



U.S. FISH AND
WILDLIFE SERVICE

Infrastructure Planning – Grey to Green

Presentation Overview:

- Bureau Introduction
- Bureau Applications
- Project Examples

Who Are We?

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

Representing USFWS today is:

- Angela Baran Dagensh – Facility Operation Specialist
- Bartholomew Wilson, P.G., Ph.D – Geomorphologist
- Brian Ellington, P.E. – Infrastructure Program Management
- Nathan Beauchamp – Transportation Planning



The Fish and Wildlife Service

- **Land Management Agency within the DOI**
 - National Wildlife Refuge System

- **Priorities of the USFWS**

- Landscape Conservation
- Migratory Birds
- Threatened and Endangered Species:
- Aquatic Species
- Connecting People With Nature



Infrastructure Planning Considerations

Basics of Good Project Management

- Clearly Defined Need & Success Criteria
- Business Case Development
- Sponsor, Stakeholders, Comms Plan
- Vulnerability Assessments
- NEPA, Cultural Resources, & Permitting Consultations
- Risk Assessment
- Acquisition Planning for Execution



BIL – Bureau Applications

- Ecosystem Restoration Projects on Federal Lands
- Invasive Species Projects
 - Detection, Eradication, & Prevention
- Grants to States, Tribes, and Territories for Voluntary Ecological Restoration
- Revegetation & Hazard Mitigation
 - Funding for Mined Lands Remediation
 - Funding for Orphan Well Remediation
- Funding for National Revegetation Efforts, Water Quality, Fish Passage and Seed Strategy Projects



Nature Based Solutions

Focus Areas

- **Wave Attenuation**

- Designed to energy level and site goals
- Low Energy ←————→ High Energy

*Logs and root wads
Reefs
Oyster Castles*

*Sand Shoals
WAD (Wave Attenuation Devices)
Rock (only when necessary)*

- **Hydrology Restoration**

- Scalable
 - Hand dug to dredges
 - Root cause of habitat loss

- **Elevation Enhancement and Beneficial Reuse of Dredge Material**

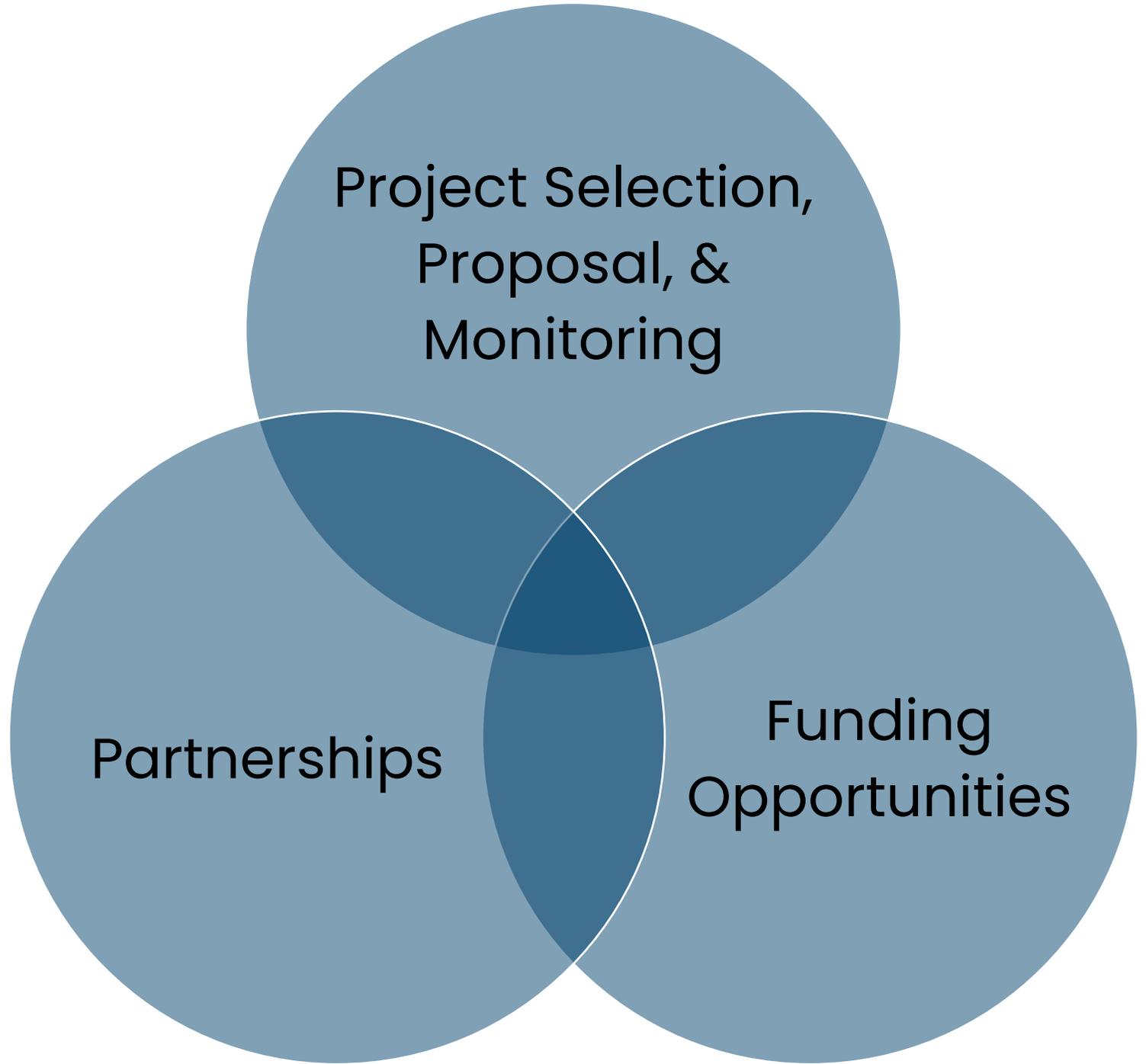
- **Use of Prescribed Fire**

- Facilitate habitat transgression to invasive species management





Key to Success



Questions?

