Title:

S-106: Establish an educational turbidity monitoring certification to improve the quality of turbidity data that are used to evaluate project-related threats to resources.

Background:

- This recommended management action relates to sediment on hardbottom and coral reefs in the entire state of Florida.
- This recommended management action is being put forth because turbidity data are currently collected by many individuals with various levels of experience and expertise. Collection of data by inexperienced, untrained individuals results in uncertainty regarding the quality of such data and usefulness for evaluating project-related impacts on resources.

Objective:

- The intended outcome of this action is to increase the number of trained and certified individuals that will conduct turbidity monitoring for coastal construction projects, resulting in more accurate data on project-related turbidity, by establishing an educational turbidity monitoring certification. This certification training would be preferred but not mandatory, initially, and the benefits received during the permitting process would encourage the applicant to choose 'Florida Department of Environmental Protection (FDEP)-certified' turbidity monitors over non-certified. Some of the benefits include:
 - o Prequalified monitoring personnel would not need to submit qualifications during the permitting process.
 - o Best Management Practices for the process/technique of collecting samples in the turbidity plume.
 - O Both federal and non-federal projects will be able to require that turbidity monitoring personnel are FDEP-certified, even though this will not be a mandatory FDEP requirement. United States Army Corps of Engineers will be able to incorporate this in their contracts similar to the current 'National Marine Fisheries Service observer certification' requirement, as long as there is physical proof of the training.
 - This approach does not require legislative approval initially. It avoids legal challenges and solves the underlying problem, as well as serve as a stepping stone for a certification program if required in the future.

Intended Benefits and/or Potential Adverse Effects:

- Trained and certified individuals will conduct turbidity monitoring for coastal construction projects, which will result in more accurate data on project-related turbidity. Accurate data on project-related turbidity will result in a better understanding of potential project-related impacts resulting from turbidity, which will result in better protection for water resources.
- Benefits of implementation of this recommended management action include training that may result in more effective turbidity monitoring, which could save monitoring crews time in the field and result in cost-savings to permittees and taxpayers.
- Anticipated negative economic impacts associated with this recommended management action include regulatory agencies needing to invest time and money in order to establish the certificate program and to continually offer courses. Monitoring firms may also need to spend time and money to ensure their employees receive the training and are certified

- so that they remain competitive.
- The duration of the benefits of this recommended management action is ongoing and shall have long-term benefits.
- If this recommended management action is not implemented, the quality of turbidity data would remain questionable and impacts to resources may result.

Agencies/ Organizations:

- The lead agency for implementation of this recommended management action would be the FDEP.
- Other potential agencies or organizations who could be involved were not identified.
- The key stakeholders for this recommended management action would be any stakeholder involved in coastal construction activities (including permittees, monitoring companies and regulatory agencies).
- Certification is normally done by the Board of Professional Regulation (Florida Department of Business & Professional Regulation) or a professional society. However, since this is creating a voluntary program, it does not require legislative approval.

Permitting/ Enforcement Requirements of RMA:

- There are no permitting requirements for this recommended management action.
- Enforcement requirements for this recommended management action include those that are currently in place to review permit compliance reports.
- Means of demonstrating success of this recommended management action include tracking the number of individuals certified and the number of compliance issues regarding improper turbidity monitoring. Certification course participants could be given a pre-test to determine their knowledge of turbidity monitoring prior to the training and could be reassessed upon course completion to determine the effectiveness of the training.

Cost:

- The estimated direct cost of implementing this recommended management action was not identified. However, regulatory agencies will need to invest time and money to establish the certificate program and continually offer courses.
- Funding may be acquired through the FDEP or other regulatory agencies.

Time Frame & Extent:

• The anticipated timeframe for implementation of this recommended management action is 0 - 2 years, with the voluntary program starting as soon as possible, followed by the mandatory certification.

Miscellaneous Info:

- This recommended management action is linked to S-104.
- Some uncertainties or gaps with this recommended management action include the following: (1) the cost to develop the course, (2) the inability of the course to pay for itself (the small size of the turbidity monitoring industry means that not enough people would be getting certified or paying for certification for the course to be sustainable), (3) the legal liabilities for both the entity/person being certified and the entity doing the certification, (4) certifications need to be tracked, thus individuals who would be tracking the certifications need to be identified, (5) the certification tracking process needs to be

- identified, (6) who would be conducting the testing still needs to be identified, (7) what exactly would testing entail, (8) policing would be required to ensure that certification standards continue to be met, (9) who would set certification standards still needs to be identified, (10) who would monitor compliance with those standards and who would have the authority to enforce those standards is still unknown, and (11) non-compliance would require decertification, which would bring legal challenges for the enforcing entity.
- Suggestions were made to incorporate other training needs (e.g. sea grass or benthic habitat monitoring) into one training program in order to increase the feasibility of moving forward with mandatory certification at this time. While it is a good endeavor to have FDEP certification for all monitoring activities, there is a danger in increasing the scope of this training program such that the more charismatic issues may eclipse the turbidity monitoring issues, or such that the roll out of this training program is pushed further into the future. The industry is also highly specialized, in that most turbidity monitoring personnel rarely monitor benthic habitat and vice versa, so a combined program geared towards turbidity monitors may be counter-productive if training for other monitoring disciplines are included.
- Currently, a Turbidity Monitoring Working Group exists and is addressing much of the content of this recommended action. After careful analysis, the Turbidity Monitoring Working Group decided that, since the problem was primarily the lack of understanding/guidance about how to monitor correctly, a training (without professional certification) program could be the solution. Consequently, FDEP received the buy-in from the major players in the turbidity monitoring industry with regards to a voluntary certification (training) program and discussions are currently underway.

Goals/ Objectives to be achieved:

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

- FL Priorities Goal C1 Obj. 1 / FL Priorities Goal C4 Obj. 4
- SEFCRI LAS MICCI Conservation Goal C / SEFCRI LAS MICCI Issue 1 Goal / SEFCRI LAS MICCI Issue 1 Goal Obj. 1 /SEFCRI LAS MICCI Issue 1 Goal Obj. 2 / SEFCRI LAS MICCI Issue 2 Goal / SEFCRI LAS MICCI Issue 4 Goal