Tom Giese

Nitrogen loading targets are based on total nitrogen (TN) as opposed to total inorganic nitrogen (TIN), as was indicated prior. As discussed in this publication by the Water Research Foundation (https://www.waterrf.org/serve-file/SON-in-BNR.pdf), at lower effluent TN concentrations, organic nitrogen will typically make up 30 to 60% of TN. Of that amount, typically 40 to 60% is biodegradable, meaning 40 to 60% is not biodegradable in the treatment process, which could account for a significant portion of the TN. As a result, some facilities could have a very difficult time achieving a limit of 3 mg/L even though they treat TIN to the same levels as other facilities. This needs to be taken into account when setting permit limits.

Marine point source targets listed in Appendix E are based on concentrations. While this is likely appropriate for the model, actual limits should consider an annual load limit, rather than concentration limits, as was advised by those involved with the Long Island Sound and Chesapeak Bay TMDLs. Given the size of Puget Sound and residence times it is presumably the annual load (or at least seasonal load) that matters more than a specific concentration on any given day. A load limit will allow flexibility to avoid over designing for a brief one time scenario that may never occur and would have negligible impact if a concentration limit were briefly exceeded.

Please provide guidance on how those facilities needing to upgrade their facility to ensure they maintain sufficient capacity before limits are set can be assured they are incorporating the appropriate nutirent removal requirements and are not forced into another future upgrade that could have otherwise been avoided.

The plan rightly acknowledges that implementation will require substantial financial resources. It states that there are several state, federal, and even private resources. There may be several resources, but they are wholly inadequate. This is evident when looking at all the projects that applied for SRF funding for FY 2026 and did not get selected, looking at the reduced pool of money via the PWTF due to reductions in the state budget, or considering the current administrations huge cuts to infrastructure funding. As those involved in the Long Island Sounds and Chesapeake Bay TMDLs correctly pointed out, adequate funding is critical to implementation. They also recommended a staged implementation to help increase availability of resources (funding, contractors, engineers, etc.). This is advice Ecology must take to heart and may require staggering the timing of permit requirements for the marine dischargers.