

Tulalip Tribes

Attached you will find a word document on specific comments from the Tulalip Tribes on the draft TMDL for the Pilchuck River. Generally, the most important concerns from the Tribes perspective includes the target date for meeting requirements. We disagree with establishing a target date of 2111. Actions to improve temperature and dissolved oxygen need to be met in half that time. The target date has major implications to ESA listed species. We do not disagree with the actions suggested in the TMDL, but the effectiveness of these actions need to be more thoroughly monitored. For example, waste load monitoring to determine effectiveness appears to be under separate NPDES permits, whether improvements to monitoring these NPDES permits as it relates to this TMDL is unclear. Although improvements in temperature are unlikely going to occur from improving stormwater infrastructure, improvements in stormwater infrastructure (bringing them up to standards) needs to be a focus for various reasons that effect the outcome of this TMDL especially for the Little Pilchuck and sub-basins where cities are located. The worst case scenario modeled is not climate change based, as far as we can tell, and may not represent a worst case scenario and how the actions under this TMDL will ameliorate these changes.

Water Quality Improvement Report and Implementation Plan - DRAFT (October 2020)

Page	Paragraph	Comment
vii		Table 1. Can the river mile be added to the reach code or add an additional column
x		Table 4. We observed bull trout at the old Pilchuck Dam site at roughly the Purdy Creek junction
xi	1	I do not understand this assumption, is this part of a criteria? Do you have assumptions like this for spawning or incubation? Plays down the impact.
xii	last	Chinook have been observed spawning up to Worthy Creek this year. The first time in a 100 years.
13	2	Do you want to mention Pink Salmon? A principle issue maybe adult migration which would include Pink Salmon.
13	3	Does spawning availability mean access?
15	Bullet 3	Bank improvements also improve shade or effective shade
16	Basis for targets	In the first sentence carbon load is mentioned. This is the first time I am seeing this, may need to be brought up sooner.
17	DO Section	Second paragraph - is exceeded the right term to use?
18	last	Third sentence does not make sense. The way I am reading it, are you talking about survival of emergent fry. Just remove emergent fry from sentence.
18	last	Is the information in this paragraph based on a particular reference or many references, you may want to add them?
26	1st bullet	This probably outside this TMDL, but monitoring requirements at least at a couple of designated sites need to be included in order to verify levels. This comment applies to all stormwater sections.
47	2	Is the date of 2111 new, I do not remember that date mentioned. This needs to be much sooner, especially since it is involving ESA listed species. Is this date ok with NMFS? Something like 2050 would be better.
47	2nd section	What is the remaining 20% in land distribution?
49	3rd	May want to mention microclimate in this paragraph because you bring it up later.
51	Table 24	7th bullet. Are you saying that there are thermoregulatory behaviors unique to the Pilchuck. You should have a reference. How is this restoring processes?
51	Table 24	11th bullet. What about removing direct surface withdrawals, through connections to water purveyors or source switching to deeper regional aquifers?
51	Table 24	19th bullet - does this include bringing up old public and private stormwater facilities up to current standards - hope so.
51	Table 24	20th bullet. What is a verical array?

52	1	Does NPDES fall under either of these sections? What about the Shoreline Master Program or FEMA regulations?
52	2	Does the TMDL have any teeth? If this is provided to a hearing examiner (HE) will it have more weight than the opinion of County or City staff who HE's always defer to.
53	1	Is this 2 degree level based on a study, a reference is needed to support this.
55	4	Maintaining forest access roads - it is my understanding forest road management includes trying to disconnect road drainage from stream drainage.
56	2	LID comments - I believe LID is just encouraged and is not accepted by engineers and design professionals. If it is required they may have to accept it.
56	2	Redevelopment should also be required to bring out dated stormwater infrastructure up to standards. State and local agencies should develop a process to identify and update outdated private stormwater facilities to current standards.
61	3	I do not see any SCD or NRCS references in these sections, they would help here?
64	2	Shouldn't current conditions versus targets be discussed here?
64	Table 25	I think there needs to be references with this table. Not sure where these targets came from, they are inconsistent with NMFS targets. At the size of river mentioned the pool frequency per mile should be 26 not 23.6.
68	last	Second to last sentence. What are you saying - even with the proposed actions temperatures will still exceed standards?
72	1	So how much of the buffer width does not meet this buffer width - about 70%?
73	last	Last sentence - not sure what this means. There is LWD in the reach but it is not functioning to provide pool habitat. What do gravel bars have to do with pool habitat? These appear to be simply observations of habitat availability.
74	1	First full paragraph. I think I would remove of the third sentence and say something like Observed temperatures fluctuated over the course of 24 hours, potentially effecting fish life during the day, less so at night.
75	1	Is this correct - a residual pool depth of 30 meters?
75	1	Frank considers riprap as cover, I am not sure what his basis is.
75	2	There appears to be groundwater contributions to the river above rm 19. Does the river largely lose flow from rm 19 to rm 10.
78	1	Suggest changing goals of permit to - if landowner permission allows.
78	1	Check language in these sections to make sure this does not sound like a survey crews report - I see we used frequently.
79	1	What stream mile is 12th Street?

79	1	Last sentence - I think you are referring to a location here not the whole basin.
79	2	Why a different buffer width on streams - you used 180 feet earlier?
84	Figure 17	I think the figure may be incorrect, the southwestern boundary appears in error.
85	3	Is it 371 or 381 in second sentence?
88	last	It is a little confusing in that you describe reach attributes in downstream direction. Looking at location based on a downstream direction is a standard way of describing banks?
93	Tulalip Tribes	Second paragraph - To follow from the previous paragraph I would suggest adding protection of cultural and archaeological resources here too.
103	1	What is the 85% based on - may want a reference
103	Table 30	Are these current actions by partners?
106	2	The area between the Pilchuck and Little Pilchuck (rm 9 -10) - where they run parallel maybe an area that is needed for further study. They may be sharing a shallow aquifer linking them.
108	1	First sentence on page appears out of place.
109	Table 35	Really, were there alternatives and was this the most expensive?
110	Table 35	Stormwater BMP's - Why per acre? Why not per facility? Sometimes these facilities handle both treatment and control. These numbers look way over blown.
110	Table 35	We have found EQIP estimates to be too low in this region.
117	USDA	What about their Wetland Reserve Program or Wetland Reserve Enhancement Program?
122	last	This is implementation monitoring not effectiveness monitoring
123	Monitoring elements	Might consider, salmon spawning locations and numbers. Ultimately that is a benefit you are protecting with this TMDL.
125	2	We do not agree with a 2111 target
125	2	Maybe I missed it, but other than the 2111 target are there others. Don't recall seeing interim targets or short term targets to make sure it is trending in the right direction.
127	1st bullet	tulalip is likely to be implementing restoration project as well as providing support.
127	List	What about the responsibilities the cities and county has with NPDES, permitting, permitting compliance, stormwater upgrades?
128	1	I hope the focus is just not on restoration projects.
143	last	Where does this 2 degree criteria come from?
153	3	Taking measurements only at monitoring sites, does not sound sufficient for determining effective shade.
172	Table 49	Is scenario 2 supposed to be a climate change scenario, if not why was a climate change scenario not included?
187	Table 52	Marysville?
209	1	First sentence on page mentions table 54 - is this correct?

211	Bullet 6	Is full restoration of baseflow realistic?
213	sub-Bullet 1	May want to study this between river miles 9 and 10.
258	5	When are the carbon additions from the river most problematic or beneficial in the estuary or Port Gardner. I think we need a better understanding of carbon processes throughout the year.
260	3	In light of this comment whys is the target 2111, I would think your target dates should line up with climate change target dates.
260	4	This why improvements to stormwater facilities are so critical. Maybe not from a temperature, but SRP, nitrogen and other pollutants
261	1	Also provides options for the future