TREASURE COAST REGIONAL PLANNING COUNCIL

MEMORANDUM

To: Council Members

From: Staff

Date: May 10, 2019

Subject: Intergovernmental Coordination and Review Log

The Intergovernmental Coordination and Review process serves, in part, as an early warning system for the federal government to determine if a federally funded project or program is consistent with plans and ongoing community initiatives of local governments and the regional planning council. The review process is intended to inform the applicant of potential concerns or inconsistencies regarding the proposed activity. Council’s statutory role is to coordinate the state’s required review at the local level. Council has requested comments from potentially affected local governments in an effort to avoid duplication of efforts, funding, and services, and to ensure the efficient use of resources. The attached Intergovernmental Coordination and Review Log presents a summary and recommendations on the following applications:

<table>
<thead>
<tr>
<th>TCRPC Number</th>
<th>Project Description</th>
<th>Applicant</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
</table>

Recommendation

Council should approve the comments in the attached report and authorize their distribution.

Attachments
TREASURE COAST REGIONAL PLANNING COUNCIL
INTERGOVERNMENTAL COORDINATION AND REVIEW LOG

TCRPC Number: 19-FL-03-02

Applicant: U.S. Army Corp of Engineers – Jacksonville District

Project Description: Draft Project Implementation Report and Environmental Impact Statement
Loxahatchee River Watershed Restoration Project

The United States Army Corps of Engineers (USACE), Jacksonville District, in partnership with the South Florida Water Management District (SFWMD), prepared the Draft Integrated Project Implementation Report (PIR) and Environmental Impact Statement (EIS) to evaluate the federal and non-federal interest in implementing the Loxahatchee River Watershed Restoration Project (LRWRP), a component of the Comprehensive Everglades Restoration Plan (CERP). CERP was approved as a framework for restoring the south Florida ecosystem while providing for other water-related needs of the region in the Water Resources Development Act of 2000.

The LRWRP draft PIR and EIS presents a description of existing and expected future conditions in the ecosystem; formulation and evaluation of plans considered to address ecosystem restoration needs in the region; analysis of environmental effects of the tentatively selected plan; project costs; and implementation issues.

The Loxahatchee Slough was once connected to the Everglades and contained both sawgrass and ridge and slough habitats characteristic of the Greater Everglades. The Central and Southern Florida (C&SF) Project cut off this connection and had unintended consequences of altering hydrology of the Loxahatchee Slough and River, cutting off the Northwest Fork of the Loxahatchee River from the Loxahatchee Slough and the rest of its watershed, and channelizing the Southwest Fork of the Loxahatchee River. The flood control improvements resulted in reduced flows to the Northwest Fork by diverting freshwater that formerly flowed naturally to the Northwest Fork into the Southwest Fork. Urban and agricultural development that followed implementation of the C&SF project further severed the connection of the watershed to the Loxahatchee River. The construction of canals, channelization of natural waterways, and barriers to flow also degraded wetland structure and function throughout the watershed. These drained wetlands cannot store water as effectively as they once did, which results in periods of excessive and insufficient freshwater inflow to the Loxahatchee River and Estuary.

The purposes of LRWRP are to restore and sustain the flow of freshwater to the federally designated National Wild and Scenic Northwest Fork of the Loxahatchee River (NWFLR); to increase connectivity of hydrology, flora, and fauna between natural areas; and to improve seasonal timing and distribution of water to restore drained wetlands that form the historic headwaters for the river.

The LRWRP study area is approximately 480,000 acres (~750 square miles) located in northern Palm Beach County and southern Martin County. The study area is characterized as highly urbanized in the eastern portion, and transitions to extensive natural areas to the west and north.
The Loxahatchee River Watershed drains an area of approximately 154,000 acres (240 square miles) within the study area. Nearly half of the drainage basin is comprised of wetlands. Agricultural and forested uplands in the northern area of the basin comprise one quarter of the watershed. The remaining quarter is developed urban areas.

The LRWRP seeks to achieve restoration by developing alternatives that will capture, store, and redistribute water currently lost to tide; rehydrate headwater natural areas that have been hydrologically impacted by excessive draining and water diversions; reduce peak discharges to the project’s estuarine systems; improve timing and distribution of water from the upstream watershed to increase the resiliency of freshwater riverine habitats to future sea-level changes; and reestablish connections among natural areas that have become spatially and/or hydrologically fragmented.

To facilitate the evaluation of numerous possible combinations of management measures, screening criteria were developed to select from an array of alternate plans, including a no action plan. Alternative 5R, identified as the National Ecosystem Restoration Plan, is the Tentatively Selected Plan (TSP). It is the plan that reasonably maximizes ecosystem restoration benefits in the Loxahatchee River and floodplain as well as the wetlands in the watershed, compared to costs. The TSP (shown below) consists of the following components:

- In the south and southeast: conveyance structures in the C-18 Canal, a pump station at the M-1 Canal, and earthwork to improve connectivity in the Grassy Waters Triangle.
- In the southwest and west: a 9,500 acre-foot above ground storage reservoir with pump stations and inflow and discharge canals; 4 co-located aquifer storage and recovery (ASR) wells; new canals, structures, and a pump station to connect the M-O Canal to the reservoir; and wetland restoration in Loxahatchee Slough.
- In the north: Wetland restoration sites (Kitching Creek, Gulfstream East, Moonshine Creek, and Pal-Mar East) and a flow attenuation facility including a pump station.
The TSP will deliver 98% of wet season restoration flow target and 91% of the dry season restoration flow target for the Northwest Fork of the Loxahatchee River. Restoration of seasonal flows will reverse the trend of increasing salinity levels and help conserve the remaining riverine cypress habitat designated as the first National Wild and Scenic River in Florida. Restored flows will also promote recovery of important freshwater vegetation and estuarine zones that are important for Federally managed fish species, protected species, and oysters.

The TSP improves wetland hydrology in the Pal-Mar natural area complex and restores 17,000 acres of various types of agricultural land that are part of the historical Greater Everglades. An additional 9,500 acres of natural areas are improved in the J.W. Corbett WMA, Loxahatchee Slough, and Kitching Creek. The restoration actions also improve connectivity for over 78,000 acres of natural areas and restored wetlands that benefit many species of flora and fauna. While the overall project purpose is ecosystem restoration, the wetland restoration components will provide multiple recreation and economic opportunities for the local areas in the form of hunting, fishing, boating, and other outdoor recreation.

Implementation of LRWRP by USACE and SFWMD will occur over many years and will be guided by a Project Partnership Agreement that describes the roles and responsibilities of the USACE and SFWMD for real estate acquisition, design, construction, and operations and maintenance. Development of sequencing for LRWRP components will consider factors that influence implementation such as land availability, funding availability, cost-share balance between the USACE and the SFWMD, and the integration of projects to be constructed by other agencies.
**Cost Estimate and Implementation Plan:**

The total first cost of the LRWRP (October 2018 price level) of $473,052,000 is outlined below:

<table>
<thead>
<tr>
<th>Ecosystem restoration cost estimates Construction Phase Items</th>
<th>Cost1, 2, 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow-way 1 features (G-160, G-161, Grassy Waters Triangle, M-1 pump station)</td>
<td>$13,599,000</td>
</tr>
<tr>
<td>Flow-way 2 features (C-18W Reservoir, ASR, M-O Canal pump station)</td>
<td>$224,864,000</td>
</tr>
<tr>
<td>Flow-way 3 features (Kitching, Moonshine, Gulfstream East &amp; West, Cypress Creek Canal, Hobe St Lucie drainage, Pal-Mar East, Mack Dairy Spreader, Shiloh Farms flow-way)</td>
<td>$53,175,000</td>
</tr>
<tr>
<td>Adaptive Management and Cultural Resources Protection</td>
<td>$11,181,000</td>
</tr>
</tbody>
</table>

Construction Features Sub-Total | $302,819,000 |
Preconstruction, Engineering, and Design (PED) | $115,747,000 |
Construction Management (S&A) | $16,958,000 |
Lands and Damages | $137,528,000 |

**Total First Cost** | **$473,052,000** |

1 Construction costs in this table include contingencies
2 October 2018 price level
3 Recreation costs are not included in the ecosystem restoration cost estimates

**Analysis:** In 1999, at the request of Palm Beach County and the U.S. Environmental Protection Agency, Council prepared the *Loxahatchee River Basin Watershed Planning Project for Palm Beach County*. This report, which can be found on Council’s website, contains twenty-two conclusions and recommendations that discuss a broad range of issues related to the restoration of the Loxahatchee River. This report, and a similar report prepared by Martin County for the Martin County portion of the Loxahatchee River watershed, contain historic information that may be relevant to the proposed project.

In 2017, Council passed a resolution to support a proposed locally preferred option that addressed the five water resource goals originally established for the LRWRP. Consideration of these goals should be part of any Alternative Plan;

- restoration of the Northwest Fork of the Loxahatchee River (one of two nationally designated Florida Wild and Scenic Rivers);
- restoration of the Loxahatchee Slough;
- the reduction of damaging fresh water discharges to Lake Worth Lagoon by increasing surface water storage and conveyance;
- restoration of the Grassy Waters Preserve and enhancement of water supplies for local governments in Palm Beach County; and
- the provision of better flood protection for the western communities within the County

The proposed project is consistent with the **Strategic Regional Policy Plan**. The Loxahatchee River Watershed Restoration Project has the potential to help achieve ecosystem restoration, increased water supplies, improved water quality, and the maintenance of flood protection. This
project represents an opportunity to accomplish these goals and balance the need to provide water for natural systems and urban and agricultural uses.

**Recommendation:** Council should approve the draft staff report and authorize its transmission to the U.S. Army Corps of Engineers.

**Agencies Contacted:** Palm Beach County Local Governments
Martin County Local Governments