SCIENCE EVALUATION

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Coastal Alabama Comprehensive Watershed Restoration Planning Project

LOCATION

Coastal and Intertidal12-digit HUC Watersheds in Mobile and Baldwin Counties, Alabama

SPONSOR(S)

State of Alabama

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

Planning, Technical Assistance, Project

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

This is difficult question for a planning proposal. They describe the methods used for the CCMP development but unsure how that guides the watershed management plans? These plans are just an action in the CCMP. They utilized some vague data/information sets for the CCMP -- which is an overarching and broad document anyway. The actual scientific data that may be used for planning purposes could have been better outlined and more thorough examples given from past planning efforts in the area. By looking at past plans, I was able to see what might go into these plans but it would have been good to have this outlined specifically and less focus on how they created the CCMP.

No peer reviewed information is cited, only publicly available plans and websites.

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

N/A - all supporting information directly pertains to Gulf coast region

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

- ◉ YES
- ○ NO
- ○ NEED MORE INFORMATION

Comments

No published literature is cited. Only plans and websites. The 6 provided are cited completely and accurately.

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

I imagine there are large data gaps that need to be addressed for many of these watersheds, and by outlining this, we may have better understood some of the risks in the planning efforts. In many of these watersheds, the action/projects may just be to collect more data for better decision making. Discussion of this scientific short-fall that probably exists for the planning effort would have made the proposal stronger.

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 proposal assumed there was no risk in planning. I think there are some inherent risks in planning. We all of know of plans that end up just collecting dust and/or not being used by the municipalities, local governments, etc.. These risks needed to be discussed and addressed on what corrective actions they could take to help make sure plans were adopted. Furthermore, what happens in 5 years when these plans mature; is there a plan to update, keep current and relevant?

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:

The applicant does make an effort to list the factors (some science-based) that would be included the watershed plans but do not go any farther in elucidating any scientific peer-reviewed specifics on what data would be utilized (e.g. Land-Use Development Indices; habitat mapping; oyster larval distribution; TMDLs, T&E species distributions, etc).

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:

They have espoused this but did not thoroughly show this determination. We can only assume and hope that good science is used in producing and implementing these watershed plans.

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:

More discussion on the scientific gaps that are certain to exist in many of these watersheds would have better explained risks and uncertainties with trying to plan in such watersheds when little data is available for good decision-making.

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)?

Not necessarily. I think they have seen a few successes in past planning efforts and have decided this will work for all watersheds in Mobile Bay area. This is probably an oversight considering scientific data gaps that exist and differing political will in each watershed to see these plans implemented.

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

Yes.

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. -- what if there isn't good scientific information to write quality implementation plans? What if the plans are not adopted by local government or are not feasible in political climate? Discussing some of these risks and mitigation measures would have made the proposal stronger.

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

They only consider positive consequences -- "future risk reduction".

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

Yes, they are typical goals of watershed management planning.

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

Yes, typical objecitves as to be expected with this type of project. Vague and similar jargon to everything else.
How the water shed planning process will be undertaken was the important information provided. I think it's very important that they have stated that the plans will actually "identify" specific restoration and conservation projects, not just broad planning document. They should call them watershed IMPLEMENTATION plans to better reflect that "actions" will be outlined that should be taken to result in X measurable success criteria.

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

Yes, there's a measure of success to create the plans. There is also general discussion on what they hope the plans acheive. Examples may have made it more clear and strongly stated on what outcomes the actions/projects of those plans may be. (e.g. measurable change in water quality for X major watersheds; X amount of reduced sediment loading in X major watersheds, etc.)

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)

N/A for planning project. However, there is discussion of having monitoring plans within each watershed plan. There is probably some monitoring of how the watershed plans are tracking that could have been added. With so many plans being proposed, it would be good to know how they plan to manage this load to be sure the best is coming out of each planning effort. It should be confirmed that the implementing sponsor has the capacity to manage this many plans for implementation over the life 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)

It's not clear. I can only assume that they will use the most relevant and recent information available to create these plans.

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)

Only successes from past watershed management plans have been discussed. What about the old watershed plans that are listed? Was there something wrong with these and their implementation?
There are inherent risks with this kind of planning that needed to be discussed especially from a scientific point of view when you are depending on local governments to implement these plans. For example, politics can often trump good science --- this risk was not discussed. See Science Gaps discussion above as well.

Please summarize any additional information needed below:

*How long do they feel these plans will be viable scientifically and will have to be updated? Are they 'living' documents?
*Is creating this many plans at one time feasible for the MBNEP to manage (need staff with experience) and what is the role of ADCNR in this??
*Would it be better scientifically to focus on the major pollution issues in priority watersheds and focus funding those issues? Will this many plans result in loss of focus on major issues that can actually result in measurable water quality outcomes?
*What overlap will there be in the watersheds to control redundancy in plans?