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# Public Utility District No. 1 of Douglas County

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August 23, 2004

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 Ms. Salas:

In compliance with Article 41, as modified February 24, 1989, enclosed are the original and four (4) copies of the 2003 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 and 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

Washington Department of Fish and Wildlife – Ephrata

Jeffers, Danielson, Sonn & Ayward, Mr. Garfield R. Jeffers

Colville Confederated Tribes, Mr. Jim Priest

**2003 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 (WDFW)**

## 2003 Annual Report – Wells Wildlife Mitigation Program

### A. Expenditures

The Wells Special Wildlife Account principal balance totaled \$753,320 at the end of fiscal year 2003 and \$688,833 at the end of the calendar year. The Wells special account will be credited \$36,451 due to a past overcharge of administrative overhead. The table below summarizes expenditures for fiscal year 2002 (July 2001-June 2002).

Expenditure	Wells Account	Supplemental Budget	Total
Salaries	\$34,787	\$41,053	\$78,840
Employee Benefits	\$11,384	\$10,482	\$21,866
Goods and Services	\$23,705	\$30,230	\$59,935
Property Tax	\$5,072	0	\$5,072
Land Rental (DNR)	\$1,238	0	\$1,238
Fire Protection Contracts	\$2,485	0	\$2,485
Weed Assessments	\$286	0	\$286
Travel	\$220	\$90	\$310
Capital Outlay	\$16,850	0	\$16,850
Administrative Overhead	\$12,872	\$6,320	\$19,192
<b>TOTAL</b>	<b>\$108,899</b>	<b>\$88,175.00</b>	<b>\$197,074</b>

The capital outlay expenditure was for a used circle irrigation system on Washburn Island.

### B. Game Bird Release

A total of 281 California quail captured in the Brewster and Pateros area were banded and relocated on the Wells Wildlife Area in January and February. These included 136 released on the West Foster Creek Unit, 37 on the Central Ferry Canyon Unit and 108 on the Indian Dan Unit. An additional 42 quail captured and banded on Bridgeport Bar in the summer were released on site.

### C. Public Use

Estimated public use is summarized in Appendix A. Public use was estimated from hunter registration data, corrected for registration cards not returned and for estimated non-compliance with the registration program. It also includes a correction factor for areas lacking a registration program.

### D. Wildlife Habitat Management and Related activities

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

Agricultural crops grown for wildlife food and cover on the area totaled 130 acres. This includes 95 acres of irrigated wheat (65 acres on Bridgeport Bar and 30 acres on Washburn Island), 15 acres of corn/proso millet (10 acres on Bridgeport Bar and 5 acres on Washburn Island in 60 foot strips) and 20 acres of dryland wheat (15 acres on Indian Dan Canyon and 5 acres on West Foster Creek). Irrigated 52 acres of permanent cover on Washburn Island 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:

Planted a total of 4,721 shrubs and trees primarily on Washburn Island. Species and numbers planted are listed in Appendix B. Mowed, rotovated and/or sprayed vegetation competing with these and other woody plantings. Laid out approximately 6,000 feet of plastic mulch on Washburn Island to minimize weed growth around trees and shrubs.

3) Ponds:

Managed inflow rates and water levels in five ponds on the West Foster Creek Unit. Surveyed an area on the West Foster Creek Unit for a potential state duck stamp project, which would result in about 5 additional acres of wetland.

4) Shrub Steppe Habitat Restoration:

Mowed about 25 acres of weeds to prepare an area on Central Ferry Canyon for restoration. This project, primarily funded by a WDFW grant, will increase sharp-tailed grouse nesting cover in the vicinity of a lek (display site).

Seeded all firebreaks associated with a fire that burned about 100 acres of shrub-steppe on the Indian Dan Unit.

5) Wildlife Feeding and Watering:

24 upland game feeders were filled and maintained.

6) Artificial Nesting Structures

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

Sharp-tailed grouse populations in North Douglas County as in other parts of Washington, are extremely depressed and will require additional protection.

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Most kestrel nest boxes were removed from the West Foster Creek and Central Ferry Canyon Units to decrease the potential of sharp-tailed grouse chick predation.

### 7) Fences:

Constructed 1,200 feet of woven wire fence around a parking area and along a state highway on Bridgeport Bar. Continued to remove fence material from Washburn Island. Removed ½ mile of fence on the Central Ferry Canyon Unit.

### 8) Vegetation Control

Released bio-control agents to assist in controlling Purple Loosestrife (3,000 Galerucella californiensis) and Dalmatian toadflax (9,000 Mecinus janthinus).

Treated a variety of weeds with herbicide including: diffuse knapweed ( 3.5 acres and 9 miles of road), leafy spurge (2 acres), Dalmatian toadflax (38 acres), white top (2 acres), and quackgrass (21 acres).

Mechanical weed control included mowing 25 acres of quackgrass and Canadian thistle on the Indian Dan Unit and 15 acres of quackgrass on Washburn Island. 3 acres on Washburn Island were mowed to prepare sites for woody plantings.

### 9) Firebreaks and Fire Control

Firebreak maintenance included one mile 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. Cleaned out and mowed parking areas. Replaced signs as needed. Constructed one new parking area with registration booth on the West Foster Creek Unit. This will enable the seasonal closure of a nearby parking area to help protect wintering sharp-tailed grouse.

### 11) Other:

Constructed new loading dock and repaired pump, suction line, screen and foot-valve on Washburn Island. Placed 15 new brush piles on Bridgeport Bar.

## E. Wildlife Populations and Surveys

### 1) Upland Game Birds

Favorable spring weather for the second year produced ideal reproductive conditions for California quail (Callipepla californica) and other upland game species. The Central Ferry Canyon and West Foster Creek Units fall wildlife surveys (Appendix G) yielded a count of 310 California quail and 26 gray partridges (Perdix perdix) and 4 ring-necked pheasants (Phasianus colchinus). For some unknown reason, the fall pheasant population in this area was unusually depressed.

Upland game harvest recorded on the wildlife area through the registration program (see Appendices E and F) totaled 1,868 birds (for all units), close to the 2002 record of 1,895. Although the total quail harvest was slightly lower, quail hunters had a 31 percent higher success rate than in 2002. California quail continue to dominate the bag check composition, making up 96.5 percent of the upland game take on the area. Quail and gray partridge harvest recorded through the registration program was 2.8 and 30.8 percent greater respectively than in 2002 while the pheasant harvest was 61 percent lower than in 2002.

Upland game harvest figures for Washburn Island in 2003 totaled 147 birds including 4 pheasants and 143 quail. Here, as elsewhere in the vicinity, the pheasant harvest declined. Washburn Island upland bird harvest has not been included in Appendix F as explained in the 2002 report.

Wildlife Area personnel banded 200 mourning doves (Zenaida macrura) on Bridgeport Bar as part of a 3-year US Fish and Wildlife Study. In 2003, 919 doves were banded in Washington, one of 26 states participating in the study.

## 2) Waterfowl

Canada goose (Branta canadensis) nesting surveys on Wells Pool yielded an estimated production of 777 goslings (Appendix D), 18.4 percent greater than in 2002. This may be a conservative estimate since it does not include active nests not visited. Ground nest predation by raccoon continues to be a serious problem on the Bridgeport Bar Islands. Predators destroyed 28 nests on these islands.

Waterfowl harvest continues to be good despite a drop in waterfowl use of Wells Pool. Wells Pool aerial surveys conducted in October and November 2003 yielded a 45.5% and 85% lower numbers of ducks respectively than in 2002 (appendix H). 538 registered hunters harvested 1,108 ducks and 91 geese on the Wildlife Area. Duck harvest reported at registration booths on Washburn Island and Bridgeport Bar (including the Bridgeport Bar Islands) was 28.3 percent lower while goose harvest was 116.7 percent higher than in 2002.

3) Big Game

Mild winter conditions continue to favor mule deer (Odocoileus hemionus) survival and deer population in the vicinity of the Wells WA remained high. The fall wildlife surveys yielded thirteen mule deer and one white tailed deer on the Central Ferry Canyon Unit. Although none were tallied on the West Foster Creek Unit, this area is known to support a good population of mule deer.

4) Non-Game

The bald eagle (Haliaeetus leucocephalus) roost survey conducted by the Bureau of Land Management during the 2002-2003 winter is summarized in Appendix H. The highest count for the Pearl Hill, Azwell and Brewster roosts totaled 85 eagles (21 in 2002).

A volunteer, Rick Hendrick banded American kestrels (Falco sparverius) on the wildlife area. Appendix C summarizes the American kestrel production and banding data on the wildlife area. Rick banded 121 young and 23 adult kestrels. He surveyed 30 nests, 29 of which produced 120 kestrels (4.14 young per nest). Production for one active nest was unknown.

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Appendix A

Wells Wildlife Area  
Estimated Bird Hunting Use and Harvest  
2003

Activity	Use Days	Wildlife	Numbers Harvested
Waterfowl Hunting	1193	Ducks	2504
		Geese	173
		Total	2677
Upland Game Hunting	1850	Pheasants	42
		Quail	2951
		Hungarian	52
		Chukar	11
		Total	3056
Dove Hunting	139	Dove	363

Appendix B

Wells Wildlife Area  
Woody Plantings  
2003

Common Name	Species	Bridgeport Bar	Washburn Island	Total
Water Birch	<u>Betula occidentalis</u>	50	750	800
Black Cottonwood	<u>Populus trichocarpa</u>	0	200	200
Ponderosa Pine	<u>Pinus ponderosa</u>	50	250	300
Blue Spruce	<u>Picea pungens glauca</u>	25	65	90
Austrian Pine	<u>Pinus nigra</u>	25	175	200
Wood Rose	<u>Rosa woodsii</u>	100	300	400
R.O. Dogwood	<u>Cornus sericea</u>	100	600	700
Serviceberry	<u>Amelanchier alnifolia</u>	100	600	700
Chokecherry	<u>Prunus virginiana</u>	100	400	500
Hawthorn	<u>Craetagus douglassi</u>	50	421	471
Total		600	3761	4361



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Appendix C

Wells Wildlife Area  
American Kestrel Production  
2003

AREA	WEST FOSTER	CENTRAL FERRY	INDIAN DAN	TOTAL
ADULTS BANDED	6	6	11	23
JUVENILES BANDED	53	28	40	121
TOTAL BANDED - 2003	59	34	51	144
RECAPTURED	0	0	0	0
NESTS WITH UNKNOWN PRODUCTION	1	0	0	1
NESTS WITH KNOWN PRODUCTION	12	6	11	29
TOTAL NESTS	13	6	11	30
YOUNG PRODUCED*	52	28	40	120
YOUNG/NEST W/KNOWN PRODUCTION	4.33	4.67	3.64	4.14

\* Young produced from nests with known production.

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Appendix D

WELLS POOL  
CANAGA GOOSE NESTING SURVEY  
2003

	NATURAL SITES	ARTIFICIAL STRUCTURES	TOTAL
TOTAL NESTS VISITED	132	36	168
NESTS WITH KNOWN CLUTCH	102	24	126
TOTAL EGGS	577	152	729
AVERAGE CLUTCH	5.66	6.33	5.79
NESTS WITH KNOWN FATE AND CLUTCH	98	23	121
TOTAL EGGS	566	148	714
TOTAL HATCH	462	138	600
PERCENT HATCH	81.6	93.2	84.0
HATCHED EGGS PER NEST	4.71	6.00	4.96
ABANDONED	6	0	6
PREDATED	89	0	89
UNKNOWN	9	10	19
TOTAL LOSS	104	10	114
KNOWN PRODUCTION	462	138	600
HATCHED NESTS: UNKNOWN CLUTCH	8	7	15
*ESTIMATED HATCHLINGS	38	42	74
NESTS: UNKNOWN FATE	13	6	19
*ESTIMATED HATCHLINGS	61	36	94
NESTS: ACTIVE/NOT VISITED			0
*ESTIMATED HATCHLINGS	0	0	0
TOTAL ESTIMATED PRODUCTION	561	216	777
PERCENT OF TOTAL PRODUCTION	72.2	27.8	

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

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Appendix E

Wells Wildlife Area  
Hunter Bag Check Summary  
2003 Hunting Season

	Indian Dan	Bridgeport Bar	West Foster	Central Ferry	Washburn Island	Total
<b>UPLAND GAME BIRDS</b>						
Hunters	253	501	162	90	109	1115
Pheasant	3	11	7	0	4	25
Pheasant per hunter	0.01	0.02	0.04	0.00	0.04	0.02
California Quail	476	848	158	177	143	1802
Quail per hunter	1.88	1.69	0.98	1.97	1.31	1.62
Gray Partridge	8	1	22	3	0	34
Gray partridge per hunter	0.03	0.00	0.14	0.03	0.00	0.03
Chukar	0	0	2	5	0	7
Chukar per hunter	0.00	0.00	0.01	0.06	0.00	0.01
Total upland game	487	860	189	185	147	1868
Upland Game per hunter	1.92	1.72	1.17	2.06	1.35	1.68
<b>WATERFOWL</b>						
Hunters		443			95	538
Ducks		990			118	1108
Duck per hunter		2.23			1.24	2.06
Canada Geese		54			37	91
Goose per hunter		0.12			0.39	0.17
Total Waterfowl		1023			154	1177
Waterfowl per hunter		2.31			1.62	2.19
<b>MOURNING DOVE</b>						
Dove Hunters	12	50	7	16	10	95
Dove Taken	29	158	3	44	30	264
Dove per hunter	2.42	3.16	0.43	2.75	3.00	2.78
<b>MULE DEER</b>						
Deer Hunters	44		27	40		111
Deer Taken	5		5	6		16

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  
 2002-2003

<b>UPLAND GAME BIRDS*</b>						
	Hunters	Pheasant	California Quail	Gray Partridge	Chukar Partridge	Total Upland Game
Harvest 2003	1006	21	1659	34	7	1721
2002	1284	54	1614	26	27	1721
Number Variance	-278	-33	45	8	-20	0
Percent Variance	-21.65	-61.11	2.79	30.77	-74.07	0.00
Harvest Rate 2003		0.02	1.65	0.03	0.01	1.71
2002		0.04	1.26	0.02	0.02	1.34
Percent Variance		-50.36	31.19	66.91		27.63

\* Upland game bird figures above do not include those for Washburn Island.

<b>WATERFOWL**</b>				
	Hunters	Ducks	Geese	Total Waterfowl
Harvest 2003	538	1108	91	1199
2002	640	1546	42	1588
Number Variance	-102	-438	49	-389
Percent Variance	-15.94	-28.33	116.67	-24.50
Harvest Rate 2003		2.06	0.17	2.23
2002		2.42	0.07	2.48
Percent Variance		-14.74	157.74	-10.14

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

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

## 2003 Annual Report – Wells Wildlife Mitigation Program

### Appendix G

#### Fall Wildlife Surveys 2003

	West Foster Creek	Central Ferry Canyon	Total
<b>UPLAND GAME BIRDS:</b>			
Pheasant - Male	2	0	2
- Female	1	0	1
- Unknown	1	0	1
- Total	4	0	4
California Quail	224	86	310
Gray Partridge	0	26	26
Mourning Dove	1	0	1
<b>MAMMALS:</b>			
Mule Deer	0	13	13
Coyote	0	1	1
White-tailed Deer	0	1	1
Cottontail Rabbit	1	1	2
<b>DIVERSITY SPECIES:</b>			
Great Horned Owl	1	1	2
Red Tailed Hawk	0	3	3

Appendix H  
 WELLS POOL AERIAL WATERFOWL COUNTS  
 October 2001 - November 2003

Flights:	10/26/01	11/15/01	12/18/01	10/23/02	11/14/02	1/13/03	10/23/03	11/13/03
<b>SPECIES</b>								
Tundra Swan	0	0	0	0	0	0	0	4
Trumpeter Swan	0	0	2	0	0	0	0	0
<b>TOTAL</b>	0	0	2	0		0	0	4
Western Canada Goose	150	369	410	450	10	450	80	465
Undifferentiated Canada Goose	0	0	0	0	440	130	0	0
Other Goose								
<b>TOTAL GEESE</b>	150	369	410	450	450	580	80	465
Mallard	1510	885	1810	845	6830	170	290	40
Gadwall	150	275	120	25	460	50	100	0
American Wigeon	14370	7460	8400	12900	16080	1740	10800	4000
Green-winged Teal	0	0	0	30	0	0	1	0
Northern Shoveler	2	0	0	0	0	0	0	0
Northern Pintail	0	15	0	0	0	0	0	0
Wood Duck	0	0	0	0	0	0	2	0
<b>SUBTOTAL PUDDLE DUCKS</b>	16032	8635	10330	13800	23370	1960	11193	4040
Redhead	7600	6400	1500	3000	3530	1750	1570	0
Canvasback	2200	2750	1200	1470	4000	130	0	0
Scaup	7000	5450	9650	5900	3520	1630	1600	1200
Ringneck	2090	700	3380	2910	3340	90	450	520
Goldeneye	0	40	440	50	620	210	0	50
Bufflehead	60	130	100	50	400	110	0	60
Ruddy	140	700	0	0	50	300	0	0
<b>SUBTOTAL DIVING DUCKS</b>	19090	16170	16270	13380	15460	4220	3620	1830
Common Merganser	0	1	20	0	0	0	0	0
Hooded Merganser	0	3	0	10	25	0	0	0
<b>TOTAL DUCKS</b>	35122	24809	26620	27190	38855	6180	14813	5870
<b>TOTAL WATERFOWL</b>	35272	25178	27032	27640	39305	6760	14893	6339
Coots	22300	17700	15000	23150	19300	17530	14000	2970
<b>SURVEY TOTAL</b>	57572	42878	42032	50790	58605	24290	28893	9309
Bald Eagle	3	5A, 1i	5A, 1i		0	2A, 1i	2	2A
White Pelican	0	0	0	0	0	0	8	0
Cormorant	0	0	0	0	0	0	4	0

Appendix I

Bureau of Land Management  
 Bald Eagle Roost Monitoring Summary  
 Winter 2002-2003

Date	Brewster Roost				Pearl-Upper Wells Roost				Azwell Roost				Total			
	Ad	Imm	Unk	Total	Ad	Imm	Unk	Total	Ad	Imm	Unk	Total	Ad	Imm	Unk	Total
12/16/02	1	0		1	0	0	0	0	6	3	0	9	7	3	0	10
12/30/02	1	4		5	3	1	0	4	11	6		17	15	11	0	26
01/13/03	0	0		0	1	15		16	21	9		30	22	24	0	46
01/27/03					4	13		17	26	42		68	30	55	0	85
02/10/03					4	4		8	23	12		35	27	16	0	43
02/24/03					0	9		9	17	10		27	17	19	0	36