



Department of Environmental Resources Management

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Carlos Alvarez, Mayor

August 21, 2008

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U.S. Army Corps of Engineers
ATTN: Stu Appelbaum
P.O. Box 4970
Jacksonville, FL 32232-0019.

Re: Review of Programmatic Regulations for the Comprehensive Everglades Restoration Plan; 33 CFR Part 385

Dear Stu:

Thank you for the opportunity to provide comments during the current review process for the Programmatic Regulations to govern the planning and implementation of the Comprehensive Everglades Restoration Plan (CERP). We also appreciate your willingness to extend the date for acceptance of the comments, due to the effects of Tropical Storm Fay. The attached comments are technical in nature, and are derived from DERM staff's experience participating in various CERP technical teams over the past few years. The comments have been organized by general themes first, then chronologically according to the relevant section number.

We understand that there must be procedures to guide the development of a program as complex as CERP, however, in practice we have found some of the regulations to be cumbersome and inflexible. We encourage you to look for ways to streamline the process and add flexibility. The technical teams should be able to respond to new information and ideas in a timely manner, adapt the process to address unique project features or problems as they arise, find ways to integrate across project phases or boundaries, and work efficiently so that projects can be completed in a timely manner.

We hope that you will find our comments helpful. Please call me at (305) 372-6863 if you have any questions or concerns regarding these general comments or the attached specific comments.

Sincerely,

A handwritten signature in cursive script that reads "Susan Markley".

Susan Markley, Ph.D.
Chief, Ecosystem Restoration and Planning Division

Attachment

Delivering Excellence Every Day

Review of Programmatic Regulations for the Comprehensive Everglades Restoration Plan; 33 CFR Part 385, Miami-Dade DERM Staff Comments:

The Programmatic Regulations should be updated to allow implementation of Incremental Adaptive Restoration (IAR) in the project planning process. IAR is the recent recommendation from the Committee on Independent Scientific Review of Everglades Restoration Progress (CISRERP). This panel recommended that CERP proceed with an Incremental Adaptive Restoration (IAR) approach, which would make “investments in restoration that are significant enough to secure environmental benefits while also resolving important scientific uncertainties about how the natural system will respond to management interventions.” (Executive Summary, Committee on Independent Scientific Review of Everglades Restoration Progress (CISRERP), National Research Council, 2006). We support the concept, and we recognize that implementation of IAR could affect progress toward achieving the Interim Goals and Targets in the near term, although there is a possibility for accelerating achievement of Interim Goals and Targets in the long term if this process begins to address some of the uncertainties in a timely manner. The Programmatic Regulations potentially constrain the implementation of IAR, as currently written. An IAR approach would result in environmental benefits, however, these might not be sufficient to result in an alternative that provides cost effective restoration benefits on a Next-Added Increment (NAI) basis. This situation would be relieved if: 1) cost-effectiveness were calculated according to the definition provided Section 385.3, 2) the requirement for meeting a cost-effectiveness standard on the NAI basis were relaxed for IAR projects, and/or 3) the process for calculating benefits were to include benefit credits for features that offer learning opportunities to reduce uncertainty for future phases of a project.

The artificial division of CERP into individual projects has, in practice, resulted in a lack of coordination among projects that closely related. This could result in restoration that is substantially less than originally projected because the synergy projected by the Restudy might not be realized. Where projects are expected to operate synergistically, there should be some means for coordinating between projects, or combining projects that are closely related in order to achieve or exceed restoration expectations.

385.3. We agree with the first part of the definition of restoration provided in the Section 385.3 (Definitions) and hope that this continues to be the definition of restoration in future versions of the Programmatic Regulations. The definition of restoration as “the recovery and protection of the South Florida ecosystem so that it once again achieves and sustains those essential hydrological and biological characteristics that defined the undisturbed South Florida ecosystem” allows sufficient flexibility in interpretation that new information can be readily incorporated. We are concerned, however, with the second part of the definition, which states “the restored South Florida ecosystem will be significantly healthier than the current system; however it will not completely replicate the undisturbed South Florida ecosystem”. The use of the phrase “will not completely replicate” does not sufficiently encourage attempts to preserve the full range of community types and processes that collectively define the Everglades, and may cause an unintended dismissal of one or more community types that may prove essential, but for which information is currently lacking. We encourage substitution of the wording from the Supplementary Information section (Section IV. Discussion of Comments, Section D (Defining Restoration, P. 64205): “...the restored South Florida ecosystem will be significantly healthier

than the current system but will be smaller and somewhat differently arranged than the historic ecosystem.” Restoration challenges still to be addressed include determining which hydrological and biological characteristics of the undisturbed ecosystem should be considered “essential”, and then implementing restoration accordingly. A spirited discussion on restoration at one of the plenary sessions at the 2008 GEER conference indicated how much agreement (or lack thereof) exists at present. Defining the essential characteristics of the Everglades will be the greatest challenge for CERP, in light of the disproportionate loss of dynamic storage and transition zones in the system. This loss has reduced the resilience of the system and its ability to adapt to changing conditions. We would encourage you to utilize a definition for restoration that does not unintentionally promote dismissal of any system components, when these may later prove to be “essential”.

385.3. “Justified” is defined in Section 385.3 as “*Justified* has the same meaning as in section 601(f)(2) of WRDA 2000 which states that the Secretary of the Army, in carrying out any activity to restore, preserve, or protect the South Florida ecosystem, may determine that an activity is justified by the environmental benefits derived by the South Florida ecosystem and no further economic justification for the activity is required, if the Secretary determines that the activity is cost-effective.” “Cost-effective” is defined as “*Cost-effective* means the least costly way of attaining a given level of output or performance, consistent with the goals and purposes of the Plan and applicable laws.” The reader is left with the impression that the process will result in selection of an alternative that provides the most benefits possible, provided the team has worked to develop the most efficient means of delivering those benefits. In practice, however, the teams are not encouraged to find the most efficient way to deliver maximum benefits. Teams are, instead, using an existing ACOE process for determining cost-effectiveness that calculates a cost-benefit index for each of the alternatives and then compares among the alternatives to determine a relative cost-effective ranking. This is not a valid method for determining cost-effectiveness, since project alternatives can vary radically not only in cost, but in the level of benefits provided. This method will almost always result in selection of an alternative with fewer than maximum benefits because the cost to produce fewer benefits is often disproportionately less. An “environmentally preferred alternative” is then rejected in favor of one that provides lower benefits but that also has a more favorable cost-effectiveness score. The Programmatic Regulations should be revised to offer stronger guidance on addressing cost-effectiveness, and should emphasize maximizing restoration benefits first, consistent with the definitions for “justified” and “cost-effective”.

395.9. Section 385.9 states that there is a need to demonstrate that a project is cost-effective on a Next-Added Increment basis. This requirement would not be a problem if cost-effectiveness were being determined according to the provided definition of cost-effectiveness, but it has the potential to be problematic if the method for determining cost-effectiveness that is currently in practice continues. It may be appropriate to revisit this requirement and adjust or eliminate it in consideration of the issues that project teams have experienced or are likely to experience, such as: 1) the existing process for calculating cost effectiveness, which was not designed for comparing different restoration alternatives, and in practice, has not always provided results that agree with best professional judgment, 2) uncertainty in total projects benefits, where these are derived from computer simulation models (or lack thereof) that may not be sensitive to some of the most critical ecological performance measures, 3) project phasing, which will enable project

implementation with reduced initial expenditures, but which may also reduce project benefits attributable to a limited phase only to a level that is not considered cost-effective by the existing process, and 4) project phasing, which may separate components that need to work synergistically to provide benefits.

385.10. There are many processes in the Programmatic Regulations where the ACOE is to consult with various levels of government and the tribes. Section 385.10 of the regulations states “It is expected that the Corps of Engineers and the non-Federal sponsor will set reasonable time limits for consultation ...” Miami-Dade County offered a comment in 2002 that “it should be recognized that the Corps and non-Federal sponsor have a responsibility not to overburden agencies with simultaneous projects that would, *de-facto*, render agencies unable to respond thoughtfully and in a timely manner.” In practice, aggressive schedules for multiple projects, each with several subteams conducting meetings and generating work products simultaneously, in the Miami-Dade County area have created the very conditions that we hoped that the ACOE and non-Federal sponsor would avoid. We understand that there are ample reasons for expediting CERP implementation. In consideration of shrinking local budgets and increasingly limited staff resources, however, the consultation process should include, at a minimum, an acknowledgement that lack of comment on the part of a particular agency does not equate with concurrence. The availability of staff from critical agencies should be considered when developing or revising project schedules in order to avoid undue delays. Schedules should be adjusted when necessary to ensure that comments from critical agencies can be provided prior to making important decisions. The definition of consultation in Section 385.3 should be revised accordingly.

385.20. Miami-Dade County stated in its 2002 comments on the Programmatic Regulations that “RECOVER is the appropriate vehicle for on-going scientific and technical input into the system-wide analyses required to assure long-term success. Its responsibilities and structure are appropriately described in the draft regulation. However, The Corps and South Florida Water Management District (SFWMD) need to commit funding to develop and evaluate appropriate modeling and evaluation tools, including funding that will enable RECOVER to review, and make recommendations to improve the adequacy of system-wide simulation models and the analytical tools used in the evaluation and assessment of projects.” RECOVER has been tasked with many appropriate system-wide tasks in the Programmatic Regulations, but has not received funding and staffing sufficient to adequately discharge these responsibilities, and funding support continues to wane. RECOVER tasks should therefore be reviewed and those that can be appropriately covered by a project team should be shared with or transferred to the project teams. This would enable projects to ensure adequate resources for those tasks by requesting the needed funding from Congress as part of project authorization. One example of a task that could be effectively shared between RECOVER and the project teams is the monitoring to determine individual project success. Although the 2006 CISRERP report stated that “The Monitoring and Assessment Plan (MAP) documents reviewed describe a well-designed, statistically defensible monitoring program and an ambitious assessment strategy”, the stations established for the MAP may be inadequate to determine at a project-level or IAR scale whether specific project features are operating as projected. Project teams are currently unable to fill in this gap unless a particular monitoring element is needed to meet regulatory requirements. The Programmatic Regulations should include sufficient flexibility and coordination between RECOVER and the

project teams that the results of CERP projects can be evaluated at both the project and system-wide scales, as appropriate.

385.31. We applaud the inclusion of the following statement in Section 385.31 (Adaptive Management Program) and encourage the Army Corps of Engineers (ACOE) to retain it in all future versions of the Programmatic Regulations: “Endorsement of the Plan as a restoration framework is not intended as an artificial constraint on innovation in its implementation.” This statement provides appropriate guidance to project managers in how to approach CERP planning and effectively captures Congressional directives offered during the legislative review of WRDA 2000 to continually seek improvements in the Plan.

Subpart E (Sections 385.35-385.39). The Programmatic Regulations should clearly state that constraints, such as savings clause and flood protection issues, should be given the same priority as meeting project goals and objectives. The July 2007 final draft Guidance Memoranda appear to allow for the equal treatment of constraints and project goals and objectives, and they allow establishment of performance measures to address constraints, but this has not been our experience when participating in project teams. We have participated in several teams where an assumption exists that the team will address whether selected alternatives meet project constraints after plan formulation is nearly complete. This puts the plan at risk for a need for reformulation and corresponding schedule delays if the constraints have not been appropriately addressed at the beginning of the formulation process.

385.35. Section 385.35(b) concerns the process for identification of water made available and water to be reserved or allocated for the natural system. The regulations should be revised to address questions that have arisen on how to coordinate water needs between projects that may generate additional water that can be made available to the natural system and projects that either do not generate water or do not generate sufficient water to meet restoration goals. If such issues are only considered on a project by project basis, additional water that might be made available to the natural system may not be appropriately reserved by a water generating project because there is no mechanism for a water using project to place a claim on additional water made available. The Programmatic Regulations should clarify who is responsible for deciding where and how “water made available” is allocated.

385.35. Section 385.35(b) concerns the process for identification of water made available and water to be reserved or allocated for the natural system. It is not clear whether there is a process, either here or under Adaptive Management, for addressing natural system water needs once a project is in place and monitoring indicates that natural system needs have not been met by the existing water reservations for the project. Could the water needed at some future date for adaptive management be inadvertently released for use by other users, and if so, can it be recaptured for natural system use? Please clarify the mechanism for revising water reservations to provide for the natural system as intended by Congress.

385.36. There is a need to address water quality more comprehensively. The savings clause requires that no transfer of water occur until water of “comparable quantity and quality” is available to replace the transferred source. In practice, it has been challenging for a project team to judge whether the savings clause criteria are being appropriately met, for the following

reasons: 1) state numerical standards do not exist for many parameters of concern, 2) state water quality standards may be insufficient to meet restoration goals, and 3) the current suite of water quality evaluation tools are insufficient for most of the parameters of concern, and 4) project boundaries limit the team's ability to appropriately consider the sources or ultimate fate of water passing through the project.

385.36. We continue to be concerned about Section 385.36(b)(5) (Elimination or Transfer of Existing Legal Sources). Miami-Dade County commented in 2002 that "the terminology 'water supply for fish and wildlife' is vague." We continue to hold that opinion, and suggest that the definition be explicitly expanded to include not only publicly owned conservation land but private land with conservation easements or other means for ensuring long term preservation, including mitigation areas and mitigation banks. We continue to strongly believe that Biscayne Bay should be included as an individual environmental basin which maintains its own reservation; the language in the 2003 final regulations provides no such assurance. There are likely many other natural areas of concern to other state and/or local agencies that should be considered for specific inclusion in this list, as well.

385.37. There is a need to reconsider the definition of flood protection so that restoration is not unduly hampered. Section 601(h)(5)(B) of WRDA 2000 contains a savings clause provision ensuring that the levels of flood protection are not reduced by implementation of a project. The existing Corps process for determining flood protection appears to consist of an analysis of stages and hydroperiods for the project area. Areas where stages are increased and/or hydroperiods are lengthened on private lands are targeted for flood mitigation, which usually consists of acquisition, purchase of a flowage easement, or, in many cases, modification of the project to avoid such impacts. We recommend that this analysis be revisited for jurisdictional wetlands and/or mitigation areas, particularly where conservation or protection is the designated land use, and where no existing flood control infrastructure exists. Wetlands are already flooded for at least part of the year, therefore it could be argued that the level of flood protection is not changing if the peak stage is not changing. Mitigation areas are land set aside where wetland functions have been improved to compensate the general public for wetlands impacted elsewhere. If additional water will further improve wetland function in a mitigation area, this should not be viewed as a loss of flood protection that warrants compensation. The ACOE Section 404 Regulatory Program should, in concert with the revision process for the Programmatic Regulations, also revise its procedures for consistency with the Programmatic Regulations and should require the provision of flowage easements or other appropriate mechanisms that address this flood protection issue for mitigation projects within CERP footprints.

385.37. Flood protection is defined in the Programmatic Regulations as "levels of service ... that: (1) Were in existence on the date of enactment of section 601 of WRDA 2000; and (2) Are in accordance with applicable law". During the intervening years since passage of WRDA 2000, Miami-Dade County has implemented many projects, at substantial public cost, to improve local flood protection. It would not be in the best interest of CERP for the benefits achieved by these projects to be diminished by restoration activities. We therefore recommend that Section 385.37(c), which addresses opportunities for improved and new flood protection, be revised to acknowledge intervening non-CERP projects that are directed at improving flood protection and

indicate that restoration activities will either not impact benefits or will mitigate for any loss of benefits that were derived from such projects.

Figure 1 of Appendix A to Part 385 provides a general process flow chart for development of a CERP Project. Real Estate acquisition at the federal level does not begin until after the Project Implementation Report (PIR) has been completed. Real estate costs in South Florida have a large impact on CERP project budgets, therefore additional flexibility in the real estate process is needed in order to realize savings. Real estate acquisition that occurs only after PIR completion has unduly inflated the cost of CERP projects, in part because real estate speculation in the vicinity of the project can drive up market prices. Increased flexibility for initiating real estate acquisitions would enable the federal government to negotiate early with willing sellers and take advantage of any downturns in market prices. In addition, early negotiations with local governments and private entities could be initiated to determine whether fee simple acquisition of land within a CERP footprint is actually needed or whether agreements for flowage easements or other partial transfer of property rights might be achieved at reduced or no cost to the project. This would have a beneficial effect on project budgets, since uncertainty about real estate costs could be significantly reduced.