SCIENCE EVALUATION

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Abandoned Oil and Gas Well Plugging and Site Reclamation

LOCATION

7 FWS National Wildlife Refuges in Louisiana and 9 NWRs in Texas; and 1 unit of the National Park System in Louisiana and 2 NPS units in Texas

SPONSOR(S)

Department of the Interior, U.S. Fish and Wildlife Service, and National Park Service

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

Project, Planning, Technical Assistance, Implementation

REVIEWED BY:

DATE: 12/17/2014

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

For the most part yes, but the proposal mentions numerous times the high risk / high uncertainty associated with restoration of > 3,000 acres of wind tidal flats at Padre Island National Seashore. The risk is to be managed by testing restoration methods in a smaller area and assessing these methods for effectiveness. However, there is no mention of any of the methods that have been used in the past or that they plan to test. It seems that the proposal was often redundant and could have been more effective by being concise but more detailed on topics such as this one. I would need more information to comment on the potential success of the Padre Island National Seashore project, which constitutes a significant portion of the planned restoration effort.

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

Directly pertains to Gulf Coast region

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

- ◉ YES
- ○ NO
- ○ NEED MORE INFORMATION

Comments

References comprise a variety of agency manuals.

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

- ◉ YES
- ○ NO
- ○ NEED MORE INFORMATION

Comments

I believe they are represented in a fair and unbiased manner. My only additional comment is that there are not really any outside references (e.g. from published literature from peer-reviewed journal sources). So, in some ways, the proposal is built on in house literature sources. That may be all there are, but for what it's worth, outside sources are probably worth including to eliminate any potential bias.

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

Uncertainties are discussed for different restoration methodologies and also for selected individuals projects.

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 proposal asserts that the project achievements will be long term in nature (no further action would be needed after the 1-6 year project timeline).

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:

No peer-reviewed literature sources are referenced, but this information (if available) would allow for better determination of the potential for success using the proposed restoration methods.

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)?

In some cases, yes. In the case of the large Padre Island National Seashore wind-tidal flat restoration, no. Pilot restoration activities would be undertaken, but it is not discussed what those would constitute.

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

No

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.

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

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)

Yes

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, a monitoring program has been incorporated into most of the projects.

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 projects are in many cases needed to correct past failures - these are discussed.

Please summarize any additional information needed below:

The project seems like a good one. It is broad in spatial scale and coalesces over 50 individual projects across 2 states with over 6,500 acres affected. The project goals and objectives are well developed and aligned with RESTORE goals. I am, for the most part, confident that this project would be successful. I would like more information on the Padre Island National Seashore wind tidal flat restoration plans, as this is a key piece of the proposal, but for which the discussion of methods / alternative methods is not comprehensive.