

No. 1 of Douglas County

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September 16, 2008

Honorable Kimberly D. Bose, Secretary Mr. Nathaniel J. Davis Sr., Deputy Secretary Federal Energy Regulatory Commission 888 First Street N.E. Washington, D.C. 20426

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

Dear Secretary Bose and Deputy Secretary Davis:

In compliance with Article 41, as modified February 24, 1989, enclosed are the original and four (4) copies of the 2007 Annual Report for 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.

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Robert W. Clubb, Ph.D.

Chief of Environmental & Regulatory Services

Enclosure PCD 102328

c: with enclosures

Mr. Erich Gaedeke

FERC – Portland

Mr. Matt Monda – Washington Department of Fish and Wildlife

Mr. Garfield R. Jeffers – Jeffers Danielson, Sonn & Aylward

Ms. Dinah Demmers – Colville Confederated Tribes

2007 ANNUAL REPORT Wells Wildlife Mitigation Program Federal Energy Regulatory Commission License Number 2149

September 2008

Submitted by:

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

INTRODUCTION

On July 15, 1974, Douglas PUD entered into an agreement with the Washington Department of Game (WDG, now Washington Department of Fish and Wildlife, WDFW) to address the Wells Project's effects on wildlife. This agreement addresses Article 41 of the Wells Project license. Included in the agreement was a one time cash payment of \$1,250,000 to be used for wildlife resources in Douglas and Okanogan counties in close proximity to the Wells Reservoir. The agreement also transferred properties to the WDG to establish the Wells Wildlife Area (WWA), consisting of the Central Ferry Canyon, West Foster Creek, Indian Dan Canyon, Okanogan River, Washburn Island and Bridgeport Bar units of the WWA. Douglas PUD owns the Washburn Island Unit and portions of the Bridgeport Bar Unit and Okanogan Unit that reside within the Wells Project Boundary; WDFW owns the portions outside the Wells Project Boundary. The term of this agreement extends for the duration of the Wells Project license (May 31, 2012).

On June 19, 1995, Douglas PUD entered into a Memorandum of Agreement (MOA) with the WDFW for additional funding for the WWA. This MOA was necessary because the interest income received from the WDFW's investment of the original Douglas PUD \$1,250,000 cash payment (July 15, 1974 Agreement) was no longer adequate to fund the annual operations of the WWA. In order to maintain the present level of operations for the WWA, it was determined by the parties that additional funds were necessary. Under the terms of the MOA, Douglas PUD agreed to provide additional funding required to maintain the WWA through the end of the Wells Project license (May 31, 2012). The additional funding varies by year but was \$81,116 for the 2006-07 fiscal year.

This annual report presents the expenditures, accomplishments, and enumeration of certain wildlife and recreational uses of the Wells Wildlife Area through the Wells Wildlife Mitigation Program during fiscal year 2007 (July 2006-June 2007).

A. Expenditures

The Wells Special Wildlife Account principal balance totaled \$495,732 at the end of fiscal year 2007 (July 2006-June 2007) and \$429,029 at the end of the calendar year. Fiscal year 2007 expenditures are summarized below.

Expenditures	Wells WA	Supplemental	Total
	Account	Funding	-
Salaries	35,768	39,557	75,325
Employee Benefits	13,846	12,864	26,710
Goods and Services	27,548	28,291	55,839
Property Tax (Okanogan County)	5,072	0	5,072
Land Rental (DNR)	1,459	0	1,459
Fire Protection Contracts (Okanogan and Douglas Counties)	2,485	0	2,485
Weed Assessments (Okanogan Co.)	286	0	286
Travel	41	68	109
Capital Outlay	1,689	337	2,026
Administrative Overhead	11,918	0	11,918
TOTAL	100,112	81,117	181,229

B. Game Bird Release:

• Captured and banded 135 California quail (*Callipepla californica*) and relocated 93 to the Indian Dan Unit, 10 to the Bridgeport Bar Unit and 32 to the West Foster Creek Unit.

C. Public Use:

• Bird hunting use on 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 Habitat Development:
 - Established 156 acres of agricultural crops for wildlife food and cover on the area. This included: 124 acres of irrigated wheat (84 acres on

Bridgeport Bar and 40 acres on Washburn Island), 17 acres of corn (12 acres on Bridgeport Bar and 5 acres on Washburn Island) and 15 acres of dryland wheat on the Indian Dan Canyon and West Foster Creek Units.

 Irrigated about 40 acres of perennial vegetation on Washburn Island to promote dense nesting and escape cover.

• Riparian Tree and Shrub Planting:

- Inter-planted 150 black cottonwood (*Populus trichocarpa*) seedlings in Bridgeport Bar shrub/tree plantings.
- Mowed, rotovated and/or sprayed vegetation competing with these and older woody plantings.
- o Removed about 150 Chinese elm trees (*Ulmus parvifolia*, an undesirable exotic species) encroaching on planted trees and shrubs, and treated stumps with herbicide.
- Installed about 550 feet of plastic irrigation lines and 800 feet of hose with micro-sprinklers on the Bridgeport Bar Unit to irrigate tree and shrub plantings.

• Ponds:

 Managed intake flow rates and water levels in five ponds on the West Foster Creek Unit to ensure proper water distribution between ponds and prevent flooding.

• Wildlife Feeding and Watering:

- o Filled and maintained 24 upland game bird feeders.
- o Inspected and maintained gallinaceous guzzlers and springs as needed.

• Artificial Nesting Structures:

O Cleaned and repaired goose, wood duck and kestrel nest structures. Canada goose nest structure use is summarized in Appendix B.

• Fences:

o Inspected, maintained and repaired livestock and deer fences as needed.

• <u>Vegetation Control:</u>

o Treated a variety of weeds with herbicide including: diffuse knapweed (12 acres), leafy spurge (.5 ac), Puncture vine (8 ac), Grass (8 ac,

- primarily quackgrass), Whitetop (4 ac) and miscellaneous weeds (4 ac).
- o Mowed weeds growing on and along wildlife area roads (7 ac) and on Washburn Island (20 ac).

• Firebreaks and Fire Control:

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

• Buildings and Public Use Facilities:

o Maintained and repaired buildings as needed. Cleaned out and mowed parking areas. Cleared snow and replaced signs as needed.

• Other:

- o Installed three new irrigation pumps and intakes on Washburn Island and Bridgeport Bar.
- Extended a field on Bridgeport Bar to be irrigated with a wheel-line.
 This work included installing 8 new risers and valves, adding 120 feet of mainline, clearing trees and removing about 20 valves.

E. Wildlife Populations and Surveys

Upland Game Bird Harvest:

- o WDFW recorded 895 upland bird hunters registering on the wildlife area with a harvest of 731 birds in 2007 (see Appendices C and D). California quail comprised 91.8 percent of the upland birds reported harvested on the area. The reported quail harvest (671) was 25.3 percent lower than in 2006 while the pheasant harvest was 236 percent higher (pheasant, chukar and gray partridge, and grouse harvests were: 37, 8, 10 and 5 respectively).
- Reported upland game bird harvest on Washburn Island in 2007 totaled 48 birds, including 29 quail, 18 pheasants and one grouse.
 Washburn Island upland bird harvest was not included in Appendix D. Pheasant hunting success was highest on Washburn Island (0.2 pheasants per upland game hunter day).

Waterfowl:

o A total of 90 Canada goose (*Branta Canadensis*) nests on Wells Reservoir were surveyed. Each nest was surveyed twice. Clutches were documented in 67 of the 90 nests, for a minimum nesting rate of 74.4%. Ground nests had lower hatching success rates than artificial

nesting structures: 3.7 hatchlings per nest versus 5.0 hatchlings per nest for artificial structures. Lower hatching success rates were apparently due to higher predation rates on ground nests. A total of 20 nests, out of 67 known active nests (29.9%), were lost to predation (primarily raccoon predation). Production of 251 goslings was documented in 2007, and estimated gosling production was 322. All 2007 Canada goose nesting surveys results are presented in Appendix B.

- o The US Fish and Wildlife Service and WDFW conducted aerial waterfowl surveys on October 7, 2007 and January 16, 2008 that are summarized in Appendix E.
- O Waterfowl hunters reported hunting 601 days on the Bridgeport Bar Islands, the Bridgeport Unit and the Washburn Island Unit a 10% increase over 2006 and harvesting 102 geese and 1,284 ducks. This represents an average of 2.31 waterfowl per hunter day. Waterfowl harvest is summarized in Appendices C and D.

• Non-Game:

- O Assisted the Bureau of Land Management in conducting bald eagle (*Heliaeetus leucocephalus*) surveys of 3 communal night roosts located in the vicinity of Wells Pool during the 2006-2007 winter (summarized in Appendix F). The highest count for the Pearl Hill/Upper Wells and Indian Dan roosts totaled 75 eagles. The highest count for three roosts in 2006 was 61 eagles.
- Volunteers recorded white pelican numbers (*Pelecanus erythrorhynchos*) on Wells Pool between April 11 and September 25.
 They recorded the high counts of 51 birds (103 in 2006) on September 17 and 23.

2007 Annual Report – Wells Wildlife Mitigation Program

Appendix A Wells Wildlife Area Estimated Bird Hunting Use and Harvest 2007

Activity	Use Days	Wildlife	Numbers Harvested
Waterfowl Hunting	1155	Ducks	2590
		Geese	185
		Total	2775
Upland Bird Hunting	1470	Pheasants	55
		Quail	1115
		Grey Partridge	20
		Chukar	10
		Total	1200
Dove Hunting	200	Dove	510
- =1			
Total Bird Hunting	2825		4485

Appendix B

WELLS POOL
CANADA GOOSE NESTING SURVEY
2007

	NATURAL SITES	ARTIFICIAL STRUCTURES	TOTAL
TOTAL NESTS VISITED	72	18	90
NESTS WITH KNOWN CLUTCH TOTAL EGGS AVERAGE CLUTCH NEST LOSS - PREDATED KNOWN CLUTCH UNKNOWN CLUTCH	55 330 6.00 26 20 6	69 5.75 0 0	67 399 5.96 26 20 6
NESTS WITH KNOWN FATE AND CLUTCH TOTAL EGGS TOTAL HATCH PERCENT HATCH HATCHED EGGS PER NEST ABANDONED DEPREDATED UNKNOWN TOTAL LOSS	55 330 206 62.4 3.7 1 20 0	53 45 84.9 5.0 0	64 383 251 65.5 3.92 1 20 0
KNOWN PRODUCTION HATCHED NESTS: UNKNOWN CLUTCH *ESTIMATED HATCHLINGS NESTS: UNKNOWN FATE *ESTIMATED HATCHLINGS NESTS: ACTIVE/NOT VISITED *ESTIMATED HATCHLINGS TOTAL ESTIMATED PRODUCTION PERCENT OF TOTAL PRODUCTION	206 9 34 2 7 0 247 76.7	0 4 20 75	251 11 44 2 7 4 20 322 100

Appendix C.

Wells Wildlife Area
Hunter Bag Check Summary
2007 Hunting Season

	Indian	Bridgeport	West	Central	Washburn	Total
	Dan	Bar	Foster	Ferry	Island	
UPLAND GAME BIRDS			·			
Hunters	228	358	109	111	89	895
Pheasant	0	9	7	3	18	37
Pheasant per hunter	0.00	0.03	0.06	0.03		0.04
California Quail	216	315	40			671
Quail per hunter	0.95	0.88		71	29	
•			0.37	0.64	0.33	0.75
Gray Partridge	3	0.00	5	2	0	10
Gray partridge per hunter Chukar	0.01		0.05	0.02	0.00	0.01
	2	6	0	0	0	8
Chukar per hunter	0.01	0.02	0.00	0.00	0.00	0.01
Grouse	3	0	0	1	1	5
Grouse per hunter	0.01	0.00	0.00	0.01	0.01	0.01
Total upland game	224	330	52	77	48	731
Upland Game per hunter	0.98	0.92	0.48	0.69	0.54	0.82
WATERFOWL		4.40				220
Hunters		446			155	601
Ducks		1128			156	1284
Duck per hunter		2.53			1.01	2.14
Canada Geese		68			34	102
Goose per hunter		0.15			0.22	0.17
Total Waterfowl		1196			190	1386
Waterfowl per hunter		2.68			1.23	2.31
MOURNING DOVE						
Dove Hunters	18	74	21	51	10	174
Dove Taken	5	132	21	288	14	460
Dove per hunter	0.28	1.78	1.00	5.65	1.40	2.64
Dove per numer	0.20	1.70	1.00	5.05	1.40	2.04
MULE DEER						
Deer Hunters	29	- 11	37	49	0	126
Deer Taken	2	0	3	2	0	7
Deer per hunter	0.07	0.00	0.08	0.04		0.06
•						

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.

Appendix D.

Wells Wildlife Area Game Bird Bag Check Summary Comparative Hunting Success and Harvest Rate 2007-2008 Hunting Season

UPLAND GAME BIRDS*	Hunters			Chukar Partridge	Total Upland Game	
Harvest 2007	895	37	671	10	8	726
Harvest 2006	750	11	898	54	12	975
Interannual change	145	26	(227)	(44)	(4)	(249)
Percent change	19.3	236.4	(25.3)	(81.5)	(33.3)	(25.5)
Daily Harvest Rate 2007		0.04	0.75	0.01	0.01	0.81
Daily Harvest Rate 2006		0.01	1.20	0.07	0.02	1.30
Percent change		181.9	(37.4)	(84.5)	(44.1)	(37.6)

^{*} Upland game bird figures above do not include those for Washburn Island.

WATERFOWL**	Hunters	Ducks	Geese	Total Waterfowl
Harvest 2007	601	1284	102	1386
Harvest 2006	546	1421	70	1491
Interannual change	55	(137)	32	(105)
Percent Change	10.1	(9.6)	45.7	(7.0)
Daily Harvest Rate 2007	1 1	2.14	0.17	2.31
Daily Harvest Rate 2006		2.60	0.13	2.43
Percent Change		(17.9)	32.4	(5.1)

^{*} Upland game data for Indian Dan, Bridgeport Bar, West Foster and Central Ferry Units ** Waterfowl data for Washburn Island and Bridgeport Bar

Appendix E.

WELLS POOL - WATERFOWL SURVEY 2007-2008

Survey Region NORTH COLUMBIA BASIN Observer/Affiliation: Randy Hill (FWS), Mikal Moore

(WDFW), Ray Bentley

(WDFW), Ray Bentley		
SURVEY DATES:	11/07/2007	01/16/2008
SPECIES		
Tundra Swan	0	0
Trumpeter Swan	0	0
Undifferentiated Swans	63	0
TOTAL	63	0
Western Canada Goose	0	35
Lesser Canada Goose	0	0
Undifferentiated Canada Goose	20	12
Other Goose	0	0
TOTAL GEESE	20	47
Mallard	1137	161
Gadwall	108	250
American Wigeon	3005	1090
Green-winged Teal	0	0
Blue-winged Teal	0	0
CinnamonTeal	0	0
Unidentified Teal	0	0
Northern Shoveler	0	0
Northern Pintail	0	0
Wood Duck	0	0
Eurasian Wigeon	0	0
SUBTOTAL PUDDLE DUCKS	4250	1501
Redhead	420	50
Canvasback	1940	70
Scaup	1050	435
Ringneck	3350	420
Goldeneye	143	659
Bufflehead	627	42
Ruddy	350	0
Scoter sp	0	0
SUBTOTAL DIVING DUCKS	7880	1676
Common Merganser	4	10
Hooded Merganser	10	66
TOTAL DUCKS	12144	3253
TOTAL WATERFOWL	12227	3300
Coots	25190	5993
SURVEY TOTAL	37417	9293
Bald Eagle	1	7a,9i
Golden Eagle	0	0
White Pelican	1	0
Sandhill Crane	0	0
Loon	3	1

Appendix F.

Bureau of Land Management Bald Eagle Roost Monitoring Summary Winter 2006-2007 Modified from Bureau of Land Management Report

	Indian E	an Roos	Roost Pearl-Upper Wells Roost /					Azwell Roost Total *								
Date	Ad	lmm	Unk	Total	Ad	Imm	Unk	Total	Ad	lmm	Unk	Total	Ad	Imm	Unk	Total
12/18/06	5	5		10	4	10	1	15	1 1 1			0	9	15	1	25
01/08/07	22	35		57	5	12	1	18				0	27	47	1	75
01/09/07				0				0				0	0	0	0	0
01/29/07		19	1	35	14	19	1	34				0	29	38	2	69
02/20/07	6	1		7	1	4		5				0	7	5	0	12