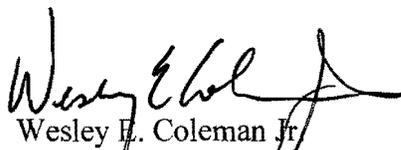


APR 17 2012

MEMORANDUM FOR CECW-SAD (ATTN: Stacey Brown)

SUBJECT: CERP, Biscayne Bay Coastal Wetlands (BBCW) Phase I Project, Miami-Dade County, Florida, Final Integrated Project Implementation Report and Environmental Impact Statement (July 2011/Revised March 2012) - Documentation of Review Findings.

1. This memorandum forwards the documentation of policy compliance review findings for the subject project proposal. In the opinion of the policy compliance review team, all concerns have been adequately addressed for this phase of project formulation and development.
2. Office of Water Project Review consideration of the subject report and environmental impact statement is complete. Questions concerning the HQUSACE policy compliance review of the project proposal may be discussed with the review manager, Jeanette Gallihugh, at 202-761-0668.


Wesley E. Coleman Jr.
Chief, Office of Water Project Review
Planning and Policy Division
Directorate of Civil Works

Encl

CF:
CECW-P
CECW-PC file

Electronically:

Gallihugh, Ware, Chekouras, Kopecky, Bee, Steffen

CECW-PC
DOCUMENTATION OF REVIEW FINDINGS

**Central and Southern Florida Project
Comprehensive Everglades Restoration Plan
Biscayne Bay Coastal Wetlands Phase I Project
Miami-Dade County, Florida**

**Final Integrated
Project Implementation Report (PIR) and
Environmental Impact Statement (EIS)**

April 2012

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CECW-PC
Documentation of Review Findings
CERP Biscayne Bay Coastal Wetlands Phase I Project
April 2012

I. BACKGROUND.

A. Study Area.

The Biscayne Bay Coastal Wetlands (BBCW) project area is located in southeast Miami-Dade County, south of Miami and east of Florida City and Homestead, within the South Florida Water Management District's Lower East Coast water supply planning region. The study area is bounded by south-central Biscayne Bay and Biscayne Bay National Park to the south and east, and the Atlantic Coastal Ridge, and agricultural and suburban development to the north and west. The project area overlaps several drainage basins and associated east-west canals. These canals are operated to reduce the potential for flood damages as well as to limit salinity intrusion into the local groundwater system.

B. Purpose.

The BBCW project is a component of the Comprehensive Everglades Restoration Plan (CERP) which provides for the restoration, protection and preservation of the water resources of central and south Florida. The purpose of the Biscayne Bay project is to restore the natural hydrology and ecosystem in an area degraded by drainage systems and land development.

C. Study Authorization.

First authorized by Congress in 1948, the Central and South Florida (C&SF) Project expanded the existing network of canals, levees, water storage areas and water control structures in south Florida. Objectives included flood control, regional water supply, prevention of saltwater intrusion, preservation of fish and wildlife, recreation, and navigation. WRDA 2000 provided authority for the CERP in Section 601(b)(1)(A). The authority for the preparation of the Biscayne Bay Project Implementation Report (PIR) is contained in Section 601(d) of WRDA 2000. The original scope of the project has been altered in order to better address restoration goals in the study area and the BBCW project was split into two phases. Due to changes in scope and intended restoration area, Phase I of the proposed BBCW project will be recommended for specific Congressional authorization consistent with WRDA 2000, Section 601(d). Before seeking Congressional authorization the Secretary submits to Congress a Project Implementation Report (PIR). Section 601(h)(4) of WRDA 2000 details the project-specific assurances to be included in PIRs.

D. Project Planning and Recommendations.

1. A conceptual restoration plan for the area was included in the CERP. The BBCW project includes two components of the authorized "Yellow Book" selected alternative D13R: (1)

Biscayne Bay Coastal Wetlands (“other project element”), and (2) Biscayne Bay Coastal Canals (component FFF of the CERP). The original scope of the project has been altered in order to better address restoration goals in the study area, and the BBCW project was split into two phases. The Recommended Plan in this initial PIR - Alternative O Phase 1 - is the first step toward meeting restoration goals in the study area by rehydrating coastal wetlands and is integral to the health of the south Florida ecosystem. The remaining features of Alternative O, which will be studied in a subsequent PIR, will increase freshwater wetland benefits and further achieve restoration goals.

2. The Recommended Plan would improve the ecological function of coastal wetlands in Biscayne Bay by redirecting freshwater - currently discharged through man-made canals directly to the Bay - to coastal wetlands adjacent to the Bay. This will provide a more natural and historic flow and restore healthier salinity patterns in Biscayne Bay. Phase I encompasses a footprint of approximately 3,761 acres and includes features in three of the project’s four sub-components (hydrologically distinct regions of the study area): Deering Estate, Cutler Wetlands, and L-31 East Flow Way. There are no features in the fourth region, Model Land Basin. A description of the features recommended for the sub-component areas is as follows:

Deering Estate: This region is in the northern part of the project area and includes an approximately 500-foot extension of the C-100A Spur Canal through the Power’s Addition Parcel (Power’s Parcel), construction of a freshwater wetland on the Power’s Parcel and delivery of fresh water to Cutler Creek and ultimately to coastal wetlands along Biscayne Bay.

Cutler Wetlands: Features in this region, which is in the central portion of the project area, include a pump station, a conveyance canal, a spreader canal, culverts and mosquito control ditch plugs. The pump station, located on C-1, will deliver water to a 6,900-foot lined conveyance canal that will run under SW 97th Avenue, SW 87th Avenue (L-31E Levee), and across the L-31E Borrow Canal via concrete box culverts and deliver water to the spreader canal located in the saltwater wetlands. The spreader canal is divided into four segments.

L-31 East Flow Way: Features in this region, which is in the southern portion of the project area, will isolate the L-31E Borrow Canal from the major discharge canals (C-102, Military Canal and C-103) and allow freshwater flow through the L-31E Levee to the saltwater wetlands. Gated culverts and inverted siphon structures will isolate the L-31E Borrow Canal from these canals, allowing L-31E Borrow Canal to maintain higher water levels. Two pump stations and a series of culverts will move fresh water directly to the saltwater wetlands east of L-31E. Two more pump stations and a spreader canal will deliver water to the freshwater wetlands south of C-103.

Recreation Features: Recreational opportunities are also provided at the site within the project footprint. The recreation activities proposed include biking/walking trails, environmental interpretation, canoeing/kayaking, bank fishing, tent camping and nature study. Proposed facilities include interpretive signage, shade shelter, handicapped accessible waterless restrooms, handicapped parking, tent platforms, pedestrian bridge,

benches, bike rack, trash receptacles, park security gate, trail signage, potable water source and a bird watching platform.

3. The total first cost of the Recommend Plan from the final PIR/EIS, based upon October 2011 (FY12) price levels, is estimated to be \$164,070,000. The total first cost for the ecosystem restoration features is estimated to be \$162,229,000 and the recreation first cost is estimated to be \$1,841,000. The total project cost being sought for authorization is \$192,418,000, which includes all costs for construction; lands, easements, rights-of-way, and relocations; recreation facilities; pre-construction, engineering and design (PED) and construction management costs; and sunk PIR costs (\$28,348,700).

4. In accordance with the cost-sharing requirements of Section 601(e) of the WRDA 2000 as amended (50/50 cost share), the Federal cost of the Recommended Plan is \$96,209,000 and the non-Federal cost is \$96,209,000. The estimated lands, easements, right-of-way, and relocation (LERRs) costs for the recommended plan are \$80,985,000. Based on FY12 price levels, a 40-year period of economic evaluation and a 4.00% discount rate, the equivalent annual cost of the proposed project is estimated to be \$11,126,000, which includes OMRR&R, monitoring, interest during construction, and amortization, but not sunk costs. The estimated annual costs for ecosystem restoration OMRR&R, including vegetation management is \$1,873,000. The annual OMRR&R costs for recreation are estimated at \$25,000. The project monitoring period is five years except for endangered species monitoring, which is 10 years. Any costs associated with project monitoring beyond 10 years after completion of construction of the Project (or a component of the Project) shall be a non-Federal responsibility. The total project monitoring cost is estimated to be \$1,917,000 with an average annual cost of \$193,000.

5. The plan recommended for implementation is the National Ecosystem Restoration (NER) plan, supports the Incremental Adaptive Restoration principles established by the National Research Council, and was prepared in a collaborative environment. The recommended plan provides benefits by: (1) restoring the quantity, timing, and distribution of water delivered to Biscayne Bay; (2) improving hydroperiods and hydropatterns in the project area; and, (3) restoring coastal zone salinities in Biscayne Bay and its tributaries. The project will restore the overland sheetflow in an approximately 11,000-acre area and improve the ecology of Biscayne Bay, including its freshwater and saltwater wetlands, nearshore bay habitat, marine nursery habitat, and the oyster reef community. The Recommended Plan will produce an average annual increase of 9,276 habitat units at an annual cost of \$11,003,000 for a cost of \$1,186 per habitat unit. Based on these parameters, the BBCW Phase I project is justified by the environmental benefits derived by the South Florida ecosystem. The average annual cost for recreation is \$123,000 and average annual net benefits are \$58,000. The benefit to cost ratio for the proposed recreation features is approximately 2.1 to 1.

E. Non-Federal Sponsor.

The South Florida Water Management District (SFWMD) is the non-Federal sponsor. The SFWMD has several roles as defined in the following Florida Statutes: (1) completion of a PIR prior to SFWMD entering into a PCA; (2) submittal of PIR to Florida Department of Environmental Protection (FDEP) for approval prior to allocation of funds for construction; and

(3) SFWMD must analyze and evaluate water supply, water quality, flood protection, threatened and endangered species, and other natural system and habitat needs and to determine that components of the Plan are feasible, efficient, cost-effective, and consistent with the purposes of CERP.

F. HQUSACE Policy Compliance Review History.

1. Policy Compliance Review of Alternative Formulation Briefing (AFB) documentation was completed in November 2007, and the AFB was held with the vertical team and non-Federal sponsor on 3 December 2007. The final AFB Guidance Memorandum was subsequently issued on 21 April 2008. Upon review of a draft PIR/EIS, HQUSACE issued a Policy Compliance Review memo on 18 November 2009. A revised draft PIR/EIS was sent to HQUSACE to ensure resolution of important plan formulation concerns prior to public release. HQUSACE provided comments on the revised draft report in February 2010, and the draft PIR/EIS was published in the Federal Register on 19 March 2010 for public and agency review. Additional vertical team coordination and In-Progress Reviews (IPRs) were held between the review of the revised draft report and submittal of the final report in September 2011. HQUSACE issued a policy compliance review memo on 7 October 2011, after the Civil Works Review Board (CWRB) was held, with comments on the final report. In close coordination with HQUSACE, the district submitted revised sections of the final report prior to release of the report for State and Agency (S&A) Review and publication of the final PIR/EIS in the Federal Register. HQUSACE issued final policy compliance review comments, and specific edits to the report text, on 23 November 2011, with subsequent permission to release the final report and proposed Chief's Report for agency and public review. In addition to the above noted reviews, numerous additional coordination efforts occurred between HQUSACE and District and Division Offices.

2. The CWRB for this project was held on 27 September 2011. The meeting concluded with a unanimous vote by the Board members for contingent approval to release the report for S&A Review, subject to HQUSACE policy and legal concurrence with report revisions to address the remaining questions concerning the report's discussion of formulation of the selected plan, and to address implementation of the newly issued ASA(CW) policy on residual agricultural chemicals found on CERP project lands. It was agreed that the CWRB would not reconvene, but approval was coordinated with Board members through CECW-P. Approval to circulate the proposed Chief's Report for S&A Review was granted on 23 November 2011, contingent upon incorporation of provided edits.

3. The final PIR/EIS and proposed Chief's Report were sent out for S&A Review on 21 December 2011. The final PIR/EIS was published in the Federal Register after the new year on 6 January 2012. The majority of the comments received were favorable and in support of the project. In response to comments received from Florida Department of Environmental Protection, the Corps sent a letter on 12 April 2012 that clarified the roles and responsibilities of the Corps and the non-Federal sponsor in addressing residual agricultural chemicals on project lands. The Corps also sent a letter in response to comments from Homestead Air Reserve Base.

The comment letter from Homestead Air Force Base (HARB) requested additional information on the potential for bird strikes to aircraft operating from HARB. The concerns expressed

included whether predatory birds, most implicated in aircraft strikes, would thrive due to the ecological improvements resulting in increased food source for such species. In a 12 April 2012 letter to HARB, HQUSACE responded to these concerns as follows: The risk analysis in the Final PIR/EIS is predicated on restoration of tidal wetlands exclusively in the vicinity of HARB, where estuarine flora and fauna are expected to benefit from reduced hyper-saline conditions. Specifically, the elements of the project that are relevant to HARB's concerns are the culverts under L31E that attempt to provide water flow from lands west of the levee to those east, which consist of coastal mangrove wetlands. BBCW Phase 1 does not add new water to the system, it just redistributes the water eastward a short distance into existing wetlands. The plan will improve the ecology of Biscayne Bay and reestablish productive fish and invertebrate nursery habitats along the shoreline. There will not be a significant change in surface water ponding beyond what already exists and the plan should not cause a change in wading bird or raptor patterns of use.

According to bird strike data provided to the PDT by HARB, the majority of bird species documented in strikes to aircraft did not involve wading birds but rather hawks, vultures, gulls, swallows, doves, plovers, songbirds and other non-wading birds. These species are frequently observed in disturbed pasture lands or degraded wetlands and not expected to thrive in restored tidal wetlands. As requested in the February 2012 HARB letter, the Corps further research predator/prey avian relationships. The Corps did so by soliciting information from avian experts from Everglades National Park, Biscayne Bay National Park, U.S. Fish and Wildlife Service, Audubon Florida, Fish and Wildlife Conservation Commission and the University of Florida, all of whom are familiar with the BBCW Phase I project area, the project objectives and the hydrological modeling predictions. There was agreement amongst resource agencies that there will not be an increase in predatory birds such as raptors and vultures as a result of the restoration. Specifically, wetland rehydration achieved by the BBCW Phase I project and resulting wading bird increase are not likely to serve as an additional attractant to predatory birds beyond the geographic features already serving to guide raptors and other migratory birds along Florida coasts. As such, due to the limited size and location of this restoration effort the Corps does not expect an increase in bird strikes as a result of the BBCW Phase 1 implementation. However the Corps wants to continue to work with HARB to alleviate the remaining concerns.

II. RESOLUTION OF HQUSACE COMMENTS.

All HQUSACE policy and legal comments discussed in the following sections have been satisfactorily resolved by the additional information presented by the district, or by the actions taken and revisions made to the PIR/EIS as stated in the district responses.

A. POLICY COMPLIANCE REVIEW – ALTERNATIVE FORMULATION BRIEFING. NOVEMBER 2007.

1. Section 2.2 Future Without Project Condition. Regulatory Environment. This is a recurring issue with reports for CERP projects. The AFB document does not include a thorough discussion of the existing regulatory environment in the Future Without Project Condition. It appears that conclusions drawn concerning the significant decline in ecological conditions of the project area in the next 50 years without implementation of this project are not supported. For instance, there are 15 Federally-listed threatened and endangered species that may exist in the project area. Section 9 of the ESA prohibits the unauthorized “Take” of listed species on public and private lands, as a result of Federal and non-Federal actions. Through either the Section 7 or Section 10 process, the USFWS or NOAA-Fisheries works with Federal or non-Federal entities to minimize impacts to T&E species and develop plans to offset expected adverse effects. Similarly, under Section 404 of the Clean Water Act, permits cannot be issued for projects which will cause significant degradation of the aquatic ecosystem (40 CFR 230.10(c)). Compensatory mitigation is required to offset permitted losses and avoid significant degradation. Cumulative impacts must also be considered and documented under both ESA and CWA. The AFB document also indicates that Biscayne Bay is an Outstanding Florida Water. In Section 2.6.2 (Goals/Water Quality) the report states that because Biscayne Bay is an OFW, it is subject to the “most stringent regulations, including Florida anti-degradation standards, which prohibit discharges that will degrade ambient water quality. To obtain a permit for project features, the DEP will require that the project not ‘cause or contribute’ to water quality degradation.” A discussion should be added to the report that indicates how these and other environmental requirements, whether Federal, state or local, were considered in determining Future With and Without Project Conditions. It is important to also note that the project would not eliminate all of the foreseen degradation and consideration of sustainability of this project with respect to outside influences on this project needs to be discussed. (Reference 2-4.b.(4) of ER 1105-2-100).

District Response: It is recognized that the regulatory environment in a Future Without Project condition assumes continued enforcement of potential adverse impacts through the permit approval process and subsequent conservation measures. However, based on the amount of developmental permit applications received by state and federal regulatory agencies, it is very apparent that significant spatial extent of wetland and upland areas would be converted to commercial and residential development thereby reducing valuable and unique habitat that sustains the present abundance of fish and wildlife resources. Existing regulatory and statutory programs related to water quality will not necessarily preclude development and the loss of existing land available for restoration. It is also recognized that a With Project condition will not eliminate future resource degradation or provide restoration fully representative of pre-drainage

conditions, however, the project team does anticipate vast improvements in habitat quality compared to a future without project scenario. These issues will be expanded upon in the DPIR to more clearly demonstrate future conditions and anticipated project benefits.

AFB Discussion: There seems to be a disconnect between the project Future Without Project Condition and the regulatory practice in the area. This potential discrepancy could lead to either over-stating or under-stating project benefits, depending on development pressures and future land use changes. The action proposed was to review recent and ongoing regulatory actions by USACE and the State of Florida in the project area and to provide additional information about the future without-project condition on lands and natural system areas within the project area. This concern is not resolved.

Action Required: The district will review recent and ongoing regulatory actions by USACE and the State of Florida in the project area and provide a revision of this information to HQ for review and concurrence prior to the release of the draft report.

DPIR Action: The following text is included in Section 3, Future Without Project Conditions:

Section 3.1 Study Area.

Regulatory impacts were considered when compiling the future without-project conditions. The future without-project land coverage used in the hydrologic modeling and benefit assessment assumed minimal loss of wetlands with new development occurring mostly on previously farmed lands. Under Section 404 of the Clean Water Act, permits are required for the discharge of dredged or fill material in Waters of the United States, which includes wetlands. Unavoidable impacts to wetlands or other aquatic resources require compensatory mitigation. There are some exemptions under the Clean Water Act for agricultural activities. Digging ditches and farming uplands does not require a permit so these activities could occur in the basin without any requirement for a USACE permit. Clearing and filling for development would likely require a permit. In that situation, mitigation may be done through enhancement and preservation of existing wetlands on site or offsite. In addition, through the Federal permit process, the Regulatory Division of USACE evaluates compliance with other environmental laws such as the Endangered Species Act (ESA).

Section 3.1.8.1 Threatened, Endangered, and State Listed Species.

Direct loss of habitat, as well as fragmentation of habitat in surrounding areas caused by the conversion of agricultural lands to urban and agricultural uses, is likely to result in a continued decline in threatened, endangered, and state listed species. Section 9 of the ESA prohibits the unauthorized “take” of listed species on public and private lands as a result of Federal and non-Federal actions. Future Federal actions unrelated to the proposed action, but located in the study area, will require separate consultation pursuant to Section 7 of the ESA. In addition, future non-Federal actions will be coordinated with FWS through Section 10 of the ESA.

HQUSACE Analysis Draft Report: Resolved.

2. Section 2.3 Problems and Opportunities. This section should provide a succinct discussion of identified Problems and Opportunities. Section 2.3.3 and 2.4.2 (summaries of ecological problems and water quality problems, respectively) are appropriate. This section contains pages of information that is already/or should be in the Existing Conditions section. Additionally, no Opportunities are identified, except for recreation possibilities. In the draft report, this section needs to be considerably edited, adding in necessary points and removing extraneous and duplicative information that belongs elsewhere in the report.

District Response: Concur. The draft report will rework this section to provide a succinct description and reduce redundancies. Additional opportunities will be added to address restoration opportunities.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: The problems and opportunities section has been reduced from 12 pages in the AFB document to four pages in the DPIR. Section 4.2 of the DPIR is comprised of nine concise problem and opportunity statements under three subheadings:

Section 4.2.1 Ecosystem Problems

Problem: Biscayne Bay salinity patterns, estuarine habitat and estuarine dependent species have been altered and diminished

Problem: Freshwater/saltwater ecotones have been nearly eliminated

Problem: Freshwater wetlands have been altered or eliminated

Section 4.2.2 Hydrological and Ecosystem Opportunities

Opportunity: Redistribute freshwater flows to Biscayne Bay

Opportunity: Improve storage of fresh water.

Opportunity: Provide for dry season freshwater flows to Biscayne Bay

Opportunity: Restore water levels in freshwater wetlands

Section 4.2.3 Other Problems and Opportunities

Problem: Competing freshwater demands

Opportunity: Increase tourism, recreation and economic value

Each statement is supported with a single paragraph of text.

HQUSACE Analysis Draft Report: Comment is partially resolved. HQUSACE suggests numbering Problems and Opportunities. Also suggest re-wording the first problem as, "Biscayne Bay salinity patterns have been altered and estuarine habitat and estuarine dependent species have diminished;" the salinity patterns have not actually "diminished" as is currently worded. For the second problem, suggest defining "ecotone." The ecotone in question is the border or mixing zone between freshwater and saltwater, but the report does not define it. Under section 4.2.3, "Other Problems and Opportunities," suggest re-wording the first problem to "Water

supply degradation." There will always be competing demands for freshwater uses. This project won't reduce other demands. But by maintaining groundwater recharge into the Biscayne aquifer, it can help prevent salt water intrusion, maintain the quality of groundwater, and help meet water supply needs.

CESAJ Response/Action Taken: Section 2, Problems and Opportunities were numbered as requested in the comment. Language revised and ecotone defined as requested in the comment.

HQUSACE Analysis of Revised Draft Report: Resolved.

3. Section 2.7 Objectives and Constraints. ER 1105-2-100 [para 2-3.a(4)] states that objectives will include information on the effect desired, what subject will be changed by accomplishing the objective, the location where the expected result will occur, and the timing and duration of the effect. The AFB document does not adequately define and quantify objectives in accordance with the ER. This leads to uncertainty as to what the planning objectives are, when the project should be implemented (timing/base year), and how to measure the degree of objective fulfillment.

District Response: Concur. The objectives will be revised to include the suggested descriptions following the guidance in the ER.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Section 4.3, "Planning Objectives" includes the text below. The planning objectives have been revised to be more specific, measurable, and attainable.

4.3 Planning objectives

Project-specific objectives were developed by integrating the problem statements with the CERP programmatic goals that include increasing the spatial extent of natural areas, improving habitat function and quality, and improving native plant and animal abundance.

Planning objectives are more specific than the Federal objective, and reflect the problems and opportunities in the Biscayne Bay Coastal Wetlands area and CERP programmatic goals. The planning objectives for Biscayne Bay Coastal Wetlands would be attained within the period of analysis for the study which ends in Year 2050. All objectives focus on activity within the study area.

The planning objectives for the Biscayne Bay Coastal Wetlands project are to:

- 1. Restore nearshore annual average salinity regimes of less than 20 ppt in at least 1,000 acres of estuarine habitat in Biscayne Bay.*
- 2. Redirect an average of 50% of the freshwater flows from available water discharge structures*

leading directly to Biscayne Bay towards and into coastal freshwater and estuarine wetlands in order to restore the wetland habitats and minimize point source discharges into the Bay from canals.

Performance measures have been developed to evaluate how well alternatives fulfill project objectives. TABLE 5-4 in Section 5, Formulation of Alternative Plans shows the relationship between objectives and performance measures, and indicates the pertinent ecological zone.

HQUSACE Analysis Draft Report: Comment is partially resolved. Concerning Section 4.3, Planning Objectives. The report should include (briefly) the basis for the objectives to restore annual average salinity regimes of less than 20 ppt in 1000 acres of the bay. What is significant about 20 ppt salinity and 1000 acres? Could we get some context to the acreage? For example, that 1000 acres represents an improvement of 100% over expected FWOP, or that is a reasonable estimate of the area that could be likely affected by the project?

Concerning Section 4.4., Planning Constraints. Should WRDA 2000-specific constraints be mentioned, such as "Savings Clause" (e.g., existing levels of service for flood risk management must be maintained)? Or are there no affected users (M&I water supply) in the study area?

CESAJ Response/Action Taken: Ecological justification for restoring nearshore (within 500 meters of the shoreline) annual average salinity regimes to 20 ppt is predicated on a target salinity range of 5-20 ppt, reflective of mesohaline conditions. This range is recognized as optimal for estuarine and nearshore marine organisms that historically inhabited this area. More information on this performance measure is contained in Appendix C, page C-34. The reference to 1,000 acres of nearshore waters meeting this salinity range is a target selected to measure restoration success.

The following constraints addressing savings clause will be added -

- Maintain existing levels of flood protection to agricultural and urban lands (Savings Clause [Section 601 (h)(5)(B) of WRDA 2000]).
- Maintain levels of service for existing legal users (Savings Clause [Section 601 (h)(5)(A) of WRDA 2000]).

HQUSACE Analysis of Revised Draft : Resolved.

4. Section 3.4.4 Cost Estimation. The study will need to comply with new Cost Risk Analysis requirements per ECB 2007-17 and the associated Sept 2007 Planning implementation memo: http://www.usace.army.mil/cw/cecw-cp/peer/total_project_costs.pdf.

District Response: EN-C concurs with the comment. Note the AFB package was prepared prior to the effective date of the new guidance. As the guidance is now being implemented, its requirements will be met in the Draft PIR.

AFB Discussion: Participants agreed that the cost risk analysis will be performed on the TSP, including separation of the first and second increments. The analysis will be sent to the PCX for

Cost Estimating in Walla Walla.

Action Required: The comment will be resolved by taking the noted actions and making appropriate revisions in the draft report.

DPIR Action: A cost risk analysis has been completed on the TSP and Walla Walla has performed a cost analysis on Appendix B – Cost Estimates and a revised risk analysis will be completed and submitted with the Final PIR. The following text was included in the document followed by a copy of the Risk Register (Section B.5.2), as are the results for each cost item examined in subsequent sections:

B.5.1 Risk Analysis Methods

The risk analysis was conducted according to the procedure outlined in the manual entitled, 'Cost and Schedule Risk Analysis Process,' dated March 2008 and downloaded from the Corps' Cost Center of Expertise website. First, members of the PDT met to identify risk items, in both the construction cost estimate and the construction schedule. Then, the Risk Register was completed. After that, the Risk Model was customized using commercially available 'Crystal Ball' software. 'Most likely,' 'high,' and 'low' values were assigned to estimate items using the software's 'Assumption' function and the triangular distribution. 'Forecasts' were defined and the model run.

For the features costed by the USACE it is assumed that the work will be performed by a prudent contractor at a fair and reasonable cost. While the cost estimate analyzed in the risk analysis may contain adjustments due to quotations on direct and indirect costs, it contains no separate adjustment due to competitiveness or bid strategies (EI 01D010, 1 Sep 1997). Market conditions such as the current price of fuel are included in the estimate.

After the model was run the results were documented by extracting the sensitivity chart, the forecast chart and the percentiles table for major items. The percentiles were used to determine the contingency at the 80 percent confidence level. At this time, risk reduction efforts were discussed within the Engineering PDT, highlighting the Inverted Siphon as an item for further discussion.

A similar procedure took place for the SFWMD's ERRA (Acceler8) feature costs and for the Real Estate costs.

The appropriate contingencies were then applied to the MCACES/MII estimate for the Tentatively Selected Plan, producing the 'After Risk Analysis' cost estimate contained herein. Upon completion of this estimate the Total Project Cost Summary was prepared.

B.5.2 Risk Analysis Results

Results of the risk analysis are shown below. First, the risk register is presented. Then, results are given for each cost item examined. For each major item studied, the results include 1)a sensitivity chart, 2)a forecast chart, 3)a percentile table including the most likely cost and

contingencies and 4) an S-curve chart (only developed for Corps-constructed features). Finally, a table is shown providing contingencies.

HQUSACE Analysis Draft Report: Resolved.

5. Section 3.5.1 Ecological Evaluation. The section introduces an ad hoc and unorthodox benefits assessment that will need to be vigorously documented in terms of its scientific validation, theoretical basis, empirical documentation, computational accuracy, application of professional judgment (methodology and practices employed), and relationship to policy - including incorporation of risk and uncertainty. The discussion of the many assumptions in the various metrics will need to be developed and presented in a scientifically defensible manner. The use of “percent of goal” metrics differs from commonly accepted practice and will need to be discussed at the AFB. Based upon the November 1st briefing given to HQUSACE by the district, model certification is being pursued in coordination with the ECOPCX. An update of model certification should be presented at the AFB. The potential need for independent external peer review on the ecological evaluation, plan formulation and plan comparison also needs to be discussed at the AFB.

District Response: A criterion based ecological evaluation methodology (CBEEM) was utilized in lieu of post processed modeling data, as a result of unacceptable levels of uncertainty in the WASH123D and TABS-MDS model’s output as a primary representation of the impacts of the Biscayne Bay Coastal Wetland alternatives implementation. This methodology attempts to incorporate aspects of acceptable hydrological modeling, documented ecological response and professional/expert judgment in examining how efficiently alternatives attempt to achieve historical ecological and hydrologic conditions. This process is consistent with the recommendation from the National Research Council (NAS) Biennial Review of CERP.

This effort was a coordinated, multidisciplinary approach that utilized project objectives and performance measures to derive a “landscape/community scale suitability indices” intended to represent the potential restoration success of each alternative. This approach utilized a combination of modeling results, spatial extent of features, and professional judgment to ascertain how well each alternative compared with a set target.

The target set for each performance measure depended upon the precise nature of what was being measured, but was related to achieving historic conditions in the study area. Each of the performance measures included in the CBEEM was either directly or indirectly related to ecological indicators, ranging from algal blooms (water quality) to connectivity (removal of features) to estuarine habitat (salinity regimes). Targets were set utilizing empirical data for water quality, and published and/or documented ecological responses to changes in environmental conditions, utilizing judgment to determine the degree of affect.

As a result of the November 1st briefing a sub-team has been formed tasked with obtaining certification of the CBEEM model. This sub-team is undertaking a substantial task of enhancing performance measure descriptions by describing the link between ecological indicators (valued ecosystem components) and each CBEEM performance measure (i.e. the performance measure

description for phosphorus removal will be edited to describe the correlation between phosphorus and indicator species). The direct and indirect correlation between the performance measures and ecological response will be clearly identified and presented. This sub team will list the empirical data that was used to set targets, as well as explain the theoretical justification behind the judgmental and spatial impact performance measures. All assumptions will be documented and validated to the extent possible. Upon completion of the model certification process, the information will be added to the draft report to provide a reasonable assertion of the validity of the CBEEM analysis.

The district is aware of the need for and is working towards certification and validation of the plan formulation and ecological evaluation, and will amend the report to incorporate recommendations from the certification process and include more detailed and comprehensive documentation in the draft report. The PDT will also enhance the discussion of the risk and uncertainty associated with using the CBEEM approach. The phased implementation recommendation for the BBCW project is one way the BBCW project will address the risk and uncertainty. However, the PDT will also keep in mind the recent statement by the National Research Council (NAS) that, “...*Important issues concerning scientific understanding, scientific coordination, and the incorporation of science in to program planning and management remain, but the committee judges that no significant scientific uncertainty should stand in the way of restoration progress...*”

The second area of concern from HQ regards “Percent of target”. In many CERP and other restoration projects, more than one ecological benefit is measured. They typically have different units of measure (acres of oyster habitat, duration of rehydration, etc.). In order to compute the overall net ecological benefit of each alternative for comparison purposes, some means converting these different unit measures into a single unit measure is required. To do this, the different outputs are normalized on a 0-1 scale to make them combinable. This normalization in the case of CBEEM is a measure of how well each performance measure attains its target, which is essentially a goal, but a goal of historic conditions or full restoration and based on empirical or theoretical ecological thresholds. Without a target to normalize the plans to, there would be no way of combining performance measures and no way to measure how all alternatives holistically represent success. Other CERP projects have successfully implemented projects utilizing similar methodologies for normalizing performance measures. (i.e....Tamiami Trail and C-43), and this would typically done by either by normalizing to the maximum plan designed or to a natural system target.

AFB Discussion: The concern is not resolved. It was stressed that similar models have received scrutiny at ASA and OMB, meaning it is vital that the model be fully documented, appropriate for use, and have a strong scientific basis. The District is preparing to submit the model for certification to the PCX for ecosystem restoration (MVD). Concern was raised about the possibility of the model review necessitating a change in the TSP.

Action Required: The District will submit the model for certification to the ECO/PCX at (MVD). Following completion of the model review and assessment of potential impacts to the TSP, the district will coordinate with the RIT and the HQ Policy Review Manager to determine if an IPR should be scheduled.

DPIR Action: The CBEEM model completed the process of certification through the ECO/PCX in May 2009. Currently awaiting receipt of approval memorandum from ECO-PCX. The model certification will be included with in the Final Project Implementation Report.

HQUSACE Analysis Draft Report: Comment not resolved. The CBEEM documentation submitted to HQ for review did not include the review process documentation (Appendix C). This information is still needed.

CESAJ Response/Action Taken: A request for Appendix C of the review process documentation has been submitted to the ECO-PCX (Jodie Staebell). Upon receipt a copy will be submitted to HQ for review.

HQUSACE Analysis of Revised Draft: Resolved.

6. Section 5.0 Environmental Compliance. Table 5-1.

a) Fish and Wildlife Coordination Act compliance indicated ongoing discussions with USFWS. Coordination per FWCA should also be occurring with NOAA-Fisheries and the state fish and wildlife agency and should be indicated in the Table.

District Response: Coordination with the USNMFS has been established through informal correspondence and PDT participation. This coordination will be noted in the DPIR.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: The following text was included in Appendix E, Agency and Public Coordination of the DPIR:

E.1 cooperating agencies

The following state and Federal agencies are not officially noted as cooperating agencies for the purposes of National Environmental Policy Act (NEPA). However, all of the agencies are members of the Project Development Team (PDT), and have contributed to the development of the Project Implementation Report (PIR)/Environmental Impact Statement (EIS): U.S. Fish and Wildlife Service (FWS), Florida Department of Environmental Protection (FDEP), National Park Service (NPS), and Miami-Dade Department of Environmental Resource Management (DERM). These agencies are considered partners in the Comprehensive Everglades Restoration Plan (CERP) projects.

The U.S. Environmental Protection Agency (EPA) is an officially noted cooperating agency, contributor to the development of the PIR/EIS and member of the PDT. In accordance with regulations pertaining to the NEPA (Title 40 of the Code of Federal Regulations [C.F.R.], part 1501.6), the following agencies were formally invited to become a cooperating agency for an EIS on the Biscayne Bay Coastal Wetlands (BBCW) Project:

*US Environmental Protection Agency
US Fish and Wildlife Service
National Park Service
Florida Fish and Wildlife Conservation Commission
Florida Department of Environmental Protection
US Geological Survey
Miami-Dade Department of Environmental Resources Management
National Oceanographic and Atmospheric Administration / National Marine Fisheries Service*

HQUSACE Analysis of Draft Report: Comment is not resolved. The comment was regarding the Fish and Wildlife Coordination Act. Table 8-2 in the draft PIR/EIS should include coordination with NMFS and the appropriate state wildlife agency under FWCA status.

CESAJ Response/Action Taken: The FWCA entry in Tables 8-2 and B-1 have been revised to read: An ongoing consultation process between USACE, FWS, the FWC, and the NMFS has involved regular communication and exchange of input between the agencies through monthly interagency coordination meetings, public scoping meetings, and official correspondence.

HQUSACE Analysis of Revised Draft: Resolved.

b) Executive Order 13186 on Responsibilities of Federal Agencies to Protect Migratory Birds should be included in the table.

District Response: This project is expected to be in full compliance with this Act. A discussion on the status of compliance with Executive Order 13186 will be included in the DPIR.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Table B-1: Environmental Compliance and Coordination (Annex B – NEPA Information) outlines the project’s compliance with the Migratory Bird Treaty Act and the Migratory Bird Conservation Act.

HQUSACE Analysis Draft Report: Comment is not resolved. Table 8-2 in the draft PIR/EIS should include compliance with E.O. 13186.

CESAJ Response/Action Taken: Tables 8-2 and B-1 have been revised to include E.O. 13186. Specifically, the entry will read: No migratory birds would be adversely affected by project activities. This coordination has been on-going throughout the duration of the planning process; this project is in compliance with this Executive Order.

HQUSACE Analysis of Revised Draft: Resolved.

c) The table does not indicate that NOAA-Fisheries was contacted concerning ESA compliance. Is this the case, and if so why is this appropriate?

District Response: Coordination and discussions with the USNMFS concerning ESA has been established. The status of compliance will be contained in the DPIR.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Coordination with NOAA Fisheries on ESA compliance is addressed in the Biological Assessment in Annex A – FWCA & ESA Compliance (see text below). Further coordination is also referenced in Table B-1: Environmental Compliance and Coordination (Annex B – NEPA Information) outlining the project’s compliance with the Magnuson-Stevens Fishery Management Act.

A.4.5.2 Federally Listed Species.

The U.S. Army Corps of Engineers has coordinated the existence of Federally listed species with the U.S. Fish and Wildlife Service and with National Oceanic and Atmospheric Administration Fisheries, as appropriate. Specifically, coordination with National Oceanic and Atmospheric Administration Fisheries includes listed fish, marine plants, and sea turtles at sea. Coordination with U.S. Fish and Wildlife Service includes other listed plants and animals (FWS, 2004). Twenty-five federally listed threatened and endangered species are either known to exist or potentially exist within the project area and, subsequently, may be affected by the proposed action (Table A4-1). Many of the twenty-five threatened and endangered species have been previously affected by habitat impacts resulting from wetland drainage, alteration of hydroperiod, wildfire, and water quality degradation.

HQUSACE Analysis Draft Report: Comment is not resolved. Table 8-2 in the draft PIR/EIS should include coordination with NMFS under ESA compliance.

CESAJ Response/Action Taken: Tables 8-2 and B-1 has been revised to include

coordination with NMFS. Specifically, these sections read: A list of potentially affected Threatened and Endangered species has been confirmed by the FWS along with listed species under the purview of the NMFS. Coordination with both FWS and NMFS is ongoing.

HQUSACE Analysis of Revised Draft: Resolved.

7. Section 5.7 Endangered Species Act. At this time in the planning process, the district has tentatively selected a recommended plan and effects on Federally listed species should have been evaluated. An effect determination should be included the draft report and section 7 consultation with the USFWS (formal or informal), should be initiated by this point, based upon the effect determination.

District Response: Coordination with USFWS has been initiated and a formal determination of effects of the selected plan on Federally listed species will be provided in a Biological Assessment contained in the DPIR.

AFB Discussion: HQUSACE clarified that in future AFB documentation, it would be better to provide a full status of the activities, including what has been accomplished, what remains to be done, and when those activities will be completed. It is also expected that once the TSP is identified the effects determination should be completed and included with the AFB document. It was noted that it is not necessary to begin consultation until after the AFB.

Action Required: An effect determination will be completed and Section 7 Consultation with the USFWS (formal or informal), will be initiated based upon the effect determination. Status and findings will be included in the draft report.

DPIR Action: A Biological Assessment was completed and formally submitted to USFWS. That agency is presently preparing a concurrence letter on the determinations provided in the BA. Upon receipt, informal consultation will be completed. The agency agrees with our determination and is presently preparing a formal concurrence letter. A copy of the BA and the formal response from USFWS will be contained in the final PIR.

HQUSACE Analysis Draft Report: Comment is not resolved. The draft PIR/EIS does not contain the Corps' affect determination for impacts to Federally listed species. If a Biological Assessment (BA) has been prepared this should be noted in the draft report; also note the Corps' affect determination and that the Corps is seeking concurrence from the USFWS (and NMFS?) on this determination. Since the report indicates that upon receipt of concurrence informal consultation will be completed, does this mean that the project is not expected to adversely affect listed species and therefore no formal consultation pursuant to S.7 ESA is expected? Updates to Section 9.9 and Table 8-2 is needed.

CESAJ Response/Action Taken: Adverse impacts to listed species are not anticipated, therefore, formal consultation is not required. A Biological Assessment with the Corps' affect determination of impacts to threatened and endangered species was provided to the FWS, the

FWC, and the NMFS in July 2008 and is contained in Annex A of the DPIR. Sections 9.9 and 8.2 have been updated to read: Informal consultation with FWS, FWC and NMFS has resulted in agency concurrence with the Corps' affect determination; formal letters of concurrence will be contained in the FPIR/EIS.

HQUSACE Analysis February 2010: Partially Resolved. The Corps' affect determination is still not mentioned, i.e. not likely to adversely affect listed species. Otherwise, formal consultation would be needed.

CESAJ Response May 2010: Section 9.9 and Table 8.2 have been revised to read: Informal consultation with FWS, FWC and NMFS has resulted in agency concurrence with the Corps' species determinations of "no effect", and "may affect not likely to adversely affect", as presented in the Biological Assessment (Annex A) of this report. The formal letter of concurrence from the FWS is contained in Annex A, Section A4.12 of the FPIR/EIS.

HQUSACE Analysis Final Report: Partially Resolved. A letter from NMFS is required under Section 7 Informal Consultation procedures to verify their concurrence with the Corps "may affect, not likely to adversely affect" determination. This was not included in the FPIR. Additionally, the Biological Assessment Addendum that is referenced in the USFWS coordination letter (ESA/FWCA/MMPA) of 18 November 2009, was not found in the appendix, but should be included.

CESAJ Response Oct 2011: Despite verbal concurrence with NMFS on T&E species determinations, their official letter has not arrived. SAJ Office of Council is working with NMFS Office of Council to expedite the process. There was no addendum to the BA.

Verbal concurrence from the NMFS on the Corps' T&E species determinations was established in August 2010. The NMFS Protected Resources Division has approved the concurrence; however, the official letter is still pending. SAJ Office of Council is coordinating directly with NMFS Office of Council to expedite the process. Upon receipt, the concurrence letter will be placed in Annex A, Section A.4.13.

With regards to an addendum to the Biological Assessment, an addendum was never written or required. The reference in the FCAR of 18 November 2009 was specific to a revised threatened and endangered species list that was modified to exclude the bald eagle, which had been delisted as a threatened species under the Endangered Species Act on 9 July 2007.

HQUSACE Analysis of Final Report Revisions: Written concurrence from NMFS was received and provided to HQ. Resolved.

8. Tab 6. Independent Technical Review. The report needs to address the full peer review spectrum, including External Peer Review per EC 1105-2-408 and the associated implementation memo from May 2007 (the PDT should also be alert to potential WRDA 2007 requirements): http://www.usace.army.mil/cw/cecw-cp/library/peer_rev_process.pdf. CERP has benefited from extensive external peer review at the programmatic level by the National Academies. The report

should discuss the findings and recommendations of those studies and how they have been implemented (or not) in this particular PIR. The C-43 PDT prepared a workable format for demonstrating this connection, and its approach should be considered as an example for this study. The potential need for additional EPR for this study should be discussed at the AFB.

District Response: A Peer Review Plan based on the latest guidance is being developed for Biscayne Bay Coastal Wetlands and will be included in the draft report. The plan will be revised following the example of C-43, specifically to include efforts already conducted in the course of this study that meet the intent of external peer review.

AFB Discussion: A programmatic PRP documenting ongoing programmatic external review processes is being prepared at the District for all CERP projects and will be completed by the end of December and sent to the PCX for review. A project specific PRP for BBCW will be completed following approval of the programmatic PRP. The potential need for additional external peer review for the BBCW project has not yet been determined. The District response is amended to delete the inclusion of the PRP in the draft report. The PRPs will follow a separate approval process with review by the PCX and submission for approval to SAD. This comment is not resolved.

Action Required: The district will complete the PRP in coordination with the ECO/PCX for submittal to SAD for approval. Completion of the PRP will include coordination with SAD and the RIT to determine the necessity of conducting external peer review. If necessary, an IPR will be scheduled to discuss external peer review needs.

DPIR Action: Approval of the Peer Review Plan for Biscayne Bay Coastal Wetlands was received on 15 May 2009. SAJ is currently undergoing coordination with the ECO/PCX to schedule and begin an IEPR of the BBCW draft PIR in early FY10.

HQUSACE Analysis Draft Report: Comment not resolved. As indicated in the original comment, CERP has benefited from extensive external peer review at the programmatic level by the National Academies. The report should discuss the findings and recommendations of those studies and how they have been implemented (or not) in this particular PIR.

CESAJ Response/Action Taken: IEPR of the Biscayne Bay Coastal Wetlands PIR is currently underway and is scheduled for completion in January 2010.

HQUSACE Analysis February 2010: Not Resolved. Please read original comment and Oct 2009 HQUSACE Analysis. The report should discuss the findings and recommendations of previous external programmatic level reviews by the National Academies. For instance, on pg 5-34 the report references that the National Research Council's (NRC) recommendation for Incremental Adaptive Restoration for CERP. A specific section in the report discussing relevant recommendations is appropriate. It is not apparent how the National Academies/NRC reviews are being considered in CERP planning efforts as they are not discussed in reports.

CESAJ Response May 2010: The following section was added to the report:

Agency technical reviews (ATR) of the Biscayne Bay Coastal Wetlands document were carried out through collaboration with the Planning Centers of Expertise (PCX) in compliance with guidance at the time of draft PIR completion (2007) and in accordance with the following policy documents; EC 1105-2-408 dated 31 May 2005 "Peer Review of Decision Documents", Peer Review Process Memorandum dated 30 March 2007; "Supplemental Information for the "Peer Review Process" Memo, dated March 2007 found on the Corps Planning CoP web site at: http://www.usace.army.mil/cw/cecw-cp/peer/revplan_23may07.pdf; and memorandum dated 25 October 2005 (CESAD-RBT SOP 11-1-3), and EC 1105-2-410 dated 22 August 2008 "Water Resources Policies and Authorities Review of Decision Documents".

An internal SAJ Internal Technical Review (ITR) team, independent of the PDT, reviewed the subject study at the FSM stage in September 2004. The comments were incorporated into the project process and documentation. Following the FSM, an external Peer Review action plan was developed and a dedicated team established external to SAJ, comprised of members of other SAD districts, under the leadership of Wilmington District (SAW). The external ATR Team reviewed the AFB package in August and September, 2006. The same team then reviewed the draft report in March, 2007. A third external ATR was conducted for the Final PIR/EIS. This ATR of the Final PIR/EIS was a follow-on review to the previous review of the DPIR. The primary purpose of this review was to verify that previous Project Delivery Team (PDT) commitments to incorporate ATR comments were carried forward into the final report, and to review new technical information. The Cost Engineering Directorate of Expertise (DX) was charged with overseeing the ATR of cost engineering. ATR certification of the Final PIR/EIS was received on 30 July 2007.

Extensive external scientific peer review through the National Academy of Science has been conducted at the programmatic level and will continue throughout the planning and implementation of the CERP program. The findings and recommendations of these programmatic reviews have been applied to and incorporated in the Biscayne Bay Coastal Wetlands project, as applicable. In addition, Paragraph 385.10 of the Programmatic Regulations for CERP requires extensive consultation and coordination in a timely manner throughout the implementation of CERP. Such consultations have provided opportunities for external review of CERP PIRs and other documents from a diverse group of agencies and stakeholders interested in Everglades and South Florida ecosystem restoration. Consultation is required with the following external entities: Miccosukee and Seminole Tribes of Florida, Department of Interior, Environmental Protection Agency, Department of Commerce, Florida Department of Environmental Protection, and other state, federal and local agencies. The Biscayne Bay Coastal Wetlands project document has also been reviewed by the CERP Restoration Coordination and Verification (RECOVER) team that, while not independent of CERP, serves as a first-level of scientific review that is independent of the PDT.

In addition to the programmatic reviews and in order to comply with the intent of external peer review (EPR) regulations and guidance of the time (2007), the PDT documented application of previous CERP External Peer Reviews and previous CERP project reviews to the Biscayne Bay Coastal Wetlands project. This documentation covers all major areas of concern for EPR of a project of this type. The PDT, SAJ and the vertical team concurred that the subject matter covered in the decision document is not novel, controversial, or precedent-setting, and that the

project will not have significant interagency interest or significant economic, environmental or social effects. The PDT and SAJ concluded, and the vertical team concurred, that the project, with its application of previous EPRs, has met the intent of EPR requirements outlined in the referenced Corps guidance. No further EPR was deemed necessary or recommended at the time. Documentation of the application of previous CERP External Peer Reviews and previous CERP project reviews to the Biscayne Bay Coastal Wetlands project is included in Biscayne Bay Coastal Wetlands Peer Review Plan as Attachment 1. This review plan was approved by PCX and SAD (see memorandum from SAD dated 16 August 2007).

HQUSACE Analysis Final Report: Not Resolved. The response provides only two sentences, as follows, regarding the remaining concern from HQUSACE (to discuss the findings and recommendations of previous external programmatic level reviews by the National Academies): “Extensive external scientific peer review through the National Academy of Science has been conducted at the programmatic level and will continue throughout the planning and implementation of the CERP program. The findings and recommendations of these programmatic reviews have been applied to and incorporated in the Biscayne Bay Coastal Wetlands project, as applicable.” These two sentences, obviously, are not sufficient to address the comment.

CESAJ Response Oct 2011: The paragraphs cited in CESAJ Response May 2010 were added as Section 8.7.4 Compliance with Public Outreach Requirements to the PIR.

The recommendations of the National Academy of Sciences were to initiate partial construction on CERP projects to ascertain early benefits. The SFWMD under the former Acceller-8 program has nearly completed construction of some of the features in the Recommended Plan and monitoring of those features is presently on-going. Additionally, the PIR has included an Adaptive Management Plan (Annex E) to consider alternative operational adjustments if the project actions are not meeting restoration expectations. This information will be added to final PIR.

The recommendations of the National Academy of Sciences (NAS) through external programmatic level reviews emphasize an Incremental Adaptive Restoration approach of CERP. The approach for BBCW on NAS's recommendations are summarized in Section 7.3.1, and reads as follows:

The recent programmatic review of CERP and recommendations of the National Research Council (NRC) of the National Academy of Sciences contained in the report: Progress Toward Restoring the Everglades: The Third Biennial Review - 2010 were utilized in the formulation and planning process for determination of the Selected Plan for BBCW. Biennial evaluations are expected to continue for the duration of the CERP. The NRC recognizes that Everglades' restoration is a complex undertaking with many scientific uncertainties, which can slow the rate of progress. The NRC concluded that if the construction of a restoration project is delayed until all scientific uncertainties are eliminated, there will be many negative consequences including: continued decline of the Everglades ecosystem, lagging public support, and increased project costs.

The NRC identified an approach referred to as Incremental Adaptive Restoration where an incremental approach using steps that are large enough to provide some restoration benefits now, while addressing critical scientific uncertainties and taking actions to promote learning that can guide the remainder of the project design. Constructing projects using a phased approach will enable assessments of benefits and impacts to the environment as each phase is constructed. Remaining phases will then be adapted to optimize performance based on actual findings from the earlier phases. Consistent with the NCR recommendation, the Biscayne Bay Coastal Wetlands project is proposed for implementation in a phased approach. Alternative O Phase-I will utilize the available water in the most beneficial and efficient manner, while also utilizing the lands currently in public ownership.

The Biscayne Bay Coastal Wetlands project was specifically reviewed and addressed in the Third Biennial Review. The report's CONCLUSIONS AND RECOMMENDATIONS states: "During the past two years the restoration program has made tangible progress, and four CERP project are now under construction. Continued federal commitment is especially important at this time. The Everglades restoration program has completed the arduous federal planning and authorization processes for three projects and is now moving forward with construction of the Picayune Strand project with federal funding. Additionally, despite budget challenges, the state of Florida continues to expedite the construction of C-111 Spreader Canal, Biscayne Bay Coastal Wetlands, and Lakeside Ranch STA. After years of delay, it is critically important to maintain this momentum to minimize further degradation of the system during CERP implementation."

The Third Biennial Report also states that: "Given the slower than anticipated pace of implementation and unreliable funding schedule, projects should be scheduled with the aim of achieving substantial restoration benefits as soon as possible". The SFWMD under the Acceller-8 program has nearly completed construction of some of the features in the Recommended Plan and monitoring of those features are presently on-going. Project Scheduling and implementation of project options is discussed in Section 8.1.

HQUSACE Analysis of Final Report Revisions: Resolved.

9. Section 10.1 Cooperating Agencies. This section indicates that several Federal, state, and a local agency were asked to be Cooperating Agencies for purposes of NEPA. The district should address the following comments on this subject in the draft report:

- a) Why wasn't NOAA-Fisheries requested to be a Cooperating Agency?

District Response: That was an oversight: An official letter requesting NOAA to be a Cooperating Agency was drafted on 19 November 2007 and upon signature will be sent to both the Habitat Conservation and the Protected Species Divisions of the USNMFS.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the appropriate revisions in

the draft report to reflect the outcome of coordination with the USNMFS.

DPIR Action: NOAA-Fisheries has not responded to the USACE letter requesting their participation as a Cooperating Agency on the BBCW project. This will be indicated in Appendix E, Agency and Public Coordination of the DPIR.

HQUSACE Analysis Draft Report: Resolved.

b) The first paragraph of this discussion lists agencies that are “not officially” cooperators, but are members of the PDT. However, EPA has accepted the invitation to be a Cooperating Agency, and others listed may do so in the future, as not all responses have been received. The first paragraph should be edited.

District Response: Concur: the DPIR will be edited accordingly.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: The referenced paragraph (see below), located in Appendix E: Public and Agency Coordination, was modified to indicate EPA’s acceptance as a Cooperating agency.

E.1 cooperating agencies

The following state and federal agencies are not officially noted as cooperating agencies for the purposes of National Environmental Policy Act (NEPA). However, all of the agencies are members of the Project Development Team (PDT), and have contributed to the development of the Project Implementation Report (PIR)/Environmental Impact Statement (EIS): U.S. Fish and Wildlife Service (FWS), Florida Department of Environmental Protection (FDEP), National Park Service (NPS), and Miami-Dade Department of Environmental Resource Management (DERM). These agencies are considered partners in the Comprehensive Everglades Restoration Plan (CERP) projects.

The U.S. Environmental Protection Agency (EPA) is an officially noted cooperating agency, contributor to the development of the PIR/EIS and member of the PDT.

HQUSACE Analysis Draft Report: Resolved.

c) This section should plainly state which agencies have accepted the invitation to be a Cooperating Agency, which agencies have declined, and which agencies have not responded at the present time.

District Response: Concur: the DPIR will specify which agencies have accepted the

invitation to become a Cooperating Agency, which ones have formally declined, and those who have not responded.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: The section (see below), located in Appendix E: Public and Agency Coordination, was modified to indicate which agencies have accepted the invitation to be a Cooperating Agency, which agencies have declined, and which agencies have not responded at the present time.

E.1 COOPERATING AGENCIES

An invitation to become a cooperating agency was sent by letter, and an example of that letter is attached in this section. Two responses have been received as of the generation of this report: the EPA accepted the invitation to be a cooperating agency and the FWS declined the invitation (see attached letters). The other state and federal agencies that were formally invited have not responded.

HQUSACE Analysis Draft Report: Resolved.

d) The draft report should include the actual response letters from agencies. Additionally, the invitation letter sent from the Corps may only need to be included once if it was identical to all agencies, but this should be clearly stated. “Examples” of letters are not appropriate.

District Response: Concur: the DPIR will include actual responses from the agencies.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Two response letters have been received, and are included in the draft report. The section text has been modified to state: “An invitation to become a cooperating agency was sent by letter, and an example of that letter is attached in this section”. See Appendix E, Public and Agency Coordination.

HQUSACE Analysis Draft Report: Resolved.

10. Section 10.0 Environmental Coordination and Resource Agency Views. Also discussed here is how public input was sought pursuant to NEPA. However, this section is lacking a thorough discussion of the actual input received from other agencies and the public, and how that

input was taken into consideration during plan formulation. Per ER 1105-2-100 [Exhibit G-3 and para B-5.c(2)], a description and evaluation of the efforts to acquire public input, the information and opinions expressed by the public, and how public input was used in the planning and decision-making process needs to be discussed at the AFB and included in future reports.

District Response: Concur: the DPIR will contain all documented public input along with a discussion on how their views affected the planning process.

AFB Discussion: HQUSACE accepted the response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: A table outlining all project-related correspondence was developed and included in Appendix I, Pertinent Correspondence. The table contains actual input received from other agencies and has been amended to include public review feedback on the DPIR. The Final PIR will include this feedback, a summary of primary concerns and how public feedback was utilized in the planning and decision making processes.

HQUSACE Analysis Draft Report: Comment not resolved. Section 9 of the draft report is titled Summary of Coordination, Public Views and Comments. Appendix I with a table containing specific feedback from agencies and the public is fine. However, Section 9 still needs to have a summary of public input. Section 9.6 discusses public coordination that occurred for scoping of this project. This would be appropriate location to summarize what input was received. This does not need to be a discussion of specific comments, but general issues and concerns.

CESAJ Response/Action Taken: Concur; Section 9.6 has been revised to include a summary of public concerns to this point. The additional narrative reads as follows:

In general, the resource agencies and public attendees expressed overall support of the proposed project and the potential for improved habitat to benefit fish and wildlife resources. Initial concerns focused on continued saltwater intrusion along the coast; the potential leaching of soil contaminants into surface water and groundwater; the need for backfilling mosquito ditches; and the lack of water available and the amounts needed for restoration. Recommendations encouraged the continued pursuit of utilizing reclaimed wastewater from the South Dade Wastewater Treatment Plant to ensure the amount of freshwater required for restoration goals.

A number of subsequent Project Delivery Team meetings were held throughout the planning process of the project where stakeholders and representatives of non-governmental environmental organizations provided written comments and statements. The primary focus of their concerns centered on splitting the original plan into two phases; uncertainties about full restoration opportunities and the need to identify additional sources of water to fulfill restoration goals, specifically in the dry season to sustain salinities conducive for estuarine biological and vegetative communities. One recommended component was the need to include storage features in the upland for hydration during the dry season.

Additional concerns raised included uncertainties inherent to all modeling outputs; the need to define long-term management options; potential impacts associated with sea level rise; and the design of the project should incorporate polishing wetland components such as storm water treatment areas to allow for maximum restoration to freshwater and coastal wetlands.

HQUSACE Analysis of Revised Draft: Resolved.

11. Real Estate.

a) Generally, for ecosystem restoration projects, real estate costs should not represent more than 25% of total project costs (ER 1105-2-100, E-30.f). Projects with land costs exceeding this target level are not likely to be given a high priority for budgetary purposes, although it is understood that this is a goal for the CERP program as a whole and individual projects may entail larger land costs. The tentatively selected plan for BBCW has real estate costs equaling 71% of the total project costs (\$155,854,000 out of total cost of \$218,466,000). As requested previously from the district, HQUSACE would like to receive an update concerning real estate costs as a percentage of the CERP program based upon the projects being studied at this time. The concern is that there is no indication that the CERP program as a whole has reasonable real estate costs that fall near to the 25% policy goal.

District Response: Updating the real estate costs for the entire CERP program is a system wide element and should be addressed at the programmatic level. The CERP was a conceptual plan and the real estate cost estimates were reconnaissance level. For the 51 components in Appendix F of the Comprehensive Restudy for which real estate cost estimates were provided, 36 components had no identified project lands. The locations of these project components were to be determined in their respective PIRs where the project footprint and relevant real estate costs are finalized. Furthermore, these footprints and real estate costs are subject to change as there may be further refined during the detailed design and specifications phase of the projects. Until a project is approved by Congress and a PCA executed, the Corps cannot request the lands for the project and the sponsor cannot receive credit for its real estate costs (the final determination of the real estate cost).

The Total Project Costs are also subject to change as a result of construction cost increases that were not contemplated in the Comprehensive Restudy. Current approved PIRs with Chief of Engineers reports exist on only four projects and one final PIR (Caloosahatchee River (C-43) West Basin Reservoir) is in the process of being finalized. The table below summarizes the latest cost information on these individual PIRs.

PROJECT	TOTAL PROJECT COST ESTIMATE	LANDS COST ESTIMATE	PERCENT OF TOTAL COST
Caloosahatchee River (C-43) West Basin Storage Reservoir	\$507,240,000	\$80,420,000	15.85%
Broward County Water Preserve Areas	\$746,980,000	\$308,920,000	41.36%
Site 1 Impoundment	\$79,100,000	\$8,404,000	10.62%
Picayune Strand	\$349,422,000	\$193,043,000	55.25%
Indian Lagoon South	\$1,207,288,000	\$698,936,000	57.89%
Caloosahatchee River ASR Pilot Project	\$8,240,850	\$67,650	0.82%
Port Mayaca ASR Pilot Project Hillsboro ASR Pilot Project- Kissimmee ASR Pilot Project Moore Haven ASR Pilot Project	\$37,142,963	\$163,240	0.44%
TOTAL	\$2,935,413,813	\$1,289,953,890	43.94%

AFB Discussion: HQUSACE requested that a programmatic update be included in all project AFB packages for CERP projects.

Action Required: The response resolves the comment for this AFB package. HQ requests that the team share lessons learned with other teams to ensure that a programmatic update is provided on real estate in future AFB packages.

DPIR Action: No action required for the DPIR.

HQUSACE Analysis Draft Report: Resolved.

b) There were no RE ITR comments provided. A copy should be forwarded to HQUSACE for review.

District Response: ITR of real estate information was not performed. Past experience with similar projects indicates that ITR of real estate information at the AFB stage does not provide much value added to the technical analysis, since most of the detailed information is developed after the TSP is approved at the AFB. A complete ITR of real estate information would be performed for the Draft PIR.

AFB Discussion: HQUSACE and SAD agreed that ITR on the real estate should be performed for all AFB packages. It was not decided at the AFB meeting if the BBCW team should perform an expedited ITR of real estate information now or proceed on to the draft report without the RE review.

Action Required: This comment is not resolved. HQUSACE will provide direction to the District on this issue after additional internal coordination.

DPIR Response: The real estate appendix has undergone ATR and responses have been provided for all comments made to date.

HQUSACE Analysis Draft Report: Resolved.

c) Paragraph 3.4.6.1 and F.7.1 of the RE Plan notes that the total real estate will include 11,312 acres and will cost \$335,701,000. The TSP notes that 4,078 acres are needed and real estate will cost \$155,854,000. F.3.1 details that 13,600 acres are to be acquired for the project. What is the correct acreage and estimated cost for RE?

District Response: The TSP is Alternative O which will include 11,312 acres at a cost of \$335,701,000. However, the project will be in Phased Construction (2 phases) and therefore total project costs will be provided and then project costs for each phase will be provided in the draft PIR. Real Estate costs and acreage will be provided for the total real estate required for the TSP then for each Phase.

AFB Discussion: The comment is partially resolved. Upon completion of final coordination on the proposal to recommend Alt. O (to include a phased implementation), this issue should be revisited to ensure that there are not inconsistencies in guidance provided.

Action Required: This issue should be included in the discussions on the proposed TSP noted in paragraph A.6. to clarify any remaining actions.

DPIR Response: A decision was made to move forward with the plan using two separate PIR's as opposed to using one PIR and recommending the two-phase execution. The selected plan is Alternative O, Phase 1. The correct acreage for this

plan has been revised to 3,943 acres at an estimated total real estate cost of \$73,096,596 which includes a 25% contingency.

HQUSACE Analysis Draft Report: Comment not resolved. The Real Estate Plan does not reflect this information so it remains unresolved.

CESAJ Response/Action Taken: The following will be added at the end of paragraph D-6.1.

Alternative O was derived from components of Alternatives M and Q and is intended to make use of common water management features to attain the objectives of the Biscayne Bay Coastal Wetlands project. Alternative O includes the use of flow ways, spreader canals, culverts, piping, weirs, canal plugs, 102 mosquito control ditch plugs and pumps to achieve the overall project goals of restoring and enhancing wetlands and nearshore bay habitat by minimizing point source discharges and improving the quantity, quality, timing, and distribution of water to freshwater and tidal wetlands and Biscayne Bay. Alternative O reduces cost by removing the southern spreader canal which has high real estate costs. Alternative O was evaluated in the final array of alternatives as described in Appendix F, Section F.2.3. Based on the initial Cost-Effectiveness/Incremental Cost Analyses, Alternative O was identified as the desired end state for the project to be implemented via two separate reports. A subset of features for Alternative O, designated Alternative O Phase 1 reflects a first step to executing Alternative O. Alternative O Phase 1 includes all of the State's Expedited Construction program, formerly Acceler8, features. This option generally incorporates the more northerly and easterly elements of Alternative O, and defers the riskier elements for a subsequent study. Alternative O Phase 1 was identified as the Recommended Plan.

HQUSACE Analysis of Revised Draft: Resolved.

d) RE Plan should state whether lands owned by SFWMD were acquired for other projects.

District Response: Concur, more detail on lands owned by SFWMD and provided to the Corps for other C&SF projects will be provided in detail in the draft PIR.

AFB Discussion: HQUSACE accepted the District response.

Action Required: The comment is resolved by incorporating the information requested in the draft PIR.

DPIR Action: Sections D.7.7 and D.8.1 address lands provided for previous projects and the fact that the sponsor will not be afforded credit for lands previously provided for other Corps projects.

HQUSACE Analysis Draft Report: Comment not resolved. There is not enough detail in the REP to identify those lands and state what project those lands were previously provided under.

CESAJ Response/Action Taken: Paragraph D-8 will be changed to read:

D-8 EXISTING FEDERAL PROJECTS

D-8.1 Central and Southern Florida Project

Approximately 57.57 acres of the right of way of Canal 103 of the Central & Southern Florida project lie within the Homestead South Freshwater Wetlands portion of the project and will be provided for constructing of the Biscayne Bay Coastal Wetlands Project, as these lands were acquired for and previously provided for the Canal 103, C&SF project, SFWMD will not be afforded credit for these lands. Other portions of the C&SF project that are within the project area are: the Canal C-102 right of way; and Levee L-31N and its adjacent borrow canal. The SFWMD will not be afforded credit for any of these lands if they are required for this project as they were acquired, provided and certified for the C&SF project.

HQUSACE Analysis of Revised Draft: Resolved.

e) RE Plan should include discussion as to whether environmental resource permits requested will have an impact on lands needed for project.

District Response: Concur, the Real Estate Plan in the draft PIR will include more detailed discussion on the environmental resource permits which may have an impact on lands needed for the project. After completion of the AFB material, the SFWMD Governing Board issued a new strengthening protection for critical areas within the proposed footprints of environmental restoration projects in South Florida. Citing the scarcity of coastal lands available for Everglades restoration in Miami-Dade County, the District Governing Board recently identified nearly 6,400 acres within the BBCW restoration project footprint as a critical area of public interest. Under the new directive, unanimously approved by the Governing Board at its September 2007 meeting, applications for environmental resource permit (ERP) within the critical area of public interest will be denied to protect the lands for restoration. Permit applications within the overall boundaries of the BBCW project, but outside of the identified critical coastal area, will be processed on a case-by-case basis and will face a high level of scrutiny to ensure that the proposed use does not have potential impacts the Everglades restoration project.

AFB Discussion: HQUSACE accepted the District response.

Action Required: The comment is resolved by inclusion of information provided in the district response in the draft PIR.

DPIR Action: Section D.14 includes a discussion on environmental resource permits.

HQUSACE Analysis Draft Report: Comment not resolved. Section D.14 does not reflect information in regards to the comment.

CESAJ Response/Action Taken: PARAGRAPH D-14 will be re-written to provide:

D.14. MINERAL AND TIMBER ACTIVITIES

SFWMD Environmental Resource Permit applications within the boundaries of the project will be processed on a case-by-case basis and will face a high level of scrutiny to ensure that the proposed use does not have potential impacts to the project. Preliminary investigations indicate that there are several limestone mines in the vicinity of the proposed project; however, it should be noted that limestone is not classified as a mineral under Florida law. There is no limestone mining within the project footprint. There are not any other mining operations either currently in operation or currently contemplated within the project footprint. There is no known merchantable timber stands located in the project area. FPL is requesting a permit to construct borrow pits adjacent to the project boundaries. It will be the responsibility of the non-Federal sponsor to insure acquire fee title to insure that the property rights acquired and certified for the project protect the integrity of the project and that no mining or alteration of the surface on the land including any substance that must be quarried or removed by methods that will consume or deplete the surface, including, but not limited to, the removal of topsoil, sand, gravel, rock, and peat; any use or activity that causes or is likely to cause significant pollution of any surface would be allowed that would interfere with the construction, operation and maintenance of the Federal project.

HQUSACE Analysis of Revised Draft: Resolved.

f) Paragraph 3.9.1 states that some lands may require condemnation. There is currently no mention of condemnation in the RE Plan. Please include information on need for condemnation in the RE Plan.

District Response: Concur; the Real Estate Plan in the draft PIR will include information on the need for condemnation of lands within the project footprint.

AFB Discussion: HQUSACE accepted the District response.

Action Required: The comment is resolved by taking the actions noted in the district's response.

DPIR Action: Section D.21 includes a brief discussion on Project Support that notes that if lands cannot be acquired from willing sellers, the sponsor does possess the authority to acquire lands by condemnation if necessary.

HQUSACE Analysis Draft Report: Resolved.

g) Paragraph F. 19 and 2.1.16 should clearly state that costs of HTRW remediation are responsibility of NFS.

District Response: Concur, the draft PIR will state that costs of HTRW remediation are responsibility of Non-Federal Sponsor.

AFB Discussion: HQUSACE accepted the District response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Paragraphs two and three from Appendix D – Real Estate state the Non-Federal Sponsor is responsible for the costs of HTRW remediation associated with the BBCW Project.

D.20 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTES.

Although ‘classic’ industrial or commercial hazardous waste sites (e.g., those governed under the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund,) exist within the project footprint, none were identified that pose a direct impact to the project. Lands that do carry potentially significant impacts are agricultural lands, both current and fallow, where persistent pesticides and herbicides were applied and residuals remain. Sampling results indicate that the most prevalent agricultural contaminants remaining at levels that pose an ecological risk, but do not constitute hazardous waste, are Dichloro-Diphenyl-Trichloroethane (DDT) and its degradation products, dichlorodiphenyldichloroethane (DDD) and dichlorodiphenyldichloroethylene (DDE), and chlordane. All of these pesticides can be grouped under the general heading of organochloride compounds. The residuals of these compounds are known to bio-accumulate in the food chain and can reach toxic levels in higher predator species.

As the non-federal sponsor, the South Florida Water Management District is required to provide project lands that are free of hazardous wastes. As such, the South Florida Water Management District has chartered numerous Phase I and Phase II studies on properties to be acquired; also, internal reviews have been performed on lands already owned by the South Florida Water Management District and intended for project use. Results were used to determine if the land under consideration was suitably clean for the intended use, or if some form of remediation is necessary prior to plan implementation. Additionally, the US Fish and Wildlife Service has reviewed and continues to review, Phase I and Phase II results generated by the South Florida Water Management District and its consultants. Since the once agricultural lands are to be inundated to rehydrate wetlands, the basis for comparison considered by USFWS are

the Threshold Effects Concentrations (TEC) and Probable Effects Concentrations (PEC) of Sediment Quality Assessment Guidelines (SQAGs) for benthic invertebrates (MacDonald, et al, 2003).

The status of site remediation for contaminated lands in Alternative O Phase I and hazardous, toxic, and radioactive wastes concerns for lands required for other alternatives are summarized in SECTION 7.12. The non-Federal Sponsor has the responsibility to provide lands free from contamination for this project at no cost to the project.

HQUSACE Analysis Draft Report: Comment not resolved. The above is not mentioned in the REP.

CESAJ Response/Action Taken: Paragraph D-20 on pages D-33 and D-34 contains the latest version of the HAZARDOUS, TOXIC, AND RADIOACTIVE WASTES paragraph. The last sentence on page D-34 states: "The non-Federal Sponsor has the responsibility to provide lands free from contamination for this project at no cost to the project." Additionally the following sentence will be added: to the end of the paragraph: "In the event that remediation of contamination is necessary for land to be suitable for project use, such cost will be fully borne by the non-federal sponsor, and the cost is not eligible for cost sharing."

HQUSACE Analysis February 2010: Partially resolved. The above does not take into account the draft PIR Implementation Guidance in the same manner as other sections of the report. This section should be reviewed and possibly revised once the guidance is finalized. [Also note that the HTRW discussion (Section D.20) in the Real Estate Appendix now begins on page D-38, instead of the pages referenced in the response]. Additional considerations:

- In the last paragraph of the HTRW discussion, the last sentence is not intelligible; it should read as noted in CESAJ's response.
- The third paragraph of the HTRW discussion indicates that "In cases where remediation of contamination to the highest level enforceable under the law is necessary, such cost will be fully borne by the non-Federal sponsor, and the cost is not eligible for cost-sharing." This should be reconciled with the sentence "In the event that remediation of contamination is necessary for land to be suitable for project use, such cost will be fully borne by the non-federal sponsor, and the cost is not eligible for cost sharing."

CESAJ Response May 2010: Concur that policy may change with draft PIR Implementation Guidance. Section will be revised once guidance is final. Last paragraph will be changed to read as above response. The language will be changed to read as follows: If the property becomes wetland habitat, any additional remediation necessary would be undertaken prior to or during construction. Under the terms of the 2009 CERP Master Agreement, the cost of remediation required only to achieve

ecological restoration objectives on former agricultural lands contaminated by the application of commercially available products (e.g., pesticides and/or herbicides) used for their lawfully intended purpose may be eligible for cost-sharing between the Government and the Non-Federal Sponsor. The recommendations for cost sharing will be determined in accordance with guidance from USACE.

HQUSACE Analysis Final Report: Partially resolved. The 2009 CERP Master Agreement does not specifically address residual agricultural chemicals. In addition, the September 14, 2011, guidance does not allow cost sharing. HQUSACE does not concur with the CESAJ response from May 2010. The referenced sections of the PIR need to be consistent with the residual agricultural chemicals section. Please submit this revised sections as requested in the new comments. Please see new comments for additional guidance.

CESAJ Response Oct 2011: (Outstanding as of Oct 13, 2011). A consistency review of HTRW and Residual Agricultural Chemicals discussions throughout the document has been completed. Changes to the Executive Summary, Section 7 - The Selected Plan, Section 9 - Summary of Coordination, Section 10 - Recommendations, and Appendix D have been made.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

h) Paragraph F.14 details that there are several possible mineral activities in the vicinity of the proposed project. In accordance with Chapter 12, ER 405-1-12, RE plan should also include a recommendation, including rationale, regarding acquisition of mineral rights or interests.

District Response: Concur, the Real Estate Plan in the draft PIR will include an estate analysis as well as a recommendation for the estates required for the Project. In addition, it will include a more detailed write-up on the mineral activities on the project lands as well as a recommendation regarding the acquisition of mineral rights or interests.

AFB Discussion: HQUSACE accepted the District response.

Action Required: The comment will be resolved by making the noted revisions in the draft report.

DPIR Action: Section D.16.2, Estates Analysis is included in the Real Estate Appendix to address this comment.

HQUSACE Analysis Draft Report: Comment not resolved. Mineral Analysis is briefly discussed under D.14. HQ did not note the above in the Draft REP.

CESAJ Response/Action Taken: PARAGRAPH D-14 will be re-written to provide:

D.14. MINERAL AND TIMBER ACTIVITIES

SFWMD Environmental Resource Permit applications within the boundaries of the project will be processed on a case-by-case basis and will face a high level of scrutiny to ensure that the proposed use does not have potential impacts to the project.

Preliminary investigations indicate that there are several limestone mines in the vicinity of the proposed project; however, it should be noted that limestone is not classified as a mineral under Florida law. There is no limestone mining within the project footprint. There are not any other mining operations either currently in operation or currently contemplated within the project footprint. There is no known merchantable timber stands located in the project area. FPL is requesting a permit to construct borrow pits adjacent to the project boundaries. It will be the responsibility of the non-Federal sponsor to insure acquire fee title to insure that the property rights acquired and certified for the project protect the integrity of the project and that no mining or alteration of the surface on the land including any substance that must be quarried or removed by methods that will consume or deplete the surface, including, but not limited to, the removal of topsoil, sand, gravel, rock, and peat; any use or activity that causes or is likely to cause significant pollution of any surface would be allowed that would interfere with the construction, operation and maintenance of the Federal project.

HQUSACE Analysis of Revised Draft: Resolved.

B. POLICY COMPLIANCE REVIEW – DRAFT PIR/EIS. New Comments. NOVEMBER 2009.

1. Future Without Project (FWOP) Conditions. Section 3. References to FWP. All references to the BBCW project should be removed from the FWOP Conditions discussion (Section 3). An example is on Pg. 3-10, para 1, last sentence: “Biscayne Bay Coastal Wetlands project alternatives that include new manatee-friendly structures would be beneficial to the local manatee population.” Similar statements can be found for the Wood Stork and Bald Eagle on the subsequent pages. The whole of the FWOP Conditions section of the report should be reviewed and edited as necessary. The FWOP Conditions should not include any discussion on what the proposed project may accomplish. [Reference ER 1105-2-100, para 2-3.b and para E-3.a(2)]

CESAJ Response/Action Taken: Section 3 has been reviewed and edited as requested. All references to what the BBCW may accomplish in the area have been removed from the section. This includes language noted in the discussions on manatee, wood stork, bald eagle and HTRW.

HQUSACE Analysis February 2010: Partially Resolved. Comment mainly addressed in report (one small section in table 4-8 where it refers to future with project instead of FWOP). However, there seems to be inconsistencies with sea level rise in this section (4.2.1 and 4.2.3 both say from 2000-2050 a rise of .8 feet or 24 centimeters) how does this relate to medium/high/low projections in table 1 section 7.13.2.3.1? Wrong section is also referenced in 4.2.3.1.

CESAJ Response May 2010: Sea level rise discussion was edited for current version of DPIR. The SLR write-up in 7.13.2.2.3.1 has been revised (updated January 2011 – sea level rise section is now 7.14.2.3). All other references to SLR have been edited to make sure they conform with the SLR write-up in section 7.

HQUSACE Analysis of Final Report: Resolved.

2. Formulation of Alternative Plans. Section 5. This discussion is woefully inadequate. It should also include "Evaluation," which is not even a section heading in the chapter. This chapter should be the "meat" of the report. Instead, it is incredibly vague and almost every section states, "See Appendix ___ for more detail." While it is acceptable to provide additional detail in the technical appendices, it is not acceptable to require the reader to refer to the appendices to even understand the basic information regarding the nature of alternative plans, the formulation rationale behind them, where they are located, what they consist of, what objectives they meet, etc. Much of this basic information needs to be summarized from the technical appendices and brought forward to the main report. More specific comments on the plan formulation section follow below. [Reference ER 1105-2-100: Section 2-3.c-f; Section V of Appendix E; and Appendix G]

CESAJ Response/Action Taken: The Plan Formulation section of the report has been rewritten to present the material according to policy. It is now outlined to following the planning process.

Section 2 of the report is the Problems and Opportunities identification, Section 3 is the Existing Conditions, Section 4 is the Future Without Project Conditions, Section 5 is the Formulation of Alternative Plans, Section 6 is the Evaluation and Comparison of Alternative Plans. Sections 2, 5, and 6 contain the meat of plan formulation. It should now be easier to follow the process and easier to understand.

HQUSACE Analysis February 2010: Partially Resolved. This section is vastly improved from the July 2009 version of the Draft PIR in terms of explaining how alternative plans were formulated and re-formulated, what measures each alternative consists of, and how alternatives were screened. However, a question remaining is the rationale for including all four sub-component areas (Deering, Cutler, L-31E, and Barnes Sound Wetlands) in all formulated alternatives. Formulation usually follows an incremental process of adding justified increments or areas. Even the smallest formulated alternative (Alternative M) includes management measures in all 4 hydrologic basins. The recommended plan (Plan O Phase 1) does not include any features in the Barnes Sound area, but this reduction in project footprint was a result of the need to “phase” Alternative O due to its high costs. Headquarters requests that the report include the reason why all four sub-component areas were included in practically all formulation combinations. Since the Barnes Sound subcomponent wound up being eliminated from Alternative O Phase 1, it is reasonable to question what might have been the outputs and costs of formulated alternatives that selectively eliminated the other sub-component areas (Deering, Cutler, and L-31E).

CESAJ Response May 2010: At the AFB, the decision was made to split the project into 2 parts – part 1 being Alt O Phase I which included the Deering Estates, Cutler, and L-31E sub-component areas; part 2 being the remaining Barnes Sound sub-component area. Section 5.3.8.1 clearly states the reasons why that decision was made. A copy of the related memoranda could be added to the Plan Formulation Appendix if that is deemed necessary to the understanding of the information presented in Section 5.3.8.1.

HQUSACE Analysis Final Report: Not Resolved. That the vertical team agreed conceptually to the phasing of Alternative O does not absolve the District from providing rationale as to why all four sub-components had to be included in all the other alternatives and conducting proper plan formulation.

CESAJ Response Oct 2011: Newly created section 5.4 includes:

As previously discussed, all formulated alternatives include management measures for each of the component areas (Deering, Cutler, L-31E, and Barnes Sound). Alternative O Phase I was refined to focus on three of the four sub-components: Deering Estate Flowway, Cutler Wetlands and L-31 East Flowway. Barnes Sound is geographically distinct from Biscayne Bay, separated by Card Sound, and functions in a manner that includes much less fresh and saltwater mixing, due to its' increased hydrologic isolation from Biscayne Bay and the Atlantic Ocean. Barnes Sound also requires substantial land acquisition in the Model Lands and greater water deliveries than currently available to achieve project benefits, contrary to the other three components. Additionally, the other three project components all directly discharge to Biscayne Bay and were all included in the refined plan due to their synergistic manner.

HQUSACE Analysis of Final Report Revisions: Resolved.

3. Summary of Alternative Formulation. Tables 5-1 and 5-2 and Section 5.3.2 are inadequate in describing the management measures considered, what each achieves in terms of meeting planning objectives, what they cost, how they were combined, what formulation rationale was used, etc. Maps and figures should be provided to show what these features look like and where they are located. What were the effects of these alternatives? What were their benefits? Virtually no information relevant to evaluation of these alternatives is provided, either. The descriptions provided (Table 5-2) are vague. For example: Alternative D is described as "Identical to Alternative C except for minor features." The descriptions of the final array of alternatives (Section 5.4) are somewhat more helpful, but this level of detail, at least, should be provided for the preliminary plans, in addition to maps and a description of likely effects. [Reference ER 1105-2-100, Section 2-3.c]

CESAJ Response/Action Taken: The Plan Formulation section of the report has been rewritten. See response above to comment #2.

HQUSACE Analysis February 2010: Resolved.

4. Screening Preliminary Plans. Related to the previous comment, no information is provided as to how 11 preliminary plans were screened as presented in Table 5-1. The reason provided is that they were infeasible, similar or costly. The report needs to describe the ways in which screened plans are not feasible, or indicate the other plans they are similar to, or define what is too costly. The screening process needs to be documented. Furthermore, another four plans are eliminated because they violate the 902 (b) cost limit. This is confusing because the project is not authorized, so there would not be an authorized cost for which a 902 limit would be calculated. The report should indicate the cost that was used for screening and why that was an economic constraint. The report does not give the reader any idea of what the monetary values are, what these alternatives cost or what cost limit constraint they violated. [Reference ER 1105-2-100, Section 2-3.d]

CESAJ Response/Action Taken: Section 5.3.6 (Initial Screening of Alternative Plans) has been revised to more clearly state how the screening was completed. Reference to Section 902 cost limitation has been removed. The costs used in screening were the Yellow Book cost escalated to FY 2007 dollars.

HQUSACE Analysis February 2010: Resolved.

5. Benefits. Section 5.4.2. A description of the benefits assessment methodology (CBEEM) should be provided here. Only a vague explanation (habitat units for three ecological zones) is provided. The report states this ecological model is being reviewed by the Ecosystem PCX. The description of the CBEEM provided to the Eco-PCX could be provided in this section of the

report as a summary of the methodology. In Table 5-4, the planning objectives that the performance measures attempt to measure progress towards are not the same planning objectives listed in Section 4 as the planning objectives for the study. The report should clarify the benefit methodology and review the planning objectives to assure they are consistent and provide a basis for assessing objective fulfillment. See ER 1105-2-100, para. 2-3.a.(4).

CESAJ Response/Action Taken: The environmental benefits of the alternatives are now in Section 6.3 of the report. Portions of the CBEEM description provided to the Eco-PCX are provided in this section, as well as in Section 5.3 (Project Evaluation Criteria, Performance Measures, Formulation Methods, and Models). The objectives in what was Table 5-4 (is now Table 5-1) and those listed in what was Section 4 (now Section 2, page 2-5) are unified.

HQUSACE Analysis February 2010: Partially Resolved. While nothing is technically “wrong” with Section 6.3.5 on Significance (other than the misstatement that the technical significance of wetlands derives from their economic value), this section is currently very minimal. However, significance is a critically important concept for project justification and helps determine whether the proposed environmental investment is worth its cost. Please refer to ER 1105-2-100, para E-37 for examples of the three types of significance that should be cited. Terrific information is sprinkled throughout the report that is relevant to making the case why the coastal wetlands and nearshore estuarine environment are significant (scarcity, representativeness, trends over time, connectivity, biodiversity, essential fish habitat, etc.). Suggest consolidating the many institutional, public, and technical sources of significance (i.e., why the resources benefitting from the BBCW project are significant) in this section.

CESAJ Response May 2010: Additional discussion of “Significance” was gathered from other sections of the report and summarized in 6.3.6.

HQUSACE Analysis of Final Report: Resolved.

6. **CBEEM Results. Table 5-5.** In Table 5-5, why is there a note that FWOP habitat units are "net" of existing condition habitat unit conditions? FWOP conditions are what they are -- they don't need to be "netted out" from existing conditions. Existing conditions are provided by way of reference -- they do not have an affect on the calculation of benefits. In the same table, why is it that the Alternative O Phase 1 (a smaller increment of Alternative O) has greater lift/ benefit for saltwater habitat units than the larger Alternative O it is a part of? This seems counterintuitive and leads to confusion as to whether the project outputs are being derived appropriately from comparison of with- and without-project conditions per E-35.a of ER 1105-2-100. Clarification is needed.

CESAJ Response/Action Taken: This note is to explain that the reference condition for the FWO 2050 HU results and the other alternatives are not the same. The existing conditions habitat unit are provided here for reference and indeed do not have an effect on calculation of benefits. A comment stating that the existing conditions results do not influence the benefit calculations can be added. Alternatively the FWO 2050 HU results (relative to existing condition) can be deleted from table. (See Section 6.3 of the report.)

HQUSACE Analysis February 2010: Partially Resolved. Some additional explanation is necessary for the values displayed in Table 6-2. These habitat unit “lift” values represent the difference between FWOP and FWP for each alternative in 2050. As such, they represent a “snapshot” of the difference in outputs in 2050. It should be made clear to the reader that these values were not used for CE/ICA. Rather, these differences between with- and without-project effects in 2050 were annualized (in Table 6-4 and Figure 6-1) and then the annualized values were used for CE/ICA (Table 6-6). An explanation should be provided why an index value is not provided for the freshwater ecological zone. It appears that the acreage is synonymous with habitat units (i.e., one acre = one habitat unit). Appendix C does include information on the calculation of this output, but the text on page 6-34 states that two aspects of freshwater wetland restoration were included in the calculation of benefits, rehydration of wetlands and removal of exotic species. The formula in Appendix C (page C-3) only addresses the rehydration aspect. Furthermore, the assumption is made that rehydrating the area (in terms of acreage) then delivers the same number of habitat units; in other words, the quality component (i.e., the index value) is ignored, resulting in one acre = one habitat unit. The Draft PIR (page 6-33) states that the benefits methodology (CBEEM) is currently being reviewed by the National Ecosystem Planning Center of Expertise. The Eco PCX approval and certification of this application of CBEEM will be necessary to verify that the simplifying assumption used for this ecological zone (1 acre = 1 HU) is indeed valid. Documentation of model approval should be included in subsequent report submittals.

CESAJ Response May 2010: Table 6-2 (updated January 2011 – table is now Table 6-4) was amended to include additional explanation of 2050 HUs and average annual HUs. A note was provided on the table as to why index value is not shown for FW habitat units.

HQUSACE Analysis of Final Report: Resolved.

7. Cost-Effective/Incremental Cost Analysis. Section 5.4.3. The discussion on cost effectiveness/incremental cost analyses (CE/ICA) is inadequate. The report needs to show the results of CE/ICA. It needs to describe and show, through tables and graphs, the final array of plans considered, the cost effective plans, and the best buy plans. Table 5-6 does summarize information across three ecological zones, but readers need to see the results as well as a summary. Also, it does not appear that Alternative O is cost effective for saltwater habitat (according to Table 5-6), as stated under Plan Selection (first paragraph, Section 5.5), but since no data is provided the reader cannot know. [Reference ER 1105-2-100, sections E-34 to E-36].

CESAJ Response/Action Taken: All relevant information pertaining to the production efficiency analysis (CE/ICA) will be taken from section G.8 of the Economic Appendix and transcribed to the main report: Section 6.5.4.

HQUSACE Analysis February 2010: Partially Resolved. In general, this section is excellently described and displayed. Headquarters review has resulted in the following suggestions and corrections, however.

a) It would be helpful to display graphs similar to Figure 6-1, which shows “Nearshore Response Time,” for the other ecological zones, “Freshwater Wetlands” and “Saltwater Wetlands.” Since this information directly affects the calculation of average annual habitat units, which in turn is instrumental to CE/ICA, it is important to display this information regarding the temporal aspect of project benefits.

CESAJ Response May 2010: Ecological response curves for all three ecozones have been added to sea level rise analysis in the present version of the DPIR. This should address comment.

HQUSACE Analysis of Final Report: Resolved.

b) In the tables showing the results of cost effectiveness analysis (Tables 6-7, 6-8, 6-9, and 6-10), the alternatives should be arrayed according to increasing output (see ER 1105-2-100, para. E-36.c).

CESAJ Response May 2010: Since there are three different tables of habitat benefit results each with a different relative ranking of alternatives, ordering the alternatives from low to high response would result in three tables with three different alternative orders. The summary table would also have a different order. This would provide more confusion to the reader. SAJ prefers not to order the alternatives in these tables given the increase in confusion that would result.

HQUSACE Analysis of Final Report: Resolved.

c) In Section 6.5.4.2 on Freshwater Wetland Habitat, the text states that the Yellow Book Alternative *is* cost effective. However, both Table 6-8 and Figure 6-3 indicate that it *is not* cost effective. The YB Alternative *is not*, in fact, cost effective for freshwater wetlands. There appears to be a problem with the labels for plans in Figure 6-3. The YB Alternative should not be labeled as “cost effective.” Likewise, Alternative O should not be labeled as a “best buy,” but rather as “cost effective.”

CESAJ Response May 2010: All relevant information pertaining to the production efficiency analysis (CE/ICA) was taken from section G.8 of the Economic Appendix and transcribed to the main report: Section 6.5.4.

HQUSACE Analysis of Final Report: Resolved.

d) In Section 6.5.4.3 on Saltwater Wetlands Habitat, the text states that Alternative O Phase 1 provides 3% fewer AAHU’s than Alternatives O and M. However, Alternative O Phase 1 actually provides the most output for saltwater wetlands, so the text should be corrected.

CESAJ Response May 2010: This was corrected in final version of PIR.

HQUSACE Analysis of Final Report: Resolved.

8. Next-Added Increment. Section 5.6. The results of next added increment analysis in Section 5.6 need to be shown. CERP programmatic guidance calls for the results of the NAI analysis to be presented in order to demonstrate this investment is warranted in the absence of additional features. What accounts for the differences in benefits between system formulation and next added increment formulation for the Biscayne Bay project?

CESAJ Response/Action Taken: The difference between the benefits provided by CERP plus Alt O-Phase 1, and only Alt O-Phase 1 are attributed to the availability of reuse water for the CERP plus Alt O-Phase 1 condition. The additional freshwater that results from the CERP Water Reuse project will enhance freshwater wetlands, nearshore salinity, and saltwater wetlands. A discussion of this will be included in the text. The results of the analysis are included in Table 5-7 which shows a comparison between the System-Wide Evaluation and the NAI analysis. A percentage change will be included. The NAI analysis is only conducted for the TSP, and the CBEEM results table will be added to this section.

HQUSACE Analysis February 2010: Resolved.

9. Tentatively Selected Plan. Section 6. The report states that the project would restore approximately 400 acres of freshwater acres. No mention is made of saltwater wetlands or nearshore habitat benefits (two significant categories of ecological resources that are also project benefits). The Executive Summary (page x) states that 340 acres of freshwater wetlands will be restored. The report needs to be consistent throughout in terms of the acres and habitat units of various resources restored. The reader is left guessing what the actual benefits of the project will be. Section 6.0 also states that the plan would deliver incidental benefits of improved flood risk management. These benefits are not quantified or described in the Main Report. On page 6-31 the report states that water supply and flood risk management benefits are considered incidental and will only be discussed in a qualitative fashion. These benefits are not discussed qualitatively or quantitatively in the main report. They should be described, if the project is going to claim such benefits in accordance with ER 1105-2-100, para..2-3.d.

CESAJ Response/Action Taken: Section 6 has now been changed to Section 7, The Recommended Plan. The acreages of restored wetlands have been corrected throughout the report. A discussion of saltwater wetlands and nearshore habitat benefits has been included in Section 7.10 of the report. There were no calculated economic benefits to flood risk management or water supply and any inferences have been removed.

HQUSACE Analysis February 2010: Resolved.

10. Cost Estimates. Section 6.3. On page 6-13 the report refers to "LEER" (a typo) instead of "LERR." The report consistently mentions "LERR," but leaves off "LERRD." Are no disposal areas (the "D" in "LERRD") needed for any of the new spreader canals to be constructed as part of the project? The term LERR is generally restricted to use in navigation studies, where disposal features are cost-shared General Navigation Features. Projects for ecosystem restoration should use the term LERRD in accordance with ER 1105-2-100, E-30.j.

CESAJ Response/Action Taken: WRDA 2000 Section 601(e)(2)(A) requires the sponsor to provide lands, easements, rights-of-way and relocations. It does not require the sponsor to provide improvements required for disposal of dredged or excavated materials. Accordingly, LERRD (lands, easements, rights-of-way, relocations, disposal/borrow areas) should be changed to LERR (lands, easements, rights-of-way, relocations) throughout the PIR. Incidentally, the project does not require disposal areas. Excess materials will be used in the construction of berms adjacent to the canals.

HQUSACE Analysis February 2010: Concern is resolved, but documents still need to be searched for use of the term LERRD. For instance, LERRD is used on pg 7-17.

CESAJ Response May 2010: LERRD has been changed to LERR throughout the PIR, including its use on page 7-17. The only remaining use of LERRD in the document occurs in Appendix D where it is used in a direct quote of legal text.

HQUSACE Analysis of Final Report: Resolved.

11. Design and Construction Considerations. Section 6.4. On page 6-14, the report mentions project components to be constructed by the State under the Expedited Construction Program. One of the components listed is "S-702." What is S-702? No reference to it could be found in any of the maps or tables describing the project in Section 6.1 or Table 6-1. Similarly, on page 6-15, the reports states that the USACE will construct "S-711 E and W." What is this component? It is not mentioned elsewhere. It seems that the components may be mis-labeled and should correctly be described as S-711 and C-711 E and C-711 W. The report needs to be clarified/corrected as needed.

CESAJ Response/Action Taken: Concur; S-702 was a structure that was eliminated from this alternative during the screening process. This reference has been removed from the bulleted list on page 6-14 (now Section 7.7.2 on page 7-20). Additionally, the bulleted list on page 6-15 (now Section 7.7.2 on page 7-20) will be corrected to "S-711" and "C-711 E and W". There is no S-711 E and W, this was a typo.

HQUSACE Analysis February 2010: Resolved.

12. Lands, Easements, Rights-Of-Way and Relocations Considerations. Section 6.5. In regards to lands required for the project and "BBCW Zones of Potential Habitat Lift," is the bottom line the concept that the project is only "taking credit" for benefits on the lands that are part of the

project footprint, but that potential benefits extend beyond the project lands into adjacent lands and nearshore waters? If so, this concept needs to be more clearly stated in the report. The implication is that the estimate of benefits is conservative -- there may be additional benefits outside the project footprint, but due to uncertainties (the spatial extent or influence of overland flow, whether these lands will remain in a natural state or be developed, etc.) the team opted to not quantify these. The report should clarify the project impacts to fully account for any broader effects whether they are quantified or not in accordance with E-35.a. of ER 1105-2-100. HQUSACE would also suggest that this discussion be covered earlier in the report, perhaps in Section 5.4.2 on Benefits, rather than in the "LERR Considerations" section of the description of the TSP.

CESAJ Response/Action Taken: The project is taking credit for benefits that occur on project lands and is also taking credit for benefits that occur in the nearshore since there are no foreseen actions by a landowner that can impact these benefits. The discussion is provided in Section 7.8.

HQUSACE Analysis February 2010: Resolved.

13. Project Acreages and Functional Lift. Table 6-4. Another example of inconsistencies in the report regarding acres and "net functional lift" (aka "benefits") is in Table 6-4 on page 6-17. (It is also suggested that "net functional lift" be defined somewhere and a consistent term be used to describe the benefits of the project -- various terms seemed to be used interchangeably.) Table 6-4 shows 443 acres of freshwater wetlands will be restored. Page 6-1 says "approximately 400" acres will be restored. The Executive Summary states 650 acres of freshwater wetlands will be restored. Similarly, Table 6-4 shows 1,078 acres of nearshore habitat will be restored, while the Executive Summary states 1,144 (page xi). For tidal wetlands, table 6-4 shows 3,318 acres, while the Executive Summary states "approximately 3,000." The inconsistencies need to be addressed so the reader has more confidence in the estimated acres restored, which are precisely the significant resources the project is formulated to deliver. See 2-4.m. of ER 1105-2-100.

CESAJ Response/Action Taken: Table 6-4 is now Table 7-5. The references to acreage has been changed appropriately to reflect a single estimate for each benefit type.

HQUSACE Analysis February 2010: Resolved, but see Below Comment & HQUSACE Analysis [Plan Accomplishments.]

14. Plan Accomplishments. Section 6.7. Inconsistent information is also presented for affected resources and project benefits on page 6-27. The average annual habitat units listed for the three resource categories (freshwater wetlands, saltwater wetlands, and nearshore area) are not the same values provided in either Table 5-5 on the evaluated alternatives or Table 5-7 (system benefits and next added increment analysis). These sections of the report should be reviewed and revised as necessary to provide consistent information.

CESAJ Response/Action Taken: The Plan Accomplishments Section 6.7 is now Section 7.10. This section and Table 5-5, which is now Table 6-2, and Table 5-7 has been updated to Table 7-6, are now consistent.

HQUSACE Analysis February 2010: Not Resolved. There still seem to be inconsistencies with some of the numbers including acreages and habitat units. Does the entire report use conflicting numbers or are different comparisons being made? They should be unified or the differences explained.

Section 7.10 says freshwater wetlands acquired is 473.61 acres, table 6.2 says 482 acres.

Total habitat units in table 6.2 and section 7.10 and table 6-6 are not the same. Section 7.10 last paragraph states that the recommended plan results in total average annual habitat units of 9,986. This and the subcategories do not match Table 6.2 which has total HU's equaling 9,828 or the average annual table 6-6 which has the total equaling 9456.

Table 6.2 has 0 existing freshwater acres, but section 7.10 says there is an existing 3977 freshwater acres.... Are these sections comparing different things?

Table 6.6 and 6.7 use different total HU's for alternative 0, phase 1 and alternative 0 and alternative Q. This looks like it is a simple rounding error.

CESAJ Response May 2010: There was an effort to distinguish between habitat units and directly impacted acreage. This was minimized in the final version of the PIR, or the different comparisons were properly explained.

HQUSACE Analysis Final Report: Not Resolved. The report still contains inconsistencies in the project outputs which create confusion for a reader and uncertainty as to the correct output values. Pages xiv and xv of the Executive Summary discusses the benefits of the selected plan but seems to use the terms acreage and habitat units interchangeably. Page viii of the Executive Summary shows total habitat units of 9,276 and the District Engineer's Recommendations shown on page 10-1 has a value of 9,986. In contrast Sections 6.5.4 and 6.5.5 on the CE/ICA analyses show Alternative O-P1 with combined habitat units of 9,276 and values of 261 for freshwater habitat units, 5909 for saltwater habitat units, 3,106 for nearshore habitat units. The draft Chief's report uses the value of 9,276 habitat units. The evaluation of Sea Level Rise shows the outputs by property and Ecozone for Alternative O-Phase 1 with a total of 9071 habitat units- 435 for freshwater, 5834 for saltwater, and 2802 for nearshore. Please review and reconcile or explain inconsistencies.

CESAJ Response Oct 2011: Habitat Units have been verified throughout the report. There are 9,276 average annual HU's and 9,629 net HU's in 2050.

HQUSACE Analysis of Final Report Revisions: Resolved.

15. Contribution to Achievement of Interim Goals and Interim Targets. Section 6.8. The discussion in this section contains excellent information. However, the definition of "Interim Targets" was incomplete. What are the Interim Targets? What are some examples? Why does the project not contribute to the interim targets and is that important or not? The information in Table 6-5 on project effects on the CERP interim goals contains excellent information that should also be used in Section 5 on project benefits. Some of these effects could also help address the "significance" of the project benefits/outputs. There appears to be no discussion of the significance of project benefits in the Main Report. Explaining the resource significance is a critical piece in justifying project increments and answering questions regarding the worth of the investment. [Reference ER 1105-2-100, Section E-37].

CESAJ Response/Action Taken: Response: The interim targets include increase water supply to the lower east coast; protect the Biscayne Aquifer from saltwater intrusion; maintain or improve level-of-service flood protection, and provide surface water storage capacity. The BBCW project is designed to reduce canal point source discharges and spread the existing amounts of water into coastal wetlands. This project is dependent upon other projects such as waste water reuse to increase water supply in the area. Regarding surface water storage capacity, the substrate is too porous to successfully store water in the BBCW project area; therefore, this target is also not obtainable. This information has been added to Section 7.11 as recommended.

In addition, Section 5, which is now Section 6, has been revised.

6.3.5 *Significance of Ecological Benefits*

As stated, the purpose of the BBCW project is to restore the natural hydrology and ecosystem in an area degraded by drainage systems and land development. The principal benefit of the project, therefore, is to redirect the fresh water that is currently discharged directly to the Bay through man-made canals to coastal wetlands in order to restore a more natural water flow pattern to Biscayne Bay. The diversion of water from canals would re-establish sheet flow, more natural hydropatterns, spatial extent of wetlands, and desirable salinity ranges for the benefit of aquatic fauna, submerged aquatic vegetation, and commercial marine resources, including threatened and endangered species inhabiting the area.

In summary, this effort will benefit a large portion of the south Florida ecosystem by increasing the functional capacity of freshwater and coastal (estuarine) wetlands, re-establish more natural salinity concentrations, and provide more productive nursery habitat in the nearshore areas of Biscayne Bay.

In determining the significance of project benefits to wetlands and the adjacent nearshore area of Biscayne Bay, the following factors were evaluated: institutional, technical, and public recognition of importance. Wetlands are significant from an institutional perspective because they are a rare and unique resource. This resource is technically significant due to the economic value of increased productivity of commercial shrimps and fishes. Wetlands, estuaries, and nearshore coastal areas are significantly important to the public for aesthetic and recreational purposes. Thus, the overall significance of restoring wetland and nearshore habitats is because

the public cares about them, because they perform an important function in our ecosystems, and because they are protected by law.

HQUSACE Analysis February 2010: Not Resolved. Section 7.12 does not indicate which of the 10 interim goals of restoration are being contributed to. There are 11 indicators in table 7-7, and how do the indicators relate to the interim goals?

CESAJ Response May 2010: Both the narrative in Section 7.12 (updated January 2011 – section is now 7-13) and the indicators listed in Table 7-7 (updated January 2011 – table is now 7-14) will be revised to more clearly link the anticipated project effects to restoration goals.

HQUSACE Analysis of Final Report: Resolved.

16. Future Land Use Conditions. Section 6.9.2.2. What is the basis for the +/-10% variation in benefits if more or less land remains agricultural than estimated in the future without project condition?

CESAJ Response/Action Taken: Section 6.9.2.2 (which is now Section 7.13.2.2) has been revised and reference to the +/-10% variation in benefits part of the discussion has been removed as the basis for those remarks is unknown and undeterminable. Section 7.13.2.2 now reads as noted below:

7.13.2.2 Future Land Use Conditions

The benefit assessment methodology included an analysis of the effect of land use changes on project water quality as well as availability of some agricultural lands for use as wetland restoration sites. The benefit assessment assumes that agricultural lands near L-31E Levee will be available for use as wetland restoration sites. These lands are currently outside of the Dade County Urban Boundary so they are difficult to convert to urban and commercial land uses. The conversion of some of these lands would likely reduce overall project benefits; however, the local regulatory agencies (DERM, FDEP, SFWMD) negotiate with permit applicants within the Biscayne Bay Coastal Wetlands project area to minimize development impacts.

HQUSACE Analysis February 2010: Resolved.

17. Sea Level Rise. Section 6.9.2.3. The new EC 1165-2-211 (1 July 2009) on Sea Level Rise Considerations in Civil Works Programs should be referenced and followed regarding estimates of sea level rise (SLR) used in the report. Also, the report states (page 6-31) that the project benefits would still accrue under the low SLR estimate (0.8 feet by 2050), but that if SLR exceeds 1.5 feet by 2050, it is likely none of the project benefits will be realized. That's an important consideration. It is unclear whether the 1.5 feet is a medium or high estimate. The new EC requires three scenarios be considered. What is the likelihood of this 1.5-foot SLR estimate? This discussion warrants additional detail since the project benefits are dependent on the rates and extent of SLR.

CESAJ Response/Action Taken: The SLR analysis was updated to reflect the latest Corps guidance and is now included as Section 7.13.2.3.

HQUSACE Analysis February 2010: Resolved, but see New Comment C.1.

CESAJ Response May 2010: The DPIR has a revised SLR analysis. The EC on SLR is vague on the probability of any of the SLR scenarios. In fact, the EC really does not provide decision guidance regarding which SLR scenario (and its probability of occurrence) should be used for determining the viability of the project.

HQUSACE Analysis of Final Report: Resolved.

18. Cultural Resources. Section 6.10.4.3. Cultural resources are included under the "Other Social Effects" Account. Cultural resources should be included under the Environmental Quality account per the Principles of the P&G and the Corps ER 1105-2-100, paragraph 2-3. d. (3). This section mentions historic properties. Were archaeological resources evaluated as well?

CESAJ Response/Action Taken: As requested, we will move the 6.10.4.3 Cultural Resources Section to 6.8.2 under Environmental Quality. With regards to the question "were archeological resources evaluated as well?" Yes, the Phase I Cultural Resources survey and coordination with the SHPO evaluated both historic and archeological properties. The SHPO's concurrence of no effect to historic properties includes both. This correspondence is documented in the Pertinent Correspondence section. The NHPA regs [36 CFR 800.16(1)(1)] definition of Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties.

HQUSACE Analysis February 2010: Partially Resolved. The CESAJ response comment indicates that SHPO concurred with a no effect determination for the project. However, this is not stated as such in section 6.8.2. This section says that coordination has been initiated. In section 6.1.11 it says a phase 1 was done on Deering estate and SHPO determined no effect. Should the environmental quality section have more detail on further 106 plans and what has been accomplished to this point?

CESAJ Response May 2010: The following sections have been updated in Section 6:

6.1.11 has been revised to read: *A cultural resource assessment survey of the Deering Estate and Cutler Flow-way projects, and a literature review for the L-31E culverts project were completed and utilized in evaluating impacts amongst the alternatives. The Corps determined that the project does not have the potential to affect historic properties. The State Historic Preservation Officer, the Miccosukee Tribe of Florida, and the Seminole Tribe of Florida concurred with this determination.*

Section 6.8.2 has been revised to read: *The USACE has reviewed information regarding historical properties that might be affected by the BBCW project, in compliance with Section 106 of the National Historic Preservation Act of 1966 (PL 89-665), as amended; its implementing regulations (36 CFR Part 800), and the Archaeological and Historic Preservation Act of 1974 (PL 93-291), as amended.*

A review of the Florida Master Site Files indicated several known archaeological sites within the BBCW project area. These sites include one of the oldest prehistoric sites in the state, Deering Estates, an early 20th century historic site listed on the National Register of Historic Places, and the “Old Cutler Road” designated as a State Historic Highway. These include: 8DA7 (Cutler Key), 8DA8 (Cutler Mound), 8DA2001 (Cutler Fossil Site), 8DA2815 (Deering Estate historic district), 8DA2815D (historic wall), 8DA6518 (historic road), 8DA11247 (historic road), and 8DA2815C (Deering Estate Bridge). Due to the existence of known historical properties, tree islands and the high probability of unrecorded sites within the general vicinity that have the potential to be impacted by construction, a professional archaeological survey was completed in September 2007. Cultural resources including prehistoric archeological sites as well as historic structural and archeological sites were considered in this survey.

Coordination with the State Historic Preservation Officer (SHPO), the Miccosukee Tribe of Florida, and the Seminole Tribe of Florida was conducted. All consulting parties concurred with the Corps determination of no potential effect to historic properties eligible for listing on the National Register of Historic Places.

The Environmental Quality outputs for this project were portrayed as habitat outputs/units and were assessed for cost effectiveness and incremental cost in Appendix G, Economic and Social Considerations.

HQUSACE Analysis of Final Report: Resolved.

19. Real Estate Comments.

- a) Project Authorization (D.4). Recommend including the authority mentioned in WRDA 2007 for Biscayne Bay.

CESAJ Response/Action Taken: There is only one reference to Biscayne Bay in WRDA 2007 and that is found in Section 1006 (a) 11), which provides “SMALL PROJECTS FOR AQUATIC ECOSYSTEM RESTORATION: (a) IN GENERAL.- The Secretary shall conduct a study for each of the following projects and, if the Secretary determines that a project is appropriate, may carry out the project under section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330): (11) BISCAYNE BAY, FLORIDA.- Project for aquatic ecosystem restoration, Biscayne Bay, Key Biscayne, Florida.” This authorization is not applicable to the CERP Biscayne Bay Coastal Wetlands project, but to a new study for Biscayne Bay, *Key Biscayne*, Florida.

HQUSACE Analysis February 2010: Resolved. However, please note that while the CERP Biscayne Bay is not specifically mentioned in WRDA 2007, the Act did amend certain CERP provisions applicable to all projects.

b) The use of Local Cooperative Agreements with Local Government Entities as noted in Paragraph one of D-7 does not provide a real estate interest per the real estate guidelines set forth in Chapter 12 of ER 405-1-12, paragraph 12-9. This is also mentioned in paragraph D.16.1 of the Real Estate Plan. Obtaining a real estate interest in the property would meet the requirements of the regulation and therefore provide the United States sufficient rights. The interests would provide a distinct boundary of the project to insure that the Local Government agencies do not provide rights to other parties by mistake.

CESAJ Response/Action Taken: The term “Local Cooperative Agreement or Cooperative Agreement” referenced in paragraphs D.6.2 and D.7.1 of the REP will be replaced with the term “Supplemental Agreement.” Paragraph D.16.1 (see CESAJ Response to comment 19.f below) has been rewritten to conform to the term of the CERP Master Agreement which provides:

In accordance with the terms of ARTICLE III - LANDS, EASEMENTS, RIGHTS-OF-WAY, RELOCATIONS AND COMPLIANCE WITH PUBLIC LAW 91-646, AS AMENDED of the MASTER AGREEMENT BETWEEN THE DEPARTMENT OF THE ARMY AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR COOPERATION IN CONSTRUCTING AND OPERATING, MAINTAINING, REPAIRING, REPLACING AND REHABILITATING AUTHORIZED PROJECTS UNDER THE COMPREHENSIVE EVERGLADES RESTORATION PLAN, entered into on August 13, 2009, subparagraph E. provides: The Government recognizes that the Non-Federal Sponsor in limited circumstances will be entering into supplemental agreements with the State of Florida or another Florida governmental entity whereby (1) the State of Florida or another Florida governmental entity, rather than the Non-Federal Sponsor, has acquired or will acquire required lands, easements, and rights-of-way, and (2) the State of Florida or another Florida governmental entity will dedicate the land interests it owns to the *authorized CERP Project* and ensure that such lands, easements, and rights-of-way are retained in public ownership for uses compatible with the purposes of the *authorized CERP Project* and shall not be conveyed, transferred, altered, or otherwise encumbered without the advance written consent of the Non-Federal Sponsor and the Government these supplemental agreements shall be limited in effect to the signatory parties and shall not reduce or alter in any way the requirements of this Master Agreement and any *PPA* that makes the Non-Federal Sponsor solely responsible for providing lands, easements, and rights-of-way that are required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the *authorized CERP Project*.

HQUSACE Analysis February 2010: Resolved. However, CESAJ should continue to explain why a supplemental agreement is being used in future reports. For example,

here the PIR asserts in 16.2.1. that the County can not convey under the present circumstance.

c) Table D-2 as referenced does not match the acreages presented in D.7.1.

CESAJ Response/Action Taken: Acreages in Tables and text has been changed to be consistent.

HQUSACE Analysis February 2010: Resolved.

d) Navigational Servitude (D.12). Future discussion is needed for the Navigational Servitude issues.

CESAJ Response/Action Taken: Paragraph D.12 has been changed to read as follows:

D.12. NAVIGATIONAL SERVITUDE

The navigational servitude is not applicable to the project. Portions of the lands owned by the National Park Service lie below the ordinary high water line of the Atlantic Ocean. Those lands will be provided to the project, free of cost, by Memorandum of Understanding between the National Park Service and the SFWMD.

HQUSACE Analysis February 2010: Resolved.

e) The Non-Federal Sponsor Capability Assessment checklist, included as Appendix 12-E to ER 405-1-12, must be completed and included as part of the REP. This paragraph should also indicate that the non Federal sponsor has been advised of P.L. 91-646 requirements and the requirements for documenting expenses for credit purposes.

CESAJ Response/Action Taken: The following Capability Assessment checklist has been signed and provided as Exhibit to the REP.

ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? **YES**
- b. Does the sponsor have the power of eminent domain for this project? **YES**
- c. Does the sponsor have "quick-take" authority for this project? **YES**

d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? **NO**

e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? **YES**, Lands owned by the United States of America, National Park Service will be provided by Memorandum of Agreement and the lands owned by the State of Florida will be provided by Supplemental Agreement in conformity with the terms of ARTICLE III - LANDS, EASEMENTS, RIGHTS-OF-WAY, RELOCATIONS AND COMPLIANCE WITH PUBLIC LAW 91-646, AS AMENDED of the MASTER AGREEMENT BETWEEN THE DEPARTMENT OF THE ARMY AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR COOPERATION IN CONSTRUCTING AND OPERATING, MAINTAINING, REPAIRING, REPLACING AND REHABILITATING AUTHORIZED PROJECTS UNDER THE COMPREHENSIVE EVERGLADES RESTORATION PLAN, entered into on August 13, 2009, subparagraph E. provides: The Government recognizes that the Non-Federal Sponsor in limited circumstances will be entering into supplemental agreements with the State of Florida or another Florida governmental entity whereby (1) the State of Florida or another Florida governmental entity, rather than the Non-Federal Sponsor, has acquired or will acquire required lands, easements, and rights-of-way, and (2) the State of Florida or another Florida governmental entity will dedicate the land interests it owns to the *authorized CERP Project* and ensure that such lands, easements, and rights-of-way are retained in public ownership for uses compatible with the purposes of the *authorized CERP Project* and shall not be conveyed, transferred, altered, or otherwise encumbered without the advance written consent of the Non-Federal Sponsor and the Government these supplemental agreements shall be limited in effect to the signatory parties and shall not reduce or alter in any way the requirements of this Master Agreement and any *PPA* that makes the Non-Federal Sponsor solely responsible for providing lands, easements, and rights-of-way that are required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the *authorized CERP Project*.

II. Human Resource Requirements:

a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? **NO**

b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? **N/A**

c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? **YES**

d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? **YES**

e. Can the sponsor obtain contractor support, if required in a timely fashion? **YES**

f. Will the sponsor likely request USACE assistance in acquiring real estate? **NO**

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? **YES**
- b. Has the sponsor approved the project/real estate schedule/milestones? **YES**

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? **YES**
- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. **HIGHLY CAPABLE**

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? **YES**
- b. Does the sponsor concur with this assessment? **YES**

Prepared by:

KARL J. NIXON
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REAL ESTATE DIVISION
JACKSONVILLE DISTRICT

Reviewed and approved by:

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Chief, Real Estate Division
REAL ESTATE DIVISION
JACKSONVILLE DISTRICT

HQUSACE Analysis February 2010: Partially Resolved. Remove Master Agreement quotation, please just reference the document.

CESAJ Response May 2010: Concur. Master Agreement quotation was removed in Final PIR.

HQUSACE Analysis of Final Report: Resolved.

f) SAJ-RE must comply with Guidance Memorandum #1 and ER 405-1-12, in determining the "minimum estates" necessary for the project. The PIR must include an estate analysis. While fee is the generally preferred estate for ecosystem restoration

projects, a real estate analysis must be performed to determine if a lesser estate will meet project requirements and is more cost effective. It is noted that several subsections under D.16 of the Draft Report indicate that "...the estimated value of a standard flowage easement would exceed 95 percent of the fee value..." Since that conclusion is a major factor in the determination that fee is the minimum estate, the report needs to contain an adequate discussion as to the market evidence or supporting documentation leading to the conclusion. Impact on highest and best use/value are important considerations.

CESAJ Response/Action Taken: An Estate Analysis was completed for the Project by CESAJ-OC in accordance with Section 1.10.3 of the July 2007 draft of the Six Program-Wide Guidance Memoranda and was detailed in Section D.16 of the draft PIR provided to HQUSACE. Section 1.10.3 of the July 2007 draft of the Six Program-Wide Guidance Memoranda was written by HQUSACE to comply with the Memorandum dated February 24, 2005 from the Deputy Assistant Secretary of the Army (Policy and Legislation) to the Council on Environmental Quality, which is attached as an addendum. The Memorandum from the Deputy Assistant Secretary of the Army (Policy and Legislation) references enclosure 2 which provided the recommendations of HQUSACE. Issue 11 addressed the Estates Required for CERP and states: "The Corps and the State have agreed to language on this issue which is included in the Draft CERP Guidance Memorandum No.1 that says, "For all lands determined to be required for CERP projects, the interests required for implementation generally will be fee simple, based on assumptions that all or a significant portion of the rights in the land will be required for project purposes. To verify the appropriateness of this assumption, the Jacksonville District must conduct an analysis (described in GM No.1, Page 1-5) and the conclusions must be reflected in the appropriate report sections. The level of detail required for the analysis will vary depending on the project feature involved." An analysis as required by ER 405-1-12, Chapter 12 is not applicable to the Estate Analysis required for CERP Projects. Section D.16 ANALYSIS OF ESTATES REQUIRED FOR PROJECT and Section D.17 PROPOSED ESTATES has been modified as follows:

... CESAJ response included several paragraphs of language that was added to the report, but this is not included here; please refer to the CESAJ compliance document ...

HQUSACE Analysis February 2010: Partially resolved. Please correct the phrase "(ADD APPROPRIATE WATER RESOURCES DEVELOPMENT ACT AUTHORIZATION)," in **17.1.2**. Please delete from the report the large quotations from the Master Agreement. Please just reference the document. Strike the random "Or" before **D.17.2.1.2**. The reply "An analysis as required by ER 405-1-12, Chapter 12 is not applicable to the Estate Analysis required for CERP Projects" is not accurate. In general, the district should apply ER 405-1-12 unless there is more specific CERP Guidance to the contrary. In this case, the Guidance Memorandums provides additional CERP specific requirements.

CESAJ Response May 2010: Concur with correcting the phrase “(ADD_ APPROPRIATE WATER RESOURCES DEVELOPMENT ACT_ AUTHORIZATION),” in 17.1.2. Concur with just referencing the terms or paragraph in the Master Agreement and deleting the quotation. The CERP Guidance Memorandum is the guidance used to determine the estates required. This language was specifically provided by HQ for the CERP guidance memorandum at the direction of the Assistant Secretary of the Army (Policy & Legislation) to conform to a Council on Environmental Quality memo.

HQUSACE Analysis of Final Report: Resolved.

20. Legal Comments.

a) With respect to discussing the next added increment, use the definition from the regulations. The next added increment includes “only those projects that have been approved according to general provision of law or specific authorization of Congress *and are likely to have been implemented by the time the project being evaluated is completed.*” 33 CFR 385.3 (emphasis added). The current language on page vii is slightly different. Also projects such as Picayune, may fit the next added definition. Considering recent progress, it is unclear whether the assumption that no other CERP projects exist remains valid. Page vii; Section 5.6, page 5-14. Please double check and expand the analysis in the PIR to explain the situation more fully.

CESAJ Response/Action Taken: The section will be reviewed and amended if necessary.

HQUSACE Analysis February 2010: Resolved.

b) Provide a fuller explanation of the significant changes from the Yellowbook. There is significantly less acreage being recovered under the current plan. It would be useful to include in this response an explanation for splitting Alternative O into two phases. See also 33 CFR 385.26(a)(3)(xiii).

CESAJ Response/Action Taken: The changes from the Yellow Book recommended plan are due to other components of CERP (in particular Water Reuse) not scheduled for completion until after BBCW project. The parts of BBCW that are dependent upon water volumes from other projects not yet completed cannot be constructed until those projects come online. Also, there are aspects of the project that are dependent upon results of testing being done by DERM (pump size test). Once this testing is completed and the first phase of BBCW is completed, the results will be used to properly select and design the remaining features to meet the project objectives. This will greatly reduce the uncertainty associated with water volume estimates in some parts of the project area.

HQUSACE Analysis February 2010: Resolved.

c) Similarly, include an explanation that consultation with FWS and SHPO started with Alt. O but was completed using Alt. O, phase 1.

CESAJ Response/Action Taken: Informal consultation on potential project affects including threatened and endangered species was initiated through a Planning Aid Letter Report dated 13 May 2004, and expanded upon by confirmation of the presence of T and E species in a letter from the FWS dated 24 January 2005. Potential impacts to T and E species specific to Alt O Phase 1 were evaluated through a cover letter and Biological Assessment provided to FWS by the Corps' Regulatory Division on 5 March 2007.

Regarding SHPO, consultation was initiated on March 10, 2005 with consultation on Alternative E. Ongoing consultation in March 2007 and January 2008 covered the transition to Alt O, Phase 1. This correspondence with SHPO has been placed in the Pertinent Correspondence section (B.5.2).

HQUSACE Analysis February 2010: Resolved.

d) The current *draft* policy guidance, CERP Requirements for Project Implementation Reports (PIR) and Other Implementation Documents, requests an assessment of the levels and types of contaminants on the potential project lands. Please reference the appendix/annex containing this information in the main report and summarize, if possible.

CESAJ Response/Action Taken: A discussion of the types of contaminants found, by lands associated with each project alternative, is presented in Section 7.12. Note that this language will be extensively revised in accordance with the new Master Agreement and supplemental policy guidance regarding lands treated with agricultural chemicals. The document Summary of Environmental Conditions (PSI, Inc., Sept 2008) has been added to Appendix C and referenced in Sec 7.12.

HQUSACE Analysis February 2010: Resolved.

e) District is seeking a waiver for monitoring over the 1% limit. HQ RIT must approve the waiver. Under the ER, the report may not be approved until all policy deviations are addressed. See Section 1.6.1, page 1-6; see Appendix F, paragraphs F-21 and F-10.f of ER 1105-2-100.

CESAJ Response/Action Taken: Concur. A justification for consideration of the waiver is contained in Annex E, under the Project Monitoring Plan Introduction, Section E.1.4.

A white paper will be submitted to HQ RIT outlining the justification for the additional monitoring and costs requested.

HQUSACE Analysis February 2010: Section 1.7.1, page 1-8, describes the old guidance. The most recent guidance (*Implementation Guidance for Section 2039 of WRDA 2007 - Monitoring Ecosystem Restoration*, dated 31 August 2009) no longer applies the 1 % rule. Also, please state the length of monitoring.

CESAJ Response May 2010: Concur. The narrative in Section 1.7.1 was updated to reflect the most recent guidance on project-level monitoring, including the duration of monitoring. Similarly, the discussion on monitoring duration and costs in Section 7.2 was updated accordingly. Revisions to the monitoring plan are contained and referenced in Annex E.

HQUSACE Analysis of Final Report: Resolved.

f) It would be very helpful to separately summarize each type of monitoring (water quality, ecological, operational, etc) in the main report. The duration, geographical limits, costs, and justification for each proposed type of monitoring should be stated in the main portion of the PIR. As part of this, the operational testing and monitoring period should be defined and there should be short summary of the justification for such a period. The longer assessment for the need to conduct such essential, limited operational and testing may be included in the appendix and/or annex. See Master Agreement in Article I.G. (requiring that the PIR specify the need for operational testing and monitoring, the features to which it is applicable, and the duration).

CESAJ Response/Action Taken: Section 7.2 has been added to the main report which summarizes each type of monitoring; Hydrometeorological, Water Quality, and Ecological. The section provides an overview of the duration, geographical limits, costs, and justification for each proposed type of monitoring, and provides a discussion regarding monitoring to be conducted during the period of construction vs. monitoring to be conducted under OMRR&R. Section 7.3 was included that outlines Adaptive Management Monitoring.

HQUSACE Analysis February 2010: Resolved.

g) Similarly, the main report should include a summary of the need for management of exotic or native nuisance vegetation. The summary should delineate O&M from construction. See *draft* policy guidance, CERP Requirements for Project Implementation Reports (PIR) and Other Implementation Documents.

CESAJ Response/Action Taken: Section 7.4 has been added to the Main Report, which documents the need for management of exotic or native nuisance vegetation, and

differentiates between vegetation management activities needed during the period of construction and those needed during the OMRR&R phase. The costs have been captured as part of the cost apportionment breakdown included in Table 7-4.

HQUSACE Analysis February 2010: Resolved.

h) The PIR is unclear about the status of the proposed Accelerate8 work. Page 1-9, section 1.9 states that no work has been completed. However, page 8-17, section 8.9 states that the NFS has initiated design and construction efforts for certain features. This is just overall confusing, please revise report to clarify. It may be easiest to update the sections and incorporate the execution of a PPCA.

CESAJ Response/Action Taken: Section 1.9, which is now Section 1.10, and Section 8.9 has been updated to indicate the current status of the expedited work. Specifically that the expedited features within the recommended plan have been fully designed by SFWMD, and SFWMD intends to begin phased construction of the expedited features early in 2010.

HQUSACE Analysis February 2010: Resolved.

i) Revise quotations from Draft Master Agreement to reflect the current status of the agreement. Revise Section D.16.2.1 to be consistent with the executed Master Agreement. See quotation starting on bottom of page D-23. Please cite check all Master Agreement provisions mentioned in the PIR to make sure both the information and citation are accurate. Changes to the Master Agreement were being made throughout July and even into August 2009, a careful cite check will prevent any ambiguities.

CESAJ Response/Action Taken: See CESAJ Response to comment 19.f. above. The following language will be added to paragraph D.16.2.1:
In accordance with the terms of ARTICLE III - LANDS, EASEMENTS, RIGHTS-OF-WAY, RELOCATIONS AND COMPLIANCE WITH PUBLIC LAW 91-646, AS AMENDED of the MASTER AGREEMENT BETWEEN THE DEPARTMENT OF THE ARMY AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR COOPERATION IN CONSTRUCTING AND OPERATING, MAINTAINING, REPAIRING, REPLACING AND REHABILITATING AUTHORIZED PROJECTS UNDER THE COMPREHENSIVE EVERGLADES RESTORATION PLAN, entered into on August 13, 2009, subparagraph E. provides: The Government recognizes that the Non-Federal Sponsor in limited circumstances will be entering into supplemental agreements with the State of Florida or another Florida governmental entity whereby (1) the State of Florida or another Florida governmental entity, rather than the Non-Federal Sponsor, has acquired or will acquire required lands, easements, and rights-of-way, and (2) the State of Florida or another Florida governmental entity will dedicate the land interests it owns to the *authorized CERP Project* and ensure that such lands, easements,

and rights-of-way are retained in public ownership for uses compatible with the purposes of the *authorized CERP Project* and shall not be conveyed, transferred, altered, or otherwise encumbered without the advance written consent of the Non-Federal Sponsor and the Government these supplemental agreements shall be limited in effect to the signatory parties and shall not reduce or alter in any way the requirements of this Master Agreement and any *PPA* that makes the Non-Federal Sponsor solely responsible for providing lands, easements, and rights-of-way that are required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the *authorized CERP Project*.

HQUSACE Analysis February 2010: Resolved.

j) Page 8-2, 8.1.3. The process for implementation of project operations varies slightly from that outlined in the Master Agreement. Please conform to the Master Agreement. See Master Agreement, Art. I.H.4. Also, update Section 8.2 to include the execution of a PPCA.

CESAJ Response/Action Taken: The corrections have been made to the report as requested.

HQUSACE Analysis February 2010: Resolved.

k) Similarly, the most current draft GM are from July 2007. Some citations list a 2004 GM. Please make sure both the information and the citations are current and accurate.

CESAJ Response/Action Taken: The Section 14 References was checked to insure correctness and correlation with the citations contained within the document itself, and that CERP Guidance Memorandum 2007 was referenced appropriately. A global search was completed on the entire document (Main, Appendices and Annexes) to identify areas where a 2004 GM might be included. CERP Guidance Memorandum Number 16, which is the most current version of this GM, was cited in Section 6.1 Environmental Effects, but no other sections reference a 2004 GM. No change to the document was necessary.

HQUSACE Analysis February 2010: Resolved.

l) The census numbers presented indicate large minority populations, but the Environmental Justice portions simply state that no populations are affected. These two parts seem inconsistent, please explain the inconsistencies in the EJ portion. Compare Section 6.10.4.2, page 6-33 with Tables 2-5 and 2-6, Page 2-44.

CESAJ Response/Action Taken: The existing conditions write-up builds a socio-economic profile of the study area, this is not an impact assessment, but merely a

baseline establishment. The EJ section refers to the people of this profile who could potentially be impacted. The BBCW project is not anticipated to negatively impact any of the population, and a determining of no impact to the profile was made.

HQUSACE Analysis February 2010: Resolved.

m) Why is S&A (supervision) so high for the NFS when they have approximately 1/3 less in construction funds? See page 8-3.

CESAJ Response/Action Taken: Table 8-1 has been revised to show the appropriate cost apportionment of the recommended plan.

HQUSACE Analysis February 2010: Resolved.

n) Strike the last sentence of paragraph one under Section D.12, page Appendix D-19. Further discussion and possibly comments concerning the navigation servitude will follow.

CESAJ Response/Action Taken: The sentence was removed as outlined in the comment. See CESAJ Response to comment 19.d above.

HQUSACE Analysis February 2010: Resolved.

o) Strike the first bullet under Section E.2.4 on page Annex E-10 (Regulatory Plan – Water Quality Compliance).

CESAJ Response/Action Taken: The bullet/language was removed as outlined in the comment.

HQUSACE Analysis February 2010: Resolved.

p) Document compliance with WRDA 2000 and Programmatic Regulations requirements regarding availability of information in languages other than English.

CESAJ Response/Action Taken: Language was added to Section 8, Plan Implementation noting compliance with WRDA 2000 and CERP Programmatic Regulations regarding availability of information in languages other than English. The language added is in Section 8.7.3 Compliance with Public Outreach Requirements and reads as follows:

The Biscayne Bay Coastal Wetlands project Recommended Plan complies with public outreach requirements applicable to the project and project area as outlined in WRDA 2000 and CERP Programmatic Regulations below.

WRDA 2000; Section 601(k):

(2) *COMMUNITY OUTREACH AND EDUCATION.*—

(A) *IN GENERAL.*—*The Secretary shall ensure that impacts on socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are considered during implementation of the Plan, and that such individuals have opportunities to review and comment on its implementation.*

(B) *PROVISION OF OPPORTUNITIES.*—*The Secretary shall ensure, to the maximum extent practicable, that public outreach and educational opportunities are provided, during implementation of the Plan, to the individuals of South Florida, including individuals with limited English proficiency, and in particular for socially and economically disadvantaged communities.*

CERP Programmatic Regulations; § 385.18 Public outreach:

(c) *Outreach to socially and economically disadvantaged individuals and communities.*

(1) *The Corps of Engineers and non-Federal sponsors shall develop and conduct public outreach activities to ensure that socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are provided opportunities to review and comment during implementation of the Plan.*

(2) *The Corps of Engineers and non-Federal sponsors shall monitor the effectiveness of outreach activities conducted to ensure that socially and economically disadvantaged individuals and communities, including individuals with limited English proficiency, are provided opportunities to review and comment during implementation of the Plan.*

(3) *Project Management Plans and Program Management Plans shall include information, concerning any outreach activities to be undertaken during the implementation of the project or activity, to socially and economically disadvantaged individuals and communities, including individuals of limited English proficiency.*

(4) *The Corps of Engineers and non-Federal sponsors shall make project and program information available in languages other than English where a significant number of individuals in the area affected by the project or program activity are expected to have limited English proficiency.*

(5) *The Corps of Engineers and non-Federal sponsors shall provide translators or similar services at public meetings where a significant number of participants are expected to have limited English proficiency.*

HQUSACE Analysis February 2010: Not Resolved. Please add a few sentences stating what was done. The above is just a quote and it will not be very helpful in supporting the assertion that the Corps complied. Cross referencing the public participation section for NEPA may be helpful. State whether the area affected by the project was considered a non-proficient area and whether translators/materials were available in another language.

CESAJ Response May 2010: Language was added to the Final PIR, Section 8 Plan Implementation that indicates how the project has met requirements regarding availability of information in languages other than English. Additionally, the public participation section for NEPA has been cross-referenced. (see language below)

8.7.3 Compliance with Public Outreach Requirements

The Biscayne Bay Coastal Wetlands project Recommended Plan complies with public outreach requirements applicable to the project and project area as outlined in WRDA 2000 and CERP Programmatic Regulations below.

WRDA 2000; Section 601(k):

(2) COMMUNITY OUTREACH AND EDUCATION.—

(A) IN GENERAL.—The Secretary shall ensure that impacts on socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are considered during implementation of the Plan, and that such individuals have opportunities to review and comment on its implementation.

(B) PROVISION OF OPPORTUNITIES.—The Secretary shall ensure, to the maximum extent practicable, that public outreach and educational opportunities are provided, during implementation of the Plan, to the individuals of South Florida, including individuals with limited English proficiency, and in particular for socially and economically disadvantaged communities.

CERP Programmatic Regulations; § 385.18 Public outreach:

(c) Outreach to socially and economically disadvantaged individuals and communities.

(1) The Corps of Engineers and non-Federal sponsors shall develop and conduct public outreach activities to ensure that socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are provided opportunities to review and comment during implementation of the Plan.

(2) The Corps of Engineers and non-Federal sponsors shall monitor the effectiveness of outreach activities conducted to ensure that socially and economically disadvantaged individuals and communities, including individuals with limited English proficiency, are provided opportunities to review and comment during implementation of the Plan.

(3) Project Management Plans and Program Management Plans shall include information, concerning any outreach activities to be undertaken during the implementation of the project or activity, to socially and economically disadvantaged individuals and communities, including individuals of limited English proficiency.

(4) The Corps of Engineers and non-Federal sponsors shall make project and program information available in languages other than English where a significant number of individuals in the area affected by the project or program activity are expected to have limited English proficiency.

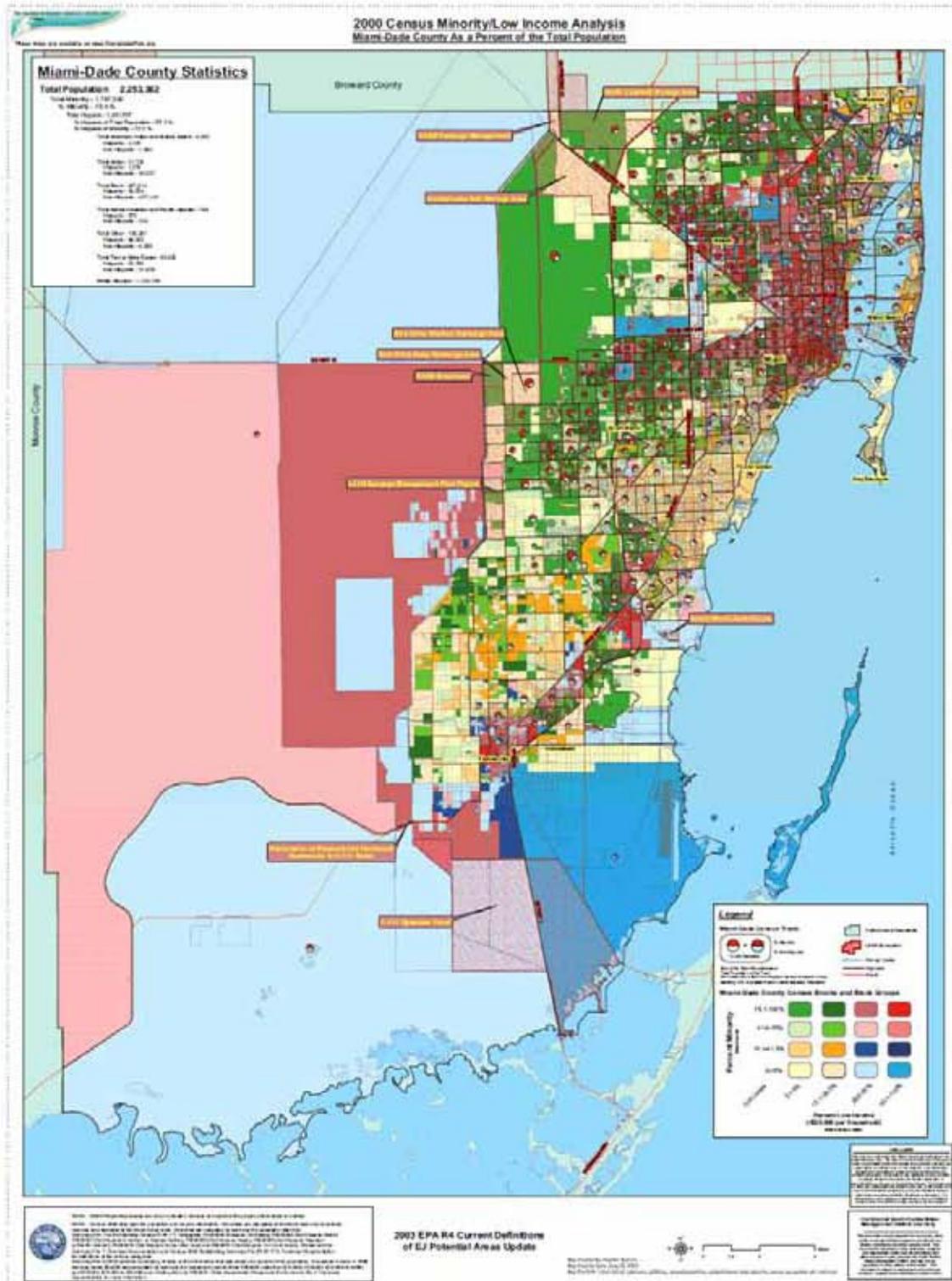
(5) The Corps of Engineers and non-Federal sponsors shall provide translators or similar services at public meetings where a significant number of participants are expected to have limited English proficiency.

During the scoping phase of the BBCW project, the SFWMD Miami-Dade Service Center in consultation with USACE Outreach personnel determined there was not sufficient need to provide translator services and/or project materials in other languages, unless requested. This determination was based on local knowledge of the potentially affected area and communities located within the project area. However, SFWMD Miami-Dade Service Center personnel are frequently present at public meetings held in the city of Miami, and are fluent in Creole and Spanish to serve as translators should the need arise.

Spanish and Creole speaking team members from the non-Federal sponsor were in attendance at the initial Feasibility Scoping Meeting (October 28-30, 2002) for the project to address any requests for translations and assess the need for future meetings. There were no requests or need for the translator's services during this meeting. This experience, combined with an assessment of the Miami-Dade County 2000 Census Minority/Low Income Analysis (see *Figure 8-1*) indicated there was no need to provide translator services, or project materials in other languages, for BBCW project meetings open to the public on a regular basis unless specifically requested by members of the public. Subsequent BBCW PDT meetings held in the south Florida area, and noticed to the public on evergladesplan.org, did not receive any requests for translators or materials being made available in other languages.

The BBCW Draft PIR was noticed to the public on March 19, 2010 in the Federal Register. The public meeting for the document was advertised within the project area through newspapers, news outlets, e-mail notices and online at the evergladesplan.org website. The BBCW Public Meeting on the Draft Project Implementation Report was held on April 21, 2010 at the Deering Estate; Miami, Florida. This meeting was held to brief the local population on the project, the contents of the DPIR and to receive feedback on the document and project. The e-mail notice issued by USACE provides the public with the option of requesting special assistance, such as Spanish language translation, through request (see *Figure 8-2*) if attending the meeting. There were no requests for special assistance prior to, or during the meeting.

Additional information on the project's compliance with public outreach requirements can be found in Appendix E, Agency and Public Coordination and Annex B, NEPA Information.



Subject bar: Public meeting April 21 for Biscayne Bay Coastal Wetlands Project

E-mail text:

The U.S. Army Corps of Engineers, Jacksonville District will host a public meeting for the Biscayne Bay Coastal Wetlands Project April 21 in Miami-Dade County. The purpose is to present the Draft Project Implementation Report (PIR) and Environmental Impact Statement (EIS) and take public comments. Public and agency comments may be submitted in writing through May 2, as well.

The Biscayne Bay Coastal Wetlands Project is a component of the Comprehensive Everglades Restoration Plan (CERP). The project goal is to improve the ecology of Biscayne Bay, including the freshwater wetlands, tidal creeks and near-shore habitat. The project team will accomplish this by adjusting the quantity, quality, timing and distribution of fresh water entering the bay and Biscayne National Park. The project includes pump stations, spreader swales, storm water treatment areas, flow ways, levees, culverts and backfilling canals in southeast Miami-Dade County.

The Corps is hosting the public meeting Wednesday, April 21 at the Deering Estate at Cutler, 16701 S.W. 72nd Ave., Miami, Fla. An open house begins at 6:30 p.m., followed by the public meeting at 7 p.m. Persons needing special assistance such as Spanish-language translation are asked to call 561-472-8885.

A public comment period is open through May 2, 2010. The draft PIR/EIS is available online at <http://tinyurl.com/ydg4mkf>. People may submit comments online at BBCWDPIRComments@evergladesplan.org or via mail to Brad Tarr, U.S. Army Corps of Engineers, Jacksonville District, P.O. Box 4970, Jacksonville, Fla. 32232-0019.

This is a project of the U.S. Army Corps of Engineers and South Florida Water Management District. For more information, please contact Eunice Ford, Corps of Engineers project manager, at 904-232-3618 or eunice.ford@usace.army.mil; or John Shaffer, SFWMD project manager, at 561-681-2563 or jshaffe@sfwmd.gov. More is available online by visiting www.evergladesplan.org, and clicking Projects on the top right. For information on the public meeting, please call 561-472-8885.

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HQUSACE Analysis of Final Report: Resolved.

q) Include copies of permits for the water quality section. See E.1.3, page E-4.

CESAJ Response/Action Taken: Copies of permits obtained by the SFWMD for project features included as an attachment to this PGM will be included in the Final PIR.

HQUSACE Analysis February 2010: Resolved.

r) Why do the “CERP projects” and “Acceler8 projects” boundary lines extend so far from the rehydrated wetlands, canals, and other project features? For example see Figure D-1 on page Annex D-31.

CESAJ Response/Action Taken: The CERP Boundaries is the conceptual boundary of the BBCW Study Area. The Acceler8 project boundary is a little more refined and much smaller area. These are the official ‘Approved’ boundaries that have been signed off on by the USACE and SFWMD. The rehydrated wetlands, canals, and other project features in the maps are from Alternative O Phase 1 that is being considered.

The SFWMD has a process in place which requires USACE and SFWMD approval before the official ‘Approved’ boundaries are modified. This is typical with many other CERP projects, where the official boundary varies from what many project personnel are considering. These occasionally change during the planning phase and when the PIR is issued.

HQUSACE Analysis February 2010: In accordance with the Master Agreement, the LERRs for the project are decided through a joint determination between the SFWMD and the Government. However, no formal or informal approvals may be made prior to following the proper process. This process includes public participation in the preparation of a NEPA document. There are no “approved” properties at this point as further input from the public and other agencies may still occur. As stated by District the boundaries indicate only the proposed features of Alternative O Phase 1 and these boundaries may change during the planning process.

CESAJ Response May 2010: Concur. Property required for the project or recommended plan not only change during the planning process but can also change during project design.

HQUSACE Analysis of Final Report: Resolved.

s) Explain how the statement that the TSP “does not provide ample water storage to meet all dry season flow” on page xvi is still in compliance with the Project Specific Assurances concerning the natural system stated in WRDA 2000, Section (h)(4)(A).

CESAJ Response/Action Taken: Concur. This is an incorrect statement and has been removed from the document.

HQUSACE Analysis February 2010: Resolved.

t) Local Items of Cooperation.

- i. Replace “Commander, HQUSACE” with “Chief of Engineers” See 10-2, paragraph 1.

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

ii. Rewrite the end of the last sentence of the first paragraph on page 10-2 to read: “which is a 100 percent non-Federal sponsor responsibility.”

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

iii. In paragraph two on page 10-2 replace partnership agreement with “Project Partnership Agreement (PPA).”

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

iv. In item b:

(a) Include the following introductory language: “Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined to be necessary for the construction, operation, and maintenance of the project. Valuation of the lands shall follow the below procedures taken from the Date of Valuation provision, Art.IV.D.1., of the CERP Master Agreement, August 2009.”

CESAJ Response/Action Taken: Introductory language added as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

(b) In paragraph a. of subsection b change “is” to “are” so that the sentence reads, in part, “that are required for construction.” See Master Agreement.

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

(c) In paragraph d of subsection b capitalize “That Are Not” in the paragraph caption.

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

v. Delete subsection c; this paragraph describes the “D” in LERRDs.

CESAJ Response/Action Taken: Subsection deleted as requested.

HQUSACE Analysis February 2010: Resolved.

vi. In paragraph f replace “with responsibility” with “and is responsible.”

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

vii. In paragraph i, insert the following at the end of the sentence “as will properly reflect total project costs and comply with the provisions of the Master Agreement including Art. XI Maintenance of Records and Audit.”

CESAJ Response/Action Taken: Language inserted as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

viii. Capitalize Government, State and Project throughout this Section.

CESAJ Response/Action Taken: Language revised as requested in the comment.

HQUSACE Analysis February 2010: Resolved.

ix. These items of local cooperation should include at least some of Picayune’s subsection r, which addressed the appropriate quantity, quality, timing, and distribution of water. Please insert applicable language. Section C.3.2 on page Annex C-49 already contains similar language.

CESAJ Response/Action Taken: The following language was inserted into the document as outlined by CESAJ Office of Counsel as subsection s, and addresses the appropriate quantity, quality, timing, and distribution of water:

“The Non-Federal Sponsor or the Florida Department of Environmental Protection shall execute under State law the reservation or allocation of water for the natural system as identified in the PIR for the Project as required by Section 601(h)(4)(B)(ii) of WRDA 2000, and the Non-Federal Sponsor shall provide information to the Government regarding such execution. The Non-Federal Sponsor shall notify the Government of any change to such reservation or allocation of water which shall require an amendment to any executed PPA after the District Engineer verifies in writing in compliance with 33 CFR 385 that the revised reservation or allocation continues to provide for an appropriate quantity, timing, and distribution of water dedicated and managed for the natural system after considering any changed circumstances or new information since completion of the PIR for the Project.”

HQUSACE Analysis February 2010: Resolved.

x. Please update the second to last paragraph in the items of local cooperation to reflect the execution of a PPCA.

CESAJ Response/Action Taken: Language in the items of local cooperation now reflects the execution of a PPCA. See text below:

“As part of its initiative for early implementation of certain CERP projects, the non-Federal sponsor has stated that it will construct portions of the Biscayne Bay Coastal Wetlands Project consistent with this report, in advance of Congressional authorization and the signing of a PPA. Under the authority of Section 6004 of WRDA 2007, the Non-Federal Sponsor executed the required pre-partnership credit agreement (PPCA) to preserve its opportunity for credit for in-kind work completed in advance of execution of a PPA. The Non-Federal Sponsor is exploring alternative project delivery methods to expedite implementation of the Project through the State expedited program.”

HQUSACE Analysis February 2010: Resolved.

C. POLICY COMPLIANCE REVIEW – REVISED DRAFT PIR/EIS. New Comments. FEBRUARY 2010.

1. Future Without Project Conditions. Continued urbanization and development in the study area are cited as causes for several of the negative future effects described in Section 4 (e.g., diminishing freshwater flows to Biscayne Bay, potentially increased flooding, likely increase in storm water runoff intensity from large storms, increasing water demand, declining native vegetation and wildlife species, loss and fragmentation of habitat for T&E species, reduced productivity of essential fish habitat). While these changes certainly seem plausible due to continued urbanization, there is no discussion in Section 4.2.12 on land use about the predicted changes in land use (in quantified terms) over the period of analysis. Describing the projected increases in urban and impervious areas in terms of acres or percentage growth in the study area would help support the reasoning behind predicted changes in the other categories of future without project conditions.

CESAJ Response May 2010: Section 4.2.12 has been re-written to include quantified changes in land use patterns, including new tables and figures documenting the shift.

Changes in residential and urban land use acreages were presented for the years 2002 and 2007 in the existing condition section and estimated for the year and 2050 using historical growth trends, future land use projections, and future population projection in Section 4.2.12. Specifically, GIS land-use projections were referenced within the study area, and within the future Urban Development Boundary (UDB) for 2050, as defined by the South Florida Water Management District.

After many decades of agricultural lands in Miami-Dade County increasing, the 2007 USDA Census of Agriculture has reported a sharp decrease in the total area of agricultural lands since 2002, falling from 90,373 acres to 67,050 acres. The high negative growth rate from 2002 to 2007 is expected to reverse and slightly increase in the future. Much of the loss of agriculture and natural lands is being attributed to increased urban and residential land uses, and their supporting activities.

HQUSACE Analysis of Final Report: Resolved.

2. Creation of Alternative O Phase 1. On page 5-34 the report states that Alternative O Phase 1 was created by the BBCW PDT “by determining which Alternative O features were most suitable and beneficial additions to the State.” What does this mean? Were features included in Phase 1 solely at the request of the sponsor? For the three criteria mentioned as used in identifying potential features, what does “below in cost” mean? What are the 12 features included in Alternative O Phase 1 (e.g., if one adds the features in Table 5-10, which summarizes the alternative, there are more than 12 individual management measures.) Again, Headquarters requests that this section be re-worked to better explain how the features of Phase 1 were determined; the current terminology is confusing and could suggest that features were selected based on sponsor preference. Acceptable reasons for including or removing management

measures from Phase 1 could include effectiveness, efficiency, completeness, acceptability, “bang for the buck,” delivery of significant outputs, potential for adaptive management, etc. ER 1105-2-100, para. E-41 includes NER plan selection criteria, which should surely apply as well to “Phase 1” of a recommended plan.

CESAJ Response May 2010: In the sentence prior to the one quoted in the comment, it states: “Through the State’s Expedited Construction program, the SFWMD intended to jumpstart restoration in three of the four sub-components comprising the BBCW study area: Deering Estate Flowway, Cutler Wetlands and L-31 East Flowway.” Therefore, the project team determined that those three sub-components would be the most suitable and beneficial parts for the State to proceed to construction with. No, there were no features included “solely at the request of the sponsor”. The 12 features included in Alt O Phase I are listed in Table 5-10 titled “Summary of Measures – Alt O Phase I”. They are:

1. S-700-100 cfs pump in Deering Estates
2. S-701-400 cfs pump in Cutler Wetlands
3. S-703-50 cfs pump, S-705-100 cfs pump, S-709-40 cfs pump, S-710-40 cfs pump, and S-711-40 cfs pump in L-31E sub-component
4. C-100A extension canal – 100 cfs in Deering Estates sub-component
5. C-701 open channel canal – 400 cfs in Cutler Wetlands
6. C-702-19, 700 ft spreader canal in Cutler Wetlands
7. C-711-2, 400 ft spreader canal in L-31E sub-component
8. Plug mosquito ditches in Cutler Wetlands
9. 63” culvert and S-D1 weir in Deering Estates
10. 2 Box culverts – 6’ for flow way, road crossings in Cutler Wetlands
11. 4 Culverts – S-23-36”; 3 Culverts – S-706-36”; 1 culvert – S-708-36”; 2 culverts – S-712-36”; and 1 inverted siphon S-707 – two @ 63” in L-31E sub-component
12. Grade south half of Powers property in Deering Estates.

HQUSACE Analysis Final Report: Not Resolved. The response did not address the comment, nor were changes made to the report. The report still reads as if the Phase I features were chosen based upon the sponsor’s preference (i.e. because the SFWMD intended to construct these features), and there is not any reasoning given based upon effectiveness, efficiency, completeness, acceptability, “bang for the buck,” delivery of significant outputs, potential for adaptive management, etc. Also see ER 1105-2-100, para. E-41, which includes NER plan selection criteria. Based upon conversations with the PDT, it appears the reason may be water quantities. If so, discuss in the report. In regards to the “12” features, using the count of 12 is confusing as it depends on how one counts the features. Clarification in the report would be appreciated.

CESAJ Response/Action Taken Oct 2011: Section 5.4 was added to the report:

A preliminary cost/benefit analysis of Alternatives: No Action, YB, M, O and Q was conducted and out of this array, Alternative O was identified as the plan that reasonably maximizes ecosystem restoration benefits compared to costs, consistent with the Federal objective. Realizing that the current availability of water would not enable Alternative O to function at its

full potential, it became apparent that recommending the full Alternative O would not be prudent until other CERP projects come online (including the Wastewater Reuse Project) which will provide the needed additional water. This plan would typically be the NER plan and ultimately identified as the Tentatively Selected Plan (TSP); however, Alternative O was instead identified as a more comprehensive environmentally preferred plan for the entire study area and this plan was further refined into a new stand-alone alternative (Alternative O-Phase 1).

Several factors were considered in determining which features of Alternative O would be included in the Phase I Alternative: maximizing use of the currently available water, utilizing lands which are in current public ownership that may offer earlier realization of restoration, minimizing uncertainties, maximizing opportunities to refine knowledge through monitoring, and prioritizing features that focus on saltwater and nearshore wetlands, which are much less land intensive and therefore require limited real estate acquisition. It would be feasible to refine any of the other alternatives in the final array, but since Alternative O was identified as the NER plan during the preliminary assessment, Alternative O was the plan that was further refined.

HQUSACE Analysis of Final Report Revisions: Resolved.

3. Alternative O and Secondary Array of Alternatives. It is confusing to have Alternative O in Table 5-3 as at this point in the "story" of alternative formulation, Alternative O has not been introduced. Additionally, the table indicates that other plans (E and J) are eliminated, but again the text is not to this point yet. Advise perhaps moving Table 5-3 to correspond to discussion in Section 5.3.7.1, as that is where the related information is presented in the text.

CESAJ Response May 2010: Alternative O was not intended to be in this table. It has been removed in the report.

HQUSACE Analysis Final Report: See New Comment A.3.

CESAJ Response/Action Taken October 2011: See response to Comment A.3.

HQUSACE Analysis of Final Report Revisions: Resolved.

4. Alternative YB in Final Array. Section 5.3.7.1 mentions that Alternative YB was carried through to the final array of alternatives as a point of comparison to the Restudy. While it is true that YB is considered in Ecological Benefits Evaluation (Section 6.3), it is not at all discussed in Environmental Effects of the Final Array (Section 6.1). This section is a descriptive analysis of alternatives and environmental effects and the YB plan should be included so that the report is providing a consistent final array.

CESAJ Response May 2010: Concur. An evaluation of environmental effects for the Yellow Book alternative has been added to the final array of alternatives presented in Section 6.

HQUSACE Analysis of Final Report: Resolved.

5. Section 902 and Alternatives Screening. Section 5.3.7.1 indicates that although BBCW is not authorized, the principles of Section 902 of WRDA 1986 were applied. The inclusion of a Section 902 cost limitation (using the initial cost estimate for BBCW in the Yellow Book) as a reason to screen out alternatives is not appropriate or necessary, and is also confusing to the reader. If there are legitimate cost limitations that are constraints on planning, then that needs to be laid out in a clear discussion. However, in the final array of alternatives (see Table 6-5), three out of five plans cost more than the 902 cost limitation of \$461,983,000 anyhow. Further information needs to be provided as to why alternatives E and J were not carried forward into the final array, absent a 902 argument.

CESAJ Response May 2010: All references to the Section 902 limit have been removed from the document. However, the team did use a pseudo-902 limit as a screening criterion because they were trying to develop reasonable alternatives and reduce costs as much as possible. Because cost was used as a screening criterion, that part was left in the document. Alts E and J cost more than other alternatives and potentially provided less benefit than the other alternatives. The team felt that Alt Q could be refined further by reducing construction costs (as stated in the report) and was therefore kept in the secondary array of alternatives.

HQUSACE Analysis Final Report: Not Resolved. The report still uses “allowable inflated YB cost limit,” just not the term 902. As stated in the original comment, legitimate cost limitations need to be clearly laid out. In addition, the report should indicate why the cost constraint did not apply to Alternative Q. The report states that the PDT felt that Alt Q could be further refined to reduce costs, but that did not occur in the planning effort. So, why was Alt Q left in the final array? If the constraint is not really the cost, but instead the water, then that is what the report needs to indicate.

CESAJ Response/Action Taken Oct 2011: Section 5.3.5.1 was expanded to include additional information on why YB plan is included:

Costs were not considered in the creation of alternatives from management measures, but costs are an important factor in plan selection and were therefore used to screen the intermediate plans. Alternatives E, P and J were deemed far too costly and unacceptable alternatives for recommendation. While Alternative Q was also very costly, it was less expensive than E, P or J and was retained to further refine the construction costs and provide a more complete and comprehensive alternative “bookend scenario” that was feasible to construct.

Alternative S was eliminated because it would reduce the ability to control water levels west of the L-31E Levee and therefore not meet the flood protection constraint.

*The YB alternative was carried through to the final array solely as a point of comparison to the Restudy, although the YB plan as originally envisioned was determined to be non-implementable due to land use changes since the Restudy was published. **Table 5-2** lists each alternative that was eliminated during the second round of screening as well as the reason for elimination.*

HQUSACE Analysis of Final Report Revisions: Resolved.

6. Evaluation and Comparison of Alternative Plans.

a) In Section 6.0 the four P&G criteria and the four system of accounts are confused. The accounts are NED, EQ, RED, and OSE, while the criteria are effectiveness, efficiency, completeness, and acceptability.

CESAJ Response May 2010: The Draft Project Implementation Report was updated to reflect corrections.

HQUSACE Analysis of Final Report: Resolved.

b) In Section 6.1.3 on Hydrology, the descriptions for all the alternatives are the same. However, the alternatives do yield different hydrologic conditions which in turn deliver different levels of freshwater, saltwater, and nearshore outputs. HQUSACE suggests including a narrative description of these differences. Otherwise, the text that is currently repeated under each alternative provides no additional information.

CESAJ Response May 2010: This has been rewritten in current version of DPIR to describe differences in hydrologic response across alternatives per the suggestion.

HQUSACE Analysis of Final Report: Resolved.

c) In Sections 6.1.7 on Vegetative Communities and 6.1.8 on Fish and Wildlife Resources, there is a contradiction as to whether or not Alternative M provides freshwater wetlands benefits (6.1.7.2 states not, while 6.1.8.2 states so).

CESAJ Response May 2010: This was corrected in DPIR sent out for public review in March 2010.

HQUSACE Analysis of Final Report: Resolved.

d) In Section 6.1.8 (Fish and Wildlife Resources), all alternatives are described as having the same effects as Alternative M. Since Alternative M is the “minimum” alternative, how is it possible that the other alternatives deliver the same fish and wildlife resources? The alternatives have differing values for habitat units listed in Table 6-2.

CESAJ Response May 2010: Concur. Nearly all the benefits associated with Alternative M occur east of the L-31 Levee in the saltwater wetlands, compared to a much smaller amount of benefits to freshwater wetlands. The narratives for each

alternative will be revised to more accurately coincide with anticipated hydration and subsequent habitat lift, as presented in Table 6-2.

HQUSACE Analysis of Final Report: Resolved.

e) In Section 6.9, Tentatively Selected Plan, the second paragraph is confusing. The costs and real estate do not correspond with Alternative O Phase I. The paragraph attempts to compare Alternative O Phase I with Alternative O, but is not successful in doing so.

CESAJ Response May 2010: The paragraph was removed to avoid confusion.

HQUSACE Analysis of Final Report: Resolved.

7. Project Costs. Total First Cost. Tables ES-1, ES-3, 7-3 and 7-4 all show the project total first cost as \$174,242,000. Table 8-1 on cost apportionment for the recommended plan shows the total cost as \$137,940,000. Table 6-3 and 6-5 have \$129,960,000 first cost, used for the benefits analysis. Values for the project cost items are different between the tables for LERR Construction, S&A, and PED. It isn't clear why the values differ, however the \$174,242,000 value appears to match the MCACES estimate. Please review and revise as needed to provide a complete and consistent description of the total project costs or indicate when different price bases are used. See ER 1105-2-100, section D-3.

CESAJ Response May 2010: Table 8-1 has been corrected to show a total cost of \$174,242,000. The tables in Section 6 that show \$129,960,000 as the first cost and different LERR, CA, S&A, and PED costs are the costs that were developed during the analysis of the five (5) alternatives. The cost for the TSP based on a more detailed design is \$174,242,000.

CESAJ Update January 2011: Table 8-1, 7-4 and ES-4 (Cost apportionment tables) have been updated to show total project costs of \$191,018,000, which includes sunk costs of \$22,995,000. Table ES-2 shows a total initial cost of \$165,707,000 which includes \$2,316,000 in recreation costs. Table ES-3 and 7-3 do not contain recreation costs, they only show the ecosystem restoration costs. Section 6 contains Planning Level costs that are commensurate with the level of details for plan formulation, but do not match the detailed TSP costs.

HQUSACE Analysis of Final Report: Resolved.

8. Cost Apportionment. Table 8-1 on page 8-3 shows the cost apportionment for the Recommended Plan based on the cost of \$137,940,000. Tables ES-3 and 7-4 show cost apportionment based on a cost of \$172,242,000. The tables need to be reviewed and revised as needed to make a consistent and accurate presentation. The footnote in Table ES-3 indicates that the cost value shown for Planning, Engineering and Design (PED) includes the development of the PIR. Further explanation should be provided in the footnote as to why PIR preparation is a

project cost. In addition, Tables ES-3 and 7-4 show the Federal and non-Federal cost shares for Recreation and Recreation Subtotal as \$485,000 on both lines. Please correct the Recreation Subtotal cost shares to show \$582,000 each and delete the heading Subtotal above the Recreation Subtotal line.

CESAJ Response May 2010: Table 8-1 has been corrected to show a total cost of \$174,242,000. Tables 8-1, ES-3, and 7-4 show the same costs.

Tables ES-3 and 7-4 has been corrected to show \$582,000 as the Recreation Subtotal and the heading of "Subtotal" has been deleted.

CESAJ Update January 2011: Tables 8-1, ES-3, and 7-4 have all been updated to reflect the current and same costs.

HQUSACE Analysis of Final Report: Resolved.

9. Actions for Change and USACE Campaign Plan. Section 7.14.1. Reference should be made to the USACE Campaign Plan, in which the Actions for Change are incorporated. At the CWRB, the district will need to address the Campaign Plan. Previous CWRBs have indicated that reference should no longer be made to the Actions for Change, but instead the Campaign Plan.

CESAJ Response May 2010: Section 7.14.1 (this is now Section 7.15.1) has been rewritten to specifically address the applicable goals of the USACE Campaign Plan. The section now reads as follows:

The Biscayne Bay Coastal Wetlands project is consistent with the USACE Campaign Plan goals of engineering sustainable water resource solutions; building effective, innovative, and sustainable solutions; and recruiting and retaining strong teams.

The project is an integral part of the larger Everglades system. The project considered compatibility of the proposed features with future potential south Florida restoration efforts, with existing Modified Water Deliveries project features, and with the purposes and features of the Central and Southern Florida multipurpose project. The recommended plan was developed to be a sustainable restoration feature, and as a foundation for the larger Comprehensive Everglades Restoration Plan. In particular, the following items were considered during the planning:

- Minimizing O&M requirements to help facilitate long term, low cost benefits.
- Engineering flexibility, through the use of design features to help manage water under a variety of future scenarios.
- Stand alone benefits. The project was formulated to provide immediate benefits to the marsh, and work in conjunction with a variety of future scenarios.
- Risk informed decision making was a vital element in the study, and has been integrated through the study process. In particular, two sources of risk and uncertainty were incorporated into the project planning:

- **Cost risk and uncertainty:** Resulting in the potential for cost growth. In order to manage these risks, the study incorporated new risk-based cost estimating methods. Bridge construction and road excavation methods involve relatively low uncertainty. The costs of fuel and oil-based materials, aggregate, concrete, and steel were the major risk factors affecting cost estimates. The proposed early start of construction is the best method to mitigate and minimize these risks.
- **Ecological response uncertainty:** There is uncertainty in regard to the landscape changes associated with restored hydrology. This project will be one of the first major restoration construction projects in the Everglades ecosystem. Existing hydrologic and ecological monitoring in south Florida will be used to assess the performance of the recommended plan and to aid decisions whether and how to modify operations of the system.

The project was designed by highly experienced staff from the Jacksonville District, South Florida Water Management District, and other agencies located in south Florida. The project team collaborated with federal, state, local, and tribal agencies as well as interested stakeholders and the public. Draft versions of the report were reviewed several times by subject-matter experts throughout USACE who were not involved in the development of the project; by a panel of independent non-government experts; and by members of the public. The PIR was amended and improved in response to each of these reviews.

HQUSACE Analysis of Final Report: Resolved.

10. Tentatively Selected/Recommended Plan. As a draft report, the term "Tentatively" should be used to caveat the recommended/selected/preferred plan or alternative. A word search of the document will allow this to be corrected before public release.

CESAJ Response May 2010: The entire Draft Project Implementation Report was searched and Tentatively Selected Plan was used to replace references to the recommended/selected/preferred plan or alternative.

HQUSACE Analysis of Final Report: Resolved.

11. Contaminants. There are several concerns with the presentation of HTRW information in the draft report. Corps policy (ER 1165-2-132) is to avoid HTRW sites when practicable. The draft report needs to be very clear as to what contamination concerns are in or near the project area, how these sites were considered during plan formulation, and what the implications are to plan implementation. Following are specific concerns or questions that need to be addressed, and HQUSACE requests a vertical team meeting to determine the significance of these issues prior to releasing the draft report for public review:

- a) Page 3-39, Section 3.1.10. The HTRW section should better align with the guidance in ER 1165-2-132 (see Sections 5 and 8). That guidance requires avoiding HTRW sites when practicable. Please revise to comply with guidance. The District should note that it may take additional time to comply with guidance.

CESAJ Response May 2010: Section 3.1.10 has been revised to better align with the guidance in ER 1165-2-132, and additional explanation has been provided to explain why it is not practicable to avoid sites containing low levels of agricultural chemicals. Many of the areas adjacent to Biscayne Bay were historically farmed and therefore contain some level of agricultural chemicals.

HQUSACE Analysis Final Report: Partially resolved. The current section 3.1.10 does not address avoidance as described in the above response. Such a description should be included in the revised HTRW section.

CESAJ Response/Action Taken Oct 2011: Section 3.1.10, Section 7.9.3 and Section 7.16 have been revised or added to include a description of actions taken to avoid HTRW lands to the extent possible during the plan formulation phase.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

b) ER 1165-2-132 (Appendix B, Table on B-3) also indicates that an HTRW appendix providing more detail should be included. The Environmental Information, Appendix C, contains information that could be used or co-labeled as an HTRW Appendix.

CESAJ Response May 2010: Appendix C.3 has been sub-titled "HTRW Investigations".

HQUSACE Analysis of Final Report: Resolved.

c) Page 7-29, section 7.8.2. Third paragraph, last sentence. Please clarify that as per the Master Agreement the NFS is still responsible for providing the LERRs.

CESAJ Response May 2010: The language in paragraph 3 is consistent with language in the Master Agreement which allows the NFS to provide LERRDs "In accordance with Article III, paragraph A, of the Master Agreement, via these supplemental agreements with another Florida governmental entity. No revision to text required.

HQUSACE Analysis Final Report: Not Resolved. CERP only deals with LERRs not LERRDs. The section numbers have changed. Please identify where this section now resides so that it can be appropriately backchecked.

CESAJ Response/Action Taken Oct 2011: The following language was added as paragraph 4 to Section 7.9.2 formerly 7.8.2: "Pursuant to the terms and conditions of the Master Agreement, the SFWMD is responsible for providing all lands, easements, right-of-ways, and relocations."

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

d) HTRW, pages 7-29 to 7-30, Section 7.8.3. (fourth paragraph). Once guidance becomes finalized this section will need to be reviewed and possibly rewritten. As written it varies from the current draft policy on PIR Implementation.

CESAJ Response May 2010: We believe this section is now consistent with the most recent guidance.

HQUSACE Analysis Final Report: New guidance was issued on September 14, 2011, which was after the Final PIR was sent to Headquarters. The current draft was not compliant with Corps policy and is not yet compliant with the new guidance. Please see new comments for additional guidance.

CESAJ Response/Action Taken Oct 2011: Comment references a prior version of HTRW section. Revised version of HTRW Section 7.9.3 write-up addresses other comments included in the PGM. Section 7.16 addresses Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

e) HTRW, pages 7-29 to 7-30, Section 7.8.3. This section should comply with ER 1165-2-132 (see section 8). HTRW sites should be avoided where practicable. At least one alternative should include non-HTRW sites, if this was not feasible please document why not. Similarly, the report reads as though no consideration was given to planning around HTRW sites. Please revise. It seems from the appendix that at least some thought was given to avoiding the inundation of a specific area due to HTRW concerns. Note that ER 1165-2-132 requires thinking through the appropriate options. The PIR should also document that the response activities must be acceptable to the U.S. Environmental Protection Agency and applicable state regulatory agencies as appropriate.

CESAJ Response May 2010: Section 7.8.3 (updated January 2011 – this is now Section 7.9.3) has been revised to better align with the guidance in ER 1165-2-132, and additional explanation has been provided to explain why it is not practicable to avoid sites containing low levels of agricultural chemicals, and/or to develop an alternative without agrochemical involvement. The section has also been revised to explain some of the planning considerations which were given to planning around the agrochemical sites. We have also documented the need for response activities to be acceptable to the USEPA, and Florida Department of Environmental Protection.

HQUSACE Analysis Final Report: This comment and response is useful for both the HTRW section and the residual agricultural chemicals section. This comment is still relevant for the revised HTRW section and the residual agricultural chemicals section. Formal resolution of this comment has been overcome by events and the revised sections will be reviewed.

CESAJ Response/Action Taken Oct 2011: Section 3.1.10 and 7.9.3 have been edited to include discussion of avoidance of HTRW lands. Bottom line: No reasonable and useful project alternative could have been formulated using only lands with no history of agricultural use or other activity that likely results in the potential presence of HTRW substances.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

f) HQUSACE is particularly concerned with possible leaching and the landfill (see page 9-7, Section 9.14) and/or land owned by DEP as mentioned in the Appendix. The situation for each of these items should be more fully understood and better explained in the PIR.

CESAJ Response May 2010: Section 9.14 has been revised to clarify that the former Lennar landfill has been closed, and that the planned conveyance channel will be lined in order to eliminate possible leaching.

HQUSACE Analysis Final Report: Partially resolved. Substantive information in this section should be included in the revised HTRW section. The new section should provide further details regarding the parcel's past use (was it a RCRA facility, was it agricultural land, etc), explain whether all HTRW material was removed and identify any parcels where remediation is necessary prior to project construction. Having this information separate from the HTRW section makes the review more burdensome. The closure report (not just a cover letter) for the landfill should be provided for review.

CESAJ Response/Action Taken Oct 2011: The former landfill site is adjacent to project lands. Additional discussion has been added to 7.9.3 regarding the status of this landfill. Closure report is included in Appendix A.

HQUSACE Analysis of Final Report Revisions: The PIR indicates that the landfill is assumed to have operated as a licensed RCRA facility since it was operational as late as 1992. Upon confirmation of this statement comment Resolved. CESAJ Confirmed.

g) Pages 7-31 to 7-32, Section 7.8.4. Remediation of Agricultural Chemicals. Once guidance becomes finalized this section will need to be reviewed and possibly rewritten. As written it varies from the current draft policy on PIR Implementation.

CESAJ Response May 2010: (updated January 2011 – this is now Section 7.9.4) We believe this section is now consistent with the most recent guidance.

HQUSACE Analysis Final Report: New guidance was issued on September 14, 2011, which was after the Final PIR was sent to Headquarters. The current draft was not compliant with Corps policy and is not yet compliant with the new guidance. Please see new comments for additional guidance.

CESAJ Response/Action Taken Oct 2011: Comment refers to a prior version of the HTRW section. Revised version of HTRW Section 7.9.3 addresses specific deficiencies noted in other HQUSACE comments. Section 7.16 addresses Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

h) Pages 7-31 to 7-32, Section 7.8.4. If cost sharing is proposed, this section should better document why the chemicals were thought to be legally applied for agricultural use. The appendix indicates a lack of evidence that the lands were used for agriculture and indicates a number of hot spots. Hot spots can be an indication of illegal application or spills. This section should better document why specific parcels should be included for cost sharing. Basically, document the process the District used to ensure we are recommending for cost sharing only the treatment of lands covered by the draft PIR Implementation Guidance. Then summarize the results (for example -- how many acres and where).

CESAJ Response May 2010: Section 7.8.4 (updated January 2011 – this is now Section 7.9.4) has been revised to better document why the chemicals were thought to be legally applied for agricultural use, and to provide more detail with respect to the “hot spots” described in the appendix. The section has also been revised to better document which specific parcels should be included for cost sharing, and how much of the parcel is likely to be effected.

HQUSACE Analysis of Final Report: The residual agricultural chemicals guidance issued on September 14, 2011, does not allow cost sharing. This comment has been overcome by events. Resolved.

i) Pages 7-31 to 7-32, Section 7.8.4. Also please note that the guidance requires an indication of the amount of funds needed to remediate the land. This section must be developed enough in the final PIR and include clearly defined costs. The current estimate is very rough and may not be sufficient.

CESAJ Response May 2010: Section 7.8.4 (updated January 2011 – this is now Section 7.9.4) has been revised to more clearly define remediation costs.

HQUSACE Analysis of Final Report: This comment has been overcome by events. Resolved.

j) Pages 7-31 to 7-32, Section 7.8.4. This section should provide more detail about the regulatory structure: what chemicals were found; are these chemicals covered by CERCLA; are they above CERCLA actionable levels; are these chemicals covered under the state contaminated sites law and if so are they above actionable levels; and are the chemicals covered by the SQAGS and if so are they at actionable levels? Explain how a change in land use would change which law applies.

CESAJ Response May 2010: Section 7.8.3 (as opposed to 7.8.4, Remediation of Agricultural Chemicals) (updated January 2011 – this is now Section 7.9.3) has been revised to provide more detail about the regulatory structure, including what chemicals were found, whether or not they are covered by CERCLA, whether or not they are above CERCLA actionable levels, whether or not these chemicals covered under the state contaminated sites law, (if so) whether they are above actionable levels, whether or not the chemicals are covered by the SQAGS, and if so whether they are at actionable levels. Discussions related to how the proposed project related changes in land use are likely to change which law would apply were also included.

HQUSACE Analysis of Final Report: Formal resolution of this comment has been overcome by events. However this information can be very useful for drafting a clear and sufficient revised HTRW section and residual agricultural chemicals section and should be included in those sections as appropriate. Resolved.

k) Pages 7-31 to 7-32, Section 7.8.4. More information about the amount and location of the land impacted by agricultural chemicals should be included (i.e., How many acres and where?).

CESAJ Response May 2010: Section 7.8.4 (updated January 2011 – this is now Section 7.9.4) has been revised to better describe the acreage and location of land which appears to have been impacted by agricultural chemicals.

HQUSACE Analysis of Final Report. This information should be included in the description of residual agricultural chemicals. See new comments for additional guidance. Formal resolution of this comment has been overcome by events. Resolved.

l) As a general comment, if there is any contemplation that USACE will be remediating the land, this requires vertical coordination and additional time should be included in

the schedule to address this issue. At this time, the understanding is that USACE does not generally undertake this type of work for civil works projects.

CESAJ Response May 2010: There is currently no contemplation that USACE will be remediating the land. Lands requiring remediation will be the responsibility of the non-Federal Sponsor, who will seek cost share for agrochemical remediation.

HQUSACE Analysis of Final Report: The residual agricultural chemicals guidance issued on September 14, 2011, does not allow cost sharing. In addition the NFS requested in its September 23, 2011, letter that the USACE conduct the remediation. This comment has been overcome by events. Resolved.

m) Update 8.2, page 8-2 to state whether cost sharing is being requested for agricultural chemicals.

CESAJ Response May 2010: Section 8.2 has been updated to state that cost sharing is being requested for additional costs associated with the presence of agricultural chemicals.

HQUSACE Analysis of Final Report: The residual agricultural chemicals guidance issued on September 14, 2011, does not allow cost sharing. This comment has been overcome by events. Resolved.

n) Page 8.6, Section 8.4. Once PIR Implementation Guidance is finalized, please include CERP specific draft guidance on monitoring.

CESAJ Response May 2010: Concur. The most recent guidance on CERP project-level monitoring was added to Section 8.4 and referenced in Annex E.

HQUSACE Analysis Final Report: Partially Resolved. Section 8.4 states that “more recent implementation guidance for Section 2039 of WRDA 2007 was provided in a memorandum from the Chief of Planning and Policy Division of Civil Works dated 27 May 2010.” This is not correct. Section 2039 Implementation Guidance for all Commands was issued by the Chief of Planning and Policy Division on 31 August 2009. On 27 May 2010, CERP-specific guidance was issued: *CERP – Requirements for Project Implementation Reports and Other Implementation Documents*. This memo was signed by the Director of Civil Works. The FPIR should be revised to accurately reflect monitoring requirements and guidance and verification that the plan complies with such.

CESAJ Response/Action Taken Oct 2011: Concur. Section 8.4 has been revised to reference the latest monitoring guidance and how the guidance was applied to the monitoring plan. The revised section now reads as follows:

Implementation guidance for monitoring ecosystem restoration contained in Section 2039 of the Water Resources Development Act of 2007 was issued by the Chief of Planning and Policy Division on 31 August 2009. The revised guidance states:

SEC. 2039. MONITORING ECOSYSTEM RESTORATION.

(a) IN GENERAL.--In conducting a feasibility study for a project (or a component of a project) for ecosystem restoration, the Secretary shall ensure that the recommended project includes, as an integral part of the project, a plan for monitoring the success of the ecosystem restoration.

(b) MONITORING PLAN. --The monitoring plan shall--

(1) include a description of the monitoring activities to be carried out, the criteria for ecosystem restoration success, and the estimated cost and duration of the monitoring; and

(2) specify that the monitoring shall continue until such time as the Secretary determines that the criteria for ecosystem restoration success will be met.

(c) COST SHARE.--For a period of 10 years from completion of construction of a project (or a component of a project) for ecosystem restoration, the Secretary shall consider the cost of carrying out the monitoring as a project cost. If the monitoring plan under subsection (b) requires monitoring beyond the 10-year period, the cost of monitoring shall be a non-Federal responsibility.

On 27 May 2010 CERP-specific guidance was issued and signed by the Director of Civil Works. In summary, the guidance states that ecosystem restoration project monitoring will be initiated upon the completion of project construction until ecological success is determined. Project funds used for monitoring after the period of construction shall be considered OMRR&R costs (Section 601 (e) (4) of WRDA 2000). Pursuant to the statutory limitation in Section 2039(c) of WRDA 2007, if the project monitoring plan requires monitoring beyond a 10-year period after completion of construction, the cost of monitoring shall be a non-Federal responsibility. As a result of this guidance, the duration of project-level ecological monitoring has been extended from five to ten years and the associated monitoring costs have increased incrementally to accommodate the longer monitoring period. Specific details, including monitoring parameters, duration and costs of ecological monitoring plan are contained in Annex E.

HQUSACE Analysis of Final Report Revisions: Resolved.

o) Section 9.14, pages 9-6 to 9-7. A landfill is a concern. Please provide more detail on what it contains and why it is acceptable and logical to include it in the project. See also previous comments on HTRW sections.

CESAJ Response May 2010: Within section 9.14, we have replaced the sentence which read “While landfills and other hazardous waste sites have been identified and evaluated, the issue of greatest concern stems from historical use of agricultural chemicals”, with the following; “A former C&D landfill was located on tract TA500-

062. The property owner, Lennar Homes, has completed removal of the landfill, and has satisfied the closure permit requirements, with the exception of completing the required (on-going) quarterly monitoring. The proposed construction on this property is limited to constructing a pumped station, concrete lined channel, and borrow pit (to provide embankment material for the lined channel). These features need to be constructed in order to convey water from the C-1 Canal to the Biscayne Bay Coastal Wetlands. Because the proposed channel will be lined with 6" of concrete, leaching of ammonia, or any other chemicals, from the soils as a result of the project would not appear to be possible. With exception of the former C&D landfill site, HTRW concerns appear to be generally limited to those associated with the historical use of agricultural chemicals."

HQUSACE Analysis Final Report: Partially resolved. Please include in the revised HTRW Section. The new section should provide further details regarding whether all HTRW material was removed and identify any parcels where remediation is necessary prior to project construction. Having this information separate from the HTRW section makes the review more burdensome. Provide a copy of the landfill closure permit and report (not just a cover letter) and describe how construction of project features will impact any portion of the closed landfill facility. If there is quarterly monitoring how will the CERP project impact or be impacted by that monitoring. What steps are being taken to ensure that construction will not create any landfill related issues. Explain the reference to leaching ammonia above.

CESAJ Response/Action Taken Oct 2011: The revised HTRW section 7.9.3 includes discussion of outstanding remedial actions and identifies two parcels with solid waste present at the time of the environmental audits. Closure report was obtained from the local sponsor and is included in Appendix A.

A discussion similar to the following has been added to section 7.9.3 "The closed landfill site is outside of the project land as stated in the discussion. No impact to the closed landfill facility is expected. No impact to quarterly monitoring is expected since a "no further action" letter from the local regulatory agency does not require ongoing monitoring of the landfill site. Because of the local geology that features hard limerock at a depth of 1 to 2 ft below land surface, waste was not buried at this former landfill but was stacked above the normal ground elevation. This fact greatly facilitated the removal and closure of the landfill and the risk of not having removed all of the waste. Constructing the flow-way on land just north of the former landfill site presents a lower risk than typically associated with construction next to an old landfill site given the practice of stacking rather than burying the waste. Ammonia is typical degradation byproduct found in groundwater beneath landfills. The landfill closure letter from Miami-Dade DERM acknowledges that groundwater monitoring can cease at the site because of compliance with groundwater quality standards."

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

p) Appendix C, no page number provided. Letter from University of Florida, item number 7. Is this parcel (TA500-062 (Lennar Landfill)) included in the project? If so it needs to be documented and the District needs to lay out why an HTRW site with possible leaching and actionable arsenic levels would be used for a civil works project.

CESAJ Response May 2010: The revised text contained within Section 9.14 describes the need for the parcel TA500-062, and explains why leaching from the proposed lined concreted channel is not a real possibility.

HQUSACE Analysis Final Report: Partially resolved. Please include in the revised HTRW Section. The new section should provide further details regarding whether all HTRW material was removed and identify any parcels where remediation is necessary prior to project construction. Having this information separate from the HTRW section makes the review more burdensome. See also response in comment o. above.

CESAJ Response/Action Taken Oct 2011: The revised HTRW section discusses removal actions and outstanding actions. Parcel by parcel information has been added to 7.9.3 in Tables 7-11, 12, 13. These tables give the latest status with the exception of the Lennar landfill site which has since received a closure letter.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

q) Parcels of concern: Shoal Point TA500-074, TA500-002. Safety and health plans required. Landfill (Lennar flowway freshwater wetlands), TA500-62 AKA TA500-038. See folded pages at the very end of Appendix C. The situation for each of these parcels should be more fully understood and better explained in the PIR. Documentation from the applicable regulators should be included in the PIR.

CESAJ Response May 2010: The situation surrounding the Powers Addition Parcel (TA500-074, AKA Shoal Point Parcel) has been better explained in Section 7.8.3.1 and the Lennar Parcels (TA500-02) and (TA500-062 AKA TA500-038) have been better explained in Section 7.9.3.2 of the PIR. Additional information regarding HTRW is also explained in Section 7.9.3 of the PIR.

HQUSACE Analysis Final Report: Not resolved. There is no Section 7.8.3.1. Please include all relevant information in the revised HTRW Section.

CESAJ Response/Action Taken Oct 2011: Information regarding the status of the Power's parcel (TA500-074) is included in the soil management plans and FDEP review of these plans. Copies of these plans are included in the appendix. Note that construction of the Deering Estate features on the Power's parcel is nearing completion and residual agricultural chemicals were addressed per the approved soil management

plan. Additional information for the TA500-02 and TA500-062 is included in Section 7.9.3.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

r) What is land use/purpose of the 184.8 acres owned by Miami Dade County Department of Environmental Resources Management? See section D.1 6.2. 1. Please better explain the situation for these lands in the PIR.

CESAJ Response May 2010: Concur. The following explanation was added to the Real Estate Appendix in Section D.16.2.1.after the second sentence of the first paragraph:

Miami-Dade County DERM acquired the lands pursuant to the Miami-Dade County Environmentally Endangered Lands Program. In 1990, Miami-Dade County approved a program to fund the acquisition, protection and maintenance of environmentally endangered lands. The Miami-Dade County Environmentally Endangered Lands Program specifically established an Environmentally Endangered Lands Management Trust Fund in Chapter 24A of the Code of Miami-Dade County, providing for: "...the preservation, enhancement, restoration, conservation and maintenance of environmentally endangered lands which either have been purchased with monies from the EEL Acquisition Trust Funds, or have otherwise been approved for management pursuant to Section 24A-8(2)." (Appendix X, Chapter 24A, Code of Miami-Dade County)." The Environmentally Endangered Lands program considers acquisition of sites proposed by the public and by other government agencies. Sites are inspected and then recommended for acquisition. Once approved for acquisition, the seller must be willing to sell the land to Miami-Dade County. No land is acquired from those landowners unwilling to sell. For the Without Plan condition, it is assumed that lands purchased through this program will be managed in accordance with Chapter 24A of the Miami-Dade County code.

HQUSACE Analysis Final Report: Not Resolved. Section D.16.2.1 of the RE Appendix could not be found.

CESAJ Response/Action Taken Oct 2011: See second paragraph of Section D.17.2.1. Deering Estates/Shoal Point. After May 2010, SFWMD provided additional information on the lands within the Deering Estates portion of the project which indicated that the 184.8 acres referenced in the prior version of the PIR was in fact 185.65 acres and is owned by the Board of Trustees of the Internal Improvement Fund of the State of Florida (the State of Florida) and leased to Miami-Dade County for public recreational use and for protection of natural resources. The land is managed by Miami-Dade County Department of Environmental Resources Management. There are approximately 15 acres required for construction of the spreader canal which will be required in fee. For the remaining approximately 170.65 acres, Miami-Dade County DERM will execute a Supplemental Agreement to provide a perpetual

flowage/conservation easement over these lands and the State of Florida, Board of Trustees of the Internal Improvement Fund will execute a Supplemental Agreement to provide a perpetual flowage/conservation easement over these lands or will execute a perpetual flowage/conservation easement over these lands.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

s) Page D-38 to top of D-39 is slightly different from the draft guidance, it may need to be rewritten once the PIR Implementation Guidance is finalized.

CESAJ Response May 2010: Concur. The language was changed to read as follows: If the property becomes wetland habitat, any additional remediation necessary would be undertaken prior to or during construction. Under the terms of the 2009 CERP Master Agreement, the cost of remediation required only to achieve ecological restoration objectives on former agricultural lands contaminated by the application of commercially available products (e.g., pesticides and/or herbicides) used for their lawfully intended purpose may be eligible for cost-sharing between the Government and the Non-Federal Sponsor. The recommendations for cost sharing will be determined in accordance with guidance from USACE.

HQUSACE Analysis of Final Report: The CERP Master Agreement does not specifically address agricultural chemicals. The residual agricultural chemicals guidance issued on September 14, 2011, does not allow cost sharing. HQUSACE does not concur with the CESAJ response from May 2010. The original comment has been overcome by events. No further action necessary. Resolved.

t) Page D-19. The last paragraph of Section D.7.7 is awkward. It would not be sufficient to consider all lands acquired after April 30, 1999 as being in furtherance of the project. Please strike the language or revise for clarity. Real Estate at the District level should coordinate the implementation of this policy with Counsel.

CESAJ Response May 2010: Concur. The last paragraph was changed to read as follows: "For the determination that a tract was acquired "in furtherance of a CERP project" should be supported by documentation existing at the time of acquisition." For planning purposes and for land valuation in the PIR, pursuant to paragraph a. above, the Jacksonville District and SFWMD agreed that lands acquired after April 30, 1999, the date of publication of the Comprehensive Everglades Restoration Plan, is the date when lands were acquired for a CERP Project. For crediting purposes, the SFWMD will be required to submit the SFWMD Governing Board resolution, authorizing the acquisition of the lands, parcels or tracts of land, which will show the CERP project or SFWMD project for which the lands were acquired.

HQUSACE Analysis of Final Report: Resolved.

u) Where is “black point” (See page A1-42 (Appendix)) in relation to the project? Is it outside the project footprint? Please better explain the situation for this land in the PIR.

CESAJ Response May 2010: The “black point” reference noted in the comment is located in Annex A, page A1-42, not in Appendix A, A1-42 as indicated. The reference to “Black Point” is contained within the USFWS Draft Fish and Wildlife Coordination Act Report. Black Point is a point of land which projects east into Biscayne Bay, and which falls within the boundaries of Biscayne National Park. While Black Point (25d31.5'N, 80d17.9'W) itself is part of the Cutler Wetlands Component of Alternative O - Phase I), both the South Dade Landfill, and Old South Dade Landfill, which have been implicated as the source of the in elevated contaminants, actually lie southwest of Black Point, and south of Black Creek (aka the C-1 Canal) which lies along the Cutler Wetlands Southern Component.

The team is working with Staff at the USFWS to assist them in developing language which more specifically captures the geographical location of their concerns for inclusion in the Final Fish and Wildlife Coordination Act (FWCA).

HQUSACE Analysis Final Report: Partially resolved. Please include in the revised HTRW Section. Clarification is still needed regarding the relation of Black Point to the Project and why it is included in the coordination act report.

CESAJ Response/Action Taken Oct 2011: In 7.9.3, a discussion has been added that states something like: “During planning of the Cutler Wetland pump station on C-1, the project team considered locating the pump station at the intersection of SW87th Ave and the C-1 canal or locating the pump station northwest of the intersection of the C-1 canal and SW 232nd Street. The SW 87th avenue/C-1 location is closer to the South Dade landfill at Black Point and within the landfill related groundwater plume of ammonia. The project team decided that the location northwest of SW 232nd Street would be more suitable since there would be no possibility of entraining ammonia impacted groundwater into water pumped from the C-1 canal.”

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

D. POLICY COMPLIANCE REVIEW - FINAL PIR/EIS. New Comments. OCTOBER 2011.

1. Alternative O Phase II. The report needs to discuss what Phase II of the BBCW may be, beyond saying that additional formulation is required. The PIR leads the reader to believe that the remainder of features in Alternative O will be pursued for Phase II – by virtue of Phase I being pulled from Alternative O which was deemed the NER plan on a “watershed” basis. It seems, through conversations with the vertical team, that the remainder of Alternative O features are not likely to be pursued. The Corps needs to be forthcoming to ASA(CW), Congress, and other interests about what may be pursued and why the remaining features in Alternative O are not likely to be implemented.

CESAJ Response/Action Taken Oct 2011: Section 6.6 has been re-written to provide information about Alternative O-Phase II. Section 6.6.1 entitled Alternative O Phase 1 was added which states:

Alternative O is a cost effective plan and would provide more comprehensive watershed restoration than Alternative O Phase 1 (due to the large increases in freshwater wetland benefits), and thus has been identified as the environmentally preferred plan. Alternative O Phase 1 is a compatible subset of Alternative O, therefore the remaining components of Alternative O, including the Barnes Sound component, could be further studied and constructed in the future, with no conflicts with the current Alternative O Phase 1 configuration.

As previously described, Alternative O Phase I was identified as the NER plan primarily due to the current availability of water deliveries. Although there is no set schedule to proceed with Phase II planning at this time, as the increased water deliveries required to realize the full utility of the Phase II components become available via the construction of other projects, consideration of Phase II implementation will be supportable.

HQUSACE Analysis of Final Report Revisions: Resolved.

2. DE Signature. The final report lacks the District Engineer's signature on page 10-7 of the Recommendations section. A revised page signed by the DE should be provided for inclusion in the final reports submitted with the Chief's Report package and to ASA(CW), OMB, and Congress.

CESAJ Response/Action Taken Oct 2011: DE Signature will be provided on the signature page of Section 10, Recommendations when the Final Report is submitted with the Chief's Report package and to ASA (CW), OMB, and Congress.

HQUSACE Analysis of Final Report Revisions: Resolved.

3. Discussion and Tables for Secondary Array of Alternatives. The location of Table 5-2 regarding the secondary screening appears to be out of place on page 5-18. Its heading refers to Alternative O which is not shown in the table and is introduced on page 5-29. In addition, it screens out Alternatives E and J which appears to conflict with the subsequent text that includes them among the remaining alternatives. The table descriptions refer to the description above for Alternatives E and J; however those are described later beginning on pages 5-22 and 5-24. The cost screening rationale for Alternatives E and J is discussed in Section 5.3.5.1 as well as the introduction of Alternative O. So it would seem more logical to include the table later and refer to it in Section 5.3.2.1. in order to provide a clearer presentation.

CESAJ Response/Action Taken Oct 2011: Table 5-2 was updated.

Alternative	Carried Forward?	Reason for Elimination
A	Yes	
YB	Yes, as a point of comparison	
E	No	Excessive Cost
J	No	Excessive Cost
M	Yes	
P	No	Excessive Cost and Similar to E
Q	Yes, maintained to refine construction costs	
S	No	Would cause groundwater to rise within communities west of project area; would likely cause flooding at Homestead Air Reserve Base, impacting Homeland Security

Section 5.3.5 was re-written to clarify screening rationale and include the correct sequencing of formulation, detailed information on Alternatives E and J was removed. Section 5.3.5.1 was expanded to include:

Prior to Table 5-2:

Costs were not considered in the creation of alternatives from management measures, but costs are an important factor in plan selection and were therefore used to screen the intermediate plans. Alternatives E, P and J were deemed far too costly and unacceptable alternatives for recommendation. While Alternative Q was also very costly, it was less expensive than E, P

or J and was retained to further refine the construction costs and provide a more complete and comprehensive alternative “bookend scenario” that was feasible to construct.

Alternative S was eliminated because it would reduce the ability to control water levels west of the L-31E Levee and therefore not meet the flood protection constraint.

The YB alternative was carried through to the final array solely as a point of comparison to the Restudy, although the YB plan as originally envisioned was determined to be non-implementable due to land use changes since the Restudy was published. Table 5-2 lists each alternative that was eliminated during the second round of screening as well as the reason for elimination.

After Table 5-2:

As a result, the remaining alternatives included No Action Alternative, YB, M and Q. General descriptions of these intermediate alternatives are provided below, and specific details are included in Appendix F (Plan Formulation).

HQUSACE Analysis of Final Report Revisions: Resolved.

4. Discount Rate. Section 6.5.3 on Average Annual Costs refers to the discount rate of 4.375% as the currently set rate. The current rate for FY 11 is 4-1/8% in accordance with Economics Guidance Memo #11-01 which is used elsewhere in the report such as Section 7.7. The text should indicate that 4.375% was the discount rate at the time of the analysis rather than the current rate.

CESAJ Response/Action Taken Oct 2011: Text was updated to state “at the time of the evaluation”.

HQUSACE Analysis of Final Report Revisions: Resolved.

5. Section 7.2. Editorial. The second paragraph includes a reference to a USACE source that could not be found, which resulted in an error statement being printed in the text. Suggest that the reference be added.

CESAJ Response/Action Taken Oct 2011: Reference added – correction made.

HQUSACE Analysis of Final Report Revisions: Resolved.

6. Local Items of Cooperation. The Final PIR should include the below language with respect to water allocations and reservations. This means that the BBCW Final PIR must be revised. Specifically, item u. in the recommendations section must be revised. The revised draft PIR for BBCW contained language similar to the below and it was changed without formal written guidance from Headquarters. Please note that the below may differ from past language used in Picayune Strand and other PIRs and Chief’s Reports because it explicitly provides that an

allocation or reservation of water may be used. This change was made at the request of the non-Federal-sponsor to clarify its abilities under state law. Language similar to the below was used in IRL-S, Picayune Strand, C-43, and Site-1 Chief's Reports and PIRs.

“The overarching objective of the Plan is the restoration, preservation, and protection of the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. The Federal Government and the non-Federal sponsor are committed to the protection of the appropriate quantity, quality, timing, and distribution of water to ensure the restoration, preservation, and protection of the natural system as defined in Section 601 of WRDA 2000, for so long as the project remains authorized. This quantity, quality, timing, and distribution of water shall meet applicable water quality standards and be consistent with the natural system restoration goals and objectives of the CERP, as the Plan is defined in the Programmatic Regulations. The non-Federal sponsor will protect the water for the natural system by taking the following actions to achieve the overarching natural system objectives of the Plan:

1. Ensure, through appropriate and legally enforceable means under Florida law, that the quantity, quality, timing, and distribution of existing water that the Federal Government and the non-Federal sponsor have determined in this Project Implementation Report is available and beneficial to the natural system, will be available at the time the Project Partnership Agreement for the project is executed and will remain available for so long as the Project remains authorized.

2. (a) Prior to the execution of the Project Partnership Agreement, reserve or allocate for the natural system the necessary amount of water that will be made available by the project that the Federal Government and the non-Federal sponsor have determined in this Project Implementation Report.

- (b) After the Project Partnership Agreement is signed and the project becomes operational, make such revisions under Florida law to this reservation or allocation of water that the non-Federal sponsor determines, as a result of changed circumstances or new information, is necessary for the natural system.

3. For so long as the Project remains authorized, notify and consult with the Secretary of the Army should any revision in the reservation of water or other legally enforceable means of protecting water be proposed by the non-Federal sponsor, so that the Federal Government can assure itself that the changed reservation or legally enforceable means of protecting water conform with the non-Federal sponsor's commitments under paragraphs 1 and 2. Any change to a reservation of water made available by the project shall require an amendment to the Project Partnership Agreement.”

CESAJ Response/Action Taken Oct 2011: This language was added to Section 10 as paragraph (u) under the items of local cooperation, pages 10-5 and 10-6.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in the attachment to these comments. (Revision of local items of cooperation that were added in order to match the 14 September 2011 guidance pertaining to agricultural chemicals.)

7. Residual Agricultural Chemicals. On September 14, 2011, the Assistant Secretary of the Army (Civil Works) issued new guidance on the Comprehensive Everglades Restoration Plan (CERP) – Residual Agricultural Chemicals. In a letter dated September 23, 2011, the non-Federal sponsor requested that this guidance be applied to the BBCW project and that a residual agricultural chemicals section be added to the PIR. The Jacksonville District should revise the PIR to follow the September 14, 2011, Residual Agricultural Chemicals guidance. To facilitate the revision process the following items should be included or addressed in the revised FPIR:

- a) To facilitate vertical review, the District shall submit with its revised residual agricultural chemicals section a detailed list of all other PIR sections that will need revisions in order to maintain consistency with the revised residual agricultural chemicals PIR section. This includes changes to the HTRW section. See comment 8 for additional guidance. In addition, the District will at the same time also provide the revised Final PIR pages of the other sections. For example, past comments on Appendix D indicate that certain sections in Appendix D will need to be revised. In addition, according to past comments, parts in sections 7 and 9 will need to be reviewed. See also specific comments in this comment memo. The detailed list with attached FPIR pages will facilitate the review. Without these documents, the review will be considerably more burdensome.

CESAJ Response/Action Taken Oct 2011: The table below summarizes changes to the PIR associated with HTRW issues.

Section	HTRW Content (Yes, No)	HTRW Edits Oct 2011 (Yes, no)	Section / Page #s	Addresses NEW OWPR Comment #s	Addresses OLD OWPR Comment #s
Section 00 Exec Summary	y	y	page xxi		
Section 1 Introduction	n	n			
Section 2 Identification of Problem	n	n			
Section 3 Existing Conditions Affected Env.	y	y	3.1.10, page 3-46		4.a, 4.e,
Section 4 Future Without Project Cond.	n	n			
Section 5 Formulation of Alt Plans	n	n			

Section	HTRW Content (Yes, No)	HTRW Edits Oct 2011 (Yes, no)	Section / Page #s	Addresses NEW OWPR Comment #s	Addresses OLD OWPR Comment #s
Section 6 Evaluation and Comparison	y	n			
Section 7 The Selected Plan	y	y	7.9.3, page 7-46 and Section 7.16 was added (Residual Agricultural Chemicals)	7.a-h, 8	4.d, 4.e, 4.f, 4.g, 4.o, 4.p, 4.q, 4.u,
Section 8 Plan Implementation	y	n			
Section 9 Summary of Coordination	y	y	9.14, page 9.14		9
Section 10 Recommendations	y	y	10.0, page 10-7		9
Appendix A	y	y	added additional soil mgmt plans		4.a
Appendix C	y	y	added additional correspondence		4.a
Appendix D	Y	Y	D.21	7.a,	7.a,

HQUSACE Analysis of Final Report Revisions: Table was included with submittal of report revisions. Resolved.

b) The non-Federal sponsor (NFS) should submit all required information for the completion of the PIR analysis. No funds are available for USACE to perform any task other than reporting and analyzing the information provided for completion of the PIR. The BBCW has at least three distinct Components: Deering Estate Component, Cutler Wetlands Component and L-31E Component. The NFS should provide sufficient information for USACE to document in a residual agricultural chemicals section at a minimum each of these three components separately and should examine individual features and footprints as appropriate. Thus, there should be a component specific analysis which includes subsections on: the residual agricultural chemicals present, the regulatory coordination, the soils removed, the applicable cost comparisons, and the engineering and other risks.

CESAJ Response/Action Taken Oct 2011: The information requested is provided in Section 7.16 Residual Agricultural Chemicals. The organization of this information is as requested.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

c) The guidance only addresses legally applied agricultural chemicals. The appendix indicated a lack of evidence that the lands were used for agriculture and indicated a number of hot spots. Hot spots can be an indication of illegal application or spills. The NFS should provide documentation which describes what actions have or will be taken to identify and remove "hot spots" that indicate a spill or waste management practice. See Footnote 3 in the guidance. Basically, the District needs to document the process used to ensure that the proposed work is within the parameters of the residual agricultural chemicals guidance and summarize the results (for example --how many acres and where).

CESAJ Response/Action Taken Oct 2011: See Section 7.16, Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

d) The soils removed analysis should summarize the steps taken to determine whether any characteristic hazardous waste under RCRA is present. The analysis should illustrate the thought process and not simply include an overarching statement affirming compliance. For example, identifying whether the substances are listed under Subpart D (see 40 CFR 261.30 et seq.) and then conducting the analysis contained in Subpart C (see 40 CFR 261.20 et seq.). The soils removed section should summarize the soil results to date and state whether the levels are at or above the toxicity levels listed in 40 CFR 261.24.

CESAJ Response/Action Taken Oct 2011: See Section 7.16 Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

e) If additional testing is needed to determine whether hazardous wastes are present, the NFS should include an analysis based on the best available information for inclusion in the PIR. Many of these sites have Phase II EAs and some are already under construction. Past HTRW sections in draft/Final PIRs included a detailed description of the arsenic present, identified 27 CERCLA regulated substances, and stated that Phase II assessments were completed. It is anticipated that a summary of what has been found to date and whether the results indicate that hazardous waste characteristics are exhibited can be included.

CESAJ Response/Action Taken Oct 2011: No additional testing is required on previously surveyed land. See Section 7.9.3 HTRW and Section 7.16 Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

f) If additional testing is needed, the PIR section shall also specify when such testing will be conducted (for example prior to construction, during construction and/or after construction), explain whether such testing procedures were approved by the regulator and specify the party that will conduct the testing.

CESAJ Response/Action Taken Oct 2011: Additional testing is not required during PIR phase. Details of additional testing required in the future are provided in Section 7.9.3 HTRW and Section 7.16 Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

g) As indicated in item 4 of the guidance, adequate final regulatory approvals must be provided by the NFS to SAJ and forwarded to HQUSACE before construction can begin. The Jacksonville District must receive a concurrence memorandum from HQUSACE and receive full funding from the NFS prior to initiating construction that would impact soils containing residual agricultural chemicals. A statement to this effect should be included in the residual agricultural chemicals section.

CESAJ Response/Action Taken Oct 2011: Statement regarding HQUSACE review prior to construction is provided in Section 7.16 Residual Agricultural Chemicals.

HQUSACE Analysis of Final Report Revisions: The PIR should reference the need for a concurrence memorandum. This is not indicated in the redline/strikeout edits in the attachment, but comment is Resolved with modification of the statement in the PIR.

h) While at the time of writing this comment, the September 14, 2011, Residual Agricultural Chemicals Guidance has not been formally transmitted to the field, the ASA CW memo that was provided informally should be used to develop the PIR Residual Agricultural Chemicals Section. The guidance will be formally provided shortly. The vertical team should seek clarification if needed, and is encouraged to work through the HQUSACE Review Manager from the Office of Water Project Review in drafting the section since this will be the first application of the new guidance. This could facilitate an efficient policy review.

CESAJ Response/Action Taken Oct 2011: Section 7.16 Residual Agricultural Chemicals has been added to the Selected Plan Section 7 per paragraph 4 of ASA (CW) policy. As noted above, the guidance is fresh. The steps necessary to comply with it are under discussion at many levels within the USACE.

HQUSACE Analysis of Final Report Revisions: Resolved by transmittal of guidance.

8. The September 14, 2011, residual agricultural chemicals guidance does not eliminate the need for a separate HTRW Section. The HTRW section should cover all HTRW that does not fall within the scope of the residual agricultural chemicals guidance. Past draft PIRs clearly indicated that some sites have or had HTRW issues. The revised HTRW section should be provided as requested in comment 7.a. Other sections of the PIR may need to be revised for consistency with the new HTRW section and should also be provided as requested in comment 7.a. As this will be a newly revised HTRW section, new comments may arise and outstanding comments should be addressed. To assist in an efficient review, there should be one thorough HTRW section that contains all the relevant substantive information rather than having additional pieces of substantive information sprinkled throughout multiple sections. This section should utilize information in the appendices and annexes but the reader should be able to understand the issues by reading the text in the HTRW section.

CESAJ Response/Action Taken Oct 2011: Section 7.9.3 has been revised to address HQUSACE comments. The following was added to the section: 1) Discussion of avoidance of HTRW lands, 2) Discussion of landfill and other point source HTRW sites, 3) Tables 7-11, 7-12, 7-13 which is a parcel by parcel summary of findings to date was added to section. CESAJ acknowledges that some parcel survey work has yet to be completed and that it is more typical for a feasibility study to come forward with much less substantive HTRW information as provided here.

HQUSACE Analysis of Final Report Revisions: Resolved with incorporation of redline/strikeout edits in attachment to these comments.

9. In order to assure appropriate coordination, the District should respond to current and outstanding comments. All of these changes must be identified through the process in described in 7.a. or identified in response to comments in this PGM. The District should not make any additional changes to the Final PIR document without written Headquarters coordination.

CESAJ Response/Action Taken Oct 2011: Noted.

HQUSACE Analysis of Final Report Revisions: Resolved.

E. POLICY COMPLIANCE REVIEW – REVISED FINAL PIR/EIS. New Comments. NOVEMBER 2011.

In addition to these few new comments on the revised final report, an attachment to these comments was included with redline/strikeout edits for specific sections of the final report. Those edits were incorporated verbatim to resolve several of the remaining comments from the previous review of the final report in October 2011.

1. Project Costs. Table 7-3 in the text shows the total first cost for the ecosystem restoration features as \$165,707,000 with a total investment cost of \$181,040,000. In contrast, the cost apportionment data in Table 7-4 is showing a cost for ER subtotal of \$188,702,000. Presumably the difference between these numbers is the sunk PIR costs of \$22,955,000 as explained in the footnote. However, adding \$22,955,000 to \$165,707,000 gives a total of \$188,662,000 rather than \$188,702,000 as shown in Table 7-4, a difference of \$40,000. In addition, Table 7-4 shows the PED costs as \$32,950,000. Subtracting the \$22,955,000 for sunk PIR costs results in a cost of \$9,995, which is \$40,000 greater than the \$9,955 shown in Table 7-3. Please clarify the discrepancy and revise as needed. Table 8-1 on cost apportionment may also need to be reviewed and revised since it has similar information to that in Table 7-4 except the ER subtotals are missing. Tables ES-2 and ES-4 may need to be revised also for consistency.

CESAJ Response/Action Taken: Table 7-3 is correct, however the footnote to the table was updated. The sunk PIR cost is \$22,995,000 – it was erroneously typed as \$22,955,000 in the earlier version of the document. This accounts for the \$40,000 difference. Table 8-1 has been updated to match Table 7-4 (including ER subtotal). Table ES-3 has been updated to reflect \$22,995,000. The \$22,995,000 was the sunk PED costs. The difference was the sunk construction management costs. The Table is correct.

HQUSACE Final Analysis: Resolved.

2. Regulatory Concurrence. The District has obtained additional regulatory coordination documentation from SFWMD. This should be included in the revised final PIR.

CESAJ Response/Action Taken: The letter can be found in the BBCW FPIR Appendix C in the “Summary of Environmental Conditions” report by PSI. It is in Appendix A of that report.

HQUSACE Final Analysis: HQUSACE provided two additional letters for incorporation into the report in the Appendix noted above. This has been done. Resolved.

3. Section 8.8. Section 8.8 “Environmental Commitments” has been slightly revised in consultation with District Counsel. Upon incorporation of redline/strikeout edits in the attachment to these comments this will be resolved.

CECW-PC

SUBJECT: Biscayne Bay Coastal Wetlands Phase I Project. Documentation of Review Findings. April 2012

CESAJ Response/Action Taken: All redline/strikeout edits in the attachment were incorporated into the document.

HQUSACE Final Analysis: Resolved.

4. Consistency. Please review the whole PIR including RE discussions for consistency with revisions to Section 7.

CESAJ Response/Action Taken: The PIR was reviewed for consistency with Section 7, including RE discussions.

HQUSACE Final Analysis: Resolved.
