SCIENCE EVALUATION

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

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

LOCATION

All 5 U.S. Gulf States

SPONSOR(S)

Department of the Interior

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

Program, Technical Assistance

REVIEWED BY:

DATE:

January 5, 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

On p. 11, “Coastal emergent habitat classifications will be standardized and the emerging comprehensive dataset will serve as a baseline for all RESTORE Council projects focused on coastal habitats.” The proposed work should employ the existing Coastal and Marine Ecological Classification System (CMECS) as a classification system for head of tide out to the outer limit of Exclusive Economic Zone. http://coast.noaa.gov/digitalcoast/publications/cmecs

The development of a standard operating procedure library is good, particularly if scientifically-based summary recommendations in user-friendly form can be publicly available from it.

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

applies to defined Gulf Coast region

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

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

Comments

Yes - however, existing resources are not fully acknowledged and should be to ensure no duplication of effort. As examples related to the inventory and gap analyses: 1) the Gulf of Mexico Coastal Ocean Observing System has an extensive, stakeholder-based (via expert interviews, workshops, plan reviews) 10-year build out plan with sections inventorying existing monitoring and observing activities for living marine resources (fisheries, marine mammals, sea turtles, plankton, coastal and seabirds), habitats, and restoration projects, as well as gap analyses and a proposed coastal ocean observing system design

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

However, some uncertainties and risks included were not scientific but were related to stakeholder participation.

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 adaptive management technical assistance aspect is a real strength of this proposal. Funded restoration projects will need the help assessing uncertainties and risks over time with respect to sea level rise, climatology, development pressures, and diversions or natural river course changes.

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:

The proposal is overall well-based in science, but some existing resources are not fully incorporated, as noted above.

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:

Documenting and communicating risks per applicable restoration project is actually an objective of this proposal

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)?

Not really. For example, the idea of combining monitoring inventories with modeling and gap analyses, under “adaptive management” seems logical, but more details on the selected method of this integration would be helpful.

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

Yes - in terms of data management and data sharing (U.S. Integrated Ocean Observing System Data Management and Communication Standards (http://www.ioos.noaa.gov/data/dmac/welcome.html) , QA/QC (Quality Assurance for Real Time Oceanographic Data Collection - http://www.ioos.noaa.gov/qartod/welcome.html) , inventories and some gap analyses (GCOOS Build-out Plan). See, in particular, the GCOOS Data Portal http://data.gcoos.org/ , GCOOS Data Products (which

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)

No

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

Not really. The risks are primarily due to not offering technical assistance in a coordinated way to the funded proposals.

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

yes

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

yes

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

The measures of success and feedback loop for adaptive management could be fleshed out more. The measures of success are also not necessarily statistical in nature.
Assessments should also include connectivity of habitats, in addition to areal extent.

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)

Yes, and adaptive management is a primary purpose of the proposal.

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

yes, but not necessarily statistical information

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)

Yes. However, more information could be provided on past successes and failures of similar efforts. For example, some information is provided on the success of the USGS digital library and interactive map product tools, but more information is needed here. Further, how are the expanded digital library and map tools distinct from the in-progress GOMA restoration project tracker? From the information given, it is difficult to discern if the proposed effort will develop distinct and effective tools.

Please summarize any additional information needed below:

-overall proposal is very good and very much needed to help ensure effective, adaptive implementation of restoration projects
-need more inclusion of existing resources and how to coordinate fully with those (vs. duplicating existing efforts and resource use) - e.g., GCOOS, Ocean Conservancy, GOMA, Harte, NOAA, NAS, QARTOD, IOOS)
-need more description of successes and failures of similar efforts, including specifics of how the digital library and map tools are distinct from other existing efforts
-need more statistical information and details on measures of success