Maximizing the Benefits of Multi-Objective Projects by Securing Advance Mitigation Credits

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Session Overview

• Planning and design considerations
• Technical design considerations
• Regional Conservation Investment Strategies and Mitigation Credit Agreements
West Sacramento Levee Improvement Program

- West Sacramento, California
- WSAFCA, USACE, DWR
- Southport Levee Improvement Project
- 5.5 miles of levee improvements on the west side of the Sacramento River
- 3.8 miles of setback levee
- 120 acres of new floodplain connected to the river
Natomas Levee Improvement Program

- Sacramento, California
- SAFCA, USACE, DWR
- 42 miles of levee improvements around the Natomas Basin
- Landside Levee Improvement Project - 18 miles of levee improvements
- More than 1,500 acres of habitat mitigation
Keys to Success

- Early Planning
- Regular Communication
- Coordinated Design and Construction
- Clear Documentation
- Successful Habitat Establishment
Early Planning

- Begin at the programmatic level
- Assess potential mitigation needs for the entire program
- Identify projects that could support ecological restoration
- Prepare a conservation/mitigation strategy for the program
Resource Agency Coordination

- Engage with resource agencies early
- Understand their regional conservation goals
- See if you can plan and design your mitigation so it contributes to regional conservation goals
- Give the resource agencies the opportunity to become advocates for your project
Relationship to CEQA/NEPA and Permitting

- Comprehensive programmatic CEQA/NEPA and permitting coverage
- Combined project-level coverage for both infrastructure and restoration projects
- Set favorable mitigation ratios early in the program
- Allows for creative approaches to mitigation
Securing Advance Mitigation

- Permittee-responsible advance mitigation requires diligence, continuity, and strong institutional organization
- Document in environmental documents, permits, and mitigation documents
  - EIR/EIS, IS-MND, EA
  - Biological Opinions (especially programmatic)
  - Permits (404, 1600, 2081)
  - Habitat Mitigation and Monitoring Plan (HMMP)
  - Mitigation Reports
- Regional Conservation Investment Strategy (RCIS) Program
  - Mitigation Credit Agreement
Coordinated Design and Construction

- Coordinated concurrent restoration and civil designs
- Regular interaction can lead to designs with reduced impacts
- Create habitat on infrastructure (e.g., levees, canals)
- Make assets out of liabilities (e.g., borrow sites)
Coordinated Design and Construction

• Plans and specs need to be coordinated but independent
  • Choose the right contractor for the job
  • Civil works contractor to build the infrastructure
  • Restoration contractor to build the habitat
• Civil works contractor often creates conditions for restoration
• Restoration contracts include 3-5 years of establishment
Habitat Establishment

- Restoration contractor responsible for 3-5 years of establishment
- Performance-based contract, but with attentive oversight
- Aggressive weed management
- Adapt to unexpected conditions—don’t force something to grow where it doesn’t want to grow (e.g., sediment deposition)
Long-term Management

• Contract with natural land management entity
• Retain management in-house or with a sister agency
• Obligations may not be as onerous as you would expect
  • Site maintenance
  • Monitoring
  • Reporting
• Resource agencies will likely require a conservation easement
• Long-term funding source (e.g., endowment, assessment district)
- Short-term and long-term monitoring and reporting obligations
- Spelled out in the permits and mitigation documents
  - Recognize potential long-term obligations
  - Realistic success/performance criteria
  - Avoid restrictive methods—allow for flexibility
  - Don’t overcomplicate it—this is not a research project!
- A picture is worth a thousand words
• Annual mitigation report
  • Initially reports on habitat establishment, but transitions to tracking credits once habitat is established

• Primary components
  • Habitat status
    • Established and available for credit release
    • In-progress
  • Credits used and credits available
  • Overall health of the entire site
Key Points

• **Early planning** – holistic/programmatic approach that includes regional conservation needs

• **Regular communication** – with resource agencies, engineering design team, restoration design team, CEQA/NEPA and permitting team

• **Coordinated design and construction** – engineering and restoration design teams work in tandem; separate civil works and restoration contractors

• **Clear documentation** – clearly spell out how habitat will be evaluated and how credits will be tracked

• **Habitat establishment** – select a qualified contractor and be an attentive manager