Wapato Irrigation Project: New - Toppenish Creek Diversion

An example of how the Integrated Plan is working and improving the Yakima Basin

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HOW DID THE IDEA FOR A NEW DIVERSION AT TOPPENISH CREEK UNIT TWO CANAL ORIGINATE?

THESE TWO DOCUMENTS WERE FUNDED BY THE BIA AND THE WASHINGTON STATE DEPARTMENT OF ECOLOGY GRANT C1700079.
“...An estimated 165,000 AF (see Chapter 5) is available for recovery with full implementation of the WIP Modernization Plan...”

The above excerpt from the ITRC Conservation Plan should be cause for excitement and celebration.
OVERVIEW OF ALL OF THE MODERNIZATION PLAN

EACH INDIVIDUAL YELLOW “CAPTION BOX” IS AN INDIVIDUAL RECOMMENDATION…LOTS OF WORK TO DO ON WAPATO IRRIGATION PROJECT!
TYPE SELECTION & PROJECT DEVELOPMENT

ALTERNATIVES CONSIDERED:

I. A SERIES OF CASCADING BOULDERS
II. A SERIES OF CASCADING BOULDERS WITH A CONCRETE LINED CHANNEL
III. A SERIES OF CONCRETE WEIRS - TOPPED WITH SMOOTH RADIUS STAINLESS STEEL IN A CONCRETE LINED CHANNEL COMBINED WITH A RADIAL GATE FOR FLUSHING FLOW. RADIAL GATE ALLOWS BETTER MANAGEMENT OF FLOW THROUGH A SCADA SYSTEM.
Structural modeling based on soil report conditions: liquefaction & lateral spread to 30 feet below existing grade, increased estimated cost from original 1.5 million to 3.7 million.

Of this 3.7 million 1.521 million is YBP money from Washington State department of ecology. The remainder is funded through the WIP-BIA.
STRUCTURAL MODELING OF THE INITIAL SIPHON PIPE THAT IS INSTALLED FOR FUTURE CONNECTION UNDERNEATH THE NEW DIVERSION.
NOW LET'S TAKE A LOOK AT THE JOBSITE AND GO THROUGH A CONSTRUCTION SEQUENCE
WHILE ALL OF THE PRIOR STEPS ARE UNDERWAY: FABRICATE A 6 FOOT DIAMETER FUTURE SIPHON TO PLACE BENEATH THE NEW DIVERSION
SPECIAL THANKS TO THE FOLLOWING:

ERNESTO LOPEZ - PROJECT ENGINEER & RESIDENT ENGINEER

JUSTIN JACOB & DAVE LINDE: WAKISH ENGINEERING: Hydraulic Check, Feasibility Analysis and Biological Assessment.

Jeff Harlan, Dave Fischer & Pete Plant of BIA

Yakama Nation Cultural Resources - CRA Assessment

GN Northern, Imran Magsi - Soils Engineering & Structural Design Check

State of Washington Department of Ecology - Grant Funding $$$’s
QUESTIONS?