A STRUCTURED DECISION-MAKING PROCESS FOR RESTORING THE ATCHAFALAYA RIVER BASIN, LOUISIANA

Bridging the boundaries between scientists, managers, and stakeholders

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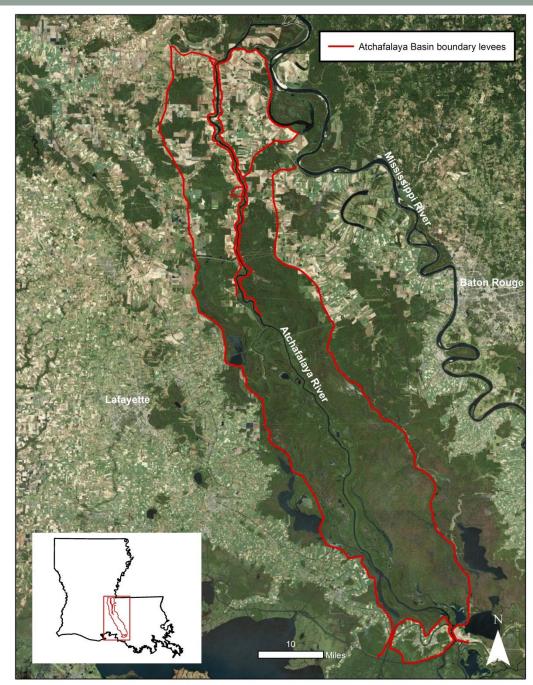


Purpose

- Develop a stakeholder-driven process for restoration and conservation efforts in the Atchafalaya River Basin (ARB).
 - Reduce conflict through substantive, local stakeholder involvement.
 - Establish a collective vision to better prepare and manage the coming long-term environmental issues.

The Atchafalaya River Basin

- Over 4,000 km²
- Largest distributary of the Mississippi River
- Biodiversity hot spot
- Largest contiguous swamp in North America
- Home to Cajun culture
- 50-50 public-private land



Evolving Management

- 1928 Flood Control Act
 - Established the Atchafalaya Floodway (USACE)
- 1962 Old River Control Structure (USACE)
 - 70/30 flow policy
- 1986 Water Resources Development Act (USACE)
 - Balanced approach to water resources problems
- 1998 Creation of the Atchafalaya Basin Program (LDNR)
 State Master Plan
- 2008 Louisiana Legislature Act 606
 - Shift to water resources management approach

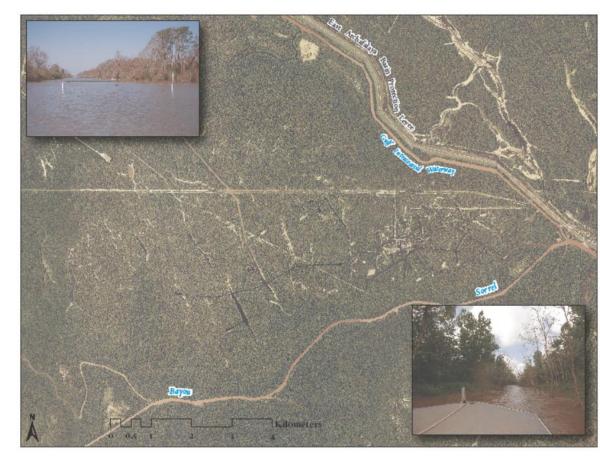
Resource Use

National

- Flood control
- Navigation
- Oil and gas

State, regional, and local

- Commercial fishery
- Sportsman's Paradise
- Ecotourism

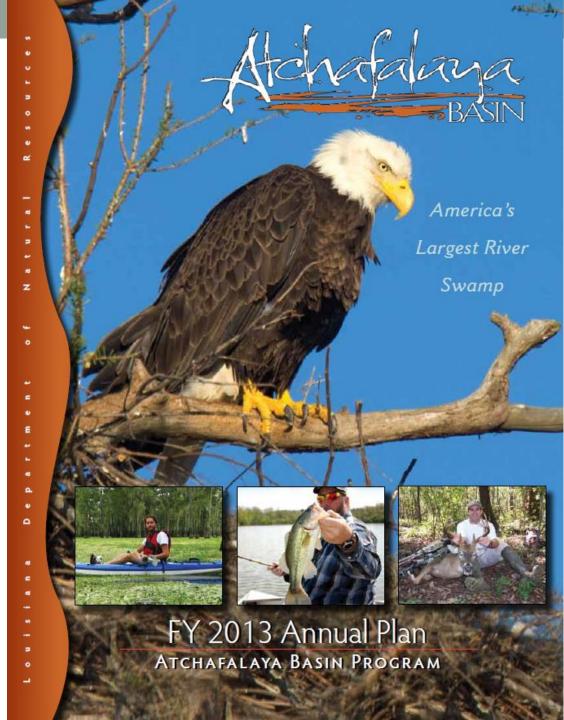


Resource-use complexes

- Food, raw materials, recreation
- Flood control, navigation, mineral extraction

Act 606

- Annual Plan process
 - ~adaptive management
- Research and Promotion Board (RPB)
 - Public hearings
 - Project approval
 - Draft Annual Plan
- Technical Advisory Group (TAG)
 - Commitment to science
 - Project development



Atchafalaya Basin Program

Technical Advisory Group

- US Fish and Wildlife Service
- US Geological Survey
- US Army Corps of Engineers
- Dept. Wildlife and Fisheries
- Dept. Natural Resources
- Dept. Environmental Quality
- Dept. Ag. and Forestry
- LSU, Sch. Renewable Nat. Resources.

Research and Promotion Board

- Dept. Natural Resources
- Dept. Environmental Quality
- Dept. Health and Hospitals
- Dept. Culture, Rec., Tourism
- Office of Governor
- Dept. Transportation and Development.
- Dept. Ag. and Forestry
- State Land Office
- Dept. Wildlife and Fisheries
- Atchafalaya Levee Board
- St. Martin Parish (non-voting)
- St. Mary Parish (non-voting)
- Iberville Parish (non-voting)
- Assumption Parish (non-voting)

Stakeholder conflict

- No ownership of results
 - Back-end inclusion of ideas
- Lack a fair and neutral forum for dialogue
- Confusion over variable boundary definitions





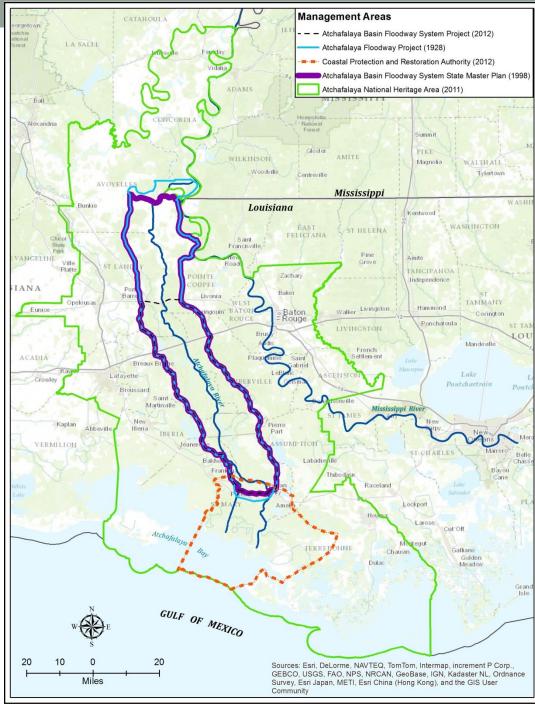
Boundary definitions

• Then:

- Baldcypress regeneration
- Local hypoxia
- Altered fisheries

• Now:

- Hurricane protection
- Coastal hypoxia
- Nutrient/carbon markets
- Coastal restoration
- Agriculture

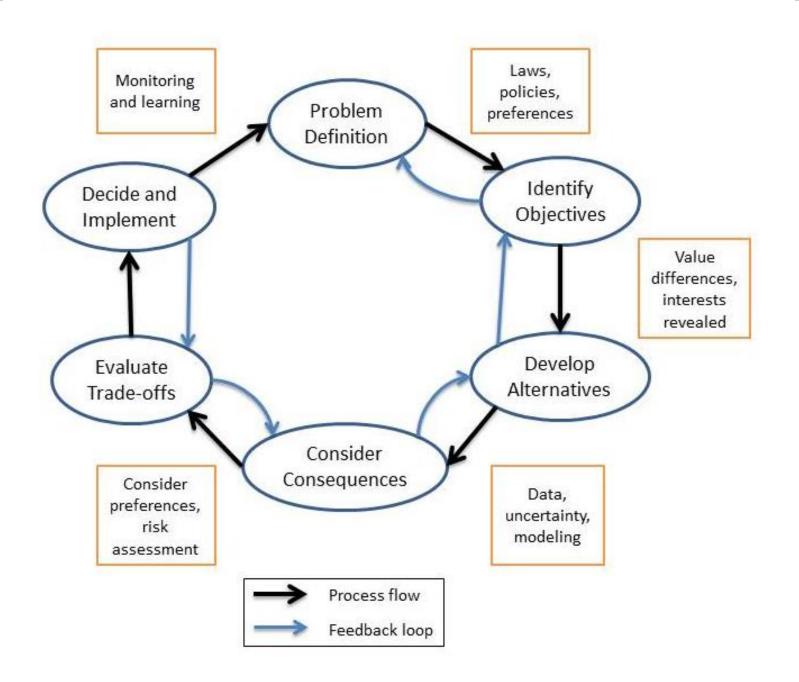


Lacking a long term vision

- "Louisiana Governor Jindal Asks Army Corps to Increase Water Flow into Atchafalaya" – 96.5 fm KPEL
- "Mermentau's Fresh Solution" The Advocate
- "Atchafalaya River will get more water from Mississippi River to help wildlife" - The Times Picayune
- "Flooding in Louisiana's Great Basin: A Good Thing?" National Public Radio

Why Structured Decision Making?

- Focus on fundamental objectives
- Translates values into measurable objectives
 - "What gets measured, gets managed."
- Bridges the boundary between scientists, stakeholders, and decision-makers
- Requires little institutional change in the ARB



Our approach

- Builds on existing scientific research and current management framework
 - 1. Use SDM to create a values-based, stakeholder-driven decisionmaking process
 - 2. Establish a modified governance structure that incorporates nongovernmental stakeholders
 - 3. Continue to support decisions with rigorous scientific assessment



Professional, neutral facilitator

- Necessary due to:
 - Basin's history and current conflicts
 - Resource value
 - Broad stakeholder use
- Set of skills not currently available
 - Committed to the process
 - Outside perspective
 - Recognize conflict and anger as potential



Stakeholder workshop

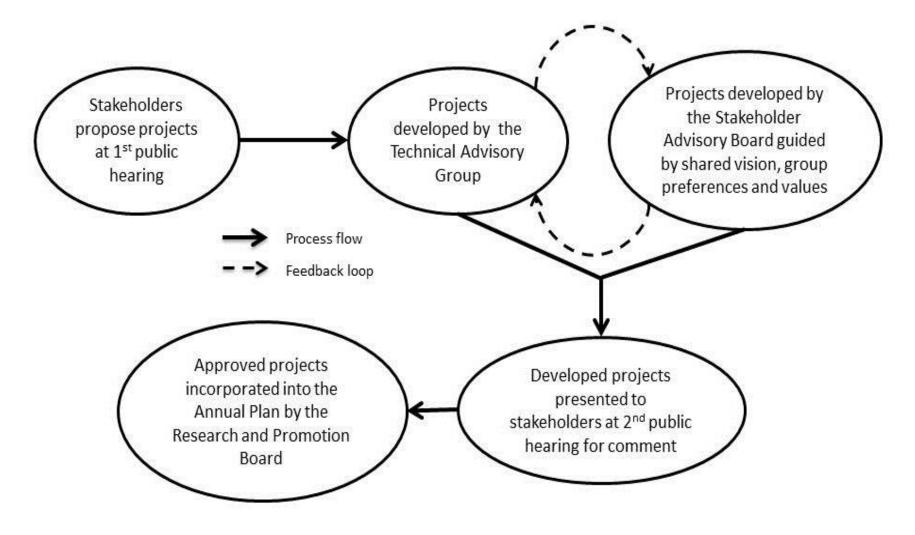
- Teach the SDM process
- Develop shared vision and management objectives
- Develop a structured decision model
 - Integrates stakeholder values with scientific data
 - Incorporates uncertainty
 - Explores alternatives
- Create a Stakeholder Advisory Board

Stakeholder Advisory Board

- Supplement the TAG and RPB
 - Develop management alternatives
 - Consensus-based project proposals
 - Revise management recommendations based on decision model
- Modeled after Tallapoosa River, Alabama

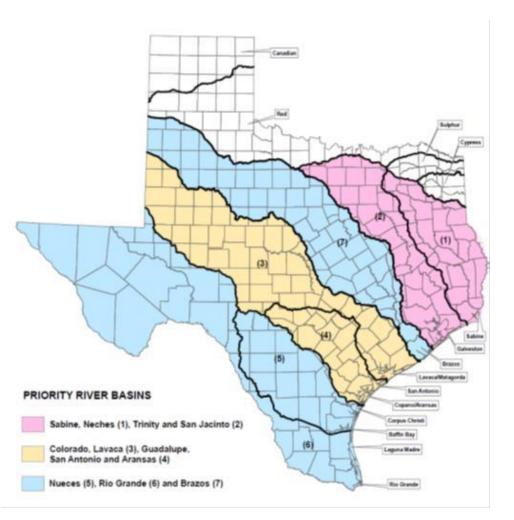


Modified governance structure



Stakeholder-driven Management

- All major rivers in Texas have stakeholder committees
- Also have a science committee
- Stakeholders consensus based recommendations based on science committee's findings



Discussion

- Individual project focus \rightarrow long-term vision approach
- Active stakeholder participation
- Transparent, focused decision-making process

• Transferable to other river systems in LA as increased usage will strain current decision frameworks.

Kozak, JP and BP Piazza. A proposed process for applying structured decision making to restoration planning in the Atchafalaya River Basin, Louisiana, USA. Restoration Ecology, Submitted.

Acknowledgements

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