Science Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Coastal Alabama Comprehensive Watershed Restoration Planning Project

LOCATION

Coastal Alabama's Baldwin and Mobile Counties

SPONSOR(S)

State of Alabama

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

Proposal seeks funding to complete watershed planning components of 19 priority watersheds in Coastal Alabama.

REVIEWED BY:

DATE:

Dec. 2014 and Jan 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

Proposed watershed planning objectives, methods and process follows NEP, EPA and other ongoing NFWF coastal Alabama watershed planning program guidelines and processes.

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

Yes, to the best of my knowledge after reading same.

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

Proposal does not mention the long term watershed uncertainties for maintainance of historic flows and water quality issues related to the on going "water war" with the state of Georgia for the major upper basin watersheds cited in the proposal for Mobile Bay. Many of the other more limited coastal and Mobile bay hydrologic basins within this proposal are not linked to other state's shortstopping of historic flows, etc. I am unaware of any public or Council member comments or questions about the "tri-state" water fight with Between Alabama and Fla. vs state of Georgia. That fight has seriously harmed Fla's Apalachicola River and Bay ecosystems.

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 best available science for hydrological studies and NEP/EPA processes followed it appears that such evaluation has been considered and will be a part of these planning efforts over time. Future land use issues are mentioned as necessary monitoring component of this process, etc.

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:

excluding the "tri-state" watershed issues raised above.

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 application mentions that this watershed planning proposal follows similar completed and ongoing watershed planning in this same coastal watershed for NEP and NFWF funded projects; and, is fiscally and scientifically complementary to other substatial funding for similar goals and objects in immediate coastal basins

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

not exactly at this scale but for smaller basin focus.

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)

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?

As best as I can determine for these watersheds. It is a foundational watershed planning approach to future decision making for land use planning, prioritization of water quality work, identification of conservation and restoration priorities and other necessary watershed plan implementation steps.

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

same as E. above

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

not mentioned that I noticed.

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)

Monitoring is grossly covered by mention of this watershed proposal following NEP, EPA and other approved watershed planning processes. and, by the involvement of State and Federal program staff.

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)

No.

Please summarize any additional information needed below:

History of water resource issues within each of these identified basins per water quality or quantity values would be helpful in followup reviews for funding agencies to see if specific basin water resource elements of concern were tracted during the term of this plan and beyond. Plans for historic flows / stream capture by ongoing or future agricultural practices (center pivot wells on intense croplands, agricultural impoundments planned or proposed for permits, etc) within each basin should be listed and monitored.