

M E M O R A N D U M

TO: Governing Board Members

FROM: Alan Shirkey, Ecosystem Restoration & Capital Projects

DATE: November 10, 2022

SUBJECT: C-43 Canal Water Quality Treatment and Testing Project (Phase II), Glades County

Agenda Item Background:

As part of the Northern Everglades Estuary Protection Program (NEEP), the C-43 Canal Water Quality Treatment and Testing Project (C-43 Canal WQTTP) has an overarching objective to demonstrate and implement cost-effective, wetland-based strategies for reducing nutrient discharges, particularly nitrogen, to the C-43 Canal, the Caloosahatchee River, and the Estuary. The planned project site for the facility, currently known as the BOMA Site, is situated South of the Caloosahatchee River, North of State Road 80, just upstream (East) of the S-78 Spillway and Lock Structure.

The C-43 Canal WQTTP Conceptual Plan was completed in 2012 which recommended a phased, multi-scale wetland demonstration testing facility to help better understand the nitrogen cycle and study the key factors associated with nitrogen reduction in treatment wetlands. The phased research demonstration, comprising wetland mesocosms and bioassays (Phase I), followed by test cells and field-scale cells (Phase II), was envisioned to help inform the basis for design of a future, full-scale constructed treatment facility. The primary study objectives of the Phase I demonstration focused on various treatments of hydraulic loading rates, vegetation, and soils to determine which specific variables may provide the best performance for nitrogen reduction. Further in line with the 2012 Conceptual Plan, all of the Phase I demonstration results will be used to help inform the scale-up of constructed treatment wetland research on this current phase (Phase II).

The lowest responsive and responsible bidder is recommended for award. In accordance with District policy and consistent with state law for Request for Bids procurements, this item was competitively bid through a sealed bid process.

Core Mission and Strategic Priorities:

C-43 Canal WQTTP supports the District's core mission of Ecosystem Restoration.

Funding Source:

The construction of the C-43 Canal WQTTP will be funded through dedicated funds (Land Acquisition Trust Fund) and Ad Valorem funds.

Staff Contact and/or Presenter:

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ATTACHMENTS:

Resolution No. 2022-1113

Map

Backup Document