

## Background

On August 12, 2019 Ecology received a complaint that Yakima County Parcel No. 15150313404, located at 1571 Nile Road, Naches, Washington was irrigating without a water right. Ecology staff confirmed the information by observation from the road. Ecology enforcement staff then contacted Ryan Clark by telephone on August 29, 2019. A follow up letter was sent by Ecology in accordance with the Revised Code of Washington (RCW) 90.03.605. The applicant, Ryan Clark, was offered multiple options on how to become compliant with RCW 90.03. Ryan Clark contacted Wes Gibbons to transfer a portion, .08 cfs and 3 ac-ft, of Gibbons' water right to his property. Wes Gibbons irrigates 9.87 acres under with S4-83449-J, receiving water from the Nile Ditch Association's ditch, with a priority date of August 26, 1889.

On May 5, 2020, Ryan Clark submitted an application to temporarily add a Point of Diversion (POD) and temporarily add to the existing place of use (POU) under Certificate Number S4-83449-J.

## The Existing Place of Use

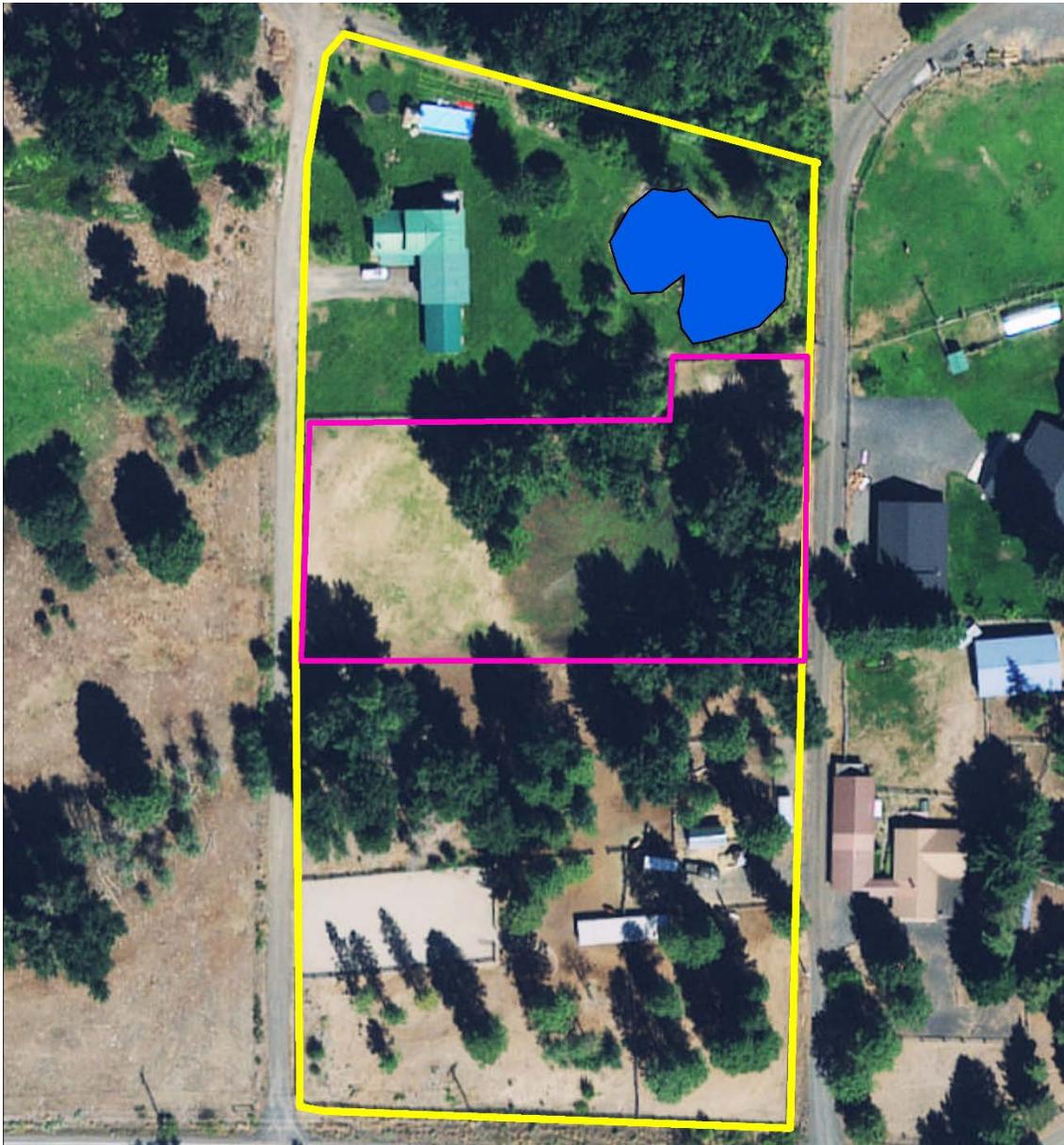
The existing place of use, Yakima Parcel No., 15162843401, is a property of 10.85 acres with 9.87 irrigated acres authorized under S4-83449-J at 39.48 ac-ft/yr. The existing place of use has been heavily irrigated and has been utilized for intensive crop production as evidenced by a 2019 aerial image (see aerial image below).



*Figure 1. 2019 aerial image of Yakima County Parcel No., 15162843401, irrigated acres outlined in bright purple.*

## Proposed Place of Use

The proposed place of use, Yakima County Parcel No., 15150313404, is a 5-acre parcel with approximately 2.98 acres utilized as a horse corral. Of the 2.98-acre horse corral, approximately 1.08 acres will be irrigated to maintain a sparse pasture area in the horse corral (see aerial image below). The remaining 1.9 acres of the horse corral will need periodic pre-ride dust control (this use is included in the proposed 3 acre-feet of total use). The aerial image is from 2019, while the applicant was illegally irrigating his property, so this likely shows the extent of desired level of irrigation.



*Figure 2. 2019 Aerial Image of Yakima County Parcel No., 15150313404, outlined in yellow, proposed source in blue, and irrigated portion outlined in bright pink.*

## Water Duty Analysis

According to the Washington Irrigation Guide (WAIG), one acre of pasture/turf in the Yakima area requires 37.28-acre inches. When 37.28 is divided by 12 (feet in 37.28 acre inches) this equals 3.106 ac-ft. The applicant utilizes sprinklers, Ecology's Guide 1210 gives an efficiency of 75%, therefore, 4.142 acre feet per acre is required to grow pasture/ turf.

## Consumptive Use Analysis

Utilizing the water duty analysis above and knowing that the existing place of use utilizes wheelline irrigation (Guide 1210 indicates a consumptive rate of 85%). 4.142 acre feet per acre multiplied by 0.85 results in a consumptive use of 3.52 acre feet per acre at the existing place of use. Therefore, the granting of the seasonal change would result in a net benefit of 0.52 acre feet to the Naches River.

## Conclusion

The applicant is limited to 3 acre-feet of total water use. The applicant will be irrigating 1 acre of grass and limited use for dust control from the time that Ecology issues the authorization until October 15 2020 (not a full irrigation season). The applicant is mitigating this 3 acre-feet by fallowing 1 acre at Wes Gibbons's property. 1 acre fallowed at Wes Gibbons's property saves 3.52 acre-feet of consumptive use. Thereby, creating a *net benefit of 0.52 acre-feet* in the Naches River.

Furthermore, this seasonal change will have a metering provision enforced by CRO metering Coordinator, Nigel Kingsbury, and follow up by CRO Water Master, Mark Dunbar.

Therefore, Ecology recommends approval of this seasonal change application based on the net benefit of 0.52 acre-feet for the Naches River (TWSA Positive Impact) and the level of continued follow up Ecology will be maintaining with this particular applicant.