Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Bayou Greenways 2020 - Clear Creek Riparian Corridor Acquisition

LOCATION

City of Houston and Harris County, Texas

SPONSOR(S)

Texas Commission on Environmental Quality

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

Land acquisition

REVIEWED BY:

DATE:

1/22/2015

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

Should these RESTORE funds be used to purchase land for riparian corridor parks in Houston? I found this proposal difficult to review perhaps because it may be unclear to me what priorities the funding efforts are targeting. There is no "science" or new science proposed in the present proposal because funds are requested for a land purchase.

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

This Clear Creek project is part of a larger Bayou Greenways initiative that is located within 25 miles of the coastal area and has the promise to benefit Galveston Bay.

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

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

Comments

Limited citations are included, likely because securing green spaces (e.g., .parks, preserves) along riparian corridors that are presently fragmented in a heavily urbanized area clearly promises to provide important ecological and potentially environmental health benefits.

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

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

Comments

Riparian buffers certainly provide important benefits for water and habitat quality.

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 proposal acknowledges that land prices could increase, but the Houston Parks Board plans to move quickly (~12 months) to secure land purchase and "estimates that approximately an additional $21 million in private funding would be leveraged." The project appears to have broad support from regional stakeholders. For example, letters of support are provided from Harris County Flood Control, the City of Houston and the Galveston Bay Council, which includes representatives from key state and federal agencies such as the Texas Commission on Environmental Quality, the Galveston Bay Estuary Program and the U.S. Environmental Protection Agency.

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 Houston Parks Board should ensure this land purchase is not obsolete, in the absence of significant sea level rise. Potential influences of sea level rise was not considered in the proposal.

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)?

NA. This is a land acquisition project to connect fragments of a riparian corridor.

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)

Adaptive management text is provided.

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. The primary measure of success is defined as whether the planned land purchases are successful in a reasonable time period. If there are delays in acquisitions due to escalation of prices, then success would be lessened.

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, but this is difficult to fully evaluate because it is a land purchase. If the project is implemented in a timely fashion then statistical analyses are not necessary.

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

Please summarize any additional information needed below:

As noted above, I found this proposal difficult to review perhaps due to a lack of understanding related to RESTORE program priorities. Are new scientific advances desired more so than land acquisitions for parks and preserves? Perhaps future proposal review instructions could provide this information, or perhaps partition research funding and proposals among scientific priorities and land acquisition categories.