

Mid-Yakima River Basin Bacteria TMDL

WSDA Dairy Nutrient Management Program Comments

November 10, 2020

The Washington State Department of Agriculture's Dairy Nutrient Management Program (DNMP) recognizes the extensive work Ecology has done to prepare the Mid-Yakima River Basin TMDL. Because there is only one licensed dairy in this TMDL boundary (in the Moxee Drain sub-basin), our comments are focused on TMDL observations and recommendations that may affect that dairy.

In response to "Point Sources" discussed on p. 12

- **Comment:** The draft states that a potential source of bacteria pollution in the upper dry reach of the Moxee Drain sub-basin is a large dairy, presently categorized as a Concentrated Animal Feeding Operation (CAFO). However the dairy does not have a CAFO permit issued by Ecology. Consider clarifying by stating that the dairy is classified as 'large', with 700 or more mature animals concentrated in one area.

In response to 'Discussion and Conclusions- Escherichia coli pollution' p. 73

- **Comment:** The draft states that the principal cause of mastitis in dairy cows is from E. coli contamination by coming into contact with their own manure; this doesn't have any relevance to the TMDL.

In response to "BMPs for agricultural operations to achieve compliance" p. 97 of document

- From the draft, "Persons engaged in ag operations who implement and maintain the BMPs will be presumed to be in compliance with the Mid-Yakima River TMDL and state water pollution control act".

Question: WSDA has regulatory authority over non-permitted, licensed dairies through Chapter 90.64 RCW. How will Ecology determine if dairies are implementing and maintaining the BMPs and their overall compliance to the TMDL?

In response to Agricultural BMPs for preventing bacteria pollution, Table 51, p.98-100.

- Animal Confinement and Feeding Areas (p.98): “All animal confinement areas should be hardened (stabilized) with compacted gravel or concrete, or similar material to allow for effective manure collection and to prevent erosion.”
Comment: Animal holding areas are typically on hardened surfaces. Compacted gravel or concrete are not a requirement by Chapter 90.64 RCW. Current research and consensus does not suggest leaching beyond compacted animal areas. If water runs off these areas, dairies are required to contain and store, or treat runoff to prevent a discharge or impairment to surface waters of the state.
- Dry Manure Storage (p.99): “Design manure storage facilities...generated by the operation, be covered, and installed on an impermeable surface”.
Comment: Covering dry manure storage is not required by Chapter 90.64 RCW. If water runs off these areas, dairies are required to contain and store, or treat runoff to prevent a discharge or impairment to surface waters of the state.
- Liquid Manure Management (p.100): “No manure application is allowed during the winter (Nov 1- Feb 1)”.
Comment: DNMP does not advise applying manure to frozen, snow covered, or saturated soils. However under Chapter 90.64 RCW, non-permitted dairies can apply manure any time of the year if they show an agronomic need to apply manure, maintain application records, and prevent a discharge or impairment to surface waters of the state.
- Liquid Manure Management (p.99): “Manure storage lagoons should, at minimum, consist of a single 60-mil HDPE geomembrane liner...”.
Comment: Geomembrane liners are not a current state requirement for licensed dairy or permitted CAFO facilities in Washington.

- Nutrient (manure) Application (p.100): “Nutrients should not be applied between Nov 1 and February 1”.
Comment: As previously stated, DNMP does not advise applying manure to frozen, snow covered, or saturated soils. However under Chapter 90.64 RCW, non-permitted dairies can apply manure any time of the year if they show an agronomic need to apply manure, maintain application records, and prevent a discharge or impairment to surface waters of the state. Restricting manure applications solely by calendar date may not be effective at reducing bacterial loading.

Thank you for the opportunity to submit our questions and comments. We look forward to being an active participant in the TMDL success.

-WSDA