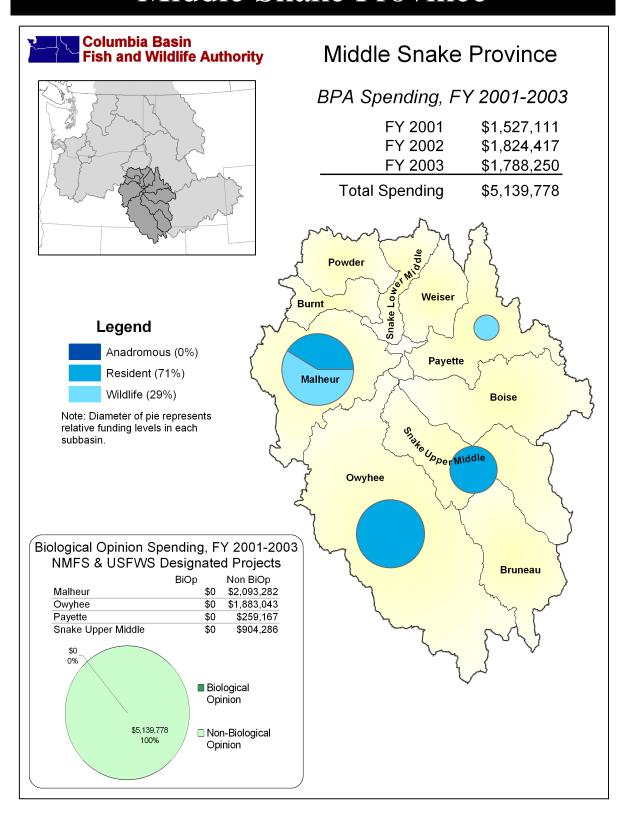
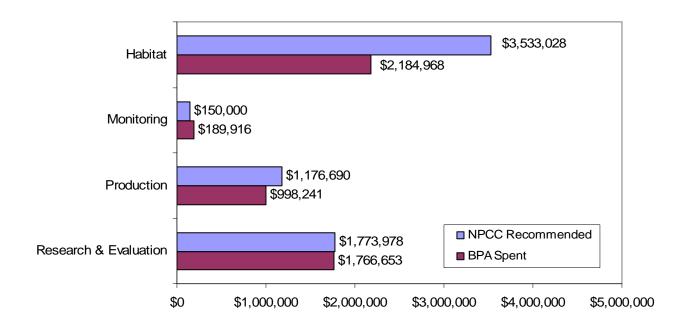
Middle Snake Province

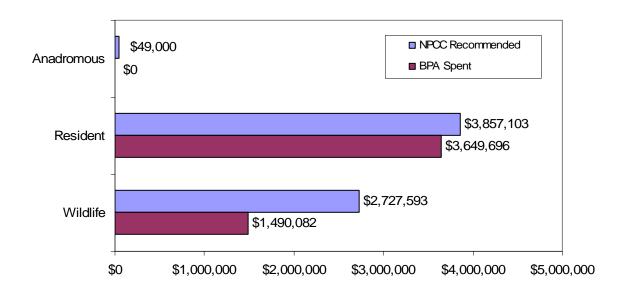


Middle Snake Province FY 2001-2003 Spending Summaries

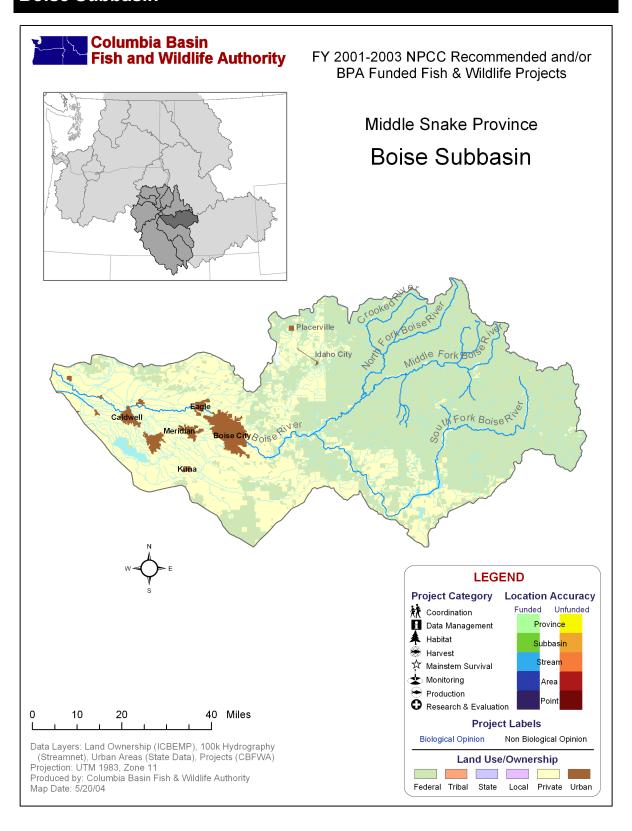
NPCC Recommendations and BPA Spending by Project Category, FY01-03



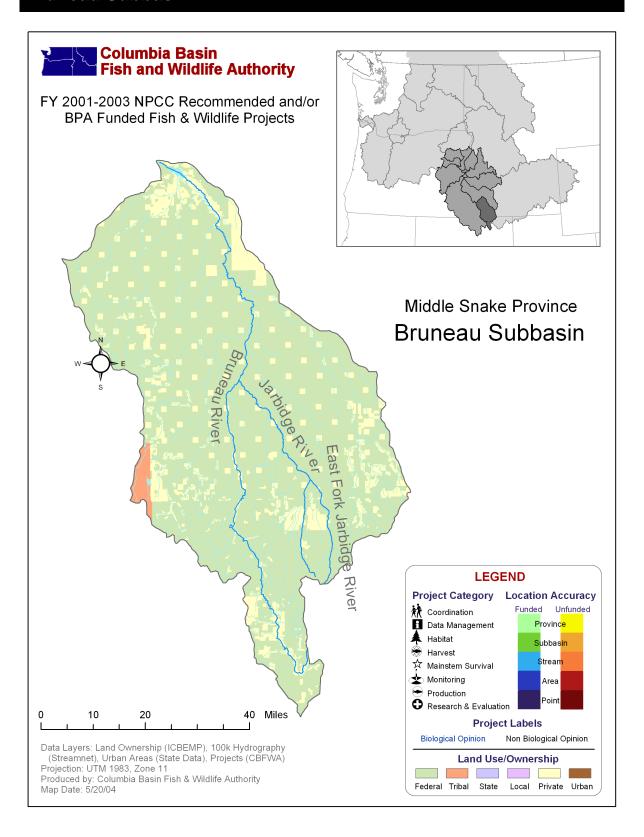
NPCC Recommendations and BPA Spending by Project Type, FY01-03



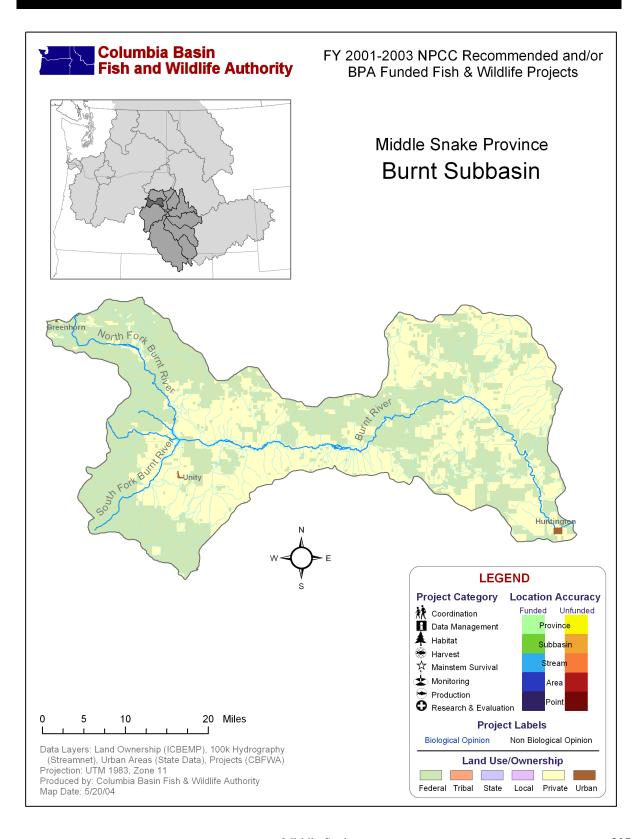
Boise Subbasin



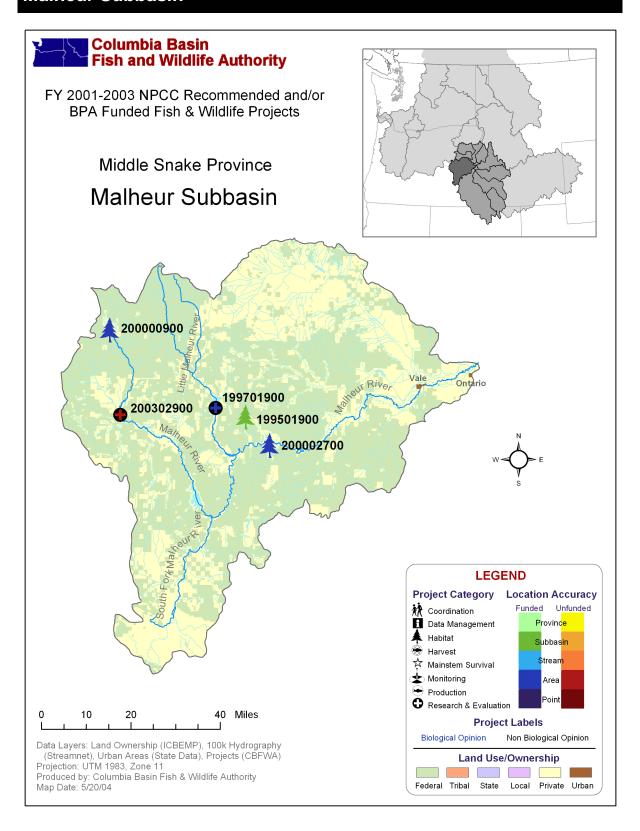
Bruneau Subbasin



Burnt Subbasin



Malheur Subbasin



Projects in the Malheur Subbasin

Pr	oject ID			Project	Title	Rev	BiOp?		
199	501900	Burns	-Paiute F&	W Coordinator	FY 1997	no			
	Rec 00-0	03		\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	Spent 01-0	03		\$20,191	\$ 0	\$ 0	Wildlife	Habitat	subbasin
199	701900	Evalu heur I		fe History of Na	tive Salmonio	ds In The Ma	Middle	Snake	no
	Rec 00-0	03		\$208,996	\$216,101	\$324,401	Type	Category	Accuracy
	Spent 01-03			\$166,539	\$403,035	\$292,793	Resident	Research & Evaluation	area
200	000900	Logar	Valley W	ildlife Mitigatio	Middle	Middle Snake			
	Rec 00-0	03		\$188,140	\$194,536	\$146,842	Type	Category	Accuracy
	Spent 01-0	03		\$174,758	\$206,774	\$125,717	Wildlife	Habitat	area
200	0002700	Malhe	Malheur Wildlife Mitigation Project				Middle	no	
	Rec 00-0	03		\$184,318	\$190,584	\$285,000	Type	Category	Accuracy
	Spent 01-0	03		\$164,134	\$254,875	\$284,466	Wildlife	Habitat	area
200	Assess the Feasibili port the Reintroduct Beulah & Warmspri			action of Anadro	mous Populat			Snake	no
	Rec 00-0	03		\$ 0	\$ 0	\$49,000	Type	Category	Accuracy
	Spent 01-0	03		\$ 0	\$ 0	\$ 0	Anadromous	Research & Evaluation	area

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

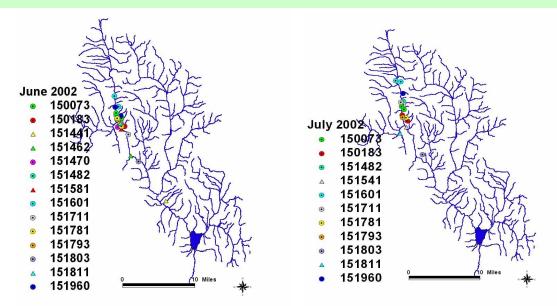
199701900—Evaluate the Life History of Native Salmonids in the Malheur Basin

2002 Project Objectives

- Document migratory patterns of bull trout in the Malheur Basin
- Evaluate whether bull trout and brook trout are both present in Meadow Fork and Lake creeks
- Determine bull trout use of Beulah Reservoir

Migratory Patterns of Bull Trout in the Malheur Basin - Preliminary Results

- Monitored movements of 16 bull trout (6 –13 inches) from May—August
- Fish remained between river mile 40-46 during early summer and moved upstream (river mile 46-56)



Bull trout movement in the Malheur River during June and July 2002.



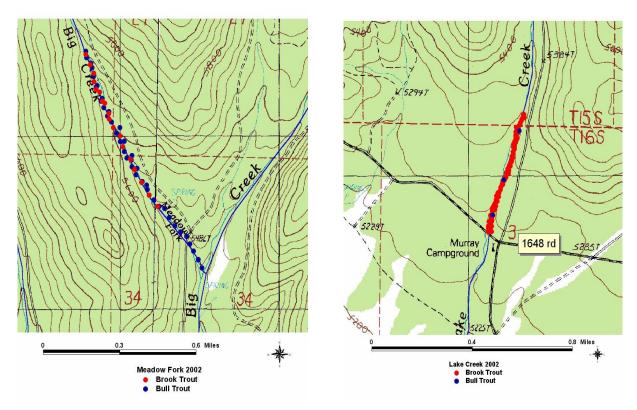
Upstream movements of bull trout in the Malheur River during August 2002 likely reflects an attempt to find appropriate refugia as well as initial movements towards suitable spawning locations

Bull/Brook Trout Distribution in Meadow Fork/Lake Creek - Preliminary Results

- Brook trout present in both drainages
- Brook trout collected throughout the Meadow Fork drainage except at the confluence with Big Creek
- Lake Creek salmonid population consisted mostly of brook trout



Burns-Paiute Tribe biologists surveying Meadow Fork Creek for bull trout and brook trout.



Locations bull trout and brook trout were collected in Meadow Fork and Lake creeks during 2002.

Bull Trout Use of Beulah Reservoir - Preliminary Results



Burns Paiute Tribe biologists display one of three adult bull trout collected from Beulah Reservoir.

- Three adult bull trout were collected in the reservoir
- Two adult bull trout where collected at the confluence of the Malheur River and Beulah Reservoir (trap was in operation for only one month due environmental conditions)
- No bull trout were reported through spring creel surveys



Efforts by the Burn Paiute Tribe to monitor bull trout use of Beulah Reservoir were limited due to an unexpected drawdown.

200002700 — Malheur River Wildlife Mitigation Project

2002 Project Objectives

- Rehabilitate plant communities through reseeding and enhancing irrigation efficiency
- Control and eradicate weed populations

Plant Community Rehabilitation- Preliminary Results

Denny Jones Ranch

- Purchased in 2000
- 6,386 acres of deeded land and allotments
- 409 acres of meadowland (most hayed for last 120 years)
- Approximately 1,300 acres of medusahead-infested rangeland

Rehabilitation (Plantings)

- 45 acres oats
- 12 acres of grass mix



Management efforts on the 409 acres of meadowland includes reseeding select areas with native vegetation, and implementing a crop rotation plan in the agriculture areas.



Rangeland management activities on the Denny Jones Ranch will include efforts to control medusahead which out competes native species and cannot be digested by grazers.

HEP Results

Species	Acres	HSI	Habitat Units		
Yellow warbler	12	0.28	22.8		
Mink	81	0.1	7.88		
Mule deer	6,304	0.22	1,456.44		
Western meadowlark	6,304	0.32	2,111.80		

200000900— Logan Valley Wildlife Mitigation Project

2002 Project Objectives

- Maintain the historical distribution of meadows
- Restore stream channel morphology and natural functions
- Protect riparian areas
- Restore and maintain vegetative communities
- Control/eradicate weed infestations

Preliminary Results

- Property purchased in 2000
- Consists of 1,760 acres

HEP Results

Species	Acres	HSI	Habitat Units
Black-capped chickadee	420	0.24	420
Mink	798	0.11	87.8
Downy woodpecker	420	0.5	210
Mule deer	1,760	0.53	932.8



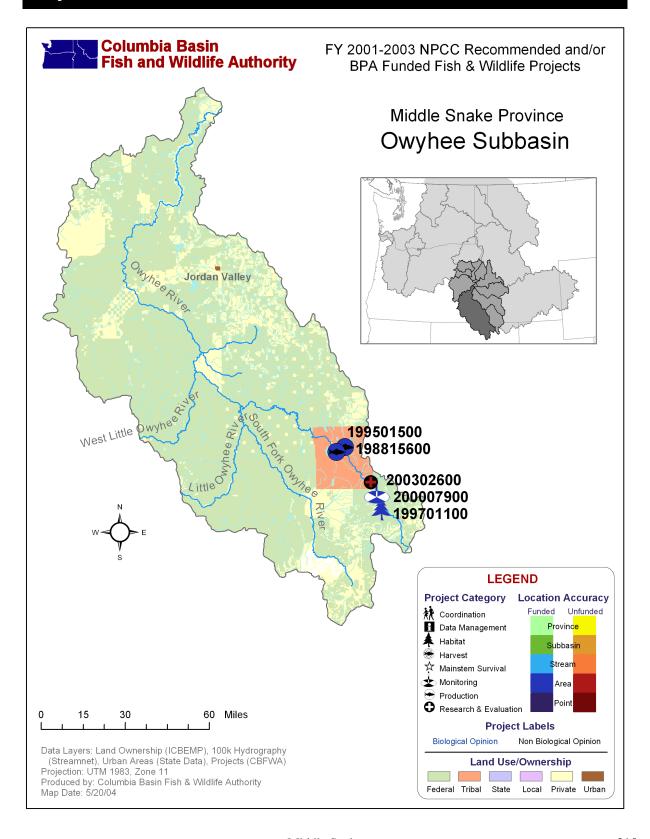
Restoration and maintenance of dry and wet meadows in Logan Valley is a high priority for the Burns Paiute Tribe.





Burn Paiute Tribe biologists collecting data to assist in the restoration of stream morphology and natural functions on the Logan Valley Ranch. Photos: Courtesy Burns Paiute Tribe

Owyhee River Subbasin



Projects in the Owyhee River Subbasin

Project ID			Project	Title		Re	view Cycle	BiOp?
198815600		plement Fishery h Conservation	y Stocking Prog	Middle	Middle Snake			
Rec 00	-03		\$138,307	\$143,009	\$147,871	Type	Category	Accuracy
Spent 01	-03		\$137,235	\$118,961	\$103,759	Resident	Production	area
199501500		ke Billy Shaw n (O&M, M&l	Operations and E)	d Maintenand	ce and Evalua	a- Middle	e Snake	no
Rec 00	-03		\$221,550	\$229,082	\$296,871	Type	Category	Accuracy
Spent 01	-03		\$228,875	\$142,272	\$267,139	Resident	Production	area
199701100	En DV		tect Habitat ar	nd Riparian A	Areas on the	Middle	e Snake	no
Rec 00	-03		\$300,000	\$310,200	\$292,696	Type	Category	Accuracy
Spent 01	-03		\$178,843	\$219,672	\$296,371	Resident	Habitat	area
200007900		sess Resident I V.I.R.	Fish Stocks of t	he Owyhee/B	runeau Basir	n, Middle	e Snake	no
Rec 00	-03		\$ 0	\$ 0	\$150,000	Type	Category	Accuracy
Spent 01	-03		\$70,630	\$104,227	\$15,059	Resident	Monitoring	area
200302600 Wildlife Inventory and I dian Reservation			and Habitat Ev	valuation of D	uck Valley In-	- Middle	Snake	no
Rec 00	-03		\$ 0	\$ 0	\$127,461	Type	Category	Accuracy
Spent 01	-03		\$ 0	\$ 0	\$ 0	Wildlife	Research & Evaluation	area

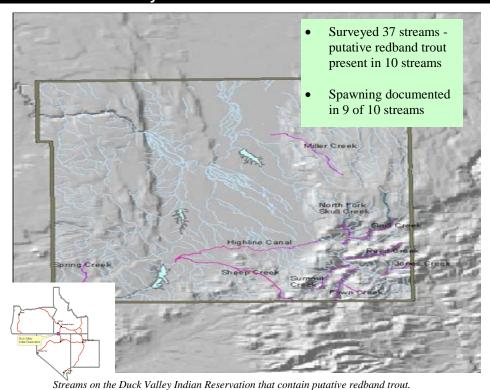
Projects in **bold** have preliminary results data included in this report.

199701100— Enhance and Protect Habitat and Riparian Areas on the DVIR

2002 Project Objectives

- Identify and protect spawning areas
- Enhance and protect river and stream habitat
- Protect and rehabilitate natural springs

Stream Inventories - Preliminary Results



Length Frequencies and Population Densities for Putative Redband Trout Populations on the in Duck Valley Reservation

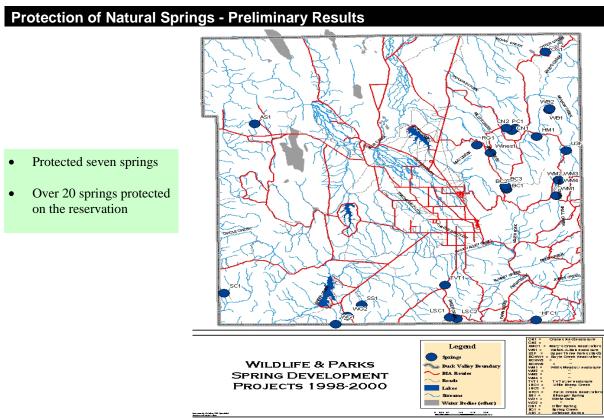
					Salmonid Size	Distribution	
Creek	Site	Date	trout/m2	0 - 100	101 - 150	151 - 200	201+
Fawn Ck.	Upper	7/18/2001	0.3	60	32	0	0
	Lower	7/18/2001	0.13	52	19	1	0
Skull Ck.	Upper	7/3/2001					
N. fork (Skull)		6/26/2001	0.06	4	29	7	
Summit Ck.	Upper	5/14/2002	0.006	5	16	1	0
	Lower	5/15/2002	0.009	10	6	1	0
Spring Ck.	Uppr/Lwr	5/9/2002	0.06	39	18	3	0
Jones Ck.	Uppr/Lwr	6/20/2001	0.06	3	18	5	0
Sheep Ck.	Lower	5/14/2002	0.002	0	2	0	10
Indian Ck.	Upper	6/4/2002		0	0	0	0
Miller Ck.	Lower	6/18/2002	0.16	18	18	8	0
	Upper	6/12/2002		0	0	0	0
Reed Ck.	Uppr/Lwr	5/8/2002	0.012	7	5	2	0
Papoose Ck.							

Road Modifications - Preliminary Results

• Installed 12 cross drainage dips and improved three stream crossing in the Skull Creek drainage



Stream crossing in the Skull Creek drainage prior to and after road improvements



Locations of protected springs on the Shoshone-Paiute Tribes of the Duck Valley Indian

199501500—Lake Billy Shaw Operations and Maintenance and Evaluation

2002 Project Objectives

• Protect reservoir shoreline and riparian areas

Reservoir Shoreline and Riparian Areas Protected—Preliminary Results



Aerial photo of Lake Billy Shaw on the Duck Valley Indian Reservation



Willow plantings along the shoreline of Lake Billy Shaw

- Planted 16,292 willow and 70 poplars
- Fenced the entire perimeter of the reservoir and tributaries (over 13 miles of fence)
- Constructed and enhanced two offreservoir stock ponds as an alternative source of water for livestock

200007900— Assess Resident Fish Stocks of the Owyhee/Bruneau Basin, DVIR

2002 Project Objectives

Determine presence/absence and genetic purity of putative redband trout populations on the DVIR

Genetic Population Structure - Preliminary Results

- Genetically pure redband trout (i.e., lack of hatchery rainbow trout genes) appear to exist in 6 of the 12 sample locations
- Six haplotypes were identified among the locations



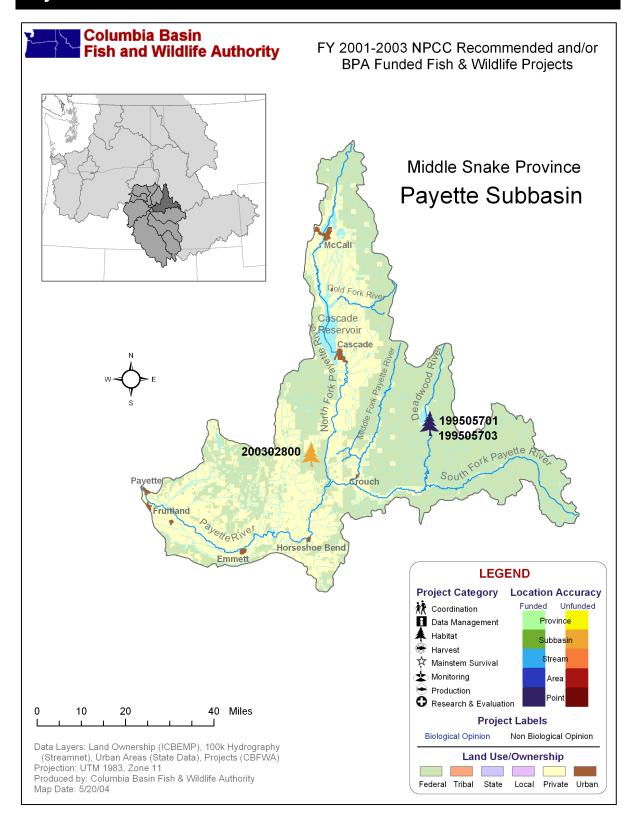
Although redband trout are native to the Owyhee River drainage, little is known about their genetic population structure and diversity.

Composite Mitochondrial Haplotype Frequencies for Putative Redband Trout Populations from Upper East Fork Owyhee River

Population	I	II	III	IV	${f v}$	VI
Fawn Creek, Upper (<i>N</i> =60)	0.65	0.35	0	0	0	0
Fawn Creek, Lower (<i>N</i> =60)	0.55	0.333	0.05	0.033	0.033	0
Highline Canal (<i>N</i> =15)	0.667	0.333	0	0	0	0
Jones Creek (N=27)	0.704	0.037	0.111	0.074	0.037	0.037
Miller Creek (<i>N</i> =44)	0.568	0.273	0.068	0.091	0	0
Reed Creek (N=14)	0.643	0.357	0	0	0	0
Sheep Creek (<i>N</i> =52)	0.462	0.385	0.077	0.058	0	0.019
Skull Creek, Upper (<i>N</i> =27)	0.667	0.259	0.074	0	0	0
Skull Creek, Lower (<i>N</i> =39)	0.641	0.256	0.103	0	0	0
Skull Creek, N.F. Lower (<i>N</i> =42)	0.619	0.357	0.024	0	0	0
Spring Creek (<i>N</i> =60)	0.6	0.317	0.017	0.017	0.05	0
Summit Creek (<i>N</i> =46)	0.478	0.261	0.152	0.022	0.087	0

Highlighted populations preliminarily identified as genetically pure redband trout.

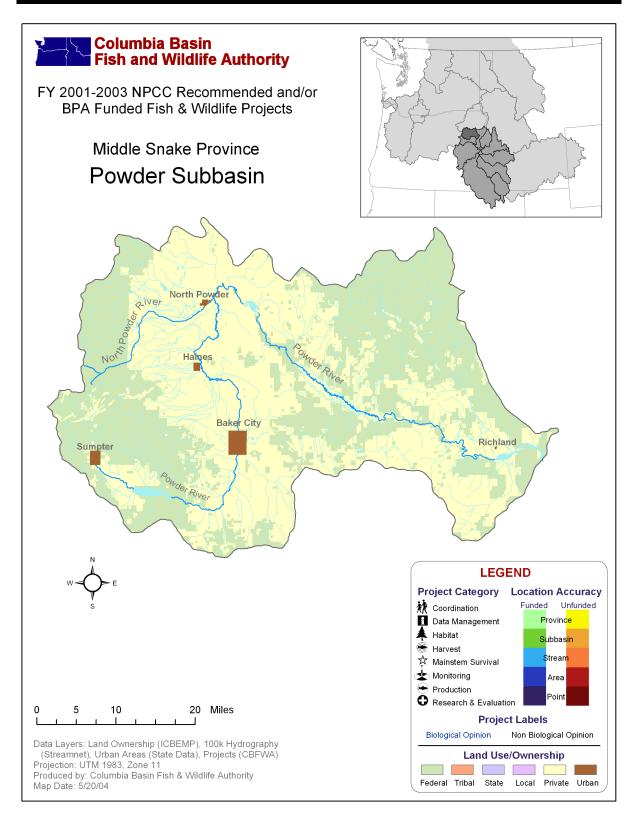
Payette Subbasin



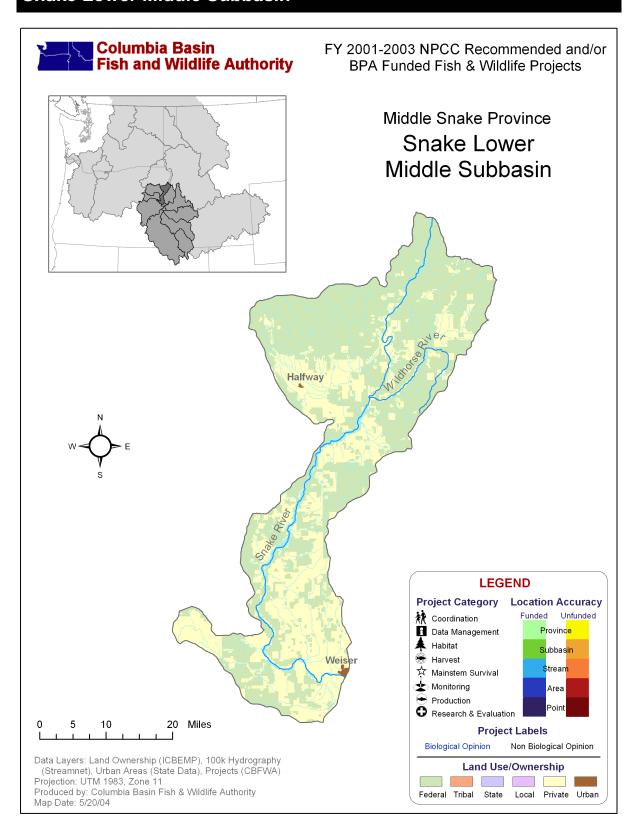
Projects in the Payette Subbasin

Project ID		Pı	rojec	Review Cycle		BiOp?				
199505701	Southern Id	laho Wildlife Mi	tigat		Middle Snake		no			
Rec 00-	03	\$626,8	856	\$	0	\$78,500	Т	ype	Category	Accuracy
Spent 01-	03	\$106,5	562	\$118,4	47	\$17,600	W	ildlife	Habitat	point
199505703	Southern Id	laho Wildlife Mi	tigat	ion - Shos	hone	e-Paiute Tribes	S	Middle	Snake	no
Rec 00-	03	\$626,8	856	\$	0	\$78,500	Т	уре	Category	Accuracy
Spent 01-	03	\$	0	\$12,9	98	\$ 3,560	W	ildlife	Habitat	point
200302800		of Marine-Deriv	ed N	utrient Lo	ss in	the Boise-		Middle	Snake	no
Rec 00-	03	\$	0	\$	0	\$30,000	Т	ype	Category	Accuracy
Spent 01-	03	\$	0	\$	0	\$ 0	Re	sident	Habitat	subbasin

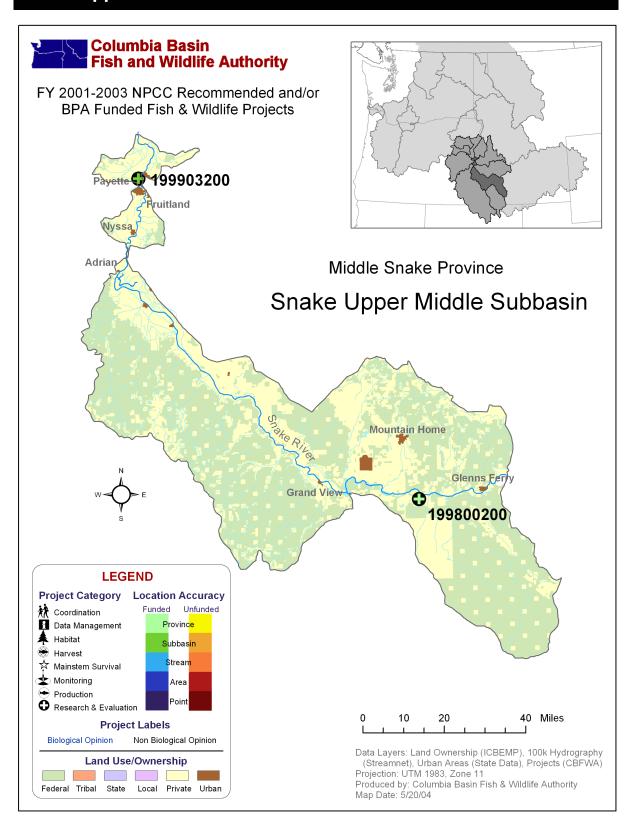
Powder Subbasin



Snake Lower Middle Subbasin



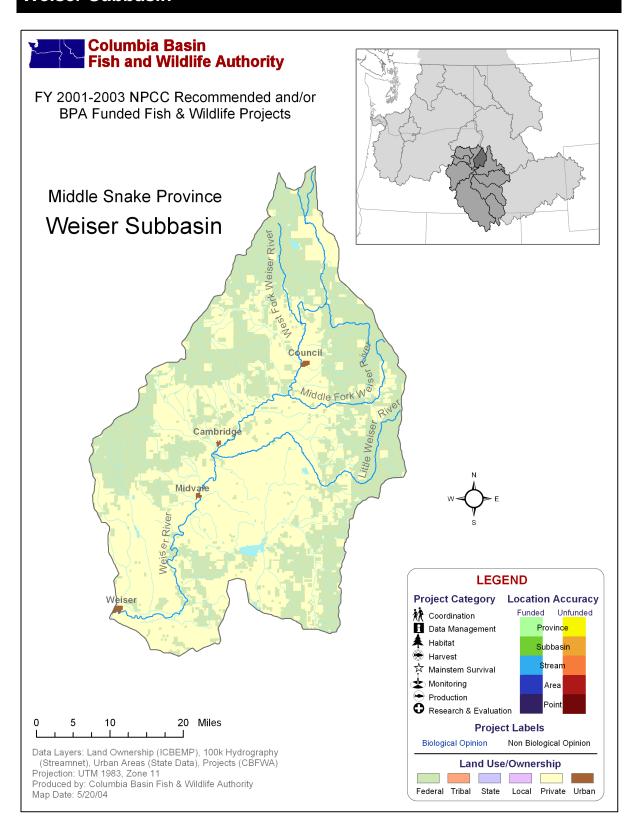
Snake Upper Middle Subbasin



Projects in the Snake Upper Middle Subbasin

Project ID	riew Cycle	BiOp?					
199800200	Snake River N	Middle	Snake	no			
Rec 00-03		\$263,837	\$272,807	\$311,375	Type	Category	Accuracy
Spent 01-0	93	\$272,805	\$243,156 \$381,786		Resident	Research & Evaluation	province
199903200	Consumptive	Sturgeon-Hells Cany	yon		FY 200	1	no
Rec 00-0	03	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
Spent 01-0	93	\$ 6,539	\$ 0	\$ 0	Resident	Research & Evaluation	subbasin

Weiser Subbasin



Columbia Basin Fish & Wildlife Authority

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