



# 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 26, 2006

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 2005 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. Jon Miyashiro  
Washington Department of Fish and Wildlife – Ephrata  
Jeffers, Danielson, Sonn & Ayward, Mr. Garfield R. Jeffers  
Colville Confederated Tribes, Ms. Dinah Demers

2005 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)

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A. Expenditures

The Wells Special Wildlife Account principal balance totaled \$637,914 at the end of fiscal year 2005 and \$556,185 at the end of the calendar year. The table below summarizes expenditures for fiscal year 2005 (July 2004-June 2005).

Expenditures	Wells WA Account	Supplemental Funding	Total
Salaries	44,625	32,043	76,888
Employee Benefits	13,708	7,569	21,277
Goods and Services	23,777	31,091	54,868
Property Tax (Okanogan County)	5,072	0	5,072
Land Rental (DNR)	1,238	0	1,238
Fire Protection Contracts (Okanogan and Douglas Counties)	1,505	0	1,505
Weed Assessments (Okanogan Co.)	286	0	286
Travel	0	0	0
Capital Outlay	572	5,563	6,135
Administrative Overhead	14,072	22,346	36,418
<b>TOTAL</b>	<b>104,855</b>	<b>98,612</b>	<b>203,467</b>

B. Game Bird Release:

- Captured, banded and relocated a total of 164 California quail (Callipepla californica) to the Indian Dan Unit.

C. Public Use:

- Upland bird hunting use of the wildlife area is summarized in Appendix A. This 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 sites lacking a registration program.

D. Wildlife Habitat Management and Related Activities:

- Grain Food Plot and Waterfowl Pasture Development:
  - Established 140 acres of agricultural crops for wildlife food and cover on the area. This included: 100 acres of irrigated wheat (52 acres on Bridgeport Bar and 48 acres on Washburn Island), 10 acres of corn (6

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- acres on Bridgeport Bar and 4 acres on Washburn Island in strips), 14 acres of barley on Washburn Island and 16 acres of dryland wheat (10 acres on Indian Dan Canyon and 6 acres on West Foster Creek).
- Irrigated 45 acres of permanent cover on Washburn Island to promote dense nesting and escape cover.
- Riparian Tree and Shrub Planting:
  - Planted 510 woods rose (Rosa woodsii) in low-lying areas of Washburn Island and interplanted 300 Cottonwoods (Populus trichocarpa) seedlings in Bridgeport Bar and Washburn Island shrub/tree plantings. Fewer seedlings were planted this year to allow wildlife area staff to address a backlog of shrub/tree planting maintenance needs.
  - Mowed, rotovated and/or sprayed vegetation competing with these and older woody plantings.
  - Removed an estimated 2,000 trees (weedy species) encroaching on planted native trees and shrubs.
- Ponds:
  - Managed flow rates and water levels in five ponds on the West Foster Creek Unit.
- Shrub-steppe and Herbaceous Habitat Restoration:
  - Summer fallowed about 8 acres on Washburn Island to be planted to permanent herbaceous cover in 2006.
- Wildlife Feeding and Watering:
  - Filled and maintained 24 upland game feeders.
  - Inspected and maintained gallinaceous guzzlers and springs as needed.
- Artificial Nesting Structures:
  - Cleaned and repaired goose, wood duck and kestrel nest structures. Canada goose nesting and nest structure use is summarized in Appendix B.
- Fences:
  - Inspected and repaired fences as needed.
- Vegetation Control:

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- Released bio-control agents to assist in controlling Dalmatian toadflax (1,200 Mecinus janthinus).
- Treated a variety of weeds with herbicide including: diffuse knapweed (10 acres), leafy spurge (1 acre), and Russian knapweed (10 ac).
- Mowed weeds growing on and along approximately 10 miles of road. Mowed 5 acres of weeds on the West Foster Creek Unit, and 3 acres on Bridgeport Bar.
  
- Firebreaks and Fire Control:
  - Maintained one mile of firebreaks on the West Foster Creek Unit and two miles on the Bridgeport Bar Unit.
  
- Buildings and Public Use Facilities:
  - Maintained and repaired buildings as needed. Cleaned out and mowed parking areas. Replaced signs as needed.
  
- Other:
  - Installed 600 feet of irrigation mainline.

### E. Wildlife Populations and Surveys

- Upland Game Birds:
  - Total upland game harvest recorded on the wildlife area through the registration program (see Appendices C and D) was 1,319 birds (for all units except Washburn Island). California quail made up 94 percent of the upland game take on the area in 2005. California quail harvest recorded through the registration program was 17.2 percent lower than in 2004 while the pheasant and gray partridge harvest were 10 and 70 percent higher respectively than in 2004 (the pheasant and gray partridge samples were low; 32 and 34). Only 4 chukar partridges were reported being taken. This appears to be inconsistent with the increase in chukar numbers observed particularly on the Indian Dan Unit.
  - Upland game harvest registration figures for Washburn Island in 2005 totaled 142 birds including 10 pheasants (1 in 2004) and 132 quail (111 in 2004). Washburn Island upland bird harvest was not included in Appendix D since this table compares the upland game harvest reported on the major wildlife area units with that of the preceding year. Upland game harvest and in particular quail harvest has and is expected to increase as planted riparian habitat matures.

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- The West Foster Creek and Central Ferry Canyon Units fall wildlife surveys (Appendix E) yielded a count of 68 California quail 53 gray partridges (Perdix perdix) and 6 ring-necked pheasants (Phasianus colchinus).
- Waterfowl:
  - Conducted a Canada goose (Branta canadensis) nesting survey on Wells Pool. The estimated gosling production was 582 (Appendix B). Ground nest predation primarily by raccoon continues to be a serious problem on the Bridgeport Bar Islands. Only 17 ground nests were found on these islands, which previously produced approximately 50 nests annually. Of these 17 nests, predators destroyed 14 and 3 nests had unknown fates.
  - The US Fish and Wildlife Service in Cooperation with WDFW conducted an aerial waterfowl survey of Wells Pool on October 7, 2005, which is summarized in Appendix F.
- Non-Game:
  - The Bureau of Land Management conducted bald eagle (Haliaeetus leucocephalus) surveys of two roosts located in the vicinity of Wells Pool during the 2004-2005 winter (summarized in Appendix G). The Brewster roost was not surveyed. The highest count for the Pearl Hill/Upper Wells and Azwell roosts totaled 59 eagles (the highest count for three roosts in 2004 was 49). Large numbers of eagles are still using a roost recently discovered on the Indian Dan Unit. This roost will be surveyed beginning in early 2006.
  - Volunteers made regular counts of white pelicans (Pelecanus erythrorhynchos) using Wells Pool between June 17 and October 28. A total of about 120 were tallied during the first two weeks of September. Double-crested cormorants (Phalacrocorax auritus) continue to encroach on a Great Blue Heron (Ardea herodias) rookery near the mouth of the Okanogan River. Volunteers observed eight cormorant nests (a conservative estimate since some were concealed) within a heron rookery including 22 nests at this site.

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Appendix A

Wells Wildlife Area  
Estimated Bird Hunting Use and Harvest  
2005

Activity	Use Days	Wildlife	Numbers Harvested
Waterfowl Hunting	1273	Ducks	2980
		Geese	75
		Total	3055
Upland Game Hunting	1818	Pheasants	52
		Quail	2271
		Hungarian	65
		Chukar	0
		Total	2388
Dove Hunting	144	Dove	413

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Appendix B

WELLS POOL  
CANAGA GOOSE NESTING SURVEY  
2005

	NATURAL SITES	ARTIFICIAL STRUCTURES	TOTAL
TOTAL NESTS VISITED	95	26	121
NESTS WITH KNOWN CLUTCH	64	17	81
TOTAL EGGS	361	101	462
AVERAGE CLUTCH	5.64	5.94	5.70
NEST LOSS - PREDATED (UNKNOWN CLUTCH)	12	0	12
NESTS WITH KNOWN FATE AND CLUTCH	60	12	72
TOTAL EGGS	342	78	420
TOTAL HATCH	321	77	398
PERCENT HATCH	93.9	98.7	94.8
HATCHED EGGS PER NEST	5.35	6.42	5.53
ABANDONED	4	0	4
PREDATED	0	0	0
UNKNOWN	17	1	18
TOTAL LOSS	21	1	22
KNOWN PRODUCTION	321	77	398
HATCHED NESTS: UNKNOWN CLUTCH	15	8	23
*ESTIMATED HATCHLINGS	80	51	131
NESTS: UNKNOWN FATE	5	4	9
*ESTIMATED HATCHLINGS	27	26	53
NESTS: ACTIVE/NOT VISITED	0		0
*ESTIMATED HATCHLINGS	0	0	0
TOTAL ESTIMATED PRODUCTION	428	154	582
PERCENT OF TOTAL PRODUCTION	73.5	26.5	



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Appendix C.

Wells Wildlife Area  
Hunter Bag Check Summary  
2005 Hunting Season

	Indian Dan	Bridgeport Bar	West Foster	Central Ferry	Washburn Island	Total
<b>UPLAND GAME BIRDS</b>						
Hunters	208	533	146	123	136	1146
Pheasant	0	12	10	0	10	32
Pheasant per hunter	0.00	0.02	0.07	0.00	0.07	0.03
California Quail	236	806	53	150	132	1377
Quail per hunter	1.13	1.51	0.36	1.22	0.97	1.20
Gray Partridge	12	1	12	21	0	46
Gray partridge per hunter	0.06	0.00	0.08	0.17	0.00	0.04
Chukar	5	0	0	1	0	6
Chukar per hunter	0.02	0.00	0.00	0.01	0.00	0.01
Total upland game	253	819	75	172	142	1461
Upland Game per hunter	1.22	1.54	0.51	1.40	1.04	1.27
<b>WATERFOWL</b>						
Hunters		421			207	628
Ducks		1127			242	1369
Duck per hunter		2.68			1.17	2.18
Canada Geese		22			16	38
Goose per hunter		0.05			0.08	0.06
Total Waterfowl		1149			258	1407
Waterfowl per hunter		2.73			1.25	2.24
<b>MOURNING DOVE</b>						
Dove Hunters	17	45	13	32	14	121
Dove Taken	10	103	32	89	16	250
Dove per hunter	0.59	2.29	2.46	2.78	1.14	2.07
<b>MULE DEER</b>						
Deer Hunters	78	6	15	62		161
Deer Taken	9	0	0	5		14
Deer per hunter	0.12	0.00	0.00	0.08		0.09

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

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Appendix D.

Wells Wildlife Area  
 Game Bird Bag Check Summary  
 Comparative Hunting Success and Harvest Rate  
 2005-2006 Hunting Season

<b>UPLAND GAME BIRDS*</b>						
	Hunters	Pheasant	California Quail	Gray Partridge	Chukar Partridge	Total Upland Game
Harvest 2005	1010	22	1245	46	6	1319
Harvest 2004	1153	20	1504	27	4	1555
Number Variance	-143	2	-259	19	2	-236
Percent Variance	-12.4%	10.0%	-17.2%	70.4%	50.0%	-15.2%
	1006					
Harvest Rate 2005		0.02	1.23	0.05	0.01	1.31
Harvest Rate 2004		0.02	1.30	0.02	0.00	1.35
Percent Variance		25.6%	-5.5%	94.5%	71.2%	-3.2%

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

<b>WATERFOWL**</b>				
	Hunters	Ducks	Geese	Total Waterfowl
Harvest 2005	628	1369	38	1407
2004	434	1021	34	1055
Number Variance	194	348	4	352
Percent Variance	44.7%	34.1%	11.8%	33.4%
Harvest Rate 2005		2.18	0.06	2.24
2004		2.35	0.08	2.43
Percent Variance		-7.3%	-22.8%	-7.8%

\* 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 E.

Fall Wildlife Surveys  
2005

	West Foster Creek	Central Ferry Canyon	Total
<b>UPLAND GAME BIRDS:</b>			
Pheasant - Male	3		3
- Female	3		3
- Total	6		6
California Quail	45	23	68
Gray Partridge	30	23	53
Mourning Dove	14		14
Ruffed Grouse	0	0	0
<b>MAMMALS:</b>			
Mule Deer	0	9	9
Coyote	2	0	2
White-tailed Deer	0	0	0
Cottontail Rabbit	2	0	2
Black Bear	0	0	0
<b>DIVERSITY SPECIES:</b>			
Red Tailed Hawk	1	1	2
Bald Eagle	0	0	0
Northern Harrier	3	0	3
Great Horned Owl	0	4	4
Cooper's Hawk	1	1	2
Osprey	0	1	1

**Appendix F.**

**WELLS POOL - AERIAL WATERFOWL SURVEY**

2005

Observer / Affiliation: Randy Hill (FWS),  
John Cotton (WDFW)

<b>SPECIES</b>	<b>FLIGHT DATE</b>
	<b>11/07/2005</b>
Tundra Swan	0
Trumpeter Swan	0
<b>TOTAL</b>	<b>0</b>
Western Canada Goose	60
Lesser Canada Goose	0
Undifferentiated Canada Goose	210
Other Goose	0
<b>TOTAL GEESE</b>	<b>270</b>
Mallard	1707
Gadwall	255
American Wigeon	5512
Green-winged Teal	0
Blue-winged Teal	0
Cinnamon Teal	0
Unidentified Teal	0
Northern Shoveler	0
Northern Pintail	0
Wood Duck	0
<b>SUBTOTAL PUDDLE DUCKS</b>	<b>7474</b>
Redhead	660
Canvasback	360
Scaup	2830
Ringneck	73
Goldeneye	70
Bufflehead	230
Ruddy	0
<b>SUBTOTAL DIVING DUCKS</b>	<b>4223</b>
Common Merganser	42
Hooded Merganser	0
<b>TOTAL DUCKS</b>	<b>11739</b>
<b>TOTAL WATERFOWL</b>	<b>12009</b>
Coots	16100
<b>SURVEY TOTAL</b>	<b>28109</b>
Bald Eagle	4 Adults
White Pelican	0
Sandhill Crane	0
Loon	8
Grebe	8
Cormorant	0
Egret	0
Heron	0
Bonaparte's Gull	0

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Appendix G.

Bureau of Land Management  
 Bald Eagle Roost Monitoring Summary  
 Winter 2005-2006  
 Modified from Bureau of Land Management Report

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
12/13/04					4	1	1	6	3	1	1	5	7	2	2	11
12/27/04								0				0	0	0	0	0
12/28/04								0	3	10		13	3	10	0	13
01/10/05					4	7		11	1	8		9	5	15	0	20
01/24/05					6	25		31	8	20		28	14	45	0	59
02/07/05					3	11		14	1	12		13	4	23	0	27
02/22/05					1	3	6	10	0	17		17	1	20		27
03/07/05								0				0	0	0	0	0