



Gulf Coast Ecosystem Restoration Council

Best Available Science, Data Management, & Monitoring for SEP Projects

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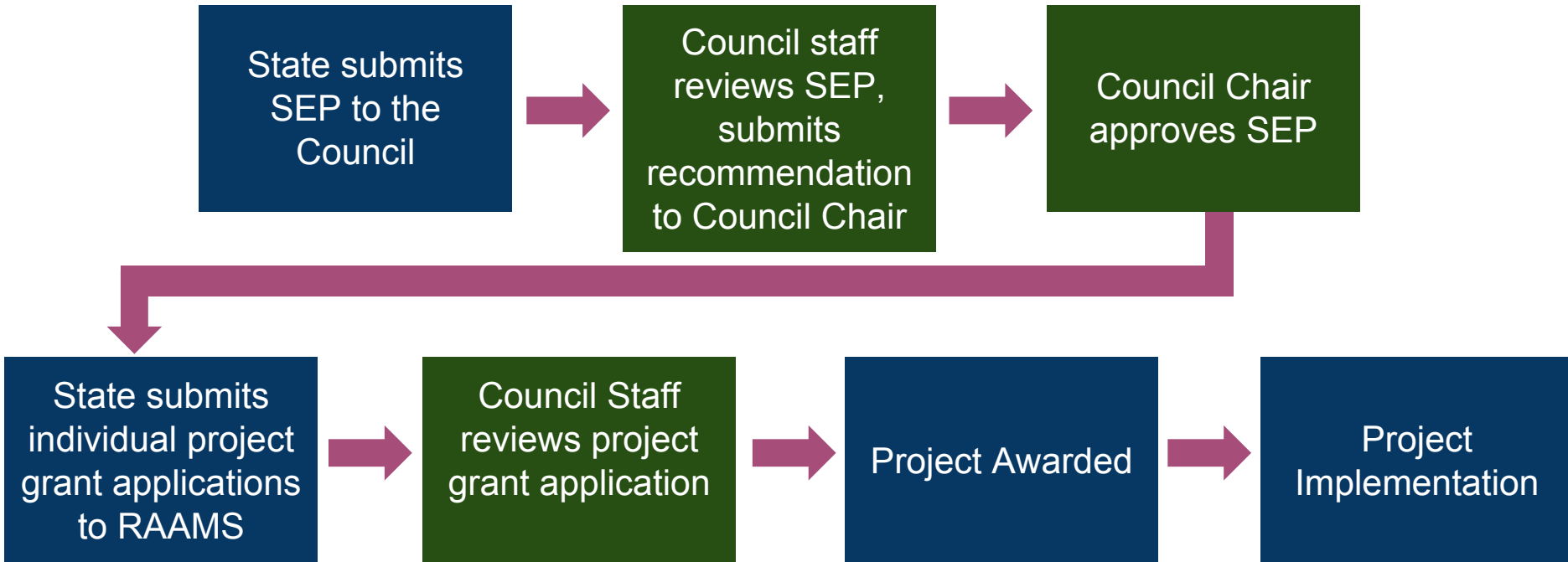


Talk Outline

- General process for funding projects from SEP->Grant
- Best Available Science (BAS) requirements at Granting stage
- Data Management and Monitoring Requirements
- External BAS review process



General Process for Funding SEP Projects



ALL Projects & Programs are to be based on the
Best Available Science (BAS)



Best Available Science (BAS)

The RESTORE Act defines “best available science” as science that:

- Maximizes the quality, objectivity, and integrity of information, including statistical information;
- Uses peer-reviewed and publicly available data; and
- Clearly documents and communicates risks and uncertainties in the scientific basis for such projects.



RESTORE Act

“...the Council shall expend funds made available from the Trust Fund to undertake projects and programs, using the *best available science*, that would restore and protect the *natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, and economy* of the Gulf Coast.”



First Step: BAS at SEP Stage

State submits
SEP to the
Council

Council staff
reviews SEP,
submits
recommendation
to Council Chair

Council Chair
approves SEP

State submits
individual project
grant applications
to RAAMS

Council Staff
reviews project
grant application

Project Awarded

Project
Implementation

**ALL Projects & Programs are to be based on the
Best Available Science (BAS)**



Second Step: Grant Applications

State submits individual project grant applications to RAAMS



Council Staff reviews project grant application



Project Awarded



Project Implementation

Project/Programs Grant Applications are required to include:

- Demonstration of “**use of best available science**” in Project Narrative and Metric selection
- ***Observational Data Plan (ODP)*** - information relevant to project ***data collection and compilation (e.g. monitoring plan)***
- ***Preliminary Observational Data Management Plan (DMP)*** - information relevant to project ***data management and delivery***



Addressing BAS in Grant Application Narrative

- **Demonstrate “use of best available science”:**
 - Project/Program Goals and Objectives are clearly articulated and justified using peer reviewed literature and/or publicly available information.
 - How best available science (e.g. scientific review processes, technical expertise, and/or data) will be/were utilized to develop and inform proposed project activities, design, and inform adaptive management.
 - Why this specific method is being selected instead of other methods (e.g., scientifically sound; cost-effectiveness).
- **Project Narrative Templates will be provided with guidance on BAS.**
- **A series of BAS review questions are in the narrative template.**



Addressing BAS in Metric Selection

Metrics selected should be:

- Objective
- Quantifiable
- Include outcome targets (e.g. Success criteria)
- Match project/program ecological benefits listed in the SEP,
- *Be consistent across **program** activities* (e.g., WQ benefits)
- Metrics will be described in the project narrative, included in the ODPs, and entered into RAAMS (Grant Management System).

Please work with Jessica Henkel (jessica.henkel@restorethegulf.gov) when developing the Metrics for your project/program.

Potential Metrics available for selection can be found at link below:

[Metrics suggestions and new metrics](#)



Purpose of ODPs and DMPs (Data Management and Monitoring Plans)

- Ensure consistency with RESTORE Act and BAS.
- Assist in Council reporting (i.e. Annual Reports).
- Ensure projects are compliant with financial award (selected metrics).
- Determine whether projects are meeting intended objectives, benefits, and outcomes, and
- Allow for future adaptive management actions, if warranted.



Council's Federal Requirements

Federal Reporting & Data Management Requirements:

- GPRA Modernization Act (P.L. 111-352)
- OMB guidance (2 C.F.R. § 200.328)
- RESTORE Act (Section 1603(t)(2)(C)(vii)(VII)(dd))
- Digital Accountability and Transparency Act (S.994; i.e. Data Act of 2014)



Guidance(s) on ODP & DMP

- Located on [Grants Resources Page](http://www.RestoreTheGulf.gov) at www.RestoreTheGulf.gov.
- Recommend **close coordination one another and Consortium Support staff** when developing plan(s).
- The *Appendices of the Guidance(s)* will be helpful!

***We're not telling you what to collect,
we're asking you to tell us what you're collecting,
how you're managing/sharing it, & how it supports your
metrics.***



Guidance: ODPs Include

ODPs must be prepared, submitted, and approved prior to award of funds.

- Project goals and objectives
- Goals and objectives for **data** collection and monitoring
- Listing of metrics (*what metrics are selected in RAAMS to demonstrate project benefits*)
- Parameters to be monitored in support of those metrics
- Identification of success criteria
- Additional information is also requested (e.g. budgets, baseline data, methods, etc.)



Guidance: ODPs Include

Sample implementation project metrics and supporting data:

- **Metric: HM001 - BMP Implementation for Nutrient Reduction - Lbs. of Nitrogen Avoided Annually**
- **Metric HM001 Success Criteria: 1000 lbs. Nitrogen avoided annually**
 - **Parameter I:** Reduction in event mean concentration (EMC) of total nitrogen in storm-water runoff
 - **Success Criteria Parameter I:** Reduction in EMC of total Nitrogen in storm-water runoff equivalent to pollutant loading of ~1,000 lbs. annually



Guidance: ODPs Include

Sample planning metrics and supporting data:

- **Metric: PRM001 - # studies/models used to inform management**
- **Metric PRM001 Success Criteria: 2 reports compiled in support of technical design, environmental compliance, and monitoring**
 - **Parameter I: Data Collection Report**

Success Criteria: Completion of a data collection report to support preliminary and final project design. The final data collection report may include, but is not limited to, the following sub-reports: bathymetric, topographic, and magnetometer survey reports, and geotechnical reports.
 - **Parameter II: Preliminary Design Report**

Success Criteria: Completion of a preliminary design report and draft 30% set of project plans to support permit application and present recommended project features, surveys, location of borings, cost estimates, and draft adaptive management and monitoring plan.



Interim Guidance: DMPs Include

DMPs must be prepared, submitted, and approved prior to award of funds.

- Project name, sponsoring agency, phase
- Estimated budget for data management (*for life of project*)
- Contact information for one or more Data Stewards
- Estimated data collection period (*start and end dates*)
- A short description of the project location & data collection
- A list of each of the data types (*examples in Appendix D of Guidance*)
- GIS information (*if known and applicable*)
- Your organization's data management and metadata capacities and how your organization intends to store, archive, and disseminate project data

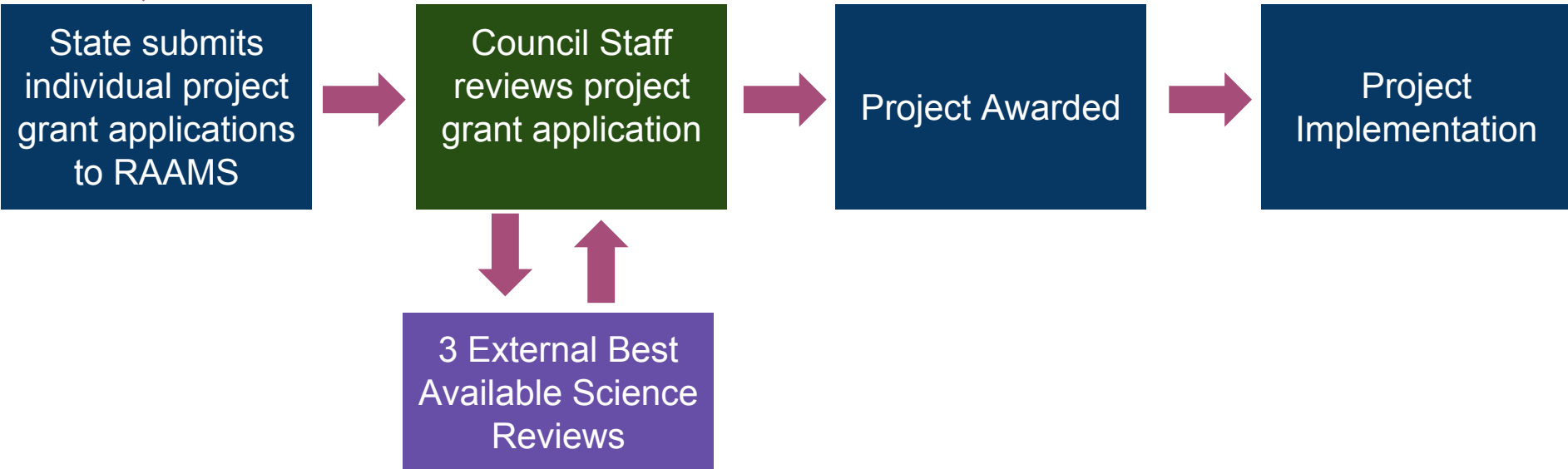


Interim Guidance: DMP

- Digital data will be required to be provided to the Council for review and approval on a yearly basis.
- Metadata records required for datasets created by Council funded activities (*Council Metadata Tool being finalized - training to be provided in the next year*)
- We acknowledge that data management capacities vary across organizations.
- Recommend using existing templates.



General Process for Funding SEP Projects





External Science Review Process

- Each project/program application requiring BAS review will be released to 3 anonymous expert reviewers for BAS review
- Review questions include:
 - BAS criteria evaluation as defined by the RESTORE ACT
 - Science Context evaluation
- Reviewers look at project narrative, as well as ODPs and DMPs



External Science Review Process

- Projects with similar activities and metrics could potentially be “batched” and reviewed together.
- If “phasing” project components (e.g. planning, E&D, implementation), each phase, depending on the project, may be subject to BAS reviews.



Resources

- There are a number of helpful resources specific to the RESTORE Grants located here
<https://www.restorethegulf.gov/gcerc-grants-office/gcerc-grants-resources>
- Guidance relating Best Available Science to the requirements of the grant applications can be found here
<https://www.restorethegulf.gov/sites/default/files/GO-RES%20RPAG%201-01%2012-21-2015.pdf>



QUESTIONS?

Thank you!