CWG Review 1: Spring 2015

Tier 1 Information:

1. **Management Action**

N-69 Support and provide money incentives and initiatives to restore and preserve wetlands north of Lake Okeechobee to stop discharges to coastal estuaries to protect estuaries and reefs.

2. **Intended Result (Output/Outcome)**

   What is the end product/result of this management action?

   - Incentives for municipalities, agriculture, and government agencies to implement creative and new ways to restore wetlands for better storage and filtration within the Lake Okeechobee and St. Lucie River watersheds. The ultimate result of this management action is to reduce eutrophication of Lake Okeechobee and to reduce discharge of its water to tide in the SEFCRI region.
   - Encourage partnerships between federal, state and local governments and private land owners to develop new surface water management and water quality improvement techniques that will continue to provide flood protection and environmental services while reducing peak flows and pollution loads to Lake Okeechobee and southeast Florida estuaries.
   - There is a need to increase the understanding that the hydrology of the Lake Okeechobee and St. Lucie River watersheds are connected with water quality on our nearshore coral reefs. Too few people understand that there is a connection.

3. **Duration of Activity**

   Is this a discrete action or a recurring activity? Explain.

   - There are two pieces: (1) the discrete action of creating the program and (2) the recurring management and support of the program with incentives. It would be a phased approach to implementing this program.
   - On-going until the large discharges that adversely affect the estuary and nearshore reefs in the SEFCRI area Lake Okeechobee and Kissimmee River water that flows onto our nearshore reefs are reduced in magnitude and pollutant load.
   - Initially prioritize wetlands adjacent to ongoing watershed restoration projects and those experiencing subsidence.

4. **Justification**

   What issue or problem will this management action address? Explain.

   - Water enters Lake Okeechobee six times faster from the Kissimmee River and other tributaries, than it leaves. In wet years, this results in long duration discharges to St. Lucie and Caloosahatchee Rivers. Storage and treatment north of Lake Okeechobee is essential to improving the estuarine conditions in Southeast Florida.
   - This management action will address discharges from the Lake Okeechobee watershed to tide within the SEFCRI region.

5. **Potential Pros**

   What are the potential advantages associated with this management action?

   - Retention of water upstream is expected to improve ecological conditions north of the lake and water storage capacity in Lake Okeechobee.
   - Improved water quality for southeast Florida coral reef ecosystem including estuaries, nearshore habitats, and coral reef tract is an expected benefit.

6. **Potential Cons**

   What are the potential disadvantages associated with this management action?

   - A potential disadvantage associated with this management action could be the costs and administration of the program. Providing sufficient funding for agricultural users to commit to the program for the long term.

- If the new system of water management doesn't have flexibility, then in dry years, or successive dry years, agricultural interests south of the lake may want more water. This may result in less than optimal water quality and quantity within the watersheds and estuaries of southeast Florida.

7. **Location**

County/Counties: Miami-Dade, Broward, Palm Beach, Martin, Other?

- The 4 SEFCRI counties: Miami-Dade, Broward, Palm Beach and Martin counties.
- Counties along the Kissimmee and St. Lucie River watersheds.

Relevant Habitats: Coral reef, seagrass, watershed, etc.?

- Coral reefs, seagrass, inlet, oysters, mangroves, freshwater wetlands within applicable watersheds, and watersheds

Specific Location: City, site name, coordinates, etc.?

- Counties along the Kissimmee and St. Lucie River watersheds.

8. **Extent**

Area, number, etc.

- North central Florida.
- The Lake Okeechobee watershed: approximately 2.8 million acres, or 4,400 square miles (including Arbuckle Creek sub-basin and the lake proper.
- St. Lucie River watershed: 1,050 square miles.

9. **Is this action spatial in nature?**

- No. The improvements would be outside the SEFCRI region, but will benefit estuaries and reefs in the SEFCRI region.

Do you believe this management action could be informed by the Our Florida Reefs Marine Planner Decision Support Tool?

If yes, you will proceed to the next section on Marine Planner Information.

- No. Other tools are available for this work.

Marine Planer Information:

Coral density, percent cover, etc., near canals and inlets that discharge water from the Lake Okeechobee and St. Lucie River watersheds.

Tier 2 Information:

WHY?

1. **Strategic Goals & Objectives to be Achieved**

Refer to the SEFCRI Coral Reef Management Goals and Objectives Reference Guide.

- FL Priorities Goal C1, Obj. 1, Minimize the impacts of reduced water quality associated with controlled freshwater deliveries and coastal construction activities on coastal, estuarine and lagoonal habitats.
    - Modify the timing, process of delivery and water quality of storm and flood control releases to minimize nutrient and contaminate loading, as well as the rate and magnitude of water quality changes in receiving waters.
- FL Priorities Goal C1, Obj. 7, Engage the South Florida Water Management District and ACOE at a high level to consider impacts of all flood control activities on coastal resources.
- SEFCRI LAS LBSP Issue 4, Goal Obj. 3, Initiate the implementation of engineering/management actions to reduce pollution from the highest priority sources.
- Goal A1 Manage the Florida Reef Tract and Ecosystem using an ecosystem-based approach. The Lake

Okeechobee and St. Lucie River watersheds are part of this ecosystem.

- Goal A3: Improve understanding of status and linkages of human activities to the condition and trends of the Florida Reef Tract and Ecosystem.
- GOAL A4: Improve coordinated emergency response to disturbance events and restoration of reef injuries (e.g., vessel groundings, invasive species outbreaks, algal blooms, bleaching, disease outbreaks, hurricane damage, etc.). Unfortunately, discharges from Lake Okeechobee damage the St. Lucie Estuary and nearshore reefs in the SEFCRI region even without hurricane-related rainfall events.
- GOAL C1. Reduce pollutant loading to south Florida coastal waters.
- GOAL C2. Restore and preserve coastal estuarine habitats that aid in naturally improving water quality and support the life histories of coral reef biota.
  Objective 1. Focus existing land acquisition programs such as Florida Forever on acquiring properties aimed at preserving and restoring coastal and wetland habitats to benefit coral reefs; 2. Provide incentives through the regulatory process for restoring and preserving wetlands associated with the coastal watershed.
- GOAL C3. Educate the public and elected officials on the need to maintain coral reef habitats and coastal water quality. This includes opportunities for economic development in tourism and recreation.

2. Current Status

Is this activity currently underway, or are there planned actions related to this recommendation in southeast Florida? If so, what are they, and what is their status.

- SFWMD Northern Everglades and Estuaries Protection Program, Lake Okeechobee Restoration plan and BMAP
- FRESP and Dispersed Water Management Northern Everglades, Payment for Environmental Services (NE-PES) program
- The federal government and state are already developing these programs. The Everglades Headwaters National Wildlife Refuge, the Dispersed Water Management Program, improvements to the structural integrity of the Herbert Hoover Dike (Corps of Engineers), the Lake Okeechobee Basin Action Management Plan, the Florida Ranchlands Environmental Services Project (now incorporated into the Dispersed Water Management Northern Everglades--Payment for Environmental Services (NE-PES) program) , and others are all examples of initiatives that have begun to address this issue.
- The goal of this Management Action is not to duplicate, replicate or in any way take away from these on-going initiatives. The goal is to support these initiatives because they will improve conditions in the northern SEFCRI estuaries (i.e., St. Lucie Estuary, Lake Worth Lagoon) and to coral reefs near canals and inlets that receive water from the Lake Okeechobee watershed.

3. Intended Benefits (Outcomes)

What potential environmental benefits or positive impacts might this management action have?

- Environmental benefits include improved water quality, quantity and timing of water entering Lake Okeechobee. Private landowners may benefit from participation in program. Property owners in southeast Florida estuaries will benefit from increased property values. Resources users will benefit from greater abundance and health of fish, invertebrates and an overall healthier coral reef ecosystem.
- Improve ecological conditions (e.g., increase seagrass cover, improve fisheries) in northern estuaries.
- Improve water quality and ecological conditions throughout the SEFCRI region, especially near canals that discharge water from Lake Okeechobee and its watershed.

What potential social/economic benefits or positive impacts might this management action have?

- Some potential social/ economical benefits with this management action include: Increased property values for waterfront property owners; a decrease in the frequency and duration of water-quality related closures of coastal estuaries and beaches due to contamination; and improved sustainability of agricultural practices in the Lake Okeechobee and St. Lucie River watersheds.

What is the likely duration of these benefits - short term or long-lasting? Explain.

- The duration of this management action would be long-term. Estuary-damaging discharges have been taking place for decades. CERP, even when fully implemented will not stop the discharges. More must be done.

4. **Indirect Costs (Outcomes)**

What potential negative environmental impacts might this action have?

- No negative environmental impacts are expected to result from this management action.

What potential negative social/economic impacts might this action have?

- -

What is the likely duration of these negative impacts - short term or long-lasting? Explain.

- -

5. **Risk**

What is the threat of adverse environmental, social, or economic effects arising from not implementing this action?

- Risk associated with not implementing this RMA includes:
    - Adverse impacts to water quality and quantity
    - Continued degradation of coral reef ecosystem resources
    - Continued degradation of wetland resources in SE Florida

6. **Relevant Supporting Data**

What existing science supports this recommendation? (Provide citations)

- St Lucie River Watershed Protection Plan/updates SFWMD 2009/2012
- Modeling and evaluation of water storage north of Lake Okeechobee have been conducted by SEFCRI partners, including SFWMD, FWS, FWC and the US Army Corps of Engineers. References: CERP,
- See: "Options to Reduce High Volume Freshwater Flows to the St. Lucie and Caloosahatchee Estuaries and Move More Water from Lake Okeechobee to the Southern Everglades, An Independent Technical Review by the University of Florida Water Institute. (2015)

7. **Information Gaps**

What uncertainties or information gaps still exist?

- Little data are available on adverse impacts of water from the Lake Okeechobee and its watershed on reefs in the SEFCRI region, especially when water is being discharged to tide for flood control.
- Some data exist on effects of modern agricultural practices on corals elsewhere – see Marion, G. S., Dunbar, R. B., Mucciarone, D. A., Kremer, J. N., Lansing, J. S., & Arthawiguna, A. (2005). Coral skeletal δ 15 N reveals isotopic traces of an agricultural revolution. Marine Pollution Bulletin, 50(9), 931-944. And impacts of eutrophication on coral reefs are very well known in other systems – for a review, see Fabricius, K. E. (2005). Effects of terrestrial runoff on the ecology of corals and coral reefs: review and synthesis. Marine Pollution Bulletin, 50(2), 125-146.

WHEN?

8. **Anticipated Timeframe for Implementation**

How long will this recommendation take to implement?

- Expanding existing payment-for-environmental services programs can be implemented very quickly. These programs are very popular with ranchers, who are very conservation-minded.
- Existing initiatives are underway, so support from SEFCRI would demonstrate buy-in that the benefits will not be limited to solely the Kissimmee River and Lake Okeechobee, but will also extend to coastal ecology and reefs.

9. **Linkage to Other Proposed Management Actions**

Is this activity linked to other proposed management recommendations?

- Yes

If so, which ones, and how are they linked? (e.g., is this activity a necessary step for other management actions to be completed?)

- N-86 – Improve regulation of point-specific water quality discharge-
- S-28 – Support restoration of historical/natural "Everglades" water flow to minimize pulses of freshwater and

protect marine ecosystems from poor water quality.

- N-71 – Develop and implement a monitoring program to detect, identify, and eliminate sources of pollution flowing through inlets to improve water quality and protect reefs.

  This Management Action complements the above-referenced RMAs. It needn't be done in isolation or as a necessary step toward implementing any of them. The common theme is that they all recognize that the health of our reef ecosystems, (biodiversity, fish abundance, etc.) is affected by the conditions in the contributing watersheds. Improving water quality in the Kissimmee River, the Everglades and in the Inlet Contributing Areas will improve conditions in our estuaries and have a positive effect on our reef ecosystem.

Does this activity conflict with other existing or proposed management actions?

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WHO?

10. Lead Agency or Organization for Implementation

What agency or organization currently has/would have authority? Refer to the Agencies and Actions Reference Guide.

- This Management Action supports on-going initiatives that are in various stages of implementation by federal and state agencies, including the U.S. Army Corps of Engineers (Lake Okeechobee), the U.S. Fish and Wildlife Service (Everglades Headwaters Nat'l Wildlife Refuge), FDEP (TMDLS and BMAPs), the Florida Fish and Wildlife Conservation Commission (Management of lake levels in the Kissimmee Chain of Lakes), SFWMD (Payment for Environmental Services), and likely many others. Support by SEFCRI for these initiatives would enhance their collective abilities to acquire funds to further their programs.
- All water management districts overseeing this area.
- The Nature Conservancy or other appropriate NGOs that oversees this region.
- All counties within the watershed.

11. Other Agencies or Organizations

Are there any other agencies or organizations that may also support implementation? Explain.

- County and municipal agencies may also support implementation of this RMA.
- Agricultural consortiums. Owners of agricultural lands are going through difficult times. Many are being creative in identifying other income streams (e.g., ecotourism, hunting leases, sod farming, NRCS Wetlands Reserve program) to keep their properties. Many manage lands where the natural water table and hydrologic conditions have been altered. Paying them to restore hydrology could help some keep their properties (instead of selling land to developers) while also having measureable environmental benefits.
- Ranchers. Many ranchers are in the same situation as the owners of agricultural lands described above. Endorsing programs that pay them to keep ranching, albeit in wetter conditions, would likely be well received.
- Conservation organizations. The collective memberships of state and local conservation groups would likely support the implementation of N-69.
- TAC Team # 1 – A pilot program (FRESP) was very successful and had been absorbed by the SFWMD.
- Recommended that TAC supports RMA N-69

12. Key Stakeholders

Identify those stakeholders most greatly impacted by this management action, including those from whom you might expect a high level of support or opposition. Explain.

- Florida Cattleman's Association, which will be very supportive of the RMA
- Conservation groups in the SEICRI area and throughout the state.

HOW?

13. Feasibility

Is there appropriate political will to support this? Explain.

- Political will to do "something" exists. The specifics on what and where to increase storage and treatment north

of Lake Okeechobee remain undefined.

What are the potential technical challenges to implementing this action? Has it been done elsewhere?

- Needs of counties/areas that would benefit from the RMA are disconnected from potential needs and counties/areas where the project would be implemented.
  Ecosystems have adapted to hydrologically drained conditions. Restoring water tables and hydrologic conditions in a landscape that is very flat can have widespread ramifications. Back-filling ditches can be easy, but developing engineering plans to prevent adverse impacts on adjoining properties can be challenging. Current hydrological models are inadequate for summarizing subsurface water flows in this region.
- Yes, hydrologic restoration projects in the Kissimmee River basin have been on-going for many years and have been very successful. The concept of this MA is support these on-going projects because they will benefit coastal ecosystems as well as inland areas.

14. Legislative Considerations

Does the recommendation conflict with or actively support existing local, state, or federal laws or regulations? Explain.

- This management action is consistent with existing local, state and federal regulations and actively supports on-going initiatives.

15. Permitting Requirements

Will any permits be required to implement this action? Explain.

- Yes, approvals will need to be obtained from federal (Corps of Engineers) and State (i.e., FDEP/WMD) agencies prior to implementing some hydrologic restoration projects.
- Smaller projects on ranches may be exempt from many of these requirements.

16. Estimated Direct Costs

Approximately how much will this action likely cost? (Consider one-time direct costs, annual costs, and staff time, including enforcement.)

- Program costs would be subjected to legislation at the state and federal levels

Will costs associated with this activity be one-time or recurring?

- The costs associated with this action would be recurring. As long as there are discharges from Lake Okeechobee to, the St. Lucie Estuary, the Indian River Lagoon, as well as to the 4 SEFCRI counties, there will be a need to create more water storage areas.

If recurring, approximately how long will staff time and annual costs be necessary to implement the management action?

- Because this management action involves supporting on-going initiatives that are being led by others, staff time should be reduced as time goes on, provided projects are successful in reducing flows from Lake Okeechobee and its watershed to the extent that they are not harmful to the coastal estuaries.

17. Enforcement

Does this require enforcement effort?

- No

Provide an explanation if available.

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18. Potential Funding Sources

Identify potential funding organizations/grant opportunities, etc.

- North American Wetlands Conservation Act, Wetland Reserve Program, Landowners Incentive Program, SFWMD's Dispersed Water Management Northern Everglades--Payment for Environmental Services (NE-PES) program

- Possible protected species funding from FWS &/or FWC if individual projects will benefit flora and fauna that are designated as threatened or endangered.
- State and Federal
- US EPA, USFWS
- Expansion of state funding, Dispersed water management, payment for environmental services.

19. Measurable Outcomes/Success Criteria/Milestones

How will the success of this recommendation be measured? How will you know when the intended result is achieved?

- Increased area of water storage north of Lake Okeechobee over time.
- Metrics are fairly straightforward; measurements of volume of discharges and quantities of pollutants (e.g., N, P) that are discharged from the St. Lucie Locks are already calculated. Economic and ecological metrics already have been published for the FRESP project – see Hilary M. Swain, Patrick J. Bohlen, Kenneth L. Campbell, Laurent O. Lollis, and Alan D. Steinman (2007) Integrated Ecological and Economic Analysis of Ranch Management Systems: An Example From South Central Florida. Rangeland Ecology & Management: January 2007, Vol. 60, No. 1, pp. 1-11. As more water storage projects come on line, discharges should be reduced and the quantities of pollutants should simultaneously decline.
- Central Everglades Planning Project may have additional suitable metrics for this RMA. Available on ACOE website.
- Success will be attained when discharges from the Lake Okeechobee and St. Lucie River watersheds into the coastal estuaries and nearshore reefs no longer have detrimental impacts on these ecosystems. THIS MAY BE AN UNREALISTIC OBJECTIVE, SUGGEST OMITTING. Solving Lake O and surrounding watershed quality, quantity, timing, and distribution will not, on their own, result in a fully rehabilitated estuary.

SEFCRI/TAC Targeted Questions:

1. TAC - Is the recommendation likely to achieve the intended result? Explain.

Tier 1 – #2 (Intended Result - Output/Outcome)

- KG: The recommendation is likely to achieve the intended result. Storage of water north of Lake Okeechobee is needed to reduce peak flows and the rate of inputs into the Lake that are then discharged south Florida estuaries.

2. TAC - Is the recommendation sufficient to address the identified issue or problem? Explain.

Tier 1 – #4 (Justification)

- KG: The recommendation would address part of the complex challenges of water management in south Florida. This recommendation would provide a shift in focus from restoration activities south of Lake Okeechobee to areas north of the lake, where they would have a greater benefit.

3. TAC - Is the recommendation technically achievable from a science or management perspective? Explain.

Tier 2 – #8 (Anticipated Timeframe for Implementation) and Tier 2 - #13 (Feasibility)

- KG: The recommendation is technically feasible from both, a scientific and management perspective and is consistent with water management agency findings.
- TAC Team #1 - A pilot program (FRESP) was very successful and has been absorbed by the SFWMD.
- Recommend that TAC supports MA N-69
- Reference FRESP group – supported; successful pilot program on family run ranches. There has been a lot of buy in to use these ranch lands to help with water flow.
- Since 2012 program was taken over by SFWMD – it has an opportunity to be expanded. Ranchers are invested. Their mindset stops with Lake O, but it'd be interesting to incorporate dive and fisher groups – incorporate further downstream benefits.
- This is still underway but is limited in scope. This could easily be expanded. Ranchers like this program – they see the conservation value, it doesn't affect their operations too much, and it's a source of income. There is no incentive for them to do this on their own, however. Get rewarded for going above the regulatory requirements

(it is subsidized). Don't need to buy land to hold water, use this existing land. It's win-win.
- Target is Lake O, but it works downstream too.
- &O about this program would be beneficial – what ranchers are doing affects offshore reefs. This increases an allied base.
- Funded by legislative appropriation – with wide support elected officials will follow.

4. **SEFCRI Team, PPT & Other Advisors - Has this been done (by SEFCRI, other agencies or organizations in the SEFCRI region)? Explain.**
   Tier 2 – #2 (Current Status)
   - KG: Modeling and evaluation of water storage north of Lake O have been conducted by SEFCRI partners. The Florida legislature has not yet funded projects to improve water quality and quantity north of the lake other than the Kissimmee River restoration.
   - Additional funds are needed to increase storage north of Lake O. JDV- Agree with above

5. **SEFCRI Team, PPT & Other Advisors - Is this recommendation a research or monitoring project? (Recommendations should be turn-dirt management actions, not the step you take before a management action). Explain.**
   - KG: The project is not a research or monitoring project.

6. **SEFCRI Team, PPT & Other Advisors - If either of the following applies to this management action, provide feedback on which information submitted by the Community Working Groups may be more appropriate, or if entries should be merged. Explain.**
   a. **There are different viewpoints for an individual management action (i.e. two working group members provided separate information, as indicated by a '//' marking between them).**
   b. **Information submitted for this and other draft management actions is sufficiently similar that they might be considered the same.**
   - -

7. **SEFCRI Team, PPT & Other Advisors - Non-agency Question: Is the recommendation technically achievable from your stakeholder perspective? If not, do you have suggestions that would allow this to become technically achievable from your stakeholder perspective? Explain.**
   Tier 1 - #5 (Potential Pros), Tier 1 - #6 (Potential Cons), Tier 2 - #3 (Intended Benefits), Tier 2 - #4 (Indirect Costs) and Tier 2 - #12 (Key Stakeholders)
   - -

8. **SEFCRI Team, PPT & Other Advisors - Agency Question: Is the recommendation technically achievable from a management perspective? If not, do you have suggestions that would allow this to become technically achievable from your agency's management perspective? Explain.**
   Tier 2 – #10 (Lead Agency or Organization for Implementation) and Tier 2 - #11 (Other Agencies or Organizations)
   - KG: The recommendation is technically feasible from an agency perspective.

Comments from the Reviewers:

- John Fauth and Kurtis Gregg (TAC) are willing to assist the CWG members in further developing this.
- This is a key item with FOS (Vincent E.)
- KG: This is a good MA.
- JDV- I would suggest there are two separate issues to address: 1) total water volume and 2) Flux and loadings of nutrients or other deleterious chemicals.
- JDV- again quantity and quality are potential separate but obviously related issues.
- JDV- Not con, but a potential consequence. If the new system doesn't have flexibility, then in dry years, or successive dry years, agricultural interests south of the lake may want more water.
- KG: Oyster habitats, mangroves, inlets, nearshore reef

- JDV- seems very spatial focused to me...would be good to identify each county for which this MA would be applicable.
- KG: The MA is consistent with goals and objectives at federal, state, regional, and county levels.
- TAC Team #1 recommends expansion of existing programs, such as FRESP (Florida Ranchlands Environmental Services Project, www.fresp.org), which provides payment to ranchers for the environmental services of providing water retention and reducing nutrient loading. The FRESP program has been adopted by the SFWMD as the Dispersed Water Management Northern Everglades--Payment for Environmental Services (NE-PES) program
- JDV- 5-10 year implementation timeline
- JDV- Needs of counties/areas that would benefit from the MA are disconnected from potential needs of counties/areas where project would be implemented.
- KG: Status of support is unclear.
- JEF - Expanding existing payment-for-environmental-services programs can be implemented very quickly. These programs are very popular with ranchers, who are very conservation-minded.
- KG: SFWMD, DEP, DACS, EPA, Army Corps of Engineers (suggestion for lead agency)
- KC: Florida State Legislature and State Senate Select Committee on Indian River Lagoon and Lake Okeechobee Basin (http://www.flsenate.gov/Media/Topics/IRLLOB);
- "The Select Committee on Indian River Lagoon and Lake Okeechobee Basin (IRLLOB) was appointed during the 2012-2014 legislative term to investigate policies, spending, and any other governmental activities affecting water management in the Indian River Lagoon and Lake Okeechobee Basin." Recommendations in 2014 legislature received over 231 million dollars in funding (http://www.flsenate.gov/Media/PressReleases/Show/1785).
- Northern Everglades and Estuaries Protection Program (NEEPP, http://www.flsenate.gov/Laws/Statutes/2011/373.4595 and also see http://my.sfwmd.gov/portal/page/portal/xweb%20protecting%20and%20restoring/other% 20everglades for following text in quotes):
- "Underscoring the state's commitment to Greater Everglades ecosystem restoration, the Florida Legislature in 2007 expanded the Lake Okeechobee Protection Act to strengthen protection for the Northern Everglades. This is being achieved by restoring and preserving the Lake Okeechobee watershed and the Caloosahatchee and St. Lucie estuaries. The legislation required watershed plans for Lake Okeechobee (including Fisheating Creek), the Caloosahatchee and St. Lucie Rivers and their estuaries. Some key features of the NEEPP include 1) Recognizing that the Lake Okeechobee, Caloosahatchee and St. Lucie watersheds are critical water resources of the State, 2) Building upon and consolidating numerous restoration activities into a comprehensive approach and 3) Expanding use of the Save Our Everglades Trust Fund to include Northern Everglades restoration and extends it through 2020."
- Under the NEEPP, the recently adopted Florida Department of Environmental Protection's (FDEP) Lake Okeechobee Basin Management Action Plan represents a major milestone for water quality restoration (http://publicfiles.dep.state.fl.us/DEAR/BMAP/LakeOkeechobee/Final_BMAP/) and the Lake Okeechobee Watershed Protection Plan continues to strive for watershed restoration goals such as water storage (http://my.sfwmd.gov/portal/page/portal/xweb%20protecting%20and%20restoring/other% 20everglades).
- Kissimmee River Restoration (SFWMD and U.S. Army Corps of Engineers (http://my.sfwmd.gov/portal/page/portal/xweb%20protecting%20and%20restoring/kissim mee%20river)
- "After extensive planning, construction for the Kissimmee River Restoration Project began in 1999 with backfilling 8 miles of the C-38 canal. Three construction phases are now complete, and continuous water flow has been reestablished to 24 miles of the meandering Kissimmee River. Seasonal rains and flows now inundate the floodplain in the restored area. The Kissimmee River Restoration Project will return flow to 40 miles of the river's historic channel and restore about 40 square miles of river/floodplain ecosystem. The restoration project – a 50-50 partnership with the South Florida Water Management District and the U.S. Army Corps of Engineers – is currently projected to be complete by 2019."
- Everglades Headwaters National Wildlife Refuge and Conservation Area (http://www.fws.gov/southeast/evergladesheadwaters/#.VMa6fZh0zGg):
- "The U.S. Fish and Wildlife Service is working to conserve the natural resources and rural way of life in the

Kissimmee River Valley. Partners in this effort include the Florida Fish and Wildlife Conservation Commission, the U.S. Department of Agriculture's Natural Resources Conservation Service, the U.S. Department of Defense, The Nature Conservancy and the National Wildlife Refuge Association. If fully realized, the refuge and conservation area will span 150,000 acres north of Lake Okeechobee. Two-thirds of the acreage, or 100,000 acres, will be protected through conservation easements purchased from willing sellers. With easements, private landowners would retain ownership of their land, as well as the right to work the land to raise cattle or crops. The easements would ensure the land could not be developed."

- Dispersed Water Management Program http://www.sfwmd.gov/portal/page/portal/xweb%20protecting%20and%20restoring/water%20storage%20programs :"Since 2005, the South Florida Water Management District has been working with a coalition of agencies, environmental organizations, ranchers and researchers to enhance opportunities for storing excess surface water on private and public lands. Over the years, these partnerships have made thousands of acre-feet of water retention and storage available throughout the greater Everglades system."
- Natural Resource Conservation Service – Easement Program: (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/easements/wetlands/?cid=stelprdb1237775)
- "NRCS offers easement programs to eligible landowners to conserve working agricultural lands, wetlands, grasslands and forestlands."

Questions from the Reviewers:

	Questions/Information Needs Highlighted by the Reviewers	Addressed by CWG:	Not Addressed by CWG Because:
1.	It would be good to explore the connection with coral reefs.	X	☐ This does not apply. ☐ Need help addressing it.
2.	JDV - Good MA, but very general with many details needed to result in effective implementation.	X	☐ This does not apply. ☐ Need help addressing it.
3.	JDV- using the term "dumping ground" is not specific, plus it creates an immediately polarized reaction. Perhaps revise to be less provocative?	X	☐ This does not apply. ☐ Need help addressing it.
4.		☐	☐ This does not apply. ☐ Need help addressing it.
5.		☐	☐ This does not apply. ☐ Need help addressing it.
6.		☐	☐ This does not apply. ☐ Need help addressing it.
7.		☐	☐ This does not apply. ☐ Need help addressing it.

Questions from the CWGs back to the Reviewers:

- -