

APPENDIX C

Response to Comments

The Port Townsend Special Use Permit Environmental Assessment was made available for 30-day public comment pursuant to 36 CFR 215. Five letters were received during the comment period which began on March 11, 2004, and ended on April 12, 2004. The Responsible Official has considered the comments received and has developed the following responses.

Port Gamble S'Klallam Tribe

Comment: The EA provides very little analysis of indirect and cumulative impacts on downstream aquatic resources.

Response: The Final EA (March 2007) discloses the direct, indirect, and cumulative effects of the four alternatives considered in detail (EA Chapter 4 – Environmental Impacts at 4-2 to 4-59). The effects to downstream aquatic parameters such as timing and frequency of flows, habitat quantity, fish migration, and water temperature are described. Cumulative effects are specifically noted for fisheries and water quality for each of the alternatives. Additionally a discussion of the indirect and cumulative impacts on downstream aquatic resources of implementing the preferred alternative (Modified Permit Conditions Alternative) is part of the project's Biological Assessment (May 23, 2005).

Comment: The EA fails to outline specific permit conditions.

Response: The Final EA contains a description of the conditions identified during the NEPA analysis and Section 7 ESA consultation which will be made part of the special use permits issued to the City.

Comment: State water quality criteria are regularly exceeded in the lower Big Quilcene River during the low flow months of July and August. The City's water diversion practices have an influence on this problem.

Response: The Big Quilcene River is listed on the State's 303(d) list of impaired water bodies for not meeting water quality standards for temperature. For the most part water temperature on the Big Quilcene River falls within State temperature standards during most months of the year (as measured in years 2001 and 2002). Individual daily maximum temperatures exceeded State standards in July and August, which are periods when summer chum are not in the river. Results from a flow test and stream temperature modeling indicate that flow in the Big Quilcene River has only a small influence on water temperatures in the lower river, and varying the quantity of the diversion or shutting off the diversion completely would have only a minor effect on stream temperature. (EA at 4-6, BA at B-38). The City's flow/temperature test indicated the diversion of 25 cfs had an approximate 1 degree C influence on stream temperatures. The Clean Water Act discussion in this EA disclosed that the City's water diversion practices are one of many management activities throughout the watershed that contribute cumulatively to degraded water quality. The mandatory instream flow requirements conditioned as part of permit reissuance will provide supplementary protection, mitigation, and enhancement to water quality.

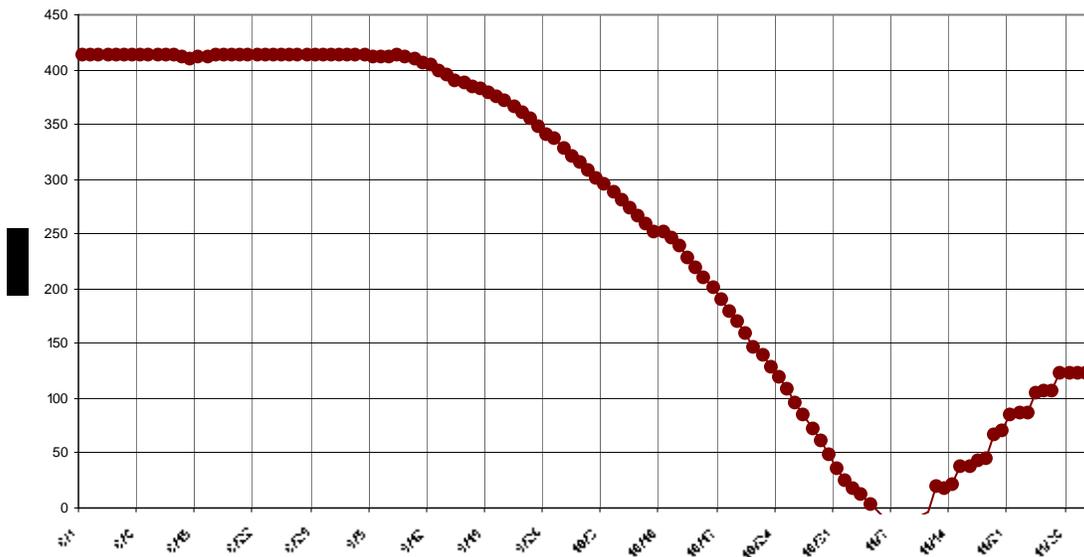
Comment: A report prepared by the City's consultant (Orsborn and Orsborn 2000) suggests that August-October Big Quilcene River flows do appear to be significantly related at the City diversion.

Response: While the report by Orsborn and Orsborn shows minimal change in stream flows between the diversion and hatchery staff gages during the low flow period, the EA explains that the worst case reduction of flow in the Big Quilcene River is approximately 20-27% and 7-28% for the Little Quilcene River between August and October. These figures are based on a diversion of 30 cfs from the Big Quilcene River while maintaining a minimum 27 cfs below the diversion and a diversion of 9.56 cfs from the Little Quilcene River, maintaining the minimum instream flow requirement of 6 cfs. The percent reduction in flows was derived from flow duration curves that included 2001 flows, a drier than normal year, so the potential reduction in flows represent an amount that is higher than would be expected during an average water year. Actual percent reduction of flows will also be less, as typical flow diversions are 18-24 cfs from the Big Quilcene River and 0-2 cfs from the Little Quilcene River during August-October.

Comment: The USFS should consider conditions that would limit water withdrawal when flows below the diversion drop below 45 cfs and daily temperatures reach 28-30 degrees C.

Response: The attached graph of Lords Lake levels from August – November 2002 demonstrates the reservoir is capable of providing approximately two months of supply while maintaining a minimum instream flow of 27 cfs in the Big Quilcene River. In a low water year the water storage system is operating at the limits of its capacity.

2002 Lords Lake Level



If the minimum instream flow requirement were set at 45 cfs this would require beginning to draw from Lords Lake at approximately 70 cfs. Based on average flows for the past six years use of stored water would begin in early August, three weeks earlier than the 27 cfs instream flow usually requires. In a below average water year such as 2001, a 45 cfs minimum instream flow would have resulted in starting to draw down Lords Lake in mid July and not having been able to begin refill the reservoir until mid November. Use of the entire reservoir capacity with no other supply would have required closing the Mill for approximately two months.

Including restriction of diversions for air temperature exceedance of 28-30° C as a permit condition would not be effective in managing temperature conditions and effects to summer chum in the lower river for the following reasons:

- Restriction of diversions at daily air temperatures of 28-30° C does not take into consideration actual water temperature. Early in the summer air temperatures may exceed 28° C, yet snowmelt may maintain stream temperatures below 16° C.
- The time lag between opening and closing valves and change in flows at the hatchery, approximately three and a half hours, would still allow temperature exceedance in the lower stream reaches as flows are adjusted for daily and hourly temperatures fluctuations.
- 2001 - 2003 summer temperature exceedance periods of 16° C ended September 5th. The earliest hatchery observation of summer chum returns is 16 August with the bulk of the return in late August and September. Spawning begins the last week of August and continues through October, which is after most stream temperature exceedances.

Comment: Additional water conservation measures such as those outlined in the recent WRIA 17 water storage alternatives analysis could be implemented.

Response: A number of significant changes have been implemented by both the City and the mill to conserve water resources. Originally operation of the water system at its 30 cfs capacity was needed to meet the need, but the average steady state municipal diversion now consumes 22 cfs. A Conservation Plan has been developed which summarizes conservation measures. These measures are also described in the May 23, 2005 BA on pages B-7 thru B-9.

During periods of low stream flow the mill implements additional conservation measures that reduce the total municipal water requirement to approximately 19 cfs, however the mill runs in a riskier mode than normal where margins of safety are reduced for equipment failure, process upsets, and off-quality production.

- From 1996 to 2003 water use for producing a ton of paper/pulp was reduced from 22 thousand gallons to 13 thousand gallons, and conservation during the low river flows further reduces use to 12 thousand gallons.
- The use of water for mill operations was 13.5 MGD in 1995 and 11.9 MGD in 2004.

Comment: Presence of summer chum in the Big Quilcene River during the critical late summer period obligates the agency to condition permit renewal to ensure no adverse affect on this threatened stock.

Response: The November 14, 2006 Biological Opinion received from the National Marine Fisheries Service contains reasonable and prudent measures and terms and conditions to avoid or minimize take of summer chum salmon. These measures and conditions will be incorporated into the City's special use permits if a decision is made to renew the permits.

Comment: The basis for the U.S. Forest Service decision on renewal of the City of Port Townsend's special use permit can be made on the basis of a relatively data-rich understanding of flow conditions, water temperatures, and threatened fish habitat in the Big Quilcene River. The Tribe's regression analysis was conceived as a starting point on the relationship between flows and water temperature in the lower river. More elaborate models could and should be constructed to determine acceptable thresholds for management actions or suitable mitigation measures to offset temperature loading from flow reduction.

Response: Construction of more elaborate models for determining acceptable thresholds for management actions or suitable mitigation measures to offset temperature loading from flow reduction proposed by some commenters would not likely provide any substantial new information on which to base a decision.

- The USGS has monitored flow continuously in the Big Quilcene and Little Quilcene Rivers since 1994 and the Washington State Department of Ecology installed telemetry stream gages in the lower stream reaches for both rivers in 2003.
- The Tribes and City have monitored temperatures in the Big and Little Quilcene Rivers during the low flow months since 2001, which has included low flow and high temperature years. The Hatchery has monitored Big Quilcene River and Penny Creek temperatures since the 1970s.
- The EA used available temperature records and stream flows to assess the diversion influence on stream temperature.

Additionally a monitoring framework as described in the NMFS Biological Opinion would be a required part of permit renewal. This required monitoring would be designed to answer questions related to streamflow-spawning habitat relationships as well as streamflow-temperature relationships.

Jamestown S'Klallam Tribe

Comment: Concern expressed about the lack of cumulative impact analysis on downstream aquatic resources from the Big Quilcene River diversion.

Response: Please see response to similar comment from the Port Gamble S'Klallam Tribe.

Comment: Further analysis is needed on the relationship between low stream flow, high water temperature and diversion practices.

Response: The 2002 City and Tribe stream temperature monitoring with the City's diversion flow test release in the Big Quilcene River provided the basis for the EA's analysis of diversion impact to stream flow and temperature. The testing was done with flows of 68-70 cfs to closely simulate the maximum percent reduction in flow and its impact to stream temperatures. The study was also conducted during a warmer than average period and when stream temperatures were peaking for the year. It would be expected that diversion variations with average or below average air temperatures would have a lesser effect on stream temperature.

Additional study was completed in December 2004 using a stream temperature model. Different streamflow scenarios were modeled. Results from this study and the 2002 test support the conclusion that flow in the Big Quilcene has only a small influence on water temperatures in the lower river (BA B-38).

Additionally a monitoring framework as described in the NMFS Biological Opinion would be a required part of permit renewal. This required monitoring would be designed to answer questions related to streamflow-temperature relationships.

Comment: Permit conditions should be based on temperature and flow dependent thresholds coupled with additional water conservation measures.

Response: The Big Quilcene special use permit will be conditioned by the requirement to maintain a minimum instream flow of 27 cfs below the diversion dam when the natural flow above the diversion exceeds 27 cfs. The comment to permit conditions based on temperature and flow dependent thresholds is addressed in a similar comment received from the Port Gamble S'Klallam Tribe. The water conservation measures implemented by the City and mill are also described in a response to a similar comment from the Port Gamble S'Klallam Tribe.

Olympic Forest Coalition

Comment: The Forest Service must ensure that a reissuing of permit does not adversely affect the marginal situation (aquatic health in Big Quilcene and Little Quilcene) already present. It should improve the status quo.

Response: The preferred alternative (Modified Permit Conditions Alternative) contains a permit condition that the 27 cfs instream flow requirement be made mandatory which is a change from the current situation where this flow requirement is voluntary. Making the instream flow requirement mandatory would be an improvement over existing baseline conditions.

Comment: The Forest Service must place operationally defined conditions on the permit renewal.

Response: Permit conditions associated with the preferred alternative are described in the final EA. (EA at 2-3)

Comment: OFCO urges the Forest Service to implement permit conditions that limit water withdrawal when flows downstream of the diversion fall below 45 cfs, and when daily air temperatures reach 28-30 C.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe.

Comment: Additional water conservation measures should be put in place.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe.

Skokomish Tribe

Comment: The EA does not adequately describe or analyze likely environmental impacts relating to reduced flows below the diversion facility, particularly the relationship between low flows and increased water temperature.

Response: Please see the response to a similar comment from the Jamestown S'Klallam Tribe.

Comment: State water quality temperature standards are routinely exceeded during July and August in the lower anadromous reach of the Big Quilcene River.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe.

Comment: For the USFS to provide the City of Port Townsend a renewal of their special use permit, additional conditions and mitigation measures should be imposed.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe.

Comment: The EA lacks sufficient detail to adequately describe the indirect and cumulative impacts of the proposal, a more thorough analysis should be made in the form of an Environmental Impact Statement.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe. Additionally an EIS is not necessary as the responsible official has determined, based on evidence and analysis in the EA, that the proposed action and alternatives will not have significant effects on the environment.

Comment: The City of Port Townsend should assess and implement more water saving measures for the city and the mill, some of which are identified in the recent WRIA 17 planning document.

Response: Please see the response to a similar comment from the Port Gamble S'Klallam Tribe.

Comment: A decadal review/amendment process of the special use permit allowing interim analysis/amendments of permit conditions should be imposed.

Response: The monitoring framework required and described in the Biological Opinion for this project provides for conducting monitoring activities for a five year period after permit reissuance, with an interim assessment of impacts to Hood Canal summer chum to be conducted at the end of the five year monitoring period. As the monitoring information becomes available it will be provided to NMFS, and will be collaboratively analyzed and interpreted by the Forest, City, and NMFS.

Donald Winningham

Comment: Inaccurate statement that the diversion of water from the Big and Little Quilcene Rivers represents 100% of the total water supply and demand for the City of Port Townsend.

Response: The figure of "100% of total water supply" relates to the water the City of Port Townsend provides to its customers and the fact the City does not possess any other water resources to serve its customers. The few private wells within the City's service area are mostly used for irrigation. The spring that provided the City's initial water supply was abandoned, as was the City's Snow Creek diversion, and the City did not seek water claims on these sources. While the Tri-Area was supplied with water from the Quilcene Rivers in the past, they have been served with ground water from the Chimacum valley since 1997.

Port Townsend Paper Company is the major water user of the City's surface water diversions, however with a current residential population of approximately 8500 and projected population of over 25,000, the municipal water supply is a significant resource for the community's drinking water. Non-industrial consumption now varies seasonally from approximately 5-13% of overall water use and at ultimate build out in the urban growth area it is estimated municipal water consumption will be over 50%.

Most small water systems in the area, such as the community of Poulsbo, obtain their water from groundwater sources. These communities do not have industries requiring large volumes of water such as a paper mill. Estimated ground water recharge in the Quimper peninsula is 8,980 af/yr. This equates to total ground water availability for the whole Quimper peninsula of approximately 8 million gallons per day, which is not adequate to provide for the City and mill's current consumption.

Comment: Emergency measures to safeguard against low flow rates should be an obligatory part of the permit language.

Response: The permit will contain a condition requiring a minimum instream flow of 27 cfs. While streamflows may drop below 27 cfs occasionally due to unintentional measurement error or rapid fluctuations in streamflows, these instances would have a magnitude of 2 cfs or less and a duration of less than 24 hours (BA at B-43).

Comment: Can we be absolutely sure that the monitoring of the flow rates is dependable and foolproof?

Response: Flow rate monitoring is based on U.S. Geological Survey (USGS) staff gages on both the Big and Little Quilcene Rivers. Through a contractual agreement with the City, the mill maintains and monitors the operation and condition of the diversion system, providing coverage seven days a week.

Comment: Why shouldn't a company such as Port Townsend Paper mitigate the loss or damage associated with the diversion action?

Response: As described in the BA (B-8 and B-9) the mill does mitigate potential adverse effects of the diversion by past and ongoing implementation of conversation measures.

Comment: Have the City of Port Townsend formally indemnify the diversion activities against damage resulting from a failure of their action or equipment.

Response: An indemnity clause (standard to most special use permits) will be included as part of the special use permits issued to the City.