

Data Acquisition Standard Operating Procedures

Assessment of Oysters and Barnacles Along the Chassahowitzka, Homosassa, and Lower Withlacoochee River Systems (ID# 5074)

Last Updated: 2/17/2024

Program Summary

A study of oyster habitat extent and quality as well as barnacle species ranges within the Chassahowitzka, Homosassa and lower Withlacoochee Rivers was conducted to support Southwest Florida Water Management District minimum flows and levels and investigate their effects on sessile macroinvertebrate communities.

URLs

- Program - <https://www.swfwmd.state.fl.us/>
- DDI - <https://data.florida-seacar.org/programs/details/5074>

Contacts

Contact Name	Organization	Email	Phone
Gabe Herrick, PhD	Lead Environmental Scientist	Gabe.Herrick@watermatters.org	352-796-7211, x4275

Data Tables

- Data_5074A_Final
- Data_5074A_Load
- Data_5074B_Final
- Data_5074B_Load
- Data_5074C_Final
- Data_5074C_Load

Data Stored Procedures

- usp_Data_5074A_Load_insert
- usp_Data_5074B_Load_insert
- usp_Data_5074C_Load_insert
- usp_combined_oyster_insert_5074A
- usp_combined_oyster_insert_5074B
- usp_combined_oyster_insert_5074C

Data Acquisition Standard Operating Procedures: ProgramID 5074

Date Created: 06/09/2020

Created By: Mrudhula Murali

Data File Path:

1. Data: "[\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_5074\DataToLoad\Data_ID_5074 \ OysterData_Master_R2.xlsx](file://forest.usf.edu/data/PDrive/CAS-WI/Misc%20Projects/SEACAR_FDEP/Data/ID_5074/DataToLoad/Data_ID_5074/OysterData_Master_R2.xlsx)"
2. Data: "[\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_5074\DataToLoad\Data_ID_5074 \ OysterFieldData_Master_R1.xlsx](file://forest.usf.edu/data/PDrive/CAS-WI/Misc%20Projects/SEACAR_FDEP/Data/ID_5074/DataToLoad/Data_ID_5074/OysterFieldData_Master_R1.xlsx)"
3. Spatial Data: [\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_5074\DataToLoad\Data_ID_5074 \ Chass_Oyster_Bed_Center_Points_and_AreasR1.xls](file://forest.usf.edu/data/PDrive/CAS-WI/Misc%20Projects/SEACAR_FDEP/Data/ID_5074/DataToLoad/Data_ID_5074/Chass_Oyster_Bed_Center_Points_and_AreasR1.xls)"
4. Spatial Data: [\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_5074\DataToLoad\Data_ID_5074 \ Hom_Oyster_Bed_Center_Points_and_AreasR2.xls](file://forest.usf.edu/data/PDrive/CAS-WI/Misc%20Projects/SEACAR_FDEP/Data/ID_5074/DataToLoad/Data_ID_5074/Hom_Oyster_Bed_Center_Points_and_AreasR2.xls)"
5. Spatial Data: [\\forest.usf.edu\data\PDive\CAS-WI\Misc Projects\SEACAR_FDEP\Data\ID_5074\DataToLoad\Data_ID_5074 \ L_With_Data_Joined_05042018_R3.xls](file://forest.usf.edu/data/PDrive/CAS-WI/Misc%20Projects/SEACAR_FDEP/Data/ID_5074/DataToLoad/Data_ID_5074/L_With_Data_Joined_05042018_R3.xls)"

DDI URL: <http://dev.seacar.waterinstitute.usf.edu/datadiscovery/programs/details/5074>

Contact Information:

Contact Name: Gabe Herrick, PhD

Contact Organization: Assessment of Oysters and Barnacles Along the Chassahowitzka, Homosassa, and Lower Withlacoochee River Systems

Contact Email: Gabe.Herrick@watermatters.org

Contact Phone: 352-796-7211, x4275

Procedure Overview:

1. Use SQL Server Import Export Wizard to load the file "Chass_Oyster_Bed_Center_Points_and_AreasR1.xls" and file "Hom_Oyster_Bed_Center_Points_and_AreasR2.xls" and file "L_With_Data_Joined_05042018_R3.xls" into table **Locations_5074A**.
2. Use SQL Server Import Export Wizard to load the file "OysterData_Master_R2.xlsx" "worksheet ["Chassahowitzka-Field", "Homosassa-Field", "Withlacoochee-Field"] into table **Data_5074A_Load**.
3. Use SQL Server Import Export Wizard to load the file "OysterData_Master_R2.xlsx" "worksheet ["Chassahowitzka-Lab", "Homosassa-Lab", "Withlacoochee-Lab"] into table **Data_5074B_Load**.
4. Add a column [Name] from **Data_5074A_Load** to the **Data_5074B_Load** table by joining the [Sample Bag] column from **Data_5074B_Load** and **Data_5074A_Load** table

5. Use SQL Server Import Export Wizard to load the file "OysterFieldData_Master_R1.xlsx" worksheet "Oyster Field Survey Info" into table **Data_5074C_Load**. [Load data having values in Sample Bag, Total Live and Total Dead]
6. Execute procedure `usp_Data_5074*_Load_insert` to load the data into table **Data_5074*_Final**.
7. Add the Monitoring Locations from tables **Locations_5074A** to the **SampleLocation_Point** table if they do not exist there already.
8. Add new Monitoring Locations into the **SampleLocation** table. This will generate a LocationID for each Monitoring Location.
9. Update the **SampleLocation_Point** and **SampleLocation_Line** 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_5074A_Final**, **Data_5074B_Final** and **Data_5074C_Final** with the LocationID in the **SampleLocation** table. Join on the [Name] column in **Data_5074A_Final**, **Data_5074B_Final** and **Data_5074C_Final** and the ProgramLocationID column in **SampleLocation**.

Data Tables

1. **Data_5074*_Load**
2. **Data_5074*_Final**

Data Stored Procedures

1. `usp_Data_5074*_Load_insert`
2. `usp_SampleLocation_Point_update`

GIS Procedures

1. The Monitoring Location information is found in the tables **Locations_5074***.
2. Complete steps 6 through 9 in the "Procedure Overview" section of this document.

```

SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC [dbo].[usp_combined_oyster_insert_5074A]
AS
BEGIN
SET NOCOUNT ON;
SET XACT_ABORT ON;

-- Delete Existing Data
exec usp_delete_combined 1350, 'Combined_OYSTER'
ÿ
-- Constants - PLEASE SET NOW!!
DECLARE @dataLoadCode varchar(10) = '5074A';
DECLARE @combinedTable varchar(50) = 'Combined_OYSTER'
DECLARE @parameterID int
ÿ
-- Setup data load
DECLARE @runBy varchar(50) = SYSTEM_USER;
DECLARE @programID int, @dataStreamID int;
ÿ
SELECT @dataStreamID = DataStreamID,
@programID = ProgramID
FROM DataStreamProcedure
WHERE DataLoadCode = @dataLoadCode;

SET @parameterID = 38 -- Number of Oysters Counted - Total
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadrantIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT @programID, @dataStreamID, @parameterID, a.LocationID, a.[Sample Date], 'Random Quadrat',
'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Total #/ 0#25 m2], GETDATE(), NULL, a.[Sample
Bag], a.Name, a.[Sample Date], 'Exact', 'NA', 'NA'
FROM Data_5074A_Final a
WHERE a.[Total #/ 0#25 m2] IS NOT NULL
AND a.LocationID IS NOT NULL
ÿ
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy
ÿ
SET @parameterID = 27 -- Percent Live
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadrantIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT @programID, @dataStreamID, @parameterID, a.LocationID, a.[Sample Date], 'Random Quadrat',
'Estimated percent', 'Natural', NULL, 25, 0.25, a.[% Live], GETDATE(), NULL, a.[Sample
Bag], a.Name, a.[Sample Date], 'Exact', 'NA', 'NA'
FROM Data_5074A_Final a
WHERE a.[% Live] IS NOT NULL
AND a.LocationID IS NOT NULL
ÿ
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy
ÿ
/*
SELECT *
FROM Combined_OYSTER
ÿ

```

```
SELECT Distinct ProgramID, b.IndicatorName, c.ParameterName, a.NumRowsCombined
FROM Combined_Data_Tracking a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
INNER JOIN Combined_Parameters c on a.ParameterID = c.ParameterID
WHERE b.Habitat = 'Oyster/Oyster Reef'
ÿ
SELECT *
FROM Data_5074A_Final
ÿ
SELECT *
FROM Combined_Parameters a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
where b.Habitat = 'oyster/oyster reef'
ÿ
SELECT *
FROM DataStreamProcedure
WHERE ProgramID = 5074

exec usp_delete_combined 1350, 'Combined_OYSTER'
*/
END
```

GO

```

SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC [dbo].[usp_combined_oyster_insert_5074B]
AS
BEGIN
SET NOCOUNT ON;
SET XACT_ABORT ON;
ÿ
-- Delete existing data
exec usp_delete_combined 1351, 'Combined_OYSTER'

-- Constants - PLEASE SET NOW!!
DECLARE @dataLoadCode varchar(10) = '5074B';
DECLARE @combinedTable varchar(50) = 'Combined_OYSTER'
DECLARE @parameterID int
ÿ
-- Setup data load
DECLARE @runBy varchar(50) = SYSTEM_USER;
DECLARE @programID int, @dataStreamID int;
ÿ
SELECT @dataStreamID = DataStreamID,
@programID = ProgramID
FROM DataStreamProcedure
WHERE DataLoadCode = @dataLoadCode;

SET @parameterID = 28 -- Shell Height
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT @programID, @dataStreamID, @parameterID, a.LocationID, a.[Date Collected], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Height (mm)], GETDATE(), NULL, a.[Sar
Bag], a.Name, a.[Date Collected], 'Exact', 'NA', 'NA'
FROM Data_5074B_Final a --percent
WHERE a.[Height (mm)] IS NOT NULL
AND a.LocationID IS NOT NULL
ÿ
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

/*
SELECT *
FROM Combined_OYSTER
ÿ
SELECT Distinct ProgramID, b.IndicatorName, c.ParameterName, a.NumRowsCombined
FROM Combined_Data_Tracking a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
INNER JOIN Combined_Parameters c on a.ParameterID = c.ParameterID
WHERE b.Habitat = 'Oyster/Oyster Reef'
ÿ
SELECT *
FROM Data_5074B_Final
ÿ
SELECT *
FROM Combined_Parameters a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
where b.Habitat = 'oyster/oyster reef'
ÿ
SELECT *
FROM DataStreamProcedure
WHERE ProgramID = 5074
ÿ

```

```
exec usp_delete_combined 1351, 'Combined_OYSTER'  
*/  
END
```

```
GO
```

```

SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC [dbo].[usp_combined_oyster_insert_5074C]
AS
BEGIN
SET NOCOUNT ON;
SET XACT_ABORT ON;

-- Delete existing data
exec usp_delete_combined 1354, 'Combined_OYSTER'

-- Constants - PLEASE SET NOW!!
DECLARE @dataLoadCode varchar(10) = '5074C';
DECLARE @combinedTable varchar(50) = 'Combined_OYSTER'
DECLARE @parameterID int
-- Setup data load
DECLARE @runBy varchar(50) = SYSTEM_USER;
DECLARE @programID int, @dataStreamID int;
SELECT @dataStreamID = DataStreamID,
@programID = ProgramID
FROM DataStreamProcedure
WHERE DataLoadCode = @dataLoadCode;

SET @parameterID = 26 -- Density
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT @programID, @dataStreamID, @parameterID, a.LocationID, a.[Survey Date], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Total #/ 0#25 m2]/0.25, GETDATE(), NULL,
a.[Sample Bag], a.Name, a.[Survey Date], 'Exact (for live specimens only)', 'NA', 'NA'
FROM Data_5074C_Final a
WHERE a.[Total #/ 0#25 m2] IS NOT NULL
AND a.LocationID IS NOT NULL
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

SET @parameterID = 27 -- Percent Live
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT @programID, @dataStreamID, @parameterID, a.LocationID, a.[Survey Date], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[% Live], GETDATE(), NULL, a.[Sample
Bag], a.Name, a.[Survey Date], 'Exact (for live specimens only)', 'NA', 'NA'
FROM Data_5074C_Final a
WHERE a.[% Live] IS NOT NULL
AND a.LocationID IS NOT NULL
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

SET @parameterID = 39 -- Number of Oysters Counted - Live
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)

```



```

SELECT@programID, @dataStreamID, @parameterID, a.LocationID, a.[Survey Date], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Total Live], GETDATE(), NULL, a.[Sample
Bag], a.Name, a.[Survey Date], 'Exact (for live specimens only)', 'NA', 'NA'
FROM Data_5074C_Final a
WHEREa.[Total Live] IS NOT NULL
ANDa.LocationID IS NOT NULL
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

SET @parameterID = 40 -- Number of Oysters Counted - Dead
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT@programID, @dataStreamID, @parameterID, a.LocationID, a.[Survey Date], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Total Dead], GETDATE(), NULL, a.[Sample
Bag], a.Name, a.[Survey Date], 'Exact (for live specimens only)', 'NA', 'NA'
FROM Data_5074C_Final a
WHEREa.[Total Dead] IS NOT NULL
ANDa.LocationID IS NOT NULL
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

SET @parameterID = 38 -- Number of Oysters Counted - Total
ÿ
-- Insert data
INSERT INTO Combined_OYSTER (ProgramID, DataStreamID, ParameterID, LocationID, SampleDate,
SurveyMethod, PercentLiveMethod, HabitatClassification, MinimumSizeMeasured_mm, NumberMeasured_n,
QuadSize_m2, ResultValue, DateAdded, QAQCFlag, QuadIdentifier, ReefIdentifier, LiveDate,
LiveDate_Qualifier, LiveDate_MinEstDate, LiveDate_MaxEstDate)
SELECT@programID, @dataStreamID, @parameterID, a.LocationID, a.[Survey Date], 'Random
Quadrat', 'Estimated percent', 'Natural', NULL, 25, 0.25, a.[Total Live]+a.[Total Dead], GETDATE(),
NULL, a.[Sample Bag], a.Name, a.[Survey Date], 'Exact (for live specimens only)', 'NA', 'NA'
FROM Data_5074C_Final a
WHEREa.[Total Dead] IS NOT NULL
ANDa.[Total Live] IS NOT NULL
ANDa.LocationID IS NOT NULL
exec usp_combined_data_tracking_insert @parameterID = @parameterID, @ProgramID = @programID,
@dataStreamID = @dataStreamID, @CombinedTableName = @combinedTable, @NumRowsFinal = @@ROWCOUNT,
@LastUpdateBy = @runBy

/*
SELECT *
FROM Combined_OYSTER

SELECT Distinct ProgramID, b.IndicatorName, c.ParameterName, a.NumRowsCombined
FROM Combined_Data_Tracking a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
INNER JOIN Combined_Parameters c on a.ParameterID = c.ParameterID
WHERE b.Habitat = 'Oyster/Oyster Reef'
ÿ
SELECT *
FROM Data_5074C_Final
ÿ
SELECT *
FROM Combined_Parameters a
INNER JOIN Indicator b on a.IndicatorID = b.IndicatorID
where b.Habitat = 'oyster/oyster reef'
ÿ
SELECT *
FROM DataStreamProcedure

```

```
WHERE ProgramID = 5074
ÿ
exec usp_delete_combined 1354, 'Combined_OYSTER'
*/
END
```

```
GO
```

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC usp_Data_5074A_Load_insert
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

INSERT INTO [dbo].[Data_5074A_Final]
([River], [Survey Date], [Name], [Bar], [Survey Comment], [Photos], [Sample Date], [Latitude], [Longitude],
, [Sample Bag], [Sample Area], [Total #/ 0#25 m2], [% Live])
SELECT [River], [Survey Date], [Name], [Bar], [Survey Comment], [Photos], [Sample
Date], [Latitude], [Longitude]
, [Sample Bag], [Sample Area], [Total #/ 0#25 m2], [% Live]
FROM [dbo].[Data_5074A_Load]

END
GO
```

```
SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC usp_Data_5074B_Load_insert
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

INSERT INTO [dbo].[Data_5074B_Final]
([Date Collected], [River], [Sample Bag], [Specimen #], [Full ID], [Height (mm)]
, [WWW (g)], [SWW (g)], [TDW (g)], [Cond# Index])
SELECT [Date Collected], [River], [Sample Bag], [Specimen #], [Full ID], [Height (mm)]
, [WWW (g)], [SWW (g)], [TDW (g)], [Cond# Index]
FROM [dbo].[Data_5074B_Load]

END
GO
```

```

SET ANSI_NULLS ON
SET QUOTED_IDENTIFIER ON
CREATE PROC usp_Data_5074C_Load_insert
AS
BEGIN
SET NOCOUNT ON
SET XACT_ABORT ON

INSERT INTO [dbo].[Data_5074C_Final]
    ([River], [Survey Date], [Surveyors], [Survey Start Time ], [Survey End Time], [Entry], [Est River
km], [Name]
    , [GPS], [Rockbar], [Bar], [Shoreline], [Clusters], [Continuous], [Scattered], [Survey
Location/Description]
    , [Veg %], [Veg Taxa], [Est % Bar Area Alive], [Photos], [Boat], [Samplers], [Sample Date], [Sample
Start]
    , [Sample End], [Sample Location], [Latitude], [Longitude], [Sample Bag], [Total #/ 0#25 m2], [% Live]
    , [Total Live], [Total Dead])
    SELECT [River], [Survey Date], [Surveyors], [Survey Start Time ], [Survey End Time], [Entry], [Est
River km]
    , [Name], [GPS], [Rockbar], [Bar], [Shoreline], [Clusters], [Continuous], [Scattered]
    , [Survey Location/Description], [Veg %], [Veg Taxa], [Est % Bar Area Alive], [Photos], [Boat]
    , [Samplers], [Sample Date], [Sample Start], [Sample End], [Sample Location], [Latitude], [Longitude]
    , [Sample Bag], [Total #/ 0#25 m2], [% Live], [Total Live], [Total Dead]
    FROM [dbo].[Data_5074C_Load]

END
GO

```