HQ, Washington DC

Implementing Credit Trading for Nutrients in Idaho

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February 5, 2019

CLEAN WATER PARTNERS LLC

Outline

- Location
- Problem
- Approach
- Clean Water Partners, LLC
- Pilot
- Full Scale
- Credit Trading Guidance
- Next Steps

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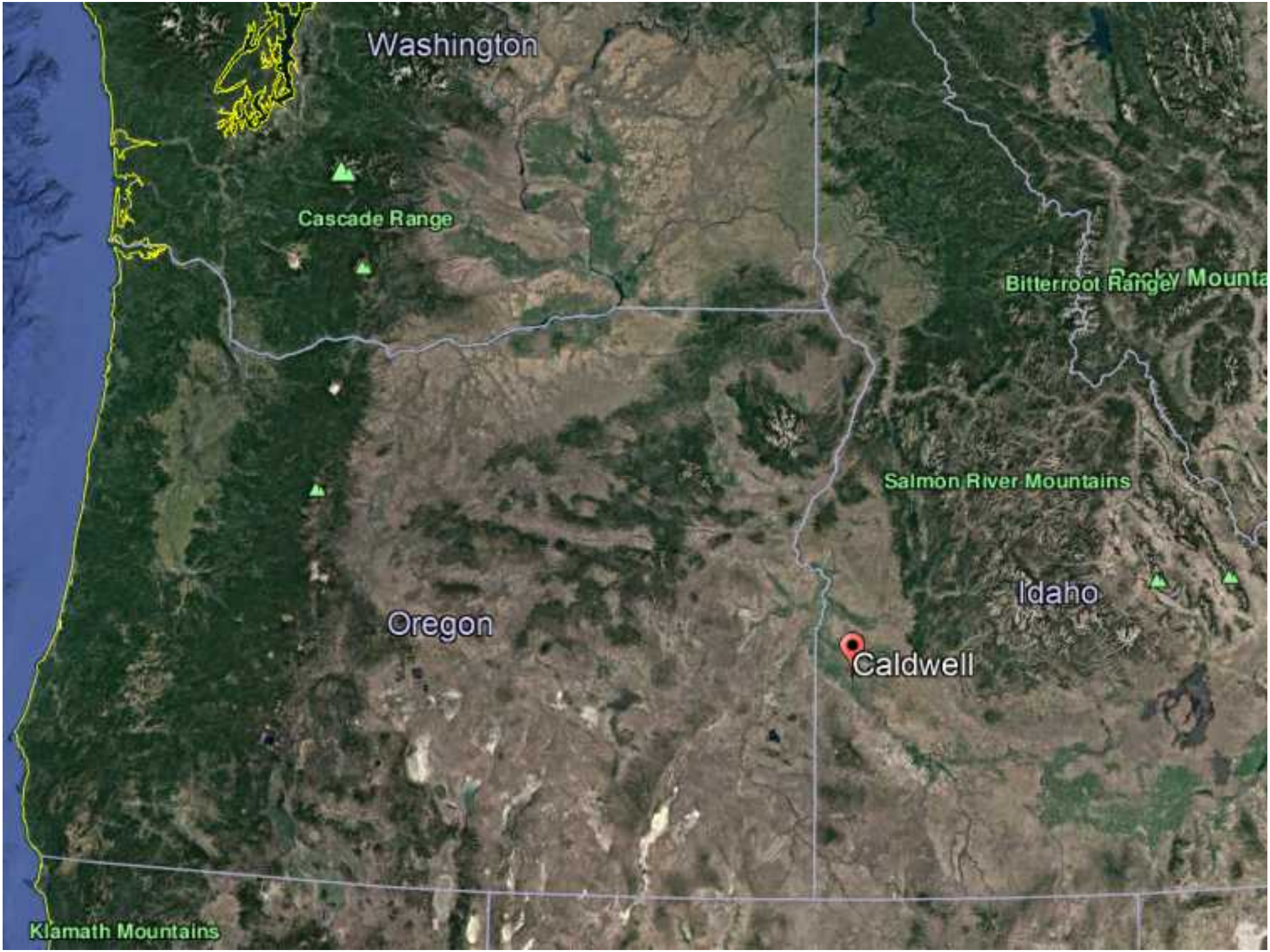
Washington
Cascade Range
Bitterroot Range
Salmon River Mountains
Idaho
Oregon
Caldwell
Klamath Mountains


Nyssa
Emmett
Parma
Star
Eagle
Wilder
Canyon
Caldwell
Caldwell
Meridian
Boise
Marsing
Nampa
Kuna
Ada
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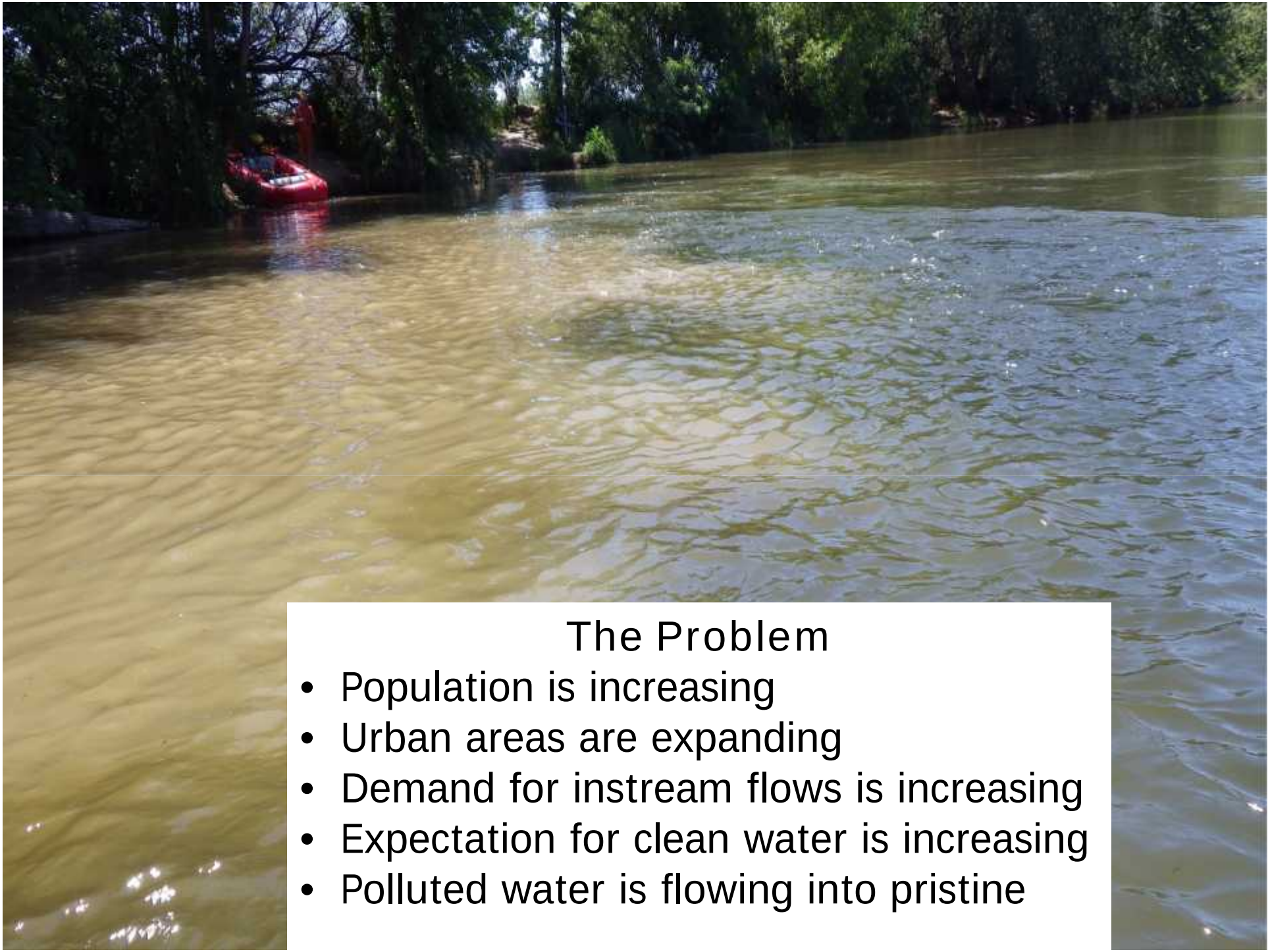

The Problem

- Population is increasing
- Urban areas are expanding
- Demand for instream flows is increasing
- Expectation for clean water is increasing
- Polluted water is flowing into pristine

Approach

Reduce nutrients via

Constructed Basin/Constructed Wetlands (CB/CW), funded with Trading Credits

Clean Water Partners, LLC (Formed 2015)

- Hal Anderson, Principal, Idaho Water Engineering
- Gary Howard, Principal, Idaho Wetlands Group
- Douglas Jones, Executive Director, Growers for Biotechnology
- Ronald Jones, Principal, Ecolotree
- Rob Tiedemann, Ph.D., Principal, Ecological Design
- Dave Tuthill, Ph.D., Principal, Idaho Water Engineering

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Project Objective

This project tests the proof of concept and provides scientific documentation showing whether a sedimentation basin in combination with a constructed wetland(s) can remove significant quantities of sediment and phosphorous from receiving waters in southwest Idaho.

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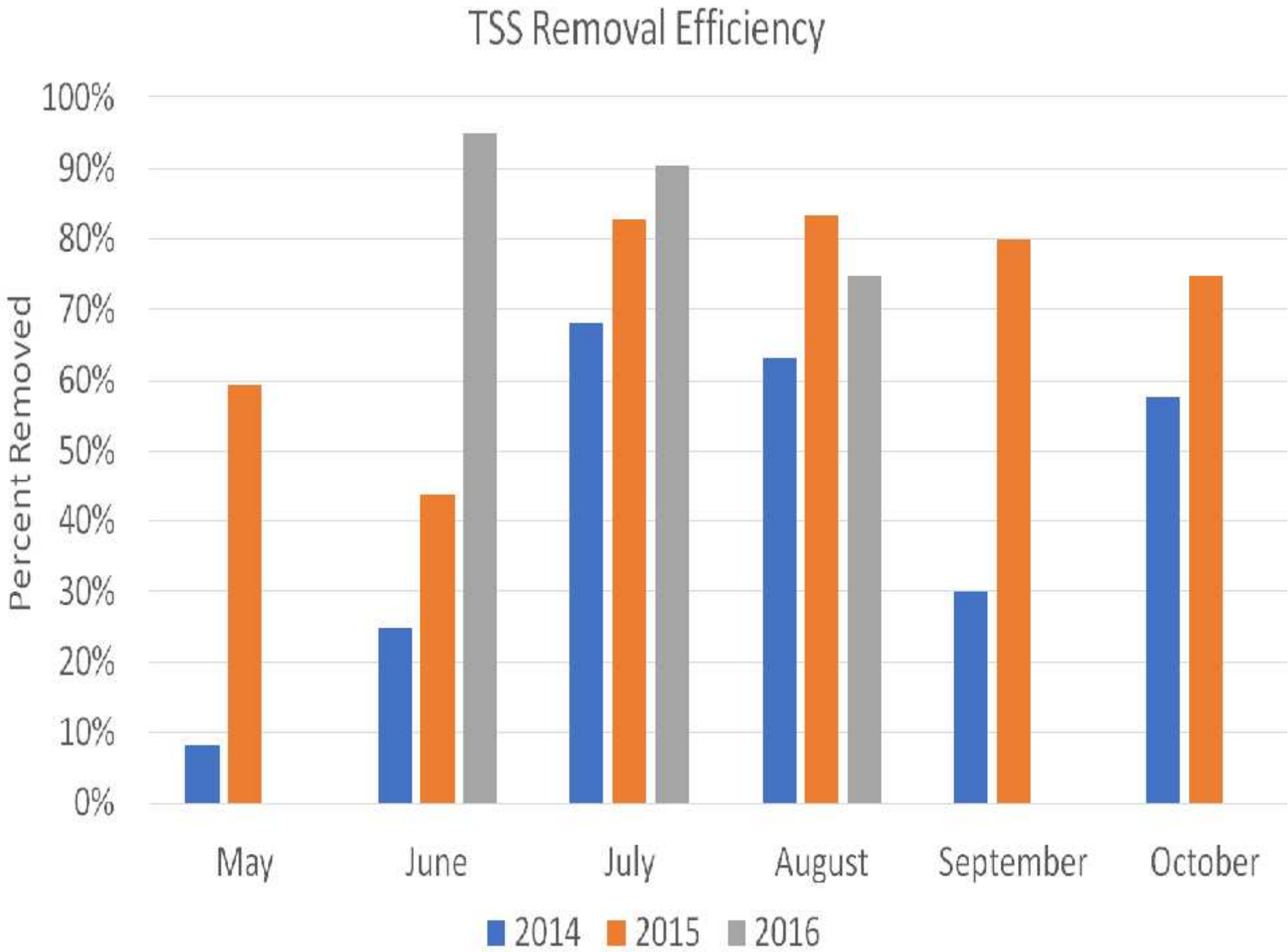
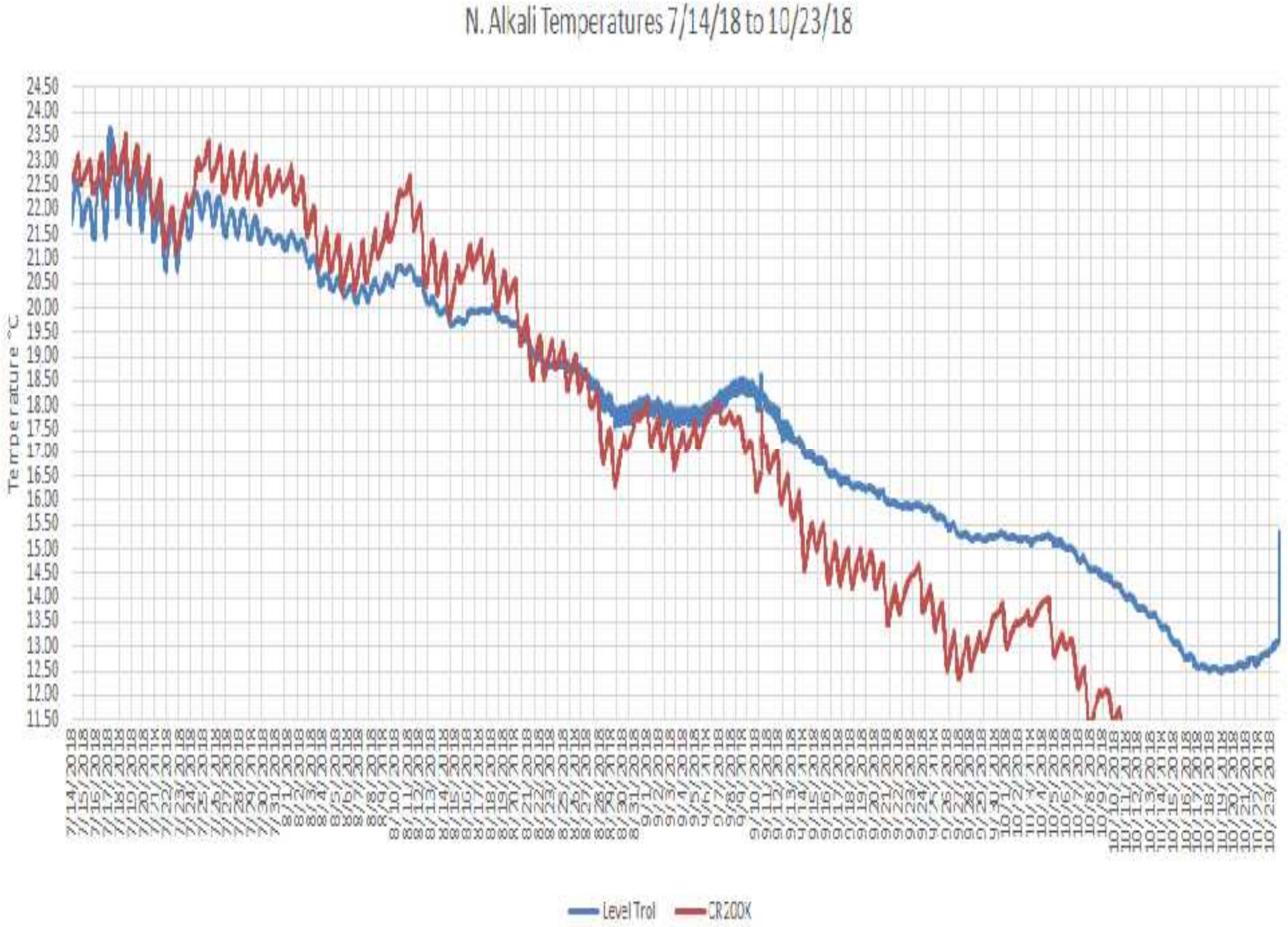
North Alkali Drain Water Quality Improvement Demonstration Project 2015 Results

After 3 years Operation


TSS Removal Efficiency
Percent Removed
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
May
June
July
August
September
October
2014
2015
2016


N. Alkali Temperatures 7/14/18 to 10/23/18
Temperature °C
Level Trol
CR200K

RECEIVED

MAR 10 2015

WATER RESOURCES
WESTERN REGION

Ident. No. _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of applicant(s) Rock Contractors, Inc. Phone 208-466-4051

   Name connector (check one): ☐ and ☐ or ☐ and or

   Mailing address 444 W. Karcher Rd. City Nampa

   State ID Zip 83687 Email jeff@nampapaving.com

2. Source of water supply Fifteenmile Creek which is a tributary of Boise River

3. Location of point(s) of diversion:

TWP	RGE	SEC	Govt Lot	¼	¼	¼	County	Source	Local name or tag #
4N	2W	21			NE	NW	Canyon	Fifteenmile Creek	
"	"	16			SE	SW	"	"	
"	"	16			SW	SW	"	"	
"	"	16			NW	SW	"	"	

4. Water will be used for the following purposes:

   Amount 0.50 cfs (cfs or acre-feet per year) for Irrigation purposes from 3/1 to 11/15 (both dates inclusive)

   Amount 200 cfs (cfs or acre-feet per year) for WQ Improv & Wildlife purposes from 1/1 to 12/31 (both dates inclusive)

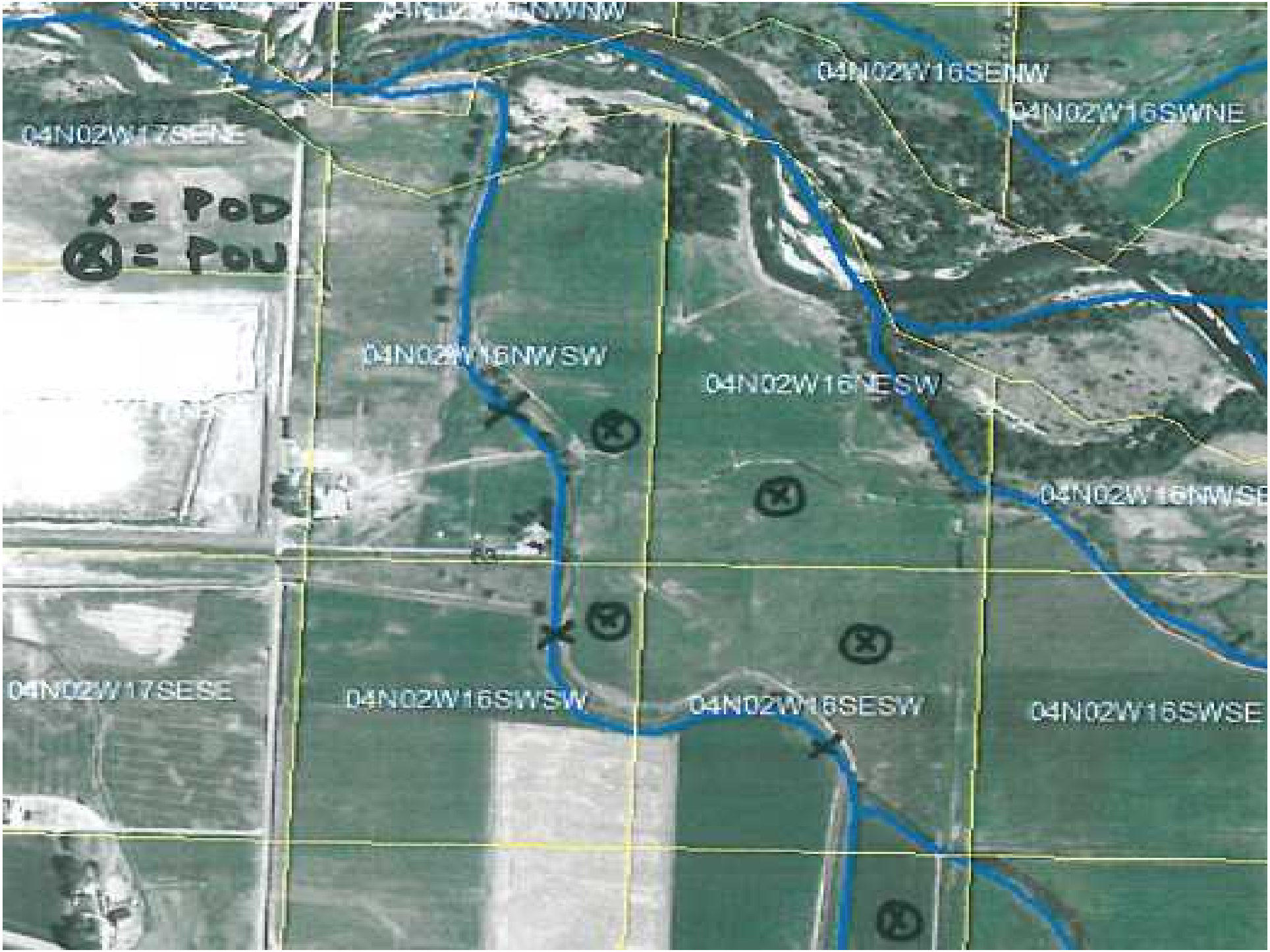
   Amount 2382.9 af (cfs or acre-feet per year) for WQI & Wildlife Storage purposes from 1/1 to 12/31 (both dates inclusive)

   Amount 200 cfs (cfs or acre-feet per year) for Diversion to Storage purposes from 1/1 to 12/31 (both dates inclusive)

5. Total quantity to be appropriated is (a) 200 cubic feet per second (cfs) and/or (b) and 2382.9 acre feet per year (af).

6. Proposed diverting works:

   a. Describe type and size of devices used to divert water from the source. Diversion dam in creek


04N02W16SENW
04N02W16SWNE
X = PoD
= PoU
04N02W16NWSW
04N02W16NESW
04N02W16NWSE
04N02W17SESE
04N02W16SWSW
04N02W16SESW
04N02W16SWSE

Water Quality Trading Guidance

State of Idaho
Department of Environmental Quality

October 2016

Steps

- Meet with Idaho DEQ (now with Primacy)
- Pursue development of full scale CW/CW projects, with construction now underway
- Benchmark with other trading entities
- Sign agreement for a trade
- Receive water right permits (protests almost resolved)
- Meet with EPA HQ
- Meet with EPA Region 10
- Meet with EPA in Idaho
- Finalize more complex multi-party agreements

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Thank You