

Estimate for Completing Watershed Characterizations for Western and Eastern Washington

June 17, 2008

This is an initial cost estimate for completing watershed characterizations using the methods outlined in Ecology's guidance document (publication 05-06-027) and wildlife characterization developed by WDFW. Estimates are based on conducting characterization for three watershed processes by agency staff.

Table I assumes that a characterization will be completed at the broad or county scale and will also provide the data and analysis necessary to conduct characterization at the mid scale (e.g. cities). For each mid scale characterization of processes it is estimated that another \$10,000 will be required.

Table 2 provides an inventory of characterizations for Western Washington, including a prioritization of counties and cities.

Map 1 shows where characterizations have been completed statewide.

Table 1 - Estimated Cost for Characterizing a Watershed	
Wetland Mitigation:	
<i>Water Flow Processes</i> ¹	\$60,000
<i>Nutrient Processes</i>	3,000
<i>Pathogen Processes</i>	3,000
Subtotal	\$66,000
Wildlife – Broad Scale ²	\$10,000
Wildlife – Mid Scale ³	\$50,000
Subtotal	\$60,000
Total	\$126,000

Characterization in Eastern Washington would also require a one-time cost for development of additional methods, estimated at \$157,000⁴. It is expected the characterization costs for eastern Washington would be similar to those presented in Table 1.

¹ One ES4 analyst for 4 months, one ES5 analyst for 1 month.

² One ES5 analyst for 1 month.

³ One ES5 analyst for 5 months.

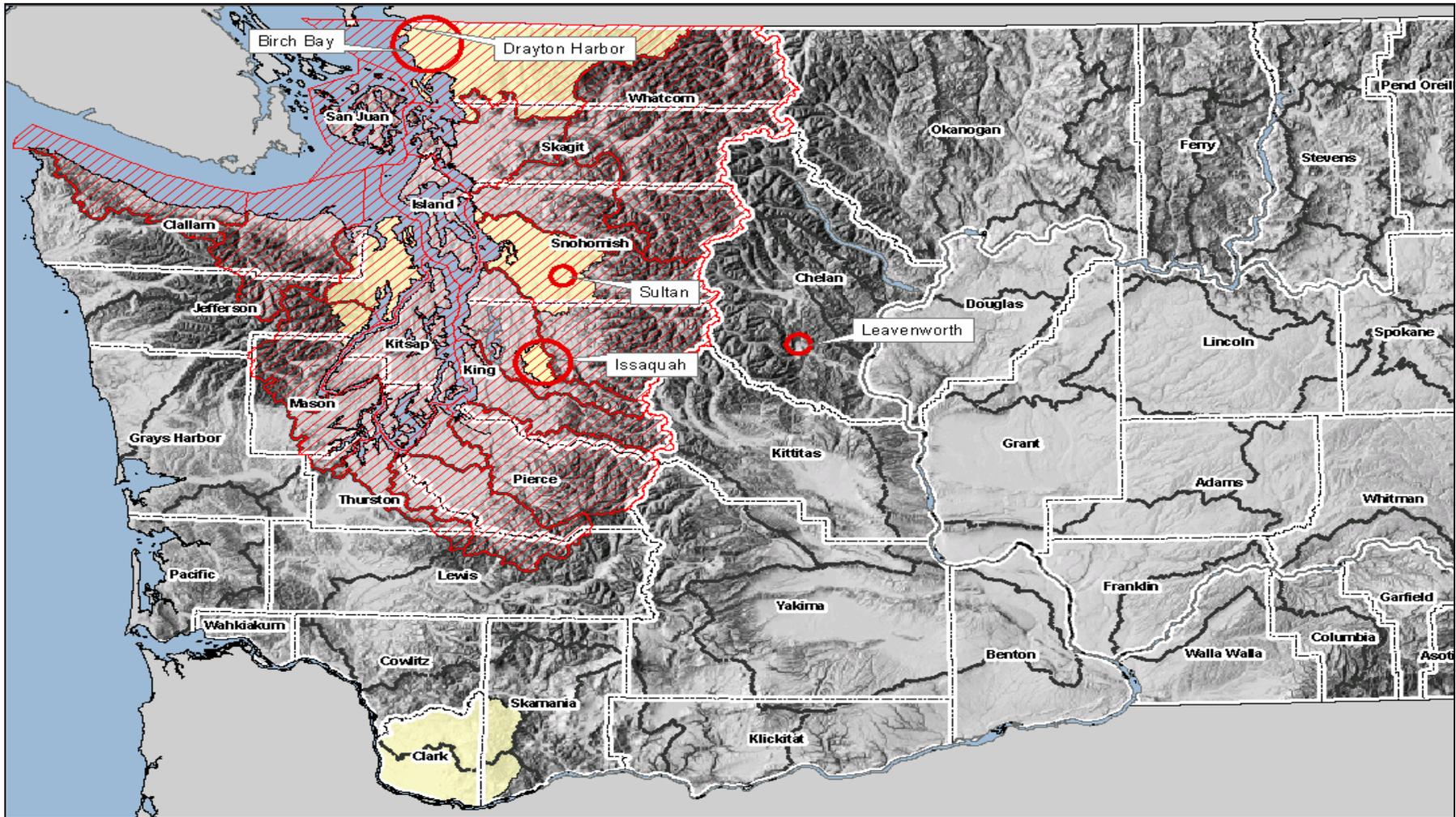
⁴ Two ES5 analysts for 6 months, one ES4 analyst for 3 months and \$7000 for outside review and initial printing.

Table 2 – Inventory of Characterizations for Western Washington

Assumes broad-scale characterization will be completed unless county is shown in “bold.” Mid-scale characterizations are recommended in these cases (e.g. due to either completion of broad scale characterization or smaller geographic scale of county lends itself to mid scale analysis – such as Island County).

Year for scheduled funding of SMP update by legislature is shown in parentheses.

Puget Sound Counties			
Broad Scale Characterization (For cost see Table 1)	WRIAs	Name of WRIA	Mid-Scale Characterization (~ \$10K additional per jurisdiction)
Pierce (2011 – SMP underway)	10	Puyallup/White	Puyallup (2011 – underway)
	12	Chambers	
	11	Nisqually	
Thurston (2011 – SMP underway)	11	Nisqually	Yelm (2011)
	13	Deschutes	Olympia/Lacey/Tumwater (2011 – SMP underway)
	23	Upper Chehalis	
Clallam (2011)	18	Dungeness	Port Angeles/Sequim (2011)
Kitsap (2011)	15	Kitsap	Bremerton/Port Orchard (2011)
Whatcom (Completed SMP & Characterization)	1	Nooksack	Ferndale/Lynden (2012 – SMP underway)
Snohomish (2011 – SMP underway)	5	Stillaguamish	Stanwood, Arlington (2011)
King (2011 – SMP underway)			Issaquah (underway)
Skagit (2012)	3	Lower Skagit	Mount Vernon/Burlington/Sedro Woolley (2012)
Island (2012)	6	Island	Whidbey & Camano Island (2012)
San Juan (2012)	2	San Juan	San Juan Islands (2012)
Mason (2012)	14	Kennedy- Goldsborough	Shelton (2012)
Other West Side Counties			
Grays Harbor (2014)	22	Lower Chehalis	Hoquiam/Aberdeen/Cosmopolis (2014)
	23	Upper Chehalis	
Lewis (2012) – characterization started	23	Upper Chehalis	Chehalis/Centralia (2012)
Cowlitz (2012)	26	Cowlitz	Winlock/Toledo/Vader (2012)
	26	Cowlitz	Longview/Kelso ((2012)
	27	Lewis	
Clark (2011) – characterization complete	27	Lewis Salmon-	Ridgefield/Battle Ground (2011)
	28	Washougal	



Map 1: Yellow = Broad scale characterization; Red circles = Mid-scale characterization; Red hatching = Regional characterization underway by People for Puget Sound