

M E M O R A N D U M

TO: Governing Board Members

FROM: Lawrence Glenn, Water Resources Division

DATE: September 8, 2022

SUBJECT: Contract with Florida International University for Biscayne Bay Coastal Wetlands Vegetation and Periphyton Monitoring

Agenda Item Background:

The Biscayne Bay Coastal Wetlands (BBCW) Project is part of the Comprehensive Everglades Restoration Plan and is designed to eliminate point source discharges to Biscayne Bay by spreading water across coastal wetlands as sheet flow and thereby delivering freshwater to the bay in a more natural fashion. Various components of these wetlands are expected to benefit positively from increased sheet flow and are being monitored to evaluate project success and to satisfy specific permit conditions. The District currently has contracted with Florida International University to monitor vegetation and periphyton response in the Deering Estate component of the BBCW project. This contract would provide similar RECOVER monitoring in the L-31E Flow Way, North Canal Freshwater Wetland, and Cutler Wetlands Flow Way components of the BBCW project. The proposed three-year contract is to have Florida International University evaluate vegetation and periphyton response relative to hydrologic changes in the three aforementioned BBCW wetlands in an amount not-to-exceed \$352,704 subject to Governing Board approval of future years budgets. Costs for this contract are creditable and included in the District's total project cost estimate for Biscayne Bay Coastal Wetlands Restoration.

Core Mission and Strategic Priorities:

Additional Item Background:

Monitoring consists of three primary components: (1) monitoring vegetation annually during the wet season in the BBCW L-31E Flow Way, North Canal Freshwater Wetland and Cutler Wetlands Flow Way, (2) documenting changes and comparing results with previous years' results to assess performance of project in tidal wetlands within vicinity of BBCW L-31E Flow Way, North Canal Freshwater Wetland, and Cutler Wetlands Flow Way, (3) monitoring periphyton annually during the wet season along each of the vegetation monitoring transects, (4) measuring water level and soil depth during wet season visits, (5) measuring soil pore water and surface water salinity during wet season visits. Results will be evaluated relative to hydrologic changes occurring in the region in the form of progress and comprehensive annual reports for the L-31E Flow Way, North Canal Freshwater Wetland, and Cutler Wetland Flow Way.

Funding Source:

This monitoring effort will satisfy various specific conditions of the Florida Department of Environmental Protection (DEP), Biscayne National Park, United States Army Corps of Engineers permits, and BBCW Phase 1 PIR which requires the District to submit an annual

report to DEP detailing the progress of the BBCW L-31E Flow Way, North Canal Freshwater Wetland and Cutler Wetlands Flow Way, and to incorporate the annual monitoring report into the South Florida Environmental Report and assess performance of BBCW Projects.

Staff Contact and/or Presenter:

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ATTACHMENTS:

[Resolution No. 2022-0910](#)