Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Mobile Bay and Beyond - Watershed Implementation to enhance marsh, marine, and estuarine ecosystems

LOCATION

Southern Baldwin County and southern Mobile County

SPONSOR(S)

USDA

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

Project, Planning, technical assistance, implementation

REVIEWED BY:

DATE:

1/2/2015

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

Yes - provided in USDA publically available technical documents. Links provided in reference list.

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

Most information supporting is directly from projects pertaining to the geographic area. Many of the practices described are adaptable to the geographic area if they are not utilized currently.

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

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

Comments

The literature sources seem to be cited accurately. Not all citations are not provided within document but are listed at end. Most citations are USDA associated technical guides/handbooks/ best management practices.

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

Examples of data collected in other similar project types was provided to show scientific basis. The proposed actions are proven best management practices that the USDA has conducted and written manuals on.

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

Uncertainties and risks are identified in relation to implementation with private landholder participation and storm-induced risks to projects.

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)?

The USDA has a 50 year successful track record with these conservation practices and the alternatives. This is well outlined and citations of their manuals/guidebooks provided (technical standards and criteria based on research).

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

No - but am somewhat familiar with practices proposed in this project/program.

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 - there is some discussion of mitigating risk through established relationships with Soil & Water Conservation Districts. If storms affect project, remedial work is mentioned. There wasn't a lot of detail.

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 - documentation in Appendix B provided federal standards used to reduce negative consequences with implementation.

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

Yes - clear goal to install conservation practices on private land in priority watersheds to reduce sediment, pesticides, nutrients and fecal coliform into the Gulf

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

Yes, somewhat - although not directly listed, the types of actions are outlined and presented well.

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

Yes - the described GIS system and modeling of anticipated water quality improvements will be a great tool for measuring success. Need to be sure monitoring systems are in place pre-project implementation to show these successes. Some seem to be, but need some reassurance that other monitoring systems are budgeted for to measure success of water quality projects.

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 somewhat - there isn't a lot of attention to detail on the monitoring program. See above comment. There seem to be some monitoring systems in place (though not cited). If not, I would like there to be some reassurance that other monitoring systems are budgeted for to measure success of such water quality projects. One year of site monitoring is not enough especially with project life spans of 5-25 years.

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

Yes - current successful projects/programs examples are cited.

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 - past successes are well described and cited.

Please summarize any additional information needed below:

*Well-established work on private land for water quality purposes is one of the most important project types that need to be done with these oil spill funds. Leveraging these well-established, successful USDA programs is a good vehicle for doing this kind of work.
*Timeline - mostly shovel-ready and can be quickly implemented due to good previous science-based programs already showing successes in the specific region.
*There is good synergy with projects in the region already funded.