Wapato Irrigation Project
Conservation and Modernization
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Outline

History
Map
What’s Wrong?
Two Reports
Previous Projects
Present Projects
Future Projects
Estimated Budget
Diversion Dam
Questions
WIP History

- Land is on the Yakama Nation Reservation
- Treaty 1855  12.2 million acres ceded
  1.3 million acres reserved
- Late 1800’s Indian Irrigation Projects started
- WIP Authorized in 1904; Construction 1916
- 142,000-145,000 irrigated acres (GAO 97 & 06)
- 60% / 40% Irrigation Project Land Ownership split between Yakama and Non-Yakama
GAO Reports What’s Wrong

- Deterioration prevents users from receiving water
  - Long Term Sustainability → Depress Lease & Water Rates

- Lack of regular maintenance led to users making their own repairs and/or modifications
  - Decrease system stability (Drought !!)

- Understaffing; Too few to operate & maintain

- Previously, crisis-style management
  - Lack of planning & preventive maintenance

Led to Two Current Reports

Cal Poly - Irrigation Training & Research Center
BIA paid for & contracted

YN Modernization Plan  March 2018
YN Conservation Plan     July 2019

Same people = Better Continuity
Charles Burt PE/PhD and Daniel Howes PE
WIP Capability Increased

**Funding Sources**

- $$ Reclamation
- $$ WA ST Ecology
- $$ USDA - NRCS
- $$ BIA Const. & Maint.
- $$ WIIN Act

Projects, Repairs, Material Acquisition
Leveraged by the BIA through YN 638 contracts

Crisis Style Management
Previous Projects

Unit 2
- Canal Lining
- Lateral Piping

Satus
Lateral Piping & E Line
Present Projects

30 Miles pipe installed to date

~11,000 Acre/Feet Saved per year
Future Projects
Future Projects

- New fish block in Marion Drain replaces upstream fish ladder
- 10-20 shallow well pumps to 100 CFS to Marion Drain to the new fish block
- Enlarge canal
- Satus 2 Pump Reservoir (Storage ~ 400 AF)
- New VFD controlled pumps in reservoir will bypass Satus 2 Pumps and enable fine tuning of flows to the Satus 2 Pump Canal
- New pumps in Marion Drain discharge up to 150 CFS upstream of the radial gate to supplement excess flows to the Satus Feeder Canal
- New Satus Feeder Canal siphon under Toppenish Creek. No mixing of canal and creek water.
- Satus 2 Pumping Plant
These projects will be implemented over the next 20 years and have an estimated peak spending level of $15 million / year.

Funding needs to be sustained over time in order to allow phasing and progressing of projects.
WIP Main Diversion

Dave Fisher - BIA

95% of the water for WIP is diverted from the Yakima River.