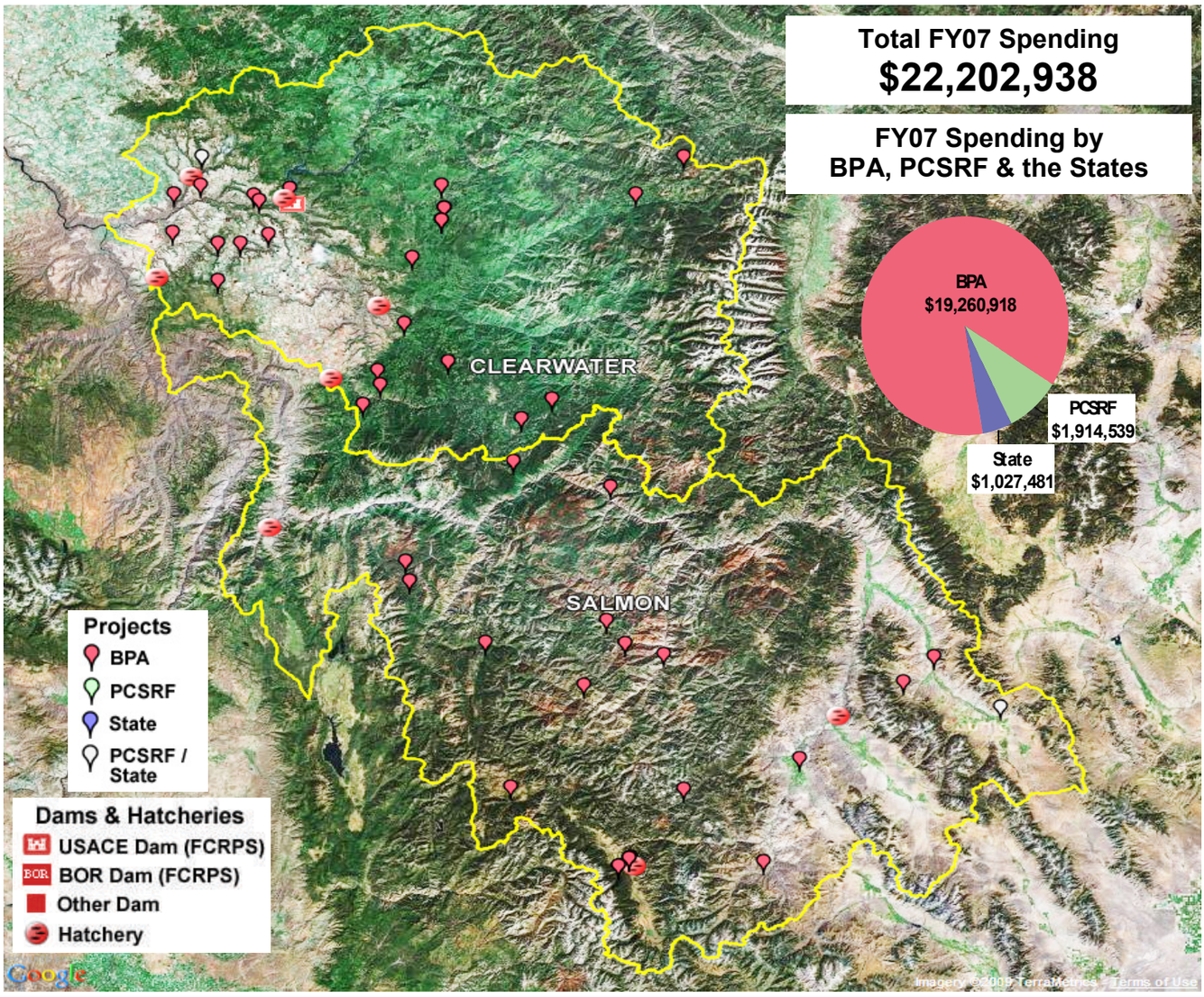
Mountain Snake



Land Ownership
Federal……....79%
Private……21%
Tribal……...1%

The Mountain Snake Province, located in central Idaho, encompasses an area of 23,339 square miles. Subbasins in the Mountain Snake Province include the Clearwater and Salmon. Chinook (spring and fall), steelhead (summer), sockeye, and bull trout populations throughout the province are listed under the federal Endangered Species Act. This province is characterized by habitat conditions that range from pristine to severely degraded. The Salmon Subbasin is one of the largest subbasins in the Columbia River Basin (represents 16.7% of the land area of Idaho) and contains some of the region's most pristine terrestrial and aquatic montane ecosystems. The Salmon Subbasin provides habitat strongholds within large designated wilderness areas. The Clearwater Subbasin contributes approximately one-third the flow of the Snake River and 10% of the flow of the Columbia River system annually. Forestry, ranching, agriculture, mining, and recreation are significant factors in the economy of communities in the province.

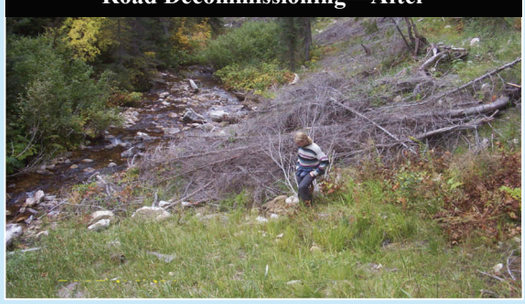
BPA FY 2008 Habitat Project Accomplishments in the Mountain Snake Province[1]			
Habitat Zone	**Project-type**	**Planned Value**	**FY 2008 Accomplishment (Actual Value)**
Instream	Increase instream habitat complexity, remove vegetation	4.45 miles	4.45 miles stream complexity improved
	Increase instream habitat complexity	6 structures	9 structures installed
	Install sprinkler	13.5 cfs	13.5 cfs water conserved
	Install sprinkler	4,165.4 acre-feet	4,165.4 acre-feet water conserved
	Install sprinkler, acquire water instream	63.5 miles	63.8 miles of primary stream improved
	Install sprinkler, acquire water instream	295 miles	362.5 miles of total stream reach improved
	Acquire water instream	17,399.5 acre-feet	7,739.8acre-feet protected
	Acquire water instream	99 cfs	98 cfs water protect
	Install fish screen	20.7 cfs	23 cfs water screened
	Remove/install diversion, install fish passage structure	22.1 miles	37.6 miles habitat accessed
	Remove/Install diversion	1 screen	1 screen addressed
Riparian-Upland	Install fence	506.68 miles	7.37 miles of fence installed
	Plant/remove vegetation, create, restore, and/or enhance wetlands, practice no-till and conservation tillage systems, upland erosion and sedimentation control, enhance floodplain	2,471 acres	2,424.9 acres treated
	Decommission/relocate/improve road	56.30 miles	62.70 road miles treated
Riparian	Plant/remove vegetation	18.28 miles	17.73 miles vegetation improved

Habitat Improvement Project — Protect and Restore Lolo Creek Watershed

Road Decommissioning—Before

The Nez Perce Tribe initiated watershed restoration projects in the Lolo Creek watershed (Clearwater River) in 1996 to enhance fish habitat, reduce sediment delivery, and protect riparian areas from excessive grazing. Since 1996, the tribe has completed numerous fencing, stream stabilization, road decommissioning (Photos), and culvert replacement projects to improve the Lolo Creek watershed. Since 1997, the Nez Perce Tribe, in cooperation with the Clearwater National Forest, has obliterated more than 60 miles of road. In addition, more than 16 miles of fence has been constructed and maintained to to protect riparian and culturally significant areas from negative impacts from cattle grazing. To increase shade, reduce temperature and sediment input, and increase large woody debris recruitment, more than 13,800 native trees have been planted in riparian zones in the watershed. Since 2000, 19 culverts have been replaced and 8 culverts have been removed to aid fish passage.

Road Decommissioning—After



Mountain Snake

Focal Species in the Mountain Snake Province[a]

Focal Species	Clearwater	Salmon
Brook Trout		
Bull Trout		
Chinook-Fall		
Chinook-Spring		
Sockeye		
Steelhead—Summer		
Westslope Cutthroat Trout		

Not a focal species | Not listed | Species of Concern | Threatened | Endangered

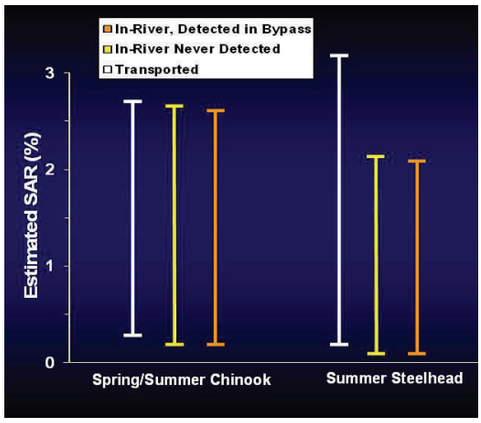
[a]Focal species were identified by subbasin planners during the Northwest Power and Conservation Council's subbasin planning process. Since the completion of subbasin planning, the list of focal species has been amended through the Fish and Wildlife Program Amendment process. This list represents the most current suite of focal species.
[b] USFWS Status
[c] ESA Status

2007 Hatchery Releases and Returns to Hatcheries in the Mountain Snake Province

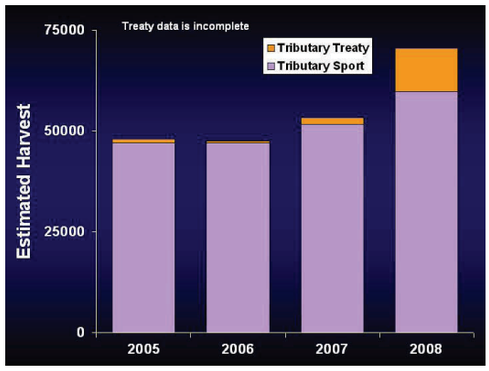
Species	Release Goal/ Released	Return Goal/Return to Collection Facility
Spring Chinook		
Fall Chinook		
Coho		
Summer Steelhead		
Winter Steelhead		
Atlantic Salmon		
Brook Trout		
Kokanee		
Rainbow Trout		
TOTAL		

Wildlife Habitat Losses by Hydroelectric Facility in the Mountain Snake Province

Ranges in Aggregate Smolt to Adult Return (SAR) for Wild Salmon and Steelhead Originating from the Mountain Snake and Blue Mountain Provinces (returns to Lower Granite Dam)[1]



Mountain Snake Province Salmon and Steelhead Harvest[2,3]

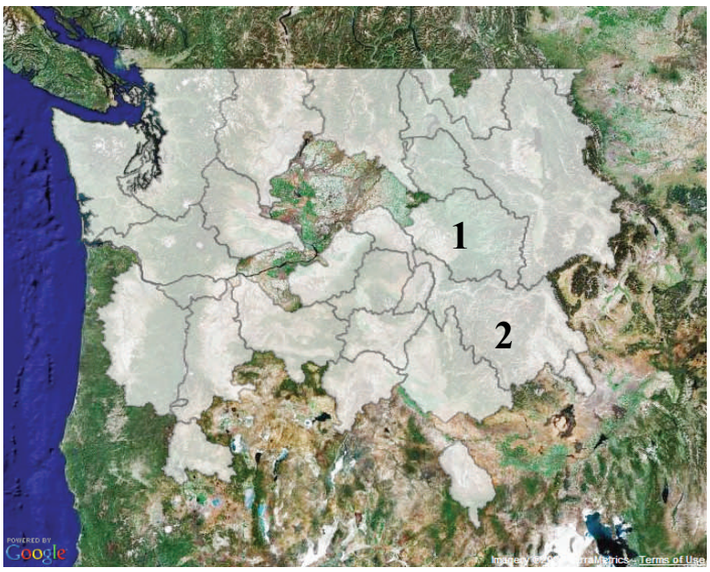


Species/Race	Tributaries—2008	
	Sport	Treaty
Spring Chinook	10,795	10,562
Summer Steelhead	59,933	Unknown

Status and Recovery Standards for ESA-Listed Salmon and Steelhead in the Mountain Snake Province[4,5]

ESU or DPS	Major Population Group (MPG)	Populations and Viability			Number of Natural Spawners	
		No. of Populations	No. Meeting Viability Standards	Minimum No. Needed to Meet Standards	Minimum if MPG Viability Standards Met	Minimum if all Populations Meet Standards
Snake River Spring/Summer Chinook	South Fork Salmon	4	0	2	1,750	3,500
	Middle Fork Salmon	9	0	5	3,500	5,250
	Upper Salmon	8	0	5	5,500	8,500
Snake River Fall Chinook	Lower Mainstem	1	0	1	3,000	3,000
Snake River Steelhead	Clearwater	5	0	4	4,500	8,250
	Salmon	12	0	6	6,000	12,000
Snake River Sockeye						

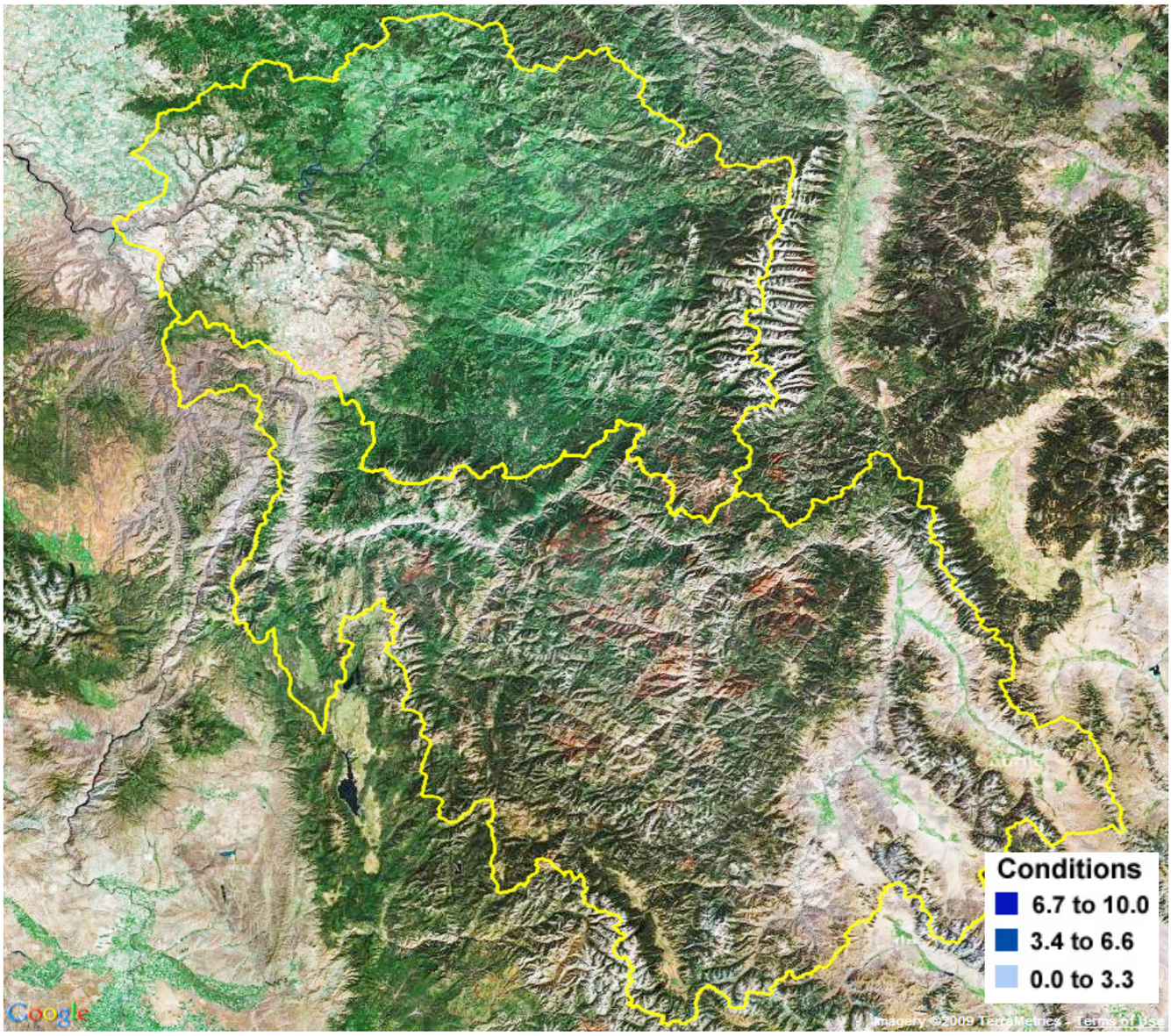
Bull Trout Status in the Mountain Snake Province



Recovery Unit	Number of cores	Abundance	Trend	Threat	Risk
Clearwater River (1)	7	1,302-3,850 (unknown for 2 cores)	Unknown (4) Stable (1) Declining (2)	Widespread, low-severity (2) Moderate, imminent (3) Substantial, imminent (2)	At (5) High (1) Potential (1)
Salmon River (2)	10	700-1,500 (unknown for 7 cores	Unknown (10)	Widespread, low-severity (3) Moderate, imminent (3) Substantial, imminent (3) Slightly (1)	At (6) High (1) Potential (3)

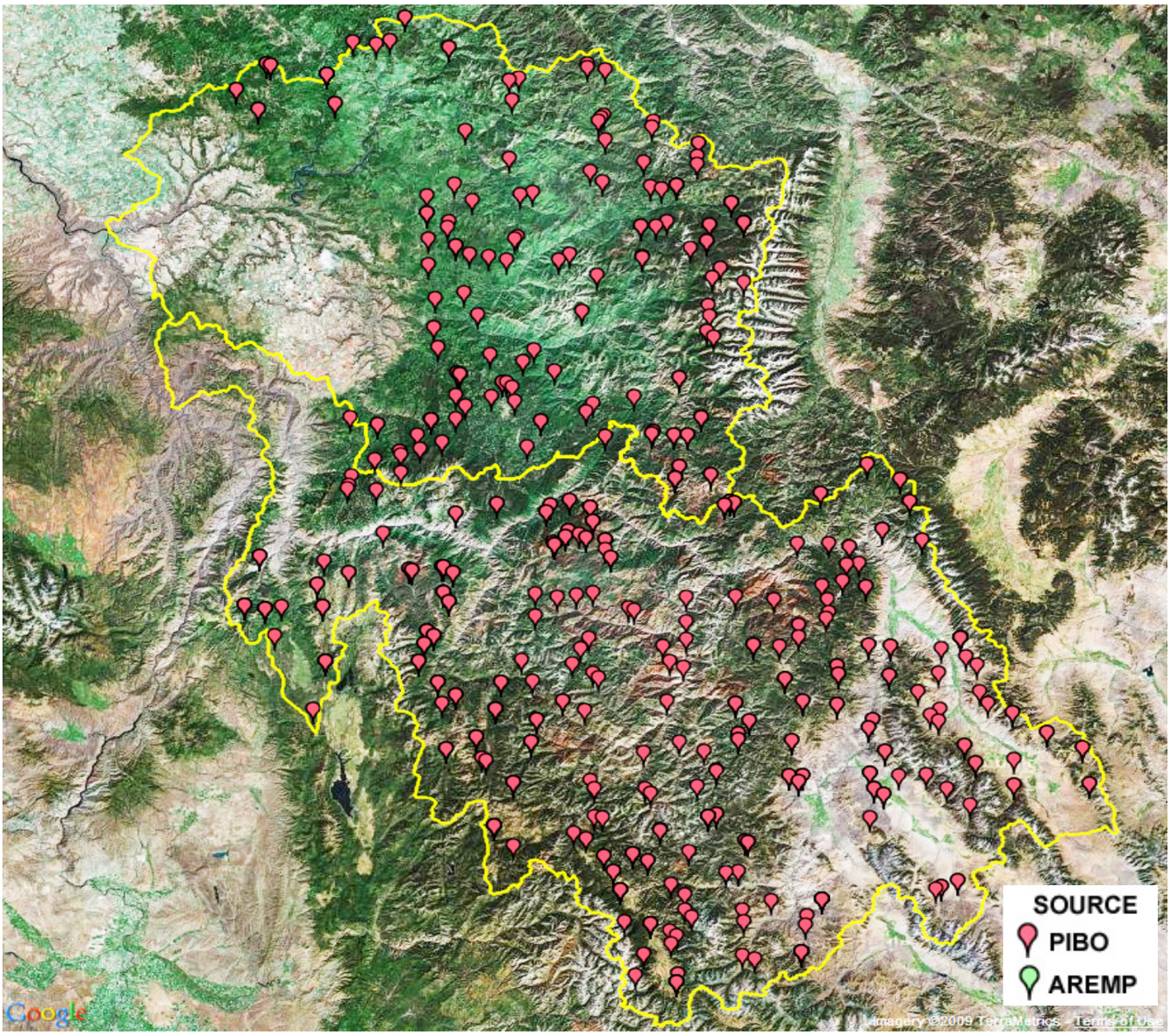
Mountain Snake

Watershed Conditions for National Forest and Bureau of Land Management Lands in the Mountain Snake Province



Watershed condition is based upon work completed by the USDA Forest Service (FS) and USDI Bureau of Land Management (BLM) Aquatic and Riparian Effectiveness Monitoring Program (AREMP). AREMP personnel evaluate the status and trend of watershed condition on FS, BLM, and National Park Service administered lands within the range of the Northern Spotted Owl. Watershed condition scores are determined for all watersheds that contain a minimum of 25 percent federal ownership. AREMP applies a decision support model to evaluate the premise that watersheds are in good condition. Watersheds are judged to be in good condition where the physical processes, such as wood and sediment delivery, and habitat attributes are adequate to maintain or improve the diversity and abundance of native or desired non-native aquatic species.[7] A score of 10 indicates full support for the premise that a watershed is in good condition and a score of 0 indicates no support for the premise. A fifteen-year assessment of watersheds is being done in 2009, with an expected publication date of early 2010.

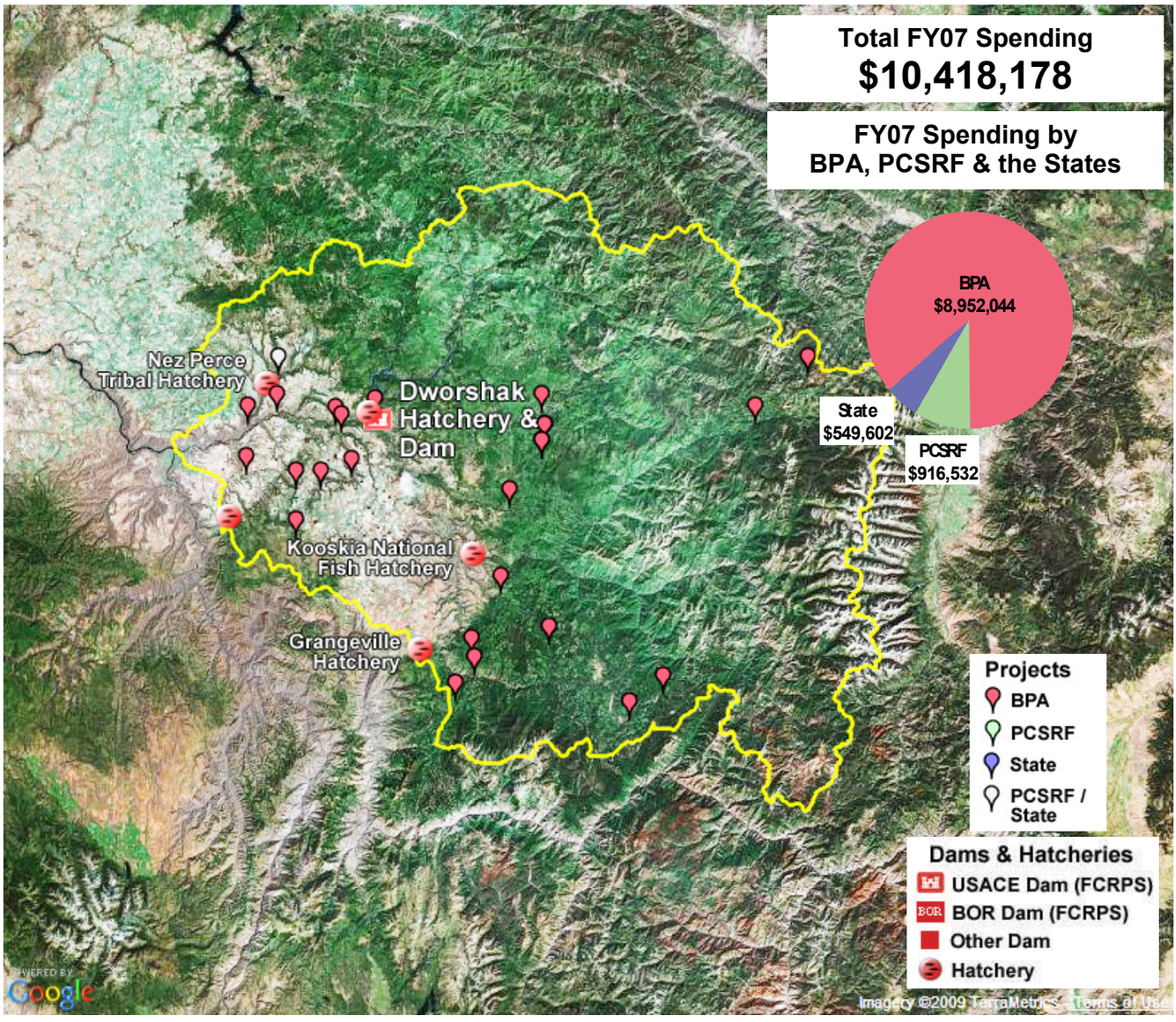
Stream Inventory Sites on National Forest and Bureau of Land Management Lands in the Mountain Snake Province



Green Symbol—Indicates locations where stream information is collected by the USDA Forest Service and USDI Bureau and Land Management through the Aquatic and Riparian Effectiveness Monitoring Program (AREMP).

Red Symbol—Indicates locations where stream inventory information is collected by the USDA Forest Service and USDI Bureau and Land Management through the PacFish/InFish Biological Opinion Monitoring Program (PIBO). The locations and information reported are for the sentinel and integrator sites used to track habitat status and trend within the PIBO area over time.[8]

Mountain Snake



In the Clearwater River Subbasin, summer steelhead, Chinook salmon (both spring/summer and fall races), bull trout, westslope cutthroat trout, and brook trout have been identified as focal species. Steelhead, fall Chinook salmon, and bull trout are also listed as threatened under the federal Endangered Species Act (ESA). Because they were extirpated then reintroduced, spring/summer Chinook salmon are not considered part of the threatened Snake River spring/summer Chinook salmon Evolutionarily Significant Unit (ESU). Steelhead in the subbasin are part of the Snake River Distinct Population Segment (DPS), fall Chinook salmon are part of the Snake River ESU, and bull trout are within the Clearwater River Recovery Unit. Recovery criteria for a steelhead DPS or a salmon ESU do not necessarily require that all populations achieve viability (extinction risk = low) prior to de-listing. Recovery plans for Snake River steelhead and salmon have not been completed; however, the initial recovery planning objective is to achieve viable status for the Lower Clearwater Mainstem, Lolo Creek, Lochsa, and South Fork Clearwater populations of steelhead. Because there is only one population of Snake River fall Chinook, it should become highly viable (extinction risk = very low). Recovery criteria for bull trout vary among recovery units.

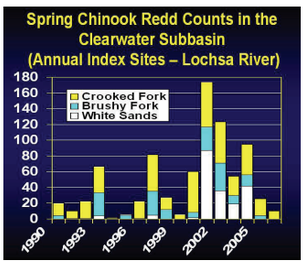
Subbasin: Clearwater

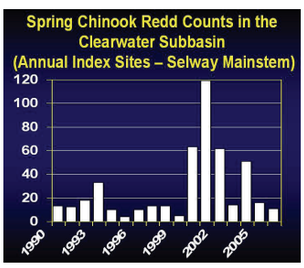
Key Factors Limiting Clearwater River Subbasin Focal Species [1,2]						
Factors for Decline/Limiting Factors/ Threats		**Species/Race, and Life-Stage Most Affected**				
		Spring/Summer Chinook	**Fall Chinook**	**Summer Steelhead**	**Bull Trout**	**Cutthroat Ttrout**
Habitat	Estuary and Nearshore Marine Habitat Degradation	Smolts	Smolts	Smolts		
	Channel Structure and Complexity				Juveniles, adults	Juveniles, adults
	Riparian Areas and LWD Recruitment				Juveniles, adults	Juveniles, adults
	Stream Flow	Juveniles	Juveniles		Juveniles, adults	Juveniles, adults
	Water Quality	Juveniles	Juveniles	Fry, summer parr, winter parr	All	All
	Fish Passage			Juveniles, adults	Juveniles, adults	Juveniles, adults
Hydro	Mainstem Columbia River Hydropower-related Adverse Effects	Smolts	Smolts, adults	Smolts		
Harvest	Mortality from Targeted Fishery		Adults			
Predation/ Competition/ Disease	Predation by or competition with non-native species				Juveniles, adults	
	Predation by birds or marine mammals	Juveniles	Juveniles	Juveniles		

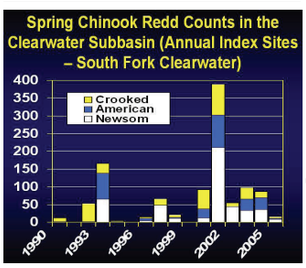
BPA FY 2008 Habitat Project Accomplishments in the Clearwater Subbasin			
Habitat Zone	**Project-type**	**Planned Value**	**FY 2008 Accomplishment (Actual Value)**
Instream	Increase instream habitat complexity	0.1 miles	0.1 miles of stream complexity improved
	Remove/breach dam, install fish passage structure	15.7 miles	30.2 miles of habitat accessed
Riparian-Upland	Install fence		2.30 miles of land fenced
	Decommission road/relocate/improve road	22.50 miles	62.31 miles of road treated
	Plant/remove vegetation, practice no-till and conservation tillage systems, uoland erosion and sedimentation control	787.5 acres	3,573 acres improved
Riparian	Plant vegetation	9 miles	25.88 miles protected

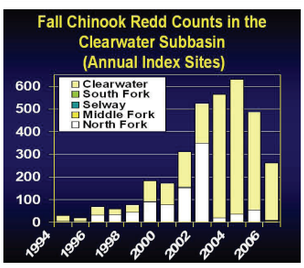
Mountain Snake

Chinook









Spring

ESA Listing Status: None
ESU: Snake River
MPG: Clearwater
Biological Objective:10,000 spawning natural adult returns[1]
Status: Annual index sites
Middle Fork Clearwater (tributaries)
Lochsa River (tributaries)
White Sands—9 redds (2006)[2]
Brushy Fork—0 redds (2006)[2]
Crooked Fork—35 redds (2007)
Selway River (tributaries)
White Cap—0 redds (2006)[3]
Running—0 redds (2006)[3]
Bear—10 redds (2006)[3]
Eagle—0 redds (2002)[4]
Moose—3 redds (2005)[3]
Selway Mainstem—13 redds (2006)[2]

South Fork Clearwater (tributaries)
Newsom—4 redds (2006)
American—0 redds (2007)
Crooked River—5 redds (2005)[3]
Red River—197 redds (2007)
Wild Juvenile Production:

Early-Fall

ESA Listing Status: None
ESU: None
Biological Objective: No carrying capacity estimates have been made[1]
Status: Extirpated[1]

Fall

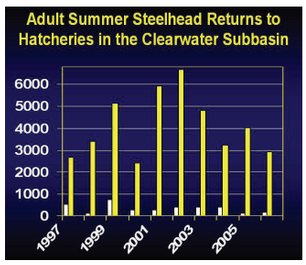
ESA Listing Status: Threatened
ESU: Snake River
MPG: Snake River
Population:
Draft Recovery Plan Criteria:
Biological Objective:10,000 spawning natural adult returns[1]
Status: Natural and hatchery
North Fork Clearwater
Mainstem—6 redds (2006)[5]

Middle Fork Clearwater
Selway—1 redds(2006)[5]
Mainstem—1 redd (2006)[5]

South Fork Clearwater
Mainstem — 1 redd (2006)[5]
Newsom Creek—4 redds (2006)[5]

Clearwater
Mainstem—251 redds (2006)[5]
Wild Juvenile Production:

Steelhead



Summer

ESA Listing Status: Threatened
DPS: Snake River
MPG: Clearwater
Populations:Lower Mainstem, North Fork, Lolo Creek, Lochsa River, Selway River, and South Fork
Recovery Plan Criteria: Lower Mainstem, Lochsa River, and Selway River = 1,000 natural adults per population, South Fork = 1,000 natural adults, North Fork = 2,500 natural adults, and Lolo Creek = 500 natural adults,
Biological Objective: B-run = 12,000 spawning natural adult returns, A-run = 4,900 spawning natural adult returns[1]
Status: Hatchery returns
Middle Fork Clearwater
Kooskia Hatchery—142 adults (2006)[9]

North Fork Clearwater (B-run)
Dworshak Hatchery—3,514 adults (2007)
Wild Juvenile Production:

Subbasin: Clearwater

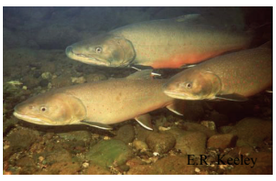
2007 Hatchery Releases and Returns to Hatcheries in the Clearwater Subbasin			
Hatchery/Acclimation Pond	**Species**	**Release Goal/Released**	**Return Goal/Actual Return**
Dworshak	Spring Chinook		/2,110
	Summer Steelhead		/3,514
Sweetwater Springs			
Kooskia	Summer Steelhead		Not available
Nez Perce Tribal			
Clearwater			
Crooked River			
Powell			
Red River			
Big Canyon			
Selway Pond			
Total			

BPA-Funded Wildlife Projects in Clearwater Subbasin				
Project	**Sponsor**	**Acres**	**HU**	**Habitat Type**
Craig Mountain Wildlife Area	Idaho Department of Fish and Game	60,000	Unknown	Eastside grassland, ponderosa pine forest, mixed conifer forest, and riparian
Dworshak Wildlife Management Area	Nez Perce Tribe	7,100	Unknown	Eastside grassland, ponderosa pine forest, mixed conifer forest, and wetland

[1] Nez Perce Tribal Watershed Division. 2004. Clearwater Subbasin Plan. A Report Prepared for the Northwest Power and Conservation Council. Portland, Oregon.

Mountain Snake

Bull Trout



ESA Listing Status: Threatened
Core Populations: North Fork Clearwater, Fish Lake (North Fork Clearwater), Lochsa, Fish Lake (Lochsa), Selway, South Fork Clearwater, Lower and Middle Fork Clearwater (Within Clearwater Recovery Unit)
Draft Recovery Plan Criteria: 500 adults in each of Fish Lake (North Fork Clearwater, Fish Lake (Lochsa), and Lower/Middle Fork Clearwater —5,000 adults in each of the North Fork Clearwater, Lochsa, Selway, and South Fork Clearwater[1,6]
Status: Redd surveys

Little North Fork
Lund Creek—30 (2007)
Little Lost Lake Creek—36 (2007)
Lost Lake Creek—13 (2007)
Little North Fork—29 (2007)
Rocky Run Creek—8 (2007)

North Fork Clearwater and Breakfast Creek
Bostonia Creek—26 (2007)
Goose Creek—1 (2007)
Isabella Creek—1 (2007)
Lake Creek—3 (2007)
Long Creek—6 (2007)
Moose Creek—0 (2007)
Niagra Gulch—2 (2007)
Placer Creek—2 (2007)
Quartz Creek—0 (2007)
Skull Creek—2 (2007)
Swamp Creek—1 (2007)
Vanderbilt Gulch—39 (2007)

Lochsa River (Density Estimates–fish/100m^2)
White Sands Creek— 0.00 (2007)
Brushy Creek—0.00 (2007)
Crooked Fork—0.02

Selway River
Upper Selway River—0.10 (2007)
White Cap Creek—0.00 (2007)
Moose Creek Drainage—0.00 (2007)
Little Clearwater—0.28 (2007)

South Fork Clearwater
American River—0.06 (2007)
Crooked River—0.07 (2007)
Red River—0.00 (2007)
West Fork Crooked River—0.21 (2007)

Westslope Cutthroat Trout

ESA Listing Status: Species of Concern
Biological Objectives: None
Status: Density estimates (fish/100m^2)

North Fork Clearwater
Isabella Creek—0.83 (2007)
Skull Creek—1.34 (2007)

Lochsa River
Mainstem Lochsa—0.16 (2006)
Brushy Creek—1.09 (2006)
Crooked Fork—1.37 (2006)

Selway River
Upper Selway—0.33 (2007)
White Cap Creek—0.46 (2007)
Moose Creek Drainage—0.70 (2007)
Little Clearwater—0.41 (2007)

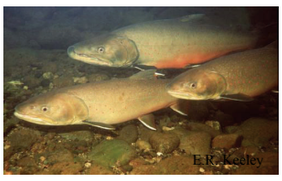
South Fork Clearwater
American River—0.06 (2007)
Crooked River—0.47 (2007)
Red River—0.11 (2007)
West Fork Crooked River—9.94 (2007)

Brook Trout

ESA Listing Status: None
Biological Objectives: Nome
Status: Occur throughout subbasin

Subbasin: Clearwater

Bull Trout



Abundance, Trend, Threat, and Risk Ranks (Fish Lake (Lochsa River) Core):
Abundance = 1-50
Short-term Trend = Unknown
Threat = Widespread, low-severity
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Fish Lake (North Fork Clearwater River) Core):
Abundance = 1-50
Short-term Trend = Declining
Threat = Moderate, imminent
Risk = High

Abundance, Trend, Threat, and Risk Ranks (Lochsa Core):
Abundance = 50-250
Short-term Trend = Stable
Threat = Moderate, imminent
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Mid-Low Clearwater Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Substantial, imminent
Risk = At

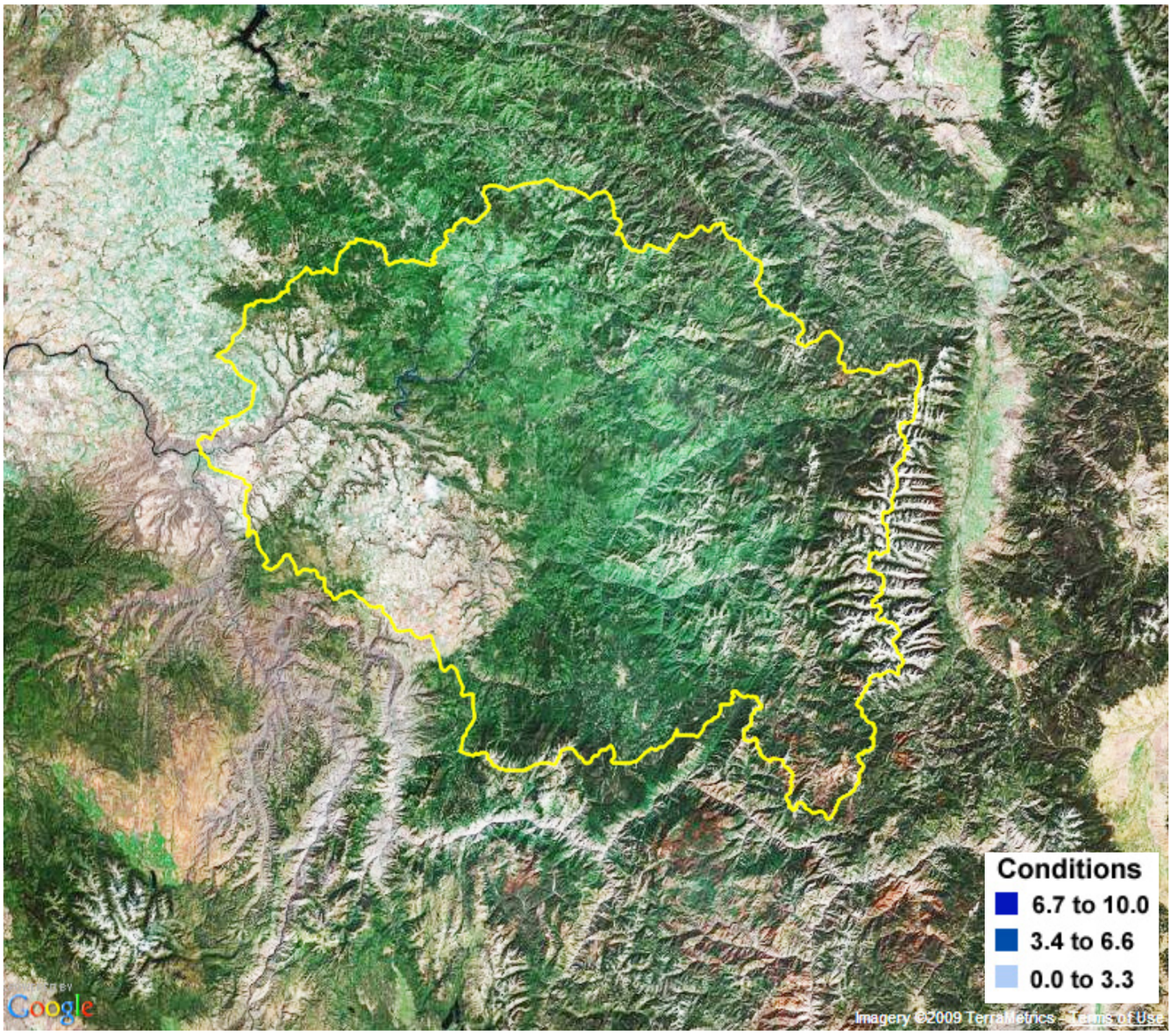
Abundance, Trend, Threat, and Risk Ranks (North Fork Clearwater Core):
Abundance = 250-1,000
Short-term Trend = Declining
Threat = Moderate, imminent
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Selway Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Widespread, low-severity
Risk = Potential

Abundance, Trend, Threat, and Risk Ranks (South Fork Clearwater Core):
Abundance = 1,000-2,500
Short-term Trend = Unknown
Threat = Substantial, imminent
Risk = At

Mountain Snake

Watershed Conditions for National Forest and Bureau of Land Management Lands in the Clearwater Subbasin



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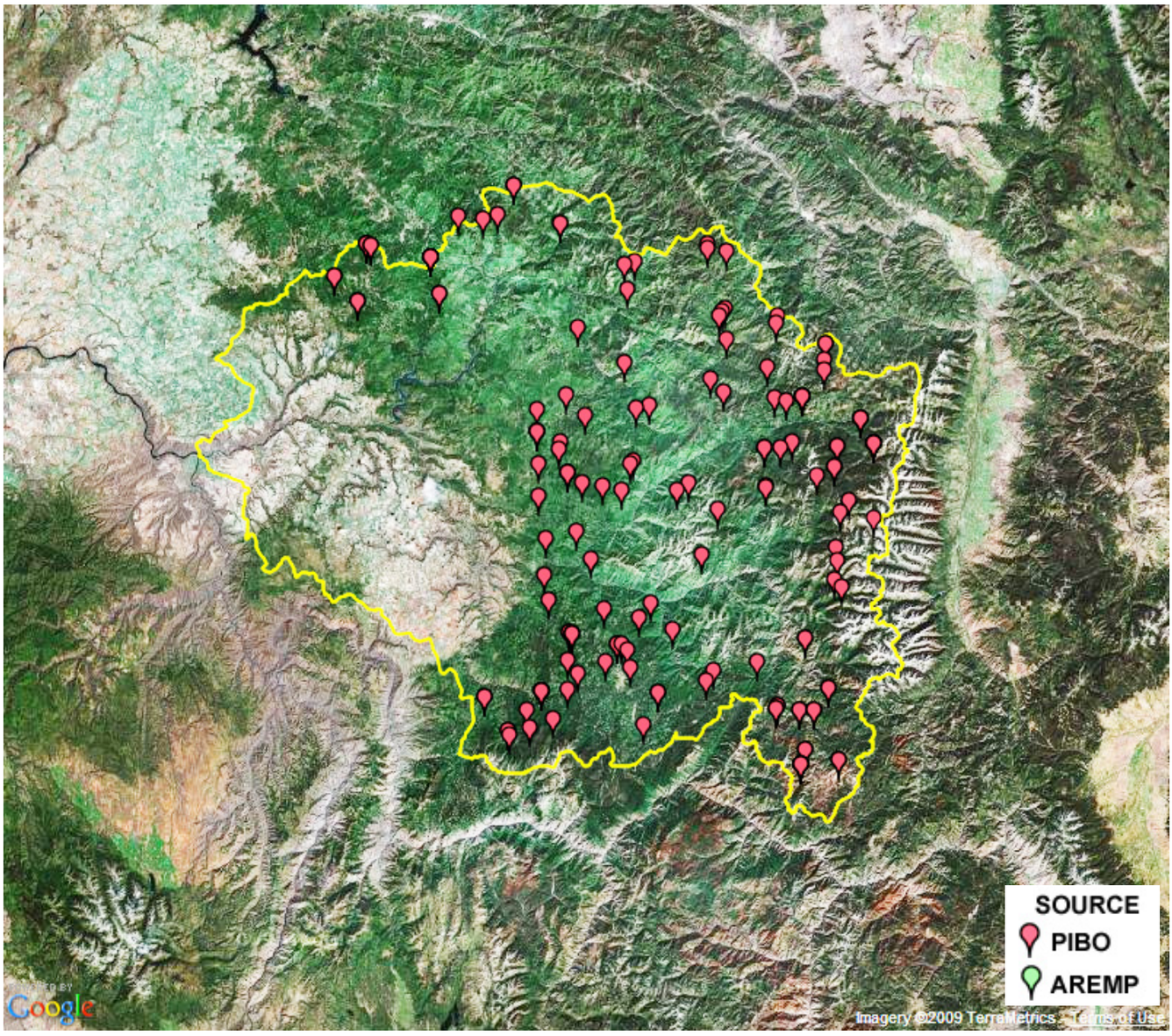
Subbasin: Clearwater

Stream Inventory Sites on National Forest and Bureau of Land Management Lands in the Clearwater Subbasin



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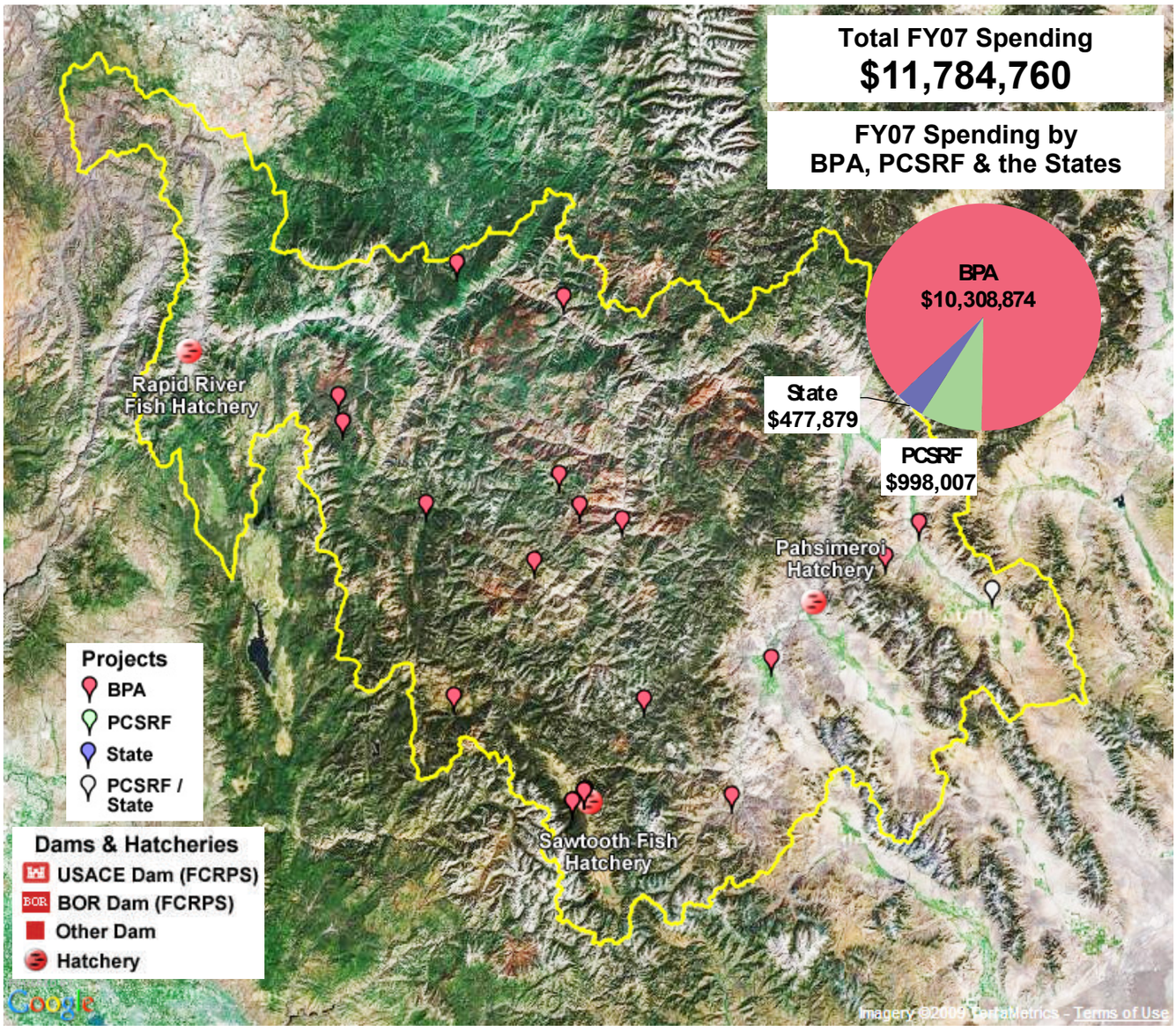
Mountain Snake



In the Salmon River Subbasin, summer steelhead, Chinook salmon (both spring/summer and fall races), sockeye salmon, and bull trout have been identified as focal species. Sockeye salmon are also listed as endangered under the federal Endangered Species Act (ESA). Steelhead, Chinook salmon, and bull trout are listed as threatened. Steelhead in the subbasin are part of the Snake River Distinct Population Segment (DPS), and sockeye and Chinook salmon are part of the Snake River Evolutionarily Significant Unit (ESU) for their species and race. Bull trout are within the Salmon River Recovery Unit. Recovery criteria for a steelhead DPS or a salmon ESU do not necessarily require that all populations achieve viability (extinction risk = low) prior to de-listing. Recovery plans for Snake River steelhead and salmon have not been completed; however, the initial recovery planning objective is to achieve viable status for the Chamberlain Creek, Secesh River, South Fork Salmon, Upper Middle Fork Salmon, and Upper Salmon populations of steelhead. The subbasin includes three major population groups of spring/summer Chinook salmon, each of which must meet viability criteria. Because there is only one population each for Snake River fall Chinook and Snake River sockeye, each should become highly viable (extinction risk = very low). Recovery criteria for bull trout vary among recovery units.

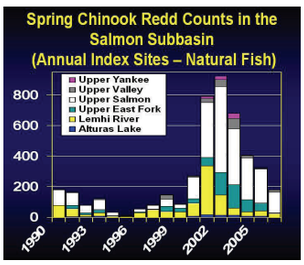
Subbasin: Salmon

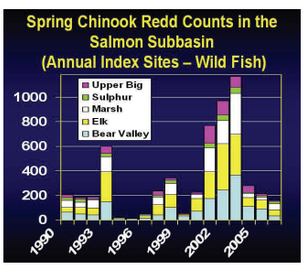
Key Factors Limiting Salmon River Subbasin Focal Species [1,3]						
Factors for Decline/Limiting Factors/ Threats		**Species/Race, and Life-Stage Most Affected**				
		Spring/Summer Chinook	**Fall Chinook**	**Sockeye**	**Summer Steelhead**	**Bull Trout**
Habitat	Estuary and Nearshore Marine Habitat Degradation	Smolts	Smolts		Smolts	
	Floodplain Connectivity and Function	Juveniles			Fry, summer parr, winter parr	
	Channel Structure and Complexity	Juveniles	Juveniles		Fry, summer parr, winter parr	Juveniles, adults
	Riparian Areas and LWD Recruitment	Juveniles	Juveniles		Fry, summer parr, winter parr	Juveniles, adults
	Stream Flow	Juveniles	Juveniles	Juveniles		Juveniles, adults
	Water Quality	Juveniles	Juveniles	Juveniles	Fry, summer parr, winter parr	All
	Fish Passage	Juveniles, adults	Juveniles, adults	Juveniles, adults	Juveniles, adults	Juveniles, adults
Hydro	Mainstem Columbia River Hydropower-related Adverse Effects	Smolts	Smolts, adults	Smolts	Smolts	
Harvest	Mortality from Targeted Fishery		Adults			
Predation/ Competition/ Disease	Predation by or competition with non-native species		Juveniles	Juveniles		Juveniles
	Predation by birds or marine mammals		Juveniles	Juveniles		

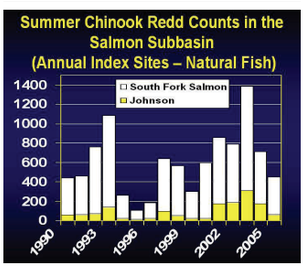
BPA FY 2008 Habitat Project Accomplishments in the SalmonSubbasin			
Habitat Zone	**Project-type**	**Planned Value**	**FY 2008 Accomplishment (Actual Value)**
Instream	Install fish screen		41.9 acre-feet/year water screened
	Acquire water instream	71.7 cfs	75.4 cfs water protected
	Acquire water instream	8,223.9 acre-feet	10,586.8 acre-feet water protected
	Acquire water instream	25.7 miles	26.6 miles of primary stream improved
	Acquire water instream	299.7 miles	300.3 miles of total stream reach improved
	Remove/breach dam, install fish passage structure	13.5 miles	16.5 miles habitat accessed
Riparian-Upland	Install fence	1 miles	3.15 miles of land fenced

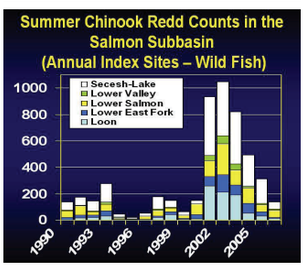
Mountain Snake

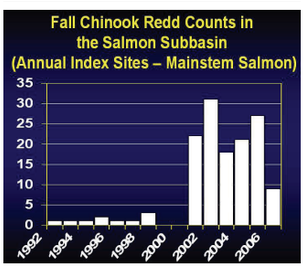
Chinook











Spring/Summer

ESA Listing Status: Threatened
ESU: Snake River
MPG: South Fork, Middle Fork, and Upper Salmon River
Populations: See table
Draft Recovery Plan Criteria: See table
Biological Objective: 36,400 spawning natural adults[1]
Status: Annual index sites Natural (N) and wild (W)
Spring Chinook (N)
Alturas Lake Creek—1 redd (2006)[2]
Lemhi River—25 redds (2006)[2]
Upper East Fork—2 redds (2006)[2]
Upper Salmon River—138 redds (2006)[2]
Upper Valley Creek—12 redds (2006)[2]
Upper Yankee Fork—0 redds (2006)[2]
Spring Chinook (W)
Bear Valley Creek—31 redds (2006)[2]
Elk Creek—53 redds (2006)[2]
Marsh Creek—48 redds (2006)[2]
Sulphur Creek—18 redds (2006)[2]
Upper Big Creek—9 redds (2006)[2]
Summer Chinook (N)
Johnson Creek—63 redds (2005)[2]
South Fork Salmon—390 redds (2005)[2]
Summer Chinook (W)
Loon Creek—14 redds (2006)[2]
Lower East Fork—7 redds (2006)[2]
Lower Salmon River—52 redds (2006)[2]
Lower Valley Creek—11 redds (2006)[2]
Secesh River-Lake Creek—54 redds (2006)[2]
Wild Juvenile Production:

Fall

ESA Listing Status: Threatened
ESU: Snake River
MPG: Snake River
Population: Lower Mainstem
Draft Recovery Plan Criteria: 3,000 natural adults with no fewer than 2,500 distributed in the mainstem
Biological Objective: 2,100-2,500 spawning natural adults[1]
Status: 9 redds (mixed origin) (2006)[3]
Wild Juvenile Production:

Species/ Race	Population	Threshold Abundance
Spring/ Summer Chinook		
	Little Salmon River	750
	South Fork Salmon River Mainstem	1,000
	Secesh River	750
	East Fork South Fork Salmon River	1,000
	Chamberlain Creek	750
	Lower Middle Fork Salmon River	500
	Big Creek	1,000
	Camas Creek	None
	Loon Creek	500
	Upper Middle Fork Salmon River	750
	Sulphur Creek	500
	Bear Valley Creek	750
	Marsh Creek	500
	North Fork Salmon River	500
	Lemhi River	2,000
	Salmon River lower mainstem below Redfish Lake	2,000
	Pahsimeroi River	1,000
	East Fork Salmon River	1,000
	Yankee Fork Salmon River	500
	Valley Creek	500
	Salmon River upper mainstem above Redfish Lake	1,000
	Panther Creek	750

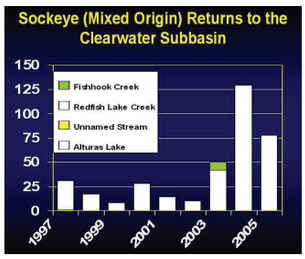
Subbasin: Salmon

Steelhead

Summer

ESA Listing Status: Threatened
DPS: Snake River
MPG: Salmon River
Populations: Little Salmon River, South Fork, Secesh River, River, Chamberlain Creek, Lower Middle Fork, Upper Middle Fork, Panther Reek, North Fork, Lemhi River , Pahsimeroi River, East Fork Salmon River, Upper Salmon Mainstem
Draft Recovery Plan Criteria: Little Salmon River, South Fork, River, Chamberlain Creek, Panther Reek, Lemhi River , Pahsimeroi River, East Fork Salmon River, Upper Salmon Mainstem = 1,000 natural adults for each population, Secesh River and North Fork = 500 natural adults per population, Lower Middle Fork, Upper Middle Fork = 1,500 natural adults per population
Biological Objective: >21,600 spawning natural adults (includes A-and B– run)[1]
Status: Not available
Wild Juvenile Production:

Sockeye



ESA Listing Status: Endangered
ESU: Snake River
MPG: Snake River
Population: Redfish, Alturas, Petit lakes
Draft Criteria Plan Criteria:
Biological Objective: 2,000 spawning natural adults[1]
Status: Redfish Lake Creek: 78 adults of mixed origin returned (2005)[6]
Wild Juvenile Production:

2007 Hatchery Releases and Returns to Hatcheries in the Salmon Subbasin

Hatchery/ Acclimation Pond	Species	Release Goal/Released	Return Goal/Actual Return	Harvest	PNI
Hayden Creek					
Sawtooth	Spring/Summer Chinook		/1,580		
	Summer Steelhead		/4,049		
Rapid River	Spring/Summer Chinook		/5,949		
	Summer Steelhead		/44		
Pahsimeroi	Spring/Summer Chinook		/717		
Yankee Fork Pond					
Hagerman					
McCall	Spring/Summer Chinook		/2,986		
	Summer Steelhead		/2		

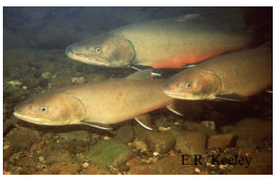
BPA-Funded Wildlife Projects in the Salmon Subbasin

There are no wildlife projects in this subbasin

[1] Nez Perce Tribe Watershed Division and Shoshone-Bannock Tribes. 2004. Salmon Subbasin Plan. A Report Prepared for the Northwest Power and Conservation Council. Portland, Oregon.
[2] Hassemer, P. Idaho Department of Fish and Game. Personal Communication.
[3] Garcia, A.P., S. Bradbury, B. Armsberg, S. Rockledge, and P. Groves. 2006. Fall Chinook Salmon Spawning Ground Surveys in the Snake River Upriver of Lower Granite Dam, 2005-2006 Annual Report. (via StreamNet)
[4] United States Fish and Wildlife Service. 2003. Chapter 17, Salmon River Recovery Unit 16, Idaho. *In*: U. S. Fish and Wildlife Service. Bull Trout (*Salvelinus confluentus*) Recovery Plan. Portland, Oregon.
[5] IDFG. Response to the U.S. Fish and Wildlife Service. Idaho department of Fish and Game. Unpublished Report.
[6] Plaster, K., M. Peterson, D. Baker, J. Heindel, J. Redding, C. Willard. 2007. 2005 Snake River Sockeye Salmon Captive Broodstock Program; Research Element. (via StreamNet)

Mountain Snake

Bull Trout



ESA Listing Status: Threatened
Core Population: Upper Salmon, Pahsimeroi, Lake Creek, Lemhi, Middle Salmon-Panther, Opal Lake, Middle Fork Salmon, Middle Salmon-Chamberlain, South Fork Salmon, Little-Lower Salmon (Within Salmon River Recovery Unit)
Draft Recovery Plan: (adults) Upper Salmon (5,000), Pahsimeroi (3,000), Lake Creek (100), Lemhi (2,000), Middle Salmon-Panther (3,000), Opal Lake (5,000), Middle Fork Salmon (5,000), Middle Salmon-Chamberlain (2,000), South Fork Salmon (5,000), Little-Lower Salmon (2,000)[4]
Status: Density Estimates - fish/100m^2

Lower Salmon River
Slate Creek—0.26 (2007)
John Day Creek—0.00 (2006)
Skookumchuck Creek—0.00 (2006)
Little Salmon—0.04 (2006)

Upper and Lower Middle Fork Salon River
Mainstem Middle Fork—0.25 (2007)
Loon Creek—0.07 (2005)
Camas Creek—0.30 (2005)
Marsh Creek—0.10 (2006)

Middle Salmon River
Panther Creek—0.13 (2006)
Moyer Creek—2.54 (2006)

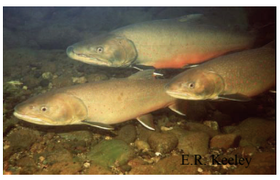
Lemhi River
Lemhi River—0.13 (2006), 141 redds (2007)
Hayden Creek—0.23 (2006), 52 redds (2007)
Bear Valley Creek—0.13 (2006), 25 redds (2007)

Pahsimeroi River
Pahsimeroi River—0.10 (2004)

Upper Salmon River
East Fork—0.04 (2006)
Mainstem—0.07 (2005)
Redfish Creek—0.04 (2005)
Valley Creek—0.05 (2004)

Subbasin: Salmon

Bull Trout



Abundance, Trend, Threat, and Risk Ranks (Lake Creek Core):
Abundance = 50-250
Short-term Trend = Unknown
Threat = Widespread, low-severity
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Lemhi River Core):
Abundance = 250-1,000
Short-term Trend = Unknown
Threat = Substantial, imminent
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Little Lower Salmon River Core):
Abundance = 50-250
Short-term Trend = Unknown
Threat = Substantial, imminent
Risk = High

Abundance, Trend, Threat, and Risk Ranks (Middle Fork Salmon Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Slightly
Risk = Low

Abundance, Trend, Threat, and Risk Ranks (Middle Salmon River/Chamberlain Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Widespread, low-severity
Risk = Potential

Abundance, Trend, Threat, and Risk Ranks (Middle Salmon River Panther Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Moderate, imminent
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Opal Lake Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Widespread, low-severity
Risk = Potential

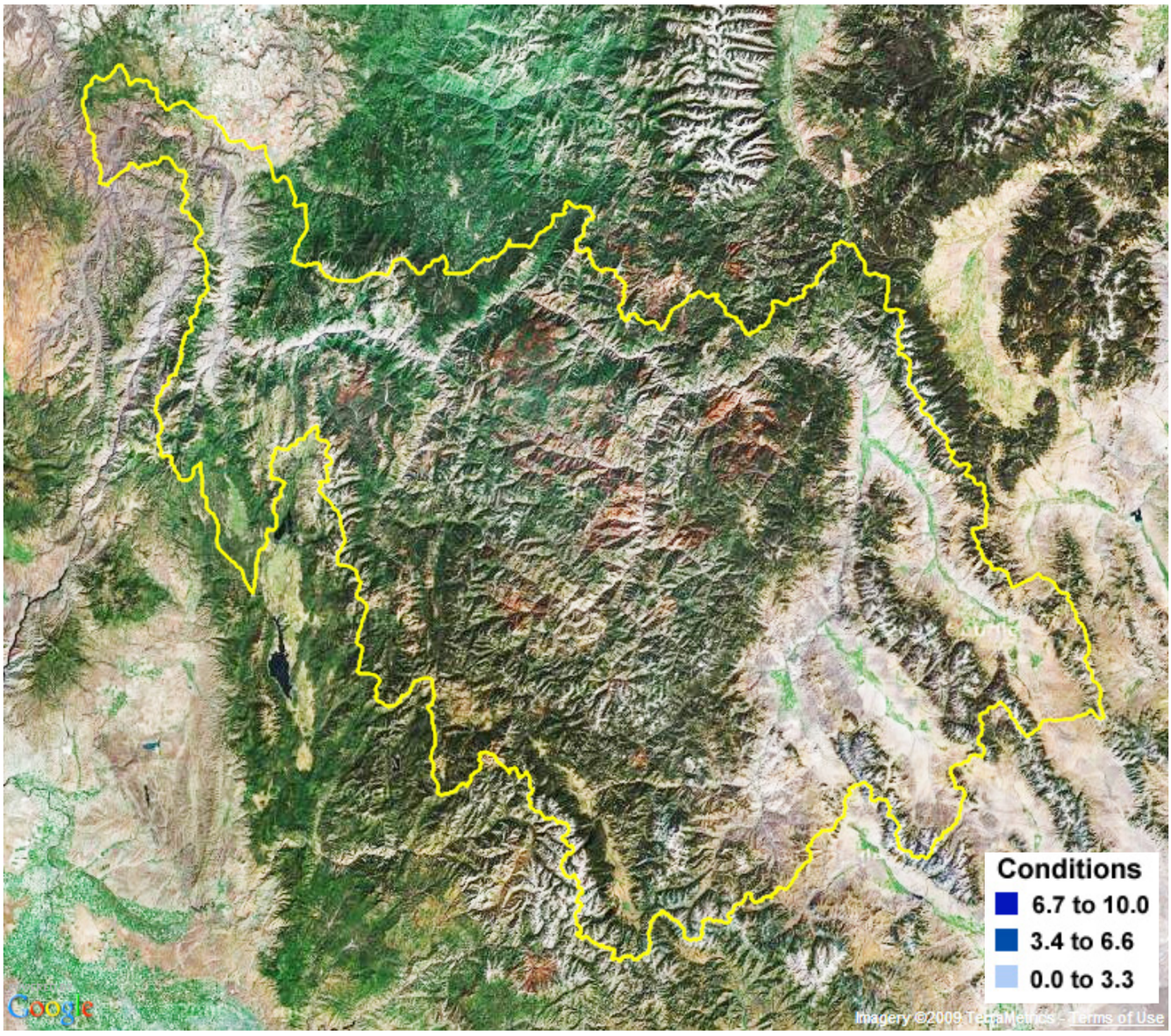
Abundance, Trend, Threat, and Risk Ranks (Pahsimeroi River Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Substantial, imminent
Risk =At

Abundance, Trend, Threat, and Risk Ranks (South Fork Salmon River Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Moderate, imminent
Risk = At

Abundance, Trend, Threat, and Risk Ranks (Upper Salmon River Core):
Abundance = Unknown
Short-term Trend = Unknown
Threat = Moderate, imminent
Risk = Potential

Mountain Snake

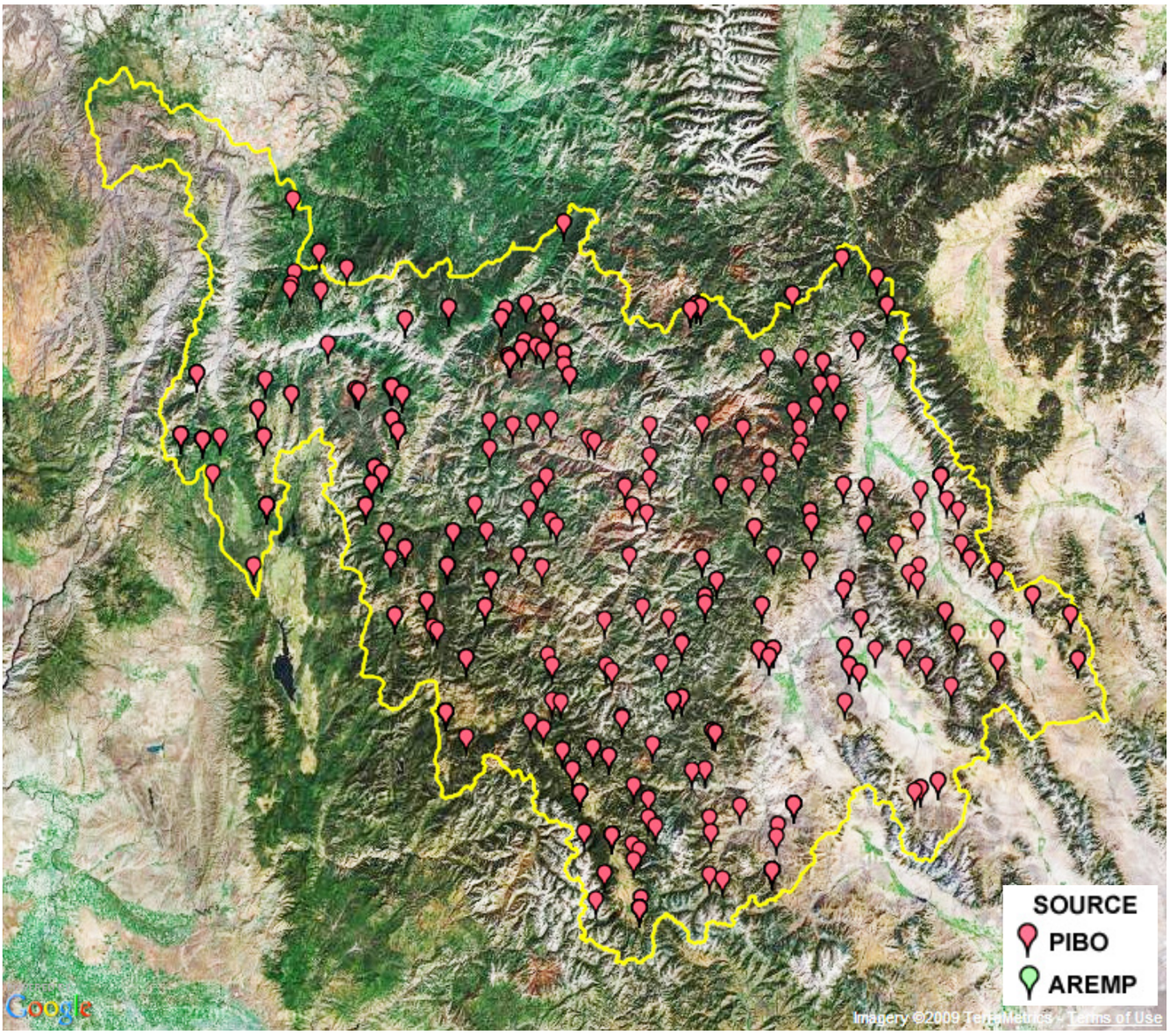
Watershed Conditions for National Forest and Bureau of Land Management Lands in the Salmon Subbasin



Watershed condition is based upon work completed by the USDA Forest Service (FS) and USDI Bureau of Land Management (BLM) Aquatic and Riparian Effectiveness Monitoring Program (AREMP). AREMP personnel evaluate the status and trend of watershed condition on FS, BLM, and National Park Service administered lands within the range of the Northern Spotted Owl. Watershed condition scores are determined for all watersheds that contain a minimum of 25 percent federal ownership. AREMP applies a decision support model to evaluate the premise that watersheds are in good condition. Watersheds are judged to be in good condition where the physical processes, such as wood and sediment delivery, and habitat attributes are adequate to maintain or improve the diversity and abundance of native or desired non-native aquatic species.[7] A score of 10 indicates full support for the premise that a watershed is in good condition and a score of 0 indicates no support for the premise. A fifteen-year assessment of watersheds is being done in 2009, with an expected publication date of early 2010.

Subbasin: Salmon

Stream Inventory Sites on National Forest and Bureau of Land Management Lands in the Salmon Subbasin



Green Symbol—Indicates locations where stream information is collected by the USDA Forest Service and USDI Bureau and Land Management through the Aquatic and Riparian Effectiveness Monitoring Program (AREMP).

Red Symbol—Indicates locations where stream inventory information is collected by the USDA Forest Service and USDI Bureau and Land Management through the PacFish/InFish Biological Opinion Monitoring Program (PIBO). The locations and information reported are for the sentinel and integrator sites used to track habitat status and trend within the PIBO area over time.[8]