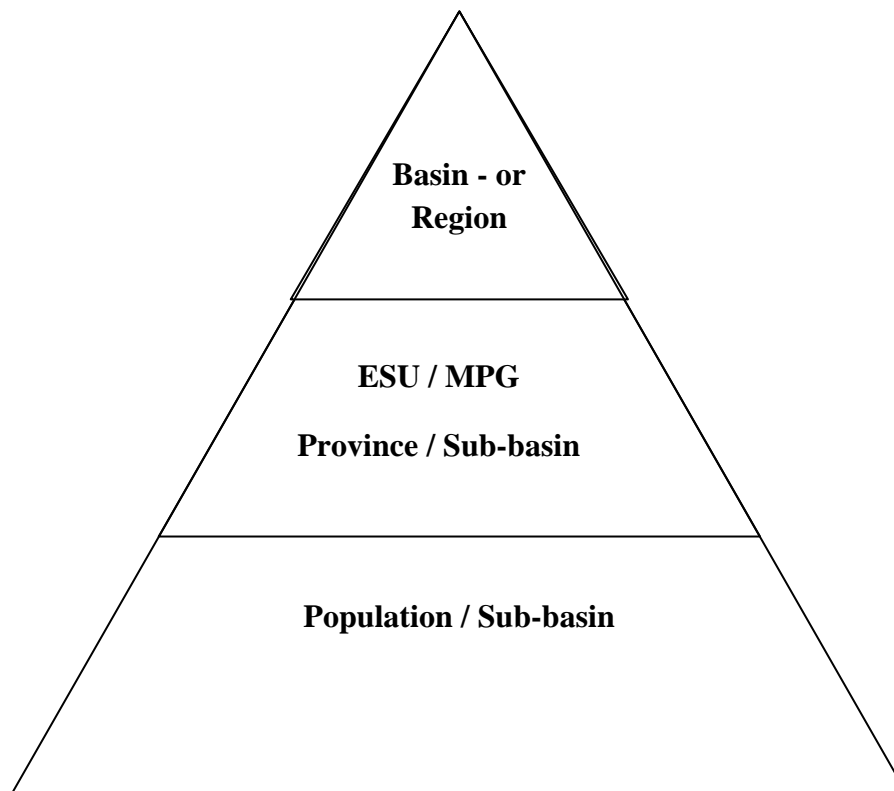


Attachment 1

Monitoring/Reporting Pyramid



Anadromous Fish

Scale		Indicator	Units	Source	Notes
Basin / Region Anadromous Salmonids and Lamprey	Biological Indicators	Adult Returns	<ul style="list-style-type: none"> ○ Bonneville returns relative to 5 million fish goal (by species, race, hatchery, natural) ○ Mainstem dams adult counts (by species, race, hatchery, natural and lamprey) ○ Map sub-basins occupied by lamprey 		
		ESUs	<ul style="list-style-type: none"> ○ % listed ○ % ESUs increasing, stable, decreasing or % very low, low, moderate, and high risk categories 		
	Performance Indicators	Hatcheries	Total releases <ul style="list-style-type: none"> ○ species ○ life-stage (smolt, parr etc) ○ Total Adults produced 		Ad Hoc Supplement Work Group Draft in Progress
		Harvest	Species/Race <ul style="list-style-type: none"> ○ Harvest Number (sport, tribal, commercial)by Fisheries Location ○ Hatchery/ Wild 		
	Implementation Indicators	Implementation Indicators (Roll up of Province/ESU/MPG indicators)	<ul style="list-style-type: none"> ○ Miles of stream protected/accessible ○ Water acquired ○ Number/Types of projects under FWP ○ Number/types of projects under other programs 		

Scale		Indicator	Units	Source	Notes
Anadromous Salmonid ESU / MPG (Province) (Roll up or representative populations for each ESU)	Biological Indicators	VSP			
		<ul style="list-style-type: none"> ○ Abundance 	<ul style="list-style-type: none"> ○ Total spawners and NORs relative to aggregate ESU target ○ MPGs meeting targets ○ Trend: MPGs increasing, stable, decreasing or % very low, low, moderate, and high risk categories 		
		<ul style="list-style-type: none"> ○ Productivity 	<ul style="list-style-type: none"> ○ MPGs meeting targets ○ Trend: MPGs increasing, stable, decreasing ○ % change smolt productivity aggregated across index sites ○ SARs 		
		<ul style="list-style-type: none"> ○ Spatial Structure 	<ul style="list-style-type: none"> ○ MPGs meeting targets ○ Trend: MPGs increasing, stable, decreasing ○ % accessible area utilized 		
	<ul style="list-style-type: none"> ○ Diversity 	<ul style="list-style-type: none"> ○ MPGs meeting targets ○ Trend: MPGs increasing, stable, decreasing ○ See Recovery Plans 			
	Performance Indicators	Hatcheries	<ul style="list-style-type: none"> ○ Total releases ○ Total adults produced ○ Hatchery spawners (target and non-target areas) 		
		Harvest	Species/Race/Origin <ul style="list-style-type: none"> ○ Impact rate ○ Harvest Number ○ Hatchery /Wild ○ Fisheries location 		
		Hydrosystem performance	<ul style="list-style-type: none"> ○ % adult and juvenile mortality by project ○ System Survival ○ TIR 		
		Predation	<ul style="list-style-type: none"> ○ Avian, pinniped, pikeminnow predation rates ○ Number and location of bird communities 		
		Habitat Status & Trend	Limiting factor indicators [TBD] <ul style="list-style-type: none"> ○ Watershed Condition ○ Water Quality and Quantity 		Need to discuss with the land and water managers
	Implementation Indicators	Implementation Indicators (Roll up of Subbasin/Population indicators)	<ul style="list-style-type: none"> ○ Miles of stream protected/accessible ○ Water acquired ○ Number/Types of projects ○ Etc. 		

Scale		Indicator	Units	Source	Notes
Anadromous salmonid Population/ Sub-basin	Biological Indicators	VSP			
		<ul style="list-style-type: none"> ○ Abundance 	<ul style="list-style-type: none"> ○ Total spawners and NORs relative to target ○ Trend: increasing, stable, decreasing 		
		<ul style="list-style-type: none"> ○ Productivity 	<ul style="list-style-type: none"> ○ Lambda, R/S relative to target, smolt production [index areas; primary populations] ○ 		
		<ul style="list-style-type: none"> ○ Spatial Structure 	<ul style="list-style-type: none"> ○ % MSAs occupied or meeting recovery objectives? 		
	<ul style="list-style-type: none"> ○ Diversity 	<ul style="list-style-type: none"> ○ See Recovery Plans 			
	Performance Indicators	Hatcheries	<ul style="list-style-type: none"> ○ Report against hatchery objectives ○ Total releases ○ Hatchery fraction ○ Harvest ○ Returns to hatchery ○ PNI for ea. hatchery program ○ Index of productivity 		
		Habitat [fish productivity]	<ul style="list-style-type: none"> ○ Spawner to Smolt trends (representative population/IMW) 		
		Habitat Status & Trend	Limiting factor indicators [TBD] <ul style="list-style-type: none"> ○ Watershed Condition ○ Water Quality and Quantity 		Need to discuss with the land and water managers
	Implementation Indicators	Implementation Indicators (accomplishments)	<ul style="list-style-type: none"> ○ Pisces/PCSRF/ performance indicators ○ % with HGMPs / ESA coverage 		

Resident Fish

Scale		Indicator	Units	Source	Notes
<p>Bull Trout Recovery Unit/ (Province) (Roll up or representative populations for each Recovery Unit)</p>	<p>Biological Indicators</p>	<ul style="list-style-type: none"> ○ Abundance 	<ul style="list-style-type: none"> ○ Total bull trout spawners relative to RU target ○ Bull trout Core Areas meeting targets ○ Trend: Bull trout core Areas increasing, stable, decreasing or % very low, low, moderate, and high risk categories 		
		<ul style="list-style-type: none"> ○ Productivity 	<ul style="list-style-type: none"> ○ 		
		<ul style="list-style-type: none"> ○ Spatial Structure 	<ul style="list-style-type: none"> ○ Bull trout % accessible area utilized 		
		<ul style="list-style-type: none"> ○ Diversity 			
	<p>Performance Indicators</p>	<p>Hatcheries</p>	<ul style="list-style-type: none"> ○ Total releases 		
		<p>Harvest</p>			
		<p>Hydrosystem performance</p>			
		<p>Predation</p>			
		<p>Habitat Status & Trend?</p>	<ul style="list-style-type: none"> ○ Report once for province and sub-basin? 		<p>Need to discuss with the land and water managers</p>
	<p>Implementation Indicators</p>	<p>Implementation Indicators (Roll up of Sub-basin/Population indicators)</p>	<ul style="list-style-type: none"> ○ Miles of stream protected/accessible ○ Water acquired ○ Number/Types of projects ○ Etc. 		

Scale		Indicator	Units	Source	Notes
Bull trout Core Area/Population White Sturgeon Management unit/population (Sub-basin)	Biological Indicators	<ul style="list-style-type: none"> ○ Abundance 	<ul style="list-style-type: none"> ○ Bull trout - Total bull trout adults (core area) relative to target ○ Bull trout: Adult Trend, increasing, stable, decreasing ○ White sturgeon: Total abundance by size class relative to target ○ White sturgeon: Trend in sturgeon population size classes relative to targets ○ White sturgeon: Trend in young of year recruitment 		
		<ul style="list-style-type: none"> ○ Productivity 	<ul style="list-style-type: none"> ○ White sturgeon - potential yield 		
		<ul style="list-style-type: none"> ○ Spatial Structure 	<ul style="list-style-type: none"> ○ Bull trout local populations meeting recovery objectives? 		
		<ul style="list-style-type: none"> ○ Diversity 			
	Performance Indicators	Hatcheries	<ul style="list-style-type: none"> ○ White Sturgeon - Report against hatchery objectives ○ Total releases 		
		Harvest	Sturgeon Harvest <ul style="list-style-type: none"> ○ Commercial ○ Sport ○ Tribal ○ Yield/unit area 		
		Habitat [fish productivity]			
		Habitat Status & Trend	White sturgeon – weighted useable area		Need to discuss with the land and water managers
	Implementation Indicators	Implementation Indicators (accomplishments)	Pisces/PCSRF/ performance indicators		

Scale		Indicator	Units	Source	Notes
Basin/Region Wildlife	Performance Indicators	Wildlife Program Implementation	Total For basin <ul style="list-style-type: none"> ○ HUs lost ○ Goal ○ Total HUs credited ○ % Completion ○ projects w/long-term management funding agreements 		
Province	Performance Indicators	Program Implementation	By FCRPS Facility <ul style="list-style-type: none"> ○ HUs lost ○ Goal ○ Total HUs credited ○ % Completion ○ projects w/long-term management funding agreements ○ Acres or projects meeting management objectives 		
	Implementatio n indicator	Implementation Indicators (accomplishments)	Pisces performance indicators		
Sub-basin	Performance Indicators	Project Implementation	Map-Project Location and Name		
	Implementation Indicators	Implementation Indicators (accomplishments)	Pisces performance indicators		