

Selah-Moxee Irrigation District

Comment letter is attached as an uploaded file.

Selah-Moxee Irrigation District

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November 13, 2020

To: Department of Ecology

Re: Mid-Yakima River Basin Bacteria TMDL

On behalf of the Selah-Moxee Irrigation District ("SMID"), we submit the following comments to the draft Mid-Yakima River Basin Bacteria TMDL Report ("report"). SMID also requests that it be kept notified of any actions or developments regarding the report and the TMDL.

General Comments:

- The report is of questionable accuracy because of the infrequency of testing and the outdated results. For example, the cited USGS samples were collected in the Moxee Drain in 1988, 1999, and 2000. This is now 20-year-old data which would not identify the numerous changes that have occurred in this area.
- Agriculture practices have changed as many water users have changed irrigation practices, including more reliance on sprinkler and drip irrigation. Irrigation water providers such as Selah-Moxee Irrigation District and the Roza Irrigation District in the Moxee basin, along with the farmer and orchardist water users have piped many formerly open ditches. These changes have substantially reduced the amounts of surface return flows that enter the drains and ditches identified in the report.
- The report should recognize that many of the identified "streams" are in reality irrigation canals, ditches, or drainage ditches delivering irrigation water or draining irrigation return flows (i.e., Moxee Drain, Hubbard Canal, Roza Canal). These irrigation facilities are primarily man-made structures whose purpose is to deliver or drain irrigation flows.

- The irrigation and drainage facilities are not intended to be used for “recreational” purposes. The public is strongly discouraged from entering or using these waters for safety reasons. The facilities will never be “fishable” or “swimmable” because they are not designed to be used for those purposes and the safety protocols already in place to prevent such use. It is questionable whether any of these irrigation facilities should be identified on the 303(d) listing as they will never be used for recreational purposes.
- The report also fails to recognize or adequately characterize the source of these waters in the Moxee basin. The Roza Canal, Moxee Canal, and Hubbard Canal all receive their water through irrigation facilities that divert out of the Yakima River. The waters that end up in the Moxee drain, the Drainage Irrigation District facilities, and other drains, are comprised of irrigation return flows. The Moxee basin does not have any natural flows of streams or creeks. All waters are return flows derived from the productive irrigated lands in the Moxee basin.
- There is no “Moxee Creek.” The waters in this drainage canal incorrectly identified as “Moxee Creek” again all come from irrigation return flows. This is also evidenced by the fact there is no measurements of waters or “streams” above the irrigated farmlands. Any ephemeral streams identified in the Report come from the snow melt and the occasional storm event. As evidenced by the small amount of rainfall for the Moxee basin, these drains will be dry for most, if not all of the year, but for irrigation.

Technical Comments:

- Page X, Introduction states “In 2018, Ecology adopted new State WQS for bacterial indicators to transition from FCB to enterococci bacteria (*E. coli*) requirements by December 31, 2020 (pub number 18-10-029).
Replace “enterococci” with “*Escherichia coli*” for consistency with Ecology Publication No. 18-10-029 for freshwater, primary contact uses.
- Page 26 states “The sub-basin’s average annual precipitation is 8.3 inches, ...” However, Figure 7 shows an average annual precipitation of 5 inches within the Moxee Drain sub-basin.
Update Figure 7 with correct value (rounded to 8 inches).
- Page 57 states “A K-S analysis found significantly greater ($K-S = 3.08$, $p < 0.001$) FCB pollution during the irrigation season. During the irrigation season, eleven of the twelve (91.7%) sites actually sampled had FCB concentrations in excess of State FCB criteria; whereas, only five of the eight (62.5%) sites actually sampled during the non-irrigation season exceeded those same criteria.”
For clarification, recommend adding the following after State FCB criteria “(exceedance of GMV and/or STV criteria)”.
- Page 58 states “The excessive FCB pollution at 37-FM-10 (Figure 27) throughout the entire year does not support its proposed use as representative of background conditions. Note that there

is substantial agricultural development including a large CAFO (dairy) upstream (east) of 37-FM-10 along Moxee Drain streambed. Another sampling site should be located further upstream for representing background conditions.”

WAC 173-201A-020 defines "background" as the “biological, chemical, and physical conditions of a water body, outside the area of influence of the discharge under consideration.”

Was any effort made by Ecology staff to reconcile this issue upon review of the FCB data collected in 2005 and before commencing additional monitoring in the Moxee Drain sub-basin during 2010? It is noted that no FCB data was collected in the Moxee Drain sub-basin as part of the 2014 survey.

- Page 60 states “The excessive FCB pollution at 37-FM-5.5 (Figure 28) during the irrigation season does not support its proposed use as representative of background conditions. Upstream of site 37-FM-5.5, DID #11 extends north through the industrial section of the City of Moxee and continues through agricultural fields. Another sampling site should be located further upstream for representing background conditions.”

Was any effort made by Ecology staff to reconcile this issue upon review of the FCB data collected in 2005 and before commencing additional monitoring in the Moxee Drain sub-basin during 2010? Perhaps outfall from the Roza Canal to Moxee Drain (Site ID 37-IS-5) might be a more representative “background” site given the seasonal FCB statistics for the 2005 season provided in Table 36.

- Page 77 states “CME completed OSSS upgrades in October 2009, according to the YHD. Additional sampling should be conducted throughout the duration of the Mid-Yakima River Basin Bacteria TMDL in order to determine if the mobile home park continues to be a significant source of FCB pollution.”

Given that OSSS upgrades were completed in October 2009, and Ecology conducted FCB sampling in the Moxee Drain sub-basin during the 2010 season, was there a noticeable (statistically significant) decrease in FCB concentrations downstream of CME at Bell Road (Site ID 37-FM-5 / 37-IS-1)? If so, recommend providing a summary of the FCB data/findings in this section and possibly updating applicable percent reduction targets.

- Page 81, Wasteload Allocations.

The document should recognize that the City of Moxee owns and operates a MS4 but is currently not permitted under the 2019-24 Eastern Washington Phase II Municipal Stormwater Permit and will likely be permitted during the next 5-year permit term. The City of Moxee likely discharges a portion of its stormwater into surface waters such as DID #11. Future work should consider outfall monitoring of FCB/E Coli concentrations from the City’s MS4 to quantify bacteria concentrations and seasonal variations, as well as the City’s proportional share of the WLA/LA in the Moxee Drain sub-basin.

- Page 86 states “Table 47 presents the seasonal GMV and STV LAs for the three downstream sampling sites within the Moxee Drain sub-basin. They are: Moxee Drain (37-FM-1), DID #11 (37-FM-3.6), and Hubbard Canal (37-FM-4).”

Please clarify why the Hubbard Canal (Site ID 37-FM-4 / 37-IS-2) is being assigned seasonal load allocations as part of this TMDL. It is noted that the Hubbard Canal was sampled only at Bell Road during the 2005 season with limited data used to develop seasonal FCB statistics.

- Page 103-104 states “The success of the TMDL project will be assessed at each biennial review using monitoring data collected from, at a minimum, the same sites that were initially sampled by Ecology as identified in the “Sampling Design” section of this WQIR. The involved entities may monitor additional sites.”

Consider reducing list of monitoring sites in Moxee Drain sub-basin to Moxee Drain (37-FM-1) and DID #11 (37-FM-3.6), since LAs have been assigned for these downstream sites per Table 47.

- Page 104 states “Long-term monitoring will be needed even after all sites are found to be in compliance with State WQS. The monitoring will be conducted bi-annually (once every two years) at all of the sampling sites that have been given WLAs and LAs by the WQIR.”

Consider reducing list of long-term monitoring sites in Moxee Drain sub-basin to Moxee Drain (37-FM-1) and DID #11 (37-FM-3.6) since LAs have been assigned for these downstream sites per Table 47.

SMID appreciates your consideration of the above comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Nathan Draper', with a stylized flourish at the end.

Nathan Draper, Manager

Selah-Moxee Irrigation District