September 26, 2025

James Kardouni

Water Quality Program, Environmental Assessment Program

Washington Department of Ecology

Olympia, WA 98504-7600

RE: Drayton TMDL Publication 25-10-060, August 2025

Mr. Kardouni,

Thank you for the opportunity to review and comment on the draft Drayton Harbor Fecal Bacteria TMDL Technical Study and Water Quality Improvement Plan (Publication 25-10-060). Ensuring clean water enters Drayton Harbor is critical to protecting the interests of commercial shellfish farmers, Tribal and recreational harvesters, the health of shellfish users, and recreators alike. The attached comments provide some general feedback along with specific comments and suggested corrections to the document in support of a robust and equitable water quality improvement plan.

In summary, WSDA’s comments center around whether the implementation measures listed in the document align with the level of improvement needed to meet the large reductions identified in the TMDL. Aside from the extensive list of recommendations for livestock agriculture, the implementation section seems to lack specific, measurable and achievable metrics relating to sources of fecal bacteria pollutants. Instead, it largely appears to rest on continuing the existing Whatcom Clean Water Program that has already been working on this issue for a decade to get to the current status of bacteria quality in the watershed.

Watershed clean-up requires a holistic approach. Although our legal authority is limited to the three licensed dairies and their land application fields, or about three percent of the watershed’s land area, we look forward to working with Ecology and partners on basin-wide water quality improvements to ensure the protection of downstream users.

If the Nutrient Management Technical Services program, or WSDA generally, can be of further assistance, please do not hesitate to contact me or our regional inspector, Amanda Hendrix.

Sincerely,

A picture containing text

AI-generated content may be incorrect.

Michael Isensee

Operations and Compliance Supervisor

360-961-7412

**Implementation Plan - Agriculture**

The level of detail and thought that went into the agriculture section, pages 81-88, is appreciated. The document provides dozens of recommended practices for livestock operators.

Most notable of the recommendations is a recommendation to move farming practices away from all streams, preferable a distance of 215 feet on either side of a waterway, manage the riparian habitat in perpetuity, and forego the economic return that the purchase price of the property was based upon. While some landowners may be willing to sell the state the landward property adjoining waterways, those who could afford to revert 3 acres out of every 40 into a nonagricultural use for public benefit.[[1]](#footnote-2) While losing productive acreage to a use that provides no economic value to the farm would be the most substantial impact, reverting productive farmland to non-agricultural use would also increase the operating costs of managing the land with impacts including shading of remaining acreage or debris from falling vegetation impacting cropland and infrastructure.

It appears that most recommendations in the *Agriculture* chapter apply to sites with livestock. In the construction of the chapter, it is unclear if the conversion of farmland to riparian forests applies solely to livestock operations and, if so, if it applies only to a certain size and scale of operation or is intended to apply to any site that keeps livestock regardless of zoning or regardless of the size and scale of the farm. Clarifying the circumstances where these recommendations are to apply would add clarity to the document.

**Implementation Plan – Other Sources**

Ther remainder of the nonpoint section appears scant by comparison to the agriculture section. It is unclear how the implementation plan intends to usher in reductions of ninety percent or more without a more robust implementation plan.

For instance, the riparian forested buffers proposed for agriculture are not similarly proposed across the remaining land uses in the watershed. The benefits of such a practice to water quality would be equal, or perhaps even greater, on residential, commercial or recreational sites. Within the implementation plan, there does not appear to be recommendations for vegetative or other BMPs intended to prevent the discharge of bacteria-laden stormwater from any of the myriad nonpoint sources other than agriculture/livestock. With the documented need to reduce bacteria levels by over ninety percent in a number of areas, including areas with no livestock operations, it is unclear how the implementation plan intends to do this without extending the types of recommendations being made for livestock operations.

**WLA**

For NPDES permits that have waste load allocations (WLA) well below water quality criteria (e.g. for MS4 permits, Table 9, page 50, with ranges between 4-57 CFU/100mL), what is the actual obligation when samples indicate levels above these WLAs? There are actions listed on pages 49 and 51 specific to stormwater from government lands including right of ways (ROW), but it is not clear if or how these result in reduced fecal bacteria inputs when many samples are likely to result in concentrations above the WLA.

For individual stormwater permits, it appears the permittee may need to sample for fecal bacteria when requested (“When a receiving water body does not meet the WQS, stormwater samples shall be collected at the nearby permitted facility upon request…” p. 54). What is the system for such a request to be made? Has Ecology created internal processes to use Whatcom County data to alert permit managers to elevated bacteria in receiving waters so that field inspectors make such a request and use the resulting data to find and correct bacterial pollution sources? Are permitted facility inspectors equipped to identify and work with permittees to correct the types of diffuse bacteria sources that are going to generate bacteria levels of very low levels of fecal bacteria?

With each gram of dog waste containing 23 million fecal coliform bacteria and with many birds transmitting fecal bacteria in their droppings onto roofs and impervious surfaces, the WLA fecal counts seem essentially impossible to attain. Simultaneously, it is unclear if there is a reasonable expectation that permittees will actually be required to sample for fecal bacteria during the types of flushing events at their facilities that may in fact generate large loads into the watershed during critical periods.

City and County MS4 permits are required to maintain pet waste stations at permitee owned or operated lands with domestic animal or horse use (p. 49). Does this include the abundant ROW bisecting the MS4 areas, or in what instances? Does “maintain” mean providing pet waste bags, an effective disposal option, and routine pickup of disposed of bags?

Is there a WLA for the Port of Bellingham’s stormwater NPDES permit? I do not see it referenced in the TMDL.

This is perhaps outside the scope of the TMDL, but the persistent presence of elevated fecal bacteria at the mouth of Drayton Harbor cannot easily be ascribed to a source within the harbor. Since the WWTP conveyance line as shown in Figure 11 coincides with this area of regularly elevated marine fecal bacteria, a concerted ongoing effort to ensure this conveyance line is fully functional and does not leak would be beneficial to all the agencies, organizations, businesses, and individuals who are attempting to locate, identify, and correct sources throughout the remainder of the watershed. Washington Department of Health Station 15 in this area has an estimated 90 percentile of 126.2 while stations closer to the mouth of the two major freshwater tributaries have values of 20.8 for Station 379 (near the mouth of California Creek) and 19.2 for Station 378 (near the mouth of Dakota Creek). The implementation plan should specifically identify actions that could address the potential sources specific to Station 15 and should include work to confirm the integrity of WWTP conveyance.

**GENERAL COMMENTS**

**Below are some errors or noted in the document.**

* Figure 1 appears to have an error in the figure description.
* On Figures 1 and subsequent, The Urban Area delineation, overlying the green hue used for the areas outside the Drayton TMDL study area, creates a challenging map to read for anyone with color blindness, as the urban areas become a color not found in the Legend and that looks essentially the same color as Marine Water found on Figure 2
* The boundary of the Drayton TMDL does not align with some sample locations, i.e. CA14C, CA14cTrib and CA14aa. What is the definitive determination about whether a property is subject to this TMDL?
* It was not clear to me what the repeated presence of the “Marine” polygons representing 303d listings throughout the document’s figures are intended to convey on the maps. I was also not clear what data they are based upon. In particular, they are confusing on the figures labeled as showing target reductions (Figures 3-6). These figures are labeled as showing the percent reduction necessary to obtain TMDL targets based upon the mathematical models used in the TMDL, but the marine polygons consistently stay the same color and have no reduction targets.

Adding clarifying language as early as Figure 1 which includes these would be helpful, particularly if it links readers to the underlying data. I may have missed it within the overall document as I did not review the appendices, but a clear explanation of the marine polygons and their delineation as well as their relationship to State Health Department commercial shellfish area monitoring data, their relationship to the freshwater assessment units, and the reductions necessary to attain a Category 1 assessment status, would help contextualize them within the document.

* Page 60 has a typo: “…where each organization that makes up the WCWP operates within their respective authority and expertise.”
* In Nonpoint Source of Pollution, page 80, “Urban and Suburban” human development is listed as potential sources. With most of the development in the watershed outside of MS4 areas being rural, this does not appear to be an accurate label. Perhaps “Residential and Commercial”?
* In Ecology’s Clean Water Guidance for Agriculture, page 87: Add a space to “By transparently sharing this information and research, landowners are empowered to take action to protect water quality, be in [ add space] compliance with state law, and avoid potential regulatory action from Ecology.
* In Dairy Operations with Nutrient Management Plans, page 87, correct “The WSDA administers this program where one ~~the~~ many components address water quality protection—see Regulatory Framework section for details.
* There is no requirement in the law to “[E]nsure[s] dairy nutrient management plans are up-to-date” (p 87) nor is there state funding provided to local Conservation Districts to do this work. Plan updates are recommended when changes occur and can be mandated if a discharge occurs and the lack of adequate planning was indicated.
* The updated heat map for “Suspected onsite sewage systems” (Figure 15, page 91) is harder to interpret that an earlier version. Inclusion of the dry-season target reductions are not clearly visible and largely blend into the heat map of OSS density. I suggest changes to the symbology and adding this feature to the legend. It also seems more accurate to label this figure “Known and suspected.”
* I do not note any recommendation for Ecology, Port, DNR or other relevant agency to conduct routine outreach to Drayton Harbor boat users that might arrive from Canada and be completely unaware of no discharge requirements. Ensuring that every vessel that enters the harbor is aware of this requirement seems like a useful action to limit human sewage disposal directly into Drayton Harbor. An even better action would be a mandate, either in state or local codes, that dye be added to blackwater tanks in all vessels that moor within the boundaries of the harbor.

1. The 3 acres is based upon a five foot wide stream along the property boundary of a square 40-acre parcel using a core zone of 80 feet plus 25 foot filter strip, not the default 215 feet recommendation. The default would remove 6.5 acres. . A stream that bisects this same parcel could remove 13 acres, or a third, of the parcel’s acreage using the default recommendation. A parcel with more than one waterway could have an even greater proportion of the site impacted and devalued as an agricultural property. [↑](#footnote-ref-2)