Yuba IRWMP – HIC-03

Project Short Form¹

Please fill out the following information to the best of your ability/knowledge. Contact Keri Rinne with questions: keri.rinne@gmail.com

PROJECT SPONSOR INFORMATION

Lead Agency/Organization	Hallwood Irrigation Company
Name of Primary Contact(s)	Mark Chandless
Mailing Address	P.O. Box 1349, Marysville, CA 95901
Email Address	mchandless@att.net
Phone (###) ###-####	530-788-3289
Project Partners/Collaborators	Yuba Water Agency
YWA Liaison	Joanna Lessard; Ryan McNally

GENERAL PROJECT INFORMATION

Project Title	Teichert Ditch and Pipeline Conversation and Realignment
Project Total Budget	\$1,730,000.
(Attach detailed budget, if available)	
Budget Breakdown	Planning/Design Budget: \$0.
	Implementation Budget: \$1,730,000
Project Funding Match, if any	TBD
Total Project Funding Need	TBD
Project Location (Attach map if available)	Hallwood, Yuba County
Watershed/subwatershed	
Groundwater Basin	North Yuba Subbasin
(Select one)	South Yuba Subbasin
	Not Applicable
Supports Yuba Groundwater	🛛 Yes
Sustainability Plan (GSP)?	No No
Measurable Objective(s) Benefit	Chronic lowering of groundwater levels
(Answer If 'Yes' above)	Reduction of groundwater storage
(check <i>all</i> that apply)	Degraded water quality
	🔀 Land subsidence
	Depletions of interconnected surface waters
Project Priority	High
(Select one)	Medium
	Low
Project Type	Conceptual
(check <i>all</i> that apply)	Feasibility Study
	Study/Assessment
	Planning
	Engineering/Design
	Permitting
	CEQA/NEPA
	Facility Construction
	Restoration
	Best Management Practices
1	Acquisition

¹ Completed Project Short Forms should be sent via email to Keri Rinne at keri.rinne@gmail.com

	Demonstration/Pilot Project
Legal Authority	

Please select the *status* of the CEQA/NEPA/Permitting for this project:

CEQA	Exempt Not Started Initial Study EIR Determination Unknown if Required
(Select one)	
NEPA	Exempt Not Started Environmental Assessment EIS Record of Decision Unknown
(Select one)	if Required
Permitting	Not Required Not started Identified Consultations Complete Application Submitted
(Select one)	Complete Unknown if Required

PROJECT DESCRIPTION

Write a narrative <u>briefly</u> describing the project components and/or characteristics (Suggest ~ 300 words).

Hallwood Irrigation Company (HIC) is completing a System Renovation Plan (HIC-01). The first phase of plan development included an assessment of the irrigation system condition (completed in December 2022). HIC identified and prioritized several improvements, and the second phase of the plan focuses on completing construction documents, engineering, and permitting for the highest priority improvements. The project identified herein was identified as the 3rd highest priority out of the 12 improvement projects recommended.

The Teichert ditch currently runs through the Teichert Hallwood facility and becomes a below-ground pipeline that passes underneath their main plant. This presents various maintenance issues as the pipeline is inaccessible due to its location beneath Teichert's operating facilities. Additionally, the ditch is difficult to access outside normal business hours. A large portion of the above-ground Teichert ditch runs through readily draining gravelly soil. This section has a concrete lining with visible cracks, which are likely to cause significant seepage losses.

To alleviate any access and seepage issues along the Teichert ditch, the proposed alternatives are to: 1) convert the Teichert ditch into a below-ground pipeline that would be buried beneath existing access roads within the Teichert property, or 2) re-line the portion of the Teichert ditch that goes through the gravelly soil and realign the below-ground pipe to avoid Teichert's operating facilities. The recommended improvement is to convert the existing ditch within the Teichert property into approximately 8,300 linear feet of belowground pipeline. The terminus of the pipeline would return flows to the existing Teichert Ditch downstream of the Teichert property.

The estimated 27.3 CFS flows that pass through the Teichert ditch would require the pipe to be 30" in diameter to reduce friction head losses and maintain adequate velocity in the pipeline.

PROJECT RATIONALE/ISSUES STATEMENT

Briefly describe the need for the project and the desired outcomes/deliverables (Suggest \sim 200 words). Include an explanation of benefits and how they would be evaluated.

The two main goals are to:

(1) improve the efficient use of Yuba River surface water supplies in the area of benefit in the North Yuba Subbasin(2) improve the quality and quantity of flow-rate data to allow more precise and accurate control of flows in and diversions from the HIC irrigation system.

The existing Teichert Ditch is a significant source of water loss for HIC's irrigation system. The combination of failing concrete linings on top of gravelly substrate creates both immediate and long-term potential for significant water loss. The full pipeline alternative is recommended as it provides the best long-term solution for the seepage and associated

water loss concerns and provides improved operational flexibility for the Teichert facility.

The project is expected to realize the following quantifiable benefits:

- 1. Water supply savings resulting from avoidance of excess surface water diversion.
- 2. Improved groundwater conditions due to greater availability of surface water supplies and subsequent reduced demand for groundwater.

Such water savings and resiliency will allow for continued avoidance of "deficit pumping" by these agencies. Furthermore, the water savings from the project will improve water supply conditions that allow the Yuba Subbasins water suppliers to implement their groundwater substitution transfer program which provides benefits during dry years to water suppliers throughout the state.