Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Coastal Ecosystem Enhancement and Restoration in Barataria-Terrebonne Basin

LOCATION

Barataria Terrebonne National Estuary

SPONSOR(S)

Homer Wilkes (USDA)

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

Project, Technical Assistance, Implementation

REVIEWED BY:

DATE:

January 08, 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 Agricultural Runoff Reduction approach is only minimally documented with citations from the literature and none of these references offer insight into the success of this approach in the past. References citing the success of volunteer programs or suggesting tactics to increase the success of volunteer programs would instill more confidence in this critical aspect of the proposed work. The documentation of Standard Operating Procedures and Quality Assurance (Section IX) are heavily cited but these methodologies are not well-integrated into the presentation of the proposed work.

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

Many of the references listed in Section VIII are incomplete and do not follow journalistic standards for inclusion.

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

The discussion of Risks and Uncertainties (pg. 13) is cursory at best. There are very little specific strategies proposed for handling risks and not included is a thorough disclosure of what the actual risks and uncertainties are, including the reliance on volunteers.

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 long terms risks and uncertainties are not addressed at all.

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 Agricultural Runoff Reduction section is not well referenced, the two remaining thrusts, Rerouting Stormwater and Coastal Habitat Restoration are reasonably supported by scientific literature. All approaches seem to be integrated with USDA, the National Estuary Program, and existing management plans (LA 2012 Nonpoint Source Management Plan).

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:

Not enough detail was provided in the proposal that would indicate considerations for maximizing quality, objectivity and integrity of information.

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 is clearly an area of weakness. The risks and uncertainties associated with the three thrusts of the proposal are not articulated thoroughly. Only a cursory mention of a couple of risks are included.

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)?

No alternative methods are discussed and no clear justifications are stated as to the selection of the proposed methods. The clearest justification seems to be implied in that these approaches have been used before.

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)

no. A couple of risks are identified but no mitigation plan is proposed. Furthermore, there are potentially a number of other risks that could be envisioned but are not stated.

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

no. For example, what happens if not enough volunteers are recruited?

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

The goals are listed in the executive summary but remain fairly general.

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

The objectives are defined best in the executive summary but there are no quantitative measures attached to the stated objectives, i.e. how much will the nutrient loading be reduced? what nutrients? what are the invasive species to be removed? How much removal is considered success in the short term and long term?

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

Definitely not.

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)

It appears that there are plans to monitor progress with in-situ observations but the details of these plans are not well fleshed out. No quantitative measures are established in advance to determine if the success of project components. There is no adaptive management strategy proposed for any phase of the project.

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

Within the contents of the written proposal, there is little statistical information presented that would guide the current (proposed) approach.

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)

No information is provided on the past successes or failures of similar efforts as that proposed.

Please summarize any additional information needed below: