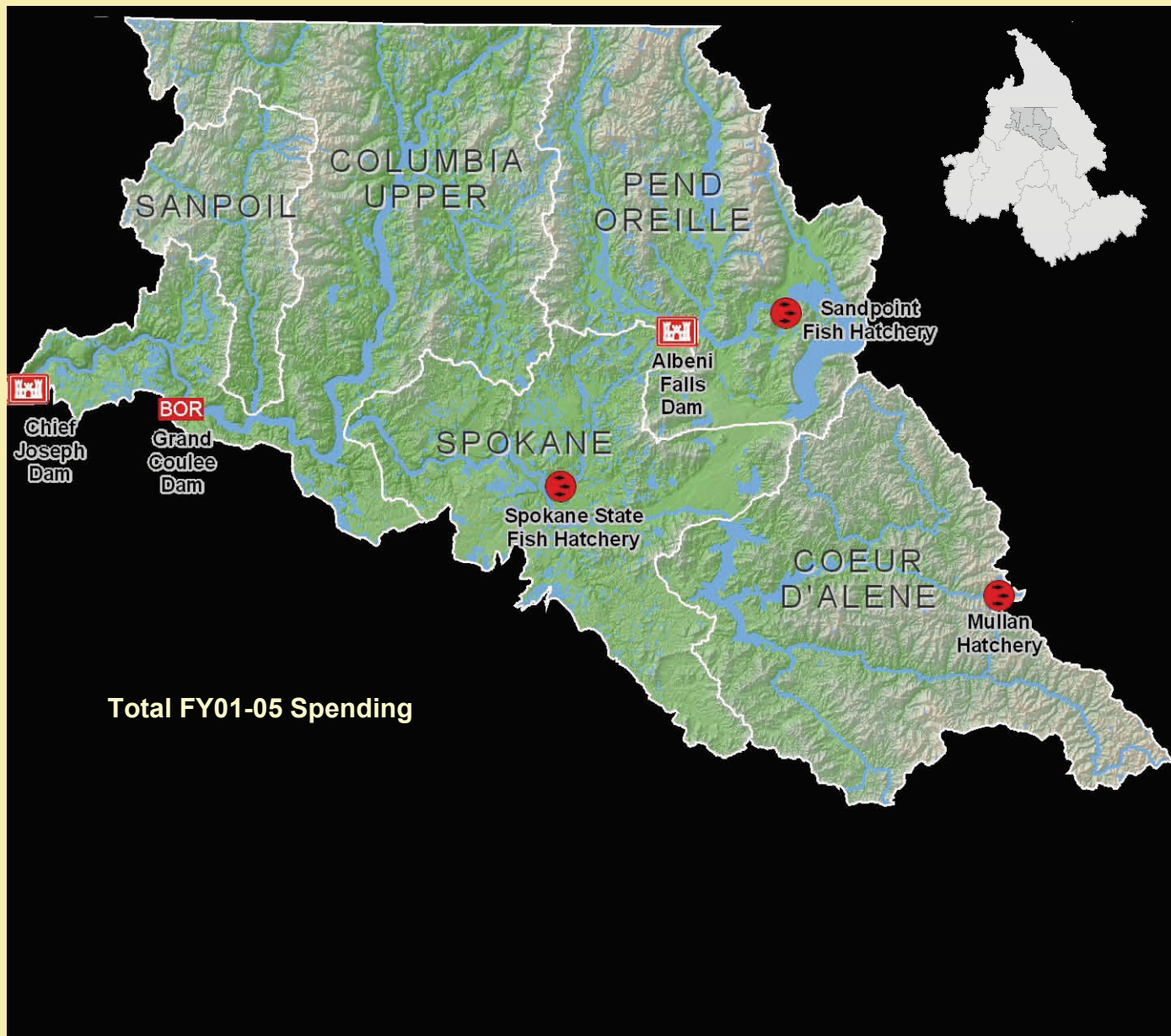


## 2006 Status of Fish and Wildlife Resources in the Columbia River Basin Report (SOTR)

### Proposed Timeline for Deliverables

June	July	August	September	October	November
<ul style="list-style-type: none"> <li>• WAC reviews CBFWA staff draft wildlife template</li> <li>• Present proposed 2006 plan and timeline to MAG</li> <li>• BPA describes inclusion of PICES data to MAG</li> </ul>	<ul style="list-style-type: none"> <li>• Present WAC-edited wildlife template to MAG</li> <li>• Present proposed 2006 plan and timeline to Members</li> <li>• Meet with BPA and NPCC to discuss 2006 template</li> <li>• Initiate efforts to complete wildlife</li> </ul>	<ul style="list-style-type: none"> <li>• Provide progress update to Members and MAG</li> <li>• Meet with BPA and NPCC to discuss 2006 template</li> <li>• Finish wildlife section</li> </ul>	<ul style="list-style-type: none"> <li>• Provide progress update to Members and MAG</li> <li>• Begin to collect fish data and update entries</li> <li>• Finish wildlife section and submit to WAC for review and comments</li> </ul>	<ul style="list-style-type: none"> <li>• Provide progress update to Members and MAG</li> <li>• Continue to collect fish data and update entries</li> <li>• Finish wildlife section and submit to MAG and Members for review and approval</li> </ul>	<ul style="list-style-type: none"> <li>• Finish fish wildlife section and submit to MAG and Members for review and approval</li> <li>• Release document</li> </ul>

# Intermountain



The Intermountain Province, located in eastern Washington and northwestern Idaho, encompasses an area of 15,617 square miles. Subbasins in the Intermountain Province include Coeur d'Alene, Pend Oreille, Sanpoil, Spokane, and Upper Columbia. Numerous populations throughout the province are listed under the federal Endangered Species Act. Resources in this province have been impacted by extensive anthropogenic activities that have severely degraded riparian habitat. In addition, stream channels throughout the province have been severely altered due to hydro-operations, diversions, and forestry practices. Prior to hydro-development, the Upper Columbia River supported a diverse wildlife assemblage that included cutthroat trout. Throughout the Intermountain Province, 10 wildlife projects were funded by the Bonneville Power Administration between 2001 and 2006. For more information relative to the accomplishments of these projects, please visit [www.cbfwa.org/sotr](http://www.cbfwa.org/sotr).

Land Ownership	
Federal.....	33%
Private.....	55%
Tribal.....	12%

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Dam	Habitat Units Lost <sup>1</sup>	Habitat Units Gained <sup>1</sup>	Habitat Units Acquired <sup>1</sup>	Habitat Units Estimated <sup>1</sup>	Total Acquired and Estimated Units <sup>1</sup>
Albeni Falls	28,658	171	2,373	3,170	5,543
Chief Joseph	8,833	1,440	1,013	0	1,013
Grand Coulee	111,785	0	76,027	17,828	93,855
<b>Totals</b>	<b>149,276</b>	<b>1,611</b>	<b>79,413</b>	<b>20,998</b>	<b>100,411</b>

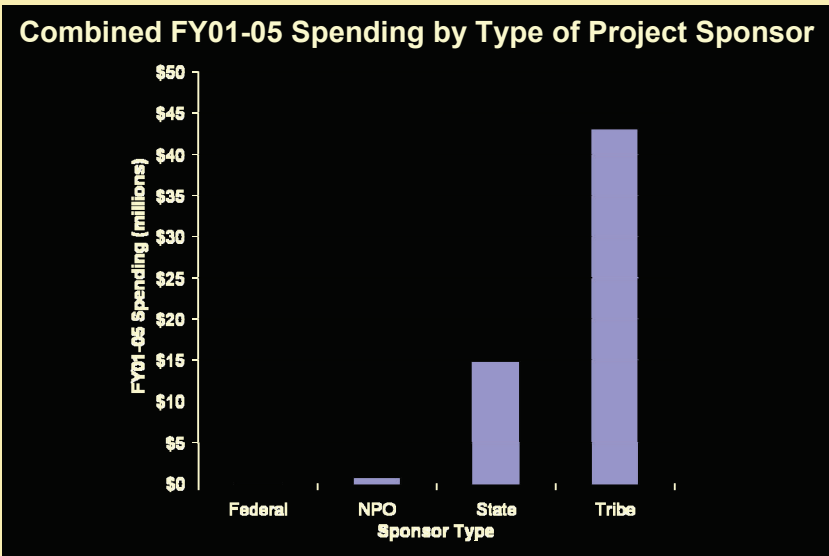
<sup>1</sup>Bonneville Power Administration. [http://www.efw.bpa.gov/Intergrated\\_Fish\\_and\\_Wildlife\\_Program/WildlifeCrediting\\_files/WL\\_10.pdf](http://www.efw.bpa.gov/Intergrated_Fish_and_Wildlife_Program/WildlifeCrediting_files/WL_10.pdf)

Major limiting factors and their primary causes in the province include:

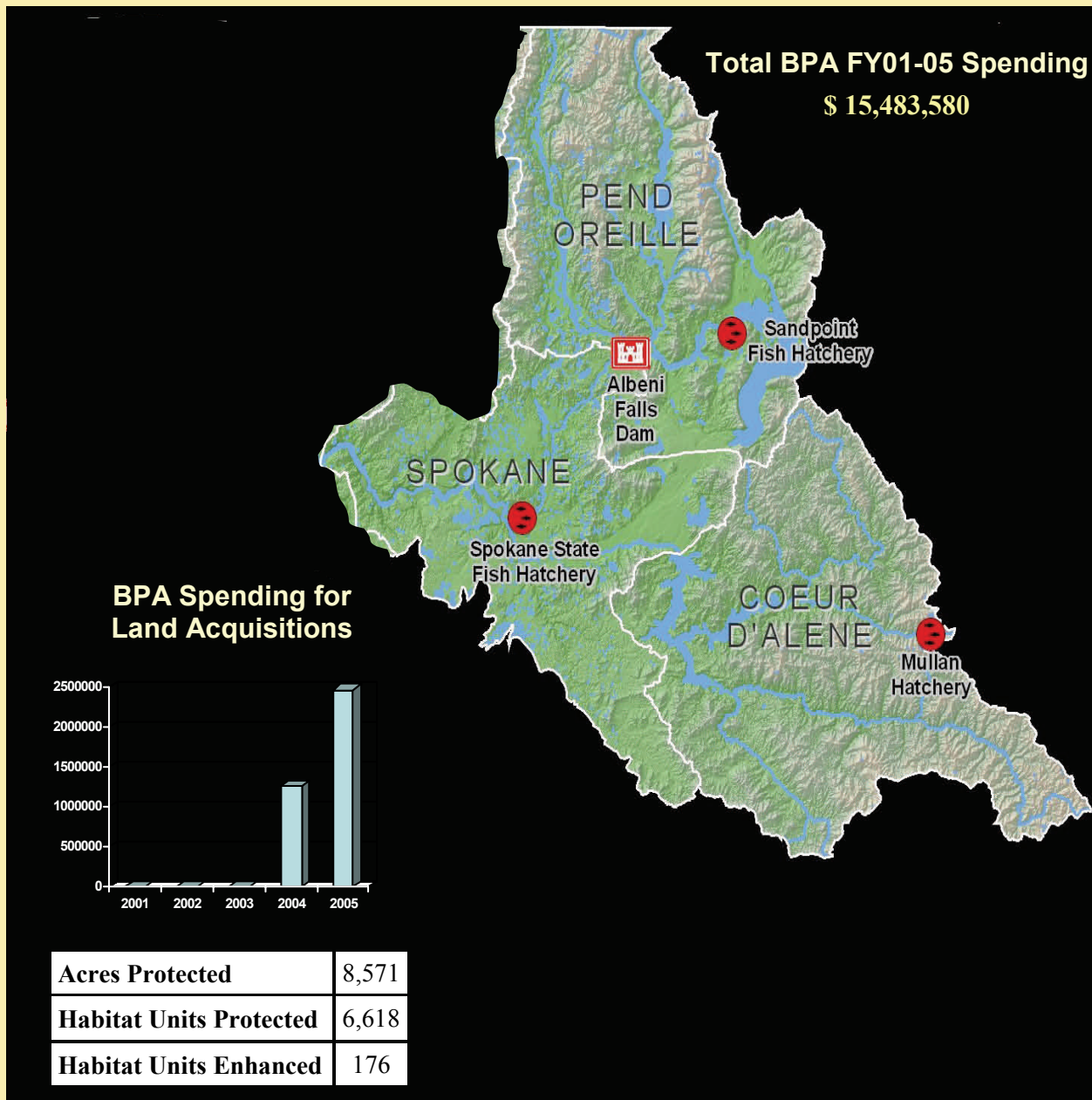
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Exiting concerns with project-specific credit assignments in the the Intre

- XXXXX
- XXXXX



# INTERMOUNTAIN (*Albeni Falls Dam*)



## Project Description

Project	Sponsor	Acres Purchased	Acquisition Costs



# Subbasin: Coeur d'Alene, Pend Oreille, Spokane

## Bald Eagle



### Breeding

**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 4,508 Habitat Units  
**Status:** 301 Habitat Units acquired (6.68% completed)<sup>1</sup>

### Wintering

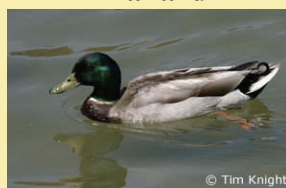
**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 4,365 Habitat Units  
**Status:** 314 Habitat Units acquired (7.19% completed)<sup>1</sup>

## Canada Goose



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 4,699 Habitat Units  
**Status:** 1,161 Habitat Units acquired (24.71% completed)<sup>1</sup>

## Mallard



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 5,985 Habitat Units  
**Status:** 227 Habitat Units acquired (3.79% completed)<sup>1</sup>

## Black-capped Chickadee



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 2,286 Habitat Units  
**Status:** 117 Habitat Units acquired (5.12% completed)<sup>1</sup>

## Redhead Duck



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 3,379 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## Yellow Warbler



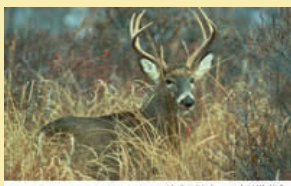
**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 0 Habitat Units  
**Status:** 59 Habitat Units acquired (0% completed)<sup>1</sup>

## Muskrat



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 1,756 Habitat Units  
**Status:** 82 Habitat Units acquired (4.67% completed)<sup>1</sup>

## White-tailed Deer



**Hydroelectric Project:** Albeni Falls  
**Biological Objective:** 1,680 Habitat Units  
**Status:** 30 Habitat Units acquired (1.79% completed)<sup>1</sup>

### BPA-Funded Projects Associated with Albeni Falls: Selected 2001 — 2006 Project Accomplishments

- Acquired 20 properties
  - Protected 4,822 acres
  - Protected 3,530 HUs
- Implemented wetland and riparian enhancements on 100 acres annually in Washington
- Credited 166 HUs as enhancements from 1992-2002 from one property
- Completed site specific management plans for five properties
- Completed HEP reports for baseline crediting on 20 properties

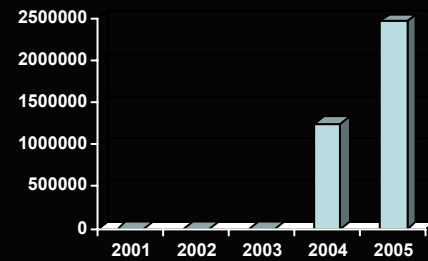
<sup>1</sup> Bonneville Power Administration. (via [http://www.efw.bpa.gov/Intergrated\\_Fish\\_and\\_Wildlife\\_Program/WildlifeCrediting\\_files/WL\\_10.pdf](http://www.efw.bpa.gov/Intergrated_Fish_and_Wildlife_Program/WildlifeCrediting_files/WL_10.pdf))

# INTERMOUNTAIN (*Chief Joseph Dam*)



Total BPA FY01-05 Spending

BPA Spending for Land Acquisitions



Acres Protected	
Habitat Units Protected	
Habitat Units Enhanced	

## Project Description

Project	Sponsor	Acres Purchased	Acquisition Costs

# Subbasin: Columbia Upper and Sanpoil

## Bobcat



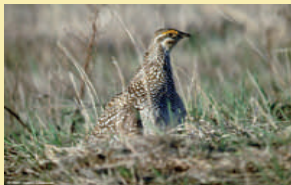
**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 401 Habitat Units  
**Status:** 132 Habitat Units acquired (32.92% completed)<sup>1</sup>

## Canada Goose



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 213 Habitat Units  
**Status:** 10 Habitat Units acquired (4.69% completed)<sup>1</sup>

## Sharp-tailed Grouse



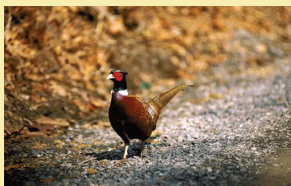
**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 2,290 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## Lewis Woodpecker



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 286 Habitat Units  
**Status:** 45 Habitat Units acquired (15.73% completed)<sup>1</sup>

## Ring-necked Pheasant



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 239 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## Sage Grouse



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 1,179 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## Yellow Warbler



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 58 Habitat Units  
**Status:** 26 Habitat Units acquired (44.83% completed)<sup>1</sup>

## Mink



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 920 Habitat Units  
**Status:** 111 Habitat Units acquired (12.07% completed)<sup>1</sup>

## Mule Deer



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 1,992 Habitat Units  
**Status:** 679 Habitat Units acquired (34.09% completed)<sup>1</sup>

## Spotted Sandpiper



**Hydroelectric Project:** Chief Joseph  
**Biological Objective:** 1,255 Habitat Units  
**Status:** 10 Habitat Units acquired (0.80% completed)<sup>1</sup>

### BPA-Funded Projects Associated with Chief Joseph: Selected 2001 — 2006 Project Accomplishments

- 

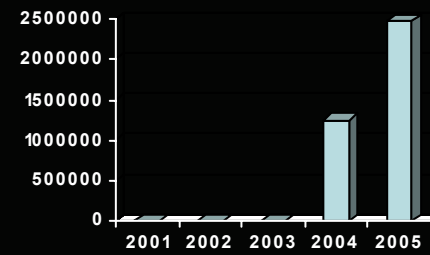
<sup>1</sup> Bonneville Power Administration. (via [http://www.efw.bpa.gov/Intergrated\\_Fish\\_and\\_Wildlife\\_Program/WildlifeCrediting\\_files/WL\\_10.pdf](http://www.efw.bpa.gov/Intergrated_Fish_and_Wildlife_Program/WildlifeCrediting_files/WL_10.pdf))

# INTERMOUNTAIN (*Grand Coulee Dam*)



Total BPA FY01-05 Spending

BPA Spending for Land Acquisitions



Acres Protected	
Habitat Units Protected	
Habitat Units Enhanced	

## Project Description

Project	Sponsor	Acres Purchased	Acquisition Costs



# Subbasin: Columbia Upper and Sanpoli

## Riparian Forest

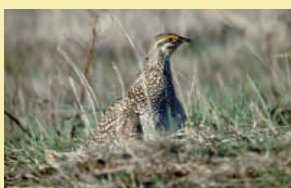
**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 1,632 Habitat Units  
**Status:** 0 Habitat Units acquired (0 % completed)<sup>1</sup>

## Canada Goose



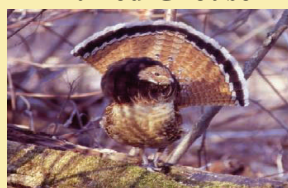
**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 74 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## Sharp-tailed Grouse



**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 32,723 Habitat Units  
**Status:** 17,149 Habitat Units acquired (52.41% completed)<sup>1</sup>

## Ruffed Grouse



**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 16,502 Habitat Units  
**Status:** 196 Habitat Units acquired (1.19% completed)<sup>1</sup>

## Mourning Dove



**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 9,316 Habitat Units  
**Status:** 1,001 Habitat Units acquired (10.74% completed)<sup>1</sup>

## Sage Grouse



**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 2,746 Habitat Units  
**Status:** 10,653 Habitat Units acquired (387.95% completed)<sup>1</sup>

## Riparian Shrub

**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 27 Habitat Units  
**Status:** 0 Habitat Units acquired (0% completed)<sup>1</sup>

## White-tailed Deer



**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 21,632 Habitat Units  
**Status:** 1,845 Habitat Units acquired (8.53% completed)<sup>1</sup>

## Mule Deer



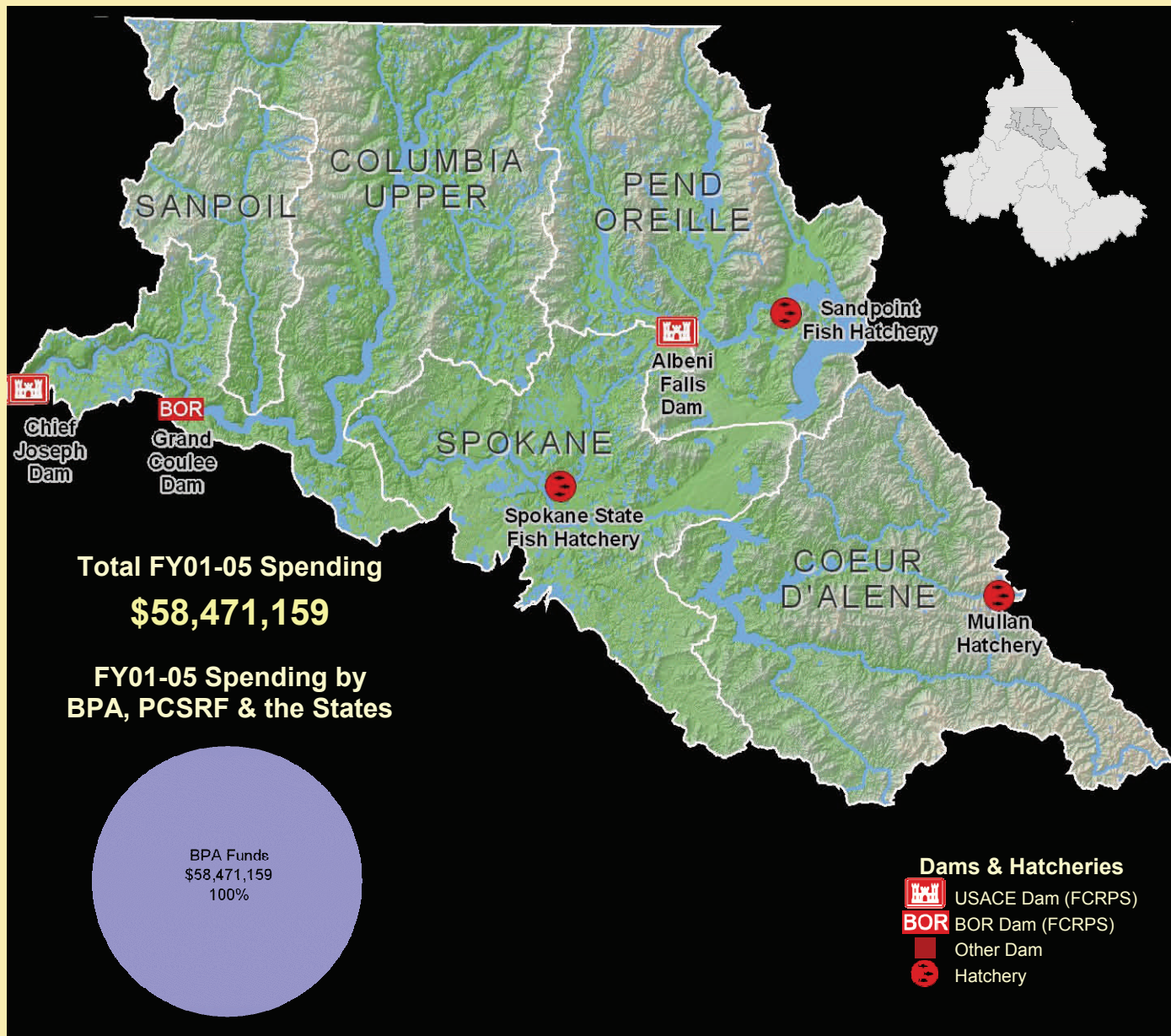
**Hydroelectric Project:** Grand Coulee  
**Biological Objective:** 27,133 Habitat Units  
**Status:** 23,218 Habitat Units acquired (85.57% completed)<sup>1</sup>

### BPA-Funded Projects Associated with Grand Coulee: Selected 2001 — 2006 Project Accomplishments

<ul style="list-style-type: none"> <li></li> </ul>
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<sup>1</sup> Bonneville Power Administration. (via [http://www.efw.bpa.gov/Intergrated\\_Fish\\_and\\_Wildlife\\_Program/WildlifeCrediting\\_files/WL\\_10.pdf](http://www.efw.bpa.gov/Intergrated_Fish_and_Wildlife_Program/WildlifeCrediting_files/WL_10.pdf))

# Intermountain



The Intermountain Province, located in eastern Washington and northwestern Idaho, encompasses an area of 15,617 square miles. Subbasins in the Intermountain Province include Coeur d'Alene, Pend Oreille, Sanpoil, Spokane, and Upper Columbia. Bull trout populations throughout the province are listed under the federal Endangered Species Act. Resources in this province have been impacted by extensive anthropogenic activities that have severely degraded riparian and in-stream habitat. In addition, natural hydrographs throughout the province have been severely altered due to hydro-operations, diversions, and forestry practices. Prior to hydro-development, the Upper Columbia River supported a diverse fish assemblage that included 11 anadromous fish stocks. With the completion of Grand Coulee Dam, all anadromous fish stocks were extirpated and the resident fish assemblage was significantly reduced. Throughout the Intermountain Province, 33 fish and wildlife projects were funded by the Bonneville Power Administration between 2001 and 2005. For more information relative to the accomplishments of these projects, please visit [www.cbfgwa.org/sotr](http://www.cbfgwa.org/sotr).

Land Ownership	
Federal.....	33%
Private.....	55%
Tribal.....	12%



Ten fish species are designated as focal species within the province. Bull trout are listed under the federal Endangered Species Act.

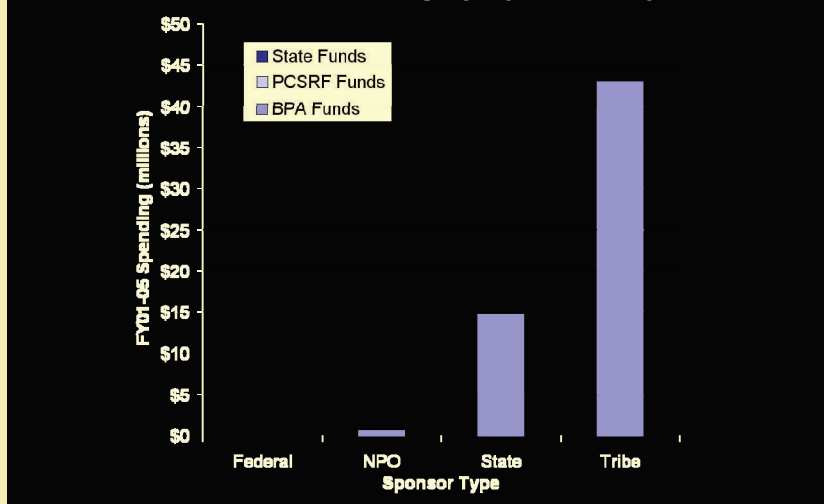
Focal Species	Coeur d'Alene	Columbia Upper	Pend Oreille	San Poil	Spokane
Bull Trout	Threatened	Not listed	Threatened	Not listed	Not listed
Burbot	Not listed	Species of Concern	Not listed	Not listed	Not listed
Chinook	Not listed	Extirpated	Not listed	Extirpated	Extirpated
Kokanee	Species of Concern	Species of Concern	Species of Concern	Species of Concern	Species of Concern
Largemouth Bass	Not listed	Not listed	Species of Concern	Not listed	Species of Concern
Mountain Whitefish	Not listed	Not listed	Species of Concern	Not listed	Species of Concern
Pacific Lamprey	Not listed	Extirpated	Not listed	Not listed	Extirpated
Rainbow/Redband Trout	Not listed	Species of Concern	Not listed	Species of Concern	Species of Concern
Westslope Cutthroat Trout	Species of Concern	Not listed	Species of Concern	Not listed	Not listed
White Sturgeon	Not listed	Species of Concern	Not listed	Not listed	Not listed

Not a focal species
Not listed
Species of Concern
Threatened

Major limiting factors and their primary causes in the province include:

- Water quality (sediment and high temperatures from roads and land use practices)
- Water quantity (fluctuations from hydro-operations, and low flows from withdrawals)
- Habitat access (dams, irrigation diversions, and culverts)
- Habitat quality/quantity (reductions of large woody debris and riparian habitat)
- Predation (avian and fish)

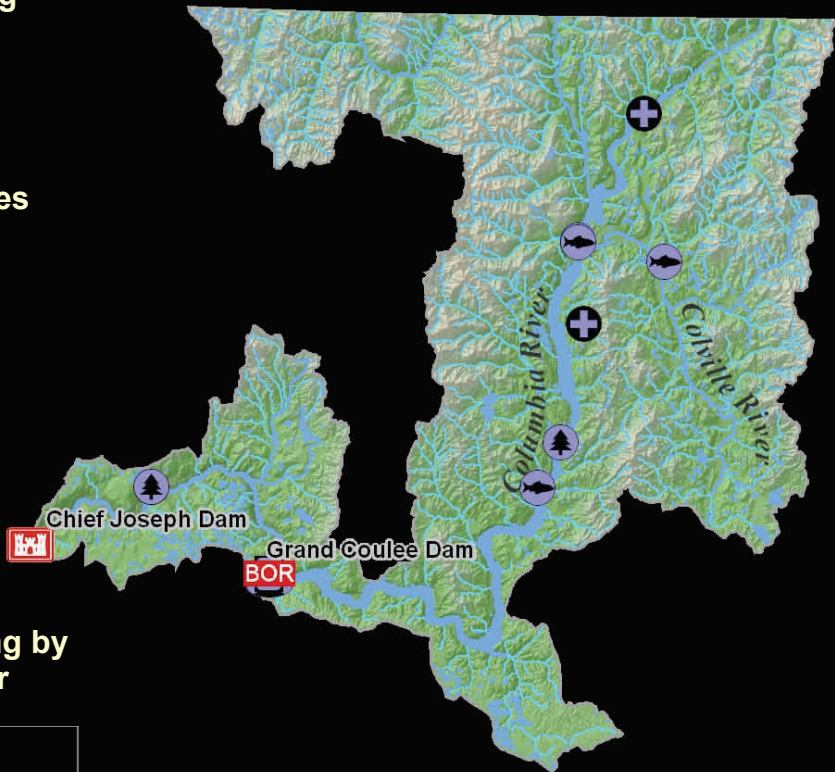
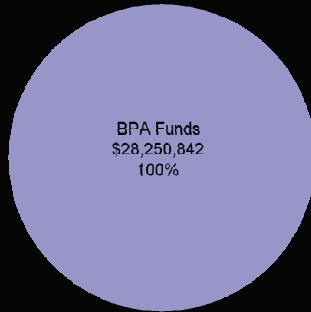
Combined FY01-05 Spending by Type of Project Sponsor



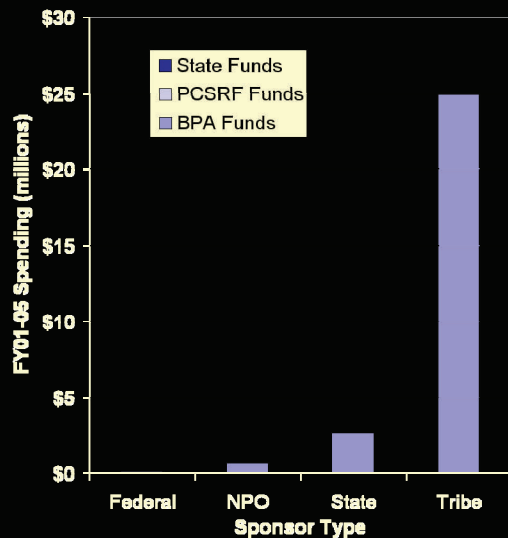
# Intermountain

Total FY01-05 Spending  
**\$28,250,842**

FY01-05 Spending by  
 BPA, PCSRF & the States



Combined FY01-05 Spending by  
 Type of Project Sponsor



- BPA Funded Projects**
- Habitat
  - Monitoring
  - Production
  - Research & Evaluation
  - Coordination
  - Data Management

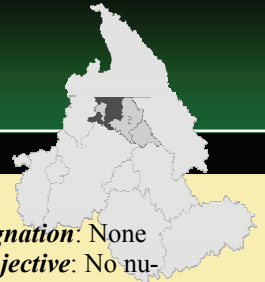
- Dams & Hatcheries**
- USACE Dam (FCRPS)
  - BOR** BOR Dam (FCRPS)
  - Other Dam
  - Hatchery

## Limiting Factors and Primary Causes

Focal Species	Life Stage	Limiting Factor	Cause
All	All	Water quantity (fluctuations)	Hydrosystem operations
Kokanee	Juveniles; adults	Passage (entrainment)	Hydrosystem operations
Rainbow trout	All	Water quality (sediment)	Land use
	Juveniles; adults	Passage (entrainment)	Hydrosystem operations
White sturgeon	All	Habitat quality/quantity	Hydrosystem operations



# Subbasin: Columbia Upper



## Chinook



**Federal Designation:** None  
**ESU:** None  
**Biological Objective:** No numeric objective for adult abundance described in the subbasin plan  
**Status:** Extirpated

## Kokanee

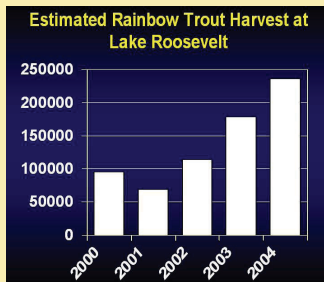
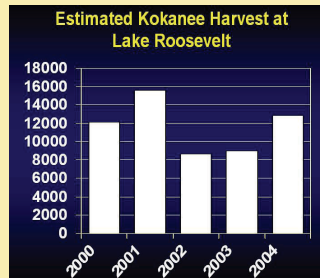


**Federal Designation:** None  
**Biological Objective:** No numeric objective for adult abundance described in the subbasin plan. Harvest goal of 300,000 identified by managers in 1995 and referenced in subbasin plan but not identified as an objective  
**Status:** Relative abundance = 3% (boat electrofishing) and 3% (gillnets) (2004)<sup>2</sup>  
 CPUE = 1.36 fish/hour (boat electrofishing) and 0.01 fish/hour (gillnets) (2004)<sup>2</sup>  
 Estimated harvest = 12,854 (2004)<sup>2</sup>

## Rainbow/Redband Trout



**Federal Designation:** Species of Concern (Redband)  
**Biological Objectives:** No numeric objective for adult abundance described in the subbasin plan  
**Status:** Relative abundance = 14% (boat electrofishing) and 2% (gillnets) (2004)<sup>2</sup>  
 CPUE = 5.45 fish/hour (boat electrofishing) and 0.01 fish/hour (gillnets) (2004)<sup>2</sup>  
 Estimated Harvest = 236,443 (2004)<sup>2</sup>



## Burbot



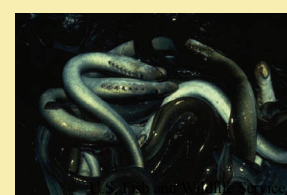
**Federal Designation:** None  
**Biological Objectives:** No numeric objective for adult abundance described in the subbasin plan  
**Status:** Relative abundance = 1% (boat electrofishing) and 12% (gillnets) (2004)<sup>2</sup>  
 CPUE = 0.38 fish/hour (boat electrofishing) and 0.07 fish/hour (gillnets) (2004)<sup>2</sup>

## White Sturgeon



**Federal Designation:** None  
**Biological Objectives:** No numeric objective for adult abundance described in the subbasin plan  
**Status:** Relative abundance = 0% (boat electrofishing) and 0% (gillnets) (2004)<sup>2</sup>  
 CPUE = 0 fish/hour (boat electrofishing) and <0.01 fish/hour (gillnets) (2004)<sup>2</sup>

## Pacific Lamprey



**Federal Designation:** None  
**Biological Objectives:** No numeric objective for adult abundance described in the subbasin plan  
**Status:** Extirpated

### BPA-Funded Projects in the Upper Columbia Subbasin: Select 2001—2005 Accomplishments

- Four hatchery projects reared and released rainbow trout, cutthroat trout, brook trout and kokanee.
- Operated 45 rainbow trout net pens above Grand Coulee Dam.
- Completed limnological, phytoplankton, periphyton, zooplankton and fisheries surveys in Lake Roosevelt.
- Conducted strobe light efficacy testing at Chief Joseph Dam.
- Completed Upper Columbia White Sturgeon Recovery Plan in conjunction with Canadian partners.
- Worked in conjunction with Canadian researchers to complete initial surveys to assess the transboundary juvenile white sturgeon population.
- Started interim hatchery program for white sturgeon in Lake Roosevelt.

*For individual project accomplishments visit [www.cbfwa.org/sotr](http://www.cbfwa.org/sotr).*

<sup>1</sup> Intermountain Province Oversight Committee and Intermountain Province Subbasin Work Teams. 2004. Intermountain Province Subbasin Plan. A Report Prepared for the Northwest Power and Conservation Council. Portland, Oregon.

<sup>2</sup> Lee, C., D. Pavlik-Kunkel, K. Fields, and B. Scofield. 2006. Lake Roosevelt Fisheries Evaluation Program: Limnological and Fisheries Monitoring, 2004-2005 Annual Report, Project Number 199404300, 202 electronic pages, (BPA Report DOE/BP-00014804-1).