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April 25, 2018

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission Mail Code: DHAC, PJ-12 888 First Street, N.E. Washington, D.C. 20426

RE: Priest Rapids Hydroelectric Project No. 2114-182 License Compliance Filing Article 414 - 2018 Bald Eagle Perch/Roosting Protection Plan annual report

Dear Secretary Bose,

Public Utility District No. 2 of Grant County, Washington (Grant PUD) respectfully submits to the Federal Energy Regulatory Commission (FERC) its 2018 Bald Eagle Perch/Roosting Protection Plan (Plan) Annual Report pursuant to License Article 414 of the Priest Rapids Project No. 2114 (Project)¹. Activities related to the Bald Eagle Perch/Roost Protection Plan were implemented in coordination with other plans required by the license for the Project during the 2018 reporting period (March 16, 2017–March 15, 2018). This includes the Wildlife Habitat Management Plan (Article 409); Wildlife Habitat Monitoring and Information and Education Plan (Article 410); Transmission Line Avian Collision Protection Plan (Article 411); Rare, Threatened, and Endangered Plant Monitoring Plan (Article 413); Programmatic Agreement (Article 416); the Memorandum of Agreement between Grant PUD and the Wanapum (Article 417); Priest Rapids Recreation Resource Management Plan (Article 418); the Shoreline Management Plan (Article 419); and the provisions of the Historic Properties Management Plan.

On April 10, 2009, Grant PUD filed its Bald Eagle Perch/Roosting Protection Plan (Plan) with FERC. FERC issued an Order on January 19, 2010 approving the Plan pursuant to Article 414 of the Priest Rapids Project². Per FERC's approval of the Plan, Grant PUD is required to provide annual reports to the U.S. Fish and Wildlife Service (USFWS), Washington Department of Fish and Wildlife (WDFW), the Wanapum and FERC by April 30 of each year.

Grant PUD is reporting its progress on the implementation activities related to this plan for the period from March 16, 2017 to March 15, 2018. The 2018 annual report presents results from daytime eagle-use surveys, communal roost site surveys, nest occupancy and productivity surveys, perch/roost tree protection efforts, and provides an update on riparian planting efforts.

¹ 130 FERC ¶ 62,054 (2010) ² 130 FERC ¶ 62,054 (2010).

PHONE 509 766 2505 FAX 509 754 6770 Bose (LA 414 Compliance filing) April 25, 2018 Page 2 of 2

Consistent with the License and modifying and approving Order, the enclosed document has been provided to the USFWS, WDFW and the Wanapum.

Respectfully,

Ross Hendrick Manager - License & Environmental Compliance

Cc: Jeff Krupka – USFWS Steve Lewis – USFWS Patrick Verhey – WDFW Alyssa Buck - Wanapum

Priest Rapids Hydroelectric Project No. 2114 2018 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414

Joe LeMoine Biologist III Public Utility District No. 2 of Grant County, Washington P.O. Box 878 Ephrata, WA 98823

April 2018

Executive Summary

On January 19, 2010, the Federal Energy Regulatory Commission (FERC) approved the Bald Eagle (*Haliaeetus leucocephalus*) Perch/Roost Protection Plan pursuant to Article 414 of the license for the Priest Rapids Hydroelectric Project No. 2114 (Project). Within this 2018 annual report, the Public Utility District No. 2 of Grant County, WA (Grant PUD) is reporting its progress on the implementation activities related to this plan for the period from March 16, 2017 to March 15, 2018. The 2018 annual report presents results from daytime eagle-use surveys, communal roost site surveys, nest occupancy and productivity surveys, perch/roost tree protection efforts, and provides an update on riparian planting efforts.

A total of 194 eagle observations were made during the project-wide surveys, distributed throughout the Project (Table 1; Figure 1). The surveys on December 20 and 21, 2017 yielded the single greatest Project-wide survey count of 62 total eagles.

Three existing bald eagle nests were monitored during the 2018 reporting year. The Cove nest produced a fledgling on July 5, 2017. Both the Goose Island nest and A-6 nest had documented nesting activity throughout the season, but staff was unable to see a fledgling at either site during the 2018 reporting period.

A total of four communal roosting site surveys were conducted during the 2018 reporting period that documented six communal roosting locations. The communal roost site with the greatest eagle use was at Scammon Landing, where nine eagles were documented. The other communal roost areas were located at the Wanapum Recreation Area (State Park) Boat Launch within the Wanapum Reservoir and Goose Island, the "S" curves and Priest Rapids Boat Basin within the Priest Rapids Reservoir (Table 3).

Grant PUD installed additional perch tree plantings at Crescent Bar and the Airstrip site in the 2018 reporting period. Grant PUD also monitored and maintained perch tree plantings at nine sites throughout the Project: Apricot Orchard, Columbia Cliffs, Rattlesnake Cove, Frenchman Coulee, Rocky Coulee, Vantage, Sand Hollow, Buckshot and Priest Rapids Recreation Area. Grant PUD is continuing to monitor and maintain these plantings throughout the 2018 reporting period as well as pursue additional locations.

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1.0 Introduction

On January 19, 2010, the Federal Energy Regulatory Commission (FERC) approved the Bald Eagle (*Haliaeetus leucocephalus*) Perch/Roost Protection Plan pursuant to License Article 414 for the Priest Rapids Project No. 2114 (Project)¹. FERC's approval of Article 414 requires the Public Utility District No. 2 of Grant County, Washington (Grant PUD) to file an annual progress report to FERC, the United States Fish and Wildlife Service (USFWS), and the Washington Department of Fish and Wildlife (WDFW), and that the annual report shall cover the dates of March 16 through March 15 of the following year.

Activities related to the Bald Eagle Perch/Roost Protection Plan were implemented in coordination with other plans required by the license for the Project during the 2018 reporting period (March 16, 2017–March 15, 2018). This includes the Wildlife Habitat Management Plan (Article 409); Wildlife Habitat Monitoring and Information and Education Plan (Article 410); Transmission Line Avian Collision Protection Plan (Article 411); Rare, Threatened, and Endangered Plant Monitoring Plan (Article 413); Programmatic Agreement (Article 416); the Memorandum of Agreement between Grant PUD and the Wanapum (Article 417); Priest Rapids Recreation Resource Management Plan (Article 418); the Shoreline Management Plan (Article 419); and the provisions of the Historic Properties Management Plan.

2.0 Materials and Methods

The following sections depict the materials and methods used during the 2018 reporting year for eagle-use surveys.

2.1 Eagle Surveys

From 2010 through 2016, Grant PUD conducted 11 perch and roosting tree surveys (3 summer/8 winter). From these six seasons, Grant PUD documented an annual average population of 347 eagles within the Project boundaries (LeMoine 2017). In summer of 2016, Grant PUD, USFWS, and WDFW agreed to reduce the number of day-use surveys within the Project from 11 to four (stop conducting the three summer surveys and reduce the eight winter surveys to four) for the following reasons:

- Summer surveys only identify resident eagles (often fledglings) and rarely find more than a few eagles Project wide;
- Reducing winter surveys to four would allow for the monitoring of eagle usage over the peak occupancy period of December through March;
- The data from these surveys would still be compatible with previous years;
- Reducing the number of required surveys would allow for a safer work environment because optimal days would be selected rather than whatever the conditions may be when Grant PUD crews are available; and
- Reducing the number of surveys would allow for the allocation of staff and resources to go to future vegetation plantings, exclusion wire efforts, and nest occupancy and success surveys.

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¹ 130 FERC ¶ 62,054 (2010)

Appendix B provides the consultation record related to this change. Grant PUD conducted daytime eagle-use surveys, communal roost tree surveys, and nest surveys from March 16, 2017 to March 15, 2018.

2.1.1 Day-Use Surveys

A total of four daytime eagle-use surveys were conducted within the Project to document areas of eagle use (Table 1). These surveys were boat-based and each survey was composed of a single and complete pass of Wanapum and Priest Rapids reservoirs. All four day-use surveys were conducted during the winter migration period (November 15 - March 15). Eagle-use surveys recorded the date, weather conditions, surveyors, specific reservoir (i.e. Wanapum or Priest Rapids), survey start time, and survey end time. Additionally, each eagle observation had the following data recorded:

- 1). observation time;
- 2). number observed;
- 3). species (i.e., bald, golden, unknown);
- 4). maturity (i.e., mature, juvenile, unknown);
- 5). Geographic Positioning System (GPS) point (NAD 84, Decimal Degrees);
- 6). location description;
- 7). perch structure/soaring (i.e., on ground, perch pole, tree, rock, cliff, soaring,); and
- 8). observation notes.

Eagle species were identified as bald, golden, or unknown. Eagle maturity status was identified as either: mature, juvenile, or unknown. Bald eagles exhibiting a white head and tail were classified as mature. Juvenile bald eagles were classified by variable amounts of white on their belly, back, and wings. Golden eagles (*Aquila chrysaetos*) exhibiting a solid brown body, black tail, and golden feathering on their nape and upperwing coverts were classified as mature. Juvenile golden eagles were classified by a dark body with white bases on their outer secondary feathers and inner primary feathers with a tail that might be white with a thick or black terminal band (Alsop 2001).

2.1.2 Communal Roost Site Survey

Grant PUD conducted four eagle communal roost surveys during the 2018 reporting period. Communal roost site eagle surveys were initiated 30 minutes before sunset and continued till twilight. Communal roost sites are defined as trees with three or more eagles perched in them. Trees that were classified as communal roost sites had the following data recorded: date, survey start time, time of sunset, time of civil twilight, observation time, count of eagles, species, GPS point, location description, and a date/time stamped photograph when possible.

2.1.3 Nest Surveys

Eagle nest surveys of known nests were performed to monitor nest occupancy, activity, and productivity in a manner consistent with WDFW protocols. In general, the methodologies for eagle nest surveys are as follows:

1). Nest occupancy surveys were conducted during the last week of February through mid-March in good weather;

- 2). A minimum of three hours were spent at each known nest site in the morning hours unless eagle occupancy was established at arrival;
- 3). If eagle occupancy was established at arrival, the information was recorded, and the surveyor vacated the area to avoid disturbing the nesting pair of eagles; and
- 4). If nest occupancy was not determined on the first survey, a second nest occupancy survey was conducted.

In addition, any evidence of new nesting activity will be documented and monitored as per the occupancy protocols above.

2.2 Eagle Perch, Roost, and Nest Tree Protection Efforts

Grant PUD implemented measures to protect eagle perch, roost, and nesting trees through wire exclusion and site management plans. Eagle roost and nest trees are wrapped with exclusion wire to protect the trees from beaver damage. The installation of exclusion wire on eagle day-use perch trees is prioritized according to nearby beaver activity, nearby nesting eagles, the tree species, or the trees that are identified as communal roost trees. As part of managing and supporting eagles that nest within or adjacent to the Project, Grant PUD maintains 17 perch, roost, and nesting structures located throughout the Project. Grant PUD also contracts with a licensed nuisance wildlife control officer (NWCO) to assist with the removal of problem beavers throughout the Project that pose a threat to perch, roost and nesting trees.

2.3 Riparian Plantings

Throughout the 2018 reporting period, Grant PUD planted and/or maintained a number of black cottonwood (*Populus trichocarpa*) and ponderosa pine (*Pinus ponderosa*) in an effort to establish additional eagle perch trees throughout the Project. Ponderosa pine was planted as an established potted plant, while black cottonwood was planted in both potted and stake varieties. Grant PUD continues to explore additional planting locations that will be compatible with Memorandum of Agreement between Grant PUD and the Wanapum (Article 417) and the provisions of the Historic Properties Management Plan.

3.0 Results and Discussion

The following sections detail the results from the 2018 reporting year.

3.1 Eagle Surveys

Grant PUD conducted daytime eagle-use surveys, communal roost tree surveys, and nest surveys from March 16, 2017 to March 15, 2018 (Table 1).

3.1.1 Day-Use Surveys

Grant PUD performed four Project-wide, day-use eagle surveys between November 15, 2017 and March 15, 2018. A total of 193 eagles were observed during the four surveys (Table 1). A map showing Project-wide distribution of the eagle observations is presented in Figure 1. A total of 178 eagles were identified as bald eagles, while the remaining 15 were documented as golden eagles. The surveys on December 20 and 21, 2017 yielded the greatest Project-wide survey count of 62 eagles. The lowest project-wide survey counts recorded were on March 14 and 15, 2018 when 18 eagles were observed. Table 2 provides a year-to-year comparison of day-use survey results across the annual monitoring periods following licensing in 2008.

D	Dete	Bald Eagles		Golden Eagles		D	a a	
Reservoir	Date	Mature	Juvenile	Mature	Juvenile	Reservoir Sum	Survey Sum	
Priest Rapids	12/20/2017 12/21/2017	8	28	2	1	39	()	
Wanapum	12/20/2017 12/21/2017	16	6	1	0	23	62	
Priest Rapids	1/31/2018	8	7	0	0	15	61	
Wanapum	1/51/2018	17	23	2	4	46	61	
Priest Rapids	2/12/2019	5	7	0	0	12	52	
Wanapum	2/13/2018	19	17	2	2	40		
Priest Rapids	2/14/2019 2/15/2019	5	4	1	0	10	10	
Wanapum	3/14/2018 3/15/2018 Wanapum		0	0	0	8	18	
Column Totals	86	92	8	7	193 *	193		
Notes: *Wanapum Reservoir had 117 documented observations; Priest Rapids Pool had 76 documented observations.								

Table 1The Priest Rapids Project eagle survey counts conducted for November 15,
2017 – March 16, 2018.

р ·	D (Bald	Eagles		Golden Eag	les		Reservoir	Survey
Reservoir	Date	Mature	Juvenile	Mature	Juvenile	Unknown	Unknown	Sum	Sum
Priest Rapids	2009-	15	8	4	3	0	3	33	0.1
Wanapum	2010 ¹	19	24	2	2	1	0	48	81
Priest Rapids	2010-	44	51	16	3	0	0	116	261
Wanapum	2011	118	95	29	3	0	0	245	361
Priest Rapids	2011-	54	77	2	1	0	0	134	27.4
Wanapum	2012	102	118	13	5	0	2	240	374
Priest Rapids	2012-	29	70	1	0	0	0	100	210
Wanapum	2013	82	133	2	1	0	0	218	318
Priest Rapids	2013-	60	45	3	2	0	0	110	202
Wanapum	2014	84	74	19	5	0	0	182	292
Priest Rapids	2014-	63	90	0	0	0	0	153	265
Wanapum	2015	96	95	20	1	0	0	212	365
Priest Rapids	2015-	63	53	3	0	0	0	119	274
Wanapum	2016	129	106	19	1	0	0	255	374
Priest Rapids	2016-	30	49	4	0	0	0	83	221
Wanapum	2017^2	72	54	9	3	0	0	138	221
Priest Rapids	2017-	26	46	3	1	0	0	76	102
Wanapum	2018 ²	60	46	5	6	0	0	117	193
Annual	PRD	52	64	4	1	0	0	122	347
Averages 2011-2016	WAN	102	104	17	3	0	1	225	547
Annual	PRD	28	48	4	1	0	0	80	207
Averages 2017-2018	WAN	66	50	7	4	0	0	127	207

Table 2The Priest Rapids Project annual eagle survey results from 2009 – 2018.

Notes:

¹Eagle Surveys reported in 2010 were based on surveys made two days (February 25, 2010 and March 4, 2010), and are not included in averages. Survey protocols modified following 2009-2010 period to 11 surveys.

²Eagle surveys reported in the 2017 and 2018 seasons were based on four surveys and have a separate average column. Survey requirements were amended following the 2016 reporting period to 4 winter surveys.

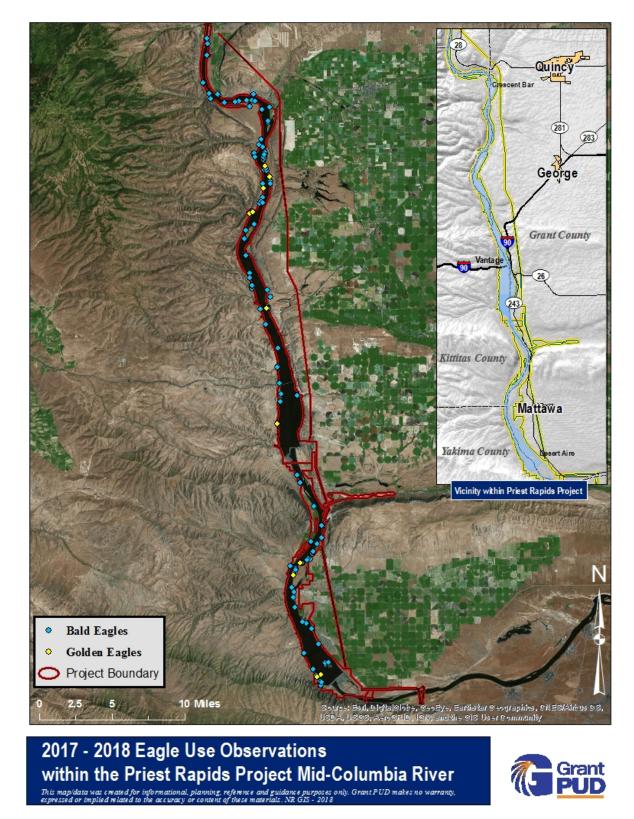


Figure 1 2017 – 2018 eagle use observations within the Priest Rapids Project, mid-Columbia River, WA.

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3.1.2 Communal Roost Surveys

A total of four communal roost surveys were conducted for the 2018 report period during the peak of eagle use (Table 3). One new communal roost sites was documented on January 25, 2018 near the Priest Rapids Boat Basin located in the immediate forebay of Priest Rapid Dam on the Yakima County side.

Table 5	2010 Communal K	oust builtey	Itcourto			
Date	Priest Rapids/ Wanapum Pool	GPS Northing	GPS Westing	Eagle (n)	Golden /Bald	Notes
1/24/2018	Priest Rapids	46.0066	-119.9299	8	Bald	Goose Island
1/25/2018	Priest Rapids	46.7648	-119.9487	6	Bald	South of "S" curves
1/25/2018	Priest Rapids	46.6441	-119.9280	5	Bald	PR Boat Basin
1/31/2018	Wanapum	47.0328	-120.0238	9	Bald	Scammon Landing
2/1/2018	Wanapum	46.9015	-119.9873	3	Bald	Wanapum State Park
2/1/2018	Wanapum	46.9236	-119.9836	4	Bald	Wanapum State Park

 Table 3
 2018 Communal Roost Survey Results

3.1.3 Nest Survey Results

Three previously documented bald eagle nests, identified as WDFW Bald Eagle Nest Territory 1703 (Wanapum Pool Right Bank/Johnson Creek/Getty's Cove (The Cove)), Bald Eagle Nest Territory 1820 (Priest Rapids Pool/Goose Island) and the A-6 nest (Wanapum Pool Right Bank, opposite Apricot Orchard Boat Launch) were monitored during the 2018 reporting period.

On July 5, 2017 the nest located at The Cove produced a successful fledgling. This is the sixth successful year out of the last seven (2010-2017) for The Cove nest. The nest was checked again in early March of 2018, and the nest is again occupied with incubation behavior observed. Monitoring results for the 2018 nesting season will be presented in the 2019 annual report.

The nests within WDFW Bald Eagle Nest Territory 1820 were Nest 1 (1820-1) for 2010, Nest 2 (1820-2) for 2011, and Nest 3 (1820-3) for 2012. Nest 1820-1 was unsuccessful in 2010, and the top of the nest tree broke off in January 2011 which ultimately destroyed Nest 1820-1. Nest 1820-2 was first documented on March 3, 2011, and the nest was not successful in 2011. In 2012, the eagles built Nest 1820-3; however, the eagles continued to nest in Nest 1820-2. The productivity of the Nest 1820-2 was unknown in 2012. Adults were seen incubating in March 2013 and 2014 on Nest 1820-3, but nest success was unknown due to nest location and tree foliage limiting observations. Nest 1820-3 was successful in 2016 with a documented fledging observed soaring over Goose Island. In 2017, Grant PUD staff observed an eagle incubating in Nest 1820-3 on multiple occasions. Subsequent surveys conducted in May and June documented at least one adult eagle perched in the nesting tree each survey, but thick foliage made it impossible to determine if a successful fledgling was produced. Spring nesting surveys in 2018 have documented that eagles have constructed a new nest in a cluster of trees to the southeast of the previous nests and there is a female exhibiting incubating behavior.

Another nest site was located just north and east of Crescent Bar in a ponderosa pine tree above a basalt cliff face on the right bank of the Columbia River. The basalt cliff is referred to locally as the A-6 wall, so Grant PUD staff is referring to the nest at this location as the A-6 nest. The A-6

nest was successful in 2015. It was once again successful in 2016 producing a juvenile bald eagle that fledged on June 30, 2016. Surveys conducted in 2017 documented at least one adult in the nesting tree on each visit, but Grant PUD staff was unable to see if a fledgling was successfully produced. Nesting surveys in spring of 2018 have documented adult bald eagles using the tree for perching, but no incubating behavior has been recorded.

3.2 Eagle Perch Tree, Roost Tree, and Nest Protection Efforts

During the 2018 reporting period, Grant PUD provided materials for tree wrapping efforts around the Airstrip property. Ellensburg Yacht Club members used the materials to wrap and/or repair existing wraps to approximately 20 trees. Grant PUD proactively and aggressively wrapped trees during the 2010-2012 reporting periods and did not discover a need for additional tree wrapping during the 2018 reporting period, however, additional surveys will be conducted during the summer of 2018 to assess the need for repairs to existing wraps and/or wrap new trees. Grant PUD contracted with a certified NWCO to remove problem beavers at select locations within the Project during the 2018 reporting period and has plans to continue throughout the 2019 reporting period.

3.3 Riparian Plantings

Grant PUD planted and/or maintained a number of ponderosa pine and black cottonwood throughout the Project. New perch tree plantings were installed at Crescent Bar and Airstrip in the 2018 reporting period. In addition to the new plantings, Grant PUD maintained/replanted perch trees throughout the existing nine locations throughout the Project: Apricot Orchard, Columbia Cliffs, Rattlesnake Cove, Frenchman Coulee, Rocky Coulee, Vantage, Sand Hollow, Buckshot and Priest Rapids Recreation Area. Grant PUD will continue extensive monitoring and maintenance of these plantings throughout the 2018 season and continue to explore potential areas for future plantings.

4.0 Summary

The numbers of bald eagles using the Project have increased steadily over the last decade. Historically the greatest documented use during the year has come in the later part of January to February, however, the 2018 reporting period documented a peak usage in December and January. Golden eagles continue to be present in the Project, but not in large numbers.

The 2018 reporting period documented nesting success at The Cove nest, which produced a fledgling on July 5, 2017. Both the Goose Island and A-6 nest had documented nesting activity throughout the season, but staff was unable to see a fledgling at either site. Grant PUD plans to continue monitoring all nesting sites within the Project through 2018. In addition, Grant PUD will follow federal guidelines as they pertain to managing grounds around nesting sites until juveniles have fledged.

Grant PUD installed a number of perch tree plantings at two new sites: Airstrip and Crescent Bar. These plantings will be closely monitored and maintained throughout 2018. Grant PUD will continue to monitor and maintain previous plantings found at nine additional sites throughout the Project. Grant PUD will also pursue additional locations that will support perch tree plantings through the remainder of 2018 and report on any progress in the 2019 report. Future tree protection efforts are planned to be directed in response to beaver activity at known areas of eagle use. Grant PUD will continue to collaborate with the Wanapum and Cultural Resources Department in the selection of future planting areas and methodologies.

List of Literature

- Alsop, F. J. III, 2001. Smithsonian Handbooks Birds of North America: Western Region. DK Publishing, Inc. New York, NY.
- Broadhead, C.2015. Priest Rapids Hydroelectric Project No. 2114. 2013 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Keeler, C. 2014. Priest Rapids Hydroelectric Project No. 2114. 2013 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- LeMoine, J. 2017. Priest Rapids Hydroelectric Project No. 2114. 2016 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Public Utility No 2 of Grant County, Washington. 2016. Priest Rapids Hydroelectric Project No. 2114. 2016 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Public Utility No 2 of Grant County, Washington. 2014. Priest Rapids Hydroelectric Project No. 2114. 2014 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Public Utility No 2 of Grant County, Washington. 2009. Priest Rapids Hydroelectric Project No. 2114 Bald Eagle Perch/Roosting Protection Plan Pursuant FERC Article 414.Ephrata, WA.
- Turner, B. 2013. Priest Rapids Hydroelectric Project No. 2114. 2013 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Turner, B. 2012. Priest Rapids Hydroelectric Project No. 2114. 2012 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Turner, B. 2011. Priest Rapids Hydroelectric Project No. 2114. 2011 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Turner, B. 2010. Priest Rapids Hydroelectric Project No. 2114. 2010 Annual Report for the Bald Eagle Perch/Roost Protection Plan Pursuant FERC Article 414. Public Utility District No. 2 of Grant County. Ephrata, WA.
- Western Forestry and Conservation Association (WFCA). 2010. Restoration of Disturbed Sites with Native Plants: An Integrated Approach. June 14–17, 2010. Wenatchee, WA.

Appendix A Bald Eagle Nest Locations

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Bald Eagle Territory #1703 Wanapum Pool Right Bank



Nest #	Zapped	Nest Description
		Bald Eagle Nest at The Cove
1703-2	No	LAT 46.8803LONG -119.9927
		Legal Description: T16-ON R23-OE S18

Bald Eagle Territory #1820 Priest Rapids Pool – Goose Island



Nest #	Zapped	Nest Description
1820-2 1820-3	No No	Bald Eagle Nests on Priest Pool – Goose Island LAT 46.6622LONG -119.9912 Legal Description: T14-ON R23-OE S34

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Bald Eagle Nest A-6 Wanapum Pool



Nest #	Nest Description
	Lat 47.2250
A-6	Long -120.0829

Appendix B Email Confirmation of Management Plan Changes

From:	Lewis, Stephen
To:	Patrick Verhey
Cc:	Joseph LeMoine; John Monahan; Deanne Pavlik-Kunkel
Subject:	[possible spam] Re: Proposed changes to eagle management
Date:	Friday, August 12, 2016 4:17:47 PM
Attachments:	image001.png

USFWS approves as well. S-

On Wed, Aug 10, 2016 at 3:05 PM, Verhey, Patrick M (DFW)

< <u>Patrick.Verhey@dfw.wa.gov</u> > wrote: Joe	< <u>Pa</u>	trick.	Verhey	@dfw.	wa.gov>	wrote:	Joe
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WDFW approves.

?

Patrick Verhey

Renewable Energy Biologist WDFW

Habitat Program Renewable Energy

Section 1550 Alder St N.W.

Ephrata, WA 98823

(509) 754-4624 ex. 213

Patrick.Verhey@dfw.wa.gov

Work schedule is M-Th

From: Joseph LeMoine [mailto: Jlemoine@gcpud.org]
Sent: Wednesday, August 10, 2016 11:29 AM
To: Verhey, Patrick M (DFW); Steve Lewis (<u>Stephen Lewis@fws.gov</u>)
Cc: John Monahan; Deanne Pavlik-Kunkel
Subject: Proposed changes to eagle management

Hello Patrick and Steve,

I apologize for getting a synopsis of our proposed changes to the Bald Eagle Perch/Roosting Protection Plan to you a little tardy, but my son did not keep his due date and decided to come early. I know we discussed a number of ideas and wanted to give you a clean copy to go over to see if we are still in agreement.

Over the past seven seasons Grant PUD has documented an annual average population of 347 eagles within the Project boundaries. Eagle observations have come from 11 perch and roosting tree surveys (3 summer/8 winter). Grant PUD proposes to stop conducting the 3 summer surveys and reduce the 8 winter surveys to 4.

1. Summer surveys only identify resident eagles (often fledglings) and rarely find more than a few eagles Project wide.

2. Reducing winter surveys to 4 would allow for the monitoring of eagle usage over the peak occupancy period of December through March.

- The data from these surveys would still be compatible with previous years. We would be able to compare everything as before with the only difference being a 4 survey total rather than an 8 survey total.
- This would allow for a much safer work environment because optimal days would be selected rather than whatever the conditions may be when you have crew availability.
- Reducing the number of surveys would allow for the allocation of staff and resources to go to future vegetation plantings (scheduled this fall), exclusion wire efforts, and nest occupancy and success surveys.

There are now 3 active nests within the Project that we monitor with the addition of the A6 nest. There is also a likelihood that there will be more nests within the Project in the years to come as the population of eagles statewide has increased significantly. With this in mind, Grant PUD proposes that all nests Project wide be managed in accordance with the USFWS national bald eagle management guidelines and that no further individual nest management plans be created or renewed.

Grant PUD is not looking to decrease the amount of effort that goes into managing eagles, rather we are looking to shift staff and resources to into something that makes sense for eagles and everyone involved. I feel that that the last seven years of surveying under the current methods has provided us with enough data that we can now make some adjustments. If we are able to focus our surveying efforts on the peak usage portion of the year and enforce a standard nest management approach, it will not only continue to provide protection and adequate data that is compatible with previous years, but also allow for

increased plantings, predator control, nest occupancy and nest success surveys to be conducted.

With your approval via email, we will proceed with implementing these changes immediately and document program modifications in an updated Bald Eagle Management Plan to be completed before the end of this year and in the Annual Report that will be submitted to FERC. I look forward to continue to collaborate on management decisions as we move forward and am more than happy to answer any questions or concerns you may have.

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"If a road has no obstacles, it probably doesn't lead to anywhere." S. Lewis