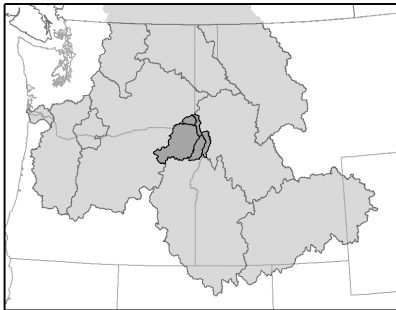


# Blue Mountain Province



## Blue Mountain Province BPA Spending, FY 2001-2003

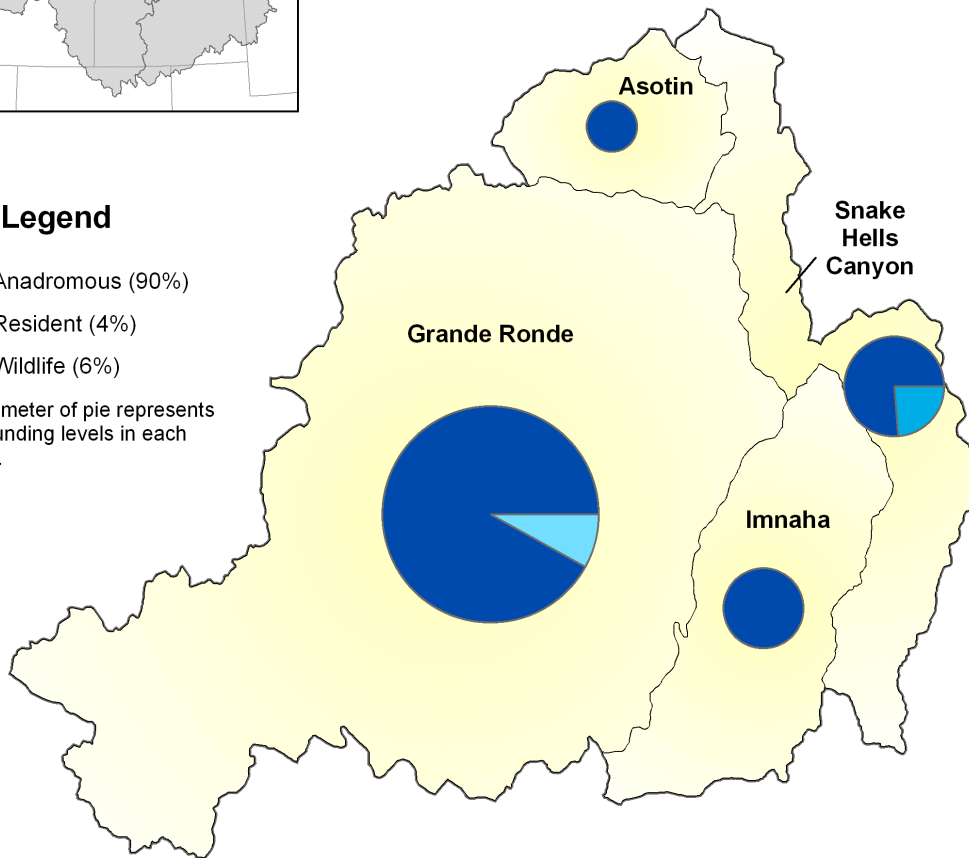
FY 2001	\$7,413,511
FY 2002	\$8,083,993
FY 2003	\$10,813,378
<b>Total Spending</b>	<b>\$26,310,882</b>



### Legend

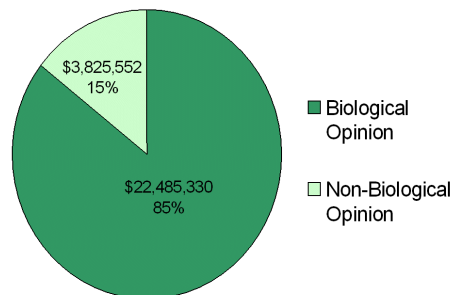
- Anadromous (90%)
- Resident (4%)
- Wildlife (6%)

Note: Diameter of pie represents relative funding levels in each subbasin.



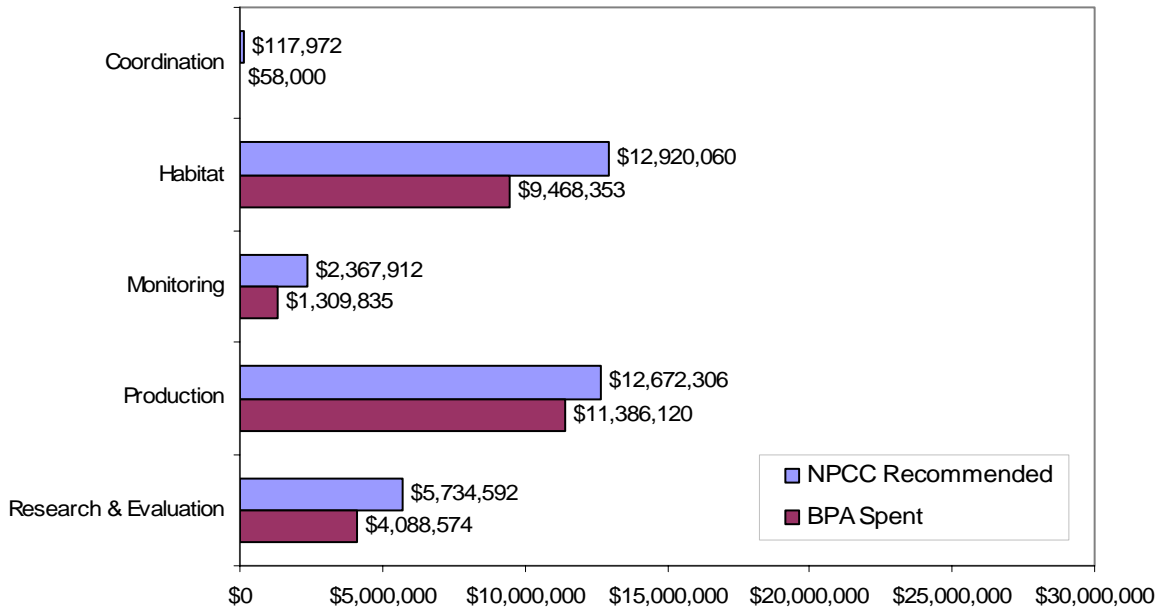
### Biological Opinion Funding, FY 2001-2003 NMFS & USFWS Designated Projects

	BiOp	Non BiOp
Asotin	\$1,022,709	\$0
Grande Ronde	\$15,854,114	\$2,879,467
Imnaha	\$2,564,318	\$0
Snake Hells Canyon	\$3,044,189	\$946,085

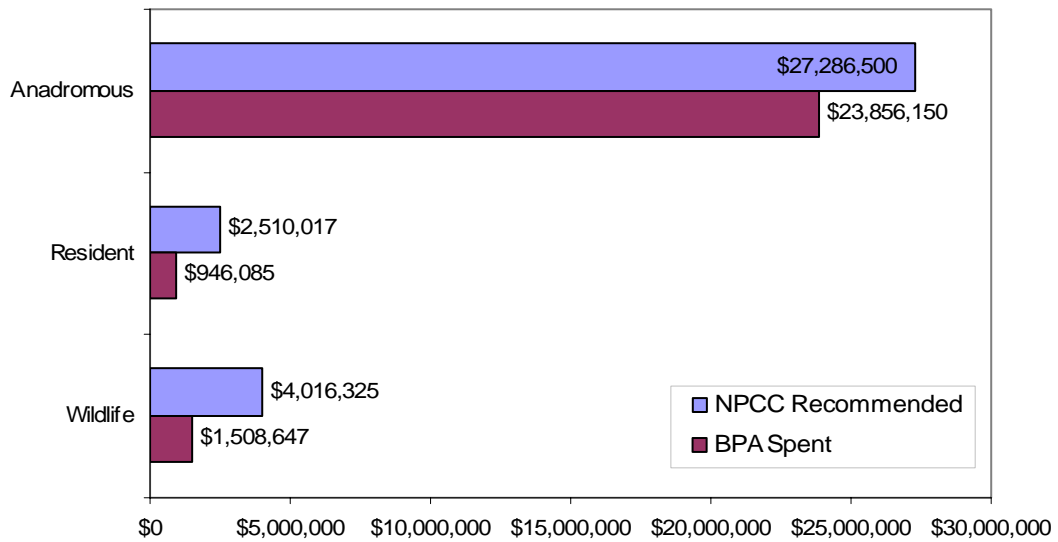


## Blue Mountain Province FY 2001-2003 Spending Summaries

### NPCC Recommendations and BPA Spending by Project Category, FY01-03



### NPCC Recommendations and BPA Spending by Project Type, FY01-03



# Asotin Subbasin

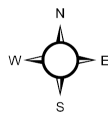
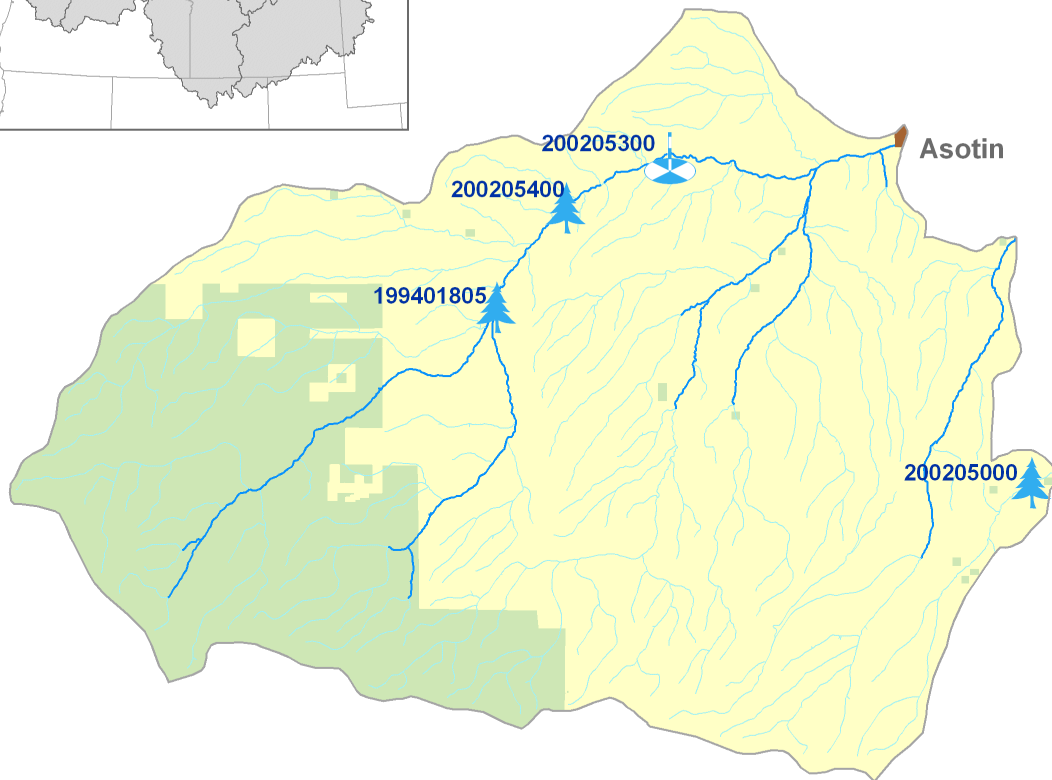


**Columbia Basin  
Fish and Wildlife Authority**

FY 2001-2003 NPCC Recommended and/or  
BPA Funded Fish & Wildlife Projects



## Blue Mountain Province Asotin Subbasin



Data Layers: Land Ownership (ICBEMP), 100k Hydrography (Streamnet), Urban Areas (State Data), Projects (CBFWA)  
 Projection: UTM 1983, Zone 11  
 Produced by: Columbia Basin Fish & Wildlife Authority  
 Map Date: 5/16/04

**LEGEND**

Project Category	Location Accuracy	
	Funded	Unfunded
Coordination	Province	Province
Data Management	Subbasin	Subbasin
Habitat	Stream	Stream
Harvest	Area	Area
Mainstem Survival	Point	Point
Monitoring		
Production		
Research & Evaluation		

**Project Labels**

Biological Opinion      Non Biological Opinion

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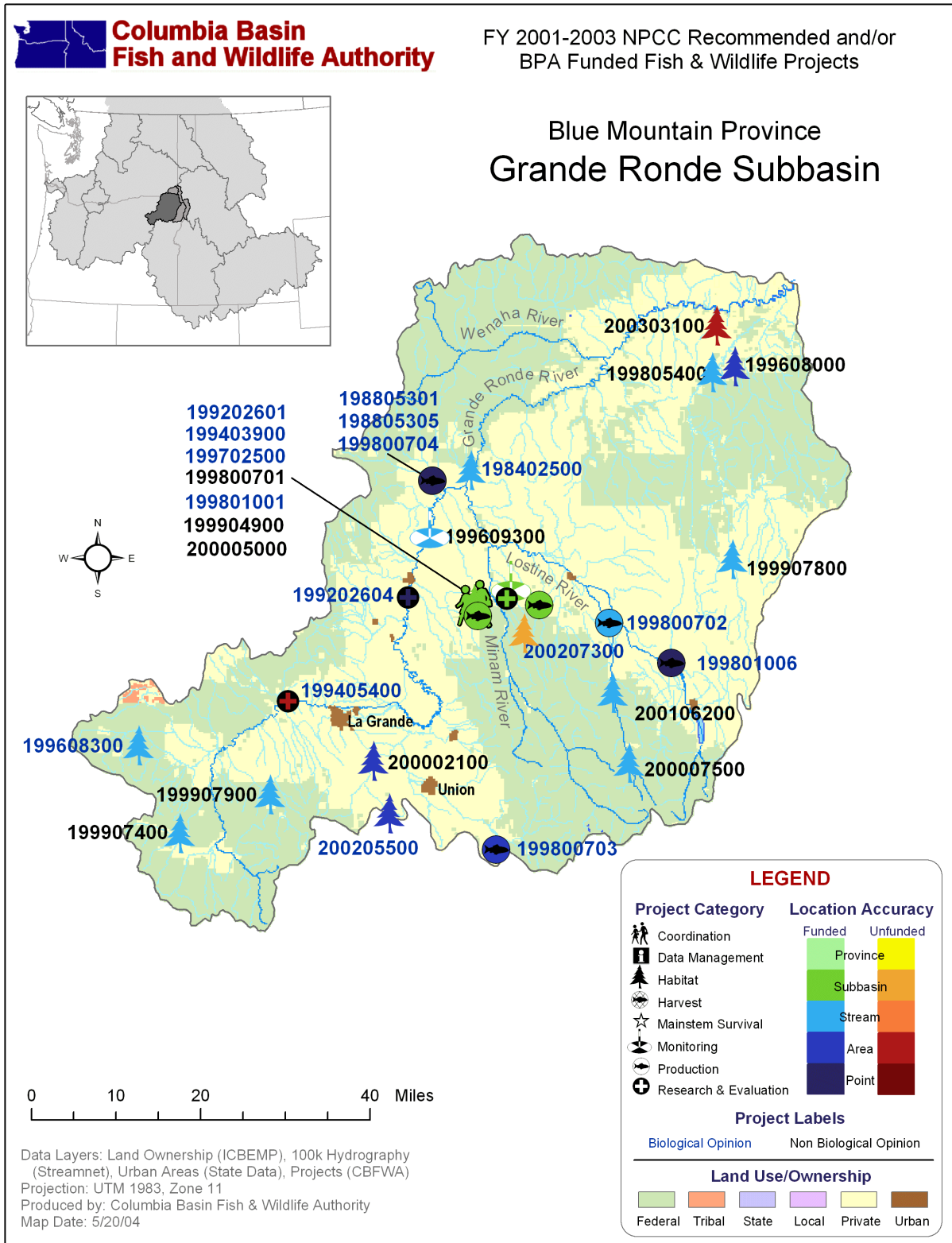
**Land Use/Ownership**

Federal	Tribal	State	Local	Private	Urban
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## Projects in the Asotin Subbasin

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>
199401805	Continued Coordination and Implementation of Asotin Creek Watershed Projects				Blue Mountain		yes
	<i>Rec 00-03</i>	\$235,000	\$271,000	\$280,214	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$187,796	\$253,566	\$261,260	Anadromous	Habitat stream
200205000	Asotin County Riparian Buffer and Couse and Tenmile Creeks Protection and Implementation Project				Blue Mountain		yes
	<i>Rec 00-03</i>	\$ 0	\$241,000	\$241,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$194,268	Anadromous	Habitat stream
200205300	Assess Salmonids in the Asotin Creek Watershed				Blue Mountain		yes
	<i>Rec 00-03</i>	\$ 0	\$316,885	\$228,600	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$18,493	Anadromous	Monitoring stream
200205400	Protect and Restore the Asotin Creek Watershed				Blue Mountain		yes
	<i>Rec 00-03</i>	\$ 0	\$121,000	\$124,600	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$107,326	Anadromous	Habitat stream

# Grande Ronde Subbasin



## Projects in the Grande Ronde Subbasin

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>
198402500	Grande Ronde Basin Fish Habitat Enhancement Project				Blue Mountain		yes
	<i>Rec 00-03</i>	\$272,649	\$349,386	\$361,265	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$285,715	\$155,650	\$464,389	Anadromous	Habitat stream
198805301	Northeast Oregon Hatchery Master Plan				Blue Mountain		yes
	<i>Rec 00-03</i>	\$2,309,038	\$1,000,000	\$318,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$969,261	\$792,026	\$885,516	Anadromous	Production point
198805305	Northeast Oregon Hatcheries Planning (ODFW)				Blue Mountain		yes
	<i>Rec 00-03</i>	\$400,477	\$79,376	\$82,075	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$39,337	\$26,450	\$24,214	Anadromous	Production point
199202601	Implement the Grande Ronde Model Watershed Program Administration and Habitat Restoration Projects				Blue Mountain		yes
	<i>Rec 00-03</i>	\$930,000	\$961,620	\$1,299,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$877,567	\$899,242	\$1,250,124	Anadromous	Habitat subbasin
199202604	Investigate Life History of Spring Chinook Salmon and Summer Steelhead in the Grande Ronde River Basin and Monitor Salmonid Populations and Habitat				Blue Mountain		yes
	<i>Rec 00-03</i>	\$725,423	\$888,087	\$918,282	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$610,678	\$932,061	\$777,894	Anadromous	Research & Evaluation point
199403900	Watershed Restoration Planner				Blue Mountain		yes
	<i>Rec 00-03</i>	\$58,000	\$59,972	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$58,000	\$ 0	\$ 0	Anadromous	Coordination subbasin
199405400	Tools for Managing Bull Trout Populations Influenced by Non-native Brook Trout Invasions				Blue Mountain		yes
	<i>Rec 00-03</i>	\$387,182	\$402,611	\$388,764	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$ 0	Resident	Research & Evaluation area
199608000	NE Oregon Wildlife Mitigation Project -- "Precious Lands"				Blue Mountain		no
	<i>Rec 00-03</i>	\$184,037	\$439,803	\$414,100	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$306,647	\$481,139	\$357,747	Wildlife	Habitat area
199608300	CTUIR Grande Ronde Subbasin Restoration				Blue Mountain		yes
	<i>Rec 00-03</i>	\$130,000	\$200,000	\$195,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$185,953	\$367,459	\$176,862	Anadromous	Habitat stream

## Projects in the Grande Ronde Subbasin, continued...

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>	
199609300	Grande Ronde Valley Stream Gauge				FY 2001		no	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 4,080	\$ 0	Anadromous	Monitoring	stream	
199702500	Implement The Wallowa County/Nez Perce Tribe Salmon Habitat Recovery Plan				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$20,000	\$20,680	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$- 6,445	\$46,227	\$ 7,875	Anadromous	Habitat	subbasin
199800701	Grande Ronde Supplementation Construction				FY 2001		no	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$487,570	\$405,795	\$102,357	Anadromous	Production	subbasin
199800702	Grande Ronde Supplementation: Lostine River O&M and M&E				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$479,289	\$545,693	\$563,172	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$568,495	\$406,381	\$541,518	Anadromous	Production	stream
199800703	Facility O&M and Program M&E for Grande Ronde Spring Chinook Salmon and Summer Steelhead				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$619,131	\$640,181	\$661,948	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$507,429	\$343,132	\$752,113	Anadromous	Production	area
199800704	Northeast Oregon Hatcheries Implementation (ODFW)				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$ 0	\$206,048	\$209,215	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$124,858	\$ 0	\$134,002	Anadromous	Production	point
199801001	Grande Ronde Basin Spring Chinook Captive Broodstock Program				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$654,648	\$676,906	\$699,921	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$553,624	\$898,028	\$666,753	Anadromous	Production	subbasin
199801006	Captive Broodstock Artificial Propagation				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$145,000	\$164,260	\$169,845	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$147,341	\$96,671	\$162,264	Anadromous	Production	point
199805400	Joseph Creek Watershed Improvement				FY 2001		no	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$21,090	\$ 0	\$ 0	Anadromous	Habitat	stream
199904900	Grande Ronde Gauge Monitoring				FY 2001		no	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$18,754	\$ 0	\$ 0	Anadromous	Monitoring	subbasin

## Projects in the Grande Ronde Subbasin, continued...

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>
199907400	Little Fly Meadow Headcut Rehabilitation				FY 2001		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$19,773	\$ 0	Anadromous	Habitat	stream
199907800	Crow Creek Star Thistle Containment				FY 2001		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 309	\$ 0	Wildlife	Habitat	stream
199907900	Beaver Creek Fish Passage				FY 2001		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$34,605	\$ 0	Anadromous	Habitat	stream
200002100	Securing Wildlife Mitigation Sites - Oregon, Ladd Marsh WMA Additions				Blue Mountain		no
	<i>Rec 00-03</i>	\$285,700	\$193,185	\$374,500	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 4,601	\$221,310	Wildlife	Habitat	area
200005000	Riparian Recovery: Plant Success				FY 2001		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$100,453	\$95,745	Anadromous	Research & Evaluation	subbasin
200007500	Lostine River Passage				FY 2001		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$78,910	\$ 0	Anadromous	Habitat	stream
200106200	Acquire Lostine River Water Rights				FY01 Action Plan		no
	<i>Rec 00-03</i>	\$150,000	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 1,688	Anadromous	Habitat	stream
200205500	Oregon Plan Blue Mountain Province Fish Screening/Fish Passage				Blue Mountain		yes
	<i>Rec 00-03</i>	\$ 0	\$153,314	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	Anadromous	Habitat	area
200207300	Wallowa County Culvert Inventory				Blue Mountain		yes
	<i>Rec 00-03</i>	\$ 0	\$170,603	\$176,404	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	Anadromous	Habitat	subbasin
200303100	Precious Lands Wildlife Habitat Expansion				Blue Mountain		no
	<i>Rec 00-03</i>	\$ 0	\$725,000	\$1,400,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	Wildlife	Habitat	area



# Innaha Subbasin

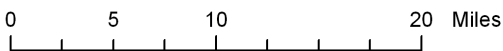
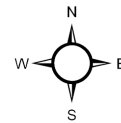


**Columbia Basin  
Fish and Wildlife Authority**

FY 2001-2003 NPCC Recommended and/or  
BPA Funded Fish & Wildlife Projects



Blue Mountain Province  
Innaha Subbasin



Data Layers: Land Ownership (ICBEMP), 100k Hydrography (Streamnet), Urban Areas (State Data), Projects (CBFWA)  
 Projection: UTM 1983, Zone 11  
 Produced by: Columbia Basin Fish & Wildlife Authority  
 Map Date: 5/20/04

**LEGEND**

<b>Project Category</b>		<b>Location Accuracy</b>	
Coordination		Funded	Unfunded
Data Management		Province	Province
Habitat		Subbasin	Subbasin
Harvest		Stream	Stream
Mainstem Survival		Area	Area
Monitoring		Point	Point
Production			
Research & Evaluation			
<b>Project Labels</b>			
Biological Opinion		Non Biological Opinion	
<b>Land Use/Ownership</b>			
Federal	Tribal	State	Local
Private	Urban		

## Projects in the Imnaha Subbasin

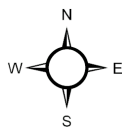
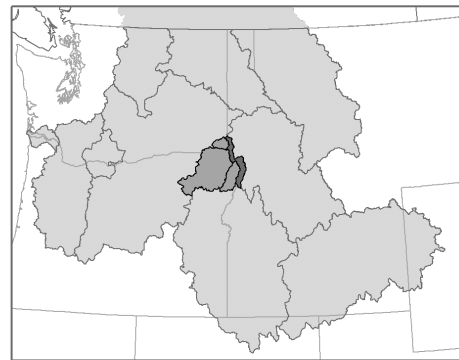
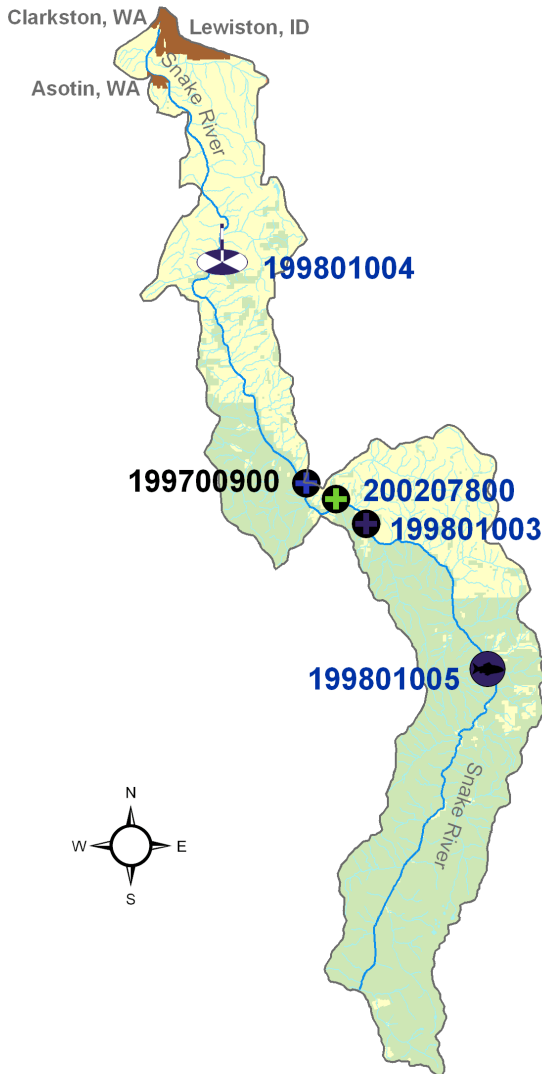
<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>	
27017	Bull Trout Population Assessment and Life History Characteristics in Association with Habitat Quality and Land Use: Template for Recovery Planning				Blue Mountain		no	
	<i>Rec 00-03</i>	\$ 0	\$175,000	\$180,950	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	Resident	Research & Evaluation	stream	
199701501	Imnaha Smolt Survival and Smolt to Adult Return Rate Quantification				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$190,057	\$241,570	\$254,590	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$173,079	\$186,086	Anadromous	Monitoring	area	
200104300	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie				FY01 High Priority		yes	
	<i>Rec 00-03</i>	\$2,000,000	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$1,963,356	Anadromous	Habitat	area
200205600	Adult Steelhead Status Monitoring - Imnaha River Subbasin				Blue Mountain		yes	
	<i>Rec 00-03</i>	\$ 0	\$148,967	\$125,000	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$ 0	Anadromous	Monitoring	subbasin

# Snake Hells Canyon Subbasin



FY 2001-2003 NPCC Recommended and/or BPA Funded Fish & Wildlife Projects

## Blue Mountain Province Snake Hells Canyon Subbasin



Data Layers: Land Ownership (ICBEMP), 100k Hydrography (Streamnet), Urban Areas (State Data), Projects (CBFWA)  
 Projection: UTM 1983, Zone 11  
 Produced by: Columbia Basin Fish & Wildlife Authority  
 Map Date: 5/20/04

**LEGEND**

Project Category	Location Accuracy	
	Funded	Unfunded
Coordination	Province	Subbasin
Data Management	Subbasin	Stream
Habitat	Stream	Area
Harvest	Area	Point
Mainstem Survival	Point	
Monitoring		
Production		
Research & Evaluation		

**Project Labels**

Biological Opinion      Non Biological Opinion

**Land Use/Ownership**

Federal	Tribal	State	Local	Private	Urban
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## Projects in the Snake Hells Canyon Subbasin

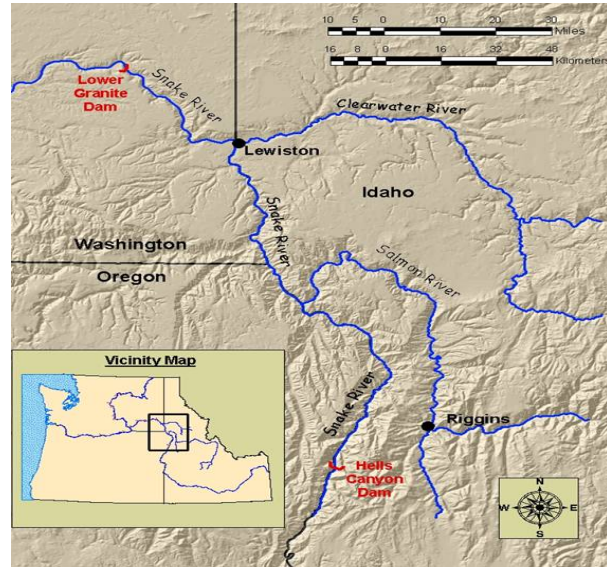
<i>Project ID</i>	<i>Project Title</i>					<i>Review Cycle</i>		<i>BiOp?</i>
<b>199700900</b>	<b>Evaluate Potential Means of Rebuilding Sturgeon Populations in the Snake River Between Lower Granite and Hells Canyon Dams</b>					<b>Blue Mountain</b>		<b>no</b>
	<i>Rec 00-03</i>	\$410,000	\$290,510	\$275,000	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$390,258	\$402,658	\$153,169	Resident	Research & Evaluation	area
199801003	Spawning distribution of Snake River fall chinook salmon					Blue Mountain		yes
	<i>Rec 00-03</i>	\$191,422	\$174,162	\$130,900	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$171,818	\$226,608	\$37,299	Anadromous	Research & Evaluation	point
199801004	Monitor and Evaluate Yearling Snake River Fall Chinook Released Upstream Of Lower Granite Dam					Blue Mountain		yes
	<i>Rec 00-03</i>	\$277,860	\$287,307	\$297,076	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$208,251	\$228,300	\$230,995	Anadromous	Monitoring	point
199801005	Pittsburg Landing (199801005), Capt. John Rapids (199801007), Big Canyon (199801008) Fall Chinook Acclimation Facilities					Blue Mountain		yes
	<i>Rec 00-03</i>	\$660,000	\$682,440	\$705,643	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$283,704	\$617,771	\$849,510	Anadromous	Production	point
200207800	Evaluate the Effects of Hyporheic Discharge on Egg Pocket Water Temperature in Snake River Fall Chinook Salmon Spawning Areas					FY02 Innovative		yes
	<i>Rec 00-03</i>	\$ 0	\$196,299	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$189,933	Anadromous	Research & Evaluation	subbasin

Projects in **bold** have preliminary results data included in this report.

**199700900 – Evaluate Potential Means of Rebuilding Sturgeon Populations in the Snake River between Lower Granite and Hells Canyon Dams**

**2002 Project Objectives**

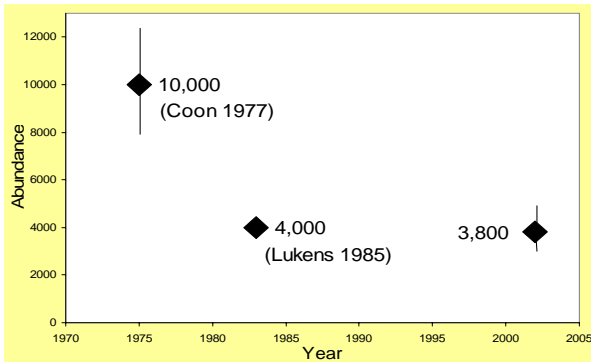
- Determine the status and characteristics of white sturgeon
- Determine habitat used for spawning and rearing



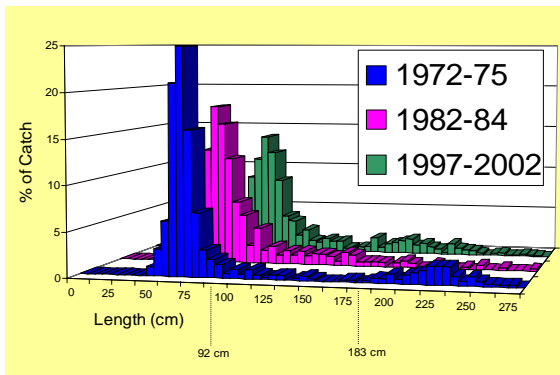
Collection and monitoring efforts occurred between Lower Granite and Hells Canyon dams.

**Population Status and Characteristics - Preliminary Results**

- Abundance level for white sturgeon estimated at 3,800, which is comparable to abundance levels over the last 20 years
- Significant decrease in abundance since the completion of the mainstem hydroelectric facilities



Comparison of abundance estimates for Hells Canyon white sturgeon.



Percentage of catch by age-class for white sturgeon collected in Hells Canyon.

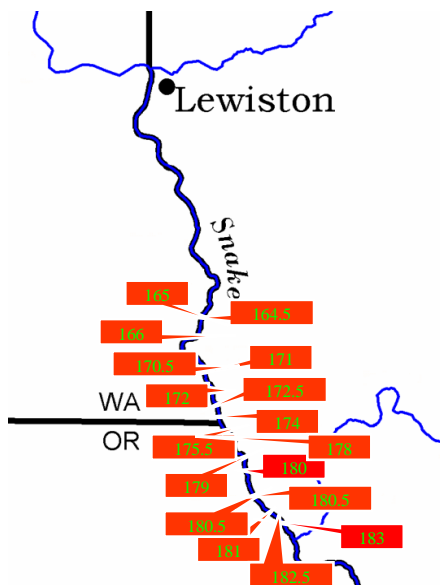
- Shift in size-class distribution with fewer fish larger than 72 inches collected
- Lack of representatives between 36—72 inches
- Loss of fish between 36-72 inches represents a loss of sexually mature fish

## Spawning - Preliminary Results

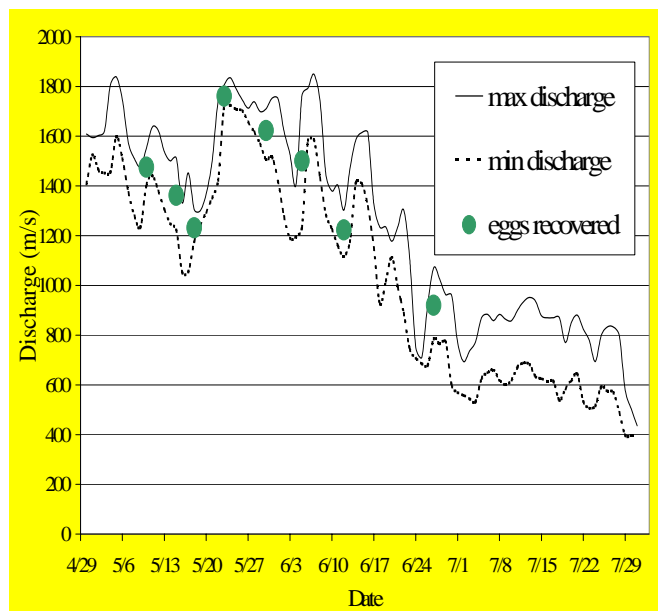
- Number of locations where eggs were recovered
  - Snake River (N = 17)
  - Salmon River (N = 3)
- Number of eggs recovered from each river
  - Snake River (N = 49)
  - Salmon River (N = 7)
- Eggs were recovered during the descending hydrograph (May—July)
- Eggs were recovered only in the upper reach of the river



Photo: Courtesy Nez Perce Tribe



Locations where white sturgeon spawned in the Snake and Salmon rivers.



Discharge rates at which white sturgeon eggs were collected in the Snake River between Lower Granite and Hells Canyon dams.