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# Public Utility District No. 1 of Douglas County

1151 Valley Mall Parkway • East Wenatchee, Washington 98802-4497 • 509/884-7191 • FAX 509/884-0553

September 11, 2003

Honorable Magalie Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street N.E.  
Washington, D. C. 20426

Subject: FERC Project No. 2149-Annual Wildlife Mitigation Report

Dear Mr. Salas:

In compliance with Article 41, as modified February 24, 1989, enclosed are the original and four (4) copies of the 2002 Annual Report of the Wildlife Mitigation Program for the Wells Hydroelectric Project No. 2149. The report was prepared by Mr. Marc Hallet, Manager of the Wells Wildlife Area for the State of Washington Department of Fish & Wildlife and has been reviewed by Douglas County Public Utility District.

Very truly yours,

Robert W. Clubb, Ph.D.  
Chief of Environmental  
& Regulatory Services

## Enclosures

c: with enclosures:  
FERC - Portland office  
FERC - Mr. Phil Mabini  
WDFW - Mr. Matt Monda  
Jeffers, Danielson, Sonn & Aylward - Mr. Garfield R. Jeffers  
Colville Confederated Tribes - Mr. Jim Priest

**2002 ANNUAL REPORT  
Wells Wildlife Mitigation Program  
Federal Energy Regulatory Commission  
License Number 2149**

**Submitted by:**

**Marc Hallet  
Wildlife Area Manager  
Wells Wildlife Area  
Washington State Department of Fish and Wildlife**

## 2002 Annual Report – Wells Wildlife Mitigation Program

### A. Expenditures

The Wells Special Wildlife Account principal balance was \$873,604 at the end of fiscal year 2002 and \$817,188 at the end of the calendar year. The table below summarizes expenditures for fiscal year 2002 (July 2001-June 2002).

Expenditure	Wells Account	Supplemental Budget	Total
Salaries	\$56,830	\$42,223	\$99,053
Employee Benefits	\$19,419	\$10,794	\$30,213
Goods and Services	\$71,519	\$20,699	92,188
Property Tax	\$5,072	0	\$5,072
Land Rental (DNR)	\$1,238	0	\$1,238
Fire Protection Contracts	\$2,682	0	\$2,682
Weed Assessments	\$286	0	\$286
Travel	\$233	\$67	\$300
Administrative Overhead (Supplemental Budget)	\$13,691	\$7,233	\$20,294
<b>TOTAL</b>	<b>\$170,970</b>	<b>\$80,986</b>	<b>\$251,956</b>

### B. Game Bird Release

Mild winter conditions limited quail trapping efforts this year. A total of 223 California quail captured in the Brewster and Pateros area were banded and relocated on the Wells Wildlife Area in January and February. These included 72 released on the West Foster Creek Unit, 17 on the Central Ferry Canyon Unit and 134 on the Indian Dan Unit. The Pateros Sports Club assisted in trapping quail.

### C. Public Use

Estimated public use is summarized in Appendix A.

### D. Wildlife Habitat Management and Related activities

#### 1) Grain Food Plot and Waterfowl Pasture Production:

Agricultural crops grown on the area totaled 125.5 acres. This included 97.5 acres of irrigated wheat (55 acres on Bridgeport Bar and 42.5 acres on Washburn Island), 18 acres of corn/proso millet strips (13 acres on Bridgeport Bar and 5 acres on Washburn Island) and 10 acres of dryland wheat (Indian Dan Canyon). These crops produced extensive food and cover for a diversity of wildlife. Crop yields were good except for about 20 acres of wheat on Washburn Island, which had been heavily grazed by geese in the spring.

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Irrigated permanent cover on Washburn Island (52 acres) to promote dense cover through the nesting season and goose pasture (after being mowed) during the latter part of the year.

### 2) Riparian Tree and Shrub Planting:

The Wildlife Area crew planted a total of 6,300 shrubs and trees primarily on Washburn Island. Shrub species and numbers of shrubs planted are outlined in Appendix B. Rows between shrubs in plantings were Mowed, rotovated and/or sprayed to stop weeds from competing with shrub plantings.

Mowed and sprayed approximately 10 acres of weeds in low lying, sub-irrigated areas, to control weeds and prepare sites for woody plantings.

### 3) Ponds

Managed inflow rates and water levels in five ponds on the West Foster Creek Unit. Most West Foster creek ponds went dry during the 2002 summer but filled again in early October.

### 4) Shrub Steppe Habitat Restoration

Seeded approximately 15 acres of the 2001 Indian Dan Unit burn to a mixture of bitterbrush, grass and forb. Cultivated and seeded about 20 acres of shrub-steppe habitat on the Bridgeport Bar Unit. This will provide increased diversity and nesting opportunity and will discourage weed invasion on portions of the unit not developed into agricultural fields and woody plantings.

### 5) Wildlife Feeding and Watering

Filled and maintained 24 upland game feeders.

### 6) Artificial Nesting Structures

Pateros Sports Club members cleaned out and repaired goose nesting structures. Rick Hendrick, another volunteer cleaned out wood duck and kestrel nest boxes. Canada goose and kestrel nesting and nest structure use is summarized in Appendix C and D.

### 7) Fences:

Removed gates, livestock panels and approximately 2 miles of barbed wire fence from the Washburn Island Unit.

8) Vegetation Control

Released bio-control agents to assist in controlling Purple Loosestrife (600 Galerucella californiensis), diffuse knapweed (500 Larinus minutus) and Dalmatian toadflax (3,050 Mecinus janthinus).

Treated a variety of weeds with herbicide including: diffuse knapweed (22 acres), Russian Knapweed (2 acres), leafy spurge (1/4 acre), Dalmatian toadflax (18 acres), white top (9 acres), and quackgrass (10 acres).

9) Firebreaks and Fire Control

Maintained one mile of firebreaks on the West Foster Creek Unit and two miles on the Bridgeport Bar Unit.

10) Buildings and Public Use Facilities

Maintained and repaired buildings as needed. Finished shop storage room constructed in 2001. Maintained 13 registration booths and replaced one, which had been vandalized. Cleaned out and mowed parking areas. Replaced signs as needed.

E. Wildlife Populations and Surveys

1) Upland Game Birds

Favorable weather conditions produced ideal reproductive conditions for upland game species. This was first evident in the results of the fall wildlife surveys conducted on the Bridgeport Bar and Indian Dan Units (Appendix G). 599 California quail (Callipepla californica) were observed on the areas during the surveys (292 on Bridgeport Bar and 307 on the Indian Dan unit), a record number for these two areas. Ring necked pheasants (Phasianus colchicus) were also well represented in the Bridgeport Bar counts.

Upland game harvest recorded through the registration program (see Appendices E and F) totaled 1,895, an all time record for the wildlife area and an increase of nearly 38 percent over the 2001 record harvest. California quail continue to dominate the bag check composition (93%). The number of quail in the registration tally was 41.6 percent greater than in 2001 while the pheasant and gray partridge takes were 25 and 29.7 percent lower respectively than in 2001. This trend may reflect the gradual change from an open habitat type to a more diverse habitat type with more extensive woody cover particularly on the Bridgeport Bar Unit, which is now the most productive quail area and where the changes in the habitat have been the greatest.

An increase in upland bird harvest has been noted on Washburn Island primarily in the past two years. The shift in management of the island with greater emphasis on upland game, and the resulting increase in upland game hunting pressure likely caused this increase. Harvest figures for the Island in 2002 totaled 174 birds including 26 pheasants, 144 quail and 2 gray partridges. Washburn Island upland bird harvest has not been included in Appendix F, which compares the latest harvest with the preceding year's harvest since the Washburn Island upland game harvest had been negligible when the area was primarily managed for waterfowl.

Dove hunting was particularly good on the Central Ferry Canyon due to Canola being grown on adjacent private lands.

2) Waterfowl

Canada goose nesting surveys on Wells Pool yielded an estimated production of 656 goslings (Appendix D), 25 percent less than in 2001. Much of this decrease can be attributed to increased ground nest predation.

Waterfowl harvest continues to be good. Much of this harvest occurs on the Bridgeport Bar islands. Duck harvest (hunter registration) on Washburn Island and Bridgeport Bar (including the Bridgeport Bar Island) was 19.3 percent greater while goose harvest was 40.9 percent less than from 2001. The decrease in the goose harvest may be related to the lower goose production in 2002 (Appendix D).

3) Big Game

Mild winter conditions continue to favor a mule deer (Odocoileus hemionus) population increase. This also resulted in greater winter dispersal of deer in portions of the wildlife area not usually considered important wintering habitat.

An informal survey of deer on the Indian Dan Unit resulted in a count of 178 mule deer on February 2, in and adjacent to the southwestern portion of the unit, and 181 in the southeast portion of the unit on April 3.

Sightings of deer in the Indian Dan Unit (18) and Bridgeport Bar (20) during the fall wildlife surveys (Appendix G) were relatively high. The Bridgeport Bar count is much greater than in preceding years (0 in 2000) probably partially due to the larger deer population in Douglas County.

4) Non-Game

Sharp-tailed grouse (Tympanuchus phasianellus) population numbers continue to be depressed on the wildlife area as elsewhere in Washington. Few were

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observed on the Central Ferry Canyon and West Foster Creek Units during the winter. A new lek (communal display ground) with five grouse was found on the Central Ferry Canyon Unit (land recently purchased from The Nature Conservancy with Washington State funds).

The bald eagle (*Haliaeetus leucocephalus*) roost survey conducted by the Bureau of Land Management in the 2001-2002 winter is summarized in Appendix H. The highest count for the Pearl Hill and Brewster roosts totaled only 12 (29 in 2001). The Azwell roost was added to the survey in 2002. The highest total number of eagles for the three roosts was 21 (01/14/02). Some of the eagles may have moved to other roosts such as the black canyon roost located about 7 miles north of the Pool. This roost received extremely high use late in January and February (up to 91 eagles).

Rick Hendrick banded kestrels on the wildlife area and recorded numbers of American white pelicans (*Pelicanus erythrorhynchos*) and double crested cormorants (*Phalacrocorax auritus*) on and along Wells Pool between July and October. These counts varied greatly through this period. The highest numbers recorded were 124 cormorants on July 29 and 106 pelicans on September 12, 2002. The counts suggest a peak in the cormorant population toward the end of July and early August.

Appendix C summarizes the American kestrel (*Falco sparverius*) production and banding data on the wildlife area. This includes a total of 19 nests surveyed, 18 of which produced 84 kestrels. Production for one nest was unknown.

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Appendix A

Wells Wildlife Area  
Estimated Hunting Use and Wildlife Harvest  
2002

Activity	Use Days	Wildlife	Numbers Harvested
Waterfowl Hunting	1256	Ducks	3042
		Geese	80
		Total	3122
Upland Game Hunting	2240	Pheasants	130
		Quail	2782
		Gray Partridge	53
		Chukar	34
		Total	2999
Dove Hunting	182	Dove	469

Appendix B

Wells Wildlife Area  
Woody Plantings  
2002

Common Name	Species	Indian Dan Canyon	Washburn Island	Total
Water Birch	<u>Betula occidentalis</u>	200	600	800
Black Cottonwood	<u>Populus trichocarpa</u>	0	200	200
Black Locust	<u>Robinia pseudoacacia</u>	0	200	200
Ponderosa Pine	<u>Pinus ponderosa</u>	0	200	200
R.M. Juniper	<u>Juniperus scopulorum</u>	0	200	200
Wood Rose	<u>Rosa woodsii</u>	0	700	700
R.O. Dogwood	<u>Cornus stolonifera</u>	0	700	700
Serviceberry	<u>Amelanchier alnifolia</u>	0	700	700
Chokecherry	<u>Prunus virginiana</u>	0	700	700
Hawthorn	<u>Craetagus douglassii</u>	0	700	700
Elderberry	<u>Sambucus glauca</u>	0	700	700
Clematis	<u>Clematis ligusticifolia</u>	100	400	500
Total		300	6000	6300



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### Appendix C

Wells Wildlife Area  
American Kestrel Production  
2002

AREA	WEST FOSTER	CENTRAL FERRY	INDIAN DAN	TOTAL
ADULTS BANDED	0	0	0	0
JUVENILES BANDED	38	28	19	85
TOTAL BANDED - 2002	38	28	19	85
RECAPTURED	0	0	1	1
NESTS WITH UNKNOWN PRODUCTION	0	0	1	1
NESTS WITH KNOWN PRODUCTION	8	6	5	19
TOTAL NESTS	8	6	6	20
YOUNG PRODUCED*	38	28	18	84
YOUNG/NEST W/KNOWN PRODUCTION	4.75	4.67	3.60	4.42

\* Young produced from nests with known production.

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Appendix D

WELLS POOL  
CANAGA GOOSE NESTING SURVEY  
2002

	NATURAL SITES	ARTIFICIAL STRUCTURES	TOTAL
TOTAL NESTS VISITED	109	52	161
NESTS WITH KNOWN CLUTCH	87	22	109
TOTAL EGGS	476	109	585
AVERAGE CLUTCH	5.47	4.95	5.37
NESTS WITH KNOWN FATE AND CLUTCH	87	19	106
TOTAL EGGS	476	103	579
TOTAL HATCH	396	95	491
PERCENT HATCH	83.2	92.2	84.8
HATCHED EGGS PER NEST	4.55	5.00	4.63
ABANDONED	4	0	4
DEAD GOSLINGS	3	0	3
PREDATED	29	0	29
UNKNOWN	80	8	88
TOTAL LOSS	116	8	124
KNOWN PRODUCTION	396	95	491
HATCHED NESTS: UNKNOWN CLUTCH	20	7	27
*ESTIMATED HATCHLINGS	91	35	125
NESTS: UNKNOWN FATE	2	4	6
*ESTIMATED HATCHLINGS	9	20	28
NESTS: ACTIVE/NOT VISITED	0	2	2
*ESTIMATED HATCHLINGS	0	10	9
TOTAL ESTIMATED PRODUCTION	496	160	656
PERCENT OF TOTAL PRODUCTION	75.6	24.4	

\*Production based on average hatched eggs per nest with known production.

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Appendix E

Wells Wildlife Area  
Hunter Bag Check Summary  
2002 Hunting Season

	Indian Dan	Bridgeport Bar	West Foster	Central Ferry	Washburn Island	Total
<b>UPLAND GAME BIRDS</b>						
Hunters	255	600	173	256	118	1402
Pheasant	6	37	6	5	26	80
Pheasant per hunter	0.02	0.06	0.03	0.02	0.22	0.06
California Quail	345	825	153	291	146	1760
Quail per hunter	1.35	1.38	0.88	1.14	1.24	1.26
Gray Partridge	3	11	0	12	2	28
Gray partridge per hunter	0.01	0.02	0.00	0.05	0.02	0.02
Chukar	2	0	0	25	0	27
Chukar per hunter	0.01	0.00	0.00	0.10	0.00	0.02
Total upland game	356	873	159	333	174	1895
Upland Game per hunter	1.40	1.46	0.92	1.30	1.47	1.35
<b>WATERFOWL</b>						
Hunters		552			88	640
Ducks		1391			175	1566
Duck per hunter		2.52			1.99	2.45
Canada Geese		31			11	42
Goose per hunter		0.06			0.13	0.07
Total Waterfowl		1422			186	1608
Waterfowl per hunter		2.58			2.11	2.51
<b>MOURNING DOVE</b>						
Dove Hunters	12	96	11	63		182
Dove Taken	9	126	39	274		448
Dove per hunter	0.75	1.31	3.55	4.35		2.46
<b>MULE DEER</b>						
Deer Hunters	26		36	67		129
Deer Taken	3		6	5		14

Note: Waterfowl hunter incidental take of upland game is included in the upland game figures and upland game hunter incidental take of waterfowl is included in the waterfowl figures.

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Appendix F

Wells Wildlife Area  
 Bag Check Summary - Comparative Success and Harvest Rates  
 2001-2002

<b>UPLAND GAME BIRDS*</b>						
	Hunters	Pheasant	California Quail	Gray Partridge	Chukar Partridge	Total Upland Game
Harvest 2002	1284	54	1614	26	27	1721
2001	986	72	1136	37	6	1251
Number Variance	298	-18	478	-11	21	470
Percent Variance	30.22	-25.00	42.08	-29.73	350.00	37.57
Harvest Rate 2002		0.04	1.26	0.02	0.02	1.34
2001		0.07	1.15	0.04		1.27
Percent Variance		-39.92	9.31	-49.38		5.54

<b>WATERFOWL**</b>				
	Hunters	Ducks	Geese	Total Waterfowl
Harvest 2002	640	1546	42	1588
2001	592	1296	71	1367
Number Variance	48	250	-29	221
Percent Variance	8.11	19.29	-40.85	16.17
Harvest Rate 2002		2.42	0.07	2.48
2001		2.19	0.12	2.31
Percent Variance		10.30	-45.31	7.41

\* Upland game data for Indian Dan, Bridgeport Bar, West Foster and Central Ferry Units

\*\*Waterfowl data for Washburn Island and Bridgeport Bar

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Appendix G

Fall Wildlife Surveys  
2002

	Indian Dan Canyon	Bridgeport Bar	Total
<b>UPLAND GAME BIRDS:</b>			
Pheasant - Male	0	61	61
- Female	0	11	11
- Juvenile	0	14	14
- Total	0	86	86
California Quail	292	307	599
Ruffed Grouse	6	0	6
Gray Partridge	0	8	8
<b>MAMMALS:</b>			
Mule Deer	18	20	38
White-tailed Deer	0	1	1
<b>WATERFOWL:</b>			
Mallard	9	0	9
Ruddy Duck	17	0	17
Ring-necked Duck	10	0	10
Scaup	2	0	2
Common Snipe	1	2	3
<b>DIVERSITY SPECIES:</b>			
Great Horned Owl	2	0	2
Barn Owl	0	1	1
Red Tailed Hawk	1	0	1
Northern Harrier	2	0	2
Great Blue Heron	0	3	3
American Kestrel	0	1	1
Lewis Woodpecker	1	0	1
Pied-billed Grebe	2	0	2
Double Crested Cormorant	0	1	1
Rattle Snake	1	0	1

