_WQ_WC_NUT

SELECT *
FROM Data_514B_Final
```

```
SELECT *
FROM Combined_Parameters a
join Indicator b on a.IndicatorID = b.IndicatorID
where b.Habitat = 'Water Column'
and b.IndicatorName <> 'Nekton'

SELECT *
FROM DataStreamProcedure
WHERE ProgramID = 514

SELECT *
FROM Combined_Data_tracking
where  programid = 514
and datastreamID = 7
ÿ
exec usp_delete_combined 1360, 'Combined_WQ_WC_NUT'
*/

END




GO
```

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC usp_Data_514A_Load_insert
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

 INSERT INTO [dbo].[Data_514A_Final]
           ([StationID],[County],[Lake],[Date],[Month],[Day],[Year],[Station],[TP (µg/L)]
           ,[TN (µg/L)],[CHL (µg/L)],[SECCHI (ft)],[SECCHI 2])
           SELECT [StationID],[County],[Lake],[Date],[Month],[Day],[Year],[Station]
         ,[TP (µg/L)],[TN (µg/L)],[CHL (µg/L)],[SECCHI (ft)],[SECCHI 2]
  FROM [dbo].[Data_514A_Load]

END
GO
```

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC usp_Data_514B_Load_insert
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

 INSERT INTO [dbo].[Data_514B_Final]
   ([StationID],[County],[Lake],[Date],[Month],[Day],[Year]
   ,[Station],[Color (Pt-Co Units)],[Cond# (µS)],[Cond# (mS)])
   SELECT [StationID],[County],[Lake],[Date],[Month],[Day],[Year]
 ,[Station],[Color (Pt-Co Units)],[Cond# (µS)],[Cond# (mS)]
  FROM [dbo].[Data_514B_Load]

END
GO
```