

## Responses to Recommendations in the USFWS Draft Fish and Wildlife Coordination Act Report

We will be working closely with the USFWS and the FFWCC during detail design to incorporate as many as their suggestions as feasible. A draft Coordination Act Report (CAR) was submitted (see Annex A) by both agencies which outline specific suggestions for protection of fish and wildlife resources. We will attempt to incorporate most of their recommendations, will continue to coordinate throughout designing and project implementation, and would like to specifically respond to the following issues:

- The potential for the project to provide additional foraging areas for wood storks could be improved through timing operations resulting in draw downs, that would concentrate fish in the littoral shelves, to coincide with fledging. This type of operational schedule could contribute to increased reproductive success in LNWR. – *We will work closely with the resource agencies on operations of the impoundment to meet project objectives, safety standards, and environmental benefits. However, littoral shelves are in the seepage canals, not within the impoundment.*
- Wildlife-protective water quality criteria, including water temperature, should be employed for discharged water to minimize potential direct and downstream effects from poor water quality on the manatee and other aquatic resources. - *An important objective of the Site 1 Impoundment Project is to ensure that water released from storage does not degrade the quality of the receiving water bodies (WCAs and Hillsboro Canal/Intracoastal Waterway). Preliminary water quality modeling indicates nutrient reduction, suspended solids (including pesticides) reduction, and no degradation to DO in the effluent due to outfall turbulence. The impoundments will be adaptively managed to avoid negative effects with regards to State water quality criteria as well as site-specific Everglades Forever Act limits, and constituents identified under the Impaired Waters Rule (chlorophyll a, DO, lead, and also a fish consumption advisory). Beyond these targets, the proposed impoundment design and operations will only incidentally satisfy any species-specific goals.*
- Design the portion of the property north of the proposed ASR pilot project and west of the impoundment as a natural wetland. This would include exotic removal and restoration of more natural hydroperiod. This area is a remnant forested sawgrass wetland and has the capacity to provide a functioning wetland community with minimal active restoration actions. - *A stability analysis of the reservoir embankment would have to be satisfactorily completed that demonstrates that a wetland on the exterior face would not impact embankment integrity as designed.*
- Incorporate wetland vegetation and littoral shelves into both the impoundment and the seepage canal. Incorporation of submerged and emergent aquatic vegetation will improve water quality and provide habitat for fish, amphibians, and reptiles. –*Littoral shelves within the impoundment would reduce the impoundment capacity. This would*

*require additional acres (not available) or a deeper design (may not be engineeringly feasible) to meet the loss in capacity. The impoundment will be operated to maintain 8 feet of water for long periods of time. These operations preclude emergent vegetation from being able to establish. Changes in the capacity of the impoundment or the operations within the impoundment to maintain a vegetated zone are incompatible with the project objects.*

- We recommend the implementation of a water quality monitoring plan in the Hillsboro Canal. This type of monitoring plan has also been recommended for the ASR pilot project. The implementation of a water quality monitoring plan will enable the team to determine if measures incorporated into impoundment design are improving the quality of discharged water. – *The Site 1 Impoundment will have water quality monitoring associated with operations as required in the NPDES and CERPRA permits.*
- We recommend the implementation of an ecological monitoring plan. This will assist the team in the determination of effects of construction and operation of the impoundment on fish and wildlife resources present on the site and in adjacent areas including LNWR and WCA 2. – *An ecological monitoring plan will be developed for the seepage canal on the project site to measure performance of wading bird, fish, and invertebrate usage and vegetation coverage and recruitment. Performance targets within the LNWR and WCA-2A were selected based on the targets identified by RECOVER. Developing similar ecological monitoring for the Site 1 Impoundment project would be difficult to discern success, given multiple CERP projects target the same area and their cumulative effects provide an overall benefit. Therefore the responsibility for monitoring will be given to RECOVER, who has developed monitoring plans for the targets in these systems.*
- Wetland impacts will occur with construction of the impoundment. Impacts to those habitats should be quantified and avoided or minimized. The quantification of unavoidable impacts along with any offsetting wetland benefits should be included in the final PIR/EIS. – *A wetland rapid assessment procedure (WRAP) was completed on the project site by an interagency team, including the FWS and the FFWCC, during the WPA Feasibility Study that quantified the acres and types of wetland habitat that will be impacted. A site inspection in June 2003 by the FWS and the FFWCC, documented in the September 15, 2003 PAL from the FWS, was to document the continued concurrence with the WPA WRAP. This draft EIS assumes all of the habitats on site will be impacted, and the corresponding wetland benefits are included in this draft EIS.*
- An in-ground storage project to the south of the Site 1 Impoundment (southern compartment) should be pursued as a future CERP project to further increase the amount of water that can be stored to meet demands for water supply in this vicinity to further reduce demands on the natural system. – *We concur. However, the southern compartment lands are not available, as they are in private ownership and currently being mined. Future plans for this site are dependent on the land becoming available.*
- The Service understands that the CERP project assurances for the Site 1 PIR are being developed using output from the updated version of the South Florida Water Management Model (SFWMM 5.4). These analyses include the quantification of water

for the natural system, quantification of water made available by the project to be reserved under Florida law, and savings clause evaluations. We support using up-to-date modeling to conduct these important analyses. However, because plan formulation and evaluation, plan selection, and calculation of project benefits for Site 1 were based on older modeling using an earlier version of the SFWMM (SFWMM 3.5), there is a need to affirm that the projected project performance based on the older modeling is consistent with the performance seen in the version of the model used to conduct the assurances analyses. We therefore recommend that the PIR include in its technical documentation the following information for the with- and without-project simulations used for the CERP project assurances: 1) RECOVER system-wide performance measures; 2) a summary of the regional water budget; and 3) a table documenting model assumptions for the with- and without-project simulations. - *The modeling done during plan formulation is different from the modeling conducted for water reservation purposes. The model runs conducted for plan formulation were done for comparison and evaluation of the various alternatives in order select the Tentatively Selected Plan (TSP). Project assurances analysis is the next step (after the comparisons are made). This analysis uses the selected plan and identifies information consistent with federal and state requirements. The model simulation comparisons used for Site 1 were the accepted methods at the time of PIR development and existed prior to the latest information included in the draft Guidance Memorandum 4 “Identifying the Appropriate Quantity, Quality, Timing and Distribution of Water to be Dedicated and Managed for the Natural System and for Other Water-Related Needs”. Further investigation of these proposed comparison methods are underway. If these methods prove to be valid and remain in the final guidance memorandum document, the Site 1 model comparisons used for the quantification of water made available by the project will be modified to be consistent with Guidance Memorandum 4. Please refer to the following web site for more detail on the different modeling and for further information.*

[http://modeling.cerpzone.org/cerp\\_recover/pmviewer/pmviewer.jsp](http://modeling.cerpzone.org/cerp_recover/pmviewer/pmviewer.jsp)

- The PIR should document the rationale(s) for selecting the various model versions for the analyses that they conducted (*i.e.*, performance quantification versus savings clause/reservations analyses). The differences in the model runs (developed using different versions) should be briefly summarized (*e.g.*, water budgets, structure for structure for proximal sub-regions such as LNWR, WCA 2, and Service Area 1). The reason for this is that the regional (average annual) water budgets, and likewise, the RECOVER regional project managers will likely not yield much insight into the differences that have resulted from the versioning (*i.e.*, related to the project-specific investigation). - *Please refer to Annex C – Project Assurances for details on the type of modeling that was conducted Site 1 water reservations. Please refer to Annex E - Site 1 Regional Evaluation Report for information on the modeling that was done for Plan Formulation.*

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