

Responses to the Recommendation from the Florida Fish and Wildlife Conservation Commission from the Final FWCA Report

1. Discussion of predicted effects. The draft Project Implementation Report/Environmental Assessment (PIR/EA) often generalizes project benefits as occurring throughout both Water Conservation Areas (WCA) 1 and 2A, when in fact the overall effect of the project in WCA-2A was predicted to be slightly negative. We recommend that the difference in relative performance be clarified throughout the PIR/EA.

Response: Noted. The document has been modified to remove generalizations and clearly describe benefits and impacts to WCA 1 and 2A.

2. Use of all performance measures and evaluation criteria developed by the team. The Site 1 project inter-agency team developed several performance measures and evaluation criteria, of which a subset was utilized for Habitat Unit (HU) calculation. The model results for those measures and criteria not utilized for HU are not reported within the draft PIR/EA. These measures were intended to describe the ecological effects of the alternatives, so we recommend that they be reported and discussed in the PIR/EA.

Response: Concur. Data developed is included in Appendix C. Information relevant to calculating HUs is discussed.

3. Clarification of benefits to WCA-1. Figures C-5 through C-7 in Project Assurances (Annex C) indicate that the predicted 2003 with-project and without-project conditions do not differ significantly and that both are below the restoration target depths for WCA-1, also known as Arthur R. Marshall Loxahatchee National Wildlife Refuge (LNWR). Conversely, Figures C-42 through C-44 indicates that the 2000 with- and without-project conditions are both above the target depths for LNWR. We recommend that the final EA explain why these two sets of graphs differ in terms of the project's predicted performance relative to the environmental targets. If the project results in predicted depths above the environmental targets, as appears to be illustrated in Figures C-42 through C-44, we recommend that the final EA explain how it was determined that these greater depths are beneficial to LNWR.

Response: Figures C-5 through C-7 represent the quantification of beneficial water made available for the natural system and water for other water related needs. The model simulations depict 2003 conditions (i.e., 2000 land use and 2003 permitted demands). The quantity of water equal to or less than the restoration target for WCA-1 is considered beneficial for the protection of fish and wildlife and will be protected. In the case of the Site 1 Impoundment, no significant difference exists between the "with" project 2003 condition and the "without" project 2003 condition; therefore, the existing beneficial water will be protected.

Figures C-42 through C-44 are included as part of the WRDA 2000 Savings Clause analysis to determine if an elimination or transfer in existing legal sources have occurred as a result of CERP project implementation. The model simulations depict the 2000 conditions (i.e., 2000

land use and 2000 actual water supply demands). The restoration target is shown on these graphics in addition to the “with” project 2000 condition and the “without” 2000 project condition to show the Site 1 Impoundment did not adversely affect any beneficial existing legal source of water for WCA-1. The Savings Clause analysis is not used in any capacity for the quantification of beneficial water made available for the natural system and water for other water related needs.

Keep in mind that when the Site 1 Impoundment PIR was developed, the Savings Clause analysis and the quantification of beneficial water made available for the natural system and water for other water related needs were based on methodologies in the Programmatic Regulations Guidance Memoranda at that time.

4. Clarification of base run year and potential effects on project justification. Section 7.2.13 (Project Justification) describes how the project is justified by calculating expected benefits associated with the Next-Added-Increment (NAI). For this and other Water Preserve Area (WPA) projects, no new model runs are proposed. Therefore, the NAI is the 2010WPA run, which should be compared against the 2010Base run. However, in the draft PIR/EA no reference is made of what base model run the NAI is being compared against. If the base run used is the 2010Base, we would expect that the urban demands and flood protection needs would all be somewhat lower relative to the 2050Base run. Consequently, we would expect that the relative contribution of the project would be greater in 2010 than if the NAI had been evaluated using the 2050Base and the 2050 Future-with-Project runs. Similarly, if the 2050Base run is used to evaluate the 2010 Future-with-Project run, we would expect that the With-Project year (2010) would reflect lower urban demands and flood protection needs compared to the base run (2050) against which it is compared. If this is the case, then the draft PIR/EA should explain these model issues clearly. Also, we recommend that the comparison of 2010 WPA (Future-with-Project) to Future-without-Project be performed using the 2010Base model run in order to ensure that at least both model runs incorporate the same model assumptions in terms of water demand.

Response: Concur. 2010 Base run has been added to the final report, as well as clarification of modeling assumptions and which models were used for which analysis.

5. Impacts to WCA-2A. It is our understanding that the Last-Added-Increment (LAI) analysis considers the effects of all of the CERP projects plus the alternative under consideration for the particular project in question as compared to no action in the year 2050. If this is the case, then the result appears to be a worsening of the condition in WCA-2A overall. This is an area that had been targeted by the 1999 Central and Southern Florida Comprehensive Review Study as “red,” indicating an area that had failed to achieve restoration goals at the conceptual level. As a result, this area was recognized as one that needed attention for improvement during plan development and implementation.

Response: It appears comparatively that the future without project attains more benefits in the WCA-2A than in both the 2050 LAI and 2010 future with project model runs. The CERP model runs are also consistent with this information, demonstrating targets are not met in WCA-2A to

meet targets for the Greater Everglades. This project has the opportunity to look at the shortfalls in WCA-2a and try to better conditions than predicted in the model. As such, an interim operations plan will be put into place that would alleviate flows into WCA-2A when targets for the system are already met by discharging to the impoundment or tide. In addition, the impoundment would have opportunities to capture NSID discharge. It is also important to note models used were evaluated for influences to WCA-2a by the IMC. Conclusions were changes in WCA-2A in the models were due to rain driven operations in the future scenarios, and not attributable to the Impoundment.

6. The report repeatedly emphasizes that rectification of the negative impacts predicted to occur in WCA-2A will be accomplished by construction and operation of subsequent Comprehensive Everglades Restoration Plan (CERP) projects, such as WCA-3 Decompartmentalization and Hillsboro Aquifer Storage and Recovery (Section 6.3.4.1.1 and Section 7.2.8). At this point in the process, we are unsure how to reconcile the predicted worsening of conditions in WCA-2A as predicted by the LAI analysis (i.e., all other CERP projects) with assurances that these same projects can address the negative impacts.

Response: An interim operational plan will be developed and put in place that will maximize the current regulatory operational plan flexibility to discharge to tide if the WCA-2A has already met targets. This interim plan will stay in place until future projects, such as Decompartmentalization, come on line and remove excess water or modify the operations. It is important to note that total changes to flows to WCA-2A is 0.3%, and not significant in itself to impact WCA-2A.

7. We are pleased that p. 5-12 of the report indicates that “operational flexibility with the impoundment to reduce high stages in the WCA-2A is being explored and will be part of adaptive management.” Section 7.4.5 states that the project’s Interim Operating Manual will be completed during Detailed Design Phase. We are very interested in better understanding the actual operational flexibility available so that predicted negative impacts to WCA-2A could be minimized, if not entirely eliminated or reversed. We request that the developers of this Interim Operating Manual keep us involved and informed of this process, as our staff familiar with the Everglades Wildlife Management Area may be able to offer valuable expertise in suggesting beneficial modifications to project operations.

Response: The Commission will be kept involved as the interim operation plan is developed and has participated in the discussions of what that plan will entail.

8. References to discharge of stormwater into the WCA. At several points throughout the report, there are references to the potential for the impoundment to discharge to the WCA (p. 2-7, p. 5-11, and Section 7.2.9). (The text sometimes refers to discharges from the impoundment to the WCAs and sometimes to WCA-2A. We are assuming that this refers consistently to WCA-2A). The impoundment design of the selected plan does not include any provisions for discharge of water to the WCA, nor does it provide any water quality treatment for the stormwater runoff it will be storing. Staff has been informed that there is no intention to provide

for such discharges. We request that this apparent inaccuracy in design description be updated to reflect that fact that the impoundment will not discharge stormwater to the WCAs.

Response: There will be no discharges from the impoundment into the WPAs, nor is there the infrastructure to do so. The text in the Report will be corrected.

9. References to North Springs Improvement District (NSID) discharges into WCA2A. While it was our understanding that all the alternatives, including Future-Without-Project, would discontinue pumping of NSID untreated stormwater runoff into WCA-2A, several sections in the PIR/EA continue to frame this reduction in pumping as a benefit of the With-Project condition. We recommend that these references be removed if it is true that this pumping would be discontinued.

Response: In the future without project, NSID cannot make discharges of untreated water into the WCA-2A in order to comply with the Everglades Forever Act. The NSID has the options to treat water and continue to discharging to WCA-2A, discharge to tide when there is capacity and downstream impacts will not occur, or otherwise find another area for storage. As such, the Site 1 Impoundment could provide some relief to excess water going into WCA-2A from NSID by increasing the capacity of the canal as well as taking some flows from NSID when the Impoundment has capacity. The report will be corrected.

10. Description of impoundment storage beneficiaries. Section 6.1.1 indicates that Alternative C provides for “maximum storage to meet water demands in the natural system during dry periods.” Section 6.1.2 indicates that, “Alternative C would be capable of contributing the most water to the natural system during periods of drought.” Section 7.3.3.1.1 states that the Selected Alternative Plan, under 2003 conditions, provides 3,600 ac-ft of additional water potentially available for other water-related needs of the system, including natural system needs. References such as this throughout the document imply that impoundment water is intended for environmental deliveries, when it is in fact held for municipal and industrial demands. It is our understanding that any benefits to the natural system would be more along the lines of reducing dependency. Please reduce the ambiguity in these and other references to impoundment water recipients.

Response: Please see response to Comment #3. Section 6.1.2 indicates that Alternative C is compared to the other two alternatives and is the Selected Alternative Plan. The project does slightly reduce dependency on the regional system and this is demonstrated in Section 6.1.4.1.

11. Boat ramps. As discussed in our January 7, 2002 letter to Col. May, the possibility of the loss of recreational access elsewhere as the result of CERP activities is of concern to FWC. Opportunities to replace these potential losses were to be available in this, and other WPA projects. The current recreation plan presented in the draft PIR/EA includes nature trails, picnic tables, canoe launch, boardwalks, parking area, information kiosk, and a sanitation facility. However, the plan did not evaluate the potential costs and benefits associated with provision of a boat ramp for motorized boat access to the impoundment. The possibility of using this

impoundment for recreational boating is an issue that we would like to pursue before the final EA is released.

Response: The impoundment will require the addition of a boat ramp for operations and maintenance (O&M). While not identified as a recreational need in Palm Beach County, a ramp could provide additional opportunities, and the O&M ramp could be upgraded to suitable for public use. The SFWMD will continue to explore the possibility of a public boat ramp within the impoundment outside of the CERP project and coordinate with appropriate agencies as to the type, number, and operational times that a motor boat would be able to use the impoundment, should a public ramp be built. Additional work to upgrade the boat ramp may require a U.S. Army Corps of Engineers 404 permit from the Regulatory Division.

12. Project impacts on recreation. Table 5.2-1 indicates that both of the with-project alternatives would result in “temporary impacts to access of recreational resources,” and Section 5.3.23 indicates that “limited impacts to recreational resources” are expected. Conversely, Section 5.3.12 indicates that recreational resources will not be adversely affected. We recommend that there be a more thorough review of the impacts to recreation, and request that our staff be consulted so that these may be minimized, and so that unavoidable impacts caused by this project may be coordinated with programs that the FWC operates. One specific concern is that the construction and operation of the new S-525A pump could reduce the navigable extent of the Hillsboro canal. We would like to explore potential means of retaining the canal navigability within the confines of its intended operations.

Response: The S-525A pump would be recessed into the levee and not impact navigability of the canal. Temporary impacts, however, to navigability would be during the construction and installation of the pump as the area would not have limited public access. By “temporary and limited” access to recreational features, the intention is to point out that public will not be able to use the construction site for recreational activities as it is a safety hazard, and will use other areas for recreation until construction is complete.

13. Effects of an internal levee on potential for recreational availability. Section 7.2.2 describes the impoundment design of the selected plan, indicating that an internal levee will function to “compartmentalize, add operational flexibility, and reduce perimeter embankment height by reducing the critical wind setup/wave run-up fetch length.” While we understand these engineering needs, we also see the levee as restricting recreational access by boat or canoe to the entirety of the impoundment. We would therefore like to explore the possibility of there being alternative means by which to attain the goals of operational flexibility and reduction of wave run-up. If this approach is necessary, then we would like to explore the possibility of designing the western cell be as large as possible.

Response: A wind-wave analysis with the objective of identifying the most cost-effective design that meets Federal Law and Corps Regulations will be performed in the detail design of this project. Also, a routing model will be developed by the District to identify optimal operations of the project. These two efforts will provide data to enable a decision about the need for the internal levee for project benefits expected with issuance of this PIR.

This page intentionally left blank.