BUREAU OF RECLAMATION

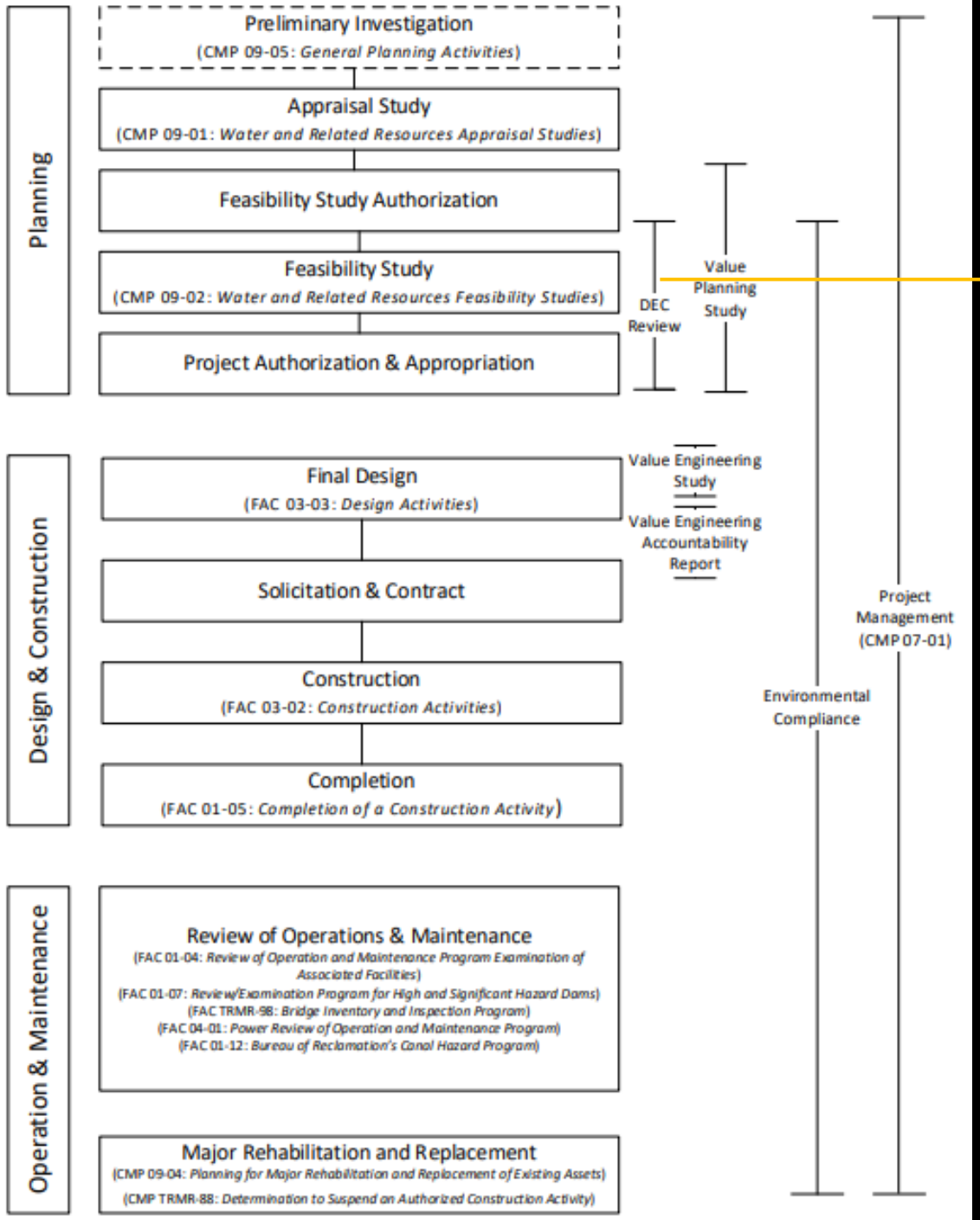
CRWQSRPP Appraisal Study

Overview Presentation

September 26, 2025

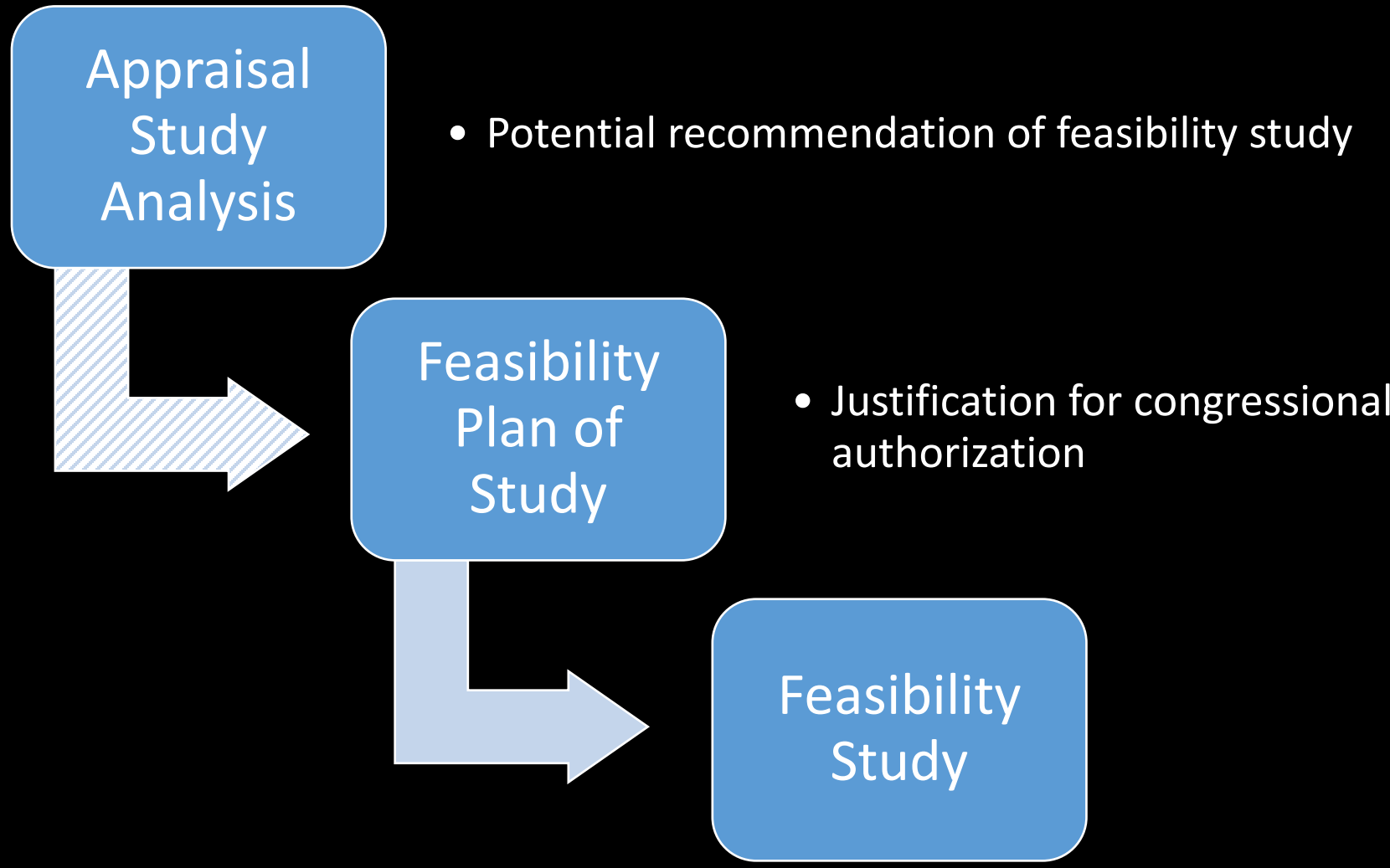
Outline

- Planning Program Overview
- Appraisal Study Outcomes
- Technical Summaries and Results
- Next Steps and Coordination


Planning
Preliminary Investigation
(CMP 09-05: General Planning Activities)
Appraisal Study
(CMP 09-01: Water and Related Resources Appraisal Studies)
Feasibility Study Authorization
Feasibility Study
(CMP 09-02: Water and Related Resources Feasibility Studies)
Project Authorization & Appropriation
DEC Review
Value Planning Study
Design & Construction
Final Design
(FAC 03-03: Design Activities)
Solicitation & Contract
Construction
(FAC 03-02: Construction Activities)
Completion
(FAC 01-05: Completion of a Construction Activity)
Value Engineering Study
Value Engineering Accountability Report
Project Management (CMP 07-01)
Environmental Compliance
Operation & Maintenance
Review of Operations & Maintenance
(FAC 01-04: Review of Operation and Maintenance Program Examination of Associated Facilities)
(FAC 01-07: Review/Examination Program for High and Significant Hazard Dams)
(FAC TRMR-98: Bridge Inventory and Inspection Program)
(FAC 04-01: Power Review of Operation and Maintenance Program)
(FAC 01-12: Bureau of Reclamation's Canal Hazard Program)
Major Rehabilitation and Replacement
(CMP 09-04: Planning for Major Rehabilitation and Replacement of Existing Assets)
(CMP TRMR-88: Determination to Suspend an Authorized Construction Activity)

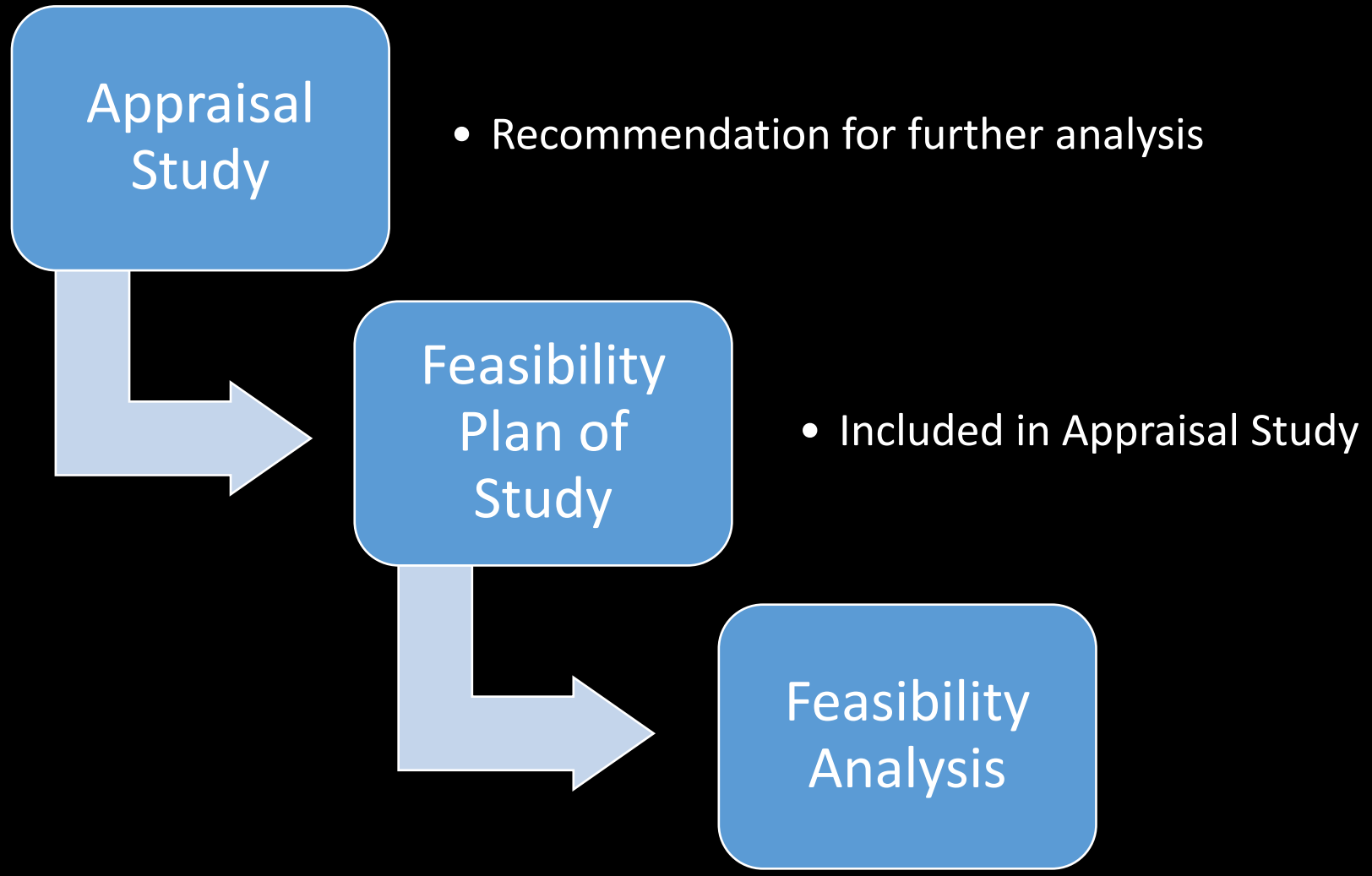
We are here

Appraisal Study Outcome - Previous



- Potential recommendation of feasibility study
- Justification for congressional authorization

Appraisal Study Outcome - Current



- Recommendation for further analysis
- Included in Appraisal Study

Feasibility Study

- CMP 09-02
- Commissioner’s Office
- Secretary’s Office
- Congressional Affairs Office
- OMB
- Congressional Authorization

Feasibility Analysis

- Meet CMP 09-02 requirements
- Utilizing different Reclamation authority
- Policy Review
- Regional Director Review
- NUID coordination for final project authorization

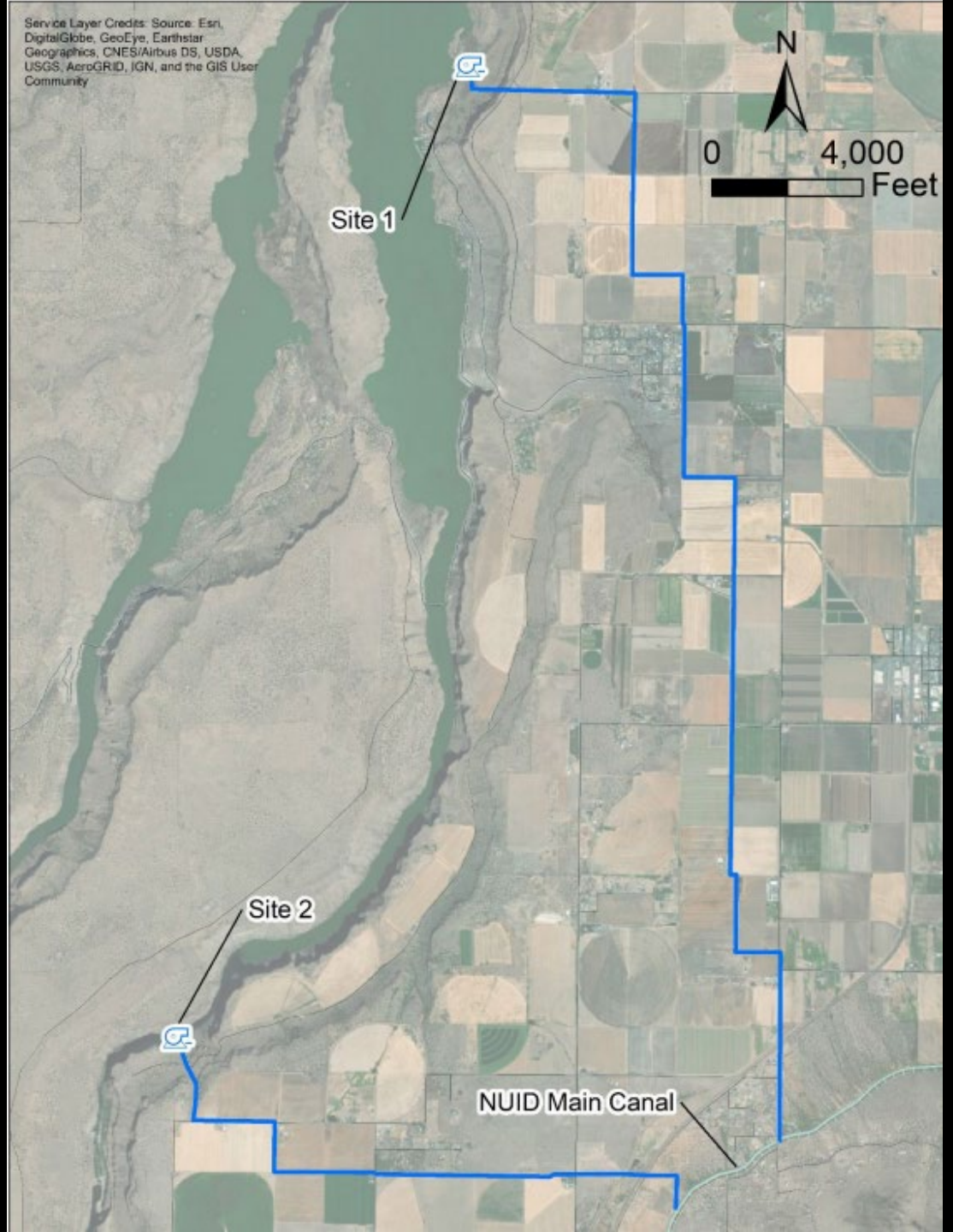
Appraisal Study Components

- Design
- Cost Estimate
- Water Resources Modeling
- Economic Analysis

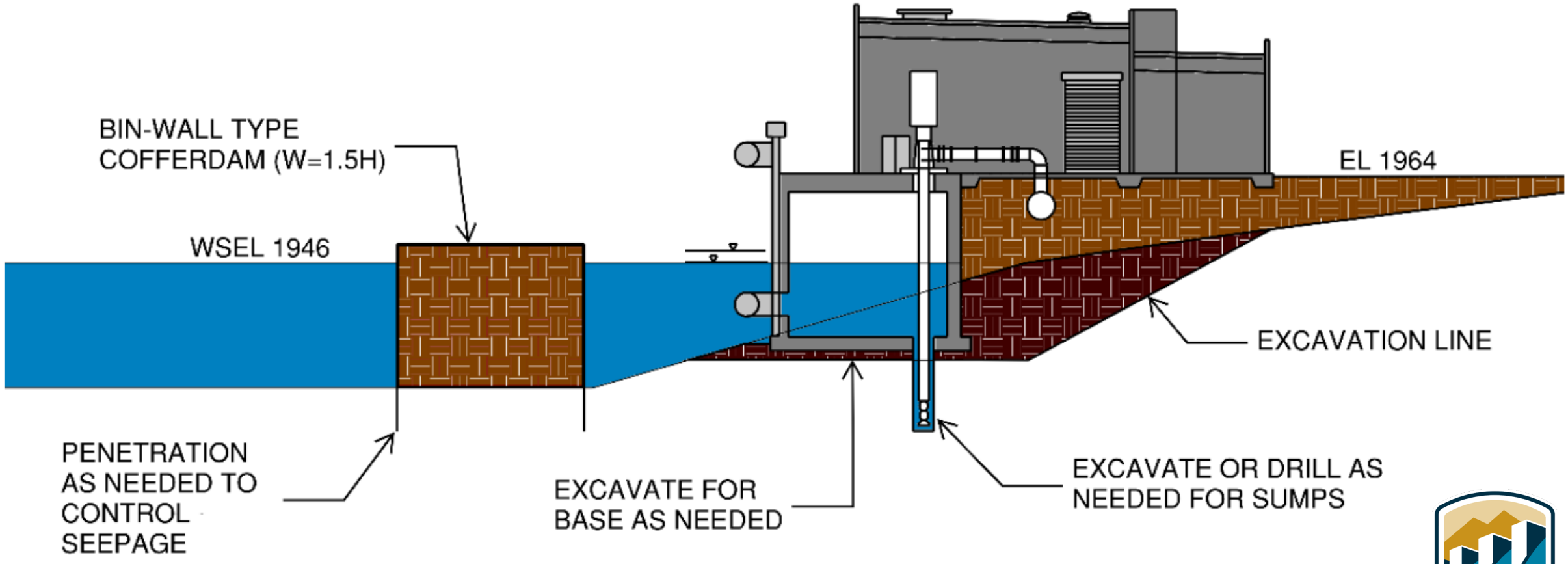
Project Alternatives Review

Site 1 – Near Palisades Marina

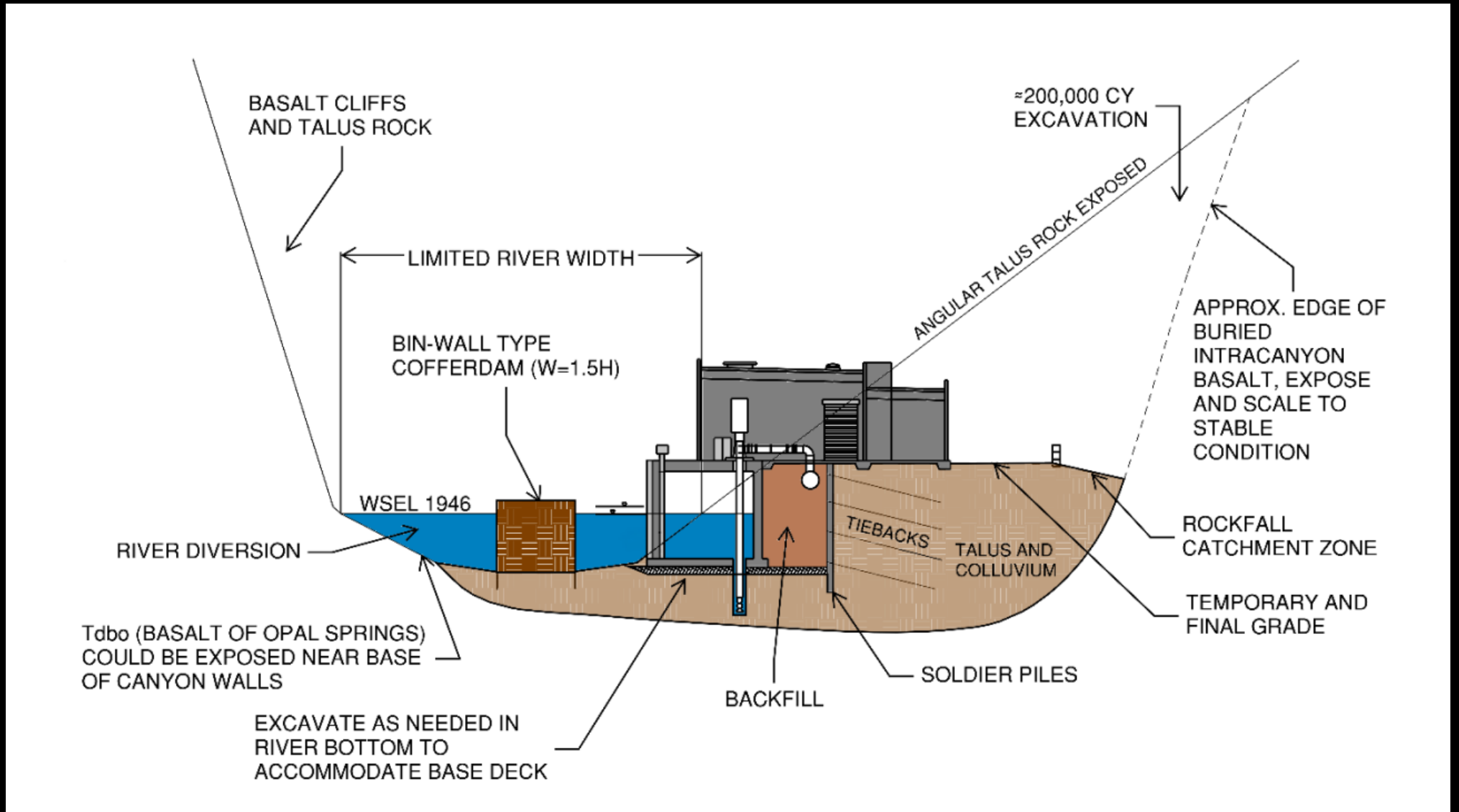
Site 2 – Near Opal Springs



Site 1 - Concept



Site 2 - Concept



Cost Estimate 200 cfs

Cost Component	Site 1	Site 2
Subtotal	$254,296,725	$252,012,846
Mobilization	$12,500,000	$12,500,000
Design Contingencies	$43,203,275	$55,487,154
Contract Cost	$310,000,000	$320,000,000
Construction Contingencies	$40,000,000	$60,000,000
Field Cost (Unit Price Level Apr-2023)	$350,000,000	$380,000,000
Non-contract Costs	$90,000,000	$100,000,000
Construction Cost	**$440,000,000**	**$480,000,000**

Cost Estimate 400 cfs

Cost Component	Site 1	Site 2
Subtotal	$343,712,773	$335,146,058
Mobilization	$17,000,000	$17,000,000
Design Contingencies	$49,287,227	$67,853,942
Contract Cost	$410,000,000	$420,000,000
Construction Contingencies	$70,000,000	$90,000,000
Field Cost (Unit Price Level Apr-2023)	$480,000,000	$510,000,000
Non-contract Costs	$120,000,000	$130,000,000
Construction Cost	**$600,000,000**	**$640,000,000**

Water Resource Modeling Time

Deschutes Basin HCP Future Time Periods	Time Period
HCP A – current operations	Years 1-7
HCP B – planned operations	Years 8-12
HCP C – planned operations	Years 13-30

Water Resource Modeling Scenarios

Scenario 1: Diversion is limited to water available at the existing NUID Crooked River pump station and is subject to restrictions outlined by the Deschutes River Conservancy (DRC) agreement.

Scenario 2: Diversion is limited to water available at the existing NUID Crooked River pump station but is not subject to restrictions outlined by the DRC agreement.

Scenario 3: Diversion is limited to water available at a new pump station location and is not subject to restrictions outlined by the DRC agreement

Water Resource Modeling Results

For HCP A, diversion in Scenarios 2 and 3 are the same. Diversion for both scenarios is also greater on average in August, September, and October than Baseline. The average annual diversion in Scenarios 2 and 3 is 345 acre-ft higher than Baseline.

Water Resource Modeling Results

For HCP B, diversion in Scenarios 2 and 3 is greater than Baseline in May through October; diversion in Scenario 3 is higher than in Scenario 2 in those months as well. Average annual diversion in Scenario 2 is 716 acre-ft higher than Baseline; average annual diversion in Scenario 3 is 7,760 acre-ft higher than Baseline. This shows the increased effectiveness of the proposed relocated point of diversion in the future (HCP years 8-12) and revised water rights assumptions, providing additional water to NUID for irrigation.

Water Resource Modeling Results

For HCP C, average monthly diversion in Scenarios 2 and 3 is greater than Baseline from April through October. From May through October, average monthly diversion in Scenario 3 is greater than in Scenario 2. Average annual diversion in Scenario 2 is 1,117 acre-ft higher than Baseline; average annual diversion in Scenario 3 is 15,027 acre-ft higher than Baseline. This continues to demonstrate the increased long-term effectiveness of the proposed relocated point of diversion in the future (HCP years 13-30) and revised water rights assumptions, providing significant additional access to water for irrigation in the North Unit.

Economic Analysis

Quantified

- Irrigation Water Supply Benefit

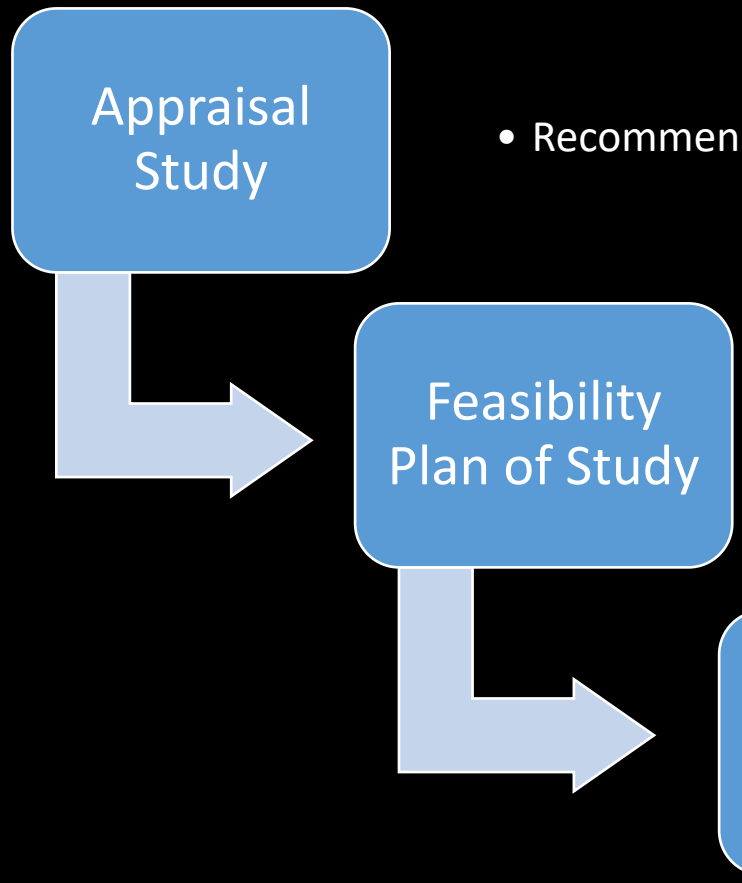
Unquantified

- Fish and Wildlife
- Water Quality

Findings and Recommendation

Item	Site 1	Site 2
Appraisal-Level Construction Cost (Unit Price Level April-2023)	$600,000,000	$640,000,000
Range of Incremental Irrigation Benefits (Present Value of 50-Year Total, 2022 U.S. Dollars)	$4,900,000 - $89,000,000	
Fish and Wildlife and Water Quality Benefits	Unquantified	
PR&G Guiding Principles	All Guiding Principles Achieved	
Plan Formulation Criteria	Rating	
• Completeness	Complete	
• Effectiveness	Highly Effective	
• Efficiency	Efficient	
• Acceptability	Acceptable	

Next Steps



- Recommendation for further analysis
- Included in Appraisal Study
- Water rights
- Value Planning

Rebekah Triolo
Project Manager
rtriolo@usbr.gov

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