Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

West Grand Terre Beach Nourishment and Stabilization

LOCATION

Jefferson Parish, Southeastern Louisiana

SPONSOR(S)

State of Louisiana

TYPE OF FUNDING REQUESTED (Planning, Technical Assistance, Implementation)

Project/Planning

REVIEWED BY:

DATE:

1-7-2015

Best Available Science:

These 6 factors/elements help frame the reviewers answers to A, B and C found in next section:

1. Have the proposal objectives, including methods used, been justified using peer reviewed and/or publicly available information?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

2. If information supporting the proposal does not directly pertain to the Gulf Coast region, are applicant's methods reasonably supported and adaptable to that geographic area?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

3. Are the literature sources used to support the proposal accurately and completely cited?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

4. Are the literature sources represented in a fair and unbiased manner?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

5. Does the proposal evaluate uncertainties and risks in the scientific basis for the proposal, including any identified by the public and Council members?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

6. Does the proposal evaluate uncertainties and risks in achieving its objectives over time? (e.g., is there an uncertainty or risk that in 5-10 years the project/program will be obsolete or not function as planned given projections of sea level rise?)

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Comments

Based on the answers to the previous 6 questions, and giving deference to the sponsor to provide within reason the use of best available science the following three questions can be answered:

A. Has the applicant made a reasonable determination that the proposal is based on science that uses peer-reviewed and publicly available data?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Information Needed:

B. Has the applicant made a reasonable determination that the proposal is based on science that maximizes the quality, objectivity, and integrity of information (including, as applicable, statistical information)?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Information Needed:

C. Has the applicant made a reasonable determination that the proposal is based on science that clearly documents and communicates risks and uncertainties in the scientific basis for such projects?

- (●) YES
- ( ) NO
- ( ) NEED MORE INFORMATION

Information Needed:

Science Context Evaluation

A. Have other methods been discussed and reasons provided to why the method is being selected (e.g., scientifically sound; cost-effectiveness)?

Yes, the proposal cites several studies as well as complex modeling developed by the project proponent (in consultation with experts) for the express purpose of selecting best methods under various scenarios, while allowing for flexibility in the face of future change.

B. Has your agency/vendor/project manager conducted a project/program like the one proposed?

No, my organization is part of a larger effort that focuses on research and science-based planning and design for the conservation of ecosystems, which includes the development of sophisticated decision support tools and predictive models. However, my organization and our larger effort do not implement ecosystem restoration projects.

C. Is there a risk mitigation plan in place for project objectives? (captures risk measures as defined under best available science by the Comprehensive Plan and Act)

Yes, through the use of linked predictive models developed for Louisiana's 2012 Coastal Master Plan, both risk reduction strategies and the adoption of a conservative "less optimistic scenario" accounting for the future effects of sea level rise, subsidence, and other factors beyond the control of the project proponent have been incorporated.

D. Does the project/program consider consequences with implementation? (captures risk measures as defined under best available science by the Comprehensive Plan and Act)

Yes, this project incorporates a comprehensive, systems level effort to model and predict future change under various scenarios - including no action - developed by the project proponent for the purpose of ensuring that funds are not wasted and that multiple, sometimes interacting projects (including West Grand Terre Beach Nourishment), can reasonably be assumed to achieve their goals over the long-term.

E. Does the project/program have clearly defined goals?

Yes: well defined primary and secondary goals, which are mutually reinforcing and beneficial to ecosystems and Gulf Coast communities.

F. Does the project/program have clearly defined objectives?

Yes: well defined primary and secondary goals, which are mutually reinforcing and beneficial to ecosystems and Gulf Coast communities.

G. Does the project/program have measures of success? (captures statistical information requirement as defined by the Comprehensive Plan and Act)

Yes, although the measures are not yet well-defined, as they rely on the completion of a monitoring program currently under development by the project proponent and the Water Institute of the Gulf: the System-Wide Assessment & Monitoring Program (SWAMP). SWAMP is incorporating two existing monitoring programs: the Coast-wide Reference Monitoring System-Wetlands (CRMS) and the Barrier Island Comprehensive Monitoring Program (BICM).

H. Is a monitoring program in place to determine project goals, success and help adaptive management (if applicable)? (captures statistical information requirement as defined by the Comprehensive Plan and Act)

Not clear, other than direct measures of achieving project goals, the monitoring program appears to be under development. Presumably there is time for completion of the monitoring program, since this proposal covers the engineering & design/permitting and adaptive management measures for the project, not the actual construction.

I. Does the project/program consider recent and/or relevant information? (captures statistical information requirement as defined by the Comprehensive Plan and Act)

Yes

J. Has the project/program evaluated past successes and failures of similar efforts? (captures the communication of risks and uncertainties in the scientific basis for such projects as defined by the Comprehensive Plan and Act)

The project is part of a larger effort to restore the Barataria/Plaquemines barrier shoreline, and several previous projects have been successfully completed. However, no evaluation of the success of those projects in achieving the stated long-term goal of enhancing and protecting the shoreline over time (such as through a reduction in erosion/beach narrowing) is offered.

Please summarize any additional information needed below: