Middle Rio Grande Endangered Species Collaborative Program's

Science & Adaptive Management Database



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Program Support Team presentation for 2020 Science Symposium

Optimizing the Role of MRGESCP in Adaptive Management



- Developing Tools
- Communicating Results
- Building Resiliency

Science & Adaptive Management Plan

Together, the Science & AM Plan and the Long-Term Plan provide the framework for implementation of the Collaborative Program's science and Adaptive Management process.

Science & AM Plan -

Defines the MRGESCP's role and associated processes in providing science-based recommendations for management of the MRG.

Long-term Plan -

An evolving communication and planning tool that is generated by organizing scientific activities into periodic work plans (i.e., annual, biennial, triennial).

Database -

Storage of accurate and up-to-date information on scientific projects and monitoring information to facilitate prioritization.

Informs the long-term plan

Building a Database Tool: Linking evidence, expectation and action

Uncertainties

- Hubert et al. 2016
- Noon et al. 2017
- CEM-derived
- Novel questions

Species outcomes

- RGSM larval survival
- SWFL nest success

- Flow
- Depth

Habitat

variables

- Temperature
- Inundation period

Management activities

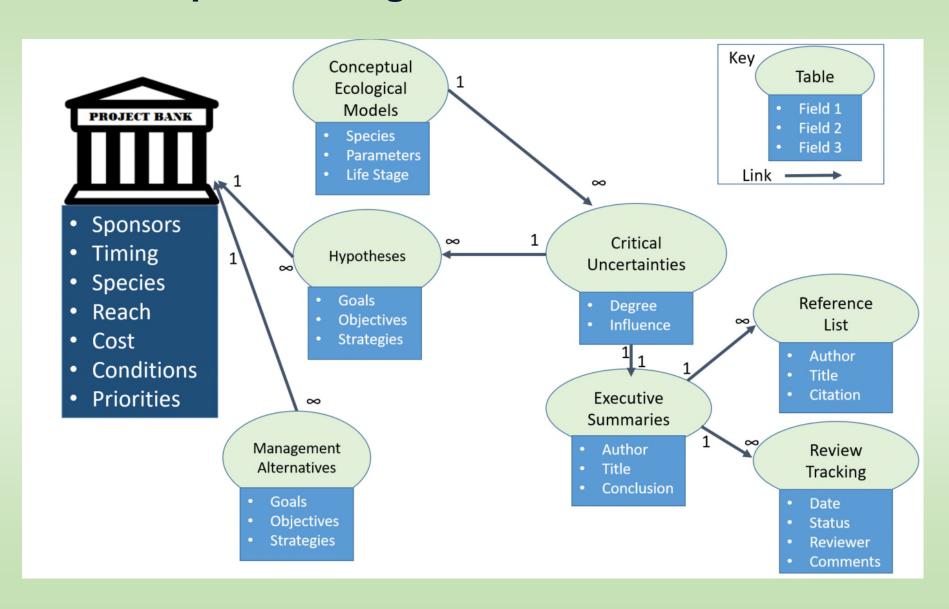
- Habitat restoration
- Modified wateroperations

River conditions

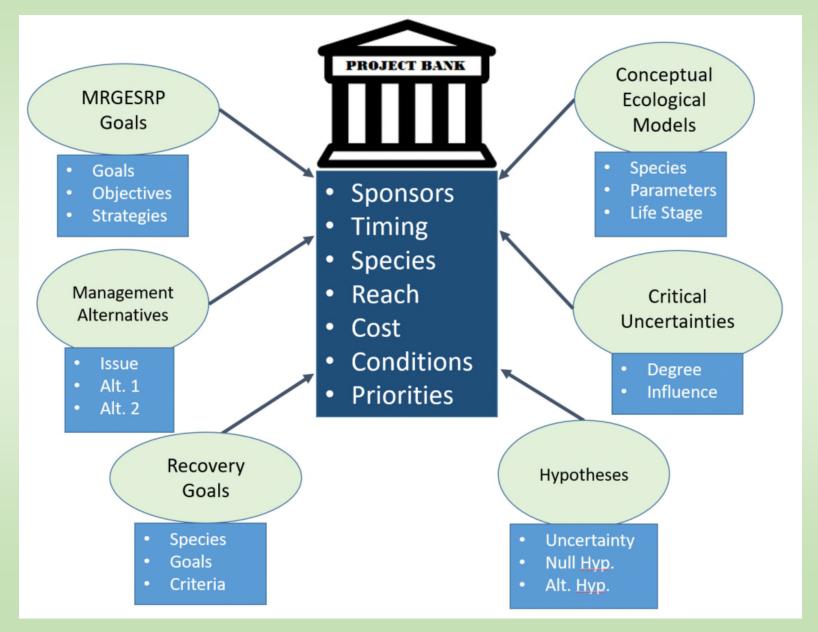
- High spring/ Low monsoon
- Low spring / Average monsoon
- Low spring / High monsoon

Database as a tool of Adaptive Management

Database to store and disseminate accurate, up-to-date information on AM uncertainties, projects, and monitoring information, and to facilitate transparent prioritization and support informed decision making.



Database as a tool of Adaptive Management



Building Efficiency: Project planning and funding



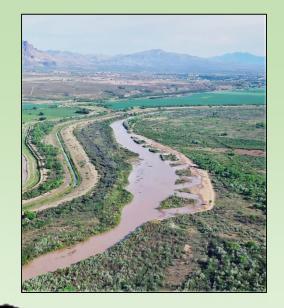
biennial

- Identify projects that meet objectives
- View project Information
- Prioritize projects for implementation
- Adjusts recommendations based on complete picture

triennial ----> Longterm

Long-Term Plan Linkages in Database

- > Sortable and searchable by project specifics:
 - Project type
 - Project focus
 - Hydrologic conditions
 - Reaches
 - Authority
- ➤ Also searchable by administrative fields:
 - Cost estimate
 - Duration





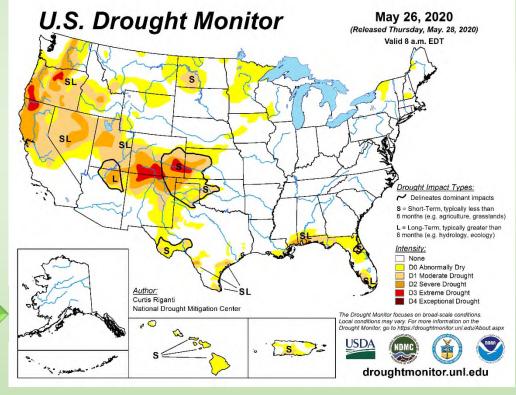
Building Resiliency: Forecasting and scenario planning



Short-

term

Longterm



Adaptive Management Database FAQ

- Who is developing the AM Database?
 - The WEST Program Support Team (PST) is building the AM Database and establishing the functional linkages that make it relational. Linkages can be reviewed and modified by Administrative and Technical Ad Hoc Groups.
- ❖ On what platform is the AM Database being developed?

 Initially, the AM Database is being formatted using MS Access (for convenience). Once formatting is complete, it can be transitioned to a SQL server (for stability).
- Who will manage and host the AM Database?
 - During development, the PST will manage and host the AM Database. Once established, the Collaborative Program can decide between the Program Portal or a cloud-based hosting service. Scoping for these and additional options can be provided by WEST.

Adaptive Management Database

- How can you use the Adaptive Management Database?
 - Planning
 - Resource Allocation
 - Coordination
 - Tracking
 - Reporting
- Do you have other information needs?
- Provide input to Program Support Team

