

Skagit Reservation Accounting Report:
April 14, 2001- December 31, 2007

In consultation with local governments and tribes, Ecology developed an amendment to the Skagit Instream Flow Rule, WAC 173-503, which was adopted May 2006. The rule amendment established reservations of water for specific out-of-stream uses that are not subject to instream flows. The rule created three reservations of limited water supplies for different purposes of use:

- Domestic, municipal, and commercial/industrial uses. (9,370,208 gallons of water per day)
- Agricultural irrigation uses (3,564 acre feet of water per year)
- Stock water uses (324,000 gallons of water per day).

Applicability of the Water Reservations

This report summarizes water uses from April 14, 2001 – December 31, 2007 utilizing the reservations. The reservations apply back to April 14, 2001 in order to provide uninterrupted water supplies for water users that established their water use after the original Skagit Instream Flow Rule (WAC 173-503) was adopted, on April 14, 2001. Under the original rule, all water uses established after this date were subject to regulation when the senior instream flows were not being met. The rule amendment adopted by Ecology allows wells developed after April 14, 2001 a legally secure water supply by including their uses under the reservation.

Domestic, Municipal and Commercial Reservation Use

Estimating Method- Debits

Domestic, municipal and commercial reservation uses were estimated by reviewing a number of different sources:

- Building permits and land division decisions made in Skagit and Snohomish Counties
- New water right permits
- Water well log reports
- Public Water System Approvals

These sources were reviewed to determine:

- If the water use was established after April 14, 2001 and qualifies as a deduction to the reservation.
- The quantity of water to deduct from the reservation.

Skagit County provided its estimate of building permits and land division decisions that rely upon permit-exempt wells for the water source. Snohomish County provided information on building permits that using permit-exempt wells for the Fisher-Carpenter Creek basin. Ecology also reviewed well log records for new wells drilled in WRIA 3 and 4. Other information sources include local and state Health Department records relating to new public water systems developed in the sub-basin management units. Ecology reviewed agency records of any new

water right decisions made by Ecology that should be deducted from the reservation quantities. For the quantity of water to deduct for water uses, the default water use figures in WAC 173-503 were used. These figures are 350 gallons per day per residential water use connection and 5,000 gallons per day for commercial uses was used to calculate water quantity. In future years, metering or other measuring data will be used and may adjust the water use figures.

All of the information on water use provided by these parties was reviewed, and cross-referenced, if possible. For instance, Ecology compared permit counts provided by the counties with well log reports, to attempt to assess the water use estimates.

No new water rights were issued by the Department of Ecology in 2007 in the Skagit basin.

Please see the appendix for more details on the reservation use accounting.

Estimating Method-Credits

The Skagit River instream flow rule allows for mitigation plans to be developed to offset the impact of a withdrawal on stream flows, subject to Ecology’s approval. The rule also allows for credits to the reservations from septic return flow at 50% of the water use. No mitigation plans were developed in 2007. All reservation uses were evaluated to determine if the septic recharge credit applies. Additionally, any septic recharge resulting from water imported into a tributary sub-basin management that could be verified was accepted as a recharge credit. For instance, Ecology accepted septic recharge credit for new Skagit PUD water connections in the tributary sub-basins, as this represents a net gain in water to the basin. The following table summarizes the estimated imported water credit. For additional information on how the credit was calculated, please see Skagit County’s Permit Counting Methodology for more details.

Sub-basin management unit	Reservation Quantity Max. Average Consumptive Daily Use (gpd)	Reservation Quantity Used (gpd)	Return Flow Reservation Credit (gpd)	PUD Return Flow Reservation Credit (gpd)	Reservation Quantity Remaining (gpd)
Carpenter-Fisher	11,633	28,700	14,350	9,450 (54 conn)	6,733
Hansen Creek	38,130	7,000	3,500	700 (4 conn)	35,330
Nookachamps Mainstem	12,279	16,100	8,050	12,950 (74 conn)	12,279

Imported water credit calculated by multiplying the number of new connections by 175 gallons per day. No sewer systems exist in Carpenter-Fisher and Hansen Creek basins. For the Nookachamps basin the number of new PUD connections (302 connections) was subtracted from the number of public sewer connections (228) to determine imported water providing return recharge flow.

Skagit River Basin Water Reservation Use- Residential & Commercial Use

Sub-basin management unit	Reservation Quantity Max. Average Consumptive Daily Use (gpd)	Reservation Quantity Used (gpd)	Reservation Credit (gpd)	Reservation Quantity Remaining (gpd)
Alder Creek	81,430	350	175	81,255
Anderson / Parker /Sorenson	20,034	1,050	525	19,509
Careys	11,633	0	0	11,633
Carpenter/Fisher	11,633	28,700	23,800 (9,450) ¹	6,733
Childs/Tank	18,096	7,450	1,225	11,871
Coal	18,742	2,100	1,050	17,692
Cumberland	25,851	0	0	25,851
Day	131,839	1,050	525	131,314
Gilligan	25,851	0	0	25,851
Grandy	147,350	11,200	5,600	141,750
Hansen	38,130	7,000	4,200(700)	35,330
Jones	67,212	1,400	700	66,512
Loretta	11,633	700	350	11,283
Mansser	15,511	350	175	15,336
Morgan	13,572	700	350	13,222
Muddy	28,436	1050	525	27,911
Nookachamps - East Fork	14,218	2,800	1,400	12,818
Nookachamps - Mainstem	12,279	16,100	21,000 (12,950)	12,279
O'Toole	23,266	0	0	23,266
Red Cabin	42,653	350	175	42,478
Salmon/Stevens watershed	5,170	0	0	5,170
Wiseman	18,095	1,750	875	17,220
Skagit-Lower	5,254,103	16,800	8,400	5,245,703
Skagit-Middle	1,394,655	14,450	4,725	1,384,930

¹ *Italicized figures represent imported water credit, which is included in the Reservation Credit total.*

Sub-basin management unit	Reservation Quantity Max. Average Consumptive Daily Use (gpd)	Reservation Quantity Used (gpd)	Reservation Credit (gpd)	Reservation Quantity Remaining (gpd)
<i>Skagit-Upper*</i>	1,938,816			
Barr Creek	25,851	350	175	25,676
Corkindale Creek	25,851	1,050	525	25,326
Everett Creek	25,851	1,750	875	24,976
Gravel Creek	25,851	350	175	25,676
Olson Creek	25,851	350	175	25,676
Prairie Creek	25,851	350	175	25,676
Sutter Creek	25,851	1,050	525	25,326
Upper Skagit-mainstem		56,750	18,375	
Upper Skagit-Total	1,938,816	62,000	21,000	1,897,816

Agricultural Irrigation Water Reservation Use

No water rights for agricultural irrigation were issued in 2007. Consequently, the available amount is 3,564 acre feet of water.

Livestock Water Reservation Use

No changes in livestock water reservation use could be determined. Ecology will update estimates of livestock water reservation use when the next Census of Agriculture is completed. For information on the permit calculation methodology, please see the 2006 report.

Appendices

Appendix A- Skagit County Permit Counting Spreadsheet

Appendix B- Snohomish County Permit Counting Spreadsheet

Appendix C- Skagit County Description of Water Use Estimating Process (2006)

Appendix D- Livestock Water Use Spreadsheet (2006)