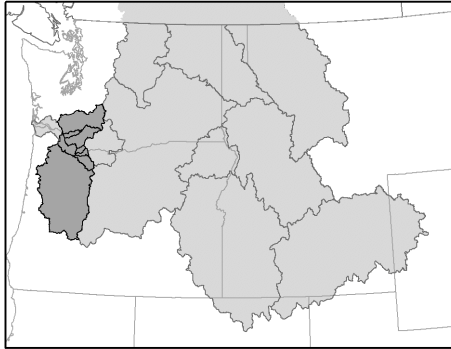


Lower Columbia Province



Lower Columbia Province

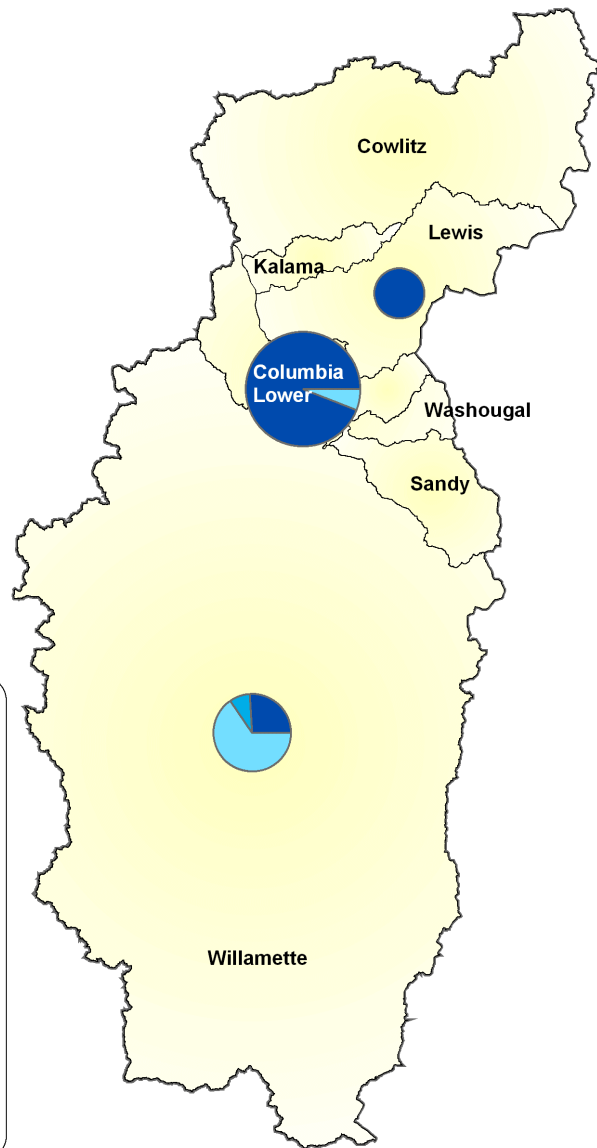
BPA Spending, FY 2001-2003

FY 2001	\$1,412,847
FY 2002	\$2,791,393
FY 2003	\$2,633,525
Total Spending	\$6,837,765

Legend

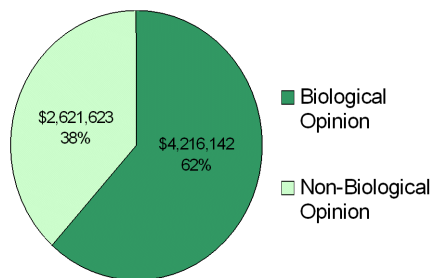
- Anadromous (76%)
- Resident (2%)
- Wildlife (22%)

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



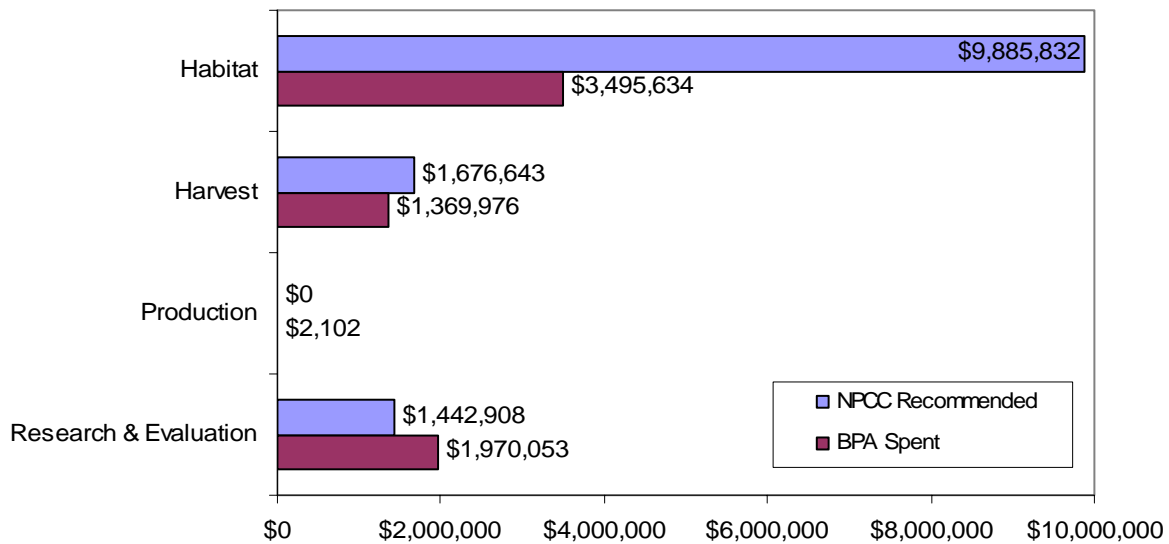
Biological Opinion Spending, FY 2001-2003 NMFS & USFWS Designated Projects

	BiOp	Non BiOp
Columbia Lower	\$3,889,536	\$260,526
Lewis	\$0	\$797,512
Willamette	\$326,606	\$1,563,585

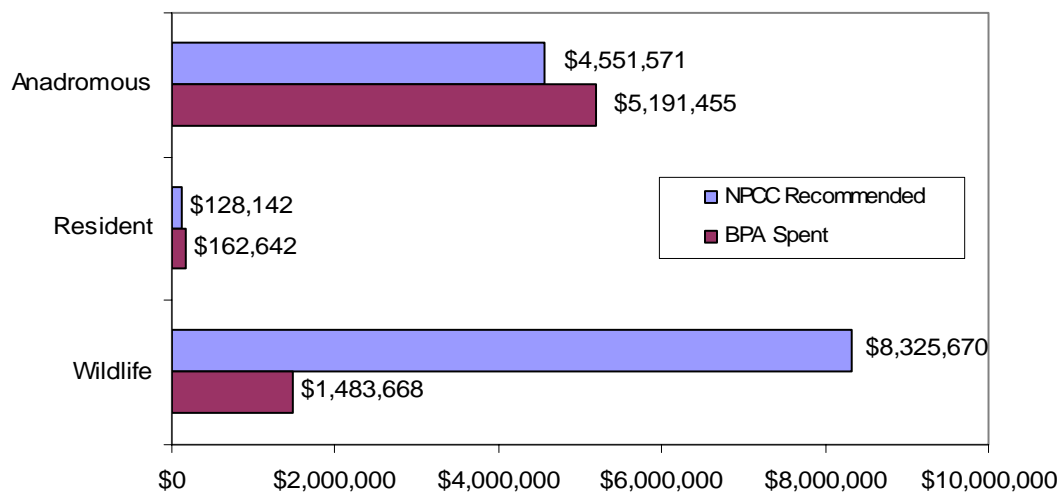


Lower Columbia Province FY 2001-2003 Spending Summaries

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



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

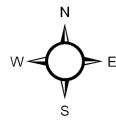
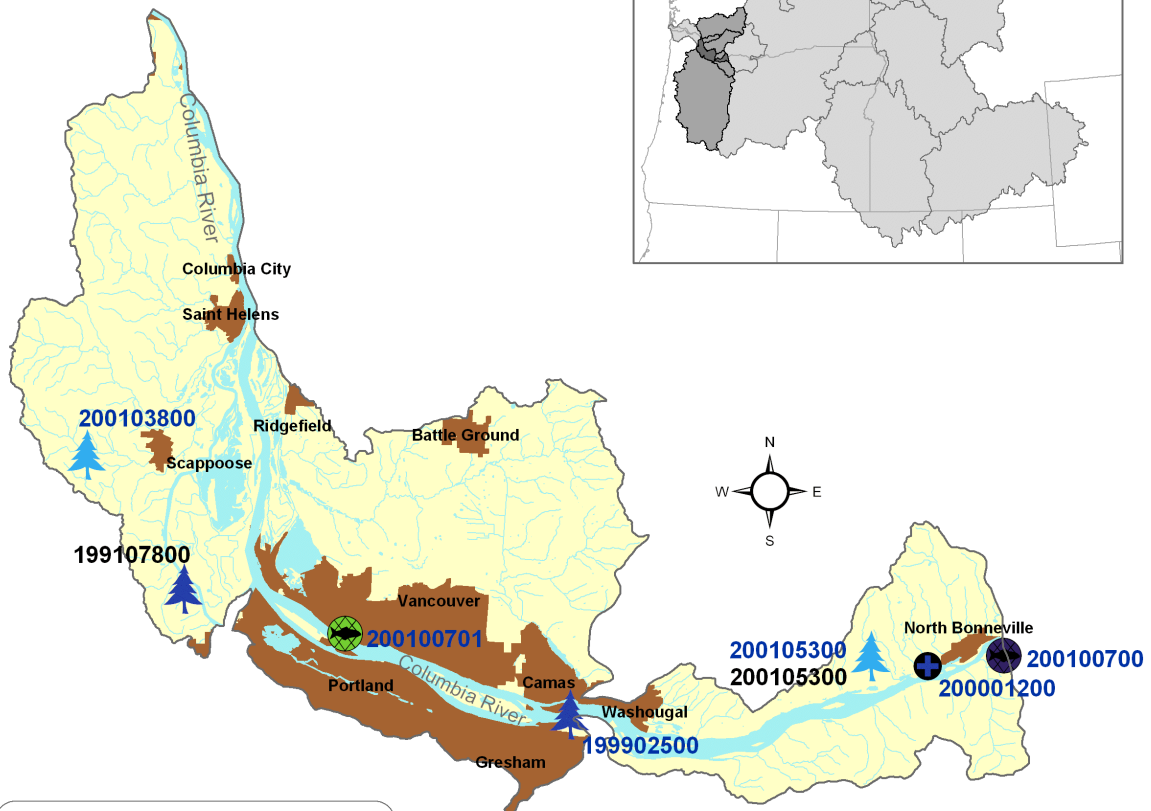
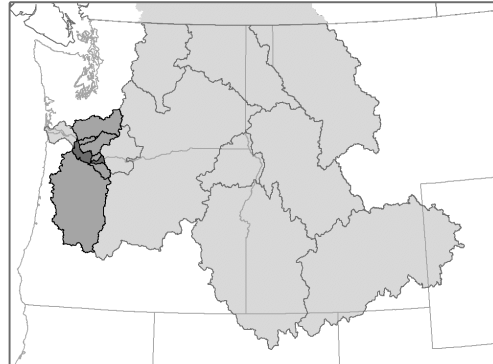


Columbia Lower Subbasin



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

Lower Columbia Province Columbia Lower Subbasin



LEGEND

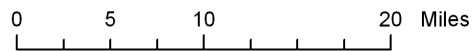
Project Category		Location Accuracy	
Coordination		Funded	Unfunded
Data Management		Province	Subbasin
Habitat		Subbasin	Stream
Harvest		Stream	Area
Mainstem Survival		Area	Point
Monitoring		Point	
Production			
Research & Evaluation			

Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

Federal	Tribal	State	Local	Private	Urban
---------	--------	-------	-------	---------	-------



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

Projects in the Columbia Lower Subbasin

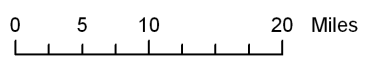
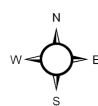
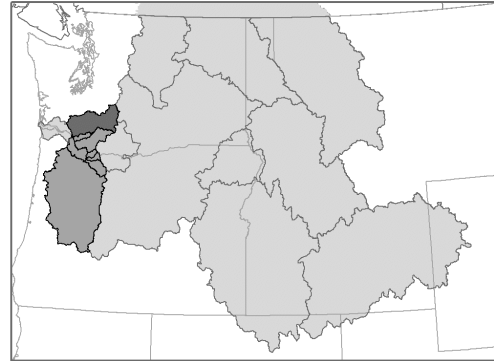
<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>	
199107800	Burlington Bottoms Wildlife Mitigation Project				Lower Columbia		no	
	<i>Rec 00-03</i>	\$120,932	\$125,041	\$110,000	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$65,290	\$82,115	\$99,798	Wildlife	Habitat	area
199902500	Sandy River Delta Riparian Forest, Wetlands, and Anadromous Estuary Restoration				Lower Columbia		yes	
	<i>Rec 00-03</i>	\$145,500	\$150,447	\$155,562	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$302,778	\$139,640	Anadromous	Habitat	area
200001200	Evaluate Factors Limiting Columbia River Gorge Chum Salmon Populations				Lower Columbia		yes	
	<i>Rec 00-03</i>	\$238,704	\$246,819	\$255,211	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$302,950	\$460,129	\$246,820	Anadromous	Research & Evaluation	area
200100700	Evaluate Live Capture Selective Harvest Methods for Commercial Fisheries on the Columbia River				FY01 High Priority		yes	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$633,000	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$ 0	\$697,980	Anadromous	Harvest	point
200100701	Evaluate live capture selective harvest methods for commercial fisheries on the Columbia River (High Priority)				FY01 High Priority		yes	
	<i>Rec 00-03</i>	\$384,285	\$659,358	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$210,068	\$421,575	\$40,353	Anadromous	Harvest	subbasin
200103800	Gourley Creek Dam Fish Ladder				FY01 High Priority		yes	
	<i>Rec 00-03</i>	\$200,119	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$195,800	\$ 3,260	Anadromous	Habitat	stream
200105300	Re-introduction of Lower Columbia River Chum Salmon into Duncan Creek				Lower Columbia		yes	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$381,671	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$448,636	\$419,547	Anadromous	Habitat	stream
200105300	Re-introduction of Lower Columbia River Chum Salmon into Duncan Creek				FY01 High Priority		no	
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$ 0	\$13,323	\$ 0	Anadromous	Habitat	stream

Cowlitz Subbasin



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

Lower Columbia Province
Cowlitz 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												
<ul style="list-style-type: none"> Coordination Data Management Habitat Harvest Mainstem Survival Monitoring Production Research & Evaluation 	<table border="0"> <tr> <td>Funded</td> <td>Unfunded</td> </tr> <tr> <td> Province</td> <td> Province</td> </tr> <tr> <td> Subbasin</td> <td> Subbasin</td> </tr> <tr> <td> Stream</td> <td> Stream</td> </tr> <tr> <td> Area</td> <td> Area</td> </tr> <tr> <td> Point</td> <td> Point</td> </tr> </table>	Funded	Unfunded	Province	Province	Subbasin	Subbasin	Stream	Stream	Area	Area	Point	Point
Funded	Unfunded												
Province	Province												
Subbasin	Subbasin												
Stream	Stream												
Area	Area												
Point	Point												

Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

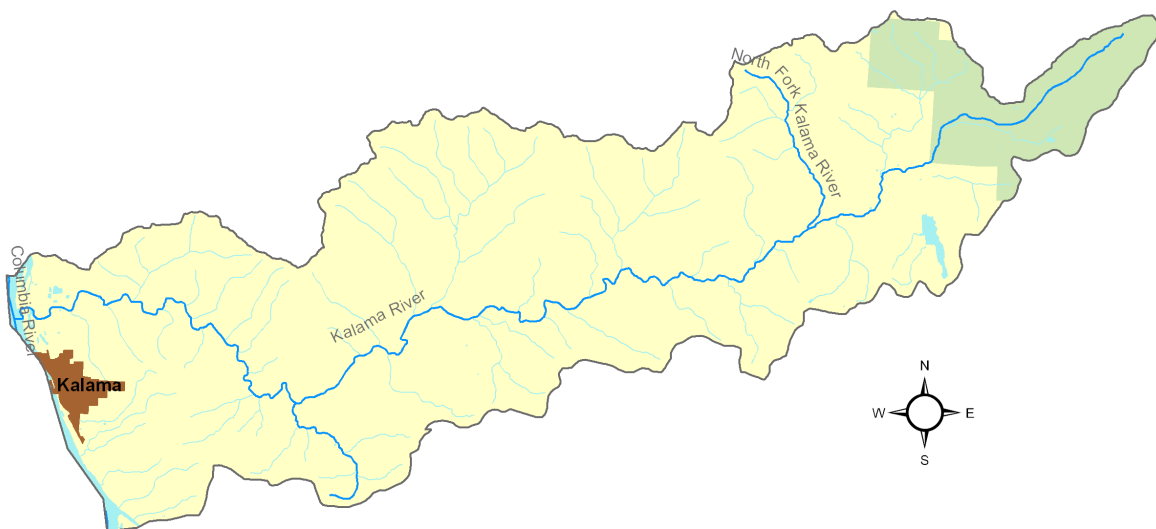
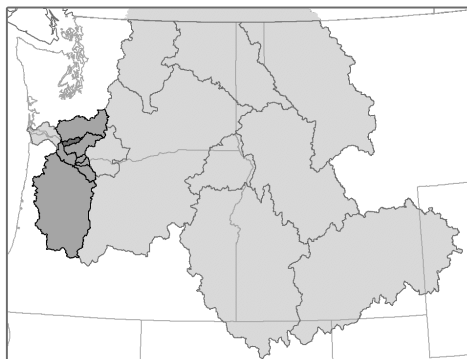
Federal	Tribal	State	Local	Private	Urban
---------	--------	-------	-------	---------	-------

Kalama Subbasin



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

Lower Columbia Province
Kalama Subbasin



LEGEND

Project Category	Location Accuracy										
<ul style="list-style-type: none"> Coordination Data Management Habitat Harvest Mainstem Survival Monitoring Production Research & Evaluation 	<table border="0"> <tr> <td>Funded</td> <td>Unfunded</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	Funded	Unfunded								
Funded	Unfunded										

Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

Federal	Tribal	State	Local	Private	Urban

0 3 6 12 Miles

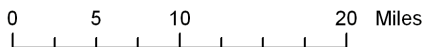
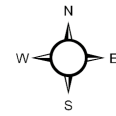
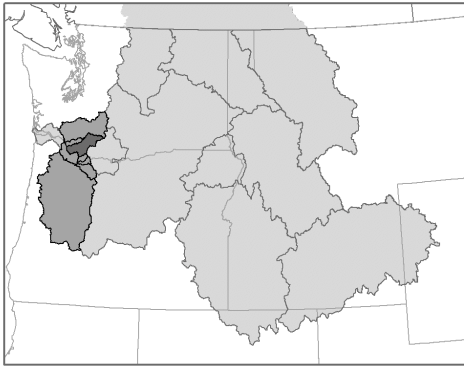
Data Layers: Land Ownership (ICBEMP), 100k Hydrography (Streamnet), Urban Areas (State Data), Projects (CBFWA)
 Projection: UTM 1983, Zone 11
 Produced by: Columbia Basin Fish & Wildlife Authority
 Map Date: 5/20/04

Lewis Subbasin



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

Lower Columbia Province Lewis 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										
<ul style="list-style-type: none"> Coordination Data Management Habitat Harvest Mainstem Survival Monitoring Production Research & Evaluation 	<table border="0"> <tr> <td>Funded</td> <td>Unfunded</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	Funded	Unfunded								
Funded	Unfunded										

Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

Federal	Tribal	State	Local	Private	Urban

Projects in the Lewis Subbasin

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>	
200001400	Evaluate Habitat Use and Population Dynamics of Lampreys in Cedar Creek				Lower Columbia		no	
	<i>Rec 00-03</i>	\$185,000	\$191,290	\$197,742	Type	Category	Accuracy	
	<i>Spent 01-03</i>	--	\$170,840	\$368,688	\$257,984	Anadromous	Research & Evaluation	stream

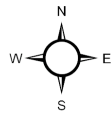
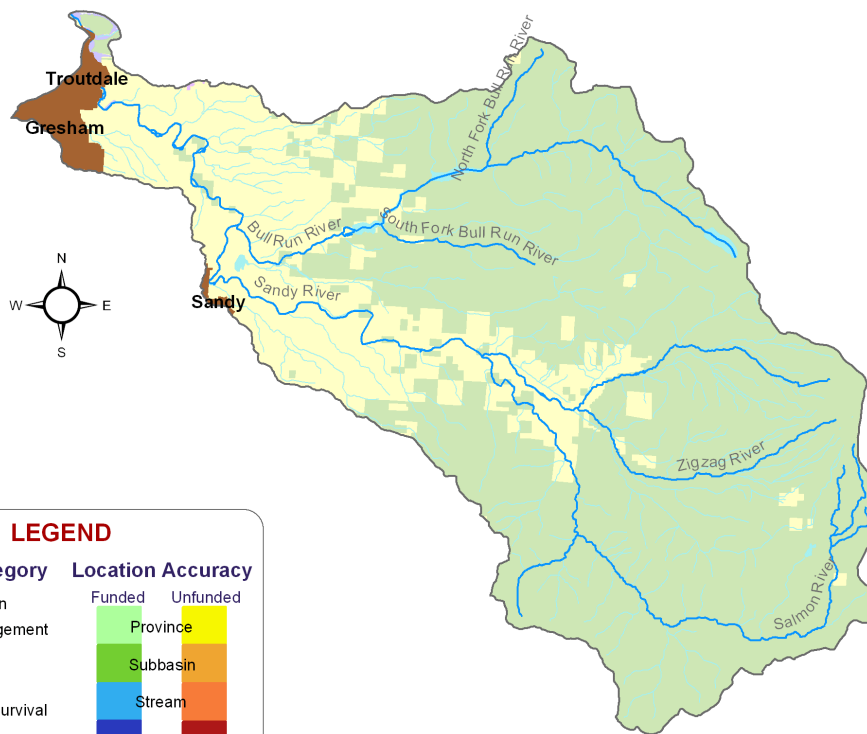
Sandy Subbasin



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



Lower Columbia Province Sandy Subbasin



LEGEND

Project Category	Location Accuracy										
<ul style="list-style-type: none"> Coordination Data Management Habitat Harvest Mainstem Survival Monitoring Production Research & Evaluation 	<table border="0"> <tr> <td>Funded</td> <td>Unfunded</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	Funded	Unfunded								
Funded	Unfunded										

Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

Federal	Tribal	State	Local	Private	Urban

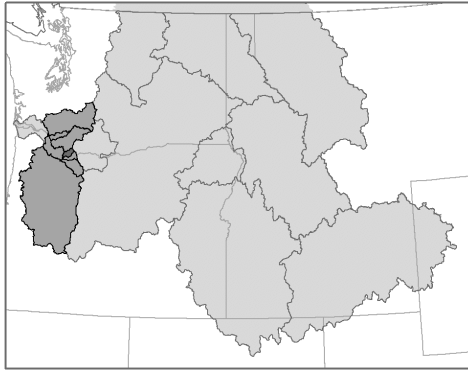


Data Layers: Land Ownership (ICBEMP), 100k Hydrography (Streamnet), Urban Areas (State Data), Projects (CBFWA)
 Projection: UTM 1983, Zone 11
 Produced by: Columbia Basin Fish & Wildlife Authority
 Map Date: 5/20/04

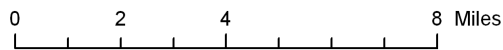
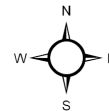
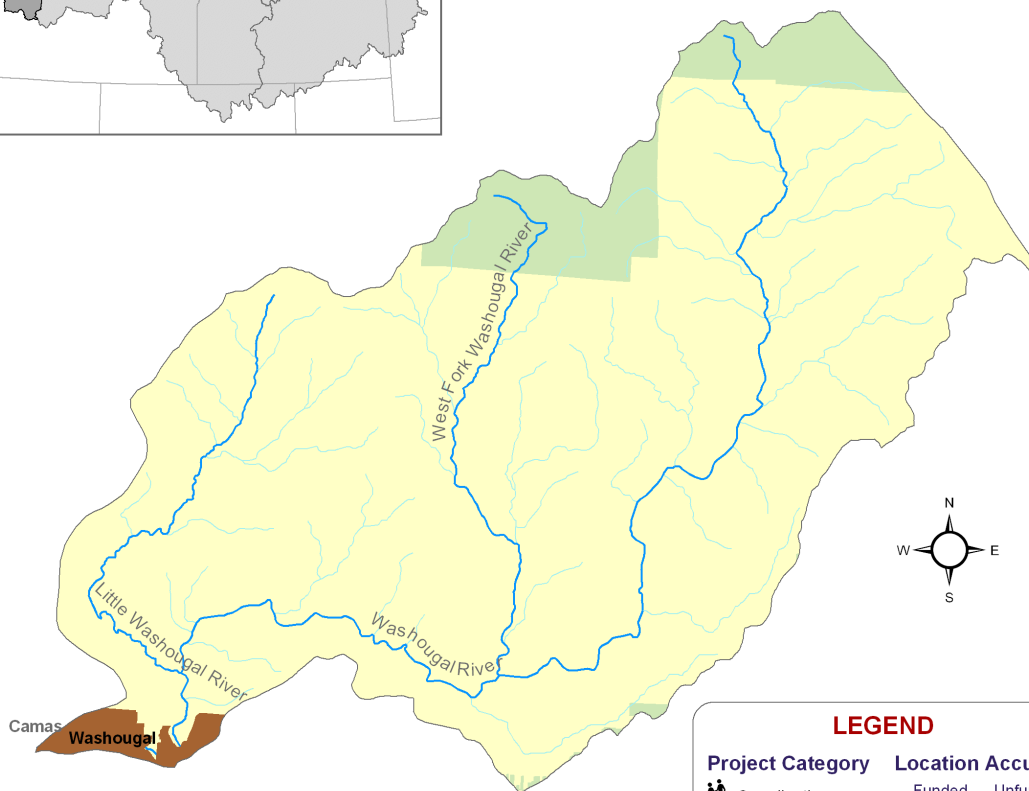
Washougal Subbasin



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



Lower Columbia Province Washougal 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	
Coordination		Funded	Unfunded
Data Management		Province	Subbasin
Habitat		Subbasin	Stream
Harvest		Stream	Area
Mainstem Survival		Area	Point
Monitoring		Point	
Production			
Research & Evaluation			

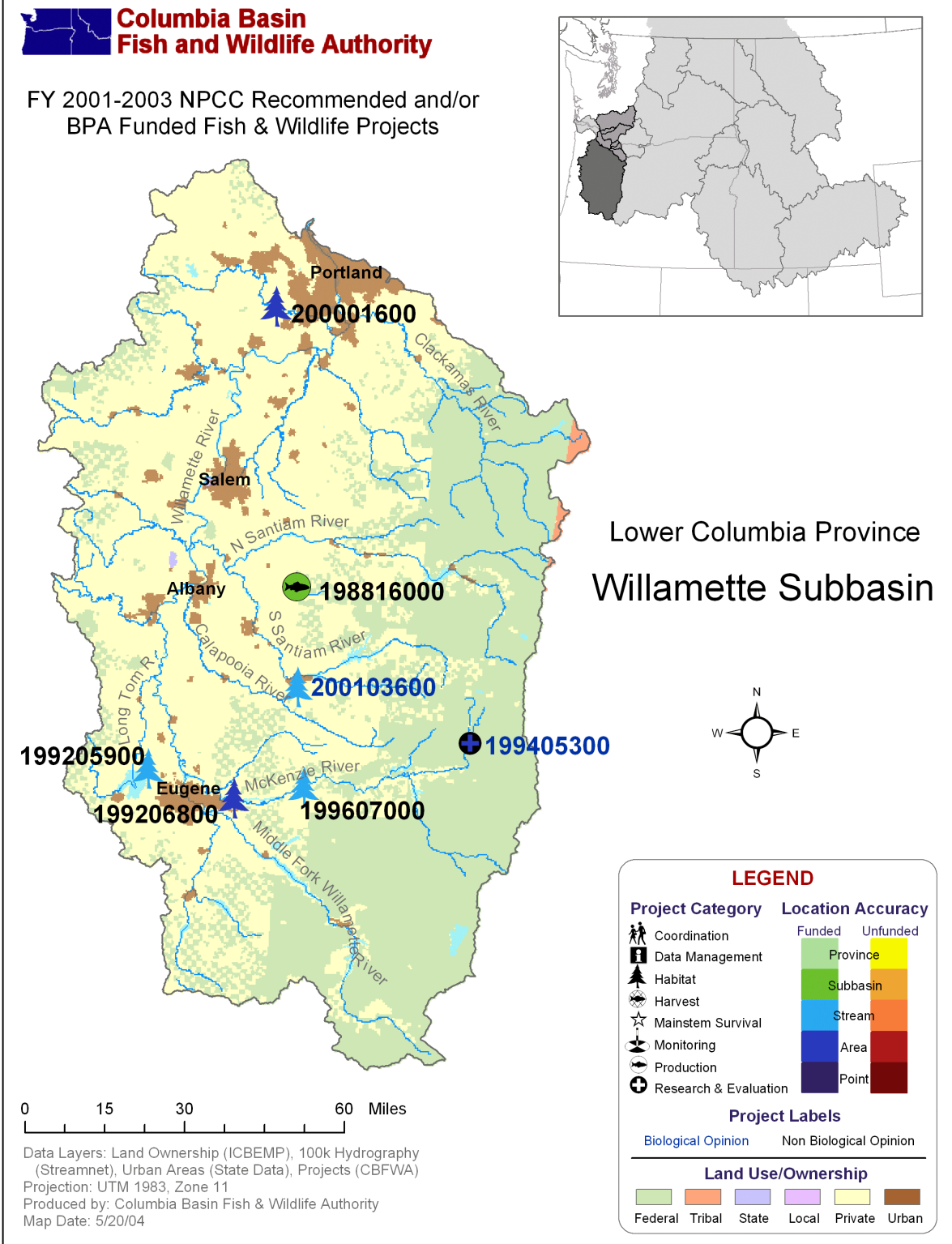
Project Labels

Biological Opinion Non Biological Opinion

Land Use/Ownership

Federal	Tribal	State	Local	Private	Urban
---------	--------	-------	-------	---------	-------

Willamette Subbasin



Projects in the Willamette Subbasin

<i>Project ID</i>	<i>Project Title</i>				<i>Review Cycle</i>		<i>BiOp?</i>
198816000	Willamette Hatchery Oxygen Supplementation				FY 2000		no
	<i>Rec 00-03</i>	\$ 0	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 2,102	\$ 0	Anadromous	Production	subbasin
199205900	Amazon Basin/Eugene Wetlands Phase Two				Lower Columbia		no
	<i>Rec 00-03</i>	\$493,373	\$510,146	\$60,650	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$43,927	\$58,112	Wildlife	Habitat	stream
199206800	Implement Willamette Basin Mitigation Program				Lower Columbia		no
	<i>Rec 00-03</i>	\$2,619,237	\$2,708,291	\$938,500	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$479,133	\$238,917	Wildlife	Habitat	area
199405300	Middle Fork Willamette River Bull Trout Re-introduction and Basinwide Monitoring				Lower Columbia		yes
	<i>Rec 00-03</i>	\$63,000	\$65,142	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$52,432	\$50,005	Resident	Research & Evaluation	area
199607000	McKenzie River Focus Watershed Program Coordination and Habitat Restoration				Lower Columbia		no
	<i>Rec 00-03</i>	\$115,000	\$118,910	\$122,953	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$86,105	\$119,530	Anadromous	Habitat	stream
200001600	Protect and Enhance Tualatin River National Wildlife Refuge Additions				Lower Columbia		no
	<i>Rec 00-03</i>	\$274,250	\$274,250	\$91,000	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$ 5,699	Wildlife	Habitat	area
200103600	Ames Creek Restoration				FY01 High Priority		yes
	<i>Rec 00-03</i>	\$170,000	\$ 0	\$ 0	Type	Category	Accuracy
	<i>Spent 01-03</i>	--	\$ 0	\$26,086	Anadromous	Habitat	stream

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

199405300—Middle Fork Willamette River Bull Trout Reintroduction and Basinwide Monitoring

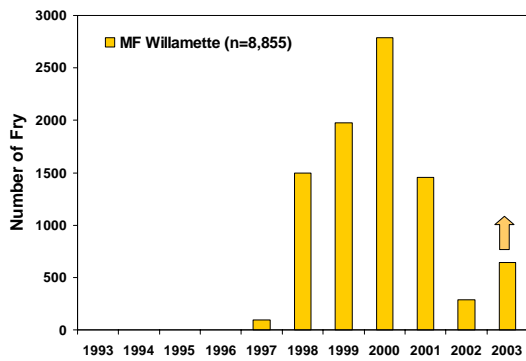
2002 Project Objectives

- Determine distribution, population size, and life history characteristics of bull trout in the Middle Fork Willamette and McKenzie River basins.

Middle Fork Willamette River Monitoring - Preliminary Results

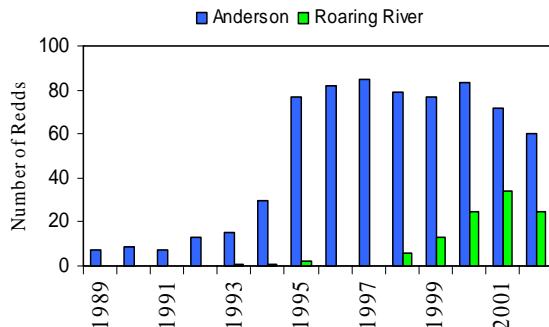
- Three age-classes of bull trout found in release locations
- Estimated 240 juvenile bull trout in 5 miles of the Mainstem Middle Fork
- Observed one 16 inch bull trout in Hills Creek Reservoir
- Observed a significant increase in the number of redds in Roaring River, following the release of bull trout fry and habitat improvements in the Middle Fork Willamette River

Middle Fork Willamette Bull Trout Releases for Rehabilitation



Numbers of bull trout fry released in the Middle Fork Willamette River.

Willamette Bull Trout Spawning Surveys



Increases in the occurrence of bull trout redds in the Roaring River (Middle Fork Willamette River), likely the result of releasing bull trout fry and habitat improvements.



Photo: Courtesy Oregon Department of Fish and Wildlife

An adult bull trout collected from the Middle Fork Willamette River.

McKenzie River Monitoring - Preliminary Results

- Bull trout redds identified in Sweetwater Creek, a location that was void of spawning activity prior to the release of bull trout fry and habitat improvements



Photo: Courtesy Oregon Department of Fish and Wildlife
Juvenile bull trout collected from the Middle Fork Willamette River.

McKenzie Bull Trout Spawning Surveys

