Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Abandoned Oil and Gas Well Plugging and Site Reclamation

LOCATION

Louisiana and Texas

SPONSOR(S)

DOI (FWS and NPS)

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

Project, Planning, Technical Assistance, Implementation

REVIEWED BY:

DATE: 01/09/15

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

This proposal does not adequately characterize the 6,600 acres proposed for restoration or the benefits of the proposed restoration. Though the methods appear to be based on best available science, it is difficult to determine if the proposed restoration is justified because the risks of damage from abandoned oil and gas features has not been quantified. There is little to no scientific analysis of the hazards posed from abandoned oil and gas wells in terms of documented disturbances or statistical likelihood of impacts. Instead, the proposal lists possible impacts and risks with no discussion of the likelihood of such impacts (for example based on type or age of infrastructure or level of exposure to natural hazards).

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

Yes, the proposal does evaluate the uncertainty and risk associated with the methods. However, the proposal does not evaluate uncertainty and risk with respect to the likelihood of the abandoned oil and gas features causing future damage.

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:

Though the methods appear to be based on best available science, it is difficult to determine if the proposed restoration is justified because the risks of damage from abandoned oil and gas features has not been quantified. There is little to no scientific analysis of the hazards posed from abandoned oil and gas wells in terms of documented disturbances or statistical likelihood of impacts. Instead, the proposal lists possible impacts and risks with no discussion of the likelihood of such impacts

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:

This proposal does not full characterize the scientific basis for this study. The proposal list potential impacts of abandoned oil and gas wells without a treatment of the likelihood of such negative impacts. If a subset of this proposal is funded, it should focus on those abandoned oil and gas features that are most likely to cause negative impacts.

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.

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

Yes, we have engaged in site reclamation.

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, the restoration of the wind tidal flats has the most uncertainty and risk and a mitigation plan is 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)

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.

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)

Yes, the project methods for plugging the abandoned wells and reclaiming the sites are based on well documented and successful methods. The methods for restoring the wind tidal flats are more uncertain and this has been communicated and addressed in the proposal.

Please summarize any additional information needed below: