



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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MEMORANDUM

TO: Program Administrators, Division of Environmental Assessment & Restoration
FROM: Drew Bartlett, Director, Division of Environmental Assessment & Restoration
SUBJECT: Alternative Method Approvals, Project COAST and Edward J. Philips Laboratory
DATE: July 2, 2013

The Aquatic Ecology and Quality Assurance Section (AEQAS), at my request, has reviewed method validation information and approved site-specific methods for alternative preservation and maximum holding times for total nitrogen (TN), total phosphorus (TP) and chlorophyll *a* (CHLA) samples, and a limited-use alternative method for the laboratory preparation of chlorophyll samples, as further explained below. Project COAST (COAST) is a surface water monitoring program coordinated by the Department of Fisheries and Aquatic Sciences at the University of Florida. The Edward J. Philips Laboratory (Philips Lab) is located at the same address, and is certified by the Florida Department of Health Environmental Laboratory Certification Program (DOH ELCP) for the analysis of TN, TP and CHLA. Project COAST shares facilities and instrumentation for chlorophyll analyses at the Philips Lab. This memo provides an approval order for alternative methods as required in Rules 62-160.220(7)(a) and 62-160.330(6)(a), F.A.C. (DEP QA Rule).

Scope of Approval

- 1. Alternative Sample Preservation Methods Including Freezing** – The alternative sample preservation methods for TN, TP and CHLA used by COAST, including freezing of TN and TP samples, as described in the COAST Standard Operating Procedures for Project Coast Surface Water Sampling, are approved as site-specific sampling methods, defined in Rule 62-160.220(4)(a), F.A.C., and as project-specific sampling methods, described in DEP SOP FA 1000, subpart FA 2230, section 1. The methods are approved for use for the COAST project for the collection, including preservation and storage, of TN, TP and CHLA samples from fresh and marine surface water matrices collected at all sites or locations sampled by COAST staff. The methods may also be used by other persons collecting samples for the COAST project, if applicable. This includes approval of a maximum holding time of 28 days from the date of sample collection for TN, TP and CHLA samples, as stipulated in the COAST SOP.
- 2. Chlorophyll Extraction Method** – The extraction method for CHLA sample filters is described in the Project COAST Laboratory Chlorophyll SOP and the Philips Lab Chlorophyll SOP #1. The extraction method in the COAST and Philips Lab SOPs for

chlorophyll analysis is approved as a limited-use method, as defined in Rule 62-160.330(4)(a), F.A.C. and in DEP-QA-001/01, section 1.2. The method is exclusively approved for use by COAST and the Phlips Lab for the analysis of samples collected from fresh and marine surface water matrices, and may not be used by another laboratory without separate review and approval by DEP.

Data Usability

Approval of the above COAST and Phlips Lab methods includes the determination that sample analytical data for TN, TP and CHLA using the COAST sample preservation methods, sample maximum holding times and COAST and Phlips Lab chlorophyll filter extraction method described above meet all applicable data quality objectives for the use of approved sampling and analysis procedures for the following:

1. Development and implementation of numeric nutrient criteria for proposed water quality standards in Chapter 62-302, F.A.C.;
2. Impairment assessment of surface waters according to requirements in Chapter 62-303, F.A.C.;
3. Development of Total Maximum Daily Loads; and,
4. Development of Basin Management Action Plans.

For additional information or questions about these approvals, please contact Russ Frydenborg or Michael Blizzard.

DB/mwb

Cc: Russ Frydenborg
Michael Blizzard
Nia Wellendorf
Stacey Cowley