Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Adaptive Management and Technical Assistance in Support of Gulf Ecosystem and Economic Restoration

LOCATION

Northern Gulf region, including the lower watershed

SPONSOR(S)

Department of the Interior

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

Technical Assistance

REVIEWED BY:

DATE:

January 2, 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

The proposed program responds to the need of a coordinated science-based approach across all RESTORE proposals/projects. The four main component of the program (adaptive management, monitoring, sustainability, and economic impact) are necessary to formulate robust projects based upon the best available science.

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

Not Applicable

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

- ◉ YES
- ○ NO
- ○ NEED MORE INFORMATION

Comments

All the literature sources are in the reference list and all the sources in the reference list are used accurately in the proposal. However, some relevant Gulf work is missing from this proposal and it appears the applicant has no knowledge of ongoing efforts (such as the Emergent Wetlands Status and Trends report). See comment below (comment box I).

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

- ◉ YES
- ○ NO
- ○ NEED MORE INFORMATION

Comments

The literature sources are represented in a fair and unbiased manner.

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

The proposal only minimally addresses risks. Being that the proposal is to set up a technical assistance program rather than a restoration project per se, the applicant identified risks related to the limited buy-in and involvement. It would have been beneficial to have a handful of risks related to each of the four program components (e.g. risk related to monitoring: if the monitoring set up for a specific project fails or does not work has planned, how to proceed? Are there alternative monitoring programs that can be used?).

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

The word uncertainty is used several times to indicate that an adaptive management approach helps reduce system uncertainty. It is also used when referring to specific project uncertainty. The proposal mentions risks and uncertainties related to unpredictable storms and other ecosystem changes, but does not evaluate them.

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)?

Other methods are not discussed in the proposal. However, a strong case is made for the four components proposed (i.e. a science-based process with a formalized framework).

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

Not that I am aware of. This is a technical assistance program that would support a great number of projects submitted to the RESTORE Council.

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)

There is no risk mitigation plan in place.

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

The major benefit of the proposed program is to provide free access to restoration science resources and practitioners. The program will synthesize available information and share lessons learned to implement improved, science-based project.

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

The program's goal is stated on page 7. It may have been beneficial to introduce the goal earlier on in the description and emphasize it in the executive summary. As is, the goal of the program is in a non-prominent spot.
The proposal's goal is to provide systematic, robust decision-making.

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

The project objectives are clearly identified on page 6 under the heading "Phase I Objectives (this proposal, 3 years)". The objectives are to 1. Establish a Gulf Restoration Adaptive Management and Technical Assistance Program to facilitate the design and execution of technically sound and sustainable habitat and water quality restoration projects. 2. Collaborate with project management team to identify technical assistance that would benefit the project at no additional project cost. 3. Deliver enhanced local to regional-scale knowledge to those projects to provide: consistent and integrated monitoring

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

Measures of success are provided. The applicant identifies as measure of success the number of projects that adopt the proposed four components of the program.

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)

The applicant describes this component as "not applicable" to the program.

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

The program lacks consideration of recent and relevant Gulf efforts.
On page 10 under "Establish Gulf-wide status and trends of valued ecosystem attributes" there is no mention of the currently ongoing USGS effort "Emergent Wetlands Status and Trends" (http://gom.usgs.gov/GOMEmWetStatusTrends.aspx). Also the USGS and EPA carried out a "Seagrass Status and Trends" a few years ago; no mention of this effort has been found in the proposal.
Under the same heading, on page 11, the applicant proposes to "standardize emergent habitat classifications". This has partly

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 proposal does not do this explicitly. The applicant mentions that technical assistance of specific components has been provided by USGS scientists in other large restoration efforts (e.g. the Chesapeake Bay, Everglades...).

Please summarize any additional information needed below:

It is not clear how the proposed program will avoid reinventing the wheel by leverage existing and ongoing Gulf efforts, e.g. GOMAportal and GRIIDC for data sharing and management; ongoing ecosystem services valuation projects and GecoServ for economic analysis; Emergent Wetlands Status and Trends for status and trends of valued ecosystem attributes.
Also, it is not clear when the valuation of ecosystem services will take place. The proposal is confusing because it mentions that valuations will take place in Phase II of the program, but this objective is described as part of Phase I (however, it is not in the timeline).