PSHAAC Puget Sound Hatchery Steelhead Program Priority Ranking (Final)

Recommendations for WDFW on which programs to have validated for compliance with the Statewide STHD Mgmt Plan and The Commission Hatchery and Fishery Reform Policy by 2015. In order of importance (last column)

01/05/2012 meeting

	Natural Population Info				Hatchery Program Info										Biological Risk				
PS River System	Natural Population (NOAA draft DIPs)	Escapement Units	Natural Spawning Escapement 06-10 avg (range)	Escapement Goal	Hatchery	Annual Personal Income Generated*	(hatchery cost/adult to catch)†	Overall Economic Value/harvest = OAEV/fish caught (NEV/fish)	Harvest Numbers (avg 05-09)‡	Program size (2011)	Recent Program Changes (2007 - 2010)	SAR- Most recent 5-year Average Available (Run years 04/05-08/09)‡	Estimates of Genetic Influence from Hatchery Program? (Y or N:Results and source)	Quality of estimates (Warheit Structure Analysis)	Recent (2006-10) Changes in program size and management that the genetic results may not represent	PSHAAC Hatchery Program Biological Risk Assessment? (High, Moderate, Low)	Priority Ranking for Program Retention
			Winter / Summer				Winter / Summer		Sport (w-s) / Tribal (w-s)	Winter / Summer	Winter / Summer	Winter / Summer					
Snohomish	Snoqualmie winter Snohomish/Skykomish winter NF Skykomish summer Tolt summer Pilchuck winter	System total **n/a** (1,688-5,574) 532 (332-734) Snoqualmie River n/a (134-422) - Skykomish River n/a (388-2110) 449 (282-618) Tolt River - 83 (50-116) Pilchuck River 568 (294-976) -		W=6,500, S=No goal	Tokul Creek Reiter Ponds Wallace River	$4,600,000 include in above include in above	$53 - $18 $21 $22 -	$740	4,425 1,793 67 No est	150,000 - 190,000 160,000 20,000 -	-40,000 - -50,000 -90,000 No Change	1.21% - 1.21% 1.12% 1.89% -	**Yes** Warheit: Smolt collections from Sky and Pilchuck showed groupings of 12.5% and 0.0% to Skamania, respectively and showed groupings of 37.5% and 8.3% to Chambers Creek, respectively. **No potential introgression noted**.	Low sample size (N=20)	Discontinuation of all off-station plants of winter and summer steelhead into Snohomish basin tributaries-fish now only released from Tokul Cr, Wallace and Reiter Pond facilities. Overall production size reduced of 20% for Snohomish basin winter steelhead and a 36% reduction in Snohomish basin summer steelhead releases. Winter program has re-initiated the spawning date limit of Jan 31 for the early-winter stock, in a effort to reinforce the differential return timing. Adult traps at the hatchery remain open throughout the entire hatchery return. Program has transitioned to no out of basin back-up.	High	**1** (Summer high priority, winter high priority)
Skagit Total	Skagit S/W Baker S/W Sauk S/W	System total **4,736** (2,629-7,046)		6,000	Marblemount	$630,000	$116 -	$702	898 -	229,000 -	-190,000 -	0.30% -	**Yes** Warheit: Appx 1.4% of samples were grouped with the Skamania ancestry group. **8.5% of samples were grouped in the Chambers Creek ancestory group and appx 0.5% of sample had mixed ancestory, including Chamber Creek, suggesting possible introgression.**	High sample size (N=212)	45% reduction in release number. Discontinuation of off staion plants (Sauk). Broodstock spawning date (1/31) limit applied. Adult trap operated throughout the entire run. Program has transitioned to no out of basin back-up.	Moderate	**3** (winter program moderate priority)
Green Total	Green winter	System total **1,052** (313-2,050) -		2,020	Soos Creek Icy Creek	$409,000 include in above	$174 $82	$711	359 216 168 92	35,000 30,000 20,000 20,000	-130,000 -50,000 No Change No Change	0.43% 0.83%	**Yes** Warheit: Appx 6.6% of samples were grouped into the Chambers Creek ancestory group. No potential introgression noted.	Medium (N=76)	71% reduction in the winter steelhead releases (Palmer closure). 50% reduction in summer steelhead releases (Palmer closure). Broodstock (Chambers) spawning date limit (1/31) applied. Adult trap operated throughout the entire run. Program has transitioned to no out of basin back-up. Program has transitioned to no out of basin back-up.	Moderate	**4** (Summer high priority, winter moderate priority)
Nooksack Total	Nooksack winter SF Nooksack summer	System total 1,901 No est		W=3,700, S=No goal	Kendall Creek Whatcom Creek	$137,000 No est	$286 - No est. -	$578	237 -	150,000 - 40,000	No Change No Change	0.32% - No est	**Yes** Warheit: Appx 0.80% of the Nooksack samples were grouped in the Chambers Creek ancestory group. **No potential introgression noted.**	High sample size (N=132)	No recent program size changes. Broodstock (Chambers) spawning date limit (1/31) applied. Adult trap operated throughout the entire run. Program is transitioning to locally adapted broodstock.	Low	**5** (winter program moderate priority)
Stillaguamish Total	Stillaguamish winter Deer Creek summer Canyon Creek summer	System total **369**** (120-676) No est		W=754, S=No goal	Whitehorse Ponds	$507,000	$92 $127	$793	569 70 No est No est	140,000 75,000	-30,000 No Change	0.49% 0.16%	**Yes** Warheit: Appx 22% of the smolts sampled were grouped with the Skamania ancestry group, **appx 7.3% were grouped with the Chambers ancestry group and appx 1.0% had mixed groupings, including Chambers, which may indicate a low level of introgression.**	High sample size (N=109)	18% reduction in the Stillaguamish Basin winter release (discontinued SF Stilly plant). Broodstock (Chambers) spawning date limit (1/31) applied. Adult trap operated throughout the entire run. Program is transitioning to locally adapted broodstock.	High	**2** (Summer high priority, winters moderate priority)
Dungeness Total	Dungeness s/w	No est		No goal	Dungeness Hatchery	$54,000	$84 -	$2,250	24 -	10,000 -	-45,000 -	0.40% -	**No**	N/A	Discontinued all outplants into the Pysht, Lyre and Clallam outplants. Broodstock spawning date limit (1/31) applied. Adult trap operated throughout the entire run.	Unk	**6** (winter program low priority)

*TCW Economics 2009
** Index estimate
† WDFW Hatchery Performance Tables 2009
‡ WDFW Hatchery and Genetic Management Plans