WAPATO DIVERSION DAM

Yakima River Basin Water Enhancement Project (YRBWEP)

Wapato Diversion Dam Rehabilitation

3/12/2021

DOWL

AGENDA

1. Background Information
2. General Schedule
3. Short Term Efforts
4. Long Term Efforts

PROJECT TEAM

Bureau of Indian Affairs (BIA)
[lead federal agency]

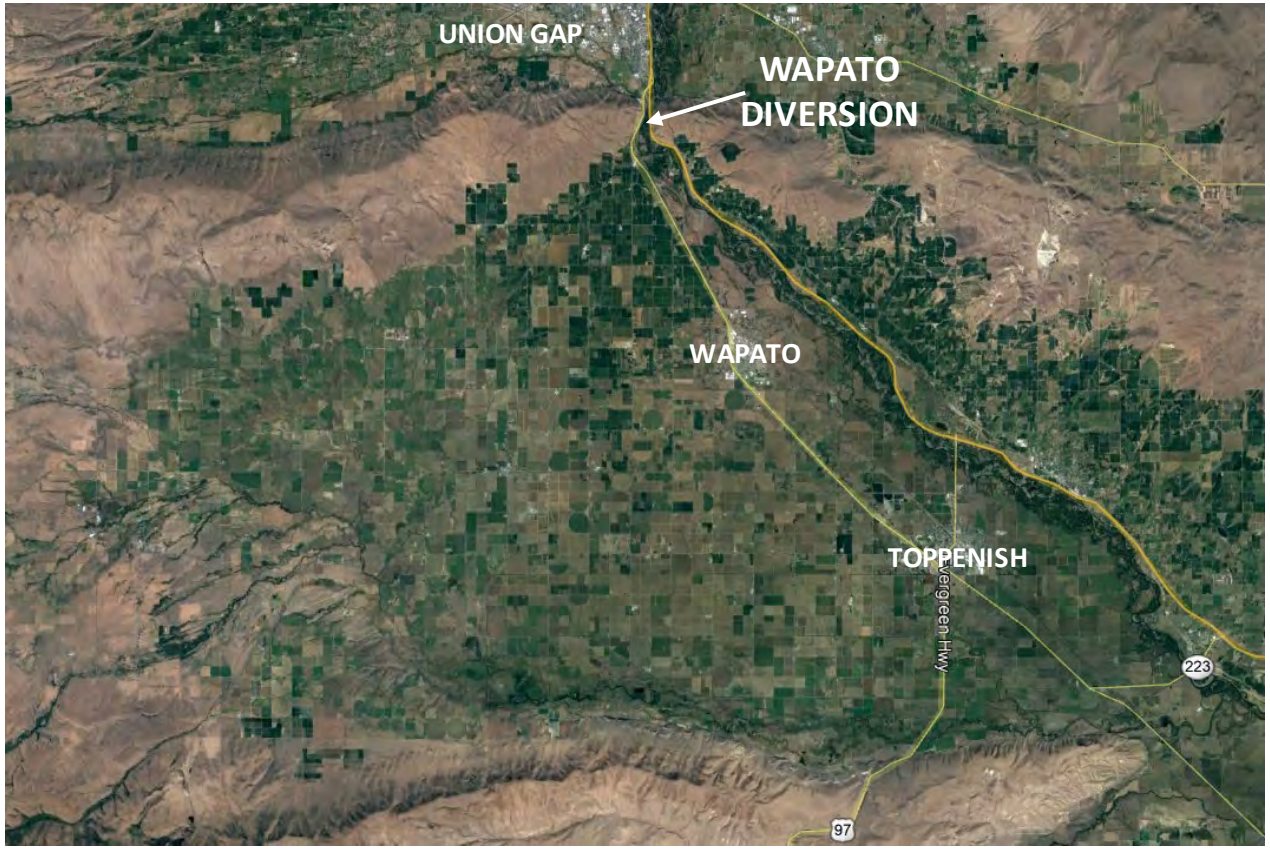
Bureau of Reclamation (BOR)

Yakama Nation

DOWL

PROJECT RELEVANCE

- Main diversion for 140,000 acres of irrigated farmland.
- Single point of failure for irrigation deliveries.
- Highest priority project in the BIA irrigation inventory.
- Originally constructed in 1917



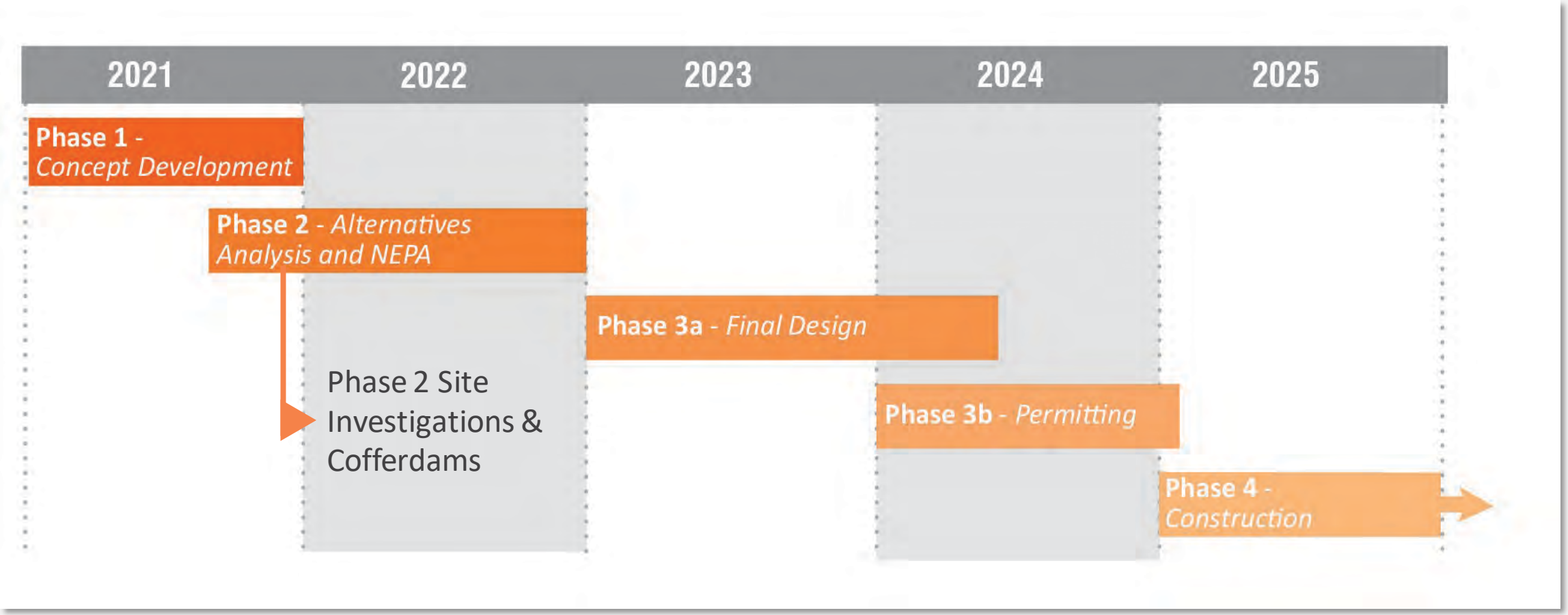
PROBLEMS AND ISSUES / GOALS AND OBJECTIVES

- Operator Safety
- Fisheries Issues
- Operational Issues
- Sediment Transport
- Stability Concerns
- Flooding Concerns

PRIMARY FEATURES

1. Main Canal Headworks
2. West Diversion
3. East Diversion
4. Earthen Embankment
5. Overflow Spillway
6. Rock Weirs

INITIAL PROJECT SCHEDULE AND PHASING



SHORT-TERM OBJECTIVES

Short-Term Objectives (Fall 2021)

- 6-month design/construction effort
- 5- to 10-year design life
- Joint BIA / Yakama Nation Effort
- Headworks rehabilitation
  - Headgate actuator replacement
  - Headworks concrete repair
  - Controls / electrical system replacement
  - Sediment removal
- Site Conditions Investigation:
  - Concrete coring
  - Geotechnical boring / seismic refraction
  - Visual Inspection
  - Survey / bathymetry

SHORT-TERM WORK PLAN

1. River Crossing
2. Existing Access Route
3. Use Existing Materials?
4. Use Bathymetry to Select Cofferdam Sites

PRELIMINARY

SHORT-TERM WORK PLAN

5 East Cofferdam

6 East Dam Coring

7 Move Cofferdam to West Channel

8 Headgate Repairs

9 East Dam Coring

10 Channel Maintenance

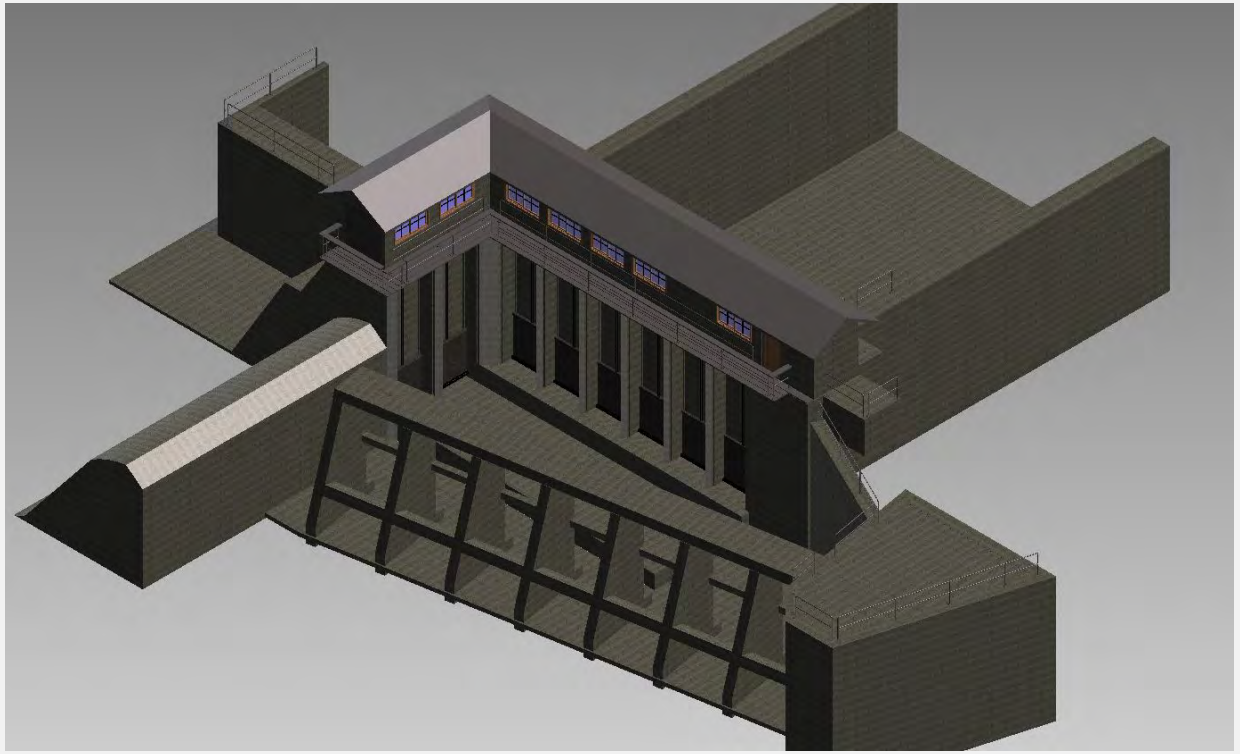
11 Inspect Ladders

LONG-TERM OBJECTIVES

Long-Term Objectives (2021 – 2025)

- 3- to 5-year design/construction effort
- 80 to 100-year design life
- Diversion long-term functionality
  - Operational issues / operator safety
  - Structural stability / flooding concerns
  - Sediment transport / fish passage
- Analyze alternatives
- NEPA compliance (EA)
- Identify a preferred action
- Final Design
- Construction

REVIT MODEL – EXISTING HEADWORKS



THANK YOU…

Any Questions? Comments?

GENERAL LOCATION

WAPATO DIVERSION SITE