



# Public Utility District No. 1 of Douglas County

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

July 26, 2002

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

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**Douglas County PUD**

**NOTED**

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**K.A.P.**

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 2001 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. Ron Wright  
Washington Department of Fish & Wildlife - Ephrata  
Jeffers, Danielson, Sonn & Aylward, Mr. Garfield R. Jeffers  
Colville Confederated Tribes, Mr. Steve Judd

2001 Annual Report  
Wells Wildlife Mitigation Program  
Federal Energy Regulatory Commission  
License Number 2149

By Marc Hallet  
Wells Wildlife Area Manager  
Washington State Department  
of Fish and Wildlife (WDFW)

2001 Annual Report  
 Wells Wildlife Mitigation Program  
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A. Expenditures - Fiscal Year 2001

	Wells Account	Supplemental	Total
Salaries	\$59,523	\$26,795	\$86,318
Employee Benefits	\$14,591	\$6,218	\$20,809
Goods and Services	\$28,436	\$32,732	\$61,168
Travel	\$166	\$253	\$419
Equipment	\$26,283		
Property Tax	\$5,072		\$5,072
Land Rental (DNR)	\$1,238		\$1,238
Fire Protection	\$211		\$211
Weed Assessments	\$286		\$286
Administrative Overhead		\$6,003	\$6,003
<b>TOTAL</b>	<b>\$135,806</b>	<b>\$72,001</b>	<b>\$207,807</b>

Wells Special Wildlife Account:

July 1, 2001 Balance: \$999,140  
 December 31, 2001 Balance: \$933,360

B. Game Bird Release

California quail banded and relocated on the wildlife area in the winter included: 112 on the West Foster Creek Unit, 60 on the Central Ferry Canyon Unit and 25 on the Indian Dan Canyon Unit (197 total).

C. Public Use

Estimated public use is summarized in Appendix A..

D. Wildlife Habitat Management and Related Activities

1) Grain Food Plot Production

Wildlife Area personnel established 75 acres of irrigated crops including 34 acres of winter wheat, 38 acres of spring wheat and 3 acres of corn. Food-plots (about 15 acres) on the Indian Dan and West Foster Canyon units, were seeded to dryland spring wheat.

The WDFW negotiated the purchase of the Washburn Island circle irrigation system. The former sharecropper on the area chose to give up his agricultural lease and allowed WDFW to use the system to irrigate 25 acres of winter wheat and about 40 acres of permanent cover. The islands crops were used extensively by waterfowl and upland game. This led to an increase in harvest as discussed below.

## 2) Riparian Shrub and Tree Planting

Shrubs and trees planted on the area totaled 7,005 as outlined in Appendix B. Of these, 6,655 were planted on Washburn Island and 350 on the Indian Dan Unit. On the Indian Dan Unit, the trees were planted in a section of plastic mulch measuring 50 feet by 100 feet and included 250 aspens and 100 willows.

## 3) Ponds

Managed the water level of artificial ponds and maintained dams and dikes. Repaired one pond outlet.

## 4) Shrub-Steppe Habitat Restoration

A fire consumed about 465 acre of habitat on the Indian Dan Unit including about 400 acres of mule deer winter range. About 50 acres of the burn and 5 miles of firebreaks was seeded to bitterbrush and a bitterbrush/grass/forb mix.

## 5) Other Projects, Developments and Activities

### a) Wildlife Feeding and Watering

Filled and maintained 24 upland game feeders for winter use and maintained 11 gallinaceous guzzlers. The Indian Dan fire destroyed one guzzler.

### b) Nesting Structures

Serviced Canada goose, wood duck and kestrel nesting structures. Canada goose and kestrel structure use is summarized in Appendices C and D. Constructed one osprey platform.

c) Fences

Maintained and repaired fences as needed. Removed about 4,500 feet of fence on Washburn Island to facilitate irrigation and habitat development.

d) Vegetation Control

Released insects on the area to control diffuse knapweed (250 Larinus minutus) and Dalmatian toadflax (222 Mecinus janthinus).

Mowed approximately 25 acres of quackgrass and Canadian thistle and applied herbicide as listed in the following table:

Wells Wildlife Area - Herbicide treatment:

Weed Species	Acres	Miles
Diffuse Knapweed	12	8
Russian Knapweed	20	0
Dalmatian Toadflax	24	0
Leafy Spurge	.5	0
Quackgrass	40	0
Total	96.5	8

e) Firebreaks and Fire Control

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

Participated in fire fighting on the Indian Dan Unit including constructing about 4.5 miles of firebreaks.

f) Buildings

Maintained and repaired buildings as needed. Constructed an enclosed storage area (12' x 23') in the open bays adjacent to the shop. Finished building "lean-to" (36' x 17') on the side of the shop for equipment storage.

g) Public Use Facilities

Cleaned out and mowed parking areas. Maintained 13 hunter registration booths.

Constructed and installed one registration booth.

E. Wildlife Populations and Surveys

1) Upland Game Birds

Overall upland bird harvest based on hunter registration data was 65.9 percent higher than in 2000 (Appendices E and F). This increase is primarily due to the unusually high California quail harvest. Hunters recorded taking 695 quail on Bridgeport Bar or 1.51 per upland game hunter (the Bridgeport Bar quail harvest, reported between 1978 and 2000, averaged 203 quail and ranged from 24 to 378 birds per year). Upland bird hunting pressure for the wildlife area was 2.9 percent higher than in 2000 and hunters averaged 1.27 birds per day; about 7 percent higher than in 2000. Hungarian partridge and chukar harvest remained low.

More intensive upland management on Washburn Island and the removal of livestock from the island may have resulted in considerably higher upland game hunting pressure and success. Washburn Island had the highest quail harvest rate on the wildlife area (1.56 birds per hunter). Here, 107 hunters recorded taking 18 pheasants, 167 quail and 3 Hungarian partridges.

Fall wildlife population surveys were conducted on the West Foster Creek and Central Ferry Canyon Units but only West Foster Creek data was available for this report (see appendix G). These surveys yielded low upland game bird counts.

2) Waterfowl

Waterfowl harvest was relatively high this year (Appendix E and F). Waterfowl hunting pressure on the wildlife area was 29 percent higher than in 2000. Waterfowl hunters averaged 2.31 birds per day; 16 percent greater than in 2000 (1.99 birds). Duck harvest on Bridgeport Bar (1,046) and on Washburn Island (250) was high; averaging 2.19 ducks per hunter. The recorded Canada goose harvest of 71 was 24.6 percent higher than in 2000.

Estimated Wells Pool Canada goose production totaled 877 (see Appendix D); nearly 200 more than in 2000.

3) Big Game

Two elk were reported in Central Ferry Canyon during the month of May and seven in December of 2001. One large bull, five cows and one calf spent much of the winter on the area. Deer populations continue to be high in this area yielding good hunting opportunities. Although deer hunter participation in the hunting registration program is low, 123 hunters recorded harvesting 15 deer.

4) Non-game

The Bald eagle roost survey conducted by the Bureau of Land Management is summarized in Appendix H. The highest eagle count for the Pearl Hill and Brewster roosts was 29 recorded on February 12 (27 in 2000).

Volunteers recorded numbers of American white pelicans and double crested cormorants using Wells Pool in the area between the Brewster Bridge and Chief Joseph Dam. Counts, made between April 3 and November 24, 2001, varied greatly. The highest Cormorant count (67) was made on August 11 and the highest pelican count (135) was made on August 14. Cormorants appeared to use the area more extensively from August through September and pelicans from June through September.

Five out of eleven known osprey nests were active this year producing 8 young.

Kestrel production and banding data is summarized in Appendix C. Ninety (90) young kestrels were found in 24 nest boxes of which 88 along with 14 adults were banded..

Appendix A

Wells Wildlife Area  
 Estimated Hunting Use  
 and Wildlife Harvest  
 2001

Activity	Use Days	Wildlife	Numbers Harvested
Waterfowl Hunting	<u>1,186</u>	Ducks	1,740
		Geese	110
		Sub Total	<u>1,850</u>
Upland Game Hunting	<u>1,807</u>	Pheasants	105
		Quail	1,580
		Hungarian	120
		Chukar	15
		Sub Total	<u>1,820</u>
Dove Hunting	<u>215</u>	Dove	<u>500</u>

Appendix A is based on hunter registration data, is corrected for hunter registration cards not returned and includes estimated hunting activity on lands without a hunter registration program (PUD project land and the Okanogan Unit).



## Appendix B

Wells Wildlife Area  
Woody Plantings  
2001

Common Name	Species	Indian Dan Canyon	Washburn Island	Total
Water Birch	<u>Betula occidentalis</u>	0	650	650
Black Cottonwood	<u>Populus trichocarpa</u>	0	175	175
Quaking-Aspen	<u>Populus tremuloides</u>	250	0	250
Black Locust	<u>Robinia pseudoacacia</u>	0	50	50
Austrian Pine	<u>Pinus nigra</u>	0	200	200
Ponderosa Pine	<u>Pinus ponderosa</u>	0	150	150
Blue Spruce	<u>Picea pungens glauca</u>	0	150	150
R.M. Juniper	<u>Juniperus scopulorum</u>	0	250	250
Wood Rose	<u>Rosa woodsii</u>	0	700	700
Caragana	<u>Caragana arborescens</u>	0	700	700
R.O. Dogwood	<u>Cornus stolonifera</u>	0	200	200
Serviceberry	<u>Amelanchier alnifolia</u>	0	700	700
Chokecherry	<u>Prunus virginiana</u>	0	700	700
Hawthorn	<u>Craetagus douglassi</u>	0	700	700
Elderberry	<u>Sambucus glauca</u>	0	650	650
Clematis	<u>Clematis ligusticifolia</u>	0	680	680
Willows (cuttings)	<u>Salix sp.</u>	100	0	100
<b>Total</b>		<b>350</b>	<b>6655</b>	<b>7005</b>

Appendix C

Wells Wildlife Area  
Kestrel Production - 2001

AREA	WEST FOSTER	CENTRAL FERRY	INDIAN DAN	TOTAL
ADULTS BANDED	6	4	4	14
JUVENILES BANDED	29	37	22	88
TOTAL BANDED - 2001	35	41	26	102
RECAPTURED	1	2	0	3
NESTS WITH UNKNOWN PRODUCTION	0	2	2	4
NESTS WITH KNOWN PRODUCTION	7	8	5	20
TOTAL NESTS	7	10	7	24
YOUNG PRODUCED*	33	37	20	90
YOUNG/NEST W/KNOWN PRODUCTION	4.71	4.63	4.00	4.50

\* Young produced from nests with known production.

## Appendix D

WELLS POOL  
GOOSE NESTING SURVEY  
2001

	<u>NATURAL SITES</u>	<u>ARTIFICIAL STRUCTURES</u>	<u>TOTAL</u>
<u>TOTAL NESTS VISITED</u>	123	36	159
<u>NESTS WITH KNOWN CLUTCH</u>	90	18	108
TOTAL EGGS	529	107	636
AVERAGE CLUTCH	5.88	5.94	5.89
 <u>NESTS WITH KNOWN FATE AND CLUTCH</u>	 86	 16	 102
TOTAL EGGS	493	99	592
TOTAL HATCH	448	92	540
PERCENT HATCH	90.87	92.93	91.22
HATCHED EGGS PER NEST	5.21	5.75	5.29
ABANDONED	13	0	13
DEAD GOSLINGS	0	2	2
PREDATED	15	6	21
UNKNOWN	16	8	24
TOTAL LOSS	44	8	52
 <u>KNOWN PRODUCTION</u>	 448	 92	 540
<u>HATCHED NESTS: UNKNOWN CLUTCH</u>	30	16	46
*ESTIMATED HATCHLINGS	156	92	248
<u>NESTS: UNKNOWN FATE</u>	6	4	10
*ESTIMATED HATCHLINGS	31	23	54
<u>NESTS: ACTIVE/NOT VISITED</u>	0	6	6
*ESTIMATED HATCHLINGS	0	35	35
<u>TOTAL ESTIMATED PRODUCTION</u>	636	242	877
<u>PERCENT OF TOTAL PRODUCTION</u>	72.46	27.54	

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

## Appendix E

Wells Wildlife Area  
 Hunter Bag Check Summary  
 2001-2002 Hunting Season

Unit:	Indian Dan	Bridgeport Bar	West Foster	Central Ferry	Washburn Island	Total
<u>Hunters:</u>						
Waterfowl	0	471	0	0	121	592
Upland Game	211	459	176	140	107	1093
TOTAL	211	930	176	140	228	1685

Game Taken /Success Rate:						
Pheasant	0	53	17	2	18	90
per hunter	0.00	0.12	0.10	0.01	0.17	0.08
Quail	209	695	161	71	167	1303
per hunter	0.99	1.51	0.91	0.51	1.56	1.19
Hun	15	16	3	3	3	40
per hunter	0.07	0.03	0.02	0.02	0.03	0.04
Chukar	0	0	0	6	0	6
Per hunter	0.00	0.00	0.00	0.02	0.00	0.01
Ducks	3	1046	28	0	250	1327
per hunter		2.22		0.00	2.07	2.24
Geese	0	40	0	0	31	71
per hunter	0.00	0.08	0.00	0.00	0.26	0.26
TOTAL	227	1850	209	82	469	2837

Dove Hunters	12	80	18	85	8	203
Dove Taken	4	197	35	371	36	643
per hunter	0.33	2.46	1.94	4.36	4.50	3.17
Deer Hunters	62	0	24	37	0	123
Deer Taken	7	0	3	5	0	15

Appendix F

Wells Wildlife Area  
 Bag Check Summary - Comparative Success and Harvest Rates  
 2000-2001

UPLAND GAME BIRDS\*

	Hunters	Pheasant	California Quail	Hungarian Partridge	Chukar Partridge	Total Upland Game
Harvest <b>2001</b>	986	72	1136	37	6	1251
2000	958	57	994	77	11	754
Number Variance	28	15	142	-40	-5	497
Percent Variance	2.9	26.3	14.3	-51.9		65.9
Harvest Rate <b>2001</b>		0.07	1.15	0.04		1.27
2000		0.06	1.04	.080		1.19
Percent Variance		21.7	10.8	-53.1		6.6

WATERFOWL\*\*

	Hunters	Ducks	Geese	Total Waterfowl
Harvest <b>2001</b>	592	1296	71	1367
2000	459	855	57	912
Number Variance	133	441	14	455
Percent Variance	29.0	51.6	24.6	49.9
Harvest Rate <b>2001</b>		2.19	0.12	2.31
2000		1.86	0.12	1.99
Percent Variance		17.7	-0.1	16.0

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

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

Appendix G

FALL WILDLIFE SURVEYS  
2001

SPECIES	West Foster Creek
<u>UPLAND GAME BIRDS:</u>	
Pheasant - Male	7
- Female	13
- Total	20
California Quail	88
Chukar	0
<u>MAMMALS:</u>	
Cottontail Rabbit	1
<u>WATERFOWL:</u>	
Mallard	1

Appendix H

Bureau of Land Management  
 Bald Eagle Roost Monitoring Summary  
 Winter 2000-2001

Date	Brewster Roost			Pearl Hill Roost			Total for Both Roosts			
	Adult	Immature	Unknown	Adult	Immature	Unknown	Adult	Immature	Unknown	Total
12/04/00	0	0	0	0	0	0	0	0	0	0
12/18/00	1	2	1	5	3	0	6	5	1	12
01/02/01	2	3	0	0	2	0	2	5	0	8
01/16/01	0	0	0	5	4	1	5	4	1	9
01/29/01	1	5	0	6	12	0	7	17	0	24
02/12/01	1	10	1	6	11	0	7	21	1	29
02/26/01	0	0	0	0	0	0	0	0	0	0
03/05/01	0	0	0	0	0	0	0	0	0	0