

Guiding Principle	Metric Defined/IWG Policy Statements	Location	Metric Study or Background Info	Policy Issues	Project	Study/Assessment	Data or Information Gaps	Schedule
<b>1. Instream Flow that:</b>	60 cfs (drought years) 61.4% WUA; 100 cfs (non-drought) 79,5% WUA; 250 cfs (long-term goal) 100% WUA; all WUA for steelhead rearing  Maintain current peak flow not exceeding 2,600 cfs.	Reach 4 - Historic Channel	<a href="#">multiple IFIM studies</a>	Done	IPID Instream Flow Improvement (Pump Exchange)	Dryden Alternative Appraisal Completed; Feasibility funded (OCR) IID Options Analysis Completed	Crosswalk for alternatives evaluation	November 2014
					Eightmile Lake Restoration/Expansion	Appraisal Study		November 2014
					Alpine Lakes Automation, Optimization, Modernization	Feasibility Study		November 2014
					Klonaqua Lake	Bathymetry collected		
					Conservation/Efficiencies - COIC opportunities	Water conservation survey		November 2014
					LNFH Wellfield Enhancement	LNFH Groundwater Investigations - Action Plan		April 2015
					LNFH Effluent Pump Back	Cost estimate		December 2014
					LNFH Water Re-Use			
					LNFH Pump Exchange (for full SW diversion)	Several options looked at previously - need to get reports	Jim C to provide PASS Report	
								Structure 2 management, modification or replacement options
a. Provides Passage		Reach 4 - Historic Channel	<a href="#">LNFH Fish Passage Evaluation</a>			WDFW Fish Passage and Survival Study		FY 15-16
b. Provides healthy habitat		Boulder Field	<a href="#">Boulder Field Assessment</a>					
c. Serves channel forming function								
d. Meets aesthetic and water quality objectives								
e. is resilient to climate change						WSU and USFS, CIG studies	get study details	
<b>2. Sustainable hatchery that:</b>	LNFH needs its firm supply of water (*57 cfs) with adequate surface water and groundwater availability to meet temperature and pathagen requirements year-round.			Eliminate reliance of S2 during low flow (phased approach)	LNFH Wellfield Enhancement	LNFH Groundwater Investigations-Action Plan		April 2015
					LNFH Effluent Pump Back	Cost estimate		December 2014
					LNFH Water Re-Use			
					Alpine Lakes Automation, Optimization, Modernization	Feasibility Study		November 2014
a. Provides healthy fish in adequate numbers								
b. Is resource efficient								
c. Significantly reduces phosphorus loading	details in 401 Cert.?	Reach 5	401 Certification					
d. Has appropriate screened diversion(s)	Project Check	Intake				NEPA ongoing?		

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e. Does not impede fish passage	Project Check	Intake	<a href="#">LNFH Fish Passage Evaluation</a>						
			WDFW Fish Passage and Survival Study						
	Project Check	S2	<a href="#">LNFH Fish Passage Evaluation</a>					Structure 2 management, modification or replacement options	
			WDFW Fish Passage and Survival Study						
	Project Check	S5	<a href="#">LNFH Fish Passage Evaluation</a>	IFC recommendation to remove/replace S5				Structure 5 management, modification or replacement options	
WDFW Fish Passage and Survival Study									
<b>3. Tribal Treaty and federally-protected fishing/harvesting rights are met at all times</b>	May 15th - July 7th (broodstock collection)	R4 Plunge Pool, other??		magnitude of tribal fishery enhancement		Sediment Transport study?	Tribal Fishery Impact Analysis and Alternatives Analysis	TBD	
<b>4. Provide additional water to meet municipal and domestic demand</b>	0.1-0.5 cfs in reserve through 2015. Leavenworth 800 ac-ft needed. Muni/dom 1,400 ac-ft needed through 2050.		Watershed Plan, Instream Flow Rule, extrapolated from existing planning docs.	Adequacy of metric? Geographic scale to be discussed by IWG	Eightmile Lake Restoration/Expansion	Appraisal Study	bring details on water needs to Steering Committee and IWG	December 2014	
					Klonaqua Lake	Bathymetry collected			
					Alpine Lakes Automation, Optimization, Modernization	Feasibility Study			November 2014
<b>5. Improved agricultural reliability that:</b>  a. Is operational  b. Is flexible  c. Decreases risk of drought impacts  d. Is economically sustainable	Restore 1,000 ac-ft additional storage, increased automation and reliability			IPID and COIC drought risk	Eightmile Lake Restoration/Expansion	Bathymetry collected	Develop COIC plan, feasibility, etc.	November 2014	
					Klonaqua Lake			November 2014	
					Alpine Lakes Automation, Optimization, Modernization			November 2014	
					IPID Instream Flow Improvement (Pump Exchange)			TBD	
					Conservation/Efficiencies - COIC opportunities				
<b>6. Improves ecosystem health including protection and enhancement of aquatic and terrestrial habitat</b>	Maintain current peak flow not exceeding 2,600 cfs	R4 (historic channel)		Terrestrial?			subcommittee(s) to discuss terrestrial, aquatic habitat goals, SOW, projects	December 2014	
	Additional habitat during high flow events and refugia during low flow	Icicle Watershed (all reaches)		Project impacts? Growth impacts?					

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7. Comply with state and federal law		Project Check	Proposed WDFW diversion and screen assessment					
8. Protect Non-Treaty Harvest		Project Check						
9. Comply with the Wilderness Act of 1964, the Alpine Lakes Wilderness Act of 1976, and the Alpine Lakes Wilderness Management Plan		Project Check						

\* Re-use may change this number depending on fish production obligations





