



# BLOOM-ID & ALGAL-ID SAMPLING

- FS 7000. GENERAL BIOLOGICAL COMMUNITY SAMPLING
  - FS 7110. PHYTOPLANKTON BLOOM SAMPLING
  - FS 7240. ALGAL MAT SAMPLING FOR TAXONOMIC IDENTIFICATION OR TOXIN ANALYSIS
  - FS 7230 RAPID PERIPHYTON SURVEY
- AB-17 Algal Bloom Response
  - Appendix A: Cyanobacteria Bloom Response Field Data Sheet



# ALGAL-ID Sampling

- The ALGAL-ID test code is associated with periphytic algae.
- ALGAL-ID samples are collected when the Rapid Periphyton Survey (RPS) rank 4-6 (algae > 6mm thick/long) is greater than >20%. They can also be collected when an abundance of periphytic algae is observed.
- When collecting for identification, pull filaments from different substrates if attached or pull from a representative area of a floating mat.
- Place all aliquots into a container with enough site water to keep the algae submerged.





# BLOOM-ID Sampling

- The BLOOM-ID LIMS test code is associated with planktonic, free-floating algae.
- Sampling often not planned or scheduled but as a result of observed field conditions.
- Toxin analysis (W-MCYST-AA) frequently accompanies this test.
- Extra BLOOM-ID tubes and toxin jars (Bloom Response Kit) can be kept with sampling equipment.



# BLOOM-ID

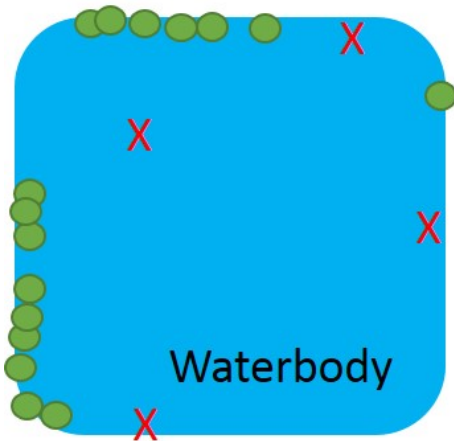
## Representative Sampling

- Determine Representative
  - Is the waterbody experiencing a bloom?
  - What proportion of the waterbody is affected?
  - Is there a scum present? If so, what is the scum's coverage?
- In cases where recreational exposure is possible, we are collecting a sample to capture the condition representative of the majority of the waterbody.



# BLOOM-ID

## Representative Sampling Scenario 1

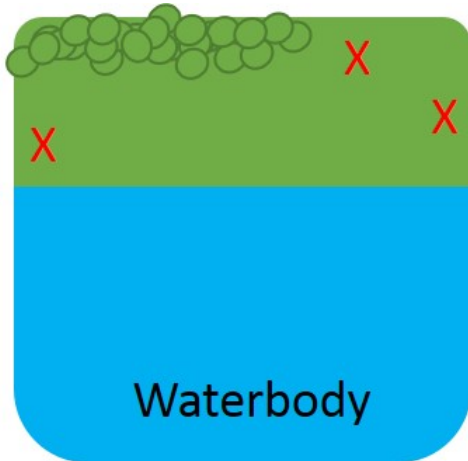


- Surface scum present on edges of water body.
- Depends on extent of bloom and size of waterbody.
- Collect a Surface Grab sample in an area where scum is not present.

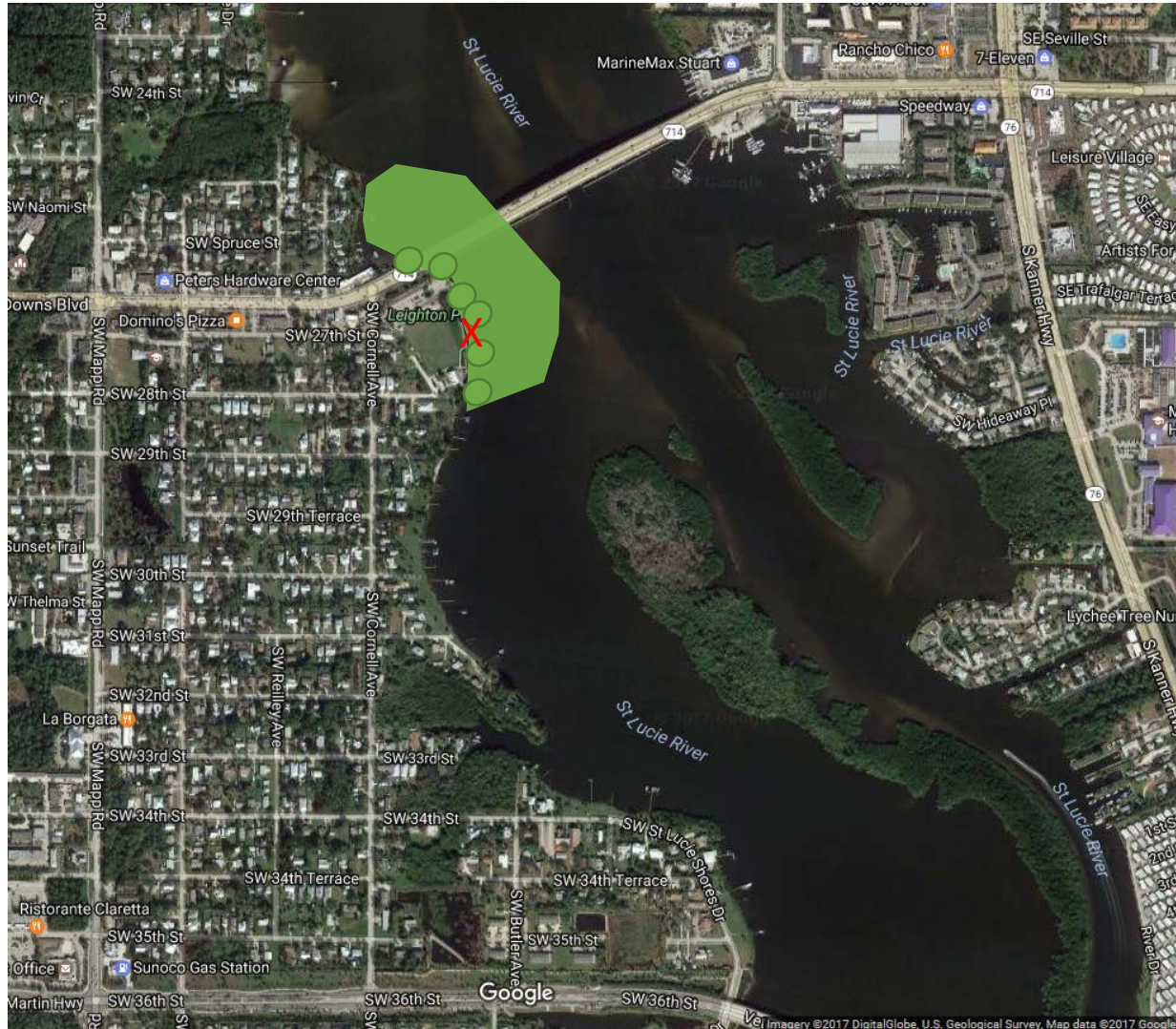


# BLOOM-ID

## Representative Sampling Scenario 2



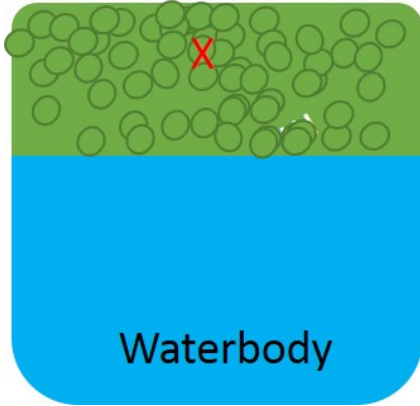
- 1/3 of waterbody is green with a surface scum blown to shoreline.
- Where to collect the sample is dependent on the size of the waterbody and practical ability to collect the sample.
- Collect Surface Grab sample in area where scum is not present.



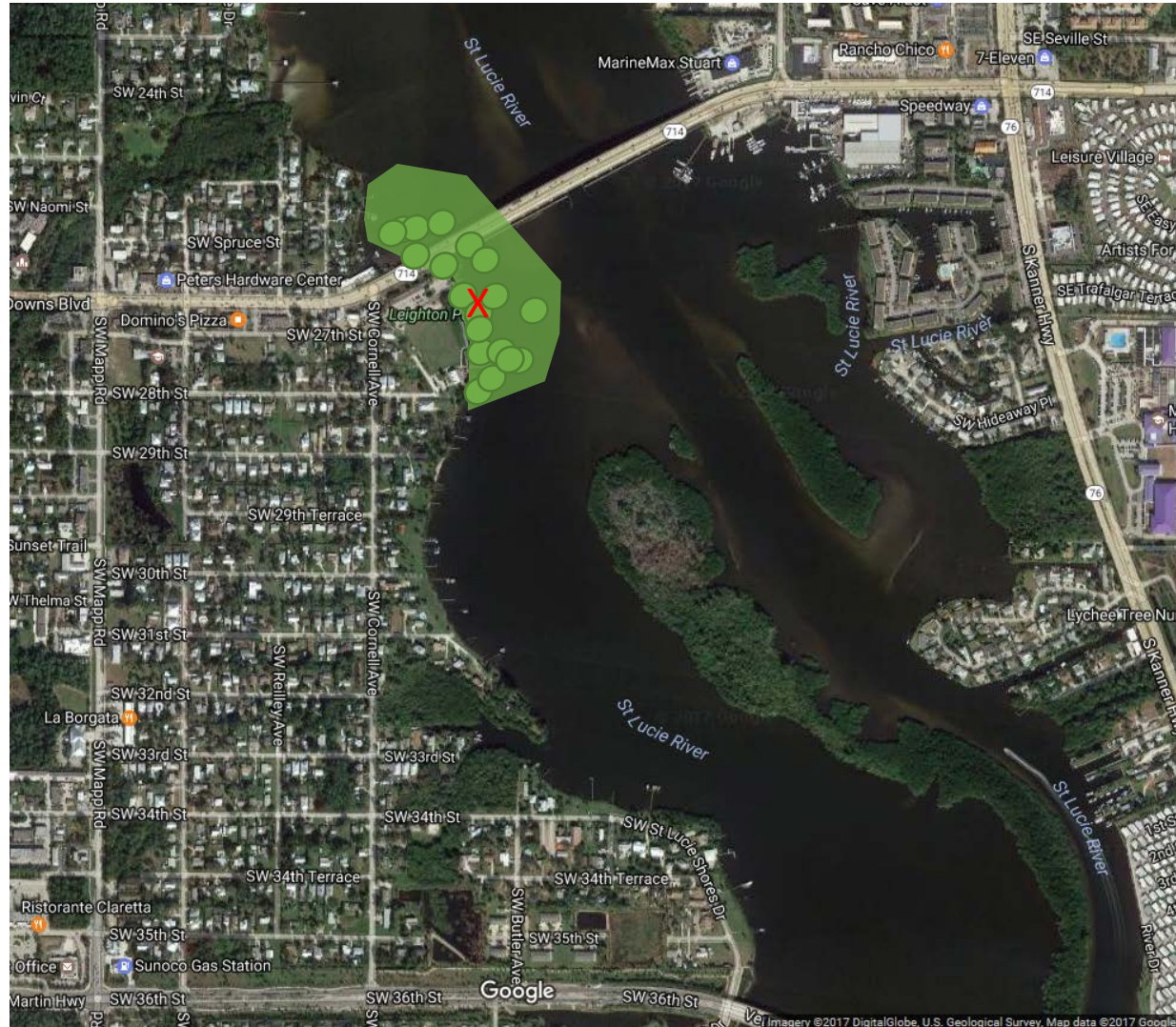


# BLOOM-ID

## Representative Sampling Scenario 3



- 1/3 of waterbody is green and covered with a green scum.
- Where to collect the sample is dependent on the size of the waterbody and practical ability to collect the sample.
- If this represents the majority of the waterbody, collect Surface Scum sample.
- Homogenize 0.5m area. See FS 7110.





# Sample Documentation & Submittal

- Label the sample containers with the appropriate locational information.
- Indicate on the sample submittal sheet where the sample was collected.
- **Document** that the analysis was not included in the original RQ or submit separately under a Bloom Response RQ.
- Do not reuse RQs that have already had samples returned.
- Contact [Jennifer Walters](#) for questions or to provide sampling information.

|          |                                                                        |           |                                                                        |                                                                           |                                                              |                                                                                 |                                                                      |                                     |                 |
|----------|------------------------------------------------------------------------|-----------|------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------|-----------------|
| Latitude | <input type="checkbox"/> dd<br><input type="checkbox"/> dms            | Longitude | <input type="checkbox"/> dd<br><input type="checkbox"/> dms            | Salinity                                                                  | <input type="checkbox"/> ppt<br><input type="checkbox"/> dms | Comments                                                                        |                                                                      |                                     |                 |
| Location | South Florida Waterbody<br>Green Canal XYZ                             |           |                                                                        | <input type="checkbox"/> Comp<br><input checked="" type="checkbox"/> Grab | Collection (comp begin or grab)<br>Date 05/18/17 Time 9:00AM | <input checked="" type="checkbox"/> Eastern<br><input type="checkbox"/> Central | Composite end<br>Date                                                | Time                                | Bottle Group(s) |
| Field ID | Green Canal XYZ                                                        |           |                                                                        | Matrix (type, e.g., Salt, Fresh, etc)<br>Fresh                            | Diss. Oxygen<br>1.7                                          | <input checked="" type="checkbox"/> mg/L<br><input type="checkbox"/> % sat      | Total Res. Chlorine<br>(mg/L)                                        |                                     | A, B, C         |
| STORET # |                                                                        |           |                                                                        | Temp (C)<br>39.0                                                          | pH<br>7.8                                                    | Sample Depth<br>0.1                                                             | <input type="checkbox"/> ft<br><input checked="" type="checkbox"/> m | Sp. Conductance<br>(umho/cm)<br>319 |                 |
| Latitude | <input checked="" type="checkbox"/> dd<br><input type="checkbox"/> dms | Longitude | <input checked="" type="checkbox"/> dd<br><input type="checkbox"/> dms | Salinity                                                                  | <input type="checkbox"/> ppt<br><input type="checkbox"/> dms | Comments<br>Surface Scum sample - Bloom-ID                                      |                                                                      |                                     |                 |
| Location |                                                                        |           |                                                                        | <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab            | Collection (comp begin or grab)<br>Date                      | <input type="checkbox"/> Eastern<br><input type="checkbox"/> Central            | Composite end<br>Date                                                | Time                                | Bottle Group(s) |