

Update on Field Sampling Procedures

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Key Changes, 9/2005

- Sample from helicopter pontoons only if DCS > 1 m
- Both field technicians present at sampling location
- DCS definition clarified
- Enhanced documentation (ex. reason for sampling from helicopter pontoon, reason for deviation from station sequence)

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Marsh Sampling Video



Key Changes, 2/2006

- **Discontinue Submersing Capped Bottles**
 - **Uncapping bottles underwater can cause unnecessary disturbance.**
- **Implement a consistent method of measuring depth to consolidated substrate – use fabricated, graduated PVC pole (Clearer view underwater, more buoyant, rounded edges)**

Key Changes, 2/2006

- Use smaller collection bottle. Larger container = greater risk of disturbing detrital material.
 - Collection bottle size was changed from 2 to 1 L capacity (total volume of up to 3 liters of water).
 - Find a gap that is large enough for 1L bottle. Move to another area if necessary. Reduce bottle size further if unable to find suitable-sized gap. If the visibility of the water column is low, then the collector should collect sample using a smaller bottle.

Sampling outside the poled (marked) perimeter – what changed?

- Samplers now decide on the specific sampling location using GPS coordinates and distance from helicopter as a reference.
- Samplers should sample at least 10 m from helicopter propeller disturbance and within 50 m of where the helicopter lands.

Sampling outside the poled perimeter - Rationale

- Restricting collection within this perimeter sometimes makes it difficult for samplers to obtain undisturbed samples. Over time, holes in the sediment column are created by the sampler visiting the sampling location.
- Difficulty of movement → difficulty in obtaining undisturbed samples
- Safety concerns

Sampling outside the poled perimeter – samplers are in control

- The sampler should make the necessary judgment to sample in a location that is representative of the bulk surface water in the area.
- Samplers will vary their approach to each station to minimize impacts depending on wind direction and the presence of cattails and tree islands.

Further enhancements on field documentation

- Any unusual conditions must be documented in the field notes (e.g., “no distinguishable water column”).
- A description of the “visible nature of the water”
- Clear description of site conditions vs. sample conditions
- Type of common plants (e.g., cattails) present
- Roles of each member of the team in each site
- Second person verifies site observations

History of Procedure References

- Marsh Sampling Protocol, Nearhoof, 5/1996
- EVPA WCA1 Monitoring Plan
 - 12/2004
 - 09/2005
 - 02/2006 (Draft version)
- EVPA Standard Operating Procedure – 3/2005
- SFWMD Field Sampling Quality Manual
- Marsh sampling workshops (9/2005 & 2/2006)