Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Texas Coast Migratory and Shore Bird Habitat Restoration

LOCATION

Texas

SPONSOR(S)

USDA/Tom Vilsack

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

Project, Planning, Technical Assistance, and Implementation

REVIEWED BY:

DATE:

1/11/2015

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

There is a list of references, but they are not cited in the text of the proposal.

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

Information not supplied by authors, but these methods are reasonably supported by evaluations from other geographies. See: http://www.fwrc.msstate.edu/pubs/mbhi_bulletin.pdf

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

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

Comments

Inconsistent format for references, incomplete individual citations, misspellings (e.g., "contrataints"), and lack of references embedded in text

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

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

Comments

Most of the references are fairly general and aren't specific to the proposed methods.

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

Authors don't acknowledge any risks, instead they point to their long history of providing broad technical assistance as assurance that the project will be a success.

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

No reference to long-term sustainbility of proposed projects. Claim that "the use of easements in habitat restoration efforts will greatly provide permanent or long term habitat restoration" is unfounded.

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 clear science-based process used to identify projects. This information may - and probably does - exist (particularly for many of the individual programs) but it is not included in the proposal.

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:

Nearly impossible to judge from the information provided in the proposal

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:

Risk and uncertainties - both current and future - are not specifically addressed in the 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)?

Specifics methods not explicitly covered in great detail. Instead, the proposal is largely a collection of programs and projects. High amounts of leverage and partner involvement seem key factors in program/project inclusion.

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

Yes, this group has extensive experience delivering conservation programs.

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 risk measures incorporated or addressed in mitigation plan.

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

Only the outcomes of implementation that are in line with broad objectives are identified.

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

Goals are identified on page 5 of the proposal, but they are fairly broad and non-specific.

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

Objectives are identified on page 5 of the proposal, but they are fairly broad and non-specific.

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

Measures of success identified in the "Measures of Success" section are non-quantitative. There is one reference to "close to 5,000 acres in easements" on page 8. The expected outcomes on page 5-6 offer some other quantitative measures of success but most lack a reference to a specific baseline, are unsubstantiated, and/or unrealistic (e.g., reducing sediment loads to improve the water quality flowing into the Gulf by one third).

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)

Ties into ongoing monitoring programs for cranes and GRIP, but most programs lack any monitoring. The use of GRIP protocols for monitoring shorebird populations is inappropriate. Instead the International Shorebird Survey protocol should be used: https://www.manomet.org/program/shorebird-recovery-project/international-shorebird-survey-iss

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

The reference to Haukos et al. 2010 and Fitzsimmons et al. 2012 are good. Would like to have seen Davis et al. 2014 (Southeastern Naturalist), some of the monitoring summaries/evaluation reports from the Gulf Coast Joint Venture (http://www.gcjv.org/documents.php), or MBHI evaluations already completed (http://www.fwrc.msstate.edu/pubs/mbhi_bulletin.pdf and theses referenced therein)

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 reference to Haukos et al. 2010 and Fitzsimmons et al. 2012 are good. Would like to have seen Davis et al. 2014 (Southeastern Naturalist), some of the monitoring summaries/evaluation reports from the Gulf Coast Joint Venture (http://www.gcjv.org/documents.php), or MBHI evaluations already completed (http://www.fwrc.msstate.edu/pubs/mbhi_bulletin.pdf and theses referenced therein)

Please summarize any additional information needed below:

This proposal describes solid work that will have obvious benefits. However, the authors have failed to elaborate on the scientific information that most certainly underpins most of this work. Monitoring plans - with a few exceptions (e.g., GRIP for the GRIP work)- are largely inadequate to measure success - and the quantitative outcomes that define success seem arbitrary and unrealistic. No formal data management plan exists either. If selected, this group should define more specific measures of success that are grounded in the strong conservation planning that has occurred in this region. Furthermore, the details of the approaches within the myriad of programs should be elaborated so it would be more clear exactly what this team