

***Theoretical Causes of
Re-Sampling and Draft
Recommendations for
Discussion***

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Defining the Problem

- Certain compliance tests are required to collect phosphorus data at a set frequency
- Compliance tests, particularly marsh programs, are not designed to accept data from the same station on a more frequent basis
- On occasion, marsh stations have been re-sampled, generating two data points per sampling period

Theoretical Causes of Re-Sampling

- Sampling Failure
 - Example: Samples are not properly preserved
 - Result: Samples must be discarded
- Laboratory Failure
 - Example: Samples run out of hold time
 - Result: Data must be qualified
- Project Logistics
 - Example: Frequency of sampling is greater than required for the compliance test
 - Result: More data than needed causes confusion over how to handle data
- Result Validation
 - Example: Sample results are outside expectations
 - Result: Project managers suspect sampling error

Factors Influencing the Policy

- TPO4 is the only parameter subject to monthly compliance testing
- Total depth of the water column is a mitigating factor for sampling and compliance testing
- There are no requirements to sample the stations in a particular mandate within the same day
- There is significant value in minimizing the time between sampling of stations within a specific water body
- Re-sampling creates significant problems for regulatory enforcement

Draft Recommendations for Discussion

Project Logistics

- Resolve project overlaps and eliminate associated re-sampling if possible
- For stations sampled more frequently than monthly, standardize the way data is handled by the compliance test

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Sampling and Laboratory Failures

- TPO4 and total water depth are the only critical parameters
 - Only failures in these two parameters may trigger a re-sampling event
 - Re-sampling events must be carried out within two days of the original event, using an existing sampling flight
 - Since lab failures are unlikely to be determined within two days of the sampling event, this condition is not likely to trigger a re-sampling

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Result Validation

- Not subject to the two day rule
- Used only in extreme events
- Re-sampling is not station specific, the entire trip, including all parameters and stations should be re-sampled
- Requires management approval (Division/Department Director)