



PROPOSAL TITLE

Wetland Creation in the Pass A Loutre Wildlife Management Area
Using Dredge Material from South Pass of the Mississippi River

LOCATION

South Pass, Mississippi River Delta

SPONSOR(S)

USACOE

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

IMPLEMENTATION

REVIEWED BY:

DATE:

5 January 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 justification for the cost is not available. The USACOE definitely knows how to dredge (or rather, contract for dredging).

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

Citing the 48 sq miles of land gain from beneficial uses from other Gulf states is a bit mis-representative given that the tip of the delta has very high subsidence rates.

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

☐ YES

☐ NO

☒ NEED MORE INFORMATION

Comments

There is nothing about how long the 640 acres will last. There are repeated statements saying that the USCOE knows how to do this. I agree that the COE knows how to use a cutterhead and how to contract to have it pushed from place to place. But repetitious claims of success are opinions, not data. Pg 16, section d says “these values illustrate the results and impacts of sediment use are easily documented.” If this is true, then the applicant can document the comparable results with relevant data and refer to a published report – preferably a journal article in a reputable journal.

Page 8 says that there were 990 acres of land built using South Pass dredged materials. A photograph is provided in the Appendix. What is the trajectory of change? Where is the reference?

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

☐ YES

☒ NO

☒ NEED MORE INFORMATION

Comments

There is no information given on the history of the projects for the MR delta dredging project success – not area, when dredged, how long it lasted, how many times or how much dredge volume was needed for various places on the delta, etc. This is an area of extremely high sediment consolidation rates (Yu, Shi-Yong; Toernqvist, Torbjorn E.; Hu, Ping 2012. Quantifying Holocene lithospheric subsidence rates underneath the Mississippi Delta. Earth and Planetary Science Letters 331: 21-30). Climate change brings sea level rise, and sea level rise is accelerating. The USCOE is supposed to be factoring in SLR rates into their project evaluations, but SLR is not mentioned.

See: USACE Guidance

<https://corpsclimate.us/guidance.cfm>

and

[Water Resource Policies and Authorities Incorporating Sea-Level Change Considerations in Civil Works Programs](#)

Engineering Circular 1165-2-211

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

Definitely not. See the comment above

Page 11, iii, is supposed to be about project success. “It has a high probability of success based on the MVN’s record of creating/restoring coastal ridges and wetland habitat...”
Where are the data for south Louisiana?

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

Definitely not, see above;
Page 8 says that there were 990 acres of land built using South Pass dredged materials. A photograph is provided in the Appendix. What is the trajectory of change? Citing the 48 sq miles of land gain from beneficial uses from other Gulf states is a bit mis-representative given that the tip of the delta has very high subsidence rates.

What is not provided are the statistics on how long the dredge piles last under historical conditions, or, under the future conditions.

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 – they are confident that they can dredge – ok, that’s true. But there is no information on the success based on prior knowledge of that part of the delta (where they dredged more than 50% of the lower MR sediments), or under future conditions.

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:

Same answer as above

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: —

Same answer as above

Page 4, for example, mentions the West Bay diversion; this is a COE project with a projected 20 year gain of 9,831 acres of land (not mudflat, but vegetated land). Dredging started in 2003.

Halfway through the project (10 years later) the gain is, generously measured, about 200 acres.

This is 3% of the projected gain. So here is an example of the risk of not knowing, and not being able to accurately predict a result.

And,

The project is estimated to cost \$56,750 per acre; how does that compare to the State of Louisiana Restoration Plan costs for all projects? For different kinds of projects? River diversions are supposed to be building land at a cost much less than what is estimated here (State of Louisiana Master Plan), so I do not see how this is a 'low-hanging fruit' page 17, Section F.

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)?

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

What if the project doesn't produce? What then?

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

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

Yes, to a point

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

Yes, to a point

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

Yes, to a point; they have an estimate of area, but not how long it will last

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)

Cannot determine; doesn't seem to be there

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

None provided

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)

Absolutely not.

Please summarize any additional information needed below:

Salinity intrusion: the project claims to reduce salinity intrusion (p. 3, exec. Summary, and repeatedly throughout). This is not possible with this project. The vegetation is already freshwater vegetation (willows, for example) and there is no new source of freshwater being introduced.

There is a letter from the head of the Louisiana Department of Wildlife and Fisheries endorsing the project, so I don't see a problem with land access.

This seems like supplemental funding for the USCOE, not a new or enhancement of resources. The USCOE must dredge south pass and they must put the spoil somewhere. Where is the justification to demonstrate that the \$30 million is being used for something new that would not be done without access to Restore funding. The dredging has to happen regardless if Restore funding existed, or not. If that is not the case, then Restore is paying to dredge a channel with a by-product of disposing of the sediment. That is not the point of Restore funds, any more than they should be spend on a sports center. I mean, funding the river dredging part of this project would be like funding the COE to dredge the SW channel and then calling it a new form of 'restoration'.