

**To:** North Coast Subbasins TMDL File **Date:** August 5, 2003

**From:** Eric Nigg – Northwest Region - Water Quality Division

**Subject:** Addendum - Clarifications to North Coast Subbasins TMDL

There are several inconsistencies or mistakes in the recently issued North Coast Subbasins Total Maximum Daily Load (TMDL) and Water Quality Management Plan (WQMP) documents. These mistakes or inconsistencies have not resulted in likely violation of water quality standards, but they bear correction and clarification. The issues are as follows: a river reach is currently listed as water quality limited but was not included in the list of TMDL waterbodies; there is an unclear period of application for bacteria load allocations; and the wasteload allocation for the Fishhawk Lake Recreation Club STP was miscalculated. There is also an incorrect statement in the Water Quality Management Plan that the TMDLs apply only to waterbodies listed on the 1998 edition of the 303(d) list.

Table 1 of the document lists water bodies that are currently considered water quality limited under section 303(d) of the Federal Clean Water Act. This table was included as an attachment in the letter submitting the TMDLs to EPA for approval. Table 1 does not include the reach of the Nehalem River from river mile 0 to 3. This water body was included in the 303(d) list recently approved by EPA (the 2002 list) and was mistakenly left out of the TMDL document. River mile 0-3 is listed as water quality limited relative to shellfish harvest criteria in Oregon's bacterial standard, though recent conversations with Oregon Department of Fish and Wildlife (Matt Hunter – ODFW) indicate this beneficial use does not exist in this reach. The TMDL for Bacteria in the Nehalem Subbasin does cover this reach of the river, as well as all water bodies in the subbasin, and water quality criteria for protection of shellfish harvest will be met in this reach if allocations presented in the TMDL are met. Modeling results presented in Figure 40 of the bacteria TMDL illustrate that both criteria, the Median of 14 MPN/100 ml and the 90<sup>th</sup>-percentile of 43 MPN/100 ml, will be met downstream of river mile 16 under the modeled allocation scenarios.

The Bacteria TMDL does not clearly state that load allocations are to be enforced year around as was intended. Load allocations were developed to protect beneficial uses during runoff events, regardless of the time of year. As such it is intended that they apply throughout the year. An un-numbered table in the executive summary does state the allocations are to be applied year around, and the seasonal variation section (Section 3.2.8, p 97) states the "allocations are designed to reduce concentrations during runoff events and will be protective of the beneficial use throughout the year." However, we believe that this should have been stated explicitly in the Allocations section.

There was a mistake in the calculation of the bacterial loads and wasteload allocations for the Fishhawk Lake Recreation Club Sewage Treatment Plant discharge. The mistake was the result of applying an incorrectly calculated flow rate for the facility during the period from October through December. The correct loading rates have been calculated for the facility and are included in the following tables. The mistaken loading rates were higher than the corrected values and did not cause a violation of standards downstream in the watershed under modeled scenarios. Therefore, this change to the wasteload allocations will not have a negative impact on the ability to achieve water quality standards. Moreover, this change will not result in a change to effluent limits in the FLRC's NPDES permit since the wasteload allocation was defined based on maintaining current permit limits, and allowing for potential growth and expansion over current loading.

Finally, the Water Quality Management Plan for the TMDLs states that only those water bodies included on the 1998 edition of Oregon's 303(d) list are covered by the TMDLs (p 358). In fact, the load allocations in the TMDLs apply throughout the subbasins for which they were developed, regardless of their status as water quality limited or otherwise.



**Corrected Loading Values for the Fishhawk Lake Recreation Club, Inc. Sewage Treatment Plant. Values included in TMDL were miscalculated for one period (October through December). Entries in ~~Strikeout~~ text are values included in TMDL; Bold values are recalculated.**

**Table 26.** Reported Daily Wasteloads by season for Wastewater Treatment Plants (WWTP) and Confined Animal Feeding Operations (CAFO). CAFO loads are limited by permit requirements.

	<b>Nehalem WWTP</b>	<b>Vernonia WWTP</b>	<b>Fishhawk Lake WWTP</b>	<b>Seaside WWTP</b>	<b>Clatskanie WWTP</b>	<b>CAFOs</b>
Facility ID	61787/A	92773/A	29850/A	79929/A	16872/A	Various
Jan - Mar	1.43x10 <sup>9</sup>	6.05 x10 <sup>7</sup>	2.59 x10 <sup>7</sup>	6.77 x10 <sup>8</sup>	5.45 x10 <sup>7</sup>	0
Apr - June	1.96 x10 <sup>8</sup>	7.20 x10 <sup>6</sup>	1.01 x10 <sup>7</sup>	4.44 x10 <sup>8</sup>	3.19 x10 <sup>7</sup>	0
July - Sept	1.41 x10 <sup>8</sup>	No Discharge	5.41 x10 <sup>7</sup>	2.88 x10 <sup>8</sup>	2.66 x10 <sup>7</sup>	0
Oct – Dec.	1.73 x10 <sup>8</sup>	1.21 x10 <sup>9</sup>	<del>7.19 x10<sup>8</sup></del> <b>4.29 x10<sup>7</sup></b>	5.74 x10 <sup>8</sup>	6.23 x10 <sup>7</sup>	0

**Table 27.** Permitted Daily Wasteloads by season for Wastewater Treatment Plants (WWTP) and Confined Animal Feeding Operations (CAFO). CAFO loads are limited by permit requirements.

	<b>Nehalem WWTP</b>	<b>Vernonia WWTP</b>	<b>Fishhawk Lake WWTP</b>	<b>Seaside WWTP</b>	<b>Clatskanie WWTP</b>	<b>CAFOs</b>
Facility ID	61787/A	92773/A	29850/A	79929/A	16872/A	Various
Jan - Mar	6.44 x10 <sup>9</sup>	1.27 x10 <sup>9</sup>	8.16 x10 <sup>8</sup>	4.90 x10 <sup>9</sup>	2.01 x10 <sup>9</sup>	0
Apr - June	1.54 x10 <sup>9</sup>	9.07 x10 <sup>8</sup>	4.54 x10 <sup>8</sup>	4.63 x10 <sup>9</sup>	9.64 x10 <sup>9</sup>	0
July - Sept	2.54 x10 <sup>9</sup>	No Discharge	1.81 x10 <sup>8</sup>	5.35 x10 <sup>9</sup>	7.81 x10 <sup>8</sup>	0
Oct – Dec.	5.44 x10 <sup>9</sup>	3.81 x10 <sup>9</sup>	<del>6.08 x10<sup>9</sup></del> <b>3.629 x10<sup>8</sup></b>	8.89 x10 <sup>9</sup>	2.03 x10 <sup>9</sup>	0

**Table 28.** Wasteload Allocations for Wastewater Treatment Plants (WWTP) and Confined Animal Feeding Operations (CAFO). CAFO loads are limited by permit requirements.

<b>Facility ID</b>	<b>Legal Name (Common Name)</b>	<b>River Mile</b>	<b>Permit Limit MPN/100 ml <i>E. coli</i></b>	<b>Allocated Wet Weather Load Fecal Coiform Counts/day</b>	<b>Allocated Wet Weather Load – Growth and Expansion</b>	<b>Total Allocation</b>
29850/A	Fishhawk Lake Recreation Club, INC.	3.8 (66)	126	<del>6.08 x10<sup>9</sup></del> <b>8.16 x10<sup>8</sup></b>	<del>6.08 x10<sup>9</sup></del> <b>8.16 x10<sup>8</sup></b>	<del>1.22 x10<sup>10</sup></del> <b>1.63 x10<sup>9</sup></b>
61787/A	Nehalem Bay Wastewater Agency	2	126	6.44 x10 <sup>9</sup>	6.44 x10 <sup>9</sup>	1.29 x10 <sup>10</sup>
92773/A	City of Vernonia	90.3	126	3.81 x10 <sup>9</sup>	3.81 x10 <sup>9</sup>	7.62 x10 <sup>9</sup>
79929/A	City of Seaside	0.2	126	8.89 x10 <sup>9</sup>	8.89 x10 <sup>9</sup>	1.78 x10 <sup>10</sup>
16872/A	City of Clatskanie	1.1	126	9.64 x10 <sup>9</sup>	9.64 x10 <sup>9</sup>	1.93 x10 <sup>10</sup>
NA	Confined Animal Feeding Operations (CAFO)	NA	0	0	0	0

