

TO: Ingria Jones, Ecology

FR: Emily Dick, Washington Water Trust

DT: March 4, 2020

RE: WRIA 7 WREC Preliminary Water Rights Analysis-Update

Washington Water Trust (WWT) is nearing completion of the irrigation assessment for WRIA 7 as the first step in their Preliminary Water Rights Analysis.

An irrigation analysis helps identify areas with both a water right document and identified irrigation through review of aerial imagery. The Department of Ecology's WRTS database provides for **149,969 water right documents** within WRIA 7. This database includes documents from all locations in WRIA 7, all document types, and all purposes of use. This number will be significantly reduced by focusing in on certificates and claims, water rights with irrigation as a purpose, water rights with actual beneficial use occurring (aerial photography) and other screening criteria. NAIP photography from 2013 and 2017 was used to assess irrigated areas.

Geographical Area Initial Findings

WRIA 7 WREC selected five priority geographical areas to focus on in the irrigation analysis:

- Little Pilchuck
- Lower/Middle Pilchuck
- Quilceda
- Patterson
- Raging

Analysis for Patterson and Raging is being finalized. In Little Pilchuck, Lower/Middle Pilchuck, and Quilceda a total of 1,920 water right documents were found. **167 of these water rights were identified to have 317 potentially irrigated acres.**

By Priority Area, # of Water Rights Identified with Irrigation:

Little Pilchuck	34
Lower/Middle Pilchuck	49
Quilceda	84

Reclaimed Water Vicinity Initial Findings

In addition, areas within a half mile of a reclaimed water facility were analyzed.

By Reclaimed Water Facility, # of Water Rights with Irrigated Areas of > 75 acres¹ and within ½ mile of facility:

Camp Korey at Carnation Farm	11
King County Carnation Plant	0
Snoqualmie WWTP and Reclaim Facility	0
WA State Fire Training Academy	0

Next Steps

In order to target the most effective water rights due diligence on a select number of these identified water rights, WWT is recommending the prioritization factors identified in “*Proposed WRIA 7 WREC Prioritization for Water Rights Due Diligence*” document.

¹ These facilities currently do not have additional capacity, a project involving a reclaimed water facility would require significant work to increase capacity and would not be worthwhile for smaller water rights.

Proposed WRIA 7 WREC Prioritization for Water Rights Due Diligence

Washington Water Trust (WWT) has been tasked with completing a water rights analysis in several WREC-identified areas throughout WRIA 7. WWT has completed an irrigation analysis in these areas by overlaying Water Right document information and NAIP aerial imagery from 2013 and 2017. 2015 NAIP imagery was not used due to drought conditions. The irrigation analysis identifies water rights places of use with aerial imagery that suggest high, medium, and low irrigation confidence. The next phase of the preliminary water rights analysis is to use irrigation analysis results to prioritize and select water rights in each area to undergo a due diligence review.

WWT recommends to the WREC committee the following prioritization in selecting water rights to further examine in a due diligence review:

- **Water Right Document Type-** Certificates and claims receive preference.
- **Irrigated Acreage-** Water rights with less than 5 acres of authorized or asserted use should be excluded from further consideration as they would not offer enough water to be viable offset projects. Water rights with more irrigated acreage identified receive preference.
- **Confidence of Irrigated Acreage-** Water rights with places of use seeing higher and more frequent (2013 and 2017) irrigation confidence receive preference.
- **Priority Date-** Water rights with more senior priority dates receive preference.
- **Distance Upstream-** Water rights higher in the sub-basin receive preference.
- **Purpose of Use-** Irrigation water rights receive preference due to ability to demonstrate beneficial use.
- **Qa/Qi Annual and Instantaneous Quantity on Water Right-** Water rights with greater quantities receive preference.¹

¹ Quantities asserted in water right documents may overestimate water need or provide no quantities at all. The actual quantities can only be determined in an adjudication, a formal process to evaluate all water rights within a specific watershed and provide legal scrutiny and determination of those water rights.