

# KISSIMMEE RIVER RESTORATION- LESSONS LEARNED SESSION

## FACILITATORS' SUMMARY

South Florida Ecosystem Restoration Task Force  
March 27-28, 2007  
Kenilworth Lodge, Sebring Florida



*Facilitated by*

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**KISSIMMEE RIVER RESTORATION- LESSONS LEARNED SESSION**  
**South Florida Ecosystem Restoration Task Force**  
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**EXECUTIVE SUMMARY**

The Task Force members and the public participated in a lessons learned session that identified the key challenges faced and keys to success in the Kissimmee River Restoration efforts to date. On March 27, 2007, 45 Task Force Members and the Public participated in a field trip on pontoon boats down a restored stretch of the Kissimmee River to explore first hand the successes to date and better understand the challenges faced and the keys to success. The following morning the Task Force invited members of the public to review and discuss the key challenges identified that included:

- Land acquisition
- Restoration challenges
- Agency communication and coordination
- Modeling, baselines and monitoring
- Project design and sequence
- Funding challenges
- Public awareness and engagement
- Stakeholders and interest groups
- Upstream challenges

The 75 minute facilitated session on March 28 noted that in restoration efforts because of their length and complexity, it is important to consider and respond to both current and future challenges. One participant suggested that the upstream challenges identified as “relating to fluctuating lake water levels and their impact downstream” was framed too narrowly in the face of considerable current and future development underway and proposed near the Kissimmee River headlands.

The Task Force and members of the public reviewed and added to the “keys to success” drawn from the March 27 field trip. The ten lessons included:

1. Conditions in the KRR that Contributed to Restoration Success, such as a very positive reaction by mother nature and lack of urban encroachment. It was noted that agency coordination will continue to be essential to success going forward in light of development and transportation proposals that could affect the future success of the restoration effort.
2. Sound scientific basis for design and proceeding is a key to success and were part of the assurances negotiated for this project and need to be reflected in interagency agreements and rules going forward.

3. Strong and ongoing commitment to partnerships and interagency collaboration were keys to success, but this took place following several decades of conflicts over the roles.
4. Demonstrate restoration benefits early and often and getting water to the natural system as quickly as possible is the key to success.
5. Use adaptive pilot testing and monitoring to resolve engineering and biological uncertainties.
6. Ongoing commitment to adaptive monitoring and assessing plan was a key to demonstrating success.
7. Adequate funding and consistent state and congressional political support and leadership starting in the 1970's and continuing over the project's implementation = success.
8. Clear consensus project goals serving multiple mission objectives enhance public education and support.
9. Lack of legal challenges on KRR allowed focus on restoration.
10. KRR demonstrates the critical importance of giving the sponsors the ability, through a streamlined process, to deliver restoration of the natural system faster and cheaper.

The participants discussed the applications of these lessons to the ongoing efforts in implementing the CERP process and projects that look across the entire ecosystem. While there were concerns noted regarding the pace of the efforts, the novelty and effectiveness of some of the processes such as PIRs, and the intensity of the multiple meetings required, most agreed with one participant's comment that "We are making progress but we are new at this and still learning how to restore ecosystems not plumbing systems."

Some discussion focused on potential roles suggested by these lessons learned that the Task Force and Working Group could play including:

- helping to celebrate and recognize restoration leadership and successes;
- asking the key lead agencies involved in implementing the programmatic regulations to present ideas for improvements and streamlining to the Working Group and the Task Force.

The Task Force Chair thanked the members of the public, the Task Force members and the facilitators for their contributions to an insightful and constructive session.

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## **FACILITATORS' SUMMARY**

The Task Force members and the public participated in a lessons learned session that identified the key challenges faced and keys to success in the Kissimmee River Restoration efforts to date. On March 27, 2007, 45 Task Force Members and the Public participated in a field trip on pontoon boats down a restored stretch of the Kissimmee River to explore first hand the successes to date and better understand the challenges faced and the keys to success. Participants completed 4x6 cards and the facilitators compiled and summarized these in a handout for the 75 minute facilitated "Lessons Learned Session" on March 28 during which members of the public and the Task Force members were invited to review and discuss the key challenges and keys to success in the KRR and their application elsewhere.

### **I. KEY CHALLENGES FACED IN THE KISSIMMEE RIVER RESTORATION TO DATE**

The Task Force and members of the public reviewed the challenges noted below on March 28 and discussed the historical context for the KRR as well as past, present and future challenges in achieving the restoration goals for the river.

*(Bulleted items below were taken from 4X6 cards handed in by March 27, 2007 KRR field trip participants. These are not listed in any order of priority)*

#### **A. Land acquisition**

- Land acquisition
- Acquiring land from unwilling sellers

#### **B. Restoration challenges**

- Placing flow back in old channel has potential of releasing of organic and other residue deposited there through the years
- High water sediment in restoration efforts and blow outs
- Dealing with blow outs of backfills
- Water- having the right amount at the right time to restore wetlands/floodplain
- Technical challenges to restoring hydrology
- Exotics/invasive species
- Construction logistics vs. environmental sensitivity

#### **C. Agency communication and coordination**

- Communication and integration with and between agencies
- Working in partnership with agencies with different ways of doing business
- Managing federal vs. state bureaucracy
- Expectation disconnect between Corps and District- partnership tensions

- Working through the different state and federal processes to achieve a single, great plan for restoration

#### **D. Modeling, baselines and monitoring**

- How to model? How much is enough?
- Model verification
- Applying the hydrological models
- Limited accuracy of hydrological models
- Proving that the biological restoration has in fact taken place
- How to define baseline against which to measure restoration?
- Need to gather adequate monitoring data to measure restoration success
- How to define future monitoring needs
- Does the science represent true restoration or short term impacts that affect projects (like weather)
- Scientific uncertainty
- Moving forward in the face of uncertainty

#### **E. Project design and sequence**

- Need for early success
- Timing

#### **F. Funding challenges**

- Funding/money (4)
- How to control escalating costs
- Time and money
- Inconsistent funding
- Acquiring funding for dredging backfill operations

#### **G. Public awareness and engagement**

- Public awareness/support (2)
- Public opposition from some interests (2)
- Initial Lack of public support
- Some public push back - understanding and dealing with interest groups who did not want restoration
- R.O.A.R Residents Opposed to Alleged Restoration
- Dealing with public opinion as to the value of the project
- What have taxpayers received for their investment and how do you tell the story of what they have received?
- Persuading ROAR of the true value and benefit of the KRR
- Communications/media interest
- Making difficult decisions that aggravate people but are the right choice

#### **H. Stakeholders and interest groups**

- Resolving conflicts between interest groups
- Purchasing land necessary to complete restoration
- Convincing the land owners that restoration was necessary
- A huge feat - considering the remoteness of the area
- Land owner/flooding issues

- Public interests, private land owners, tax payers interests

### **I. Upstream challenges**

- Ability to deal with fluctuation of water levels in the upper chain of lakes without impacting development along the lakes

#### *Discussion of Challenges Identified (on March 28)*

- In Restoration efforts because of their length and complexity, it is important to consider and respond to both current and future challenges. This exercise posed a question regarding challenges faced in the past.
- In considering this and other restoration efforts, it is important to review current ongoing and future challenges to restoration to better be able to develop solutions that can better ensure success.
- The upstream challenges related to fluctuating lake water levels and their impact downstream is understated and framed too narrowly in the face of massive development underway and planned as developments of regional impacts in Osceola County at the Kissimmee River headlands and expressways and other corridor proposals.
- The Corps is to be applauded for their action on the Avitar development proposal.
- It is important to take note that the issue is not being ignored and of the ongoing efforts of the water management districts, DEP and ACOE to deal better with the upstream issues.

## **II. KISSIMMEE RIVER RESTORATION 10 KEYS TO SUCCESS**

The Task Force and members of the public reviewed the keys to success noted below on March 28 and used these as an opportunity to set forth the historical context for the KRR and discuss the implications and relevance of this success with other Everglades restoration projects.

### **A. KRR Keys to Success**

#### **1. Special conditions in the KRR contributed to restoration success**

##### *Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Ecosystem responded immediately—unexpectedly quickly
- A very positive reaction by mother nature
- The water was able to flow. When we look at the constraints in the southern part of the system, WCA 3B, especially, we just need to let it flow
- Remove impediments to natural water flow
- Ability to use existing spoil material for backfilling to reduce cost
- Limited development/urban encroachment
- Lack of urban encroachment

##### *Participant Comments (on March 28)*

- Success continues along a continuum just like failure – looking at “lack of encroachment” – threat of encroachment is not limited to upper basin – FDOT has potential plan to build a major toll road across the middle Kissimmee – large landowners proposing a Rural Land Stewardship effort that would impact the KRR

area – do not be lulled into believing that without more agency coordination including local land use, and state agencies dealing with permitting and state sponsored infrastructure must be in sync or this success will be a flash in the pan.

## **2. Sound scientific basis for design and proceeding is a key to success**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Background science was essential
- Good scientific baseline before restoration—basis for restoration assessment
- Generating baseline data and having qualitative benchmarks to measure outcomes
- Not “over engineering” the restoration, i.e. getting the physical integrity right and letting natural recovery biological/chemical system
- Investment in science/modeling
- Pre modeling of hydrology
- Very skillful planning and modeling before restoration construction
- Effective design and planning

*Participant Comments (on March 28)*

- Underscore this lesson, right amount of water – critical assurances crafted by many in this room to protect water supply – if decisions are made that could impact success to date – low water yesterday means pools of water without flow and impacts on success – need to continue assurances.
- Assurances don’t exist in the programmatic regulations – FDOT project may not be likely – added bureaucracy without continued buy-in from key stakeholders.
- Assurances need to be there in interagency agreements and rules.

## **3. Commitment to partnerships and interagency collaboration are keys to success**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Broad consensus maintained throughout implementation
- Collaboration across multiple agencies
- Coordination of federal and state agencies
- Continuous commitment of agencies (state and federal) and community
- Good state/federal partnership
- An incredibly successful partnership between federal and state government
- PPP- public private partnerships
- Keep selecting responsible firms to execute projects successfully
- Good interdisciplinary communications
- Partnerships—agencies working together

*Participant Comments (on March 28)*

- I remember the beginnings of the KRR a little differently – much greater jeopardy in the 70’s and conflicts over roles – key event moved us from talking to doing – came from the state, Jack Malloy, when the Corps said it could not be done – he put in weirs, and demonstrated it worked.
- I think the two sides here are saying the same thing – Rock Salt noted that they were engineers and they had their instructions and did it. Now the engineers need your

help to tell us how to put it back – have to keep that moving as it gets more complicated.

- Deeper issue – getting burdened on the process because the Corps engineering frame of reference is flood control and output – natural flows may be outside that familiar framework – why not let a little water flow, dry out if a natural consequence – still managing the flow and figuring out how to manage under new parameters.

#### **4. Demonstrate restoration benefits early and often**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Vast environmental benefits were demonstrated early in the project
- Areas were selected to begin restoration that would demonstrate early success and build public support

*Participant Comments (on March 28)*

- Getting water to the natural system as quickly as possible is the key to success.

#### **5. Use pilot testing and monitoring to resolve engineering and biological uncertainties.**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Pilot project to resolve engineering and biological uncertainties
- Small test project before proceeding
- Pilot projects
- Familiarity with C38 operations and maintenance helped/led to effective design and implementation

#### **6. Monitoring and assessing plan was a key to success**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Adequate base conditions (2-3 years data) against which to assess benefits
- Monitoring and historical data proved restoration was successful
- Monitoring the 25 performance measures
- Adaptive management a key tool
- Accurate record keeping- ascertainment of results

#### **7. Adequate funding and consistent support over the project's implementation = success**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Consistent congressional support/ authorization and funding
- Adequate funding
- Funding
- Money
- Multiple partner involvement helped secure funding
- Lots of \$\$\$

*Participant Comments (on March 28)*

- How and why did KRR achieve adequate and consistent funding, why? Why did federal process allow for adequate funding? How did it work and how can we learn from that?
- Included among Gov. Graham's list in the early 1980's – Sec 1135 challenge – Corps had ability but not clear authority and money – united front in environmental community in late 80's to embrace Kissimmee as a pilot project – Florida delegation was stellar in support.
- This is a story that begins in the 1970's.

**8. Clear consensus project goals serving multiple mission objectives enhance public education and support.**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- Clear project goals
- Establishing reasonable goals- ecological, economic, etc.
- Consistent message/goals
- Task clear
- Restoring/rehabilitating systems such as the KRR to now serve multiple mission objectives helps to build public support (e.g. original = navigation + flood control; now = navigation + ecosystem restoration + recreation + wildlife + water supply alternatives + water quality improvements)
- Public education
- Public support and funding (2)
- Local/public involvement
- Community education/outreach
- Lots of local meetings--transparency
- Getting community support with public meetings
- Bringing project opponents to the table
- A very successful citizen outreach effort
- Local interest group support helped secure funding
- Opening the area to multiple uses where the public can experience the success
- Build public support by reporting to media on the status and results of finished projects

**9. Lack of legal challenges on KRR allowed focus on restoration.**

*Keys to Success noted on 4x6 Cards Completed by KRR Field Trip Participants*

- No litigation (3)
- No legal actions to divert attention from restoration

**10. KRR demonstrates you need to give the sponsors the ability through a streamlined process to deliver restoration of the natural system faster and cheaper.**

*Participant Comments (on March 28)*

- KRR was a traditional Corps/Local sponsorship project.

- This demonstrates that given the right process, the Corps has ability to do “fabulous restoration projects” – Kissimmee looks like it does because Corps did not have extra layers of CERP bureaucracy layered on top.
- When this began the regular Corps process could not pull this off. It is important to remember the original Corps plan was modest and then got clear partnership guidance from state and WMD partners.
- CERP is about a process and multiple projects and promising to do something in the future and as a result is more complicated.
- CERP is different from the KRR – questions about the upper basin – different WMD with different collaboration – extra layers showed distrust of Corps.
- CERP is a plan, not a process.
- Corps process does include cooperation with local sponsor.
- KRR did not have programmatic regulations – two different models being used – Everglades restoration so far appears less successful than the Kissimmee restoration – more process in place for Everglades – is there a message here?
- KRR is a success but started in early 70’s – took a long time and lots of work with the public – lots of meetings, but move the process along – hard to compare evolved KRR with new babies in CERP – set of projects people agree to do – do we want to use our time to address the programmatic regs – I want to look at getting restoration done over the next two years vs. focusing on revising the programmatic regulations.
- May not be an either/or.
- Looking at Acceler8 projects may be comparing apples to apples.
- We have not had a WRDA bill reauthorized since 2000 and the process required by the programmatic regs may be a big part of why we don’t have a WRDA. We need an example to show OMB.
- Lack of WRDA bill is an obstacle over the past year.
- 7 years later and we do not have PIRs.
- Lack of WRDA has not held up key conditionally approved projects – more a “show me the money” situation.
- I’m not convinced we need a change in the process. We have not yet gone through a complete PIR, all the way through. This makes it hard to evaluate whether it is successful or not.
- In the coming months several more PIRs may be up for congressional review.
- What’s working and what’s not is a good question, but maybe for another time
- Where are we going from here in getting projects through the system?

## **B. Applying Keys to Success to other Everglades restoration initiatives**

### *Participant Comments (on March 28)*

- Under CERP we have a challenge with leaders and citizens in understanding the basic terms of reference – Corps has standard civil works terms to address public problems – challenge now, we have a jumble of terms, need to re-educate the Corps leadership – we are at a time where we can use new terms and approaches to deliver faster and cheaper delivery.
- CERP is a whole new deal in doing business with the Corps – it was not meant to deal with one project – still use Corps approach to project – Congress did not authorize a project but a process – fairer to compare KRR with the Indian Lagoon.

- CERP may be a process but it is still a list of projects – still not a comfort level with what a PIR is – reeducation every time – put a level of extra meetings on the process with all of the same people every quarter.
- Acknowledge CERP as a huge step forward, but more important that we have an ecosystem problem – need to get watersheds and estuaries that feeder systems in line too – CERP looks at whole system – may be bogged down now but it looks at whole picture – can't ignore new growth and can't use old permitting systems to protect stretches without the restoring the whole system. We are making progress but we are new at this and still learning how to restoring ecosystems not plumbing systems.
- Have to recognize what is not working – again, lesson learned is that we have a process that is not producing as predicted – have to admit that we need to adapt and make revisions. How do we go about that task?



### **C. Potential Task Force Roles Suggested by the Session**

#### *Participant Comments*

- Need to get out more and celebrate like yesterday.
- Perhaps the Task Force and Working Group should be presented with a draft set of lessons and suggestions for improvements based on the experience over the past 7 years by the lead agencies responsible for implementing the programmatic regulations. The Working Group could take a stab at responding to these and pass their thoughts along to the Task Force for consideration.
- Too much process? Could not agree more – is there a simpler way to work on what is on our plate?
- 2008 is the year to look at and wrestle with programmatic regulations.
- We have to be careful – OMB can stop it – have to keep the economics in mind.

- Corps is using the Project Implementation Report approach in other restoration efforts around the country. Need Task Force and Working Group help to produce a visual that communicates to people and leaders where we are in process and to seek their help in continuing to make it happen – makes it clearer to leadership and to the public.

### **III. Conclusion and Next Steps**

The Task Force Chair, Kameran Onley, and Vice Chair, Mike Sole, thanked the public for their participation and contributions and the facilitators for their assistance in an insightful and constructive lessons learned session. The Chair noted the facilitators will produce a report that will be appended to the Task Force meeting summary and noted she is hoping the Task Force might consider future opportunities to get in the field to review both successes and challenges in Everglades restoration and then apply the insights learned to improving the path forward.



**SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE MEETING**  
**Kenilworth Lodge, Sebring, Florida**  
**March 27-28**

**TASK FORCE MEMBER MEETING EVALUATION SUMMARY**

*(8 member forms received)*

Agree



Disagree



CIRCLE ONE

**WERE THE MEETING OBJECTIVES MET?**

5      4      3      2      1

◇ To elected a Vice Chair in accordance with the Task Force Protocol.	8	0	0	0	0 =5.0
◇ To review the challenges and keys to success of the KRR project	6	2	0	0	0 =4.7
◇ To identify strategic lessons learned that can be applied to other restoration projects	3	4	1	0	0 =4.2
◇ To receive an update presentation on Acceler8 and the quarter ahead	5	3	0	0	0 =4.6
◇ To receive a Corps update and the quarter ahead	4	4	0	0	0 =4.5
◇ To discuss the 2007 Avian Ecology Workshop	3	5	0	0	0 =4.4
◇ To provide an opportunity for Task Force member remarks	4	4	0	0	0 =4.5
◇ To review next steps and provide guidance to the Executive Director and Sub-groups	3	3	2	0	0 =4.1

**MEETING ORGANIZATION**

5      4      3      2      1

❖ KRR field trip was helpful and effective	6	1	0	0	0 =4.9
❖ Plenary lessons learned discussion format was effective	4	2	0	0	0 =4.8
❖ Facilitators guided lessons learned session effectively	6	1	0	0	0 =4.9
❖ Participation was balanced among members	4	1	0	0	0 =4.8
❖ Participation was balanced between members and the public	5	2	0	0	0 =4.7
❖ The meeting facility was adequate to meet the needs of the Task Force	2	3	3	0	0 =3.9

**What Did You Like Best About the Meeting?**

- The public/member discussion/debate.
- Opportunity to visit explore the KRR project prior to the meeting. Great to get a sense of what we are working on.
- The comments about the Acceler8, CERP, PIR, processes, plans and projects.
- Short, sweet and productive.
- Interesting field trip, crisp agenda.

- Active dialogue and getting out in the resource.
- Field trip.
- Meeting format with public commentary after each agenda item.

### **What Could be Improved?**

- Somehow work in more substantive elements- a 1/2 day meeting still seemed too short.
- Task Force needs better follow through on issues raised to bring them to closure, e.g. Science Coordination Group report raised at last meeting and programmatic regs raised at this meeting.
- Allow more time for discussion, perhaps a group discussion of what area they would like to visit for the next TF meeting.
- More details in SFWMD and Corps presentations.
- More substance, less theory/process discussion.
- Room temperature- brrrr!
- Request agenda items well in advance of meeting.

### **Other Comments**

- Excellent meeting format- allowed observers and other members of the public to participate in the meeting.
- Quarterly meetings seem to be the best option- rather than bi-monthly or bi-annually. More substantive issues should be addressed no matter what format.
- Overall, great job!!!

**SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE MEETING**  
**Kenilworth Lodge, Sebring, Florida**  
**March 27-28**

**PUBLIC MEMBERS' MEETING EVALUATION AND COMMENT SUMMARY**

*10 Public Participant Survey Responses*

	<u>Agree</u>		<u>Disagree</u>		
	☺		☹		☹
<b>WERE THE FIELD TRIP/SESSION OBJECTIVES MET?</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
◇ To experience firsthand the results of a restoration effort	6	2	0	0	0 =4.7
◇ To review the challenges and keys to success of the KRR Project	3	3	1	1	0 =3.2
◇ To identify strategic lessons learned that can be applied to other restoration projects	1	2	4	1	0 =2.7

**MEETING ORGANIZATION**

	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
❖ KRR field trip was helpful and effective	9	1	0	0	0 =4.7
❖ Plenary lessons learned discussion format was effective	5	3	2	0	0 =4.3
❖ Facilitators guided the lessons learned session effectively	5	3	2	0	0 =4.3
❖ Participant was balanced between members and the public	5	4	1	0	0 =4.3
❖ The meeting facility was adequate	7	1	2	0	0 =4.5

**What Did You Like Best About the Meeting?**

- Length of meeting- excellent.
- The open forum.
- Fast movement.
- Public comment structure.
- Great initial discussion on the bigger topic of how to get results faster for CERP. Need to link back to KRR more in the discussion of moving forward.
- Broad presence of agencies- federal, state and local.
- Ability to talk with key people.
- Legislative updates- Tallahassee and Congressional.

**What suggestions do you have for improvements?**

- More detailed agenda, use of challenges and keys to success in a future report.
- Ask (require) speakers to use their microphones.
- To keep having the TF meetings on a quarterly basis.
- Please continue this format.
- Great meeting, Kameran!!

**Other Comments (continue on back if needed)**

- More publicity for future meetings.
- The TF is critical because it is the only venue with all the partners represented and where the public can readily engage.

