

## Regulatory Team Success Criteria Sub-group Evaluation

**Instructions:** Enter the answers to the questions listed below in summary form on the following table. Use the "enter" key to add additional lines in each category, as needed.

1. Overall Program Description:
  - a. Program name
  - b. What problem was the program intended to solve?
  - c. Did the program establish goals? (e.g. water resource sustainability, future water supply, existing legal use protection) If so, describe the program goals.
  - d. Describe the program's approach (i.e. "tools" to be used) to fix the problem. (e.g. Water resource development projects, water supply development projects, regulatory components, operational, water shortage plan, etc.)
  - e. Describe performance measures, if any, established to gauge success in achieving the program goals?
  - f. Were there time tables, interim milestones, and deadlines established for achieving the program goals? If so, describe.
  
2. How does the program address existing legal user rights?
  - a. How were existing uses considered? (E.g. actual permitted, permitted, projected uses? Cutbacks proposed? Source shifts? Before or after permit renewal?)
  - b. Did the program include recovery/restoration/prevention components that affected among existing legal users? If so, how were they apportioned among the existing legal uses?
  - c. Did the program establish waivers, variances or other forms of relief for hardship cases? If so, what was the nature of the relief provided by the program?
  - d. Does the program provide funding to implement changes to existing legal uses?
  
3. How does the program provide for future / new uses?
  - a. Does the program provide for future / new uses? If so, how were future uses addressed (e.g. optimization, efficiency, preferred sources, alternative sources, water resource development projects)
  - b. Does the program provide funding for future / new water supply projects?
  
4. How does the program achieve resource sustainability?
  - a. Is sustainability achieved through regulatory components? If so, explain and include any integration with other programs.
  - b. Is sustainability achieved through water resource development / restoration projects? If so, explain.
  - c. Did the Legislature specifically address the program sustainability? (E.g.: provide for "trade-offs," program components, funding, reporting)
  - d. Did the program provide for adaptive management? If so, what adaptive management procedures were included in this program?

## 1. Overall program description

### a. Program Name:

## Lower East Coast Restricted Allocation Area (LEC RAA)

### b. Target Problem:

- **Comprehensive Everglades Restoration Project (CERP):**
  - The Central and Southern Florida Flood Control Project was recognized as creating an unsustainable condition for the Greater Everglades system and future water supply. Consumptive water use, while not causing these problems, was anticipated to increase over the coming years such that supply sources needed to be identified.
  - The U.S. Congress in the 1992 Water Resource Development Act authorized the 'Restudy' of the Chief's report published as House Document 643 in 1949, "...with a view to determining whether modifications to the existing project are advisable... due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation." [Public Law 102-580, §309(1)]
  - This effort, known as the reconnaissance phase, proceeded forward in conjunction with SFWMD's Lower East Coast regional water supply planning effort.
  - After years of study, CERP was developed to restore the Greater Everglades Ecosystem and meet projected water supply needs; water to achieve the purposes defined in CERP needed to be set aside for these purposes.
  - After CERP and the Lower East Coast Regional Water Supply Plan set the planning level framework, implementation followed, including project development and regulations.
  
- **Lower East Coast Restricted Allocation Area (LEC RAA):**
  - In 2007 LEC RAA was created to:
    - Assure water needed for CERP restoration projects was not allocated for consumptive use
    - Serve as the regulatory component of the MFL recovery strategies for Everglades and Loxahatchee River
    - Address changing circumstances that evolved between adoption of CERP (2000) and 2007; specifically, funding and construction of the CERP project components was delayed; urban water supply demands were rising beyond planned projections; and numerous permit applications, requesting substantial increases in allocation, were pending. Absent timely CERP projects, increasing consumptive use demands were coming from the Everglades ecosystem. (Many of the CERP project components stored water for both restoration and consumptive use purposes as projected over time. In this manner competition between water for restoration and future uses was to be avoided.)
      - To address these issues, the LEC RAA acted to "cap" withdrawals; additional explanation of the mechanisms used is explained below.
      - LEC RAA did not reduce actual use of existing legal users; however, existing infrastructure was "stranded" due to the LEC RAA.

### c. Program Goals:

- **CERP:**
  - CERP's purpose is to modify the Project to enhance ecologic values and enhance economic values and social well-being; plan for the water resource needs of the people of south Florida for the next 50 years. (Restudy Feasibility Report / Final EIS at:1-7, 5-20 to 5-38, and 6-1 to 6-5)
  - Sustainability of water resource is the over-arching objective that is further translated into general planning objectives for the Restudy in 3 categories: ecologic, hydrologic, and socio-economic (Governor's Commission for a Sustainable South Florida Conceptual Plan, 14 and Restudy, 6-4)
    - "Sustainable communities are those that believe today's growth must not be achieved at tomorrow's expense." (Excerpts from Initial Report – Preface)

- The environment, people and economy often compete, but to be sustainable, the needs of all must be balanced. (Commission's Conceptual Plan, 13 - 14)
  - Five principles guided vision: (1) restore key ecosystems, (2) achieve a cleaner, healthy environment, (3) limit urban sprawl, (4) protect wildlife and natural areas, (5) create quality communities and jobs. (Initial Report, Preface)
  - A healthy natural system is the foundation from which South Floridians' quality of life stems. (p. 9 – Restudy)
  - As to water management, the Commission's objectives were to: (1) coordinate and integrate water management and restoration plans and ensure such plans incorporate principles of sustainability, full cost accounting, ecosystem management, and adaptive management; (2) to restore and enhance regional ground water storage; (3) to protect ground and surface water capacity through development of alternative sources of water and other operational and allocation schemes; (4) to integrate land use with water management; (5) to understand the limits of a 'managed system' and set realistic flood control goals. (Initial Report, p.2)
  - §373.1501 – Legislative intent mirrors sustainability and adds 'not diminish' supply language
- **LEC RAA:**
    - Assures water needed for Everglades restoration is not allocated for consumptive use
    - Encourages use of CERP water supply project water (AWS) is used when it becomes available
    - This rule was not intended to restore environmental performance. Environmental restoration is to occur via implementation of the CERP project components.
    - The LEC RAA also satisfied the state and federal requirement to assure water for Everglades restoration would be protected. [State protection of CERP project water must occur prior to the SFWMD executing an agreement to construct these projects with the Army Corps of Engineers, consistent with 373.470 (3)(c), Florida Statutes, 33 CFR 385.27, and WRDA 2000, Pub. L No. 106-541, § 601(h)(4)(b)(ii), 114 Stat. 2572 (2000).]

**d. Program Tools:**

- State and Federal tools:
  - CERP: Extensive modifications to C & SF Project - primarily water storage projects, water quality treatment projects, re-connection of ecosystems (e.g. 'de-comp' water conservation areas), including project design, construction, and O & M
  - Land acquisition
  - Funding
  - Adaptive assessment
- Additional tools include:
  - Monitoring (RECOVER program)
  - Federal regulation schedules
  - State water allocation 'tools' including reservations of water for CERP projects
    - If excess water is available, certification for allocation
- State water supply management tools:
  - Consumptive use permitting criteria: LEC RAA
  - Water resource development projects
  - MFLs
  - Reservations
  - Water shortage
  - Water supply development projects
  - Alternative sources identified
  - Funding

**e. Performance Measures:**

- CERP Performance Measures and restoration targets were established and used during the plan formulation phase. Each performance measure was linked to one or more of the planning objectives and consisted of a measureable indicator and target. The performance measures were largely indicators of

hydrologic characteristics capable of modelled assessment. (7-10)

- Development and evaluation of CERP alternative plans occurred through a process known as plan formulation. Plan formulation began by developing a list of many different ideas to achieve the goals and objectives. The ideas were called components. The components were the building blocks that could be combined in various ways as alternative plans that were evaluated in terms of meeting identified restoration targets. The Governor's Commission Conceptual Plan provided 40 components ("preferred options") that were grouped into 13 concepts that eventually served as the Restudy's initial framework. (Restudy, 7-3 and Conceptual Plan, 15 – 17) Eventually, a list of 112 components were identified and then refined through a screening process that included modeling, land suitability, and cost effectiveness. Next, the components were assembled into alternative plans to meet plan goals and objectives. Multi-agency teams known as alternative development teams, designed specific arrays of components to be modelled and evaluated by the Alternative Evaluation Team. This AET was a multi-agency team of diverse expertise responsible for plan evaluation, including developing quantitative indicators of plan performance, aka performance measures; comparing model results against restoration targets to identify strengths and weaknesses of each alternative plan, etc. (Restudy, 7-8 to 7-9 and see Restudy Chapter 7)
- SFER – annual reporting to state / federal entities by
- 2000 LEC Regional Water Supply Plan: Appendix D, Performance Measures. The performance measures were developed in conjunction with CERP effort, led to technical publications for MFL rules, and integrated with CUP criteria through the "B List" rule development.
- LEC RAA "cap" criteria:
  - Program geared toward not increasing use of C & SF Project / regional system water that was targeted by CERP for Everglades restoration.
  - Encouraged use of CERP project water (AWS) that was dedicated through the certification process for water supply, when that 'project water' became available.
  - Applicants must demonstrate requested allocation: "...will not cause a net increase in the volume or cause a change in timing on a monthly basis of surface and ground water withdrawn from the LEC Everglades Waterbodies or the North Palm Beach County / Loxahatchee River Watershed Waterbodies over that resulting from the base condition water use." Withdrawals "capped" at the "base condition water use." BCWU calculation varies by use class, but in no case may the withdrawal exceed that permitted to the applicant as of April 1, 2006. Rule became effective 2/2007. (AH 3.2.1.E.2. and see below for additional details.)
  - Limiting conditions require reporting, AWS development, milestones, and allow for conditional 'borrowing' from the regional system.

f. Timetables/deadlines:

- CERP and 2000 LEC Regional Water Supply Plan established project component sequencing in 5 year increments over a period of more than 20 years. Adaptive assessment of Plan implementation is also to occur due to the uncertainties inherent in ecosystem restoration. Incremental implementation of the plan allows for on-going assessment of the effectiveness of Plan component implementation by a diverse science and review panel coordinated by the RECOVER team.
- LEC RAA:
  - Applicable to new, modified, and renewal applications.
  - No rule sunset provision
  - No deadlines added to existing permits

**2. How does the program address existing legal user rights?**

a. Treatment of Existing & Proposed Uses:

- Federal level assurances: (Restudy 10-11 to 10-15, quoting Governor's Commission Restudy Plan Report, 1999 )
  - "The concept of 'assurances' is key to the successful implementation of the [CERP]. Assurances can be defined in part as protecting, during the implementation phases of [CERP],

the current level(s) of service for water supply and flood protection that exist within the current applicable Florida permitting statutes. Assurances also involve protection of the natural system.” (Restudy 10-11)

- U.S Congress’ WRDA 2000 included an assurances clause. Section 601(h)(5) of WRDA 2000 states, in part: “(A) NO ELIMINATION OR TRANSFER. – Until a new source of water supply of comparable quantity and quality as that available on the date of enactment of this Act is available to replace the water to be lost as a result of implementation of the Plan, the Secretary and the non-Federal sponsor shall not eliminate or transfer existing legal sources of water, including those for – (i) an agricultural or urban water supply; (ii)... Seminole Indian Tribe of Florida...; (iii) Miccosukee Tribe of Indians of Florida; (iv) water supply for Everglades National Park; or (v) water supply for fish and wildlife....”
- The Governor’s Commission developed assurance recommendations in 1999 which are quoted in the Restudy at 10 – 11 to 10-15. For example:
  - “...human users will not suffer from the environmental restoration provided by the Restudy. ...assurances are needed that, once restored, South Florida’s natural environment will not again be negatively impacted by water management activities.” (10-11)
  - “However, concerns have been expressed that a water user would be forced to rely on a new water storage technology before that technology is capable of fully providing a water supply source or that existing supplies would otherwise be transferred or limited, and that the user would thereby experience a loss of their current legal water supply level of service....” (10-12)
  - “Environmental benefits achieved by the Restudy must not be lost to future water demands.” (10-13)
- State level assurances: 373.1501(5): In the development of project components, the District shall assure: ... “(d) Consistent with this chapter, the purposes for the restudy provided in the Water Resources Development Act of 1996, and other applicable federal law, **provide reasonable assurances that the quantity of water available to existing legal users shall not be diminished by implementation of project components so as to adversely impact existing legal users**, that existing levels of service for flood protection will not be diminished outside the geographic area of the project component, and that water management practices will continue to adapt to meet the needs of the restored natural environment. (e) **Ensure that implementation of project components is coordinated with existing utilities and public infrastructure and that impacts to and relocation of existing utility or public infrastructure are minimized.** ... (7) **Notwithstanding any provision of this section, nothing herein shall be construed to modify or supplant the authority of the district or the department to prevent harm to the water resources as provided in this chapter.**” (Emphasis added.)
- LEC RAA:
  - LEC RAA criteria are applicable to applications for new, modified, or renewed uses.
  - Applicants must demonstrate requested allocation: “...will not cause a net increase in the volume or cause a change in timing on a monthly basis of surface and ground water withdrawn from the LEC Everglades Waterbodies or the North Palm Beach County / Loxahatchee River Watershed Waterbodies over that resulting from the base condition water use.” (AH 3.2.1.E.2.)
  - Withdrawals “capped” at the “base condition water use.” BCWU calculation varies by use class, but in no case may the withdrawal exceed that permitted to the applicant as of April 1, 2006. (e.g. PWS - maximum quantity of water withdrawn by the applicant from the permitted source during any consecutive 12 month period during the 5 years preceding April 1, 2006.)
  - Some variables accounted for when calculating BCWU include: adjustments for treatment system conversion, projects not constructed but are authorized by CUP and ERP, and adjustments due to timeframe not reflecting normal operations (e.g. climatic extremes or equipment failure) Also, BCWU includes water made available via offsets, AWS, or terminated / reduced BCWU, see last paragraph of 3.2.1.E.3.
  - Summary of LEC RAA Impact: In general, CERP’s and the LEC Plan’s intent was to restore the Greater Everglades Ecosystem and provide for future consumptive uses via projects. Thus, traditional water supplies were to be set aside and stored for restoration projects and alternative supplies, including certified CERP project water, were to be developed for future demands. However, project funding and construction did not timely occur and demands escalated beyond those anticipated. Uncertainties regarding continued allocation and use of water from the regional system thus existed, particularly as to whether consumptive uses would impact water available for storage in the CERP projects. Moreover, federal funding for CERP projects is

<p>dependent on state protection of water 'targeted' for Everglades restoration. The Board chose to restrict regional system allocations and transition to alternative sources. Hence, the LEC RAA rule was adopted and acted as a "cap" on water available for consumptive users, not merely setting water aside for CERP project storage.</p>
<p><b>b. Recovery/Restoration/Prevention:</b></p> <ul style="list-style-type: none"> <li>• Permittees were "capped" at their BCWU, a volume calculated by use class and related to the permittees' historic withdrawals.</li> </ul>
<p><b>c. Relief Mechanisms:</b></p> <ul style="list-style-type: none"> <li>• LEC RAA: Applicants may request a temporary allocation of water required to meet demands while implementing AWSW or an offset. Permit conditions will set dates and milestones for project development and will require the allocation be reduced when the AWS is available.</li> </ul>
<p><b>d. Funding:</b></p> <ul style="list-style-type: none"> <li>• CERP: state and federal funding, potential for CERP projects to have water available for "certification" as allocable water.</li> <li>• LEC RAA: funding for AWS and conservation projects (e.g. SB 444 state / SFWMD funding)</li> </ul>
<p><b>3. How does the program provide for future/new uses?</b></p>
<p><b>a. Provision for New/Future Uses:</b></p> <ul style="list-style-type: none"> <li>• LEC RAA: Potential sources are identified and include: <ul style="list-style-type: none"> <li>○ Certified CERP project water</li> <li>○ Reallocation of terminated / reduced BCWU</li> <li>○ AWS, offsets</li> <li>○ Available wet season water</li> <li>○ Temporary allocation of water from restricted source (aka "borrowing")</li> </ul> </li> </ul>
<p><b>b. Funding:</b></p> <ul style="list-style-type: none"> <li>• State and federal funding for CERP programs</li> <li>• Potential AWS and conservation funding, recognizing budgetary constraints</li> </ul>
<p><b>4. How does the program achieve resource sustainability?</b></p>
<p><b>a. Regulatory Components:</b></p> <ul style="list-style-type: none"> <li>• Sustainability is achieved through the CERP project components. (i.e. water resource development projects)</li> <li>• LEC RAA assures water to be stored in CERP projects is not allocated.</li> </ul>
<p><b>b. Water Resource Development/Restoration:</b></p> <ul style="list-style-type: none"> <li>• Yes, see above description of CERP program and 2000 LEC regional water supply plan</li> </ul>
<p><b>c. Legislative Intent:</b></p> <ul style="list-style-type: none"> <li>• Specific statutory direction concerning CERP and water supply is found in Section 373.1501, Fla. Stat.</li> </ul>
<p><b>d. Adaptive Management:</b></p> <ul style="list-style-type: none"> <li>• CERP: RECOVER – joint state / federal monitoring, evaluation, and adaptation program to address</li> </ul>

uncertainties in modeling, anticipated project effects, and ecological response.