

CWG Review 1: Spring 2015

Tier 1 Information:

1. Management Action

S-114 Create and implement mechanisms that allow permitting agencies to apply lessons learned from past projects to future projects to minimize impacts to resources and improve success of mitigation activities.

2. Intended Result (Output/Outcome)

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

- Coastal construction projects, including port expansions and beach nourishment, will be improved by implementing lessons learned on previous projects. Impacts to resources will be better minimized and mitigation will be more successful at replacing ecological functions that were provided by resources lost due to unavoidable impacts.
- Needs to be a way to track which projects are successfully improving based on “lessons learned” and which are status quo. FSBPA Annual and Beach Tech meetings are a great place to exchange ideas and many of the presentations focus on ways each beach project improved based on lessons learned (either by reducing costs, impacts, effectiveness, or all) see www.FSBPA.com

3. Duration of Activity

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

- This management action requires recurring activities in the form of project post-mortem meetings. Projects should be evaluated in a formal setting with representatives of the permitting and commenting agencies to determine what aspects of the project worked well and which aspects did not; this information should be documented in meeting minutes, summarized, and made available to be used by regulators to prevent past problems from being repeated and to so that successful aspects of past projects can be duplicated. Options for storing the documentation could include the FDEP Oculus database or SFWMD ePermitting.

4. Justification

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

- This management action is being put forth due to the variations in specific conditions, timing, contractors, etc. By applying lessons learned that are available to permit reviewers, more can be done to reduce impacts to resources and optimize the performance of mitigation. Additionally, permit reviewers can provide justification to applicants for decisions made during the permitting process so that they have a better understanding of the process.
- The SEFCRI project MICCI 4 et.al was completed in order to understand how to improve compliance and enforcement. Some of the recommendations included improved permitting language and specific requirements for permittees and permittees to have meetings pre, during, and post construction to discuss lessons learned http://www.dep.state.fl.us/coastal/programs/coral/reports/MICCI/04/MICCI_04_21_23_24_Phase_2_Report.pdf

5. Potential Pros

What are the potential advantages associated with this management action?

- Projects managers and permit reviewers will be more informed as projects are designed and permitting, potentially improving the effectiveness of avoidance, minimization and mitigation measures. The function of natural resources would be better maintained and the ecological functions provided by mitigation. The application of the lessons-learned approach could potentially reduce the costs of projects.
- One of the biggest improvements that can be made is creating and using standardized permitting language that can be updated over the years with specific categories of permitting language (e.g. specific language for

dredging, for pipes, for nourishment).

6. Potential Cons

What are the potential disadvantages associated with this management action?

- Some potential disadvantages associated with this management action include: (1) this will most likely be a lot of effort for very little return; (2) there are too many projects and timespans/project life are too long. Sometimes big picture lessons learned come through and are implemented naturally which is probably the best that can be hoped for. Because even when strategies are implemented, knowledge of how each and every special permit condition came to be is near impossible; (3) trying to track every lesson learned when each project can be so unique, and then apply those lessons learned, may be an exercise in futility; and (4) permit processors have little to no time to do this with their strict time clock turnarounds, this may need to be something that is an un rule or policy.
- This should not be over-generalized, lessons learned from one project may not translate to another. While lessons learned do not apply in each and every situation, however, the purpose of lessons learned activities is to apply when appropriate and applicable, and commonalities across projects should not be undervalued as being too disparate for comparison
- This process takes extra time and diligence to study and review previous projects. Recommendations that come from applying the lessons-learned approach could potentially increase the cost and / or construction time for some projects, although this is unlikely. In fact, a lessons-learned approach may actually reduce project costs over time.

7. Location

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

- This management action is intended to be applied statewide, including all counties in the SERCRI region. Lesson learned may be applied to other regions, but there would be unique characteristics when comparing one area to another even within the same region.

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

- This management action would be relevant to all habitat types.

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

- Statewide

8. Extent

Area, number, etc.

- This management action can be applied to all coastal permitting projects requiring a state or federal permit.

9. Is this action spatial in nature?

- No

Tier 2 Information:

WHY?

1. Strategic Goals & Objectives to be Achieved

Refer to the [SEFCRI Coral Reef Management Goals and Objectives Reference Guide](#).

- LBSP Goal C1 Obj 1 – Minimize the impacts of degraded water quality associated with coastal construction activities. LBSP Goal C4 Obj 4 – Improve consistency and level of enforcement of current rules and regulations. FDOU SEFCRI LAS Issue 3 Goal – Ensure reef ecosystems are not harmed or degraded by artificial reefs. MICCI Goal A1 Obj 3 – Determine whether there is a need for a new streamlined permit review, compliance enforcement process to enhance coordination and consistency or how existing processes might be retooled to achieve the same result. MICCI Conservation Goal C – Minimize and where possible eliminate habitat

destruction from maritime industry and coastal construction activities. MICCI Issue 1 Goal – Protect coral systems from impacts associated with projects in and around the reef tracts of southeast Florida. MICCI Issue 1 Goal Obj 1 – Review, revise, implement and enforce existing regulations. Increase effectiveness of permit conditions to protect coral communities and increase efficiency of regulatory review. MICCI Issue 1 Goal Obj 2 – Avoid and minimize impacts to coral reef ecosystems from dredge and fill activities. Reduce the areal extent of project-related impacts. MICCI Issue 2 Goal – Change coastal construction practices in ways that protect marine and estuarine habitats. MICCI Issue 2 Goal Obj 1 – Demonstrate avoidance and minimization of impacts to resources at the project planning stage. MICCI Issue 3 Goal Obj 3 – Evaluate and promote environmentally appropriate artificial reef construction that does not adversely affect natural marine habitats. MICCI Issue 4 Goal – Ensure compliance with regulatory requirements (including specific conditions) by increasing compliance review and enforcement actions. Other Strategic Management Goal A1 – Ecosystem-based approach to management.-

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.

- Currently the Department of Environmental Protection is doing this action, however, the process could be improved or be more formalized.

3. Intended Benefits (Outcomes)

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

- The intended outcome of this action is to provide an application of the lessons-learned to provide multiple environmental benefits including but not limited to, better resource protection and minimization, maintaining the function of natural resources and increasing the ecological functions provided by mitigation activities. More effective project designs that minimize impacts to resources have already been realized. Learning from previous projects will fine tune the direction of future projects and take out some of the guess work that comes with the types of activities being proposed and ultimately will build a better end result. One of the many positives aspects of applying a lessons learned approach, is there may be improved permitting language which can incorporate lessons learned. More effective designs, lead to better science and management, which in turn helps refine the scientific questions for improving future restoration projects.

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

- The application of a lessons-learned approach could potentially reduce the costs of coastal construction projects and any compensatory mitigation activities required.

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

- The benefits of the proposed management action are expected to be long-lasting and will result in better and more efficient projects as more data is collected. Over time projects are expected to continually improve due to the application of information for all past projects.

4. Indirect Costs (Outcomes)

What potential negative environmental impacts might this action have?

- There are no anticipated negative environmental impacts.

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

- A possible issues that may arise with implementation of this management action would include the potential for increased cost and / or construction time for some projects initially. However over times the lessons-learned approach may reduce project costs.

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

- Any negative impacts would be short-term, because any unforeseen impacts would be evaluated using the lessons-learned approach to determine how to achieve the desired outcome with no (or fewer) impacts during

subsequent projects.

5. Risk

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

- If this management action were not to be implemented and past projects do not get evaluated to determine why they were successful and where there were shortcomings, then past mistakes may repeat themselves and strategies that were successful may not be applied to future projects; projects may impact resources when alternative strategies could have been employed to minimize or avoid impacts; and if lessons are not applied to mitigation, then projects may not be as successful or achieve the optimum ecosystem function that could have been achieved if other techniques were employed. This should not be over-generalized, lessons learned from one project may not translate to another. While lessons learned do not apply in each and every situation, however, the purpose of lessons learned activities is to apply when appropriate and applicable, and commonalities across projects should not be undervalued as being too disparate for comparison.

6. Relevant Supporting Data

What existing science supports this recommendation? (Provide citations)

- Supporting and relevant data includes information on the adaptive management of resources is relevant. Overall, this action will be collecting and utilizing science with each application.

7. Information Gaps

What uncertainties or information gaps still exist?

- Some uncertainties or information gaps with this management action include: (1) defining a mechanism by which a lessons-learned approach can be implemented and / or formalized by regulatory agencies; (2) regulatory agencies could voluntarily produce a lessons-learned document at the completion of major coastal construction projects that outlines any issues that were encountered and how they were addressed or how similar issues should be addressed / avoided in the future. Additionally, the document should summarize any novel or ingenious aspects of the project (such as monitoring protocols, mitigation activities, or BMPs) that were successful and should be repeated in the future. Lesson-learned documents drafted by FDEP could be loaded to the Department's website or made available via Oculus; (3) another alternative would be to assemble a review-panel consisting of regulatory agencies and stakeholders and those with specific expertise (e.g., construction professionals and academics) to evaluate major coastal construction projects after completion to discuss lessons-learned; the findings from this workgroup could be summarized in a lessons-learned document and / or meeting minutes could be made available to the public. Perhaps such a workgroup could be assembled on an annual or biennial basis to discuss lessons-learned in general, instead of focusing on a specific project; (4) one of the outcomes of the lessons-learned process could be the development and iterative revision of standard permit-conditions that can be applied to similar coastal construction projects (e.g., projects that are similar in scope / scale that are expected to result in similar impacts to the same type of natural community).

WHEN?

8. Anticipated Timeframe for Implementation

How long will this recommendation take to implement?

- 0-2 years

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?)

- Any management action regarding the regulation and permitting of coastal construction projects is linked to this action.
- Closely allies with S-107 and N-119

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](#).

- The lead agency for implementation of this management action would be the FDEP and any other regulatory or stakeholder group involved in coastal construction activities.

11. Other Agencies or Organizations

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

- Other potential agencies or organizations who could be involved include the WMDs, USACE, NMFS, FWC, County governments and the FKNMS. CAMA, SEFCRI, and non-profits could all contribute information on past projects (construction and mitigation) to provide foundation of knowledge to improve future projects.

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.

- The key stakeholders for this management action would be any stakeholders involved in coastal construction activities (including permittees and regulatory agencies).

HOW?

13. Feasibility

Is there appropriate political will to support this? Explain.

- FDEP is currently applying lessons-learned and actively working towards improving this process.
- Political support may vary depending upon the specific mechanism by which the lessons-learned process is to proceed (see information gaps section) and the extent to which this process is to be formalized. Unable to tie this to the permitting process because of regulatory time clocks and there is a high turnover rate in personnel so the historical knowledge isn't there to apply to new permits.

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

- Potentially, lessons-learned regarding the minimization or avoidance of impacts may conflict with the interests of stakeholder groups that seek to construct projects in the most cost-effective manner.
- Actually creating some mechanism to record lessons learned and having each and every permit reviewer be able to access each and every permit similar to the one they are working on will be a monumental effort most likely requiring a database.
- Lessons-learned from one project may not be applicable to subsequent projects; it is necessary to determine which lessons are universally applicable and which lessons are only applicable to certain types of projects (e.g., those projects that are similar in scope / scale with the same type of natural communities). It is necessary to identify commonalities and dissimilarities between projects in order to determine which lessons-learned are applicable.

14. Legislative Considerations

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

- This management action does not conflict with any legislative considerations.

15. Permitting Requirements

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

- There are no permitting requirements with this management action.

16. Estimated Direct Costs

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

- \$0 - \$50,000

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

- The main cost associated with this action is additional staff time, which will happen on a recurring basis, project-by project.

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

- Unknown. The cost for regulatory agencies to implement a lessons-learned approach is expected to be minimal. The cost to review monitoring reports to evaluate project performance and impacts to resources will likely be project specific. Holding annual workshops, or creating training materials etc. may require some cost.

17. Enforcement

Does this require enforcement effort?

- No

18. Potential Funding Sources

Identify potential funding organizations/grant opportunities, etc.

- This management action will likely not require additional funding, as the only expected cost that are expected to be incurred are additional regulatory staff time devoted to the evaluation of project performance / outcomes.

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?

- This management action can be evaluated by assessing coastal construction permit improvements over time. Likewise, the impacts resulting from coastal construction projects could be tracked over time to document improvement in the minimization and avoidance of impacts, by utilizing better permit conditions.
- The Society for Ecological Restoration publishes guidelines that include designing metrics for evaluating project success. They are generally easy to monitor but often require some hard thinking beforehand to turn warm-and-fuzzy notions of "success" into operational definitions that can be quantified

SEFCRI/TAC Targeted Questions:

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

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

- -

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

Tier 1 – #4 (Justification)

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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)

- Yes. On a small scale for large scale projects. Many restoration projects worldwide have done it. Kruger National Park (South Africa) is one of the more famous examples, see

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)

- yes

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.

- No

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.

- KF: N-119 (increased staff) and S-107 (increased monitoring)-

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)

- No. How can this management action be required specifically? How will the permit processor have the time to do this? Is this something that needs to be in rule or policy? High turnover in agencies was discussed and that lessons learned that currently exist be lost during turnover. How do you capture these lessons so later on they can be available? There are hundreds of permits processed each year with lessons learned from each one, it is difficult to do it from year to year let alone over the span of several years. Many staff do not see permits from cradle to grave and therefore could not necessarily make the connections of what lessons should have been learned.

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)

- Yes it is being done by USACE