# Public Utility District No. 1 of Douglas County

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

September 10, 2010

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

Subject:

Wells Hydroelectric Project – FERC Project No. 2149

Annual Report - Wildlife Mitigation Program

Dear Ms. Bose:

In compliance with Article 41, as modified February 24, 1989, please find enclosed the 2009 Annual Report of the activities associated with the implementation of the Wildlife Mitigation Program for the Wells Hydroelectric Project. This 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 Public Utility District No. 1 Douglas County.

Sincerely,

Shane Bickford

Natural Resource Supervisor

**Enclosures** 

Copy: Mr. Patrick Regan, FERC, Portland, 1 copy

Mr. James Hastreiter, FERC, Portland, 1 copy

Mr. Erich Gaedeke, FERC, Portland, 1 copy

Mr. Matt Monda, Washington Department of Fish and Wildlife, 1 copy

Ms. Dinah Demmers - Colville Confederated Tribes, 1 copy

Mr. Garfield R. Jeffers, Jeffers, Danielson, Sonn & Ayward, 1 copy

2009 ANNUAL REPORT Wells Wildlife Mitigation Program Federal Energy Regulatory Commission License Number 2149

Submitted by:

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

# **Executive Summary**

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 Hydroelectric Project's construction and operation effects on wildlife. Article 41 of the Wells Project license requires the PUD to take measures to mitigate these effects. The agreement included a one time cash payment of \$1,250,000 to be used to benefit 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. Douglas PUD owns the Washburn Island Unit and portions of the Bridgeport Bar Unit and Okanogan Unit, which are within the Wells Project Boundary. WDFW owns portions outside the Wells Project Boundary. The term of this agreement extends for the duration of the Wells Project license ending 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 became 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. The additional funding varies by year but was \$86,055 for the 2009 fiscal year (July 2008-June 2009).

This annual report presents the fiscal year 2009 expenditures and accomplishments and enumeration of certain wildlife and recreational uses of the Wells Wildlife Area through the Wells Wildlife Mitigation Program in 2009.

# A. Expenditures

The Wells Special Wildlife Account principal balance totaled \$302,592 at the end of fiscal year 2009 (July 2008-June 2009). Fiscal year 2009 expenditures are summarized in Table 1.

<u>Table 1</u> - Expenditures	Wells WA Account	Supplemental Funding	Total
Salaries	48,583	48,681	97,264
Employee Benefits	19,070	17,549	36,619
Goods and Services	40,544	18,739	59,233
Property Tax (Okanogan County)	5,072	0	5,072
Land Rental (DNR)	1,651	0	1,651
Fire Protection Contracts			
(Okanogan and Douglas Counties)	2485	0	2,485
Weed Assessments (Okanogan Co.)	506	0	506
Travel	143	833	976
Capital Outlay	989	203	1,192
Administrative Overhead	15,838	0	15,838
TOTAL	134,881	86,005	220,836

## B. Game Bird Release:

o Captured 99 California quail off the wildlife area and released 81 of these on the Indian Dan Unit and 18 on the West Foster Creek Unit.

## C. Wildlife Habitat Management and Related Activities:

- Grain Food Plot and Waterfowl Habitat Development:
  - Established 166 acres of grain crops on the wildlife area in 2009.
     This included 100 acres of irrigated wheat and 22 acres of corn on the Washburn Island and Bridgeport Bar Units and 20 acres of dryland wheat on the Indian Dan and West Foster Creek Units. On Bridgeport Bar, 24 acres of irrigated wheat were seeded in the fall.

# • Riparian Tree and Shrub Planting:

- Mowed, rotovated and/or sprayed vegetation competing with woody plantings.
- o Removed several hundred Siberian elm trees (*Ulmus parvifolia*, an undesirable exotic species) encroaching on planted trees and shrubs, and treated stumps with herbicide. These trees were piled to create escape cover for rabbits, California quail and other wildlife.
- o Removed several large golden willows from the edges of small ponds on the West Foster Creek Unit. These trees were competing with and crowding out water birch and other more desirable trees. Buds and catkins of water birch provide an important winter food supply for sharp-tailed grouse, a state-listed species.

#### • Restoration of Perennial Herbaceous Cover:

- o Mowed 7 acres of a perennial herbaceous planting on the Bridgeport Bar Unit in order to disperse seed and increase cover density.
- Mowed 40 acres of exotic grass on the West Foster Creek Unit and disked 18 acres on the Bridgeport Bar Unit to prepare these for restoration activities that will be funded by a Washington State Recreation and Conservation Office (RCO) grant. This grant provides about \$45,000 to revegetate 75 acres on the two units.

#### • Ponds:

- Regulated intake flow rates and water levels of five ponds on the West Foster Creek Unit to ensure adequate water distribution between ponds, to maintain aquatic habitat and adjacent riparian plantings and to prevent flooding.
- O Maintained water control structures on the West Foster and Indian Dan Units as needed.

#### • 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 Inspected, added nesting material to and maintained goose, wood duck and kestrel nest structures. Canada goose nesting structures produced about 33.6 percent of the 2009 hatch on Wells Pool

- (Appendix A). Fox squirrels, an introduced species, are increasingly using wood duck and kestrel nesting boxes.
- o Mapped nesting structures for a Wildlife Area Habitat Conservation Plan (HCP).

#### • Fences:

- o Inspected and repaired livestock and deer fences as needed.
- o Constructed about ¼ mile of smooth wire fence to control vehicular access at a popular Okanogan Unit fishing site.

# • <u>Vegetation Control (approximately 162 acres):</u>

- O Treated a variety of weeds with herbicide including: diffuse knapweed (~20 acres), leafy spurge (~2 acres), Puncture vine (~1 acres), grass (~29 acres; quackgrass, rye, cheatgrass), Dalmatian toadflax (~4 acres) hoary cress (~2 acres), and other primarily weedy tree species (~5 acres).
- o Mowed weeds growing on and along wildlife area roads (~13 acres).
- o Mowed about 86 acres of Russian knapweed, Canadian thistle and reed canary grass on the West foster Creek and Indian Dan Units.

## • 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:

- Maintained buildings as needed. Cleared snow from, cleaned out, and mowed parking areas. Cleared snow from roads and headquarter area and replaced signs as needed.
- Other: Volunteers assisted us in repairing most of the extensive damage to the pheasant holding pens caused by heavy snow accumulation. One of the four pens was so badly damaged that it had to be removed.

#### E. Wildlife Populations and Surveys

# • <u>Upland Game Bird</u>:

o WDFW recorded 666 upland bird hunters registering (hunter days) on the wildlife area with a harvest of 478 birds in 2009 (see Appendices B and C). This represents a harvest rate of 0.72 birds per hunter day. California quail comprised 92 percent of the upland birds harvested on the area. The reported quail harvest (439) was similar to the 2008 harvest of 440 quail. Pheasant, chukar and gray partridge harvest

- numbers reported were: 15, 3 and 16 respectively. Grouse numbers were not included in Appendix C and total numbers differ from Appendix B.
- o Table 2 summarizes California quail and total upland game harvest information collected between 1983 and 2009 on the wildlife area excluding Washburn Island and the Okanogan Units where hunting registration information is lacking. Reported upland game bird harvest on Washburn Island in 2009 totaled 40 birds (33 quail, and 7 pheasants).

Table 2 - Wells Wildlife Area Upland Bird Hunting Data –						
1983-2009 Hunting Seasons						
	Hunters	Quail	Quail/	Upland	Upland	
			Hunter	Birds	Bird/Hunter	
Average	877	778	0.86	880	0.98	
Minimum	496	320	0.44	397	0.55	
Maximum	1284	1659	1.65	1721	1.71	
2009	611	406	0.66	433	0.66	
2008	648	430	0.66	471	0.73	

• Results of wildlife surveys conducted in the fall are summarized in appendix D.

# • Waterfowl:

- O Surveyed a total of 64 Canada goose (*Branta canadensis*) nests on Wells Reservoir (Appendix A). Each nest was surveyed twice. Complete clutches were documented in 44 of the 64 nests. Thirty-five ground and 9 artificial structure nests averaged 5.5 and 6.1 eggs per nest respectively. Seventeen ground nests were lost to predation (primarily raccoon). As in 2008, no nests were found on the Bridgeport Bar Islands due to raccoon activity. Production of 166 goslings was documented in 2009 (277 in 2008). The total 2009 gosling production of 253 was estimated by multiplying the number of hatchlings per nest with known clutch and fate by 1) hatched nests with unknown clutch, 2) nests with unknown fate, and 3) active nests not visited and adding the results to the number of hatchlings from nests with known clutch and fate.
- The US Fish and Wildlife Service and WDFW conducted aerial waterfowl surveys on November 15, 2009 and January 7, 2010.
   Results of these surveys are summarized in Appendix E.
- O Waterfowl hunters reported hunting 522 days on the Bridgeport Bar Islands, the Bridgeport Unit and the Washburn Island Unit and harvesting 83 geese and 945 ducks (Appendix B and C). This represents an average of 1.97 waterfowl per hunter day. Waterfowl hunting data for Bridgeport Bar, including the Bridgeport Bar Islands (1978 to 2009) and for Washburn Island (1981 to 2009), the two principal waterfowl hunting units, is summarized in table 3 and 4.

Table 3 – Bridgeport Bar Waterfowl Hunting (1978-2009)							
	Hunters		Ducks \Hunter		Geese \Hunter		Total Waterfowl \Hunter
Mean	440	658	1.54	61	0.15		
Minimum	51	81	0.67	10	0.05	91	0.72
Maximum	851	1391	3.02	183	0.40	1422	3.09
2009	428	882	2.06	33	0.08	915	2.14
2008	227	539	2.37	52	0.23	591	2.60

Table 4 – Washburn Island Waterfowl Hunting (1981-2009)							
			Ducks		Geese		Total
	Hunters	Ducks	\Hunter	Geese	\Hunter	Total	Waterfowl
							\Hunter
Mean	78	64	0.69	3	4 0.58	98	1.28
Minimum	5	0	0.00	1	0.08	15	0.54
Maximum	207	242	1.99	9	3.00	258	3.00
2009	94	63	0.67	5	0.53	113	1.20
2008	100	148	1.48	9	0.94	242	2.42

## • Non-Game:

- Wildlife area personnel counted 15 bald eagles (*Heliaeetus leucocephalus*) roosting in the Indian Dan Unit communal roosts on January 23, 2009 and 65 (53 adults and 12 juveniles) on February 5, 2009.
- O Volunteers recorded white pelican (*Pelecanus erythrorhynchos*) and cormorant numbers on Wells Pool. They recorded pelican numbers between April 13 to November 1 and observed a high of 214 on September 20 (105 in 2008). Double-crested cormorants (*Phalacrocorax auritus*) were observed between March 18 and November 28. The highest number of cormorants observed was 105 on August 9. Cormorants continue to nest in a great blue heron (*Ardea herodias*) rookery located at the mouth of the Okanogan River. On April 28, a minimum of 25 cormorant nests were observed in this rookery.

Appendix A
WELLS POOL CANADA GOOSE NESTING SURVEY
2009

	NATURAL SITES	ARTIFICIAL STRUCTURES	TOTAL
TOTAL NESTS VISITED	51	13	64
NESTS WITH KNOWN CLUTCH TOTAL EGGS AVERAGE CLUTCH NEST LOSS - PREDATED UNKNOWN CLUTCH	35 192 5.49 17 7	55 6.11 0	44 247 5.61 17 7
NESTS WITH KNOWN FATE AND CLUTCH TOTAL EGGS TOTAL HATCH PERCENT HATCH HATCHED EGGS PER NEST ABANDONED DEPREDATED UNKNOWN TOTAL LOSS	33 181 132 72.9 4.0 1 10 0	100.0	39 215 166 77.2 4.26 1 10 5
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	132 5 20 4 16 0 0 168 66.4	0 0	166 5 20 9 44 4 23 253 100

<sup>\*</sup>Production based on average hatched eggs per nest with known production.

Appendix B.

Wells Wildlife Area
Hunter Bag Check Summary
2009 Hunting Season

	Indian	Bridgeport Bar	West	Central	Washburn Island	Total
UPLAND GAME BIRDS	Dan	Dai	Foster	Ferry	isianu	
Hunters	110	294	119	88	55	666
Pheasant	0	4	4	0	7	15
Pheasant per hunter	0.00	0.01	0.03	0.00	0.13	0.02
California Quail	85	227	61	33	33	439
Quail per hunter	0.77	0.77	0.51	0.38	0.60	0.66
Gray Partridge	10	0	3	3	0	16
Gray partridge per hunter	0.09	0.00	0.03	0.03	0.00	0.02
Chukar	3	0	0	0	0	3
Chukar per hunter	0.03	0.00	0.00	0.00	0.00	0.00
Grouse	2	0	0	3	0	5
Grouse per hunter	0.02	0.00	0.00	0.03	0.00	0.01
Total upland game	100	231	68	39	40	478
Upland Game per hunter	0.91	0.79	0.57	0.44	0.73	0.72
WATERFOWL						
Hunters	12	428			94	534
Ducks	8	882			63	953
Duck per hunter	0.67	2.06			0.67	1.78
Canada Geese	0	33			50	83
Goose per hunter	0.00	0.08			0.53	0.16
Total Waterfowl	8	915			113	1036
Waterfowl per hunter	0.67	2.14			1.20	1.94
MOURNING DOVE						
Dove Hunters	9	65	19	44	2	139
Dove Taken	4	125	17	79	0	225
Dove per hunter	0.44	1.92	0.89	1.80	0.00	1.62
MULE DEER						
Deer Hunters	103	4	63	34	0	204
Deer Taken	3	0	4	3	0	10
Deer per hunter	0.03	0.00	0.06	0.09		0.05

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 C.

Wells Wildlife Area Game Bird Bag Check Summary Comparative Hunting Success and Harvest Rate 2009-2010 Hunting Season

UPLAND GAME BIRDS*	Hunters	Pheasant	California Quail	Gray Partridge	Chukar Partridge	Total Upland Game
Harvest 2009	666	15	439	16	3	473
Harvest 2008	688	38	440	10	1	489
Interannual change	-22	-23	-1	6	2	-16
Percent change	(3.2)	(60.5)	(0.2)	60.0	200.0	(3.3)
Daily Harvest Rate 2009		0.02	0.66	0.02	0.00	0.71
Daily Harvest Rate 2008		0.06	0.64	0.01	0.00	0.71
Percent change		(59.2)	3.1	65.3	209.9	(0.1)

<sup>\*</sup> Upland game bird figures above do not include those for Washburn Island.

WATERFOWL**				
	Hunters	Ducks	Geese	Total
				Waterfowl
Harvest 2009	522	945	83	1028
Harvest 2008	327	687	146	833
Interannual change	195.00	258.00	(63.00)	195.00
Percent Change	59.63	37.55	(43.15)	23.41
Daily Harvest Rate 2009		1.81	0.16	1.97
Daily Harvest Rate 2008		2.10	0.45	2.43
Percent Change		(13.8)	(64.4)	(19.0)

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

<sup>\*\*</sup> Waterfowl data for Washburn Island and Bridgeport Bar

Appendix D
Fall Wildlife Surveys
2009

	Indian Dan Canyon	Bridgeport Bar	Total
UPLAND GAME BIRDS:			
Pheasant - Male	0	4	4
- Female	0	0	0
- Unknown	0	2	2
- Total	0	0	6
California Quail	56	199	255
Gray Partridge	5	0	5
Mourning Dove			0
Ruffed Grouse	2	0	2
MAMMALS:			
Mule Deer	3	4	7
White-Tailed Deer	2	1	3
Cottontail Rabbit		2	2
Coyote		1	1
Bobcat		1	1
Waterfowl:			
Canada Geese			0
Mallard	30		30
Ruddy Ducks	3		3
DIVERSITY SPECIES:			
Great Horned Owl		1	1
Red Tailed Hawk	1	2	3
Bald Eagle	1	0	1
Osprey		0	0
Great Blue Heron		1	1
Northern Harrier		0	0
Sharp-shinned hawk		1	1
Cooper's Hawk		2	2
Rough-legged Hawk	4	0	0
Bald Eagle	1	U	11

# Appendix E.

# AERIAL WATERFOWL SURVEY WELLS POOL

2009-2010

Observer / Affiliation: Randy Hill, Ray Bentley (FWS)

SPECIES	11/15/2009	1/7/2010
Tundra Swan	0	12
TOTAL	0	12
Western Canada Goose		15
Lesser Canada Goose	0	252
Other Goose		
TOTAL GEESE	0	267
Mallard	140	660
Gadwall	730	6
American Widgeon	970	978
Green-winged Teal	120	0.0
SUBTOTAL PUDDLE DUCKS	1960	1644
Redhead	78	2200
Canvasback	840	654
Scaup	110	1612
Ringneck	1103	211
Goldeneye	180	389
Bufflehead	80	332
Ruddy	225	39
SUBTOTAL DIVING DUCKS	2616	5437
Common Merganser		7
Hooded Merganser	6	7000
TOTAL DUCKS TOTAL WATERFOWL	4582 4582	7088 7367
Coots	10300	14230
SURVEY TOTAL	14882	21597
JONVET TOTAL	14002	21391
Bald Eagle (A: Adult, i: immature)		6A3i
Loon	1	11
Grebe		1