

# Caloosahatchee River Visioning Process: Final Report

---

Prepared by the Consensus Building Institute

March 2015



Consensus Building Institute

238 Main Street, Suite 400  
Cambridge, MA 02142  
phone (617) 492-1414 fax  
(617) 492-1919

1220 L Street, NW, Suite 901  
Washington, DC 20005  
phone (202) 289-7444 fax  
(202) 289-5967

[www.cbuilding.org](http://www.cbuilding.org)

---

**Caloosahatchee River Visioning Process:  
Final Report**

**TABLE OF CONTENTS**

**1. EXECUTIVE SUMMARY..... 1**

**2. BACKGROUND AND CONTEXT..... 1**

**3. PRIORITIZATION PROCESS..... 4**

**4. MOVING FORWARD..... 9**

**5. APPENDIX A: FULL PROJECT LIST..... 12**

**6. APPENDIX B: CRITERIA.....23**

**7. APPENDIX C: PROJECTS MAP.....24**

**8. APPENDIX D: LISTING OF STUDIES AND BACKGROUND DOCUMENTS..... 26**

**9. APPENDIX E: INTERAGENCY MEETING AND COMMUNITY FORUM SUMMARIES..... 30**

---

**Caloosahatchee River Visioning Process:  
Final Report  
Prepared by the Consensus Building Institute – March 2015**

## **1. EXECUTIVE SUMMARY**

The Caloosahatchee Watershed faces severe stresses due to its alternating periods of extremely high and extremely low freshwater flows. There is broad recognition among stakeholders of the need to improve the health of the Caloosahatchee, but there are severe external constraints on the options for improving the situation and little consensus on solutions. The inability of stakeholders to present a unified voice on regional priorities has caused southwest Florida to lag behind other regions in addressing longstanding water quality and quantity impacts to the Caloosahatchee River ecosystem.

In 2013, the South Florida Water Management District (SFWMD) launched a public initiative to develop a Vision for the Caloosahatchee River and Estuary through stakeholder collaboration, focusing on the key ecological conditions of a healthier system. The process consisted of an initial stakeholder assessment, a science workshop, five “implementer” meetings, and two stakeholder forums.

The process has yielded results, including a deeper understanding of stakeholder concerns and goals for the engagement process, a reconfirming and sharpening of key ecosystem indicators and gaps, a prioritization of near- and medium-term regional projects to benefit the health of the Caloosahatchee River and Watershed, and a workable platform for constructive stakeholder dialogue and consensus building moving forward. In addition, six immediate regional priorities were identified: (1) the C-43 West Basin Storage Reservoir; (2) C-43 Water Quality Treatment and Demonstration (BOMA Property); (3) Lake Hicpochee North Hydrologic Enhancement; (4) the West Caloosahatchee Water Quality Treatment Area (C-43 Reservoir Site); (5) Babcock Ranch Preserve Water Storage; and (6) the Charlotte Harbor Flatwoods Initiative. There was strong (though not universal) support among a broad range of stakeholders in support of each of these six projects.

Although substantial challenges remain related to obtaining project funding, improving scientific data and cost-benefit metrics, and bridging stakeholder differences on a variety of potential policy and programmatic fixes, the Visioning process has increased stakeholder engagement in the process of moving regional projects forward and has built substantial momentum towards improving the health of the Caloosahatchee.

## **2. BACKGROUND AND CONTEXT**

### ***Challenges Facing the Caloosahatchee River Basin***

The Caloosahatchee Watershed is in a highly distressed state, a result of extensive development and alterations since the late 19<sup>th</sup> century. Alternating periods of extremely high and extremely low freshwater flows have robbed the river and estuary of their natural health and vitality. During the wet season, high flows decrease salinity levels in the estuary, causing harm to seagrasses and critical estuarine habitat, while during the dry season, low flows contribute to decreased water

---

quality and harmful algal blooms. A variety of factors have increased these challenges over time, including the loss of natural storage areas, increased demand for water caused by agricultural and urban development, and successive years of low rainfall.

There is broad recognition among stakeholders of the need to improve the health of the Caloosahatchee Watershed, and a shared appreciation of the river and estuary as critical environmental and economic resources. Historically, however, there has been little consensus on solutions. The system is plagued by external constraints. Over the years, a highly engineered system of channels, locks, and levies has evolved in central and south Florida to address the limited storage capacity in Lake Okeechobee and elsewhere, creating significant challenges to maintaining and improving the regional infrastructure. Demand from agricultural users is longstanding and unlikely to decrease in the foreseeable future. The need to meet water quality standards in the Everglades has affected the timing and distribution of flows to the south. Urban development has increased nutrient loads and placed additional strains on the system.

The lack of easy answers has led to stakeholder conflict. Agricultural users clash with environmentalists over water usage, permitting, and nutrient loading. Coastal communities are at times at odds with interior counties over land acquisition issues. Urban interests worry that the needs of other users are harming the economic base of the region.

Unable to speak with a unified voice, stakeholders have struggled to attract attention and funding to improve the health of the watershed. As a result, southwest Florida has lagged behind other regions in addressing its water quality- and quantity-driven challenges and in attracting funding for large-scale regional water quality and storage projects. Those projects that have been funded have lacked a connection to a broader, unified strategy for the region. Stakeholders may share an interest in finding a better way forward, but they have been unable to agree on what, precisely, it should look like.

In 2013, the District launched a public initiative to develop a Vision for the Caloosahatchee River and Estuary through stakeholder collaboration, focusing on the key ecological conditions of a healthier system. From the outset, stakeholders expressed little appetite for an initiative focused exclusively on dialogue and shared a strong desire to see concrete actions and improvements emerge from their discussions.

The Visioning process has already yielded results. Over the past two years, the District has succeeded in reconfirming and sharpening stakeholders' and the research community's understanding of key ecosystem indicators and gaps, identifying potential projects through a series of interagency meetings, and creating a platform for constructive stakeholder dialogue and consensus building on regional priorities.

The recent passage of Amendment 1 – and its potential as a sustained funding source for important ecosystem improvement projects – provides an additional reason to be optimistic about the opportunities for progress in the region in the near future. Nevertheless, the big picture constraints on regional progress still loom large, and additional dialogue is necessary to achieve consensus among stakeholders and push priority projects forward. The District's efforts to-date have already paid dividends, but more work is needed to foster lasting and more comprehensive improvements.

---

### ***Overview of the Visioning Process***

The Visioning Process has consisted of a series of steps beginning in 2013, when the District contracted the Consensus Building Institute (CBI) to design and facilitate a stakeholder engagement process. First, CBI conducted an initial assessment in the spring of 2013 involving confidential interviews with 42 individuals, which was intended to improve understanding of stakeholders' main issues, concerns, shared interests and differences with respect to the future of the Caloosahatchee. CBI drafted a stakeholder assessment report on the visioning process, which can be found on the SFWMD website at [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/final\\_caloosahatchee\\_report.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/final_caloosahatchee_report.pdf). A number of key findings emerged from the assessment, including the following:

- Stakeholders are interested in the Visioning Process, but want it to have a clear link to outcomes, not just talk.
- Stakeholders share a concern that the current landscape includes many real and/or perceived inequities regarding issues like allocating water usage, land acquisitions, and agricultural and urban BMPs. The situation creates tensions among agricultural and environmental interests, coastal and interior communities, urban and rural communities, and others.
- Although the system is complex and defies easy fixes, much is already known. Extensive data has been collected and ecological indicators are well understood; accordingly, any future dialogues should build off this base of knowledge.
- There is a strong need for action and avoidance of “business as usual.”

The next step in the Visioning process was a science workshop convened by Florida Gulf Coast University in November 2013 and attended by almost 100 participants. A Synthesis Report on the workshop is available on the SFWMD website at [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/calooos\\_science\\_workshop\\_final\\_report.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/calooos_science_workshop_final_report.pdf). The workshop was intended to clarify the science of what is known and what needs to be known regarding restoration of the Caloosahatchee River and Estuary. Key findings from the workshop included the following:

- The current ecological indicators that have been in place for a number of years are valuable and generally on target.
- These indicators suggest a preference for flow regimes between 500 and 3,000 cfs.
- Stakeholders believe enough data has been collected to justify proceeding with actions that foster flows within the preferred ranges.
- Key data gaps involve questions of hydrology, the role of stressors on organisms, and the impact and effectiveness of upstream BMPs. There is also need for better spatial distribution data of such organisms as seagrasses, oysters, mussels, sawfish, drift algae, improved compilation of historical data and salinity mapping, and more quantification of the economic costs of environmental damage, as well as improved coordination within the research community.

Beginning in April 2014, a series of five “implementer” meetings were held involving municipal, county, and state officials, with a goal of identifying priority projects that a broad set of stakeholders across the watershed could support for immediate action. Lastly, in August and December 2014, the District and other coordinating agencies convened two community forums

---

attended by between 50 and 90 stakeholders from diverse backgrounds. The forums were intended to promote dialogue on project prioritization and future stakeholder engagement processes. Appendix E contains summaries of the implementer meetings and community forums. Outcomes of the implementer meetings and community forums are discussed in more detail below.

### **3. PRIORITIZATION PROCESS**

The implementer meetings and stakeholder forums were intended to help develop shared prioritization among local and state governments and stakeholders for specific projects that will benefit the Caloosahatchee River and Estuary, and lead to concrete action steps in support of these projects. The projects under consideration included those identified in the Caloosahatchee River Watershed Protection Plan, the Basin Management Action Plan, and other plans, as well as potential projects and actions put forward by the implementing agencies and stakeholders. Appendix D contains a list of studies and background documents put forward by the implementing agencies and stakeholders as of August 2013. CBI worked with the implementing agencies to develop the agendas for the meetings and forums, organize meeting materials, and draft meeting summaries. Pat Field and Bennett Brooks from CBI served as facilitators, with assistance from CBI Associates Tushar Kansal and Toby Berkman.

Participants in the implementer meetings consisted of representatives from four key entities – the Florida Department of Agriculture and Conservation Services, the Florida Department of Environmental Protection, Lee County, and the South Florida Water Management District – as well as municipal, county and water control districts within the watershed. (Complete lists of the participants and their affiliations are included in the implementer meeting summaries attached as Appendix E.) Over the course of the five meetings, participants identified potential projects for consideration, discussed criteria for ranking projects, organized projects into regional and local groupings, and categorized the regional projects by level of prioritization. The group put forward a set evaluation criteria for potential projects, which is included below as Appendix B.

Participants in the stakeholder forums included representatives from the implementing entities as well as other county and local governments; other Federal and State agencies; environmental NGOs; agricultural, tourism, and real estate interests; academic institutions; and the general public. The Community Forums included a mix of small-group and plenary discussions and provided a platform for focused stakeholder feedback on candidate projects, prioritization criteria, and project ranking and categorization. As well, stakeholders offered recommendations on the need for improved cost-benefit metrics, discussed strategies to strengthen stakeholder coordination on local project prioritization, identified other programmatic and policy changes needed to make meaningful improvements to the Caloosahatchee River and Estuary’s ecological health, and provided suggestions on the focus and structure of future implementer and stakeholder dialogues.

A key decision in the prioritization process involved the categorization of projects. Projects located in or capable of affecting more than one county were categorized as regional. The remaining projects were categorized as local. Regional projects were further separated into three additional categories: (1) immediate regional priorities, consisting of the highest priority projects that are either permitted already, currently in the design phase or have broad stakeholder support for advancement; (2) near-term regional priorities, consisting of second tier priorities needing

additional design work but supported broadly by many stakeholders; (3) conceptual regional projects, which need further development or additional feasibility analysis; and (4) restoration projects, consisting of projects that address specific environmental restoration needs (say oxbow restoration), but that lack an infrastructure or storage component and are therefore difficult to compare directly with the other categories of projects.

For each project where the information was relevant and available, the implementing agencies noted the agency responsible for project implementation, the estimated cost of the project, the project’s estimated nutrient removal benefit (based on preliminary estimates from the 2012 CRWPP Update), and the estimated additional storage the project would engender. The agencies also identified and agreed on criteria relevant for ranking projects – for example, total expected water quality/quantity total gains, expected construction, operation and maintenance costs, opportunities for collaboration, and land acquisition requirements – and developed information relevant to these criteria.

A. Immediate Regional Priorities

Based on implementing agency discussions and stakeholder input at the Community Forums, six immediate regional priorities were identified: (1) the C-43 West Basin Storage Reservoir; (2) C-43 Water Quality Treatment and Demonstration (BOMA Property); (3) Lake Hicpochee North Hydrologic Enhancement; (4) the West Caloosahatchee Water Quality Treatment Area (C-43 Reservoir Site); (5) Babcock Ranch Preserve Water Storage; and (6) the Charlotte Harbor Flatwoods Initiative. Each of these projects is described briefly below.

*C-43 West Basin Storage Reservoir*

|                         |   |
|-------------------------|---|
| Description             | CERP component involves an above ground reservoir located south of the Caloosahatchee River and west of the Ortona Lock (S-78). This will comprise a significant portion of total water storage requirement for the C-43 Basin. The project will provide for timed releases of water to the estuary and will have O&M costs associated with the pumping operations. |
| Benefits                | The project will provide essential flows during the dry season and improve the salinity balance of downstream estuary. Secondarily, it will assist with attenuating peak flows during the wet season, to the extent possible  |
| Design Capacity         | 170,000 acre-feet   |
| Design                  | Complete  |
| Land Acquired           | Complete  |
| Remaining Cost Estimate | \$452,100,000   |
| Phases                  | Possible to phase to spread out costs and actions over time   |

*C-43 Water Quality Treatment and Demonstration (BOMA Property)*

|                         |   |
|-------------------------|---|
| Description             | The objective of this project is to demonstrate and implement cost effective wetland-based strategies for reducing TN load, and other constituents including TP and TSS, to the Caloosahatchee River and its downstream estuarine ecosystems. Special attention will be given to reducing dissolved organic nitrogen (DON) as it constitutes the most abundant and recalcitrant form of TN in the Caloosahatchee River. This is a multi-phased project involving bioassays, mesocosms, test cells, and field-scale cells to test, optimize, and demonstrate wetland-based technology effectiveness ultimately leading to implementation of a full sized treatment facility. It is envisioned that information gained from this project will be applicable to other South Florida Systems. |
| Benefits                | Demonstrate processes for reducing nutrients, especially nitrogen, from the watershed   |
| Capacity                | N/A   |
| Design                  | Conceptual Design completed in 2012. Bioassay and mesocosms study scheduled for FY 2015 through 2018  |
| Land Acquired           | Complete  |
| Remaining Cost Estimate | \$8,000,000 to construct testing facility   |
| Phasing                 | Yes   |

*Lake Hicpochee North Hydrologic Enhancement*

|                         |  |
|-------------------------|--|
| Description             | The objective of this project is to enhance the hydrology of Lake Hicpochee North with ancillary benefits of habitat restoration and water quality improvements. Phase I involves construction of a shallow storage feature on approximately 670 acres of land and construction of a spreader canal to deliver water to Lake Hicpochee North. Phase II involves the acquisition of an additional 2,454 acres for use as a flow equalization basin. |
| Benefits                | Provides shallow water storage and hydrologic enhancement to northwest portions of the lake to benefit the Caloosahatchee  |
| Capacity                | 1,280 acre- feet of storage  |
| Design                  | Construction on first phase anticipated to begin early 2016, requires funding for design of Phase II   |
| Land Acquisition        | Partial: option for another 2,454 acres  |
| Remaining Cost Estimate | \$16,600,000 for acquisition   |
| Phasing                 | Yes, also linkage with Nicodemus Slough Project  |

*West Caloosahatchee Water Quality Treatment Area (C-43 Reservoir Site)*

|                         |   |
|-------------------------|---|
| Description             | Project consists of a water quality facility in association with C-43 West Basin Storage Reservoir site to treat reservoir water to reduce nutrient concentrations from the Caloosahatchee River and Estuary and nutrient pollutant loading downstream. The project is expected to have O&M costs associated with pumping operations. |
| Benefits                | Provide water quality treatment for waters leaving the C-43 Reservoir to ensure water quality as well as quantity improvements  |
| Capacity                | N/A   |
| Design                  | Requires funding for conceptual design  |
| Authorization           | No  |
| Land Acquired           | Yes, 1,500 acres in public ownership  |
| Remaining Cost Estimate | TBD   |
| Phasing                 | Yes   |

*Babcock Ranch Preserve Water Storage*

|                         |   |
|-------------------------|---|
| Description             | Project purpose is to reduce stormwater runoff to the Caloosahatchee River originating from approximately 4,220 acres of watershed located in the southeast portion of the Babcock Ranch State Preserve. The project will provide shallow water storage by improving existing berms, constructing new berms, modifying existing water control structures and installing new water control structures. |
| Benefits                | Provide shallow water storage to reduce stormwater runoff to Caloosahatchee.  |
| Capacity                | 1,500 acre-feet of storage  |
| Design                  | Design funded by FDACs and currently underway   |
| Land Acquired           | Yes   |
| Remaining Cost Estimate | \$1,200,000 for final design and construction   |
| Phasing                 | No but possible linkage to Jacks Branch/County Line Ditch Project   |

*Charlotte Harbor Flatwoods Initiative*

|                         |  |
|-------------------------|--|
| Description             | The Charlotte Harbor Flatwoods Initiative is a multi-phased regional hydrologic restoration effort with the overall goal to restore historic flows to Charlotte Harbor. The project involves the development of regional water storage and treatment facilities, establishment of conveyance systems and restoration of habitat to restore sheet flow across five watersheds encompassing approximately 90 square miles. It will establish linkages between Cecil Webb WMA and Yucca Pens WMA. The project is expected to provide timed releases of water to enhance hydroperiods and to have limited O&M costs, and can be modified to meet future needs. |
| Benefits                | Project is expected to provide multiple benefits including flood control, habitat enhancement, recreation opportunities, water quality improvements and water recharge.  |
| Capacity                | N/A  |
| Design                  | Funding for conceptual design needed   |
| Land Acquired           | 670 acres approved for acquisition, closing expected in spring 2015  |
| Remaining Cost Estimate | \$14,000,000 for land acquisition, design and construction   |
| Phasing                 | Yes  |

B. Additional Regional Projects

The team divided the additional regional projects into three categories: (1) near-term regional priorities; (2) conceptual regional projects needing further development or additional feasibility work; and (3) regional restoration projects.

One project, the *Lake Hicpochee South Project*, was identified as a near-term regional priority. It is described below.

|             |  |
|-------------|--|
| Description | The Lake Hicpochee South project is designed to enhance the hydrology of Lake Hicpochee South by redirecting storm water through upland and wetland areas rather than a canal. In 2008, a conceptual design report was completed that had a high implementation cost for the project. In 2013, a conceptual re-evaluation report was completed in cooperation with the Flaghole Drainage District and Hendry Hilliard Water Control District to refine portions of the 2008 report in order to integrate existing infrastructure where possible to maximize the cost-effectiveness of the project. The project will require collaboration with local 298 Districts to implement and is |
|-------------|--|

|                         |  |
|-------------------------|--|
|                         | expected to have O&M costs associated with pumping operations.   |
| Benefits                | The project is expected to provide multiple benefits including flood control, habitat enhancement, and water quality improvements. |
| Capacity                | N/A  |
| Design                  | Funding for design needed  |
| Land Acquired           | Yes, land for the project is in public ownership.  |
| Remaining Cost Estimate | \$4,500,000 for design and construction  |

The team identified the following eight projects as conceptual regional projects needing further development or additional feasibility work:

- East Caloosahatchee Storage Project
- Caloosahatchee Storage – Additional Project
- Caloosahatchee Ecoscape Water Quality Treatment Area Project
- C-43 Distributed Reservoirs Project
- Recyclable Water Containment Areas Project
- Lee-Charlotte County Border Area Hydrologic Improvement
- ASR on Public Lands
- Carlos Waterway Conveyance

Finally, the team characterized the following three projects as regional restoration projects:

- Tape Grass (*Vallisneria americana*) Plantings Upstream of S-79 Project
- Oxbow Restoration
- Tape Grass Plantings below S-79

Maps of completed and proposed projects are included below as Appendix C. Overall, the prioritization process resulted in a strong consensus among most participants in support of the top six priority regional projects, listed above. The process also demonstrated, however, that not all Caloosahatchee stakeholders would endorse each and every project, and that they believe certain key programs (agricultural and urban BMPs, for instance), many projects on the local level, and some restoration projects are also important parts of the overall efforts to improve the River. Many stakeholders also expressed concerns that these and future projects, while necessary, are not sufficient to restore the river flows and water quality necessary for robust ecological health. They suggested that the region must promote more fundamental policy and programmatic changes that reach beyond the Caloosahatchee watershed alone. Frequently cited examples included: assessing urban and agricultural BMP effectiveness; establishing a water reservation for the Caloosahatchee; considering overall allocation increases to the region; revisiting the Lake Okeechobee Regulation Schedule; agreeing to meaningful implementation commitments on appropriate flow levels, and improving monitoring and enforcement of BMPs.

### C. Local Project Outcomes

The interagency team identified a robust list of near- and longer-term local projects, but determined that more information and data were needed to prioritize among them effectively and credibly. The team identified the following 20 local projects for the near-term:

- 
- Harns Marsh Improvements Phase III (West Marsh) Project
  - Nalle Grade Stormwater Park Project
  - Ford Canal Filter Marsh (Ford Street Preserve) Project
  - Fichter's Creek Restoration Project
  - Aquifer Benefit and Storage for Orange River Basin (ABSORB) Project
  - Hickey Creek Canal Widening Project
  - Hendry Extension Canal Widening Project
  - Hydrologic Restoration of Bob Janes Preserve
  - Hydrologic Restoration of Six Mile Cypress Slough Preserve - North
  - Hydrologic Restoration of Caloosahatchee Creeks Preserve
  - Hydrologic Restoration of Telegraph Creek Preserve
  - Ft. Myers Central Sewer Expansion
  - Ranch Lakes Estates Central Sewer Project
  - Jacks Branch/County Line Ditch
  - City of LaBelle Stormwater Master Plan Implementation
  - North Ten Mile Canal Stormwater Treatment System Project
  - Sunniland/Nine Mile Run Drainage Improvements
  - Yellow Fever Creek/Gator Slough Transfer Facility Project
  - Billy Creek Restoration Dredging
  - Moore Haven Canal Dredging

The team also identified 13 long-term local projects:

- Greenbriar Preserve Project
- Section 10 Storage Project
- Hendry County Storage Project
- Spanish Creek Preserve Restoration
- Lehigh Wetland Restoration
- Mirror Lakes Storage/Rehydration Project
- Cape Coral Canal Stormwater Recovery by Aquifer Storage and Recover (ASR) Project
- Stumper Jumper Ranch Land Acquisition
- Lehigh Acres Wastewater Treatment and Stormwater Retrofit Project
- Fort Myers-Cape Coral Reclaimed Water Interconnect Project
- Cape Coral Wastewater Treatment and Stormwater Retrofit Project
- Shoemaker-Zapato Canal Stormwater Treatment Project
- Winkler Canal Treatment Marsh Project

These projects are described in more detail in Appendix A. Stakeholders also expressed an interest in creating a structure for communities to come together and prioritize local projects on an ongoing basis. Stakeholders discussed how communities on the east coast of Florida have created such a structure (known as the St. Lucie River Issues Team), and agreed that this could serve as a model for a similar effort in the Caloosahatchee Watershed.

---

## 4. MOVING FORWARD

In only two years, the Visioning process has made meaningful progress in building momentum and support for regional priority projects and encouraging stakeholder collaboration. Stakeholders have expressed a strong desire to see the process continue.

Nevertheless, significant challenges remain. There are several regional projects that are ready for implementation, that have broad support among most (though not all) stakeholders, and that will contribute to improving the health for the river and estuary, but the funding necessary to move these projects to the next phase still needs to be secured. Important scientific data gaps remain on issues like hydrology, the role of stressors on organisms, and the impact and effectiveness of upstream BMPs. Relatedly, participants stressed repeatedly that better cost-benefit metrics are necessary to improve project prioritization, track project effectiveness, and advertise successes to funders and to the public. Stakeholders also still have deep and challenging differences of opinion on policy issues, which were not explicitly discussed as part of the Visioning process.

Moving forward, we offer the following recommendations to strengthen and guide future dialogues and initiatives focused on improving the health of the Caloosahatchee River and Estuary and building stronger stakeholder cohesion.

- ***Maintaining stakeholder engagement on regional projects.*** Identifying regional projects is an important step, but it is only a first step. Ongoing efforts are needed to keep stakeholders engaged to ensure progress in funding and constructing priority projects. Effective materials describing priority projects and expected benefits need to be developed by the appropriate implementing agencies, and stakeholders need to work effectively with agencies and other partners to help make the case for project implementation. Ongoing Community Forums can play an important role in keeping stakeholders informed on project progress and providing an opportunity for input and cross-stakeholder dialogue. Many stakeholders would prefer regular community forums (a few times per year). It should also be said that if at least some key stakeholders do not have the opportunity to discuss more regional issues, needs, and concerns beyond projects, they will likely not participate as actively.
- ***Strengthening economic and technical data.*** For future project ranking, there is strong cross-cutting interest and need to improve cost-benefit metrics for assessing project and program effectiveness, as well as to gather more robust and accurate quantitative technical data related to various project ranking criteria. In some cases, addressing these gaps will require further analysis, engineering, and design. In other cases, it will require compiling available data and synthesizing results, often in collaboration with other agencies.
- ***Prioritizing local projects.*** The Implementer Meetings and the Community Forums surfaced widespread interest in better understanding, prioritizing among, and promoting progress on a wide range of local projects, but it also made clear that there is neither sufficient information nor a process in place to credibly identify such projects. We recommend the District and its partners pursue what appears to be broad support for exploring the viability and merits of establishing a Community Initiatives Team (similar to the approach used for the St. Lucie River and other locations) to identify a prioritized list of local projects to promote for funding and implementation.

- 
- ***Tackling policy and programmatic considerations.*** Perhaps most challenging of all, we see a need for an ongoing, productive dialogue on the challenging policy and programmatic issues that continue to divide stakeholders. For one, it is clear that regional priority projects alone cannot deliver the water quality and quantity benefits needed to address all of the Caloosahatchee River's flow needs. Additionally, a careful look at the relative costs and benefits of programs and projects underway may offer insights on where to focus future efforts to maximize benefits. Finally, without further discussion of these issues, we expect it will be difficult to garner the regional cohesion needed to press for future funding and related project implementation needs. We understand that these will not be easy discussions, but it is our assessment that a cross-stakeholder dialogue, carefully structured to bring together effective advocates committed to a more functional path forward, can yield important gains for the region.

The current situation presents a unique opportunity to foster ongoing, concrete progress towards improving the health of the Caloosahatchee. We encourage the District, its agency partners, and the broader stakeholder community to remain engaged and continue building on the progress to-date.

**APPENDIX A  
Full Project List**

**FINAL (1/21/15)**

### **Caloosahatchee River Watershed Projects List**

Information contained in the attached tables (regional projects, local projects, and on-going programs) reflects project data developed for the 2012 update of the Caloosahatchee River Watershed Protection Plan and information provided by local governments. The information has been updated to reflect project status as of summer 2014. It has also been updated to include results from implementers' individual assessments of each project's relative importance.

**Project Phase** has been categorized as: Near-term to reflect projects anticipated to be completed within the next 5 years, Long-term to reflect projects that are anticipated to be completed in 5 years or longer, and Ongoing to reflect activities that are anticipated to span both near- and long-term.

**Category** Projects which are located in or will affect more than one county have been categorized as Regional. The remaining projects are categorized as Local.

**Agency** reflects the principle agency(s) responsible for the implementation of the project.

**Estimate Cost** reflects the most current estimate provided by the agency and reflects the costs needed to complete the project.

**Estimated Nutrient Removal** is based on preliminary load reduction estimates from the 2012 CRWPP Update, modified as appropriate, or as provided by the agency. Estimates in the CRWPP were calculated using Southwest Florida Feasibility Study reductions for project types (i.e. filter marsh, STA, shallow water reservoir, restored wetlands etc.).

Unless otherwise noted, estimates for Nitrogen and Phosphorus removal are in metric tons per year.

**Estimated Storage** is described in acre-feet.

**Caloosahatchee River Watershed Projects  
REGIONAL PROJECTS**

| CRWPP ID                      | Project/Activity   | Description   | Project Status   | Phase                   | Category/ Agency                     | Estimated Cost  | Estimated Nutrient Removal (source)             | Estimated Storage (ac-ft) |
|-------------------------------|--|---|--|-------------------------|--------------------------------------|---|---|---------------------------|
|                               |  | <b>IMMEDIATE REGIONAL PRIORITIES</b>  |  |                         |                                      |   |   |                           |
| CRE-W Res                     | C-43 West Basin Storage Reservoir Project                              | CERP component involves an above-ground reservoir (170,000 ac-ft capacity) located south of the Caloosahatchee River and west of the Ortona Lock (S-78); this will comprise a significant portion of total water storage requirement for the C-43 Basin.<br>Project is expected to provide multiple benefits including flood control, recreation, habitat enhancement and water recharge.<br>The project will provide for timed releases of water to the estuary and will have O&M costs associated with the pumping operations.  | In April 2011, a Record of Decision was issued by the USACE and an approved Project Implementation Report was submitted to the U.S. Congress. Project was authorized in June 2014.<br>Funding to construct an interim project at the site was appropriated by the Florida Legislature in 2014.                 | Long-term               | Regional<br><br>State                | \$452.1m<br>(const.)  | 97 mt/yr TN<br>8 mt/yr TP<br>(agency)           | 170,000                   |
| CRE 10                        | C-43 Water Quality Treatment and Demonstration Project (BOMA Property) | The objective of this project is to demonstrate and implement cost effective wetland-based strategies for reducing TN load, and other constituents including TP and TSS, to the Caloosahatchee River and its downstream estuarine ecosystems. Special attention will be given to reducing dissolved organic nitrogen (DON) as it constitutes the most abundant and recalcitrant form of TN in the Caloosahatchee River. This is a multi-phased project involving bioassays, mesocosms, test cells, and field-scale cells to test, optimize, and demonstrate wetland-based technology effectiveness ultimately leading to implementation of a full sized treatment facility. It is envisioned that information gained from this project will be applicable to other South Florida Systems. | In late 2012, a conceptual design for a testing facility was completed. Full engineering design and permitting of the testing facility is contingent upon funding. The District will be performing the bioassays and mesocosms study in FY 2015 through 2018.  | Long-term               | Regional<br><br>SFWMD,<br>Lee County | \$8,000,000<br>(des. &<br>const.)   | 23%<br>TN min.<br>reduction<br>goal<br>(agency) |                           |
| CRE 04<br>CRE 05<br>CRE-LO 40 | Lake Hicpochee North Hydrologic Enhancement Project                    | The channelization of the Caloosahatchee River in the 1800's drained the lake and bisected it into two distinct parts, north and south. The objective of this project is to enhance the hydrology of Lake Hicpochee North with ancillary benefits of habitat restoration and water quality improvements. Phase I involves construction of a shallow storage feature on approximately 670 acres of land and construction of a spreader canal to deliver water to Lake Hicpochee North. Phase II involves the acquisition of an additional 2,454 acres for use as a flow equalization basin.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement and water recharge.   | Design activities for Phase I are ongoing and construction is anticipated to begin in early 2016.<br>Phase II requires land acquisition and the design and construction of the flow equalization basin.<br>Project has linkages to Nicodemus Slough water storage project.                                     | Short-term<br>(Phase I) | Regional<br><br>SFWMD                | Phase I<br>\$17,200,000<br>(funded)<br>Phase II<br>\$16,600,000<br>(acq.) |   | 1,280                     |
| CRE 13                        | West Caloosahatchee Water Quality Treatment Area (C-43 reservoir site) | Project consists of a water quality facility in association with C-43 West Basin Storage Reservoir site to treat reservoir water to reduce nutrient concentrations from the Caloosahatchee River and Estuary and nutrient pollutant loading downstream.<br>Project is expected to provide multiple benefits including habitat enhancement, recreation and water quality improvements.<br>The project is expected to have O&M costs associated with pumping operations.  | Project was included in the Southwest Florida Comprehensive Watershed Plan; however there has not been any additional design or funding.<br>1,500 acres was retained in ownership by the SFWMD for potential future water quality treatment.<br><br>Funding to initiate a conceptual design study is required. | Long-term               | Regional<br><br>TBD                  |   |   |                           |

**Caloosahatchee River Watershed Projects  
REGIONAL PROJECTS**

| CRWPP ID | Project/Activity                             | Description   | Project Status  | Phase     | Category/ Agency     | Estimated Cost  | Estimated Nutrient Removal (source) | Estimated Storage (ac-ft) |
|----------|--|---|---|-----------|----------------------|---|-------------------------------------|---------------------------|
|          | Babcock Ranch Preserve Water Storage Project | <p>Project purpose is to reduce stormwater runoff to the Caloosahatchee River originating from approximately 4,220 acres of watershed located in the southeast portion of the Babcock Ranch State Preserve. The project will provide shallow water storage by improving existing berms, constructing new berms, modifying existing water control structures and installing new water control structures.</p> <p>Project is expected to provide multiple benefits including flood control, habitat enhancement and water recharge.</p>   | <p>Design to be conducted in FY14/15; funded by DACS. Construction funding will be required in FY15/16.</p> <p>Project has linkages to Jacks Branch/County Line Ditch project.</p>  | Near-term | Regional<br>TBD      | \$1,200,000<br>(des. & const.)                          |                                     | 1,500                     |
|          | Charlotte Harbor Flatwoods Initiative        | <p>The Charlotte Harbor Flatwoods Initiative is a multi-phased regional hydrologic restoration effort with the overall goal to restore historic flows to Charlotte Harbor. The project involves the development of regional water storage and treatment facilities, establishment of conveyance systems and restoration of habitat to restore sheetflow across five watersheds encompassing approximately 90 square miles. It will establish linkages between Cecil Webb WMA and Yucca Pens WMA.</p> <p>Project is expected to provide multiple benefits including flood control, habitat enhancement, recreation opportunities, water quality improvements and water recharge.</p> <p>The project is expected to provide timed releases of water to enhance hydroperiods, have limited O&amp;M costs and can be modified to meet future needs.</p> | <p>Land acquisition of 670 acres has been approved with closing expected in spring 2015. Funding for final design and construction of storage facility is required</p> <p>Funding for conceptual design is expected to be provided by SWFWMD and FDOT and to begin in winter 2014. Construction funding will be required.</p> <p>Funding for the design and construction of conveyance systems will be required.</p> <p>Project is supported by over a dozen state, federal and local agencies.</p>   | Long-term | Regional<br>Multiple | \$4,000,000<br>(acq)<br>\$10,000,000<br>(des. & const.) |                                     |                           |
|          |  | <b>NEAR-TERM REGIONAL PRIORITIES</b>  |   |           |                      |   |                                     |                           |
|          | Lake Hicpochee South Project                 | <p>The purpose of this project is to enhance the hydrology of Lake Hicpochee South by redirecting storm water through upland and wetland areas rather than a canal.</p> <p>Project is expected to provide multiple benefits including flood control, habitat enhancement, and water quality improvements.</p> <p>The project is expected to have O&amp;M costs associated with pumping operations.</p>  | <p>In 2008 a conceptual design report was completed that had a high implementation cost for the project. In 2013 a conceptual re-evaluation report was completed in cooperation with the Flaghole Drainage District and Hendry Hilliard Water Control District to refine portions of the 2008 report in order to integrate existing infrastructure where possible to maximize the cost-effectiveness of the project.</p> <p>Project requires funding for design and construction.</p> <p>Land is in public ownership. Will require collaboration with local 298 Districts to implement.</p> | Long-term | Regional<br>TBD      | \$4,500,000<br>(const.)                                 |                                     |                           |

|                  |  | <b>CONCEPTUAL REGIONAL PROJECTS NEEDING FURTHER DEVELOPMENT OR ADDITIONAL FEASIBILITY WORK</b>  |   |           |                        |   |   |         |
|------------------|--|---|---|-----------|------------------------|---|---|---------|
| CRE 128          | East Caloosahatchee Storage Project                          | Project includes constructing distributed reservoirs on 7,500 acres of private properties, with the potential to create 100,000 ac-ft of above ground storage.<br>Project could be designed to allow for dry season releases. It is expected to have O&M costs associated with pumping operations.  | Further study required to develop project(s). Assumes the acquisition of approximately 7,500 acres.   | Long-term | Regional<br>TBD        |   | 69 mt/yr TN<br>5.2 mt/yr TP<br>(CRWPP)    | 100,000 |
| CRE 128a         | Caloosahatchee Storage – Additional Project                  | Project creates 50,000 ac-ft of aboveground storage in Caloosahatchee River Watershed.<br>Project could be designed to allow for dry season releases. It is expected to have O&M costs associated with pumping operations.  | Further study required to develop project(s). Assumes the acquisition of approximately 3,500 acres.   | Long-term | Regional<br>TBD        |   | 58 mt/yr TN<br>4.3 mt/yr TP<br>(CRWPP)    | 50,000  |
| CRE 11           | Caloosahatchee Ecoscape Water Quality Treatment Area Project | Project consists of a constructed wetland designed for optimal removal of TN from the CRE. Conceptual project developed to reduce nutrient pollutant loading downstream. Strategy of this effort was to formulate both structural and non-structural features.  | Project was included in the Southwest Florida Comprehensive Watershed Plan (formerly Southwest Florida Feasibility Study), which is in the process of being completed; however, there has not been any additional design or funding work performed.   | Long-term | Regional<br>TBD        |   | 50.0 mt/yr TN<br>12.0 mt/yr TP<br>(CRWPP) |         |
| CRE-LO 41        | C-43 Distributed Reservoirs Project                          | Project involves construction of multiple storage reservoirs to capture excess runoff for use to meet both environmental flows to the CRE and agricultural demands.<br>Project could be designed to allow for dry season releases. It is expected to have O&M costs associated with pumping operations.   | Further study required to develop project(s). Assumes the acquisition of approximately 6,600 acres.   | Long-term | Regional<br>TBD        |   | 39.4 mt/yr TN<br>2.6 mt/yr TP<br>(CRWPP)  | 85,410  |
| CRE 01<br>CRE 02 | Recyclable Water Containment Areas Project                   | Project uses agricultural or other lands to provide temporary storage, remove nutrients, and treat agricultural stormwater runoff which will help reduce nutrient loading to the CRE. Involves the construction of earthen berms to retain up to two feet of water storage. Would remain operational approximately 5 years, then returned to agricultural production.<br>Project is expected to provide multiple benefits including water reuse and water recharge. It is expected to have O&M costs.   | Project was included in the Southwest Florida Comprehensive Watershed Plan (formerly Southwest Florida Feasibility Study), which is in the process of being completed.<br><br>Funding for design and construction will be required. Additionally, partnerships will be required to implement. | Long-term | Regional<br>TBD        |   | 67.5 mt/yr TN<br>14.3 mt/yr TP<br>(CRWPP) |         |
|                  | Lee-Charlotte County Border Area Hydrologic Improvement      | This project involves reconnecting and improving the hydrology of the area through the construction of a series of filter marshes and weirs within and adjacent to the FPL transmission line. The project will create a conveyance system that during the rainy season will function to connect multiple watersheds within the corridor. It will allow excess water from one watershed to flow to the next watershed via a series of filter marshes providing water treatment and storage before entering the CRE.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge. | A conceptual design study is required. It is unknown at this point if land acquisition will be required.<br><br>The project will require collaboration with FPL and multiple land owners. It is anticipated to take 15 years to fully implement, but could be constructed in phases.          | Long-term | Regional<br>Lee County | \$400,000<br>(feas.)<br>\$2,000,000<br>(design)<br>\$5,000,000<br>(acq.)<br>\$12,600,000<br>(cons.) |   |         |
|                  | ASR on Public Lands  | Development of Aquifer Storage and Recovery arrays on public lands to capture surplus water flow in watershed. Potential locations include BOMA property and Babcock Ranch Preserve.<br>It is expected to have O&M costs associated with pumping operations.  | Further study required to develop project(s).   | Long-term | Regional<br>TBD        |   |   |         |

|         |  |  |  |           |                                  |                     |  |  |
|---------|--|--|--|-----------|----------------------------------|---------------------|--|--|
|         | Carlos Waterway Conveyance   | A conceptual project to use an existing waterway owned by East County Water Control District to convey water from C-43 West Basin Storage Reservoir into the Caloosahatchee.<br>Project is expected to provide habitat enhancement, and water quality improvements.  | A conceptual design study is required.   | Long-term | Regional<br>TBD                  |                     |  |  |
|         |  | <b>REGIONAL RESTORATION PROJECTS</b>   |  |           |                                  |                     |  |  |
| CRE 150 | Tape Grass ( <i>Vallisneria americana</i> ) Plantings Upstream of S-79 Project | District study helps reestablish viable tape grass seed stock for future populations in the upper CRE. The goal is to create a viable tape grass seed stock in the upper CRE; test two genetic strains of South Florida tape grass for survival, growth, and flower and seed production for two years; and determine how long enclosures need to remain in place to ensure survival.   | In 2011, cages were monitored weekly in June and bimonthly in July and August; to date, cages are holding up well. The Lake Trafford plants/cages are showing significantly more growth at both sites compared to those in Lake Kennedy. In August, spread outside of the cages and new growth in the cages was observed at Site 2 for Lake Kennedy treatments. Funding for additional planting and monitoring was appropriated for FY14-15. | Near-term | Regional<br>SFWMD,<br>Lee County |                     |  |  |
|         | Oxbow Restoration  | Project involves the restoration of remnant oxbows within the Caloosahatchee River. Project would involve limited dredging of the former river channel and restoration/preservation of adjacent littoral vegetation. Approximately 40 oxbows have been identified for restoration.<br>Project is expected to provide multiple benefits including recreation, habitat enhancement, and water quality improvements.  | Several oxbows are publicly owned. Could involve collaboration with multiple public and private entities.<br>Project budget for Oxbow24 was \$500,000. Estimated nutrient removal cost was \$140/lbs TN, \$3,500/lbs TP  | Long-term | Regional<br>TBD                  | \$500,000 per oxbow |  |  |
|         | Tape Grass Plantings below S-79  | Involves the restoration and enhancement of +/-1,200 acres of historic submerged aquatic vegetation (tape grass) in the oligohaline littoral zones of the Caloosahatchee River below S-79. The project will involve the planting and establishment of between 16-20 large "founder colonies" in the upper estuary and tributaries to restore fish and wildlife habitat and serve as a seed bank for recovery of historic distribution and density of tape grass. | There is no local sponsor for this project. Project was submitted for RESTORE funding.   | Long-term | Regional<br>TBD                  | \$2,312,900         |  |  |

**Caloosahatchee River Watershed Projects  
LOCAL PROJECTS**

| CRWPP ID | Project/Activity  | Description  | Project Status  | Phase     | Category/ Agency        | Estimated Cost                  | Estimated Nutrient Removal (mt/yr)         | Estimated Storage (ac-ft) |
|----------|---|--|---|-----------|-------------------------|---------------------------------|--|---------------------------|
|          |   | <b>LOCAL PRIORITIES FOR THE NEAR TERM</b>  |   |           |                         |                                 |  |                           |
| CRE 142  | Harns Marsh Improvements – Phase III ( West Marsh) Project          | Project involves an existing 578-acre ECWCD stormwater treatment facility. Phase III includes designing the West Marsh (additional 202+/- acres) to expand the marsh treatment facility. This will reduce freshwater discharges to the Caloosahatchee River (via the Orange River) and provide water quality treatment.<br><br>Project is expected to provide multiple benefits including flood control, recreation, habitat enhancement, water quality improvements and water recharge. | All necessary lands have been acquired. Project design is currently underway.<br><br>The project involves collaboration with multiple agencies including FDOT as a potential source for construction funding.                       | Near-Term | Local<br><br>ECWCD      | \$6,000,000                     | 0.91 mt/yr TN<br>0.24 mt/yr TP<br>(agency) | 400-800                   |
| CRE 147  | Nalle Grade Stormwater Park Project                                 | Lee County project proposes to restore/modify an existing degraded marsh system and design a stormwater retention facility to minimize flooding in the Bayshore Creek Watershed.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.  | Project is in design and permitting. \$500,000 in Legislative funding was appropriated. Construction is scheduled to begin in 2016.   | Near-term | Local<br><br>Lee County | \$3,300,000<br>(design & cons.) | 0.54 mt/yr TN<br>0.14 mt/yr TP<br>(CRWPP)  |                           |
| CRE 139  | Ford Canal Filter Marsh (Ford Street Preserve) Project              | City of Fort Myers project creates a filter marsh to improve overall quality of storm water discharging into Billy Creek; marsh is intended to work collectively with other treatment areas along Billy Creek and its tributaries. Project creates a treatment marsh designed to divert and treat low flows from low-level rain events using a diversion weir.   | Phase 1 complete, Phase 2 awarded with construction to begin in August 2014 and Phase 3 is being permitted.   | Near-term | Local<br><br>Ft. Myers  | \$2,000,000                     | 0.54 mt/yr TN<br>0.21 mt/yr TP<br>(CRWPP)  |                           |
| CRE 140  | Fichter's Creek Restoration Project                                 | Project provides ecosystem restoration through hydrologic and water quality improvements in Fichter's Creek, and provides flood protection for neighboring areas; components include 3.2 acres of lakes, three dry detention areas (7.1 acres), culvert installation/ replacement, filter marsh creation, and berm work.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement and water recharge.  | No land acquisition is required. Project has been permitted; construction is planned to begin in FY16.  | Near-term | Local<br><br>Lee County | \$1,400,000<br>(const.)         | 0.09 mt/yr TN<br>0.02 mt/yr TP<br>(CRWPP)  | 6                         |
| CRE 30   | Aquifer Benefit and Storage for Orange River Basin (ABSORB) Project | Project involves increasing stormwater storage capacity and groundwater recharge in the Southwest area of Lehigh Acres by constructing 27 weirs.<br><br>Project is expected to provide multiple benefits including flood control, water quality improvements and water recharge.   | Project is designed and permitted. Scheduled to begin construction by the end of 2014.<br><br>Partial funding is in place (FDEP \$1.2m) and the rest is being worked on with an agreement from FDOT for the SR 82 widening project. | Near-term | Local<br><br>ECWCD      | \$2,400,000<br>(const.)         | 3.72 mt/yr TN<br>0.37 mt/yr TP<br>(agency) | 800-1,200                 |
| CRE 135  | Hickey Creek Canal Widening Project                                 | Project includes the canal widening and construction of littoral zones along three miles of Hickey Creek Canal.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water storage.  | No land acquisition is required. Project is designed and permitted. Construction is waiting on funding and a project source to take the fill material removed.  | Near-term | Local<br><br>ECWCD      |                                 | 0.2 mt/yr TN<br>0.05 mt/yr TP<br>(agency)  | 420                       |
| CRE 22   | Hendry Extension Canal Widening Project                             | Project provides additional water quantity storage within existing canal right-of-way to help provide more stormwater storage in the 5.5 mile section of Hendry Extension Canal.<br><br>Project is expected to provide multiple benefits including flood control and water recharge.   | Project permitted and designed, construction projected in FY2015. FDOT providing funding through SR82 expansion.  | Near-term | Local<br><br>ECWCD      | \$6,000,000<br>(const.)         | 0.36 mt/yr TN<br>0.1 mt/yr TP<br>(agency)  | 190                       |

|        |  |   |   |           |                        |                         |  |  |
|--------|--|---|---|-----------|------------------------|-------------------------|--|--|
| CRE 44 | Hydrologic Restoration of Bob Janes Preserve                       | Project will serve to restore the natural sheet flow and possibly impound water within the abandoned farm fields to allow aquifer recharge, reduce high flows in a manmade ditch (Lighter Canal) during the wet season.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.  | Phase I involving the restoration of former agricultural fields was completed in 2014. The second phase is awaiting construction funds. No land acquisition is required.  | Near-Term | Local<br>Lee County    | \$600,000<br>(const.)   |  |  |
|        | Hydrologic Restoration of Six Mile Cypress Slough Preserve - North | The historical site hydrology and ecosystem have been significantly altered. Water from portions of the preserve has been diverted north into the Orange River, rather than south into Six Mile Cypress Slough. Restoration of historic flows could benefit Six Mile Cypress Slough and reduce the amount of water flowing into the Orange River and ultimately the Caloosahatchee River.<br>Project is expected to provide multiple benefits including flood control, recreation, habitat enhancement, water quality improvements and water recharge.  | Phase I, the impoundment, is permitted and will undergo construction during 2014. Additional construction funds will be needed to complete the project phase. Phase II, the rehydration of the western cypress dome, is being permitted and will be constructed with financial help by the Florida Department of Transportation. Phase III, will require the design, permitting and construction of a flowway which will bring water to Phase 1 of the project. | Near-term | Local<br>Lee County    | \$1,000,000             |  |  |
| CRE 53 | Hydrologic Restoration of Caloosahatchee Creeks Preserve           | The project area is a former marsh that was disturbed when covered with fill during the dredging of the Caloosahatchee River in the 1950s. The project will cut a meandering stream channel through the spoil in the location near a historic channel and rehydrate former wetlands.<br>Project is expected to provide multiple benefits including habitat enhancement, water quality improvements and water recharge.  | No land acquisition is required. The project has been designed and permitted.   | Near-term | Local<br>Lee County    | \$650,000<br>(cons.)    |  |  |
|        | Hydrologic Restoration of Telegraph Creek Preserve                 | This project will help to restore the natural sheet flow from the 800-acre palmetto prairie and wet prairie/hydric flatwoods system into Telegraph Creek where ditches were installed by previous owners to help drain this portion of the preserve. Geowebbing and/or culverts will be installed along existing management trails that are eroding into the creek. The existing swale where the water formerly would have flowed to the creek will be graded and cleaned out. The washouts will be recontoured and plantings will be installed to reduce further soil erosion into the creek.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge. | No land acquisition is required. The project requires further design.   | Near-term | Local<br>Lee County    | \$500,000<br>(cons.)    |  |  |
|        | Ft. Myers Central Sewer Expansion                                  | Septic tank conversion to central sewer to reduce nutrient loading in the watershed and expand reclaimed water from 6 MGD to 11 MGD. The project area is located within the city limits east of I-75.   | The project is tentatively scheduled for FY 2016-2017 based on funding availability   | Near-Term | Local<br>Ft. Myers     | \$11,000,000            |  |  |
|        | Ranch Lakes Estates Central Sewer Project                          | Septic tank conversion to central sewer located at Ranch Lakes Estates in Moore Haven. Involves the construction of additional gravity sewer collection system in the Moore Haven downtown and Ranch Lakes Estates area adjacent to the Caloosahatchee River to homes now served by individual private old and failing septic systems.<br>This project will reduce nutrient loading to the Caloosahatchee Basin.  | The wastewater improvement project includes the preliminary engineering services, design, permitting and construction.  | Near-term | Local<br>Glades County | \$350,000               |  |  |
| CRE 44 | Jacks Branch/County Line Ditch                                     | Project involves improvement of water flow within Jacks Branch watershed and modification of the County Line Ditch by widening the ditch and providing weirs for increased water storage and treatment.<br>Project is expected to provide multiple benefits including flood control, water quality improvements and water recharge.   | All necessary land has been acquired. The project has been designed and permitted. Requires construction funding.<br><br>Could be constructed in conjunction with Babcock Ranch Preserve Project.   | Near-Term | Local<br>Hendry County | \$3,600,000<br>(const.) |  |  |

|         |   |  |   |           |                                   |   |  |       |
|---------|---|--|---|-----------|-----------------------------------|---|--|-------|
| CRE 121 | City of LaBelle Stormwater Master Plan Implementation     | Project includes stormwater conveyance and water quality storage improvements in the City of LaBelle.  | The C-5 portion of the city's 2004 Master Stormwater Plan was completed in 2010. These stormwater management improvements included retrofitting stormwater catch basins and adding vegetative swale treatment. Funding required to continue design and construction of additional projects. | Near-Term | Local<br>LaBelle                  |   | 34.8 mt/yr TN<br>5.8 mt/yr TP<br>(CRWPP)   |       |
| CRE 123 | North Ten Mile Canal Stormwater Treatment System Project  | Project provides stormwater storage and treatment for an urban and commercial area with the City of Ft. Myers. It is intended to minimize peak flows and enhance water quality within Manuel's Branch and Carrell Canal.   | FDEP permit is being reviewed for a modification. Project scheduled to begin in next five years   | Near-term | Local<br>Ft. Myers                | \$4,500,000   | 0.82 mt/yr TN<br>0.33 mt/yr TP<br>(CRWPP)  |       |
|         | Sunniland/Nine Mile Run Drainage Improvements             | Project involves the restoration of historical flows to Buckingham Trails Preserve. Consists of the rehydration of the preserve through the removal of manmade alterations to correct the natural sheetflow and hydrology.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement and water recharge.  | Requires land acquisition. Project design scheduled during FY14/15 with construction in FY15/16.  | Near-term | Local<br>Lee County               | \$50,000 (acq.)<br>\$100,000 (des.)<br>\$300,000 (con.) |  |       |
| CRE 64  | Yellow Fever Creek/Gator Slough Transfer Facility Project | Project involves the hydrologic restoration of the historical flows to the headwaters of Yellow Fever Creek. Project includes the construction of an interconnection facility between Gator Slough Canal and Yellow Fever Creek to transfer surface waters during high flow. Flows are currently intercepted by Gator Slough Canal and redirected to Matlacha Pass.  | Conceptual design is complete. Permitting to begin in FY15 pending further coordination between Lee County and City of Cape Coral.  | Near-term | Local<br>Lee County<br>Cape Coral | \$671,000 (design & cons.)                              | 0  | 0     |
|         | Billy Creek Restoration Dredging                          | Removal of exotic vegetation and dredging of Billys Creek.   | Project is permitted. Project to begin in FY2016.   | Near-term | Local<br>Ft. Myers                | \$680,000   |  |       |
|         | Moore Haven Canal Dredging                                | Deepening and widening of Moore Haven Canal. Will provide sediment reduction, an increase in wetland habitat, and water quality benefits to the Caloosahatchee River   | State and federal permits have been approved. Partially funded in FY13-14.  | Near-term | Local<br>Glades County            | \$12,000,000  |  |       |
|         |   | <b>LONG-TERM LOCAL PROJECTS</b>  |   |           |                                   |   |  |       |
| CRE 143 | Greenbriar Preserve Project                               | Project involves modifications within Greenbriar Swamp and to the connecting canal/swale system to increase surface water connectivity and storage within the swamp, thereby reducing freshwater discharge to the Caloosahatchee River via Hickey's Creek.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement and water recharge.  | Project is included in the ECWCD FY2014-FY2018 Capital Improvement Plan. Project requires further design work.  | Long-term | Local<br>ECWCD<br>Lee County      |   | 1.45 mt/yr TN<br>0.36 mt/yr TP<br>(agency) | 600   |
| CRE 144 | Section 10 Storage Project                                | Project includes modifying an existing mine pit to allow for additional surface water storage in the ECWCD Water Management System; also, includes improvements to the connecting canals, control structures, and a pump station.  | Requires land acquisition. Project requires further design work.  | Long-term | Local<br>ECWCD                    | \$6,500,000   | 1.63 mt/yr TN<br>0.41 mt/yr TP<br>(agency) | 1,200 |
| CRE 21  | Hendry County Storage Project                             | Project consists of the construction of shallow water storage facility to help reduce nutrient loading to the CRE.<br><br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.<br><br>The project is expected to have the capability of providing timed releases of water to the estuary. It will be expected to have O&M costs associated with pumping operations. | Project was included in the ECWCD FY2010-FY2014 Capital Improvement Plan. ECWCD has evaluated three sites for possible acquisition.<br><br>Funding will be required for land acquisition, design and construction.  | Long-term | Local<br>ECWCD                    |   | 2.72 mt/yr TN<br>0.68 mt/yr TP<br>(agency) |       |

|         |   |  |  |           |                                  |   |   |         |
|---------|---|--|--|-----------|----------------------------------|---|---|---------|
| CRE 44  | Spanish Creek Preserve Restoration  | Project involves the acquisition of agricultural lands to create shallow water storage and wetland flow-way to rehydrate the Ruby Daniels Preserve at Spanish Creek.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.  | Phase 1 involving the rehydration of a portion of Ruby Daniels Preserve was completed in 2014. Design and acquisition of approximately 640 acres land is required to construct the storage and complete rehydration of Spanish Creek.                    | Long-Term | Local<br>Lee County              | \$14,800,000<br>(acq. des. const.)                |   |         |
|         | Lehigh Wetland Restoration  | Undeveloped lots will be purchased to restore remnant wetlands through the construction of one weir. Project is approximately 710 acres located in the Greenbriar Swamp area.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.   | Funding needed to initiate the project.  | Long-term | Local<br>Multiple                | \$70,000,000<br>(acq. des. & const.)              | 0.34 mt/yr TN<br>0.10 mt/yr TP<br>(agency)                    | 1,500   |
| CRE 122 | Mirror Lakes Storage/Rehydration Project  | Multi-phase project intended to rehydrate Mirror Lakes (aka Halfway Pond), reduce peak flow discharges to the Orange River, and restore flows to the headwaters of the Estero River.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge.  | Phase I (rehydrate Mirror Lakes) completed October 2012 to include a pump station and approximately 1,000 acre-ft of storage. Phase II and III involves moving water south under SR 82, and is in the planning and preliminary design stage.             | Long-term | Local<br>ECWCD<br>FDOT<br>SFWMD  | Phase II: \$300,000<br>(const.)<br>Phase III: TBD | Phase II & III:<br>0.24 mt/yr TN<br>0.03 mt/yr TP<br>(agency) | 100-500 |
| CRE 77  | Cape Coral Canal Stormwater Recovery by Aquifer Storage and Recover (ASR) Project | Project uses ASR wells in Cape Coral to overcome water shortfall in the dry season and provide flood attenuation in the wet season.<br>Project is expected to provide multiple benefits including flood control, water quality improvements and water recharge.  | Three ASR wells were constructed in 2007; however, cycle testing has not started and construction of pumping stations and associated connections is not anticipated until 2015 due to budgetary constraints.   | Long-term | Local<br>Cape Coral              |   | 4.13 mt/yr TN<br>0.82 mt/yr TP<br>(CRWPP)                     |         |
|         | Stumper Jumper Ranch Land Acquisition   | Project involves the acquisition and restoration of 149 acres of disturbed land located within the Spanish Creek watershed in northeast Lee County.<br>Project is expected to provide multiple benefits including flood control, habitat enhancement, water quality improvements and water recharge  | Project design and acquisition required. Former Lee County Conservation 20/20 nomination.  | Long-term | Local<br>Lee County              | \$1,482,250<br>(acq.)                             |   |         |
| CRE 29  | Lehigh Acres Wastewater Treatment and Stormwater Retrofit Project                 | Project involves installing stormwater treatment features in Lehigh Acres, updating current stormwater management system, and converting high-density septic tanks to centralized wastewater treatment. Includes the conversion of 12,666 septic tank systems to central sewer.<br>Project is expected to provide multiple benefits including flood control and water quality improvements.<br>The project is expected to have O&M costs associated with the central sewer system. | Nearly 100 single family homes in Lehigh Acres have been connected to the centralized wastewater treatment plant since 2009.<br><br>Project requires funding to continue.  | Long-term | Local<br>Multiple                | \$197,238,350<br>(sewer component)                | 48.66- 87.59<br>mt/yr TN<br>(agency)                          |         |
| CRE 126 | Fort Myers-Cape Coral Reclaimed Water Interconnect Project                        | Project includes installing a 20-inch diameter transmission line from Fort Myers Treatment Plant to Cape Coral Reclamation Treatment Plant. This is intended to help prevent discharging 9 mgd treated water into the CRE.   | The feasibility study completed in 2010 found that constructing a disposal well was a less expensive near-term option; however, project is still desirable as a long-term option. Legislative funding for additional study was appropriated for FY14-15. | Long-term | Local<br>Cape Coral<br>Ft. Myers |   |   |         |
| CRE 69  | Cape Coral Wastewater Treatment and Stormwater Retrofit Project                   | City of Cape Coral utility expansion project to convert septic systems to gravity sewers and replace older stormwater inlets with newer inlets designed to assist stormwater management. Includes improvements to existing sewer system and incorporation of roadside swale into drainage system.<br>Project is expected to provide multiple benefits including water quality improvements, water reuse and water recharge.  | Project on-going. Next scheduled area is located in Northwest Sector outside of Caloosahatchee watershed.  | Long-term | Local<br>Cape Coral              |   | 27 mt/yr TN<br>5.4 mt/yr TP<br>(CRWPP)                        |         |

|         |   |   |   |           |                    |  |   |  |
|---------|---|---|---|-----------|--------------------|--|---|--|
| CRE 125 | Shoemaker-Zapato Canal Stormwater Treatment Project | Project includes installing weir/water control structures to increase channel storage and provide peak flow attenuation. It will enhance water quality and reduce erosion and siltation into Billy Creek. | Additional study required   | Long-term | Local<br>Ft. Myers |  | 0.54 mt/yr TN<br>0.14 mt/yr TP<br>(CRWPP) |  |
| CRE 141 | Winkler Canal Treatment Marsh Project               | Project creates a treatment marsh designed to divert and treat low flows from low-level rain events using a diversion weir.   | Project has been permitted but is on-hold pending funding for land acquisition. | Long-term | Local<br>Ft. Myers |  | 0.2 mt/yr TN<br>0.08 mt/yr TP<br>(CRWPP)  |  |

**Caloosahatchee River Watershed Projects  
ON-GOING PROGRAMS**

| CRWPP ID                            | Project/Activity  | Description   | Project Status  | Phase   | Category/<br>Agency                            | Estimated Cost                | Estimated Nutrient Removal (mt/yr) | Estimated Storage (ac-ft) |
|-------------------------------------|---|---|---|---------|--|-------------------------------|------------------------------------|---------------------------|
| CRE 149                             | Northern Everglades – Payment for Environmental Services (NE-PES) Program   | NE-PES solicitation is an innovative approach that allows cattle ranchers to deliver environmental services for water and nutrient retention. The goal is to establish relationships via contracts with private landowners to obtain water management services of water and nutrient retention to reduce flows and nutrient loads to Lake Okeechobee and the St. Lucie and Caloosahatchee rivers.   | There are currently three projects under contract to provide water retention service within the Caloosahatchee watershed. One of the projects (Mudge Ranch) is operational and two projects (Alico Ranch and Babcock Ranch) will be initiating construction in FY2015 | Ongoing | Regional<br>Dispersed Water Mgmt.<br><br>SFWMD | \$125.9 million over 11 years | n/a                                | 93,554                    |
| CRE 152                             | Dispersed Water Management Water Farming Assessment   | Utilize fallow/out-of-production citrus lands to store water and attenuate nutrients. To determine the overall feasibility of the water farming concept, information with respect to environmental benefits gained compared to the cost estimates associated with on-site construction, infrastructure improvements, environmental assessments, and facility maintenance needs to be evaluated.   | The District entered into a cooperative agreement with Gulf Citrus Growers Association to assess the feasibility of water farming. The feasibility study was completed in December 2013. Funding for further implementation is not available at this time.            | Ongoing | Regional<br>Dispersed Water Mgmt.<br><br>SFWMD | TBD                           |                                    |                           |
| CRE 153                             | Dispersed Water Management Interim Sites  | Parcels scheduled to become regional restoration projects present an opportunity to provide water retention through interim, low-cost alterations to the existing surface water management systems. These parcels would then provide an interim role of contributing to the watershed restoration effort while the final designs are completed and approved. If the public lands are being leased, then water management strategies will be jointly developed with the lessees to reduce discharges while not adversely affecting flood protection (including adjacent properties) and water quality. | Interim lands in the Caloosahatchee Watershed include BOMA and C-43 reservoir site.   | Ongoing | Regional<br>Dispersed Water Mgmt.<br><br>SFWMD | \$700,000                     |                                    | 1,316                     |
| CRE-LO 03<br>CRE-LO 05<br>CRE-LO 63 | Urban BMPs: Urban Fertilizer Rule [Lake Okeechobee Estuary and Recovery (LOER)] & Florida Yards and Neighborhoods Program | The Urban Fertilizer Rule is an FDACS rule that regulates the content of phosphorus and nitrogen in urban turf fertilizers to improve water quality. The Florida Yards and Neighbors Program provides education to citizens by promoting land use designs to minimize pesticides, fertilizers, and irrigation water.  | Since 2009, the UF/IFAS Florida Yards and Neighborhood Program has expanded from a homeowner approach to cover a broader audience (e.g., builders, developers, architects).   | Ongoing | Regional<br>Source Control<br><br>Multiple     |                               |                                    |                           |

|                 |   |  |  |         |   |  |  |  |
|-----------------|---|--|--|---------|---|--|--|--|
| CRE-LO 01,02,49 | Agricultural BMPs – Owner Implemented, Funded Cost-Share, and Cost-Share Future Funding | Implements agricultural BMPs and water quality improvement projects to reduce the discharge of nutrients from the watershed.   | Total agricultural acreage in the Caloosahatchee Watershed is approximately 476,568 acres. Approximately 71 percent of this acreage is enrolled in owner implemented BMPs and have cost-share type BMPs in place. Goal is 100% coverage  | Ongoing | Regional Source Control<br><br>DACS         |  |  |  |
| CRE-LO 09       | Coastal & Estuarine Land Conservation Program (CELCP)                                   | Established in 2002 by NOAA, CELCP protects important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that may be converted from their natural or recreational state to other uses (CELCP Final Guidelines, 2003). In Florida, CELCP is coordinated through FDEP's Coastal Management Program. | The primary purpose of the program is to acquire property in coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from a natural or recreational state to other uses. The program provides up to \$3 million dollars for each eligible project. | Ongoing | Regional DEP                                |  |  |  |
| CRE-LO 91       | Farm and Ranchland Partnerships   | There are two USDA-NRCS farm and ranchland partnership programs: Farm and Ranchlands Protection Program, and Wetlands Reserve Program (WRP). Under these programs, landowners sell development rights to land and place it in a conservation easement that permanently maintains land as agriculture and open space.   | The District executed a Memorandum of Understanding in October 2010 to assist USDA-NRCS by providing technical assistance in implementing their WRP projects.  | Ongoing | Regional Dispersed Water Mgmt.<br><br>SFWMD |  |  |  |
| CRE-LO 63       | Wastewater & Stormwater Master Plans  | Master Plans outline implementing urban stormwater retrofit or wastewater projects to achieve additional nutrient reductions and water storage basin-wide by working with entities responsible for wastewater/stormwater programs in the service area.   | See the CRWPP Construction Project for the implementation status of urban stormwater retrofits and wastewater projects.  | Ongoing | Local Source Control                        |  |  |  |

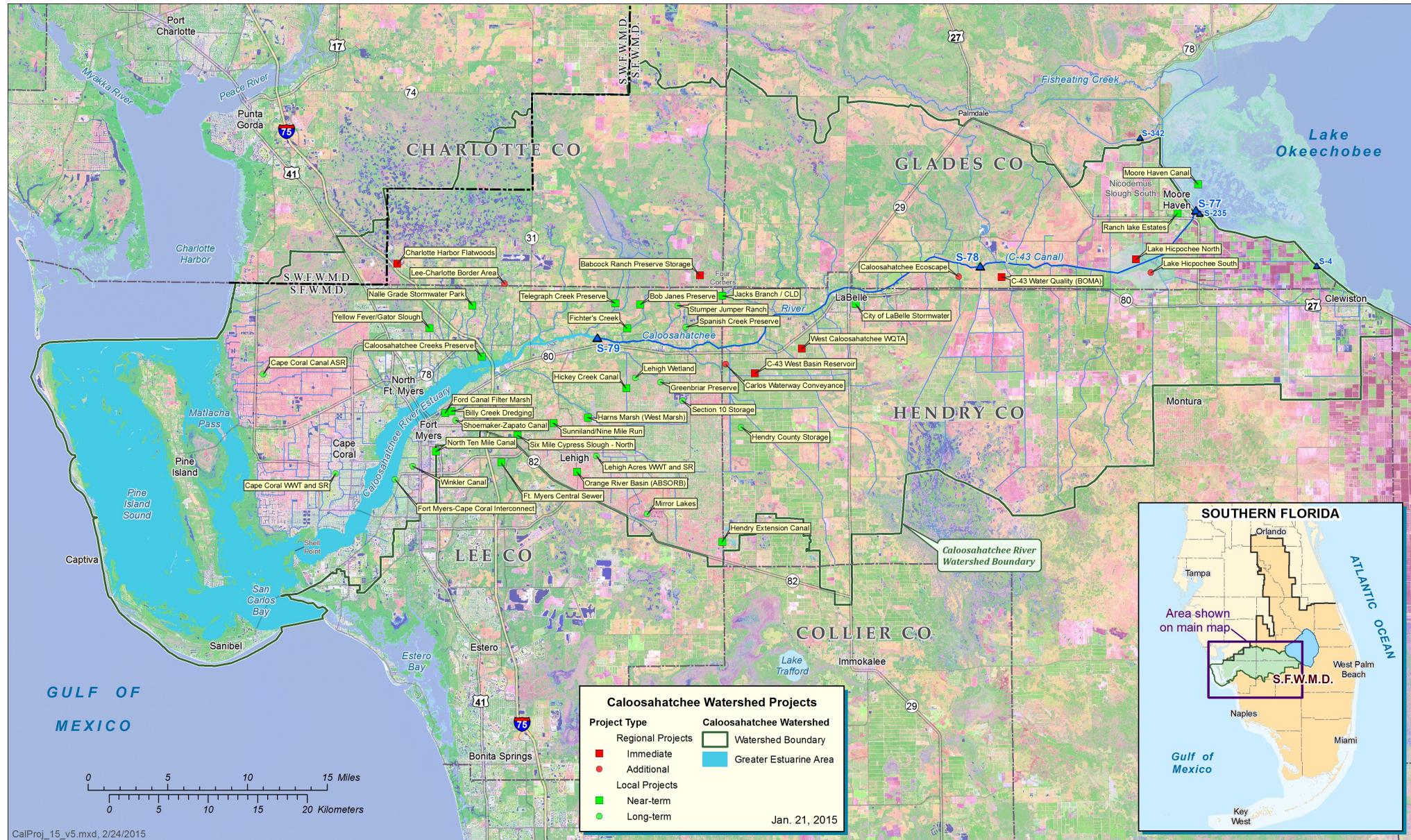
**APPENDIX B**  
**Criteria**

**DESCRIPTIVE EVALUATION CRITERIA FOR POTENTIAL PROJECTS**

| <b>CRITERIA</b>                            | <b>RATING</b> | <b>SUB-CRITERIA</b>  | <b>FURTHER DESCRIPTION</b>   |
|--|---------------|--|--|
| <b>Nutrient removal or reduction</b>       | H, M, L       | <ul style="list-style-type: none"> <li>• Nitrogen removal</li> <li>• Phosphorus removal</li> </ul>   | <ul style="list-style-type: none"> <li>• What is the estimated nitrogen and phosphorus reduction level expected?</li> <li>• What are the pounds removed per dollar?</li> </ul>   |
| <b>Water Storage</b>                       | H, M, L       |  | <ul style="list-style-type: none"> <li>• What is the acre-feet of storage expected?</li> <li>• What are the acre-feet stored per dollar?</li> </ul>  |
| <b>Operational distribution and timing</b> | H, M, L       |  | <ul style="list-style-type: none"> <li>• Does the project allow for managed storage and release of waters at needed time?</li> </ul>   |
| <b>Linkages</b>                            | H, M, L       | <ul style="list-style-type: none"> <li>• Connects to and enhances other projects</li> </ul>  | <ul style="list-style-type: none"> <li>• Does the project connect to some other project(s) in terms of cost efficiencies, joint gains, increased total benefit?</li> </ul>   |
| <b>Implementability</b>                    | H, M, L       | <ul style="list-style-type: none"> <li>• Control of land</li> <li>• Level of Design</li> <li>• Level of review</li> <li>• In an existing plan</li> <li>• Identified sources and level of funding</li> <li>• Matching or leveraged funds</li> <li>• Barriers or challenges</li> <li>• Collaboration required</li> <li>• Barriers or challenges</li> </ul> | <ul style="list-style-type: none"> <li>• Is the land for a project already purchased and/or under the control of a participating entity?</li> <li>• Is the project designed versus only conceptual?</li> <li>• Has the project already been vetted by various agencies?</li> <li>• Has the project already been listed in an existing plan?</li> <li>• Have specific sources of funding been identified (though not secured) for this project?</li> <li>• Can funding match or leverage other funding sources?</li> <li>• Are the identified sources of funding sufficient to cover the entire project cost?</li> <li>• Does the project require extensive collaboration across entities?</li> </ul> |
| <b>Regional Impact</b>                     | H, M, L       |  | <ul style="list-style-type: none"> <li>• Does the project have a regional versus only local impact?</li> </ul>   |
| <b>Multiple Benefits</b>                   | H, M, L       | <ul style="list-style-type: none"> <li>• Recreation</li> <li>• Habitat</li> <li>• Flood control</li> <li>• Water reuse</li> <li>• Water recharge</li> <li>• Open space</li> <li>• Targeted at impaired waters</li> </ul>   | <ul style="list-style-type: none"> <li>• Does the project provide multiple benefits in addition to water quality/quantity?</li> <li>• If so, what and how much?</li> </ul>   |
| <b>Sustainability</b>                      | H, M, L       | <ul style="list-style-type: none"> <li>• O&amp;M costs</li> <li>• Permanence or engineered life</li> <li>• Adaptability</li> </ul>   | <ul style="list-style-type: none"> <li>• Are there on-going operations and maintenance costs and are they clearly fundable or funded?</li> <li>• Is the action permanent or long-term or is it for a specified, narrower period of time?</li> <li>• Can the project adapt or be adapted to changing circumstances?</li> </ul>  |



Proposed projects:



CalProj\_15\_v5.mxd, 2/24/2015

## APPENDIX D

### Listing of Studies and Background Documents

Below is a listing of relevant studies and background documents cited most frequently by interviewees during the Caloosahatchee River Visioning Process as of August 2013, followed by a brief description of each. In addition, there are numerous local, NGO and university data sources available to support a Visioning Process. Interviewees broadly called for the process to create an on-line repository that provides a compendium of all relevant literature and/or links to all those materials. The list below is not intended to be exhaustive. Please also note certain kinds of materials may be protected by copyright or other intellectual property constraints and could limit what may be posted on line.

#### ***Southwest Florida Feasibility Study***

The Southwest Florida Feasibility Study is a joint effort between the U.S. Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD). The study is being used to set objectives for and develop a Comprehensive Watershed Master Plan. The study was recommended by the Yellow Book (CERP) as a comprehensive Watershed study. Specific project purposes include: Health of Aquatic Ecosystems, Water Flows, Water Quality (including appropriate pollution reduction targets), Water Supply, Flood Damage Reduction, Wildlife and Biological Diversity, Natural Habitat and Recreational Opportunity. The Plan's name is the Southwest Florida Comprehensive Watershed Plan.

#### ***Caloosahatchee River Watershed Protection Plan***

The Caloosahatchee River Watershed Protection Plan was developed by the SFWMD, the Florida Department of Environmental Protection (FDEP) and the Florida Department of Agriculture and Consumer Services (FDACS) in cooperation with other affected counties and municipalities – along with a diversity of other stakeholder and public input in response to the Northern Everglades and Estuaries Protection Act (373.4595 F. S.). The Plan identifies the best combination of Watershed storage and water quality projects needed to help improve the quality, timing and distribution of water in the natural ecosystem. The original plan was published in 2009 and updated in 2011. The plan can be found at: [www.sfwmd.gov/northerneverglades](http://www.sfwmd.gov/northerneverglades).

#### ***Caloosahatchee Water Management Plan***

The Caloosahatchee Water Management Plan (CWMP) is considered a subset of two of the four regional planning areas within the SFWMD Lower East Coast and Lower West Coast areas. The CWMP is the product of a public process, which relied heavily on the Caloosahatchee Advisory Committee (CAC). The planning effort provided a forum to weigh projected water demands against available supplies and to discuss potential solutions to identified shortfalls. Five components (regional reservoirs, Aquifer Storage and Recovery (ASRs), backpumping, distributed small-scale reservoirs, and water harvesting) were evaluated and combinations of the components were tested as alternatives.

#### ***Caloosahatchee Estuary Basin Management Action Plan (BMAP)***

In December 2009, FDEP adopted the Caloosahatchee Estuary TMDL for total nitrogen (TN), which has been linked to high chlorophyll-*a* (chl *a*) concentrations in the Caloosahatchee River and Estuary downstream of the Franklin Lock and Dam (Control Structure S-79). The TMDL

accounts for the total load at the estuary inclusive of loads from the upstream freshwater portions of the Caloosahatchee River as well as Lake Okeechobee and requires a 23% reduction in this total TN load. The purpose of the BMAP is to address total nitrogen (TN) load reductions in the portion of the Watershed below S-79 that drains to the Caloosahatchee Estuary.

### ***Lower West Coast Water Supply Plan***

The goal of the water supply planning process is to determine the region's water needs and develop sound, workable solutions for those needs. The 2012 Lower West Coast Water Supply Plan Update focuses on other water supply sources, such as reverse osmosis to treat brackish groundwater, reclaimed water, storage options, seasonal surface water and water conservation to address future demands.

### ***Caloosahatchee River (C-43) West Basin Storage Reservoir Project Final Integrated Project Implementation Report and Final Environmental Impact Statement***

This report documents studies for the Caloosahatchee River (C-43) West Basin Storage Reservoir project, in accordance with the requirements of Section 601(d) of the Water Resources Development Act of 2000 (WRDA 2000) and recommends authorization of this project. This Project addresses the need to restore the ecosystem function in the Caloosahatchee Estuary by reducing the number and severity of events where harmful amounts of freshwater from basin runoff and Lake Okeechobee releases are discharged into the estuary. The project also helps to maintain a desirable minimum flow of fresh water to the estuary during dry periods.

### ***Charlotte Harbor National Estuary Program (CHNEP) Comprehensive Conservation and Management Plan (CCMP)***

The CHNEP Comprehensive Conservation and Management Plan (CCMP) identifies Priority Problems and Quantifiable Objectives needed to protect and restore the natural resources throughout the CHNEP study area. The four Priority Problems include: water quality degradation, hydrologic alterations, fish and wildlife habitat loss and stewardship gaps. The CCMP includes a series of graphic Vision maps, quantifiable objectives, priority actions and many support documents.

### ***CHNEP Oyster Habitat Restoration Plan***

The Charlotte Harbor National Estuary Program (CHNEP) Oyster Habitat Restoration Plan is the product of a partnership between the CHNEP and The Nature Conservancy (TNC). The purpose of the Plan is to provide a technically sound, consensus-based approach for identifying oyster habitat restoration goals, methods and partnerships for the estuaries within the CHNEP. The Southwest Florida Oyster Working Group (SWFOWG), a diverse group representing local stakeholders, was convened to assist in the development of this plan. The plan provides the guidelines for native oyster habitat restoration within the CHNEP study area using a regional partnership approach.

Additional references that contain pertinent information and historical context (submitted by interviewees following the interview process) include the following:

- *Landscapes and Hydrology of the Predrainage Everglades* by McVoy, C. W., W. P. Said, J. Obeysekara, J. A. VanArman, and T. W. Dreschel. 2011.

A group of scientists at the South Florida Water Management District have united in an effort to establish a benchmark from which to measure Everglades restoration success. Using survey notes, historical maps, photos, and firsthand descriptions, they have reconstructed a vivid ecological--and hydrological--picture of the Everglades of the 1800s, before drainage of the swamp drastically altered the landscape.

- FGCU Library Collection of Caloosahatchee Documents available at the following link: <http://fgcu.catalog.fcla.edu/gc.jsp?fl=ba&st=Caloosahatchee+documents+collection&ix=kw>
- Art Marshall Study 1950-60s
- Biological Investigations of Caloosahatchee Estuary Gunter & Hall, 1962
- NOAA Distribution and Abundance of Fishes and Invertebrates in Gulf of Mexico Estuaries Volume I: Data Summaries, 1992
- NOAA Distribution and Abundance Fisheries and Invertebrates 1997
- Chamberlin & Doering studies, 1997-1999
  - Freshwater inflow to the Caloosahatchee estuary and the resource based method for evaluation
  - Preliminary estimate of optimum freshwater inflow to the Caloosahatchee Estuary: A resource based approach, 1998
  - Using Submerged Aquatic Vegetation to Establish Minimum and Maximum Freshwater Inflows to the Caloosahatchee Estuary, Florida, 2002
- SFWMD 2000. Draft technical documentation to support development of minimum flows and levels for the Caloosahatchee River and Estuary. SFWMD Water Supply Department.
- SFWMD 2003. Technical documentation to support development of minimum flows and levels for the Caloosahatchee River and Estuary. Draft 2003 Status Update Report. SFWMD Southern District Research Department and Water Supply Department.
- SFWMD 2003. Technical documentation to support development of minimum flows and levels for the Caloosahatchee River and Estuary. Appendices. SFWMD Southern District Research Department and Water Supply Department.
- Caloosahatchee River/estuary Nutrient Issues document, SFWMD, 2005
- Habitat Use of *Vallisneria americana* Beds in the Caloosahatchee River: Final Report, SFWMD, 2004

- SCCF Methods Manual and Monitoring Results for *Vallisneria americana* Restoration in Southwest Florida, 2008
- SCCF Caloosahatchee and Estuary Condition Report
- FWC Report Relationships Between Freshwater Inflows And Fish Populations In the Caloosahatchee River Estuary, Florida, P.W., Stevens et al, 2008
- Mainstem and Backwater Fish Assemblages in the Tidal Caloosahatchee River: Implications for Freshwater Inflow Studies Stevens et al, 2010
- Seasonal Freshwater inflow to the Caloosahatchee Estuary Greg Tolley, 2010
- Caloosahatchee River (C-43) West Basin Storage Reservoir PIR
- Caloosahatchee Tidal TMDL 2009
- Caloosahatchee Tidal Basin Management Action Plan 2012
- Caloosahatchee Tributary TMDL 2013
- Lower West Coast Water Supply Plan 2012
- The Responses of turbidity, CDOM, benthic microalgae, phytoplankton and zooplankton to variation in seasonal freshwater inflow to the Caloosahatchee Estuary by Tolley, G.S., et al. 2010
- Charlotte Harbor National Estuary Program 2006. Lower Charlotte Harbor Reconnaissance Report. SFWMD.
- Lower Charlotte Harbor SWIM Report (2008)

**APPENDIX E**  
**Interagency Meeting and Community Forum Summaries**

Page intentionally blank. Discussion summaries provided on subsequent pages.

## **Caloosahatchee River Community Forum Interagency Coordination Meeting Summary**

April 17 2014  
Lower West Coast Service Center  
2301 McGregor Boulevard  
Fort Myers, FL 33901

**Attendees:** A list of meeting attendees can be found in Appendix A.

### **I. Overview**

This document summarizes the first interagency coordination meeting held between the key government parties involved in implementation efforts to improve the Caloosahatchee River's health related to both water quality and quantity. This meeting served primarily to introduce the issues and each agency's work as related to the Caloosahatchee watershed as well as begin discussions about prioritization criteria for projects.

### **II. Action Items**

*For the Consensus Building Institute:*

- Revise meeting protocols given comments.
- Revise the draft evaluation criteria.
- Develop draft agenda for the stakeholder workshop.
- Work with SFWMD and other participants to develop a process for involving policy makers in the project prioritization and review process.
- Create draft meeting summary of April 17 interagency meeting.
- Create draft agenda for May interagency meeting.
- Create draft meeting notice and agenda for June stakeholder forum.
- Review stakeholder list for outreach purposes.

*For the South Florida Water Management District:*

- Coordinate assembly of the joint project list (descriptive only) from the agencies present at the meeting.
- Coordinate logistics for June stakeholder forum (setting date, invitations, public notice, etc.).
- Create list of potential funding sources for implementation of projects.
- Establish website for Caloosahatchee River coordination process.

The next interagency meeting will be held on Friday, May 16, from 9:30 am to 12:30 pm.

### **III. Introductions and Purpose of the Effort**

After participants introduced themselves, Mr. Dan DeLisi of the South Florida Water Management District (SFWMD) welcomed participants and provided background information

about the effort. He explained that the current endeavor to bring together different agencies came out of an effort to develop a common vision as part of the development of the Lower West Coast Water Supply Plan in order to secure funding from the State and other sources. He explained that stakeholders suggested that the Water Management District consider the full slate of projects to improve the watershed, how to prioritize them, and how to pool the resources needed to implement the prioritized projects. He also noted that different stakeholders have articulated a variety of different messages around management of the Caloosahatchee River watershed, and that it would be helpful to develop a common message to move forward with. Mr. DeLisi also introduced Patrick Field from the Consensus Building Institute (CBI), and spoke about why it would be important to have CBI's help with facilitating the current process.<sup>1</sup>

#### **IV. Review of Scope, Process Guidelines, and Timeline**

Mr. Field, the facilitator, reviewed the agenda for the day's meeting, the draft Process Guidelines developed for the process, and the timeline for the process. Participants provided feedback and CBI will revise these documents accordingly. Participants will finalize the document at the next interagency meeting.

#### **V. Overview of the Watershed Protection Plan (WPP): current status, key project status, future plans**

Ms. Lesley Bertolotti, South Florida Water Management District (FWMD), presented an overview of the Caloosahatchee River Watershed Protection Plan. She explained that, in 2007, the Northern Everglades and Estuaries Protection Program (NEEPP) was authorized under Section 373.4595, Florida Statutes (F.S.), in response to legislative findings that the Lake Okeechobee, Caloosahatchee River, and St. Lucie River watersheds are critical water resources that have been and continue to be adversely affected from changes to hydrology and water quality. The NEEPP legislation specifically called for the development of the three northern watershed protection plans: Lake Okeechobee, St. Lucie, and the Caloosahatchee.

Ms. Bertolotti explained that the Caloosahatchee River Watershed Protection Plan aims to minimize undesirable flows to the estuary and improve the quality of water delivered to the estuary, through implementation of the three major elements specified by the NEEPP legislation:

- *Watershed Construction Project:* This component identifies water quality and storage projects to improve hydrology, water quality, and aquatic habitats within the watershed. It includes regional, sub-regional, and local scale water quality and quantity projects [e.g., reservoirs, Stormwater Treatment Areas (STAs), chemical treatment, and local stormwater projects]. Ms. Bertolotti noted that projects at various stages of implementation are included in the Plan and that the projects were not prioritized.

---

<sup>1</sup> The Consensus Building Institute (CBI) is a non-profit institution that works to improve the way leaders use negotiations to make organizational decisions, achieve agreements, and manage multiparty conflicts and planning efforts ([www.cbuilding.org](http://www.cbuilding.org)).

- *Watershed Source Control Program:* This program is a multi-faceted approach to reducing pollutant loads by improving the management of pollutant sources within the watershed. It comprises source control programs being implemented by the coordinating agencies including BMPs, on-site treatment technologies, stormwater and wastewater infrastructure upgrades and master planning, and regulatory programs focused on water quality and quantity.
- *Watershed Research and Water Quality Monitoring Program:* This program is intended to assess the plans, programs, and other responsibilities created by the Watershed Protection Plan. The program will also conduct an assessment of the water volumes and timing from the Lake Okeechobee and Caloosahatchee River watersheds and their relative contributions to the estuary. The primary purpose of this component is to track progress toward achieving the water quality and storage targets.

The South Florida Water Management District, the Florida Department of Environmental Protection, and the Florida Department of Agriculture and Consumer Services, collectively identified in the legislation as the coordinating agencies, developed the Watershed Protection Program in 2008 with extensive stakeholder input. The plan was released in January 2009 and an updated version was released in 2012. SFWMD is currently working on an updated version of the Plan, which will be released in 2015. The 2015 version of the Plan will be the first version to take the Department of Environmental Protection's Basin Management Action Plan (BMAP) into account.

In response to Ms. Bertolotti's comments, a meeting participant inquired whether updated TMDLs (prescribed total maximum daily load levels) that are currently being developed for the freshwater section of the Caloosahatchee River will be taken into account in the updated 2015 Watershed Protection Plan. A DEP representative noted that the Department is hoping to release those updated TMDLs in July or August, 2014. In response, a SFWMD representative stated that the timing should work such that the TMDLs could be incorporated into the 2015 update of the Watershed Protection Plan.

#### **VI. Overview of the Basin Management Action Plan (BMAP): current status, key project status, future plans**

Ms. Beth Alvi and Ms. Kimberleigh Dinkins, of the Florida Department of Environmental Protection (FDEP), presented an overview of the Basin Management Action Plan (BMAP) for the Caloosahatchee River. They stated that, in August 2009, FDEP adopted the Caloosahatchee Estuary TMDL for total nitrogen (TN). The TMDL accounts for the total load at the estuary, inclusive of loads from the upstream freshwater portions of the Caloosahatchee River as well as Lake Okeechobee, and requires a 23% reduction in this total TN load. Ms. Alvi and Ms. Dinkins noted that the majority of the loading to the impaired water bodies comes from sources upstream of the estuarine portion of the river. As such, the Caloosahatchee BMAP follows a phased approach that allows for the implementation of projects designed to achieve incremental reductions, while simultaneously monitoring and conducting studies to better understand the water quality dynamics (sources and response variables) in the watershed. The projects and other activities in the current BMAP are estimated to achieve TN reductions of

148,000 pounds per year by the end of the phase. During this time, FDEP anticipates amending the TMDL to reflect updated modeling. The next phase of the BMAP will begin in 2017.

Following the comments from Ms. Alvi and Ms. Dinkins, participants discussed the following issues:

In response to a question about new and innovative technologies to deal with nitrogen loads, FDEP representatives stated that the Department has a process in place to evaluate new technologies and is currently exploring a couple of these. A SFWMD representative added that the District is looking at bioassays and mesocosms at the Boma site through the C43 water quality treatment and testing project. Lee County voiced their support of this project and moving components forward.

In response to a question about whether different parties can be required to comply with the terms of the BMAP, FDEP representatives explained that any projects identified in the BMAP are required commitments and have to be completed within timeframe of the BMAP. In the BMAP for the estuarine portion of the Caloosahatchee Basin, FDEP was able to calculate relative contributions to total nitrogen loads by different parties, and so each party is required to reduce its respective load contribution within the timeframe specified in the BMAP. Depending on the land use and land ownership, the responsible parties could be different local or state government bodies, agricultural interests, or others. The FDEP representative also explained that, while the BMAP primarily deals with water quality issues, sometimes projects under the BMAP also involve work around water quantity since quality and quantity issues are often closely interrelated.

In response to questions about how FDEP responds to situations of noncompliance with BMAP requirements, a FDEP representative explained that there are some situations in which local governments, agricultural interests, or other responsible parties have not complied with the terms of the BMAP. In these cases, FDEP sends out Letters of Noncompliance, which usually encourage people to take action. Future BMAPs will also incorporate interim milestones so that FDEP can better track responsible parties' progress. FDEP also does have the option to levy monetary penalties for noncompliance on municipalities that have MS4 systems (Municipal Separate Storm Sewer Systems), but the Department generally prefers to work with local governments to help them come into compliance with the BMAP rather than levying penalties.

Finally, in response to a question about funds that FDEP would have available for cost sharing on TMDL projects, a FDEP representative said that the Department would have between \$5 million and \$9 million from the state legislature, as well as appropriations. In addition, the Department would have \$6 million for 319 grants.

## **VII. Overview of the Agricultural Best Management Practices (BMP's): current status, key project status, future plans**

Ms. Bonnie Wolff-Pelaez, of the Florida Department of Agriculture and Consumer Services (FDACS), presented an overview of the Department's Best Management Practices (BMPs) and

work to support farmers. She began by stating that the Department works with agricultural producers to help them get involved with the Department's BMP program. The BMPs vary by land use, with every type of agriculture required to justify which nutrients are used. Farmers are given a timeframe to implement the best management practices and FDACS has people who check on farmers' compliance with nutrient use plans.

Ms. Wolff-Pelaez explained that FDACS' best management practices are comprised of two groups: nutrient management and record keeping, and irrigation management and record keeping. She showed graphs and diagrams illustrating the greater consistency of irrigation and decrease in overall water and diesel used to irrigate crops using soil moisture probes that are one of the Department's BMP technologies. She also highlighted the following structural best management practices being promoted by FDACS: alternative livestock water systems, interior ranch fencing off of water bodies, sediment and erosion control measures, structures for water control, chemigation/fertigation systems, variable rate technology / precision agriculture, and weather stations.

Ms. Wolff-Pelaez also spoke about the Department of Agriculture and Consumer Services' enrollment practices and strategy in working with farmers. She recounted that the majority of land in Hendry County is enrolled in the BMP program and that the Department would like to get Lee County enrolled and participating in the BMP program. When agricultural producers enroll in the Department's BMP program, they sign a Notice of Intent to implement a suite of prescriptive BMPs that are laid out in a manual for each type of land use. Once they enroll, The Department strives to build a long-term relationship and help them accomplish other goals related to managing their properties, such as implementing water retention projects. Ms. Wolff-Pelaez noted that, since one of the big issues in the Northern Everglades district is water storage, the Department will assist farmers in financing and securing cost-share for storage systems from FDACS and from other agencies. In addition, FDACS can help direct farmers to the appropriate government agencies and other parties for securing easements and other available resources. She closed by noting that the Department also receives phone calls from county and municipal governments around better managing land and other resources.

Following Ms. Wolff-Pelaez' presentation, participants discussed the following issues. In response to a question about which BMPs are subject to the Department's timeframes for compliance, a FDACS representative clarified that the Department only institutes timeframes for structural BMPs. She added that FDACS has a statewide BMP manual for citrus, is currently updating its manual for row crops, and is developing a manual for nurseries. The manuals are updated periodically to incorporate the latest science and the Department works to make sure that agriculturalists are aware of the manuals.

In response to questions about monitoring, FDACS representatives explained that, while FDACS does not currently conduct any monitoring itself, the Department does financially support monitoring conducted by the US Geological Survey (USGS) and has conducted its own monitoring in the past. They stated that, if farmers do not sign a Notice of Intent to participate in FDACS' BMP programs, they can be forced to comply with regulatory programs; currently a

regulatory regime is in place in the Lake Okeechobee watershed but needs to be expanded to the St. Lucie River and Caloosahatchee River watersheds. In response to a question about ensuring compliance, a FDACS representative explained that farmers are required to provide soil samples and plant tissue samples to FDACS.

Participants also asked questions about the demand for FDACS services and how the Department screens potential participants in its BMP programs. FDACS representatives explained that the Department's services are offered on a first come, first served basis, with the Department always trying to figure out how to offer its services to the large number of farmers that seek its assistance. They also explained that FDACS does not enroll agricultural operations that are too small in its programs because they are unable to carry out the prescribed best management practices. While there are no strict written guidelines as per appropriate minimum sizes, crop and livestock operations that are smaller than 100 acres, or citrus or nursery operations that are smaller than 20 or 30 acres, are generally too small to comply with the BMPs.

#### **VIII. Overview of Lee County's Local Water Quality and Storage Plans: current status, key project status, future plans**

Mr. Roland Ottolini, Lee County, presented an overview of the County's projects relating to water quality and storage. Mr. Ottolini listed the following projects that Lee County has completed:

- Treating the Powell Creek watershed also results in improvements for the Caloosahatchee River, since the Creek is a tributary of the River.
- Treating the Popash Creek Preserve, which is nestled between two mobile home parks that were constructed before best management practices had been introduced.
- Taking a series of measures to attenuate water and improve water quality in the Powell Creek bypass.
- Silt removal project in Powell Creek.
- Park staff performed a hydrological retrofit of Caloosahatchee Creek Preserve.

Lee County is also experimenting with different technologies, such as ultraviolet and carbon technologies, in Lakes Park. While initial results are promising, these technologies can be very expensive to implement and are untested on a large scale.

Mr. Ottolini listed the following projects that Lee County is considering for the future:

- Using gravity feed and pump storage to filtrate water using sediment in a county park.
- Considering options for dealing with failing septic systems in Paloma Park, a low-income subdivision in North Fort Myers.
- Provide hydrological restoration at Daniel's Preserve, which has been severed from the watershed due to historic farming practices. This is a small segment of a larger project that the County is trying to do in the Four Corners region, for which it is asking for funds from the state legislature.
- Considering options to restore hydrology, improve water quality, and attenuate flows at

Prairie Pines.

- Providing hydrological improvements at Sunniland/Nine Mile Run on the Florida Gulf Coast University Campus. The project area discharges to the Orange River.
- Shifting water that historically went south to Estero Basin into the North 6-Mile Cypress Basin in order to restore partial flows to the latter basin in order to reduce total flows.
- Providing for attenuation of water flows and improving water quality at Fichter’s Creek.

Mr. Ottolini noted that there are also many city-level projects that have been implemented to comply with TMDL requirements under the Caloosahatchee River Watershed Protection Plan.

Mr. Ottolini highlighted Lee County’s public outreach projects related to water quality and conservation. He said that Lee County has spent over \$100 million on water quality-related projects over the past 5 years. A major point of focus has been source control. In 2008, the County enacted a fertilizer ordinance that was stronger than the state standard and the County has conducted a lot of public outreach to support that ordinance. The County is also undertaking a new campaign this year in collaboration with NGOs and municipal governments around fertilizer BMPs for residents’ back yards. Mr. Ottolini also stated that the County has been a leader on water conservation. For example, Lee County has had a water conservation ordinance in place for 10 years that limits lawn irrigation to 2 days a week.

Finally, Mr. Ottolini highlighted the importance of the BOMA water quality project. The County has contributed \$10 million towards the purchase of land in Glades County, and is anxious to see a return on its investment. He also noted that the County is working with legislators in Tallahassee around securing a funding allocation for the C43 reservoir.

During the discussion following Mr. Ottolini’s presentation, Lee County representatives noted that the County is trying to screen watersheds to better determine the locations of problems in order to better identify hotspots and have maximum impact. They also noted that the County has set aside a portion of the money that it will receive from the RESTORE program, resulting from the BP Deepwater Horizon – Macondo oil spill, for local water quality projects. It has also applied to the State for additional funding under the RESTORE program. A Lee County representative stated that the County would like to see some of the RESTORE program funds allocated to the C43 reservoir project.

As a result of discussions about different completed and proposed projects, FDEP agreed to provide a list of projects listed as “completed” in the BMAP to the group and Lee County agreed to provide a list of proposed projects to the group.

#### **IX. Initial Discussion on Prioritization Criteria**

The following table summarizes participants’ discussions about which descriptive prioritization criteria to use in consideration of projects.

| <b>CRITERIA</b>  | <b>RATING</b> | <b>FURTHER DESCRIPTION</b>           |
|------------------|---------------|--------------------------------------|
| Nitrogen removal | H, M, L       | What is the estimated nitrogen level |

|                               |         |   |
|-------------------------------|---------|---|
|                               |         | expected for this project?  |
| Acre-feet                     | H, M, L | What is the acre-feet of water that is managed under this project?  |
| Tangible Benefits             | H, M, L | Are there quantifiable, measurable benefits that would accrue to water quality and/or quantity?   |
| Land is already in control    | Y or N  | Is the land for a project is already purchased and/or under the control of a participating entity?  |
| Level of Design               | H, M, L | Is the project already in design or far along in design versus only conceptual?   |
| Level of Review               | H, M, L | Has the project already been reviewed and vetted by various agencies?   |
| In an Existing Plan           | Y or N  | Has the project already been listed in an existing plan (WPP, BMAP, etc.)?  |
| Regional Impact               | H, M, L | Does the project have a regional versus only local impact?  |
| Identified sources of funding | Y or N  | Have specific sources of funding been identified (though not secured) for this project?   |
| Levels of Funding             | A, S, N | Are the identified sources of funding sufficient to cover the entire project cost, or only partially (all, some, none)?                     |
| Impact on impaired waters     | Y or N  | What is the degree of positive impact on specifically named impaired waters?  |
| Multiple Benefits             | H, M, L | Does the project provide multiple benefits in addition to water quality/quantity, such as recreation, habitat restoration, open space, etc. |
| Collaboration                 | H, M, L | Does the project require collaboration among various entities?  |
| Stakeholder Support           | H, M, L | Does the project have broad and diverse stakeholder support?  |
| Simplicity                    | H, M, L | Is the project simpler in design, development, and execution?   |

In addition to the above criteria, participants suggested that it would be preferable to focus on projects that fall into existing legal frameworks.

## **X. Next Steps**

The participants ended the meeting by discussion next steps and action items as noted at the beginning of this meeting summary. The next meeting will be held on Friday, May 16, 2014.

## Appendix A – Attendance

| Name                    | Organization  |
|-------------------------|---|
| Callie Walker           | Florida Department of Agriculture and Consumer Services |
| Bonnie Wolff-Pelaez     | Florida Department of Agriculture and Consumer Services |
| Beth Alvi               | Florida Department of Environmental Protection          |
| Jennifer Carpenter      | Florida Department of Environmental Protection          |
| Kimberleigh Dinkins     | Florida Department of Environmental Protection          |
| Jon Iglehart            | Florida Department of Environmental Protection          |
| Julie Neurohr           | Florida Department of Environmental Protection          |
| Roger Desjarlais        | Lee County  |
| Kurt Harclerode         | Lee County  |
| Roland Ottolini         | Lee County  |
| Glen Salyer             | Lee County  |
| Lesley Bertolotti       | South Florida Water Management District                 |
| Dan DeLisi              | South Florida Water Management District                 |
| Phil Flood              | South Florida Water Management District                 |
|                         |   |
| <i>Process support:</i> |   |
| Patrick Field           | Consensus Building Institute                            |
| Tushar Kansal           | Consensus Building Institute                            |

## **Caloosahatchee River Community Forum Interagency Coordination Meeting Summary**

May 16, 2014  
Lee County Public Works Building  
1500 Monroe Street, Ft. Myers, FL

**Attendees:** A list of meeting attendees can be found in Appendix A.

### **I. Overview**

This document summarizes briefly the second interagency coordination meeting held between the key government parties (the “core group”) involved in implementation efforts to improve the Caloosahatchee River’s health related to both water quality and quantity. This meeting served primarily to push forward with efforts to refine the process for working together and to review and categorize the projects that could be considered for funding. Hence, the details of the conversation are captured primarily in the revised project matrix.

### **II. Action Items**

*For the Consensus Building Institute:*

- Send out the “funding sources” document in Microsoft Word format.
- Revise the draft evaluation criteria.
- Create a draft agenda for June core group + project partners meeting.
- Create a draft meeting summary for the May 16 core group meeting.
- Create a draft meeting notice and agenda for the July/August stakeholder forum.
- Revise project list as per core group’s input and distribute to core group members.
- Revise process schedule.

*For the South Florida Water Management District:*

- Coordinate logistics for July/August stakeholder forum (setting date, invitations, public notice, etc.).
- Establish website for Caloosahatchee River coordination process.
- Schedule briefings explaining the process for key policy makers in different agencies and decision-making bodies.

*All core group agencies:*

- Review and update the “funding sources” document (once received from CBI).
- Send list of stakeholders to invite to Stakeholders Forum to Phil Flood, SFWMD.

The next interagency meeting will be held on Thursday, June 19, from 9:30 am to 12:30 pm.

### **III. Topics Discussed and Decided**

Meeting participants discussed the following issues and took the following actions:

- Meeting participants approved the updated Process Guidelines.
- A representative from the South Florida Water Management District reported that staff was working on developing the website for the Caloosahatchee interagency and stakeholder engagement process.
- After the Consensus Building Institute sends out the “funding sources” document in Microsoft Word format, agencies participating in core group meetings would update it.

Meeting participants discussed how the project prioritization process should incorporate diverse stakeholders, with the group agreeing that the core group would informally invite local governments and 298/special districts as needed. Meeting participants identified the following possible project partners:

- Fort Myers
- Fort Myers Beach
- Cape Coral
- Sanibel
- LaBelle
- Moore Have
- Clewiston
- Charlotte County
- Glades County
- Hendry County
- FDOT
- Water conservation districts

Meeting participants then discussed how to simplify the list of evaluation criteria for projects given that there were far too many to use practically and many were subsets of broader themes. Thus, the group narrowed the list of criteria to the following: nutrient removal or reduction, water storage, operational distribution and timing, implementation, regional impacts, and multiple benefits. Some of these criteria contain sub-criteria that help to define them.

Meeting participants then walked through a list of possible projects to improve the health of the Caloosahatchee watershed. This effort was the bulk of this meeting. Participants briefly discussed each project and categorized each as either: worthy of further consideration; in progress / already funded / completed; not under consideration because it requires regulatory action or is otherwise beyond the scope of the current process; or to be determined. Meeting participants also sought to group

together projects that deal with the same water feature or are otherwise related to one another. CBI and SFWMD agreed to take the input and revised the project matrices, particularly moving completed projects to a secondary list.

Meeting participants decided that the core group should vet projects against the defined evaluation criteria but that first the core group + project partners should together review projects as well. These project partners would be key implementers, ranging from other towns and counties to water districts. Meeting participants reviewed the process timeline and agreed to meet with a larger group of project partners/implementers in June and hold a stakeholder forum in late July or early August. The process of prioritizing projects among the core group would commence after the stakeholder forum. Given interest in ensuring decision makers are informed early and often, Dan DeLisi, SFWMD, offered to schedule briefings explaining the process for key policy makers in different agencies and decision-making bodies.

### **III. Adjournment**

The parties concluded their discussions and adjourned the meeting at 12:30 PM.

## Appendix A – Attendance

| Name                            | Organization  |
|---------------------------------|---|
| Callie Walker                   | Florida Department of Agriculture and Consumer Services |
| Bonnie Wolff-Pelaez             | Florida Department of Agriculture and Consumer Services |
| Beth Alvi ( <i>via phone</i> )  | Florida Department of Environmental Protection          |
| Jennifer Carpenter              | Florida Department of Environmental Protection          |
| Jon Iglehart                    | Florida Department of Environmental Protection          |
| Kurt Harclerode                 | Lee County  |
| Roland Ottolini                 | Lee County  |
| Glen Salyer                     | Lee County  |
| Lesley Bertolotti               | South Florida Water Management District                 |
| Dan DeLisi ( <i>via phone</i> ) | South Florida Water Management District                 |
| Phil Flood                      | South Florida Water Management District                 |
| Mitch Hutchcraft                | South Florida Water Management District                 |
|                                 |   |
| <i>Process support:</i>         |   |
| Patrick Field                   | Consensus Building Institute                            |
| Tushar Kansal                   | Consensus Building Institute                            |

# Caloosahatchee River Community Forum Interagency Coordination Meeting Summary

June 19, 2014

South Florida Water Management District  
Lower West Coast Service Center  
2301 McGregor Boulevard  
Fort Myers, FL 33901

**Attendees:** A list of meeting attendees can be found in Appendix A.

## I. Overview

This document summarizes briefly the third interagency coordination meeting held with the key government parties (the “core group”), along with an expanded group of municipalities, counties, and water control districts (collectively called “key implementers”), involved in implementation efforts to improve the Caloosahatchee River’s health related to both water quality and quantity. This meeting served primarily to review the core group’s work thus far with the larger body of key implementers, including the list of projects under consideration, the evaluation criteria for prioritizing projects, and planning for the August Community Forum. Details of the conversation are captured primarily in the revised project matrix, which occupied the bulk of the meeting.

The meeting was facilitated by Mr. Patrick Field and Mr. Tushar Kansal from the Consensus Building Institute (CBI).<sup>1</sup>

## II. Action Items

*For the Consensus Building Institute:*

- Schedule September interagency/intergovernmental meeting.
- Revise agenda for August community forum to include presentation of completed projects, meeting objectives, and guidelines for small group discussions.
- Revise evaluation criteria as per details below.

*For the South Florida Water Management District:*

- Coordinate logistics for August community forum (invitations, speakers, public notice, etc.).
- Establish project website for Caloosahatchee River coordination process within

---

<sup>1</sup> The Consensus Building Institute (CBI) is a non-profit institution that works to improve the way leaders use negotiations to make organizational decisions, achieve agreements, and manage multiparty conflicts and planning efforts ([www.cbuilding.org](http://www.cbuilding.org)).

the existing SFWMD site.

- Schedule briefings explaining the process for key policy makers in different agencies and decision-making bodies.
- Create a map to display the locations of completed projects.
- Create a map to display the locations of proposed projects included in the matrix.
- Post approved meeting summaries from April and May Interagency meetings to website.
- Revise projects listing as per details below and by following up with meeting participants.
- Create a project list for which land acquisition would be necessary.

The Community Forum will be held on Friday, August 8, from 1:00 pm to 5:00 pm.

### **III. Introductions and Purpose of the Effort**

After participants introduced themselves, Mr. Dan DeLisi of the South Florida Water Management District (SFWMD) welcomed participants and provided background information about the effort. He explained that the current endeavor to bring together different agencies came out of an effort to develop a common vision as part of the development of the Lower West Coast Water Supply Plan. He explained that stakeholders suggested that the Water Management District consider the full slate of projects to improve the watershed, how to prioritize them, and how to pool the resources needed to implement the prioritized projects. He also noted that different stakeholders have articulated a variety of different messages around management of the Caloosahatchee River watershed, and that it would be helpful to develop a common message to move forward with.

### **IV. Review of Projects**

Meeting participants walked through a list of possible projects to improve the health of the Caloosahatchee watershed. Mr. Phil Flood of the South Florida Water Management District (SFWMD) explained that most of the projects in the list came from the Watershed Protection Plan, the Basin Management Action Plan (BMAP), and from input provided by local governments. Review and discussion of the projects in the list constituted the bulk of the meeting. Participants briefly discussed the status and key details of each project. Based on input provided by meeting participants, the South Florida Water Management District will reorganize the project matrix by taking the following steps:

- Adding information regarding estimated project costs and funding sources;
- Adding information regarding the current phase of the project, such as conceptual, acquisition, design, and permitted;
- Adding information about the lead/implementing agency;
- Demarcating programmatic efforts, such as best management practices; and
- Adding information about the geographic scale of the project, such as local or regional.

The South Florida Water Management District will also create a map to display the locations of projects included in the matrix.

Meeting participants also discussed putting together a separate list of projects for which land acquisition would be necessary as the State Legislature has appropriated some funds for land acquisition in the next fiscal year.

#### **V. Review of Evaluation Criteria**

Meeting participants reviewed the evaluation criteria for projects previously developed by the Core Group. The criteria consisted of the following criteria: nutrient removal or reduction, water storage, operational distribution and timing, implementation, regional impacts, and multiple benefits. Some of these criteria contain sub-criteria that help to define them.

In response to input provided by meeting participants, CBI will revise the evaluation criteria to incorporate information about matching/leveraging funds (as a sub-criterion under the “implementation” category), and about sustainability (as a new criterion category, incorporating permanence or engineered life and adaptability).

#### **VI. Review of Plans for First Community Forum**

Meeting participants reviewed the draft agenda and an outreach list for the Community Forum. The Forum will begin with introductions from the coordinating agencies and ground rules, review of key findings from the 2013 Science Workshop, and discussion about the projects and evaluation criteria under consideration.

Meeting participants discussed the importance of keeping the Community Forum focused on implementable projects and setting aside for now discussions about policy issues that are broader and longer-term. In addition, participants suggested making a brief presentation of projects that have been completed in the watershed. They also suggested some additional people and organizations to add to the outreach list.

#### **VII. Additional Topics of Discussion**

A representative from a State agency requested assistance from the local government and water control district representatives in the room in explaining to senior management in his agency which constituencies the watershed work being discussed will benefit. Mr. Field, the facilitator, responded that the group has discussed the importance of briefing senior management of different bodies and elected leaders about the interagency group’s work and bringing them into the conversation in order to fully inform those individuals.

#### **VIII. Adjournment**

The parties concluded their discussions and adjourned the meeting at 11:45 AM.

## Appendix A – Attendance

| <b>Name</b>                   | <b>Organization</b>                                     |
|-------------------------------|---|
| Cookie Hester                 | Central County Water Control District                   |
| Larry Bennett                 | Central County Water Control District                   |
| Phil Aiuto                    | Charlotte County  |
| Connie Jarvis                 | City of Cape Coral                                      |
| Steve Neff                    | City of Cape Coral                                      |
| Saeed Kazemi                  | City of Fort Myers                                      |
| Vince Miller                  | City of Fort Myers                                      |
| Ron Zimmerly                  | City of LaBelle   |
| James Evans                   | City of Sanibel   |
| Mike Cook                     | East County Water Control District                      |
| Wayne Smith                   | Flaghole, Henry Hilliard, Sugarland Drainage District   |
| Pat McKenna                   | County Line Drainage District                           |
| Callie Walker                 | Florida Department of Agriculture and Consumer Services |
| Bonnie Wolff-Pelaez           | Florida Department of Agriculture and Consumer Services |
| Beth Alvi (via phone)         | Florida Department of Environmental Protection          |
| Jon Iglehart                  | Florida Department of Environmental Protection          |
| Julie Neurohr                 | Florida Department of Environmental Protection          |
| Carl Spiro                    | Florida Department of Transportation                    |
| Missie Barletto               | Glades County   |
| Kelly O’Nan                   | Hendry County   |
| Sommer Foster                 | Johnson-Prewitt & Associates                            |
| Kurt Harclerode               | Lee County  |
| Dan DeLisi                    | South Florida Water Management District                 |
| Phil Flood                    | South Florida Water Management District                 |
| Mitch Hutchcraft              | South Florida Water Management District                 |
| Gary Ritter                   | South Florida Water Management District                 |
| Keith Laakkonen               | Town of Fort Myers Beach                                |
| Lesley Bertolotti (via phone) | South Florida Water Management District                 |
| <i>Process Support:</i>       |   |
| Bennett Brooks (via phone)    | Consensus Building Institute                            |
| Patrick Field                 | Consensus Building Institute                            |
| Tushar Kansal                 | Consensus Building Institute                            |

## **Caloosahatchee River Community Forums Interagency Coordination Meeting Summary**

September 2, 2014

Lee County Public Works Building  
1500 Monroe Street, Fort Myers, FL

**Attendees:** A list of meeting attendees can be found in Appendix A.

### **I. Overview**

This document summarizes the fourth interagency coordination meeting held between the key government parties involved in implementation efforts to improve the Caloosahatchee River's health related to both water quality and quantity. This meeting served primarily to review feedback from the August 8 Community Forum meeting and begin prioritizing among regional and local projects focused on improving the Caloosahatchee watershed.

### **II. Action Items**

*For the Consensus Building Institute:*

- Work with SFWMD to prepare an updated list of prioritized projects based on rankings and categories discussed by participating agencies.
- Canvas participating agencies to identify a late September/early October timing for the next interagency coordination meeting
- Develop draft agenda for the next interagency coordination meeting.
- Create draft meeting summary of September 2 interagency meeting.

*For the South Florida Water Management District:*

- Update project descriptions based on participant feedback (additional project description, more detail on water quality benefit methodologies used across projects, factual corrections, etc.)
- Work with CBI to prepare an updated list of prioritized projects – regional and local – based on rankings and categories discussed by participating agencies.
- Seek additional information from implementing agencies to develop, if possible, basic cost/benefit data that can then be used by the implementing agencies to further prioritize among projects.

The next interagency meeting is to be held in late September or early October.

### **III. Community Forum Review**

Bennett Brooks with CBI reviewed key feedback from the August 8 Community Forum, with key stakeholder input centering on: (1) additional candidate projects; (2) additional information needs and ranking criteria considerations; (3) potential priority projects; and (4) other related issues. Key points highlighted by Mr. Brooks and implementing agency representatives in

attendance at the Forum included the following:

- Stakeholders identified a handful of candidate water quality and water supply-related projects (e.g., several Cape Coral sewer projects) not included in the project list developed by the implementing agencies, as well as proposed policy changes and projects beyond the scope of the current dialogue (e.g., LORS, oxbow restoration). Stakeholders also noted several details in the table requiring correction.
- Additional information needs cited by stakeholders centered on (1) cost-benefit analyses to foster cross-project evaluations; (2) more complete data on water quality and quantity benefits, as well as detail on data methodology and sources; and (3) greater detail on implementation-related factors such as location and benefit timing. Several stakeholders also sought more information on potential climate change impacts.
- Stakeholder comments suggested expanding evaluation criteria to incorporate the following additional criteria (among others): ability to bundle/sequence projects; relative cost-benefit; ability to deliver multiple benefits related to habitat and/or recreation; and link with a legislative or regulatory mandate.
- Priority projects cited most frequently in the small-group discussions during the Community Forum were C-43 West Basin Storage Reservoir Project; Lake Hicpochee North and South; C-43 Water Quality Treatment Area Project (BOMA property); East Caloosahatchee Storage Project; Charlotte Harbor Flatwoods Initiative

Mr. Brooks noted there was substantial overlap between priority projects cited most frequently during the Community Forum and those projects that ranked highest in the implementing agency survey conducted prior to the September 2 interagency meeting. (See discussion below.)

#### **IV. Review of Implementing Agency Survey Results**

The bulk of the meeting focused on reviewing and discussing the results of implementing agencies' initial prioritization of potential Caloosahatchee projects. (The survey was conducted via Survey Monkey prior to the September 2 meeting. A total of 10 agencies participated in the survey.)

Pat Field with CBI initiated the discussion by reviewing survey results. He noted that many of the priority projects identified by agencies overlapped with those mentioned most frequently at the Community Forum. He also noted that a number of projects were not ranked in some surveys due to insufficient information. Finally, he mentioned that many local projects garnered support, but few rose above a mid-rank prioritization.

The review of survey results and a discussion of initial priorities generated the following key points:

- Regional projects should be ranked separately from local projects, as they are of a different scale and are typically funded from different sources.

- Regional projects should be sorted within four different categories: (1) well-defined projects ready for immediate prioritization and implementation; (2) well-defined projects requiring additional information prior to implementation; (3) conceptually defined projects that will require more in-depth feasibility studies; and (4) identified needs but no defined projects.
- Local projects should be sorted into two different categories: (1) projects ready for immediate implementation and primarily just awaiting full or partial funding; and (2) longer-term projects. Participants expressed interest in identifying priorities among the many candidate projects, but agreed that any ranking will need to be grounded in credible data.
- Prioritization of local and regional projects should be informed by, among other things, comparative data (cost-benefit analysis or other metrics) that enable implementing agencies to assess the relative merits of the various projects. At the same time, others noted that cost-benefit metrics alone may not be sufficient to prioritize among projects, as the region may wish to prioritize projects with lower cost-benefits but greater overall impact (e.g., delivering more expansive water quality or supply benefits). Furthermore, sufficient data may be missing that would allow more of that kind of analysis.
- In general, it is better to rank water quality projects against other water quality projects and water supply projects against other water supply projects. Similarly, a filter marsh project is difficult to compare with a sewerage project. The group agreed to talk about this further at next meeting.
- To the extent that local projects lack or fail to provide sufficient cost-benefit data, implementing agencies may not be able to put such projects forward as regional priorities, as there will be no objective basis for prioritizing one project over another.
- Ongoing projects should be captured in a companion project list, but not be included for prioritization since they are already underway and presumably have identified funding sources.
- A final package of regional priority projects may want to draw on a mix of longer-term and immediate projects, so as to balance those projects able to deliver more significant benefits with those able to provide near-term results. As noted above, this approach is most effective among near- and longer-term projects not competing for the same funding pool.
- The implementing agencies need to be strategic in how and when projects are aggregated or split for prioritization purposes. Where possible, it is important to identify linkages among projects (for example, noting that the West Caloosahatchee Water Quality Treatment Area project is intended to complement the C-43 reservoir project even if it is not yet ready for implementation). At the same time, several participants recommended differentiating among now-grouped projects if they are in different states of readiness (i.e., Four Corners/Spanish Creek initiative) so they could be prioritized accordingly.
- Restoration projects such as tape grass plantings and oxbow restoration are important initiatives and should be noted, but are qualitatively different than water quality and supply projects and should not be included for ranking.

Based on the discussion, the group sorted the projects into the different categories outlined above. A number of projects were also revised based on additional input regarding project timeframe, status and focus.

A more definitive ranking of both regional and local projects is to be conducted (likely in late September or early October) once better data on water quality, water supply and project cost is gathered and, as possible, summarized in a comparative cost-benefit analysis. SFWMD is to work with project proponents to gather the additional data.

#### **V. Timing for Finalizing Project Prioritization**

Based on the additional work needed to inform a new ranking exercise, implementing agencies expect to have a proposed list of priority projects ready to bring to interested stakeholder later in 2014. Dan DeLisi with SFWMD said such timing would mesh well with various funding timelines.

#### **V. Next Steps**

The participants ended the meeting by confirming next steps and action items as noted at the beginning of this meeting summary. The next interagency coordination meeting is to be held in late September or early October. The next Community Forum will likely be held in mid-to-late November or early December.

## Appendix A – Attendance

| Name                    | Organization  |
|-------------------------|---|
| Bonnie Wolff-Pelaez     | Florida Department of Agriculture and Consumer Services |
| Jennifer Carpenter      | Florida Department of Environmental Protection          |
| Kurt Harclerode         | Lee County  |
| Roland Ottolini         | Lee County  |
| Lesley Bertolotti       | South Florida Water Management District                 |
| Dan DeLisi              | South Florida Water Management District                 |
| Phil Flood              | South Florida Water Management District                 |
| Kelly O’Nan             | Hendry County   |
| Shane Parker            | Hendry County   |
| Missie Barletto         | Glades County   |
| Vince Miller            | City of Ft. Myers                                       |
| James Evans             | City of Sanibel   |
| Connie Jarvis           | City of Cape Coral                                      |
| Dave Lindsay            | East County Water Control District                      |
| Mike Cook               | East County Water Control District                      |
| Kyle Grandusky          | County Line Drainage District                           |
| <i>Process support:</i> |   |
| Patrick Field           | Consensus Building Institute                            |
| Bennett Brooks          | Consensus Building Institute                            |

**Caloosahatchee River Community Forum  
Interagency Coordination Meeting Summary**

October 7, 2014  
Lower West Coast Service Center  
2301 McGregor Boulevard  
Fort Myers, FL 33901

**Attendees:** A list of meeting attendees can be found in Appendix A.

**I. Overview**

This document summarizes the fifth interagency coordination meeting held between the key government parties (the “Implementers”) involved in implementation efforts to improve the Caloosahatchee River’s health related to both water quality and quantity. This meeting served primarily to push forward with efforts to develop a list of priority projects for recommended implementation and to plan for a second Community Forum.

**II. Action Items**

*For the Consensus Building Institute:*

- Revise the agenda for the December Community Forum.
- Create a draft meeting summary for the October 7 Implementers Team meeting.

*All Interagency Team members:*

- Review and submit any additions to the “funding sources” document.
- Review the September Interagency Team meeting summary.
- Send in any additional rationales in support of the priority projects.

*For Phil Flood:*

- \* Update the list of priority projects based on the Implementers Team discussion.

The second Community Forum will be held during the first or second week of December. An Interagency Team meeting will likely be held soon after the Community Forum to review public input and revise, as needed, the list of priority projects.

**III. Introductions, Agenda Review, and September Meeting Summary Confirmation**

Mr. Bennett Brooks, facilitator from the Consensus Building Institute (CBI), opened the meeting and welcomed participants. Meeting attendees introduced themselves, and a list of meeting attendees can be found in Appendix A. In addition, Mr. Brooks reviewed the meeting agenda and the goals for the meeting and asked participants to send any comments they have on the draft meeting summary from the September Interagency meeting to either CBI or to Mr. Phil Flood, South Florida Water Management District (SFWMD). Mr. Flood also noted that SFWMD will be posting meeting summaries from prior Interagency meetings and from the first Community Forum online on the District’s website.

#### **IV. Project Evaluation and Prioritization**

Mr. Bennett Brooks, CBI, noted that the Interagency team had categorized potential projects by their level of “ripeness” (that is, how ready they are for implementation) in the previous Interagency meeting held September 2.

Mr. Brooks also noted that the Evaluation Criteria developed by the Interagency team for the projects has been undergoing revision throughout the project prioritization process. An addition made after the September Interagency meeting was to include measures to assist with calculating cost-benefit ratios of projects, including pounds of nutrient-removal per dollar and acre-feet of storage gained per dollar. In addition, Interagency team members provided the following comments on the draft Evaluation Criteria:

- An Interagency team member inquired whether the new definition of “waters of the US” under the Clean Water Act would impact any potential projects that the Interagency team would want to prioritize for funding. In response, other team members explained that the process of defining “waters of the US” would take a long time to conclude and would therefore be beyond the scope of the Interagency project prioritization process.
- An Interagency team member suggested that projects that are more theoretical and not yet ready for implementation in the near-term should not be prioritized for funding.

Following a discussion among Interagency team members, Mr. Phil Flood, South Florida Water Management District (SFWMD), stated that he would remove the word “draft” from the Evaluation Criteria document, thereby finalizing the Evaluation Criteria.

Mr. Flood explained that there are significant data limitations to the cost-benefit information that he tried to include in the draft Evaluation Criteria, namely pounds of nutrient-removal per dollar and acre-feet of storage gained per dollar, in that fewer than twenty projects out of the entire list of more than fifty potential projects have the data available to calculate one or the other measure of cost-benefit. In light of the limitations on available data around cost-benefit analysis, the Interagency team opted to move forward with prioritizing projects based on other relevant criteria.

##### *Tier 1, Immediate (or “Ready to implement”) projects*

Interagency team members reviewed and both confirmed and articulated the rationale for each of the projects listed as “Regional Priorities, Set to Fund” – that is, those projects that are most ripe for funding and implementation based on the various criteria. Based on its discussion, the team confirmed the following top four priorities and associated rationales:

- C-43 West Basin Storage Reservoir Project:
  - Cornerstone project for the region.
  - This project will help to meet optimum flows to the estuary.

- Received strong public support at the community forum.
- The land is already acquired and the project has state and federal authorizations already in place.
- C-43 Water Quality Treatment and Demonstration Project (BOMA):
  - The land is already acquired.
  - The project would be a partnership between the South Florida Water Management District and Lee County.
  - Some money has already been approved to move forward with the project.
  - Is intended to complement the C-43 West Basin Storage Reservoir Project because that project is more storage-oriented and BOMA would provide complementary water quality services.
- Lake Hicpochee North Hydrologic Enhancement Project:
  - Funding for the first phase of the project is in place. The next phase would involve another 2,400 acres of storage.
  - Presents opportunities for linkages with the Nicodemus Slough project.
  - Presents multiple benefits, including storage, nutrient removal, habitat restoration, flood control, and water recharge.
  - Resources have already been expended towards the project.
  - Utilizes existing landforms in an effort to reestablish natural flows and hydrology.
- Babcock Ranch Preserve Water Storage Project:
  - Florida Department of Agriculture and Consumer Services (DACs) is planning to fund the design phase.
  - Project would reduce stormwater runoff to the Caloosahatchee from a local basin.
  - The project is very cost-effective.
  - Necessary lands are in public ownership.
  - Would provide shallow water storage and groundwater recharge, habitat enhancement, and flood control.
  - Presents potential linkages with projects by Hendry County and County Line Drainage District.

Regarding SR 29 Improvements: After confirming that the Florida Department of Transportation will be fully funding this project, the Interagency Team opted to move this project to the list of “ongoing projects” while keeping in mind linkages that other projects could make with it.

The Interagency Team decided to prioritize these “Regional Priority Projects” (minus the SR 29 Improvements project, which is removed from this list) in the following order:

1. C-43 West Basin Storage Reservoir Project
2. Lake Hicpochee North Hydrologic Enhancement Project
3. C-43 Water Quality Treatment and Demonstration Project (BOMA)
4. Babcock Ranch Preserve Water Storage Project

### *Tier 2, Near-term (or “Farm team”) projects*

The Interagency Team also considered which projects to prioritize among a “tier two” of projects that require additional information, detail, or scoping work prior to implementation. Team members underscored the importance of these near-term priorities, as continued progress on each of these will ensure the region has another suite of “shovel-ready” projects in the near future. Team member discussion centered on the following:

- West Caloosahatchee Water Quality Treatment Area (C-43 reservoir site):
  - Interagency Team members described this project as a high priority due to its significant potential impact but noted that SFWMD will need to flesh out the project design in terms of reviewing the property and making a plan for how to use it and estimating costs associated with necessary land improvements.
- Lake Hicpochee South Project:
  - Interagency Team members described this project as a high priority but noted that the project would likely require rescoping and may require land acquisition to make it feasible.
- Charlotte Harbor Flatwoods Initiative:
  - An Interagency Team member suggested that the impact of this project would be smaller and more locally-oriented than some of the other projects on this list and that, therefore, it should not be a high priority.
- Recyclable Water Containment Areas Project:
  - An Interagency Team member suggested that this project would be better classified as a best management practice (BMP) than a discrete project that would require legislative funding.

Based on the discussion, the Interagency Team decided to designate two projects as near-term priorities:

- West Caloosahatchee Water Quality Treatment Area (C-43 reservoir site)
- Lake Hicpochee South Project.

### *Tier 3, “Very Conceptual” projects*

Although the Interagency Team briefly discussed these projects, they agreed that they largely consist of “needs” that need to be filled, in terms of storage or water quality, rather than concrete projects that merely need further development or scoping. The Team recommended that this list – plus the projects no longer considered to be ready to designate as near-term regional priorities (Charlotte Harbor Flatwoods, Carlos Waterway Conveyance, Lee-Charlotte Hydrologic Improvements and Recyclable Water Containment Areas Project) – be organized together for consideration in future prioritization discussions.

### *Restoration Projects*

The Interagency Team noted that restoration-related projects, which include tape grass planting and oxbow restoration, are important but differ from the other projects considered in that they are more likely to secure grant funding from governmental and non-governmental sources. A Team member suggested that SFWMD could fund research or monitoring efforts to help support these sorts of projects. Another Team member, however, countered that storage projects should be a higher priority than these sorts of environmental projects in the near-term because a drought can easily wipe out investments and potential benefits tied to projects such as tape grass plantings and oyster bed placement. The Interagency Team recommended that these projects continue to be listed separately.

#### *Local Projects*

Noting that it would be very difficult to prioritize among local projects without conducting a credible cost-benefit analysis (for which the data are not available), the Interagency Team opted not to prioritize among these projects nor try to group them into potential funding packages.

Instead, the Interagency Team decided for now to maintain a list of local projects, without prioritization. As well, they suggested that the South Florida Water Management District implement a program to recognize local jurisdictions that implement projects to improve the Caloosahatchee Estuary, similar to how the Department of Agriculture and Consumer Affairs (DACs) recognizes farmers and ranchers who employ the Agency's best management practices through the CARES program.

Additionally, participants discussed the merits of creating a structure similar to the Local Issues Team used for St. Lucie and Loxahatchee Estuaries to identify local priority projects and then, as possible, secure and award state funding to those projects. More discussion is needed to flesh out this idea, and Team members are interested in hearing stakeholder feedback to this idea at the next Community Forum. (See discussion below).

#### **V. Implementation Measures**

Meeting participants discussed a variety of topics regarding the implementation of their project prioritization, including funding opportunities, outreach to elected officials, and strategies to build stakeholder support.

#### *Funding Opportunities*

Mr. Phil Flood, SFWMD, briefly introduced a list of funding sources that SFWMD compiled. He asked other meeting participants to look over the list and contact him if they have other sources or opportunities that should be added to the list.

An Interagency Team member noted that it would be important to focus on the actual funders (as opposed to pass-through entities) when developing a funding strategy. For example, one participant said, federal appropriations come from the US Congress, even

if they are passed through the US Army Corps of Engineers.

### *Outreach to Local Elected Officials*

The Interagency Team discussed the contours of having local elected officials invited to, and participating in, the second Community Forum. Team members suggested that having elected officials present at the meeting, particularly for the discussion about regional priorities, could help to familiarize them with the effort to build coordinated support for funding priorities for restoring the Caloosahatchee Estuary. Meeting participants also noted that elected officials could also be invited to speak at the Forum. Finally, Team members recommended conducting targeted, personalized outreach to elected officials to secure their attendance at the Community Forum as well as the need to brief them in advance of the event about the purpose of the forum, the proposed regional priority projects, etc.

### *Building Stakeholder Support*

Interagency team members discussed the following ideas for building stakeholder support for coordinated action around securing funding for priority projects, both at the upcoming Community Forum and beyond that event:

- The Interagency Team supported the idea of creating one- to two-page write-ups for each of the top four “Tier 1, Ready to Implement” priority projects. Participants noted that many County Commissioners are looking for priority projects to support and that these projects could become part of each agency’s and local community’s priority list.
- The Interagency Team supported the idea of conducting a limited number of briefings to select NGOs, environmental advocates, and other influential stakeholders in advance of the Community Forum. These briefings would reiterate the bounded scope of the Interagency prioritization process, explain the difference between local and regional projects, and introduce the priority projects proposed by the Interagency Team. Representatives from SFWMD, local governments including Lee County, and the facilitation team from the Consensus Building Institute would conduct these outreach activities.
- Meeting participants discussed the possible formation of a body to establish and support priority projects on an ongoing basis, akin to the Issues Teams active for the St. Lucie and Loxahatchee Estuaries. This body could be sponsored by the South Florida Water Management District, and any local governments that would want to participate in the decision-making mechanism of the body could do so. An Interagency Team member noted that all projects considered by the St. Lucie Issues Team require 50 percent matching funding from local governments, and so these are the bodies that are pitching projects to the Issues Team. Meeting participants suggested that many participants of the Community Forum could be interested in bringing the Issues Team approach to the Caloosahatchee Estuary as it would provide a mechanism to seek funding for local projects. In addition, one participant said, the Issues Team approach encourages stakeholders to discuss projects collaboratively and thereby builds broader

support for region-wide water management initiatives. Team members expressed interest in seeking stakeholder feedback on this concept at the upcoming Community Forum.

## **VI. Second Community Forum**

Interagency Team members discussed how to frame the work that they have done at the Community Forum. Key points centered on the following:

- Based on their discussion, they recommended presenting and soliciting stakeholder input on the results of their prioritization process to-date. Team members underscored the importance of structuring the dialogue in a way to ensure the import and potential impact of stakeholder feedback on the draft prioritization.
- Meeting participants also agreed that the difference between regional projects and local projects should be articulated at the Community Forum.
- Regarding local projects, Interagency Team members recommended seeking stakeholder input on (1) strategies for building support for regional priorities and (2) their interest in an Issues Team-like approach. Meeting participants did not see merit in asking stakeholders to prioritize among local projects (given the lack of cost/benefit data).

Meeting participants agreed that the outreach conducted for the first Community Forum successfully informed and brought in the target stakeholders. They recommended that the District use a similar approach for the upcoming Community Forum, likely to be held during the first or second week of December. Another Implementers Team meeting will likely be held some time after the Community Forum to review stakeholder feedback and finalize its recommended list of priority projects.

## **VII. Adjournment**

The parties concluded their discussions and adjourned the meeting at 12:20 PM.

## Appendix A – Attendance

| Name                    | Organization  |
|-------------------------|---|
| Connie Jarvis           | City of Cape Coral                                      |
| Vince Miller            | City of Fort Myers                                      |
| Michael Boyle           | City of LaBelle   |
| James Evans             | City of Sanibel   |
| Bonnie Wolff-Pelaez     | Florida Department of Agriculture and Consumer Services |
| Jon Iglehart            | Florida Department of Environmental Protection          |
| Julie Neurohr           | Florida Department of Environmental Protection          |
| Carl Spirio             | Florida Department of Transportation (District One)     |
| Kelly O’Nan             | Hendry County   |
| Kurt Harclerode         | Lee County  |
| Phil Flood              | South Florida Water Management District                 |
| Mitch Hutchcraft        | South Florida Water Management District                 |
| Steve Sentes            | South Florida Water Management District                 |
| Keith Laakkonen         | Town of Fort Myers Beach                                |
|                         |   |
| <i>Process support:</i> |   |
| Bennett Brooks          | Consensus Building Institute                            |
| Tushar Kansal           | Consensus Building Institute                            |

**Caloosahatchee River  
Interagency Coordination Meeting**

January 29, 2015  
Lower West Coast Service Center  
2301 McGregor Boulevard  
Fort Myers, FL 33901

**Attendees:** A list of meeting attendees can be found in Appendix A.

**I. Overview**

This document summarizes the sixth and final interagency coordination meeting held between the key government parties (the “Implementers”) involved in implementation efforts to improve the Caloosahatchee River’s health related to both water quality and quantity. The purpose of this meeting was to take stock of feedback from the December 2, 2015, Community Forum, discuss future plans for moving priority projects forward, and address ongoing plans for stakeholder engagement.

**II. Action Items**

*For the Consensus Building Institute (CBI):*

- Collect and incorporate feedback on the Final Report and October meeting summary; work with SFWMD to distribute the Final Report to interested stakeholders.

*For the South Florida Water Management District (SFWMD):*

- Arrange briefing for the Interagency team with groups engaged in prioritizing local projects (e.g., the St. Lucie Issues Team and similar groups).

*For Phil Flood, Kurt Harclerode, James Evans, and other interested agency representatives:*

- Update the “Caloosahatchee Estuaries Initiative” document and distribute to the Implementers group for comment. Include a target date for convening the group.

*For Lee County:*

- Draft short summaries for the other top priority projects
- Make the format for short project summaries available to other Implementers.
- Add language to the project summaries indicating broad support from the Implementers group.

*For all core group agencies:*

- Provide feedback on the October meeting summary.
- Provide feedback on Final Report by February 6.
- Continue efforts to educate key decision-makers on priority projects.

### **III. Topics Discussed and Decided**

The meeting focused on the following topics:

- A debrief of the December 2014 Community Forum;
- Next steps for moving priority projects forward;
- Options for ongoing stakeholder engagement;
- The make-up and structure of a multi-stakeholder group to rank local projects in the Caloosahatchee watershed region; and
- Feedback on the CBI Visioning Process Final Report.

Each of these issues is addressed in turn below.

#### *December 2014 Community Forum debrief*

Participants felt the December Community Forum generated a productive dialogue, noting that the broad (if not universal) stakeholder agreement on the top priority projects will help build support and foster progress. They also expressed appreciation for the District's support for the effort, and they noted the importance of continuing to educate stakeholders on the need for water storage projects.

The facilitator, Bennett Brooks from CBI, noted that the one major change to the project priorities list that emerged from the Community Forum involved moving the water quality project related to the C-43 reservoir into the immediate priorities category.

#### *Next steps for moving priority projects forward*

Participants discussed various ways to carry forward the momentum coming out of the December Community Forum. They made the following observations and suggestions:

- The short project summaries produced by Lee County are helpful as a quick reference during meetings with legislators, staffers and others involved in setting funding priorities.
- It would be helpful to have similar project summaries for all six top priority projects, including the C-43 water quality project, Babcock Ranch, and Charlotte Harbor Flatwoods.
- It would also be helpful to have this kind of information available for smaller projects.
- Lee County is willing to share the project summary template with its implementing agency partners.

- It would be helpful to put a “regional stamp” on the project summaries. This could be accomplished by adding a simple statement to each summary indicating that the project is supported by the interagency working group, and/or that it emerged from the Caloosahatchee Visioning Process as a priority project.
- The idea of adding each entity’s logo to the project summaries was considered and rejected by the group for a number of reasons, including (1) a desire to see Lee County maintain some ownership over the documents, (2) interest in not adding too much “clutter” to the summaries, and (3) a recognition that each agency has varying constraints on how it is permitted to work with legislators.
- The implementers are currently engaged in a substantial amount of outreach, and want to “keep pushing” what they have already been doing. No new unified outreach efforts were identified.

### *Options for ongoing stakeholder engagement*

Participants took part in a substantial dialogue about the future of the Implementers group and options for ongoing stakeholder engagement. In framing the conversation, Mr. Brooks noted that stakeholders at the December Community Forum voiced several goals related to ongoing engagement efforts, including a desire for continued opportunities for the broader community to be briefed on and provide input on regional developments, and interest in exploring the merits of forming a new regional group to prioritize among local projects. There is also interest among a subset of stakeholders, he noted, to engage in dialogue on more difficult policy and programmatic issues.

Participants made the following observations during their discussion:

- The Community Forums are an effective venue for briefing the broader set of stakeholders on project progress. They provide an opportunity for the Implementers to listen and receive input on overall direction and specific topics. The Implementers broadly recommended that the Forums be held periodically through the year.
- There is substantial interest in convening a new group to rank local projects, but the details need to be worked out. One option is to transition the Implementers group into this new body, potentially with some additional non-governmental members and a revised structure and process. (See section below for more discussion on this topic.)
- It is difficult to effectively engage the relevant broader policy and programmatic issues within the Caloosahatchee watershed region alone because they necessitate engaging a wider set of players and interests. These issues may be addressed more effectively through alternative forums that extend beyond the Caloosahatchee region, such as the Water Resources Advisory Commission.

### *Group for ranking local projects*

Participants agreed on the goal of establishing a multi-interest group to rank local projects. They had an extended discussion on the ideal composition of any new entity and the scope of the issues it should address. Participants made the following suggestions:

- The focus of the new entity, should it be formed, should be on ranking local projects, not engaging broader policy or programmatic issues.
- The new entity should evaluate projects in an impartial manner according to the benefits they will bring to the region. The intent of this approach is to consider local needs and projects within a regional context. One way to encourage shared ownership and need is to require project proponents to have matching funding. Another is to have clear and consistent criteria for assessing projects.
- There should be careful thinking around membership in the new entity. The group discussed the merits of a government agency-only group versus one that is more broadly inclusive of other regional stakeholders. Participants suggested that they should carefully consider the costs and benefits of various models, such as a group that includes NGOs as voting members, a group that contains only government/public entities, and a group that contains a limited group of voting members and a larger group of non-voting members. Mr. Brooks suggested that regardless of the approach the Implementers decide to take on this issue, they should establish a clear set of criteria for membership.
- Implementers suggested several considerations in response to the draft “Caloosahatchee Estuary Initiative,” which provided some initial thoughts on the possible composition and structure of a new entity. Specific suggestions included:
  - The name of the new entity should reflect the fact that it will involve interior communities beyond the area of the Caloosahatchee estuary, and that it will focus on projects (and not policy).
  - The membership should be broadened to ensure that it includes municipalities. To the extent non-governmental entities are included, participation should be broadened to include sufficient representatives from various sectors, such as agriculture, NGOs, and both urban and rural communities.

Phil Flood, Kurt Harclerode, James Evans, and others who are interested will work to hone this approach.

- The new entity could have a research component and should be open to funding research projects. It could also push for the development and use of performance metrics to inform project prioritization discussions.
- There is some interest in having the smaller interagency group continue to meet even after the new entity is created, to make sure that the new structure is effective and generating needed outcomes. At the same time, meeting participants agreed, the smaller interagency group should only continue to meet

if it has a clear purpose for doing so. To accomplish both these goals, the group discussed the possibility of establishing a smaller, governmental agency-only “steering committee” to guide the process.

- To help the group decide on the composition and structure of the new entity, it was recommended they meet with representatives of the St. Lucie Issues Team and other similar groups to take stock of lessons learned and better understand the tradeoffs associated with different approaches. The District will arrange meetings with these group members in the near future.

#### *Feedback on the CBI Visioning Process Final Report*

Participants expressed appreciation for CBI’s efforts to draft and distribute a draft Final Report on the Caloosahatchee Visioning Process. Participants noted that the report will be an effective tool for demonstrating the extent of stakeholder support and help them in their efforts to obtain support for priority projects.

Mr. Brooks requested that participants send any suggested edits on the draft to CBI and the SFWMD by February 6. Mr. Brooks noted that after CBI incorporates participants’ comments, either CBI or the SFWMD will distribute a final report to the broader set of interested stakeholders. Stakeholders will be asked to inform CBI if there are any significant errors or omissions.

Participants also mentioned the possibility of CBI making a presentation to stakeholders on the Final Report. Mr. Brooks expressed openness to the idea, but suggested that any such presentation should be paired with a discussion of future stakeholder engagement efforts within the region.

### **III. Adjournment**

The parties concluded their discussions and adjourned the meeting at 12:00 PM.

## Appendix A – Attendance

| Name                    | Organization  |
|-------------------------|---|
| Beth Alvi               | Florida Department of Environmental Protection          |
| Julie Neurohr           | Florida Department of Environmental Protection          |
| Sara Davis              | Florida Department of Environmental Protection          |
| Bonnie Wolff-Pelaez     | Florida Department of Agriculture and Consumer Services |
| Phil Aiuto              | Charlotte County  |
| Carl Spirio             | Florida Department of Transportation, District One      |
| Connie Jarvis           | City of Cape Coral                                      |
| James Evans             | City of Sanibel   |
| Vince Miller            | City of Fort Myers                                      |
| Kurt Harclerode         | Lee County  |
| Missie Barletto         | Glades County   |
| Roland Ottolini         | Lee County  |
| Phil Flood              | South Florida Water Management District                 |
| Dan DeLisi              | South Florida Water Management District                 |
| Steve Sentes            | South Florida Water Management District                 |
| Lesley Bertolotti       | South Florida Water Management District                 |
|                         |   |
| <i>Process support:</i> |   |
| Bennett Brooks          | Consensus Building Institute                            |
| Toby Berkman            | Consensus Building Institute                            |

**Caloosahatchee River Project Prioritization Process  
Community Forum #1  
Meeting Summary**

August 8, 2014

Riverside Community Center  
Fort Myers, FL

**Attendees:** A list of forum attendees can be found in Appendix A.

**I. Overview**

This document summarizes the August 8, 2014 community forum held with key public stakeholders and other community participants around efforts to improve the Caloosahatchee River's health related to both water quality and quantity. This forum served to introduce community members to the work that the "key implementers" (consisting of state agencies, local governments, and water control districts) have done to-date as part of the overall process of identifying priority water management projects. The forum included a recap of the 2013 Caloosahatchee River Science Workshop, a review of projects completed to-date that benefit the river, review and discussion of potential priority projects for the future, and review of the evaluation criteria by which the "key implementers" will select and recommend priority projects for subsequent discussion with interested stakeholders and public.

The meeting was facilitated by Mr. Bennett Brooks, Mr. Patrick Field, and Mr. Tushar Kansal from the Consensus Building Institute (CBI).<sup>1</sup>

**II. Action Items**

*For the "Key Implementers":*

- Review the input provided during the Community Forum and incorporate it, as appropriate, into their process, including the project matrix and evaluation criteria documents.
- Add "total estimated storage" and "total estimated nutrient removal" figures to the project matrix.

*For Community Forum participants:*

- Send comments to provide additional detail about specific projects to Phil Flood, SFWMD, at: [pflood@sfwmd.gov](mailto:pflood@sfwmd.gov).

A second Community Forum will be scheduled for the fall.

---

<sup>1</sup> The Consensus Building Institute (CBI) is a non-profit institution that works to improve the way leaders use negotiations to make organizational decisions, achieve agreements, and manage multiparty conflicts and planning efforts ([www.cbuilding.org](http://www.cbuilding.org)).

### **III. Introductions and Purpose of the Effort**

Following an introduction by Dan DeLisi, South Florida Water Management District, Patrick Field of the Consensus Building Institute opened the meeting. Mr. Field summarized the purpose of the process as identifying a priority set of projects to help preserve the Caloosahatchee River and noted that the community forum was an opportunity to work towards that goal. He reviewed the meeting agenda and some suggested ground rules for the meeting. Mr. Field noted that the focus of the effort is on identifying and prioritizing projects that are sufficiently developed such that they could be implemented in the next five years. Finally, he noted that the policy-related recommendations, while important, are not a focus of this phase of the dialogue.

Dan DeLisi of the South Florida Water Management District (SFWMD) provided background information about the effort. He explained that the current endeavor to bring together different agencies and stakeholders came out of an effort to develop a common vision as part of the development of the Lower West Coast Water Supply Plan and the desire to develop and advance a list of priority projects that will benefit the Caloosahatchee River and Estuary. He explained that stakeholders suggested that the Water Management District consider the full slate of projects to improve the watershed, how to prioritize them, and how to pool the resources needed to implement the prioritized projects. He also noted that different stakeholders have articulated a variety of different messages around management of the Caloosahatchee River watershed, and that it would be helpful to develop a common message to move forward with.

Jennifer Carpenter of the Department of Environmental Protection (DEP) noted that the Department had recently completed updating the Caloosahatchee Estuary Basin Management Action Plan (BMAP) and expressed hope to incorporate the projects coming out of the Project Prioritization Process into future updates of the BMAP.

Cecil Pendergrass, Lee County Commissioner, noted that there was significant expertise about the river and the watershed among the people attending the Community Forum and stated that the County needed guidance from that expertise about how to move forward.

Darryl Smith of the Department of Agriculture and Consumer Services explained that the Department's priorities include working with landowners to implement best management practices to save water.

Mitch Hutchcraft, SFWMD Governing Board member, thanked participants for attending the meeting and expressed appreciation for so many people participating in the process to identify priorities for the Caloosahatchee watershed.

### **IV. Science Workshop Review**

Dr. Michael Parsons, Florida Gulf Coast University, reviewed the findings of last year's Science Workshop. The workshop summarized the major environmental challenges facing the Caloosahatchee, discussed indicators for assessing environmental conditions and tracking progress, and identified gaps where more information would improve the ability to manage and restore the system. Most broadly,

the Science Workshop sought to explore whether current ecological indicators in the Caloosahatchee are providing the needed and best information and whether there are other useful indicators that scientists should be using.

The Science Workshop identified the following phenomenon:

- Tape grass has been decreasing in abundance.
- The oyster population is steady.
- *Thalassia* is being replaced by *Halodule*.
- Very low flow can yield algal blooms and drift algae stranding events.
- During low flow, bony fishes are constrained upstream as their food sources prefer lower salinity. Predator fish, such as sawfish, will follow prey upstream and the bony fishes prove to be easy prey in a concentrated, reduced habitat area. During high flow, bony fishes are flushed downstream and into the gulf, and predator fish will follow suit.
- In summary, the indicators are responding to river flow and associated salinity levels. Looking across a range of indicators, there is a generally-agreed upon optimal flow range that is between 450 cubic feet per second (cfs) and 3000 cfs. When flow is below this range, tape grass decreases in abundance; when flow is above this range, many species are flushed down the river.

In addition, the Workshop identified areas where more information is needed, including recovery periods for *Vallisneria* and *Thalassia*, which have not recovered from recent droughts. Dr. Parsons also noted that conservation efforts could also be oriented towards either maintaining the current system or to expanding the populations of certain species, and decisions need to be made about which approach to take. He stated that, while there is a wealth of data, it needs to be collated and analyzed and that new spatial surveys and aerial maps are also needed.

Finally, Dr. Parsons summarized the comments of an expert panel that concluded the Science Workshop proceedings. The panel highlighted the need to link various indicator responses to better understand how are they responding similarly and differently. The panel also suggested further study of phytoplankton and zooplankton communities. The panel called for the formation of a science working group to continue exploring these issues.

In response to Dr. Parson's presentation, Community Forum participants made the following comments:

- A key source of nitrogen loading comes from septic tanks.
- Nutrient concentrations are higher during low flows and concentrations are lower during high flows.
- The legacy effects of sulfide toxicity need to be considered. Historical data about the Caloosahatchee River are available in a study conducted by George B. Hill during the 1920s, and the US Army Corps of Engineers also conducted a comprehensive survey of the watershed.
- An additional data gap is the impact on the watershed from sea level rise and the consequent effects of increased salinity.

## **V. Caloosahatchee River Action Plan**

Phil Flood, South Florida Water Management District, presented information about projects that have already been completed that benefit the River and also provided an overview of the types of projects that are under consideration for prioritization through the current consultation process.

### *Completed Projects*

Mr. Flood explained that approximately 100 projects have been completed throughout the watershed since 2004, including state, regional, and local projects. These projects have sought to enhance water storage capacity, enhance water quality, and promote the general health of the estuary. Examples of completed regional projects include:

- Nicodemus Slough
- Barron WCD Storage
- Wetland Reserve Program
- Local Stormwater Masterplans
- FRESP

Regulatory and other ongoing programs that have been put in place include:

- NPDES Program
- ERP Program
- Water Quality Monitoring
- Biosolids Rule

Examples of local projects that have been completed in recent years include:

- Billys Creek Filter Marsh
- Harns Marsh (Phase I)
- Manuels Branch
- Pollywog Creek Stormwater Improvements
- Pop Ash Creek Preserve
- Powell Creek Filter Marsh
- Cape Coral Stormwater Retrofit

### *Proposed Projects*

Mr. Flood provided an overview of the types of projects that are being considered for prioritization and reviewed some examples of these projects. He explained that the list of proposed projects was largely developed from the following sources of information:

- Caloosahatchee River Watershed Protection Plan
- Caloosahatchee Estuary Basin Management Action Plan
- Local Stormwater Master Plans
- Local Capital Improvement Plans

The following types of projects are under consideration:

- Water Storage (reservoirs, ponds, aquifer storage and recovery)
- Dispersed Water Storage (ranch, citrus, interim lands)

- Water Quality Projects (filter marsh, hybrid treatment)
- Local Stormwater Projects (drainage improvements, water quality/storage)
- BMPs (agricultural, urban)

Mr. Flood also explained that the implementing agencies have put together a project description matrix with the following types of information for each project under consideration (to the extent that the information is available for a given project):

- Project Description and Status
- Project Phase (whether near term, long term, or ongoing)
- Project Category (whether regional or local)
- Agency (lead implementing agency and partner agencies, as applicable)
- Estimated Cost
- Estimated Nutrient Removal
- Estimated Storage

Mr. Flood described a sampling of regional projects that are included in the project listing matrix for priority consideration. These included:

- Lake Hicpochee: Consists of two different projects, a north component and a south component. Both involve rehydrating the Lake, which is currently more of a marsh, by installing spreader canals to disperse water across the marsh for both environmental benefits and nutrient removal.
- Dispersed water management: Consists of multiple water storage projects located on citrus lands, cattle ranches and District owned property.
- Distributed reservoirs: Very conceptual projects that were proposed as a means to meet the storage needs within the watershed.
- Agricultural best management practices (BMPs): The Florida Department of Agriculture and Consumer Affairs is actively implementing this ongoing program.
- Charlotte Harbor Flatwoods: A project to redirect flows from the Caloosahatchee Basin back to Charlotte Harbor to restore historic flow patterns.
- Babcock Ranch: A water storage project proposed on the Babcock Ranch State Preserve.
- BOMA: The project will be located on 1700 acres that have been purchased in Glades County. The objective is to demonstrate and implement cost effective wetland-based strategies to reduce nitrogen load, and other constituents, within the watershed.
- Vallisneria plantings: Responding to the findings of the Science Workshop, the project would plant Vallisneria upstream of S-79 and monitor population reestablishment.
- C-43 West Basin Reservoir: The land for this project has been purchased and the project has received federal authorization. Construction is pending Congressional funding.
- C-43 Early Start Project: State funding was appropriated for the construction of interim shallow storage at the C-43 Reservoir Project site. The project is being

designed to incorporate components of the larger, federally-authorized C-43 Reservoir and will allow for up to 4 feet of water to deep so that it can be stored during the rainy season and released back into the Caloosahatchee River during the dry season. Demolition is slated to begin in April 2015.

Mr. Flood also described a sample of local projects that are included in the project listing matrix for priority consideration:

- North Six Mile Cypress: The project involves the restoration of historic water flows to the south and includes the storage of approximately 1400 acre-feet of water. Lee County has permits and funding in place for Phase I of the project.
- Mirror Lakes / Moving Water South: East County Water Control District has partnered with SFWMD and the Department of Transportation to rehydrate Mirror Lakes and restore water flows to the Estero watershed. The second and third phases of this project would move water south under SR 82.
- Cape Coral Canal Stormwater Recovery by Aquifer Storage and Recover (ASR) Project: This project uses ASR wells in Cape Coral to overcome water shortfall in the dry season and provide flood attenuation in the wet season. It involves the cycle testing of three ASR wells and construction of pumping stations.
- ABSORB / Lehigh Headwaters: Project involves increasing stormwater storage capacity and groundwater recharge in the Southwest area of Lehigh Acres by constructing 27 weirs. This project is estimated to reduce discharges to the Caloosahatchee River (via the Orange River) by an estimated 800-1,200 acre-feet.
- Fort Myers Central Sewer Expansion: Septic tank conversion to central sewer to reduce nutrient loading.
- Caloosahatchee River Floating Aquatic Vegetative Tilling (FAVT) System: Project involves the construction of a FAVT wetland for soluble phosphorus uptake and filtering of particulate phosphorus, as well as a back-end submerged aquatic vegetation (SAV) pond that would remove the particulate phosphorus still remaining in the water.
- Fichter's Creek Restoration Project: Project provides ecosystem restoration through hydrologic and water quality improvements in Fichter's Creek, and provides flood protection for neighboring areas. Components include 3.2 acres of lakes, three dry detention areas (7.1 acres), culvert installation/ replacement, filter marsh creation, and berm work.
- Fort Myers-Cape Coral Reclaimed Water Interconnect Project: Project includes installing a 20-inch diameter transmission line from Fort Myers Treatment Plant to Cape Coral Reclamation Treatment Plant. This is intended to help prevent discharging 9 million gallons per day treated water into the Caloosahatchee River Estuary.
- Hendry Extension Canal Widening: Project provides additional water quantity storage within existing canal right-of-way to help provide more stormwater storage in the 5.5 mile section of Hendry Extension Canal.

In response to Mr. Flood's presentation, Community Forum participants asked the following questions and made the following comments; *responses given by South Florida Water Management District (SFWMD) representatives are indicated in italics:*

- Beyond the \$18 million appropriated by the State for the C-43 Reservoir Early Start Project, where will the remaining \$540 million come from and how long will the whole project take to complete? *The remaining money likely will not come all at once. We would anticipate the federal government to appropriate some level of funding and the State and SFWMD will have to come up with matching funds. It will be a multi-year process to secure funding and finish the project. It should be noted, the State and SFWMD have already invested approximately \$100 million towards the land acquisition and design and permitting of the project.*
- There are various projects on the project-listing sheet that could be grouped together for maximum benefit. For example, the Lake Hicpochee North project and the Hendry County Storage Project on the Duda property. Another grouping could be the C-43 West Basin Reservoir, the West Caloosahatchee Water Quality Treatment Area Project, and the East Caloosahatchee Storage Project. *There are definite linkages between some of these projects, and they have been organized in the matrix to try group related projects together.*
- Where would CRE 128a – the “Caloosahatchee Storage – Additional Project” be located? *That is a conceptual project that will require further study to locate an appropriate site.*
- Would it be possible to add “total estimated storage” and “total estimated nutrient removal” figures to the project matrix? *That is a good idea. We will do that.*
- The Hickey Creek Canal Widening Project should be changed to “short term.” *We will do that.*
- It would be helpful to have a map that shows which lands are owned fee-simple by the public. When you remove these active businesses, you hurt the local economy. The people on the coast need to be aware of that. *Understood.*
- These projects are great, but from the bigger picture, the average releases from Lake Okeechobee into the Caloosahatchee River are going to overwhelm the benefits from all of these projects combined.
  - *Point taken, and there are other processes going on outside of this watershed to deal with some of those issues. We're going to focus on what we can do here in the short- to medium-term.*
  - *You can only eat an elephant one bite at a time. Every little bit helps and shortens the time that the estuary is inundated with water from the Lake.*

#### *Small Group Discussion About Proposed Projects*

Workshop participants discussed the projects listed in the Project Matrix in small discussion groups. Following their discussions, group representatives summarized key points from their discussions, which are provided below. In addition, a transcribed version of the notes taken by the discussion groups is provided in Appendix B.

What key projects are missing from the Project Matrix?

- Water quality project in conjunction with C-43 Reservoir
- Bob Janes Preserve hydrological projects
- Level II BMPs
- Herbert Hoover Dike Rehabilitation
- Lake Okeechobee Regulation Schedule (LORS)
- In Cape Coral:
  - Sewer relining program
  - Manhole rehabilitation
  - Working on 4 weirs that are adjustable in stormwater system
  - Using real-time modeling tools for canal system
  - Could work together regionally on Charlotte Flatwoods Initiative
- A project to address significant nutrient flows that could be coming from urban and suburban areas, such as from aging stormwater systems

What key information is needed that may not be currently available to understand the projects?

- What are the sources of the estimated nutrient removal figures provided in the matrix?
  - *A SFWMD official responded that most of these came from the source of the project, whether a local government, the Watershed Protection Plan, etc.*
- Better info on specific locations of BMPs (geographically, where are they implemented?) and nutrient reduction figures associated with each of those sites.
- Timeline for implementation of each project (e.g. would it take 6 months or years)?
- Cost-benefit analysis, and also how this relates to the timeframes needed for implementing projects.
- Some sort of methodology to compare across projects.
- Better information on water storage benefits.
- More detailed information regarding implementation (sequencing, costs, etc.).
- How does climate change interface with each of these projects?

Which projects would be of greatest priority to you?

- C-43 Reservoir
- Designate priority watersheds and implement projects in these as resources allow
- CRE 13 – Water quality facility to treat reservoir water
- CRE 128 and 128A – Distributed water storage reservoirs
- Charlotte Harbor Flatwoods
- Septic tank removal
- Four Corners – CRE 44
- Nalle Grade Stormwater Park
- Lake Hicpochee
- BOMA
- CRE 29 (Lehigh Acres wastewater treatment and stormwater retrofit project) – the nitrogen

removal figure is impressive

- CRE 30 – ABSORB Project
- Greenbriar Preserve Project
- CRE 01 – Recyclable Water Containment Areas (RWCA) Project
- Lake Hicpochee North, more so than South
- Anything that can hold water during the rainy season and release it during the dry season
- Research on cost-effective means to reduce nitrogen loading
- Dispersed water management projects
- 6 Mile Cypress
- Bob Janes Preserve
- Nutrient removal from Lake Okeechobee
- Monitoring of tributaries

Other issues that came up / Other concerns that need to be addressed:

- Readdressing minimum flow level
- Statewide stormwater rule
- Sending water south
- Treating water from Lake Okeechobee
- Water quality in the reservoirs
- Storage north of Lake Okeechobee
- Herbert Hoover Dike Rehabilitation
- Septic sewer systems
- Sea level rise

## **V. Key Evaluation Criteria**

Patrick Field, Consensus Building Institute, briefly reviewed a draft version of “project evaluation criteria” that could be used to prioritize among the projects under consideration for the Caloosahatchee watershed. He described the following criteria:

- Nutrient removal / reduction – primarily concerned about nitrogen
- Water storage
- Operational distribution and timing – operational control such that you can manage the water
- Implementation readiness – do you have control of needed land, progress of project design, partnerships in place, funding in place, etc.
- Regional impact – which projects have a broader impact
- Multiple benefits – beyond nutrient and flow, benefits such as flood control, recreation, etc.
- Sustainability – ongoing operational costs, how adaptable is the project

Community forum participants provided the following responses and suggestions about the criteria:

- Criterion to add:
  - Whether a project is legislatively mandated as part of a TMDL strategy
  - Indicate where policy decision can impact the ability to store or withhold water.
  - Regulatory management compliance – for example, making sure that stormwater ponds

- are maintained
- Projects that may be needed to address other impairments, such as fecal coliform
- Ability to bundle or sequence the projects for enhanced effect
- Items under “multiple benefits” that a participant suggested be elevated in importance:
  - Habitat
  - Recreation
- Suggestions for using the criteria:
  - Some sort of test of the criteria – for example, a survey could be conducted in which each participant is given a fixed and limited sum of money to allocate among the projects and compare how this relates to the criteria
  - Could ask people to prioritize *between* the criteria

## **VI. Conclusion and Next Steps**

The “key implementers” group, consisting of relevant agencies and local governments, will review the input provided during the Community Forum and incorporate it into their process, including the project matrix and evaluation criteria documents.

A second Community Forum will be held in the fall to discuss any prioritization strategies developed by the key implementers group, as well as possible implementation measures. Details will be forthcoming.

Copies of meeting materials and presentations are available at: [www.sfwmd.gov/calooahatchee](http://www.sfwmd.gov/calooahatchee).

## Appendix A – Attendance

| LAST NAME  | FIRST NAME | AFFILIATION   |
|------------|------------|---|
| AIUTO      | PHIL       | Charlotte County  |
| AMOS       | LEE        | Conservation Foundation of the Gulf Coast                           |
| ANDERS     | KRISTIE    | SCCF  |
| AVILA      | MARTHA     | FDEP  |
| BAKER      | WILLIAM    | MacVicar Consulting   |
| BARLETTO   | MISSIE     | Glades County/ AIM Engineering                                      |
| BARTLESON  | RICHARD    | SCCF Marine Lab   |
| BEEVER     | LISA       | CHNEP   |
| BERTOLOTTI | LESLEY     | SFWMD   |
| BOGERT     | DAVID      | River Association   |
| BOOTH      | AMANDA     | USGS  |
| BOYLE      | MICHAEL    | City of LaBelle   |
| BROOKS     | BENNETT    | Consensus Building Institute  |
| BYLE       | BILL       | Charlotte County  |
| CAIN       | TERRY      | Lee County Dept of Parks & Recreation                               |
| CAPECE     | JOHN       | Riverwatch  |
| CARPENTER  | JENNIFER   | DEP   |
| CARROZZO   | MARISA     | Conservancy of SWFL   |
| CEILLEY    | DAVID      | Johnson Engineering   |
| COELLO     | AMANDA     | III   |
| COOK       | MICHAEL    | ECWCD   |
| COOPER     | LEANNE     | Johnson Engineering   |
| COSTELLO   | CRIS       | Sierra Club   |
| COY        | ANDY       | Teacher   |
| CROOKS     | AMBER      | Conservancy of SWFL   |
| DAVIS      | STEVE      | Ibis Ecosystem Association  |
| DAVIS      | STEVE      | Everglades Foundation   |
| DELISIS    | DAN        | SFWMD   |
| DORR       | ERICA      | III   |
| DOUGLASS   | JAMES      | FGCU  |
| DREIKORN   | MICHAEL    | Self  |
| ELLIOTT    | REBECCA    | FDACS/OAUP  |
| ENGLAND    | MARGARET   | Caloosahatchee River Citizens Assoc. CRCA;<br>Hendry-Glades Audubon |
| ENGLISH    | HUGH       |   |
| EVANS      | JAMES      | City of Sanibel   |
| FANCHER    | TRISH      | Keep Lee County Beautiful   |
| FARAH      | STEVEN     | Lee County  |
| FIELD      | PATRICK    | Consensus Building Institute  |
| FLOOD      | PHIL       | SFWMD   |
| FLYNN      | LEE        | Aim Engineering   |
| FORDHAM    | GEORGE     | Fordham Engineering   |
| FOSTER     | SOMMER     | Johnson-Prewitt   |
| GILLOGLY   | PHIL       | Lee County  |

|             |         |   |
|-------------|---------|---|
| GRANDUSKY   | KYLE    | Federico, Lamb & Assocs. and CLDD         |
| HAMEL       | RON     | Gulf Citrus Growers                       |
| HARCLERODE  | KURT    | Lee County                                |
| HOURIEZ     | ANTOINE | III                                       |
| HUTCHCRAFT  | MITCH   | SFWMD                                     |
| JARVIS      | CONNIE  | City of Cape Coral                        |
| KANSAL      | TUSHAR  | Consensus Building Institute              |
| KARUNA-MUNI | ANURA   | Lee County                                |
| KIBBY       | KEITH   | Lee County                                |
| LAACKONEN   | KEITH   | Town of Fort Myers Beach                  |
| LACONTE     | JIM     | Res.                                      |
| LINDSAY     | DAVID   | ECWCD                                     |
| MANN        | FRANK   | Lee County                                |
| QUASIUS     | MARIA   | Audubon of the Western Everglades         |
| MAXWELL     | LIBBY   | FL Leg. Dist. 55                          |
| MCGREGOR    | RUTH    | CRCA                                      |
| MCLEOD      | JAY     | SWFRPC                                    |
| MEEKER      | MELISSA | Lee County                                |
| MILLAR      | PAUL    | Lee County                                |
| MILLER      | VINCENT | City of Ft. Myers                         |
| NEUROHR     | JULIE   | FDEP                                      |
| O'NAN       | KELLY   | Hendry County                             |
| OLSON       | CATHY   | Lee County                                |
| OSBORNE     | DEBI    | Conservation Foundation of the Gulf Coast |
| PALMER      | JOYCE   | USFWS                                     |
| PARKER      | SHANE   | Hendry County                             |
| PARSONS     | MIKE    | FGCU                                      |
| PAUL        | JOHN    |   |
| PAUL        | JACK    |   |
| PEARSON     | JEFF    | Cape Coral                                |
| PENDERGRASS | CECIL   | Lee County                                |
| QUASIUS     | PETE    | Audubon of the Western Everglades         |
| QUINCY      | IRENE   | Pavese Law Firm                           |
| RASNAKE     | ERIN    | FDEP-S/SW                                 |
| RITTER      | GARY    | SFWMD                                     |
| ROBSON      | DAVID   | Johnson Engineering                       |
| ROSENSWEIG  | DIANNE  | Scheda Ecological                         |
| SCOTT       | JOHN    | Clean Water Initiative of FL              |
| SENTES      | STEVE   | SFWMD                                     |
| SMITH       | DARRELL | FDACS                                     |
| SORRELS     | JUDY    | Cape Coral                                |
| SPIELMAN    | MATT    | Realtors FM                               |
| UEMURA      | EDUARDO | III                                       |
| WATERS      | DAN     | SFWMD                                     |
| WESSEL      | RAE ANN | SCCF                                      |
| WHERRY      | ROSS    | Eco-Voice                                 |
| WOOTEN      | WANDA   | Lee County                                |

## Appendix B – Transcription of Small Group Discussion Notes

**Question 1: Are there key projects missing from the list of candidate projects? Please focus on identifying only those projects that are at least in the conceptual design or preliminary planning phases.**

### Group 1

- Bob Janes Preserve - Restoration/ water storage on old ag. fields is much larger project than what's listed in CRE44
- Is there a way to create stormwater treatment plants?
- Opportunities for habitat restoration/water treatment @ golf courses - their water often has high nutrient loads.

### Group 2

- C-43 Reservoir Water Quality component (not BOMA), specifically associated w/ C-43 West Reservoir
- Vallisneria (Tape Grass) restoration project in upper estuary near Manatee Park
- Regulatory approaches that may require rulemaking or policy changes
- Study to identify hot spots for septic leaching

### Group 3

- Diverting water south- taking water away from estuaries back towards more natural conditions; sheetflow

### Group 4

- Level II BMPs
- LORS revision & Herbert Hoover Dike
- How will water move south if we fill all these projects?
- Are these projects affecting lake or Caloosahatchee River?

### Group 5

- Complete the BMAPS from Lake Okeechobee to the Estuary
- Imperative to identify projects on the impaired water bodies and tributaries to control pollution at source
- Oxbow restoration

### Group 6

- Long-term underground storage around Babcock Ranch area. (Phase 2 of C-43 reservoir ASR)
- Vallisneria restoration in oligohaline Caloosahatchee River Estuary
- Conservation 20/20 purchase of land for water storage and/or ecosystem function vs. preservation only
- See question 4 [*question 4 responses reproduced here:*

- What to do with our 1000s of urban and suburban stormwater detention ponds, which have become nutrient sources rather than sinks due to poor management, landscaping, herbicide and copper sulfate treatment; need to enforce district regulations
- what to do with our 1000s of poorly-maintained septic systems
- sending water south from Lake Okeechobee, and treating it.]

#### Group 7

- Every dream has made it on the list. Unless the data are forthcoming - a name and description aren't useful
- Stormwater retention ponds - nutrient loads

#### Group 8

- Public education program
- Water quality in Lake - add nitrogen reduction
- Solutions for large scale releases
- Scientific studies/projects that look at effects of large releases on Gulf of Mexico (ex. pink shrimp impacts)
- BMP improvements
- Water reservation for natural system, and stormwater rule

#### Group 9

- Oxbows Restoration
- Water Budget Transparency (real-time) for C-43 Reservoir storage/losses (both the short-term and long-term phases)
- Methodology for cost/benefit methods

#### Group 10

Carlos Waterway water quality project - in conjunction with C-43 reservoir

#### Group 11

- Group projects by location/connection/overlap with feasibility study. Evaluate cost effectiveness of projects by grouping
- Perform current mapping of sea grass and synthesize compared to 1950s and 1993 conditions (historic ideal conditions)
- Oxbow restoration

#### Group 12

- Plan 6 - Southern Lake Okeechobee Flow way
- Redirect flow to south from Lake Okeechobee - diminish flow to West
- Attenuate inflows to Lake Okeechobee
- Herbert Hoover Dike restoration → LORS 2008
- Complete Kissimmee River Restoration and Upper Basin water storage
- Statewide fertilizer ordinance w/ regional recognition

- Central sewer and removal of septic tanks
- Sediment transport removal projects

#### Group 13

- Oxbow restoration projects in perpetuity
  - contact Caloosahatchee River Watch for conceptual plans

#### Group 14

- Mirell as a real-time modeling tool
- Sewer Relining
- Manhole Rehabs
- Cape Coral Weir 4, 58, 9, 57
- Charlotte Flatwood Initiative, work together/Regional effort

### **Question 2: What additional (available) information is needed to understand and prioritize among the list of candidate projects?**

#### Group 1

No suggestion

#### Group 2

- Information related to budgets, cost, grants, partnerships, land acquisition costs
- What projects are needed to address other impairments (e.g. fecal) and would the identified projects provide benefits that overlap? (Multiple benefits - addressing other impairments?)

#### Group 3

- nutrient removal efficiency
- cost efficient (\$/lb)
- acre feet storage/\$
- available funding

#### Group 4

- need cost and nutrients and storage info to accurately rank these projects
- how accurate is cost? current pricing or from previous project development
- estimated storage? wet or dry? capacity? = model accuracy?
- cost benefit

#### Group 5

- See answers above to Question 1 [*Question 1 responses reproduced here:*
  - Complete the BMAPS from Lake Okeechobee to the Estuary*

- Imperative to identify projects on the impaired water bodies and tributaries to control pollution at source
- Oxbow restoration -]

#### Group 6

- Budget for nutrient sources to estuary: where are the bulk of the nutrients coming from? Various sources including groundwater, stormwater (urban), ag runoff, Okeechobee.
- What is sea level rise going to do over next 50-100 years that might affect our flow-salinity models?
- What's up with these "Stormwater Master Plans"? Do they do anything good for the environment or are they just flood control?

#### Group 7

- CRE 128 concept needs to be more clearly defined, especially storage volumes and timing of discharge/ET/percolation; nutrient reduction possibility.
- BMPs need to be clarified on their data outcomes; Level 2 BMPs are missing
- cost/benefit cannot be estimated in the absence of data.

#### Group 8

- How are you coming up with estimated nitrogen removal?
- How do you determine success of projects and how do you adapt?
- Better information on location of BMPs, and nutrient reduction; should have estimated nutrient removal
- timeline for implementation of projects

#### Group 9

- Project cost/benefit methods
- Climate change and sea level rise interactions with current Caloosahatchee issues, problems, and projects
- Actual performance of distributed storage projects

#### Group 10

Cost/benefit analysis; nutrients storage

#### Group 11

- Complete information for all projects
- How projects link together and a cost effectiveness of projects combined (i.e. ECWCD projects to send water south vs. Charlotte Flatwoods combined)
- Continued evaluation of long-term performance of constructed private water management systems
- Determination of phosphorus threshold in estuary to prevent blue-green algae blooms (b/c algae can fix atmospheric nitrogen)

- Cost evaluation should include comparison of MT removed (total nitrogen (TN) & total phosphorus (TP)) per \$. Also evaluate long-term operation costs in analysis.
- What other surplus lands are available (i.e. 440 acre N.E. Lee Parcel/C-43 Spoil)
- Regulatory caps on utility operation
- How much money is available and how much can be constructed in a given year

#### Group 12

- Salinity barrier vs. freshwater in Caloosahatchee; brackish/salt water interface
- Better info on water storage benefits
- More quantitative information
- Implementation schedule for projects on list
- Cost/benefit analysis for projects; how will the benefits to the environment be offset by impacts to rural areas. How does climate change figure into it.

#### Group 13

- Transparency of all stages of C-43
  - Monitoring of water and how much makes it to the estuary during the dry season vs. what was released
- Benefit/cost ratios in addition to timeline
- Goals and targets for storage water quality not defined
- No information on capacity for storage or nutrient loads for each project - effectiveness
- Methodology to formally prioritize projects
- Perspective on how fit in to big picture

#### Group 14

- Money
- Add engineering analysis

### **Question 3: Which of these projects are of greatest priority to you and why?**

#### Group 1

- Suggest breaking projects into cost categories, e.g. greater than \$10M, between \$5M and \$10M, between \$1M and \$5M, and less than \$1M, and prioritize within each group
- BOMA/CRE 10 - would yield valuable information that would make other projects more effective
- Bob Janes Preserve
- Regional Projects
- North 6 Mile Cypress Slough Preserve

#### Group 2

Lake Hicpochee North

- CRE 04
- CRE 05
- CRE-LO 40
- Lake Hicpochee South
- BOMA (CRE 10)
- C-43 Reservoir (CRE-W Res) and water quality treatment component
- Dispersed water management projects
- Four corners/Spanish creek (CRE 44)
- Six Mile Cypress Slough Preserve - North (on second to last page)
- Charlotte Harbor Flatwoods Initiative

### Group 3

- Reservoir/storage to remove H2O during high flow and release during low flow (dry season); regulation = restore salinity regime (C-43)
- More cost effective methods/projects → research projects
- Discharge from roads; clean before going in river
  - North Ten Mile Canal (CRE 123)

### Group 4

- C-43, BOMA, and Hicpochee = largest bang for buck, allows flows during dry season.
- CRE 29 – great nutrients removal
- septic tank removal/conversion for all areas
- CRE 149, 152, 153 = dispersed water management good idea, but small-scale and localized

### Group 5

- Four corners (CRE 44) project is designed, right of way required. Construction needs to be funded
- CRE-W Reservoir C-43 water storage (control source)
- CRE 13 Water Quality
  - Treat Pollution (N)

### Group 6

- Lake Hicpochee North → Links to Nicodemus, giving added benefit.
- Babcock Ranch water storage
- Floating aquatic vegetation tilling → Addresses both water storage and nutrient reduction

### Group 7

1. C-43 CRE reservoir - do it now!
2. CRE 128 East Reservoir - Bring it forward (100,000 acre feet)
3. CRE 04/05/2400 and BOMA acquisition: All are storage projects to mitigate flows into estuary.

Smaller funding/ST payoff:

1. CRE 30 – ABSORB project
2. CRE 143/144 – Greenbriar Preserve
3. CRE 01 – Recyclable Water Containment

#### Group 8

- C-43 reduces dry season problems and some in the wet season; funding
- Nutrient removal from lake - it is all connected
- BMPs to be effective - monitoring & regulations
- Monitoring for tributaries (discharges)
  - More funding needed for this

#### Group 9

- Transparency and real-time data delivery to public of water budget data for C-43 reservoir.
- Development of accounting methods (CBA, LCA, etc)
- Restoration of oxbows to provide:
  - a) Education to public to help support all other projects
  - b) Habitat restoration host sites

#### Group 10

- Main Caloosahatchee input- Lake Okeechobee
    - C-43 Cell 1 construction needs state/reg. leadership
    - \*Large project - impact on low flows
  - Priority watersheds
    - Storage, treatment, designed/permitted
    - Smaller but effective projects
- Continue to classify the other regional and local projects to *[no further writing]*

#### Group 11

- Projects that include hydrologic fixes like Charlotte Flatwoods and ECWCD flow south of SR 82 projects. These projects include flood control, habitat restoration, pollution control/attenuation
- C-43 reservoir, CRE 128, CRE 128A
- Lake Hicpochee South and BOMA project (upstream in river and provides storage and water quality components)
- City of LaBelle Stormwater plan and utilities project in Lehigh w/ stormwater plan CRE 29
- CRE 01

#### Group 12

- C-43 Storage Reservoir and associated projects
  - CRE 13, CRE 128, and CRE 128-A; Desperately need water quality treatment before -water enters Caloosahatchee
- Charlotte Harbor Flatwoods - multi agency jurisdictional

-Babcock Ranch - Attenuate Flooding from Charlotte County going into Lee County  
-Nalle Grade Project

-Septic Tank Removal

#### Group 13

-C-43 West Basin Storage Reservoir combined with water quality treatment on surplus lands (CRE 13)  
-CRE-147 Nalle Grade Stormwater park project

#### Group 14

- 1) Canal modeling dashboard
- 2) Cape Coral Sewer relining and Manhole Rehab (7,000)
- 3) Charlotte Flatwoods
- 4) Cape Coral Weir 4, 58, 9, 57

**Question 4: What longer-term issues does your group want to note as needing further discussion at some point in the future?**

#### Group 1

No comments

#### Group 2

-Reducing total nitrogen from Lake Okeechobee  
-Relationship to Greater Everglades Restoration projects  
- See Question 2 answers [*Question 2 answers reproduced here:*  
    -*Information related to budgets, cost, grants, partnerships, land acquisition costs*  
    -*What projects are needed to address other impairments (e.g. fecal) and would the identified projects provide benefits that overlap? (Multiple benefits - addressing other impairments?)*]

#### Group 3

-Diverting water south of the lake  
-Redevelop basin building & development standards  
-Storage north of the lake

#### Group 4

-Finish a project; don't start a lot of various projects and not finish → ensure funding is stable/secure

#### Group 5

Commitment from legislature to fund BMAPS, etc. for/in long-term

#### Group 6

- What to do with our 1000s of urban and suburban stormwater detention ponds, which have become nutrient sources rather than sinks due to poor management, landscaping, herbicide and copper sulfate treatment
  - Need to enforce district regulations
- What to do with our 1000s of poorly-maintained septic systems?
- Sending water south from Lake Okeechobee, and treating it.

#### Group 7

- CRE 29/69/121 - The density issue will drive the cost of replacing septic with sewer, and the capture of the huge total nitrogen benefits.
- Too many conceptual projects have no data estimates
- Force the water to be sent south.

#### Group 8

- Regulatory issues regarding BMPs
- Leveraging volunteers/community involvement for water quality sampling
- Septic tanks
- Sea level rise and impacts on system and projects
- Where will we get all the additional storage for wet times?
- Economic benefits

#### Group 9

- Sewer leakage assessment and solutions
- Septic tank assessment
- Climate change and sea level rise issues interaction

#### Group 10

- Storage north of the lake
- Storage and treatment in the lake

.

#### Group 11

- How to increase wet season flow south of Lake Okeechobee and increase dry season flow

#### Group 12

- Sending water south
- Water quality in the reservoirs
- Sediment accumulation and transport
- Impacts of project implementation to rural tax base.

### Group 13

- Septic tanks / sewer lines
  - Address contamination
  - Long-term planning → density of homes for sewer systems
- Sea level rise/climate change

### Group 14

- 1) Grant Funding w/ local match
- 2) Removing restrictions on reuse water SB-536

### **Other Notes:**

#### Group 4

Other notes:

- Some projects are statewide issues and will continue regardless of this ranking (ex. BMP, Ag).
- Also which projects are already funded and are going to continue; fully funded
- Info on dispersed management is outdated on table

**Caloosahatchee River Project Prioritization Process**  
**Community Forum #2**  
**Meeting Summary**

December 2, 2014

City Pier Building  
Fort Myers, FL

**Attendees:** A list of forum attendees can be found in Appendix A.

## **I. Overview**

This document summarizes a community forum held December 2, 2014 with stakeholders, state and local agencies, and other community participants around efforts to improve the ecological health of the Caloosahatchee River and watershed. The forum provided community members with an opportunity to comment on a set of proposed regional project priorities that have emerged from interagency discussions on water quantity and quality in the Caloosahatchee. The forum also included discussion of strategies to strengthen coordination among stakeholders in the region on local project prioritization, and the focus and structure of future implementer and stakeholder dialogues.

The meeting was facilitated by Mr. Bennett Brooks, Mr. Patrick Field, and Mr. Tobias Berkman from the Consensus Building Institute (CBI).<sup>1</sup>

## **II. Action Items**

*For the implementing agencies:*

- Reflect on the feedback from the forum and meet in late January to develop a final set of priority projects for the region.
- Discuss possible approaches for creating an “issues team” to address local project prioritization, and consider distributing a suggested framework to stakeholders for comment.

*For the Consensus Building Institute:*

- Develop a Final Report summarizing the implementing agencies’ final recommendations and the ideas discussed during the two community forums and visioning process.

---

<sup>1</sup> The Consensus Building Institute (CBI) is a non-profit institution that works to improve the way leaders use negotiations to make organizational decisions, achieve agreements, and manage multiparty conflicts and planning efforts ([www.cbuilding.org](http://www.cbuilding.org)).

*For Community Forum participants:*

- Send any additional comments on project prioritization, strategies to improve regional coordination, and future implementer and stakeholder dialogues to Phil Flood, SFWMD, at: [pflood@sfwmd.gov](mailto:pflood@sfwmd.gov).

*For the South Florida Water Management District (SFWMD):*

- Reflect on feedback from Community Forum regarding ongoing stakeholder forums and develop an action plan for 2015.
- Post Community Forum meeting summary on SFWMD web page.

### **III. Introductions and General Overview**

Rick Barber, SFWMD Governing Board member, opened the meeting with a brief welcome. Daniel DeLisi, SFWMD chief of staff, then provided context on the meeting and its goals. Mr. DeLisi noted that SFWMD began engaging stakeholders on the future of the Caloosahatchee River about two years ago, and the current meeting was designed to help achieve stakeholder consensus on project prioritization.

Bennett Brooks of the Consensus Building Institute then summarized the goals and agenda for the meeting and put forward ground rules to help keep the conversation on track.<sup>2</sup>

State Representative Matt Caldwell offered additional introductory remarks, focusing in particular on the upcoming legislative session. Representative Caldwell said that the Florida House of Representatives is poised to make holistic water policy a preeminent goal, noting that the Speaker of the House has put statewide water at the top of his legislative agenda. Legislators are committed to seeing the money from Amendment 1 spent wisely, and are therefore looking for input from stakeholders on their goals and priorities.

Next, Mr. Brooks provided some additional background on the stakeholder engagement process to date. He reported that the process began with a visioning exercise in which CBI interviewed approximately 40 stakeholders on their goals for the future of the Caloosahatchee River and watershed. According to Mr. Brooks, stakeholders expressed a strong interest in improving water quality and quantity, and voiced a powerful sense that a “business as usual” approach would not do enough to achieve these goals. In response, the district embraced a three-pronged strategy involving 1) a scientific workshop on ecological indicators and identification of key knowledge gaps; 2) interagency conversations around project prioritization; and 3) community forums to engage stakeholders and solicit their feedback. The first Community Forum took place August 8, 2014, and

---

<sup>2</sup> Mr. Brooks and other speakers used slide presentations to accompany their remarks. The presentations are available online at [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/caloes\\_forum\\_2014\\_1202\\_presentations.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/caloes_forum_2014_1202_presentations.pdf).

provided community members with an opportunity to offer input on which regional projects they believed were most important. Mr. Brooks reemphasized that the focus for the current meeting was on refining project prioritization (specifically, providing feedback on the implementing agencies' preliminary prioritization), as well as engaging implementers and stakeholders in a discussion around strategies for productively addressing ongoing program and policy issues moving forward.

#### **IV. Topic 1: Developing Regional Priorities**

##### *Slide Presentation*

Phil Flood of SFWMD presented on the regional project prioritization process to-date and the current categories and rankings of regional projects based on discussions among the implementing agencies. Mr. Flood drew participants' attention to a handout containing a list of regional and local projects and project categories, and noted that SFWMD had created the project list using four sources: the Caloosahatchee River Watershed Protection Plan, the Caloosahatchee Estuary Basin Management Action Plan, planned local government or water control district projects, and input from community members from the first Community Forum in August.<sup>3</sup> Mr. Flood reminded participants that the information on the projects in the handout had come from the individual agencies responsible for implementing the projects.

Mr. Flood noted the project list had been revised to incorporate participants' suggestions from the August Community Forum, and to reflect progress made in conversations among the implementing agencies. Specific changes to the list included:

- Incorporating (as possible) additional information related to ranking criteria, such as water availability for dry-season release, operation and maintenance costs, opportunities for collaboration and linkages across projects, and likely land acquisition costs.
- Including information on the source of nutrient removal data, which in most cases came from the local government or 298 district implementing the project.
- Including additional projects based on suggestions at the August Community Forum.
- Reorganizing the projects into separate tables for regional and local projects.
- Grouping local projects by type and phase, with entries indicating whether the project is a near term or long term project, and whether it focuses on filtermarsh, water storage, environmental restoration, central sewer conversion, or stormwater/drainage.
- Adjusting the ranking criteria based on stakeholder feedback at the August Community Forum meeting.
- Organizing regional projects into four categories: immediate, near-term, conceptual, and restoration. Immediate projects are high-priority projects that are essentially shovel ready, and are either permitted or currently in the design phase. Near-term projects may have an initial

---

<sup>3</sup> The handout is available online at [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/caloosahatchee\\_projects\\_list\\_2014\\_1121\\_draft.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/caloosahatchee_projects_list_2014_1121_draft.pdf).

conceptual design or design study, but are not as far along as immediate projects. Conceptual projects are ideas to address needs within the watershed that have not been fleshed out. Restoration projects are efforts that address environmental restoration needs but lack a storage component.

Mr. Flood noted that the implementing group strived to incorporate cost-benefit metrics as recommended at the August Community Forum, but concluded that there was insufficient information available for a meaningful analysis across projects.

Next, Mr. Flood provided background on each of the regional projects on the list. This included four immediate projects:

- *The C-43 West Basin Storage Reservoir*: A large reservoir to be constructed in Hendry County, designed to improve salinity in the estuary, attenuate peak water flow during the wet season, and release water during the dry season.
- *Lake Hicpochee North Hydrologic Enhancement*: Hydrological enhancement of a former lake, now a marsh, to provide environmental benefits and improve water quality.
- *C-43 Water Quality Treatment and Demonstration (aka BOMA Property)*: A project involving a number of test plots to examine processes for removing nitrogen from the watershed.
- *Babcock Ranch Preserve Water Storage*: The creation of shallow water storage to capture and store stormwater, and prevent it from flowing into the Caloosahatchee.

The list also included two near-term projects:

- *West Caloosahatchee Water Quality Treatment Area (C-43 Reservoir Site)*: A water quality project to be constructed in conjunction with the C-43 reservoir; Mr. Flood noted that the project still requires a feasibility study.
- *Lake Hicpochee South Project*: A project to rehydrate the south side of Lake Hicpochee; Mr. Flood noted that the effort would revisit an earlier feasibility study to reassess the project's costs and benefits.

The list included nine conceptual projects:

- *Charlotte Harbor Flatwoods Initiative*: A study to identify possibilities for storage on existing lands and rehydration of tributaries feeding into Charlotte Harbor; Mr. Flood suggested that a significant amount of land is already in public ownership but additional work is needed to identify key projects.
- *The East Caloosahatchee Storage Project, Caloosahatchee Storage-Additional Project, and C-43 Distributed Reservoirs Project*: Three conceptual projects that came out of the Caloosahatchee River Watershed Protection Plan to address storage needs. All would require feasibility studies.
- *Caloosahatchee Ecoscape Water Quality Treatment Project*: A project to treat water flow before it gets into the Caloosahatchee River.
- *Recyclable Water Containment Areas Project*: A project to periodically rotate agricultural lands

out of production for use as storage.

- *Lee-Charlotte Co. Border Hydrologic Improvement*: A project to try to reestablish flows in the tributaries flowing into the Caloosahatchee, with an opportunity to move waters from one watershed to another depending on conditions.
- *ASR on Public Lands*: A project to develop aquifer storage and retrieval arrays on public properties.
- *Carlos Waterway Conveyance*: A project to take water out of the C-43 reservoir, direct outflows through the Carlos Waterways, and obtain treatment benefits as water flows to the Caloosahatchee.

Lastly, the list included three restoration projects:

- *Tape Grass Plantings Upstream of S-79*: A project to reestablish tape grass upstream to serve as a seed source for the rest of the river.
- *Oxbow Restoration*: A project to restore oxbows and obtain water quality benefits.
- *Tape Grass Plantings Below S-79*: A project to reestablish tape grass meadows below S-79 through plantings.

In response to Mr. Flood's presentation, Community Forum participants asked the following questions and made the following comments; *responses given by South Florida Water Management District (SFWMD) representatives are indicated in italics*:

- The purchase of private land from interior counties has a negative impact on these counties' economic base, and the government is not doing enough with the large amount of land it already owns. Has the SFWMD done an inventory of how much additional land it is projected to purchase? *SFWMD tries to reach out to communities and accommodate them when it purchases land; it tries to avoid including properties with high commercial development potential in project design.*
- A large percentage of contamination and nutrients comes from septic tanks, and the septic tank situation should be addressed. *Agree that septic tanks are an issue.*
- SFWMD ought to buy more land to the south that flows into the Everglades. The C-43 reservoir will only hold 10% of what is needed during the wet season, and will have a limited impact on attenuating flows. *We recognize there is a gap and more needs to be done, but the SFWMD and others see the C-43 reservoir as an important piece of the solution.*
- SFWMD should offer a presentation on what it learned from the C-43 reservoir test cells, which cost more than \$10 million. *We have made presentations on some of these issues in the past, and it might be a good topic for a future Forum.*
- Does the Ecoscape Project involve land that has already been purchased? *Our understanding is that it involves land located to the west of BOMA property, where a conservation easement has been purchased.*
- In the 80's and 90's the SFWMD made significant investments in sampling and analytical lab methods. Has SFWMD started projects to support cost-benefit metrics? If not, is there an opportunity to list that as an independent project? *We have not done anything we could apply*

*to projects across the board. This is something we could talk about and the point is duly noted. It is challenging because projects vary significantly in type and scope, information is developed differently depending on if it's at the local or state level, or information is often not developed at all.*

- When building a \$452 million reservoir, it is critical to track the benefits and show it was worth it.

#### *Small Group Discussions and Report-Outs*

Participants broke into small groups to discuss regional priority projects. They were asked to address two sets of questions, take notes, and then report their answers to the full group. The questions were as follows:

1. Are projects appropriately categorized? Are they appropriately prioritized?
2. Are there any key regional projects still missing from the list?

Comments from the groups' report-backs centered on the following cross-cutting themes described below. Detailed responses from each table (and transcriptions of their notes) are provided in Appendix B.

- There was broad support for the overall project categorization, and general agreement that it effectively reflected the criteria laid out in previous sessions.
- There was broad support for the top tier priority projects, with each small-table discussion group generally agreeing that the suite of projects should be pursued immediately.
- There was general agreement that the list is complete or mostly complete, and no projects should be removed from it.
- There was repeatedly mentioned interest in promoting the Charlotte Harbor Flatwoods project to the Immediate Priority list, given the benefits of the project and near-term opportunities related to the widening of I-75.
- There was also interest in promoting the West Caloosahatchee Water Quality Treatment Area project to the Immediate Priority list, and combining it with the C-43 West Basin Storage reservoir project.
- There was consistent support for improving cost-benefit data to support future analysis across projects and types of strategies. Participants suggested that cost-benefit metrics may be crucial for tracking and publicizing project successes and securing additional funding.

Other comments included the following:

- There is a need for ongoing monitoring to track project effectiveness.
- There is continued interest from many stakeholders in program/policy actions with impacts beyond the scope of the Caloosahatchee watershed (e.g., increasing environmental flows south, hardening the Herbert Hoover Dike, the Lake Okeechobee Regulation Schedule ("LORS"), and taking advantage of storage opportunities north of Lake Okeechobee).

- The *Vallisneria* restoration south of S-79 should be listed as a higher priority.
- Including “policy” or “operational” aspects in the list could enhance projects and allow for connectability among them.
- It would be helpful to look for recreational opportunities in the projects.
- The C-43 reservoir project is distinct from other projects because it involves a federal funding component.
- Projects that are not “shovel ready” may still merit prioritization.
- Additional land should be purchased south of Lake Okeechobee.
- Some projects should be moved up or added to the list: Restoration of Oxbow 32 could be an Immediate Priority, while the Central Everglades planning project could be added to the near-term project list.
- CRE 126 (Fort Myers-Cape Coral Reclaimed Water Interconnect Project) should be considered a higher priority because there is local funding available.
- Some commenters noted the challenge of how to address sewerage projects, though local, that might have a meaningful positive impact on regional water quality if funded and constructed.
- It is important not to ignore that utilities could become partners and create a larger impact.

A complete list of each group’s comments and transcriptions of their notes on regional priority projects are included in Appendix B.

In the next portion of the meeting, participants discussed how stakeholders might garner support for a package of regional priorities. The following suggestions were put forward:

- It helps to set realistic expectations and quantify the overall benefits.
- It would be helpful to have a breakdown on the time and costs for the design, construction and maintenance phases of each project. This would help stakeholders and decision-makers understand the status of each project, how much each phase will cost, and where the project is going.
- Although analysis is helpful, there also needs to be an effort to galvanize the public around a package of key projects. For example, during the acquisition of Babcock Ranch, there was a sense of urgency and significant media coverage. Similar efforts should be made to rally support for the listing of priority projects.
- Strategies for galvanizing the public include:
  - Creating effective graphics – getting artists involved;
  - Using survey instruments; and
  - Reaching out to citizens and citizen groups to help develop a vision for what the projects are trying to achieve.
- It is important to create a compelling narrative for legislators that shows, in a compelling way, how individual projects are connected to a larger story that “everyone cares about.”

## **V. Topic 2: Considering Local Projects in a Regional Framework**

### *Slide Presentation*

Kurt Harclerode, Natural Resources Division Operations Manager with Lee County presented on the process for identifying and prioritizing among local projects. Mr. Harclerode explained that the interagency team found it difficult to prioritize among local projects given cost-benefit data gaps and inconsistencies across projects, the challenge in weighing local needs and projects against one another, and the need for greater input from and interaction with local municipalities given their central role in implementing local projects. As a result, the agencies did not prioritize among local projects.

However, given the interest among stakeholders and the interagency team in prioritizing among local projects, Mr. Harclerode said the implementing agencies believe there may well be merit in putting together a future process to consider and prioritize among local projects. He explained that the agencies are interested in hearing stakeholder interest in and support for establishing (as is done in the St. Lucie watershed and elsewhere) an “issues team” comprising agency, local government and other stakeholder representatives. Such an issues team would meet annually to hear presentations from local governments about their projects, evaluate them according to a set of articulated criteria, and then deliver to the legislature a list of priority projects for funding. The interagency team felt it would be helpful to hear participants’ input on whether a similar group might be successful in the Caloosahatchee region.

#### *Group Discussion*

Mr. Brooks and Mr. Field asked for participant comments on prioritizing and advocating for local projects, and whether there might be interest in forming a team to look at local projects in the region and seek to prioritize them in a convincing way. In response, participants made the following comments and asked the following questions; *comments or responses provided by SFWMD representatives are indicated in italics*:

- The east coast issues team came out of a fish lesion crisis, which galvanized the public. The team looks for projects that have large benefits compared to their costs, that are ready to implement, and that have strong local commitment (i.e. at least a 50% cost share). Since 1979 it has brought in more than \$80 million to the region. It has proven to be an effective tool to put together smaller projects, prioritize them, and make it easier for state representatives to fund them.
- If the community comes together to decide on priority projects, the projects are much more likely to get funded than if multiple projects are competing against each other.
- Has there been opposition to the group on the east coast, such as opposition from local governments to the ranking system? *No. All the counties and agencies are represented at the table. By the time the group comes up with a preferred list, people are generally willing to accept it.*
- What mutual obligations do the stakeholders have? *Once the list is approved, stakeholders advocate for project funding. Once funding is awarded, each entity enters into a separate contract for completing the projects. The program funds projects that are ready for implementation. This ideally means construction begins within a year.*

- The CBIRS (Community Budget Issue Request System) program is another, similar process for managing local prioritization and seeking cooperation around funding. It has been successful in bringing people together and obtaining funding. It includes different ranking categories, such as whether the project is part of a district mission, part of a regional project, within a plan, or ready to implement; how much of a nutrient load reduction the project entails; and whether there is a cost match.
- The CBIRS program offers some parallels to the St. Lucie Issues Team. The program annually solicited funding requests from local governments to implement water related projects. Eligible projects included stormwater, drinking and waste water projects. Local government requests were submitted directly to the Florida Senate and House of Representatives for funding consideration. The funding program has been inactive since FY2008.
- Given the number of competing priorities statewide and the limits on resources, the community in southwest Florida needs to be an advocate for the region and its needs to ensure it is not deprioritized.
- There may be non-cost policy and regulatory opportunities that should be paired with some of these projects.

Mr. Field and Mr. Brooks noted participants' interest into looking more closely at the potential for establishing an issues team for the Caloosahatchee watershed, and suggested that the implementing agencies work on developing a more detailed vision for what such a group might look like.

## **VI. Moving Forward From Here**

### *Small Group Discussions and Report-Outs*

Participants broke into small groups to discuss possible next steps to engage implementers and stakeholders in the Caloosahatchee River watershed. They were asked to address three sets of questions, take notes, and then report their answers to the full group. The sets of questions were as follows:

1. In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?
2. In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?
3. What should our stakeholder engagement look like in 2015?

Detailed responses from each table (and transcriptions of their notes) are provided in Appendix C, but recurring themes reported out following the small-group discussions centered on the following:

- There should be discussion on developing standardized performance metrics (and associated monitoring programs) to track program effectiveness.
- Conversations should encourage a closer look at cost-benefits across projects and programs to guide more rational investments and decision-making.
- There should be cross community conversations (north/south, coastal/rural) to tackle issues that require collaboration and coordination, and to ensure the fair and efficient sharing of costs.
- There should be an effort to improve outreach and educational efforts and materials, and to strengthen the region’s awareness of water issues and the “story” of water management.
- There should be an effort to engage far-reaching program and policy issues (e.g., LORS, urban and agricultural BMP effectiveness, water reservations, overall allocation increases to the watershed, septic tank upgrades and remediation, etc.).
- The region should develop strategies to maximize the watershed’s benefit from Amendment 1.
- Stakeholder engagement has been helpful, and SFWMD should continue or expand the Community Forums.

Other comments and suggestions included the following:

- Land acquisition may not always be the right solution; there should be a discussion between urban and rural communities about the appropriate amount of land to set aside since rural communities bear the brunt of land acquisition costs.
- There should be discussion of both agricultural *and* urban BMPs, not just the former.
- There should a standardized performance metric for urban and agricultural BMPs, and true monitoring and data collection.
- There should be discussions on septic tank upgrades and remediation.
- Public education is critical; Riverwatch is a positive example.
- The goal of public engagement should be to get “thousands or millions” of people involved, not just a smaller set of engaged citizens.
- Examples of outreach strategies include farm tours, educational campaigns, factsheets and one-pagers, and press conferences with elected officials “on the water.”
- A comprehensive outreach strategy should target 1) counties and the water management district; 2) legislators; and 3) the public.
- There should be improved science discussions between programs.
- The conversation on Amendment 1 is crucial; we should try to develop an overall policy direction and cohesive goal to help us meet our restoration goals.

## **VI. Conclusion and Next Steps**

Mr. Brooks and Mr. DeLisi offered closing remarks. Mr. Brooks invited participants to submit additional comments on index cards at their tables.<sup>4</sup> He also noted that CBI would be producing a

---

<sup>4</sup> Participants’ note card comments are included below in Appendix D.

meeting summary. In late January, the implementing agencies are expected to meet to discuss the feedback from the forum and consider regional priorities. CBI will then produce a final report summarizing the implementing team recommendations and the range of ideas that came out of the broader stakeholder engagement process. In addition, the implementing team will discuss the merits of an Issues team for the west coast, and consider distributing a suggested framework to stakeholders for comment.

Mr. DeLisi thanked participants for attending the meeting, and noted that the SFWMD had heard participants' desire for continued stakeholder dialogue "loud and clear."

Copies of meeting materials and presentations are available at: [www.sfwmd.gov/calosahatchee](http://www.sfwmd.gov/calosahatchee).

## Appendix A – Attendance

| LAST NAME        | FIRST NAME  | AFFILIATION                             |
|------------------|-------------|---|
| ABDUVOHIDOVA     | NARGIZA     | Riverwatch                              |
| BAKER            | WILLIAM     | MacVicar Consulting                     |
| BARLETTO         | MISSIE      | Glades County/ AIM Engineering          |
| BEEVER           | LISA        | CHNEP                                   |
| BOOTH            | AMANDA      | USGS                                    |
| BOYLE            | MICHAEL     | City of LaBelle                         |
| CALDWELL         | MATT        | State Representative                    |
| CAPECE           | JOHN        | Riverwatch                              |
| CEILLEY          | DAVID       | Johnson Engineering                     |
| COOK             | MICHAEL     | ECWCD                                   |
| CORNELL          | BRAD        | Audubon Florida/Audubon West Everglades |
| DAVIS            | STEVE       | Everglades Foundation                   |
| ECKERT           | TIM         | Lee Country Farm Bureau                 |
| ELLIOTT          | REBECCA     | FDACS/OAWP                              |
| ENGLISH          | HUGH        |   |
| EVANS            | JAMES       | City of Sanibel                         |
| FORDHAM          | GEORGE      | Fordham Engineering                     |
| GILLIS           | CHAD        | News Press                              |
| HAMEL            | RON         | Gulf Citrus Growers                     |
| HAMMAN           | BRIAN       | Lee County BOCC                         |
| HARCLERODE       | KURT        | Lee County                              |
| HECKER           | JENNIFER    | Conservancy of Southwest Florida        |
| HENNE            | CARTER      | Sea & Shoreline                         |
| IGLEHART         | JON         | FDEP                                    |
| JARVIS           | CONNIE      | City of Cape Coral                      |
| KEYES            | PAM         | Lee County                              |
| LAACKONEN        | KEITH       | Town of Fort Myers Beach                |
| LASSO DE LA VEGA | ERNESTO     | LCHCD                                   |
| LEOPOLDINE       | MATTHEW     | Riverwatch                              |
| LIDDICK          | DREW        | FGCU                                    |
| LINDSAY          | DAVID       | ECWCD                                   |
| LOPEZ            | JOSE "PEPE" | US Sugar Corporation                    |
| MAXWELL          | LIBBY       | FL Legislature District 55              |
| MCAVOY           | GENE        | UF/IFAS                                 |
| MILLAR           | PAUL        | Lee County                              |
| NEUROHR          | JULIE       | FDEP                                    |
| O'NAN            | KELLY       | Hendry County                           |
| OTT              | JUDY        | CHNEP                                   |
| OTTOLINI         | ROLAND      | Lee County DNR                          |
| PALMER           | JOYCE       | Ding Darling NWR                        |
| PARKER           | SHANE       | Hendry County                           |
| PAUL             | JOHN        | Jack Paul Properties                    |
| PEARSON          | JEFF        | City of Cape Coral                      |
| QUASIUS          | PETE        | Audubon of the Western Everglades       |

|             |         |                              |
|-------------|---------|------------------------------|
| QUINCEY     | IRENE   | Pavese Law Firm              |
| SCOTT       | RUTH    | Clean Water Initiative of FL |
| SENTELES    | STEVE   | SFWMD                        |
| STONEHOUSE  | MARC    | CDM Smith                    |
| TYSON       | DEBBIE  | Gunster Law Firm             |
| WESSEL      | RAE ANN | SCCF                         |
| WOLF PELAEZ | BONNIE  | FDACS                        |

## Appendix B – Small Group Discussion Notes on Regional Priority Projects

### Group 1:

#### *Comments to larger group*

- The project grouping is appropriate in terms of the criteria laid out in previous sessions, but we are still lacking metrics. We would like to see cost-benefit metrics that would enable a more concise ranking of the projects on the list.
- The C-43 reservoir and BOMA projects are the two projects within the top category that should be worked on as soon as possible.
- There is a need to scatter distributed water storage and BMPs across the region, but we need effective cost-benefit metrics to accurately evaluate the benefits of those programs.
- The Charlotte Harbor Flatwoods project should be moved forward as an immediate priority project
- The *Vallisneria* restoration south of S-79 should also be listed as a higher priority.

#### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - C-43 problematic – federal interest to make it difficult to implement
  - Number 1 is unique because it has a federal component – makes project component – needs to be in its own category
  - BOMA looks good because budget is manageable
  - Some of the more regional projects may have a bigger impact
  - Land acquisition is a big piece for keeping landowners on their lands rather than state owned pieces
  - Dispersed water projects
  - Keeping C-43 on top to keep it on federal funding list
- *Question 2: Are there any key regional projects still missing from the list?*
  - None

### Group 2:

#### *Comments to larger group*

- The projects are categorized properly.
- CRE 13 could be moved up and combined with the C-43 reservoir as an immediate priority project
- The list is likely to be helpful for lawmakers going to funding sources.
- It is helpful to separate regional vs. local projects.
- It would be helpful to see a target performance metric to be able to quantify project accomplishments after construction, so the public can see the benefit of their money being spent.
- Including “policy” or “operational” aspects in the list could enhance projects and allow for connectability among them.
- It would be helpful to look for recreational opportunities in the projects.

### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - For funding sources, the list is a great prioritized list for leaders to know where allocation should be focused
  - Regional vs. local breakdown for budgeting of state vs. local
  - Bridging the gap of governmental concern and public noticeability
  - Consensus between local municipalities
  - Project and policies/operational
    - Include measuring/document progress of policies and operational changes
    - Connectability
  - Target performance to quantify accomplishments (post construction)
    - Metric
    - Public benefit
- *Question 2: Are there any key regional projects still missing from the list?*
  - CRE13 – combine with CRE-W Res
    - Same property
    - More bang for the buck
  - Recreational opportunities – aspect on projects
  - Status update on Charlotte Flatwoods land acquisition

### Group 3:

#### *Comments to larger group*

- The C-43 reservoir project might deserve its own category, because of the federal funding component.
- We ranked the BOMA and Hicpochee projects as the second and third top priorities (following C-43).
- There are no projects missing from the list.
- Charlotte Harbor Flatwoods could benefit from being categorized as a higher priority.

#### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - Yes – appropriately grouped in terms laid out in past sessions
  - Still lacking metrics/cost-benefit
  - C-43/BOMA
  - Bonnie reviewed process by which projects were grouped/prioritized
  - Brad Cornell – We do not have metrics to adequately judge projects.
  - John Capece agreed on need for development of metrics as we move forward for better evaluation of projects in the future.
  - Marc Stonehouse – Could money be better used to move lower rated projects forward? C-43 construction costs are considerable.
  - Brad Cornell – C-43 provides major immediate impact

- Agreement that distributed water storage on private lands needs to be scaled up – as there is interest by private landowners
- Marc/Bonnie – are there other sources of funding?
- Brad – Need to address shortcomings identified in distributed water storage and potential seems to be there but need to look at cost/benefit analysis
- Marc – Which project is most ready is really only one factor that should be considered.
- *Question 2: Are there any key regional projects still missing from the list?*
  - Need to scale up distributed water storage/BMPs but need to develop cost benefit metrics to evaluate benefit and impacts
  - Charlotte Harbor Flatwoods (Bond Ranch) – seek ways to move this forward
  - Vallisneria restoration south of lock S-79

#### Group 4:

##### *Comments to larger group*

- The first grouping of four projects is well placed and we are supportive of them.
- The water quality component of adjacent lands should be moved forward in the timeline, to take advantage of land already owned by the state and allow for additional stormwater treatment next to the reservoir site.
- The biggest advantage of the reservoir is the metering of water back out to the estuary during the dry season. That is 80% of the need.
- The Charlotte Harbor Flatwoods project should be “front-burnered” because of the I-75 road widening. An opportunity could be lost in the next few weeks if we do not try to buy that project immediately. The project is relatively inexpensive but has multiple benefits: it reduces excess flows to the Caloosahatchee, mitigates flooding, restores habitat, and restores flows to Charlotte Harbor.

##### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - Charlotte Harbor Flatwoods needs to be front-burnered due to I-75 road widening and available FDOT mitigation property acquisition in jeopardy. FWCC has potential construction money. \$4M reduces flooding and excess flows to CRE.
  - C-43 Reservoir – 170,000 ACFT storage is not a static number. Great addition would be some stormwater treatment adjacent to project site. Best advantage of project would be dry season flows (80% of needs met) Lee County advocates \$300M for construction of first cell
  - Lake Hicpochee – big bang for buck, habitat restoration, etc.
  - BOMA – move it forward
  - Babcock/Four Corners – multiple partners good chance for FDACS to showcase work
- *Question 2: Are there any key regional projects still missing from the list?*
  - No

## Group 5:

### *Comments to larger group*

- There aren't any projects that should be taken off the list.
- "Shovel ready" might not be the best criterion: stimulus projects might not be shovel ready but still should not be taken off the list.
- The conceptual projects are well placed. The Charlotte Harbor project is very important but we would not replace any of the projects in the top list.
- At the last Forum, there was a discussion of hardening the Herbert Hoover Dike, which would allow flexibility in release discussions. This appears to be missing from the list.
- It is hard to rank projects involving nutrient removal and estimated storage without data and metrics.
- There might be opportunities to get more details on ASR projects, but we didn't add this to the list because we did not think it would be worth taking money from other projects.
- Storage north of Lake Okeechobee might help prevent water getting into the lake to begin with.

### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - C-43 – is this project actually "shovel ready"? Need to define "immediate" Same with BOMA.
  - Disconnect between project list and governing board list (Sept. 3 '14)
  - Babcock – need to check with FDACS
  - Metrics; cost: benefit
- *Question 2: Are there any key regional projects still missing from the list?*
  - Herbert Hoover Dike replacement – expedite culvert replacements to provide flexibility in holding water – alleviate releases, therefore reducing nutrient loading
  - Storage north and south of Lake Okeechobee
  - More details on ASR – how much water will it store? Need more details to prioritize this project.

## Group 6:

### *Comments to larger group*

- The immediate priorities are appropriate.
- One individual in the group was in favor of changing the order of prioritization but the others preferred the existing order.
- Some group members supported adding the purchase of 50,000 acres south of Lake Okeechobee to foster sending excess flows south.
- There was some discussion of removing the C-43 Reservoir from the list entirely and replacing it with the southern flow way, and changing the Lake Okeechobee regulation schedule.
- Several participants were in favor of returning the Berry Grove (C-43 Reservoir site) property to private ownership and using revenue to purchase land south of Lake Okeechobee.
- Restoration of Oxbow 32 might be added to the immediate projects list.

- We could add the Central Everglades Planning Project to the near-term projects list, subject to receipt of chiefs' report and permitting.
- There has been no discussion of the Army Corp's work restoring Herbert Hoover Dike. The Corp spent a significant amount on the initial miles of restoration. Instead of fortifying the dike to raise the water level and destroying the wetlands around the lake, the Corps should prioritize construction of a spillway on the southern portion of the dike to allow water to flow towards Everglades National Park.

*Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - Immediate priorities – OK
    - Discussed change in order – one in favor
    - Add purchase of 50,000 acres south of Lake Okeechobee for southern flow way
    - Add restoration of Oxbow #32
    - New idea – Remove C-43 Reservoir from list and replace it with Southern Flow Way from Lake Okeechobee and Lake Okeechobee Regulation Schedule changes to achieve water quality + meet MFL requirements for Caloosahatchee River. Return Berry Groves to private ownership and use revenue to purchase land south of Lake Okeechobee.
  - Near term
    - Add Central Everglades Planning Project subject to the Chief's Report + Permitting
- *Question 2: Are there any key regional projects still missing from the list?*
  - CEPP
  - Southern Flow Way

Group 7:

*Comments to larger group*

- We agreed with the projects as listed; they are appropriately categorized and prioritized, and we did not see key regional projects missing from the list.
- The group did not agree CRE 126 should be on long-term project list. It should be a high priority since the local government has funding. If SFWMD partnered with local governments it could redirect thousands of gallons as reclaimed water. There is money at the local level to build a pipeline across the river; money is needed to upgrade the south Ft. Myers wastewater treatment plant. The project would have a significant return on investment, and would have a far-reaching regional impact.
- There is a concern that if all water management district funding goes to a few projects, this will ignore local utilities that could become partners and create a larger impact.
- The group is strongly supportive of the C-43 reservoir project, and does not see this as negating the need for a flow way south. The two are equally important.

*Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*

- We agreed with projects listed generally.... Our group does not agree that CRE 126 should be on long-term list. Should be high-priority for regional near-term list since local government has funding – if SFWMD partnered with local governments, could redirect billions of gallons of nutrient-rich wastewater from Caloosahatchee River to be used as reclaimed water. Just need to update City of Ft. Myers/Lee Co. South wastewater treatment plant to reclaimed water treatment standards. Estimated total cost for that and Cape Coral to hook in is \$20M – so big bang for the buck from a water quality/nutrient reduction perspective. It would be regional in our opinion since it would have far-reaching positive impacts to whole estuary – not local...local government trying to help pay but need state cost-sharing to get done and crosses municipalities (City of Ft. Myers and Cape Coral).
- *Question 2: Are there any key regional projects still missing from the list?*
  - No

#### Group 8:

##### *Comments to larger group*

- The projects are categorized correctly, and for the most part prioritized appropriately.
- There was a discussion about whether the utilities aspect of sewer projects could be connected with other projects to have a larger area impact.
- The group also discussed whether there could be a water quality component to the storage projects, especially the C-43 projects.
- The group had concerns around the outcome of the tape grass studies project.

##### *Transcription of notes*

- *Question 1: Are projects appropriately categorized? Are they appropriately prioritized?*
  - [Blank]
- *Question 2: Are there any key regional projects still missing from the list?*
  - Yes, they are appropriately categorized and yes they are appropriately prioritized (for the most part), though a discussion was raised pertaining to utilities (sewer projects)
  - Concerns pertaining to near term projects (locally):
    - Central sewer expansion projects – could they be tagged with other projects to gain a large area as opposed to being so centralized?
  - Regional restoration projects:
    - Tape grass studies – water quality and quantity effects from Lake Okeechobee on the projects
  - Water quality component to all water storage projects (reference to C-43 projects)

## Appendix C: Small Group Discussion Notes on Moving Forward From Here

### Group 1:

#### *Comments to larger group*

- We discussed land acquisition and agreed it is not always a solution to the region's needs.
- With Amendment 1 we need to consider cost management. It may be more efficient to keep land in private hands or to use the land currently in the public domain more effectively.
- We should look at urban BMPs and not just agricultural BMPs – these have been avoided due to cost.
- We need a discussion around education, such as through the work of Riverwatch, and to encourage public discussion and acknowledgement of shared responsibility for these issues.
- We talked about approaches to reach the broader public, for example through groups doing farm tours; we acknowledged that the real question is how to get hundreds of thousands or millions of people involved, and not just a smaller set of engaged citizens.

#### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*
  - How much landscape is appropriate for water quality improvements? How do we compensate rural communities for environmental services and the implications on their tax base in regard for providing services to their citizens and loss of development rights?
  - Dispersed water management is important to preserve agriculture and to help alleviate pressure from water coming from the north in the Kissimmee River Basin
  - We discussed participating in a statewide water plan to look at how entering the system from the north impacts our area
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - [Blank]
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - [Blank]

### Group 2:

#### *Comments to larger group*

- Question 1:
  - There should be a discussion about a standardized performance metric for urban and

agricultural BMPs. There should be a common standard and incentives for BMP participation in all basins.

- There should be discussions on septic tank upgrades and remediation.
- There should be discussions on cost effectiveness between regional programs and targeted lands where storage is needed within specific basins.
- There should be discussions on cost sharing between coastal and inland communities.
- Question 2: There should be a regional partnership discussing specific water issues collectively.

#### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*
  - Metric for agriculture/urban BMP's standardization and performance
  - Incentives for BMP participation within specific basins
  - Tangible measurements for performance evaluation
  - Septic tank retrofit/upgrades
  - Cost effectiveness
  - Targeted lands where storage is needed
  - Cost share between coastal vs. inland
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - Regional partnership (ag, environmental, local & state municipalities, public), collectively discussing water
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - Issues team

#### Group 3:

##### *Comments to larger group*

- There should be a discussion between urban and rural communities about the appropriate amount of land to set aside.
- There should be a discussion with communities to the north about water coming down into our region during the wet season.

##### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*

- Land acquisition – not always the solution – need to consider cost of management
- All projects have operating cost component
- Need to seek opportunities to establish income streams to support land maintenance on public land
- Land acquisition has had negative impacts on small inland counties where large parcels of land have been pulled off the tax rolls
- Focus on agricultural BMPs; urban BMPs have been avoided due to costs
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - Education and outreach in an appropriate setting (Riverwatch)
  - Need to publicly discuss – lead toward a discussion/acknowledgement of mutual/shared responsibility vs. finer pointing
  - More public outreach – tours/farm tours
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - Engage leadership groups
  - How do we reach the masses
    - Example of how to do things right

#### Group 4:

##### *Comments to larger group*

- We would like to see a three-pronged outreach campaign involving: 1) work with counties and the water management district; 2) work with legislators; and 3) work with the public to galvanize support.
- It may be helpful to talk about the economics of restoration by putting a dollar value on the impact of an unrestored ecosystem on various industries, such as agriculture, fishing, and tourism.
- Factsheets or a series of one-page talking points might be helpful.
- It is key to champion our successes, for example through press conferences with elected officials “on the water.”
- For stakeholder engagement in 2015, Amendment 1 is huge. How is the money going to be spent? What can it do?
- We discussed Lake Okeechobee’s regulation schedule and building in additional flexibility without damaging the ecosystem.
- One way to advocate for more funding may be to coordinate better with Charlotte Harbor NEP to obtain untapped federal funds.

##### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be*

*structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*

- Three phase education:
  - County and SFWMD (WRAC and GB)
  - Legislature
  - Public
- Once project list is done and prioritized
- Hendry, Collier + Lee Leg. Delegations coming up soon – need to move Amendment 1 forward with these and other legislative reps
- Give same message to all legislators
- White paper local governments participated in went to legislators with list of projects
- Celebrate/showcase successes
  - Ag
- Fact sheets unified talking points
- Champion our successes
- Common consensus
- Press conference with elected officials
- Flexibility on lake schedule, storage north of lake
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - Amendment 1
  - Lake Okeechobee regulation schedule flexibility storage north of the lake
  - RESTORE Program – eventually funds will filter down to CRE
  - Better coordination with Charlotte Harbor NEP – fed dollars and RESTORE
  - Economic impacts
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - [Blank]

#### Group 5:

##### *Comments to larger group*

- Both septic tank remediation and real monitoring of BMPs need additional regional discussion.
- We would like to see stakeholder meetings continue.
- Public support is crucial to seeing issues advance.

##### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*

- Program – septic tank remediation
  - Wide spread issue that is being/needs to be addressed locally – need regional funding?
  - Understand the impacts of septic to the river
- Education
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - [Blank]
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - Public support
  - Continued stakeholder meetings to follow up on project implementation/status

#### Group 6:

##### *Comments to larger group*

- Question 1: Regional conversations in 2015 should involve improving the science discussion between programs, working to understand collectively how to achieve the goals of the program, and thinking about how each program fits into the larger picture of creating a water budget.
- Question 2: We should utilize discussions on how Amendment 1 will be implemented as part of an overall policy direction with a cohesive goal.
- Question 3: We should put together an appointed committee similar to the St. Lucie Issues Team.

##### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*
  - Improve the science discussions between these programs – better the science for BMAPS, BMPs, TMDLs, etc.
  - We need to understand collectively how we are achieving the goals of these programs and how each fits into the bigger picture. Create a water budget overall.
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - Utilize discussions of how Amendment 1 will be implemented to create an overall policy direction that gives a cohesive goal.
- *Question 3: What should our stakeholder engagement look like in 2015?*

- Put together and appointed committee – similar to the ISSUES team.

### Group 7:

#### *Comments to larger group*

- True monitoring and data collection is needed to know the actual benefit of BMPs, dispersed water management, and other programs, and to know where to make additional investments.
- It is important to grow and allocate water supply for all users, including the environment. We should consider metering agricultural water use to know the true usage levels, and set up water reservations to know environmental water needs.
- For future stakeholder engagement, meetings should be more frequent, less constrained, more expansive, and more results oriented. Conversations should identify policy changes, not just projects.

#### *Transcription of notes*

- *Question 1: In 2015, what regional conversations about which programs (e.g., dispersed water, land acquisition, agricultural and urban BMPs) could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, and focus)?*
  - No assumptions or self-reporting and monitoring. Need real data/monitoring to know true level of benefit of each BMP, dispersed water management, etc. to know where added investment should be made to result in real improvement (rather than paper improvements).
- *Question 2: In 2015, what regional conversations about policy issues could help advance relationship building, and program effectiveness and efficiency? How might these conversations be structured to yield constructive dialogue and productive outcomes (e.g., conversation participants, timeframe, focus)?*
  - Growing and allocating water supply for all users – including the environment! Meter agricultural water use like in SWFWMD to know true use and set water reservations to know true environmental water needs. Need comprehensive water budget made public.
- *Question 3: What should our stakeholder engagement look like in 2015?*
  - More frequent, less constrained, more expansive and results-oriented to identify and implement needed policy changes to improve stormwater treatment, wetlands preservation, operational Lake Okeechobee allocations/releases policy, etc. Projects are half of the equation. Policy is the other half.... Can't stop now without that being fully fleshed out and addressed.

### Group 8:

#### *Comments to larger group*

- A conversation needs to take place on Amendment 1. Florida Forever Program funding is likely to be restructured, and we want it to be restructured in a way that allows us to meet our

restoration goals in southwest Florida and take advantage of the opportunity for land acquisition.

*Transcription of notes*

- [Blank]

## Appendix D: Transcription of Participants' Note Card Comments

Thank you to all involved stakeholders for all the collaboration efforts and attempting to chip away at the problem.

1) First half was very productive regarding regional projects. Latter half was not productive. 2) Interesting to see how some individuals are interested in pet projects that are not of regional nature and can be handled/should be handled locally within the municipality.

Bond Ranch Acquisition is a high priority in Charlotte harbor Flatwoods project. It's shovel-ready and the deal is needed now.

– Need to avoid fixation on a popular issue i.e. southern flow way, which may not be immediately possible due to a number of constraints including impact of Lake O poor quality water on the Everglades. – Need to be science-based solutions

Celebrate successes & present unified vision – create folder of “glossy” fact sheets of successful past and priority future projects and print and distribute to forum stakeholders and local representatives to share with legislators and other funding sources

Passage of Amendment 1 will probably lead to a restructuring of Florida Forever. \*How do we reach our restoration goals through this restructure and not lose the opportunity to attract funding to protect and restore the Caloosahatchee basin.