

BY ELECTRONIC FILING

April 22, 2014

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 License Compliance Filing  
Article 414 - 2014 Bald Eagle Perch/Roosting Protection Plan annual report**

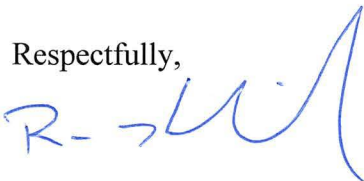
Dear Secretary Bose,

Public Utility District No. 2 of Grant County, Washington (Grant PUD) respectfully submits to the Federal Energy Commission Regulatory Commission (FERC) its 2014 Bald Eagle Perch/Roosting Protection Plan Annual Report.

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 Project. 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.

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  
License Compliance Manager

Cc: Jessica Gonzales – USFWS  
Steve Lewis – USFWS  
Pat Verhey – WDFW  
Alyssa Buck - Wanapum

**From:** Debbie Firestone  
**To:** [jessica\\_gonzales@fws.gov](mailto:jessica_gonzales@fws.gov); [Steve Lewis \(Stephen.Lewis@fws.gov\)](mailto:Steve.Lewis@fws.gov); [Patrick Verhey \(Patrick.Verhey@dfw.wa.gov\)](mailto:Patrick.Verhey@dfw.wa.gov); [Alyssa Buck](mailto:Alyssa.Buck@dfw.wa.gov)  
**Cc:** [Tom Dresser](mailto:Tom.Dresser@gcpud.org); [Ross Hendrick](mailto:Ross.Hendrick@gcpud.org); [Mark Woodward](mailto:Mark.Woodward@gcpud.org); [Carson Keeler](mailto:Carson.Keeler@gcpud.org)  
**Subject:** Grant County PUD's 2013 Bald Eagle Perch/Roosting Plan Annual Report  
**Date:** Tuesday, April 22, 2014 9:44:00 AM  
**Attachments:** [GCPUD 2013 Annual Repot LA 414 2014\\_04\\_22.pdf](#)

---

Good morning,

Attached please find Grant County PUD's 2013 Bald Eagle Perch/Roosting Protection Plan annual report consistent with FERC's license Article 414 for the Priest Rapids Project. This report was successfully submitted to FERC this morning by eFile.

Should you have questions regarding this report, please contact Tom Dresser at 509-754-5088, Ext. 2312 or by email at [tdresse@gcpud.org](mailto:tdresse@gcpud.org).

Thanks!

**Deb Firestone**  
Compliance Technician  
Public Utility District No. 2 of Grant County, Washington  
P.O. Box 878  
Ephrata, WA 98823  
509-793-1583  
509-754-5088 Ext. 2334

**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, Washington  
P.O. Box 878  
Ephrata, WA 98823

**April 2014**

## **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 2014 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, 2013 to March 15, 2014. The 2014 annual report pursuant to Article 414 reports daytime eagle-use surveys, communal roost site surveys, nest occupancy and productivity surveys, perch/roost tree protection efforts, an update on riparian planting efforts.

A total of 292 eagles were observed during the project-wide surveys. The eagles appeared to be distributed throughout the Project. The survey on February 26, 2014 yielded the greatest single-day, Project-wide survey count of 61 total eagles. A total of 12 eagles were observed during the three 2013 recreation season eagle surveys.

No new communal roost sites were documented during the 2014 reporting year.

Grant PUD continued assessment of the 13 remaining potential areas for riparian plantings of black cottonwood (*Populus trichocarpa*) by collaborating with the Wanapum and Grant PUD's Cultural Resources Department. As a result, no riparian plantings occurred during this reporting period. No riparian tree wrapping efforts were warranted in this reporting period.

**Table of Contents**

1.0 Introduction..... 1

2.0 Material and Methods ..... 1

    2.1 Eagle Surveys..... 1

        2.1.1 Day-Use Surveys ..... 1

        2.1.2 Communal Roost Site Surveys ..... 2

        2.1.3 Nest Surveys ..... 2

    2.2 Eagle, Perch Tree, Roost Time, and Nest Protection Efforts..... 2

    2.3 Riparian Plantings ..... 2

3.0 Results and Discussion ..... 3

    3.1 Eagle Surveys..... 3

        3.1.1 Day-Use Surveys ..... 3

        3.1.2 Communal Roost Surveys..... 6

        3.1.3 Nest Survey Results ..... 6

    3.2 Eagle Perch Tree, Roost Tree, and Nest Protection Efforts..... 6

    3.3 Riparian Plantings ..... 6

4.0 Summary..... 7

List of Literature ..... 8

**List of Figures**

Figure 1 2013 – 2014 eagle use observations within the Priest Rapids Project, mid-Columbia River, WA. .... 5

**List of Tables**

Table 1 The Priest Rapids Project eagle survey counts conducted for June 1, 2013 – March 15, 2014. .... 4

**List of Appendices**

Appendix A Bald Eagle Nest Survey Reports..... A-1

## **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 Article 414 of the license for the Priest Rapids Project No. 2114 (Project)<sup>1</sup>. FERC's approval of Article 414 requires the Public Utility District No. 2 of Grant County, WA (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 for the 2014 reporting period (March 16, 2013–March 15, 2014). 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 Material and Methods**

The following sections depict the materials and methods used during the 2014 reporting year for eagle-use surveys.

### **2.1 Eagle Surveys**

Grant PUD conducted daytime eagle-use surveys, communal roost tree surveys, and nest surveys from March 16, 2013 to March 15, 2014.

#### **2.1.1 Day-Use Surveys**

A total of 11 daytime eagle-use surveys were conducted within the Project to document areas of eagle use. These surveys were boat-based and each survey was composed of a single and complete pass of Wanapum and Priest Rapids reservoirs. Three surveys occurred during the summer recreational time period of June 1–September 30, 2013, and eight surveys occurred during the winter migration period (i.e., November 15, 2013–March 15, 2014). 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.

---

<sup>1</sup> 130 FERC ¶ 62,054 (2010)

Eagle species were identified as bald, golden, or unknown. Eagle maturity statuses were identified as 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 Surveys**

Grant PUD conducted an eagle communal roost survey during the January–February 2014 timeframe. 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 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. Nest occupancy surveys were conducted during the last week of February through the first week of March in good weather. A minimum of three hours were spent at each known nest site in the morning hours unless eagle occupancy was established at arrival. 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. If nest occupancy was not determined on the first survey, a second nest occupancy survey was conducted.

## **2.2 Eagle, Perch Tree, Roost Time, and Nest 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 were wrapped with exclusion wire (i.e., 36-inch-high, 4-inch-x-2-inch, 14 gauge welded wire fencing) to protect the trees from beaver damage. The installation of exclusion wire on eagle day-use perch trees was prioritized according to nearby beaver activity, nearby nesting eagles, the tree species, or the trees that were identified as communal roost trees. Grant PUD also collaborated with WDFW and the USFWS to develop a site management plan for an active bald eagle nest sited on Grant-PUD-owned property. As part of managing and supporting eagles that nest within or adjacent to the Project, Grant PUD maintains 17 article perch, roost, and nesting structures located throughout the Project.

## **2.3 Riparian Plantings**

Grant PUD identified 23 potential riparian planting areas intended to provide future eagle perch and roost trees in the Article 414 Plan approved by FERC. During the initial cultural assessment with the Wanapum and the Licensee’s Cultural Resources Department, 10 of the original 23 riparian planting sites were removed from consideration due to their cultural significance (Turner 2011). In 2013–2014, Grant PUD continued cultural assessment at the remaining 13 potential riparian planting areas with Grant PUD’s Cultural Resources Department and the Wanapum.

Additionally, Grant PUD is also exploring alternative planting sites that would be compatible with Memorandum of Agreement between Grant PUD and the Wanapum (Article 417) and the provisions of the Historic Properties Management Plan. Grant PUD plans to employ a water jet stinger planting methodology developed by the Western Forestry and Conservation Association for cottonwood planting (WFCA 2010) for future black cottonwood (*Populus trichocarpa*) plantings. Grant PUD is also researching the potential to augur holes and plant potted cottonwoods in soils where the water jet stinger is not feasible.

### **3.0 Results and Discussion**

The following sections detail the results from the 2014 survey season.

#### **3.1 Eagle Surveys**

Grant PUD conducted daytime eagle-use surveys, communal roost tree surveys, and nest surveys from March 16, 2013 to March 15, 2014 (Table 1).

##### **3.1.1 Day-Use Surveys**

Grant PUD performed 11 Project-wide, day-use eagle surveys between June 1, 2013 and March 15, 2014. A total of 292 eagles were observed during the 11 surveys (Table 1). The Project-wide distribution of the 292 eagle observations are presented in Figure 1. The survey on February 26, 2014 yielded the greatest single-day, Project-wide survey count of 61 eagles. A total of 54 eagles were identified as bald eagles, while the remaining seven were classified as golden eagles. The lowest single-day, project-wide survey counts recorded were July 11, 2013 when two eagles were observed. Cumulatively, the 292 eagles counted during the 2014 reporting period were slightly less than the 319 eagles counted during the 2013 reporting period (Turner 2013).

Eagle use during the summer recreation period (i.e., June–September) was low and sparse (Table 1). A total of 12 eagles were observed during the three 2013 recreation season eagle surveys. The breeding adults were observed near their nests, perched in thick-canopy, shaded trees or at known foraging areas. Three juvenile bald eagles were observed within the Project during the recreation season surveys.



**Table 1 The Priest Rapids Project eagle survey counts conducted for June 1, 2013 – March 15, 2014.**

Reservoir	Date	Bald Eagles		Golden Eagles		Reservoir Sum	Survey Sum
		Mature	Juvenile	Mature	Juvenile		
Priest Rapids	6/13/2013	0	0	0	0	0	7
Wanapum		6	1	0	0	7	
Priest Rapids	7/11/2013	1	0	0	0	1	2
Wanapum		1	0	0	0	1	
Priest Rapids	9/11/2013	1	0	0	0	1	3
Wanapum		0	2	0	0	2	
Priest Rapids	11/15/2013	0	2	0	0	2	18
Wanapum		10	4	2	0	16	
Priest Rapids	12/12/2013	8	5	0	0	13	36
Wanapum		10	8	3	2	23	
Priest Rapids	1/9/2014	12	4	1	1	18	56
Wanapum		18	13	6	1	38	
Priest Rapids	2/6/2014 3/10/14 <sup>1</sup>	20	19	1	1	41	55
Wanapum <sup>1</sup>		4	7	3	0	14	
Priest Rapids	2/26/2014	6	6	0	0	12	61
Wanapum		20	22	5	2	49	
Priest Rapids	3/4/2014	6	1	0	0	7	12
Wanapum		4	1	0	0	5	
Priest Rapids	3/11/2014	4	3	0	0	7	17
Wanapum		3	7	0	0	10	
Priest Rapids	3/12/2014	2	5	1	0	8	25
Wanapum		8	9	0	0	17	
Column Totals		144	119	22	7	292	292
Notes: <sup>1</sup> Wanapum Reservoir survey not conducted on 2/6/14 because of weather/mechanical failure. A make-up survey was conducted on 3/10/14.							



**Grant County Public Utility District No. 2**  
**Priest Rapids Hydroelectric Project (FERC No. 2114) Eagle-Use Survey Points**  
 Mid-Columbia River, WA



**Figure 1** 2013 – 2014 eagle use observations within the Priest Rapids Project, mid-Columbia River, WA.

### **3.1.2 Communal Roost Surveys**

A total of two communal roost surveys were conducted for the 2014 report period during the peak of eagle use (late-January through mid-February). The communal roost surveys occurred on February 26 and 27, 2014 on Wanapum and Priest Rapids reservoirs, respectively. No new communal roost sites were documented during these surveys.

### **3.1.3 Nest Survey Results**

Grant PUD has two active bald eagle nests within the Project. The bald eagle nests are identified as WDFW Bald Eagle Nest Territory 1703 (Wanapum Pool Right Bank/Johnson Creek/Getty's Cove) and Bald Eagle Nest Territory 1820 (Priest Rapids Pool/Goose Island). The nest within Territory 1703 was Nest 2 (i.e., 1703-2) produced a juvenile bald eagle for three consecutive years (i.e., 2010-2012), but was abandoned during the 2013 season. A nest survey was conducted April 25, 2013 and no signs of nesting were found and restrictions were lifted for the 2013 recreation season. Nest 1703-2 spring surveys found that the nest was active with an adult observed incubating (see Appendix A for more details).

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 1 was unsuccessful in 2010, and the top of the nest tree broke off in January 2011 which ultimately destroyed Nest 1. Nest 2 was first documented on March 3, 2011, and the nest was not successful in 2011. In 2012, the eagles built Nest 3; however, the eagles continued to nest in Nest 2. The productivity of the 1820 Nest-2 was unknown in 2012. Adults were seen incubating in March 2013 on Nest 3, but successful nesting was unknown due to nest location and tree foliage making observations limited. Spring 2014 surveys have found Nest 1820-3 active with an adult incubating (see Appendix A for more details).

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

During the 2014 reporting period, Grant PUD did not wrap any trees for beaver protection. Grant PUD proactively and aggressively wrapped trees during the 2010-2012 reporting periods and did not discover a need for tree wrapping during the 2014 reporting period.

Grant PUD continued its implementation of the 2012–2016 bald eagle site management plan for the Grant PUD-owned property known as The Cove. The site management plan was separate document that was jointly developed by the USFWS, WDFW, and Grant PUD, thus the site management plan was not presented in this report.

### **3.3 Riparian Plantings**

Grant PUD continued cultural assessment at the remaining 13 potential riparian planting areas with its Cultural Resources Department and the Wanapum. Additionally, Grant PUD is also exploring alternative planting sites that would be compatible with Memorandum of Agreement between Grant PUD and the Wanapum (Article 417) and the provisions of the Historic Properties Management Plan. Many of these areas are culturally sensitive, and Grant PUD is respecting the Memorandum of Agreement with the Wanapum.

In the future, Grant PUD plans to collect a limited number of local cuttings in early February, soak them for two weeks, and plant them prior to the end of February (pending winter storm warnings) to further evaluate the timing and success of future riparian planting efforts via the cutting methodology. Another planting option Grant PUD is researching and discussion with the

Wanapum and the Cultural Resources Department is the ability to auger holes and plant potted black cottonwoods.

#### **4.0 Summary**

The numbers of bald eagles using the Project have increased over the last decade. Cumulative data collected from February 2010-March 2014, counted 1,379 bald eagles and 120 golden eagles. In general, the greatest single-day eagle survey counts for the year have occurred in the later part of January to February. Golden eagles continue to be present in the Project, but not in large numbers.

There are two bald eagle nests within the Project. Nest 1703-2 (located at The Cove) successfully fledged a young bald eagle from 2010-2012, but was abandoned in 2013. Surveys in 2014 found that a mature bald eagle was incubating an egg in Nest 1703-2. The bald eagles nesting on Goose Island (Nest 1820-3) continue to show signs of nesting with unknown success due to nest location and tree foliage surrounding the nest. Grant PUD plans to continue monitoring the active bald eagle nests within the Project.

Grant PUD plans to direct future tree protection and planting efforts in areas of eagle nesting, roosting, foraging areas, and daytime perching as needed. 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 black cottonwood 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.

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. 2013. 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.

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 Survey Reports**



Bald Eagle Territory # 1703  
 Wanapum Pool - Right Bank



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



## Bald Eagle Territory # 1820 Priest Pool – Goose Island

Year	Nest	Early Season Observation	Late Season Observation	Season Summary	Observer/Affiliation
2010	1	2 Adults	2 Adults	Unsuccessful	Behr Turner/GCPUD
2011	2	2 Adults	2 Adults	Unsuccessful	Behr Turner/GCPUD
2012	2	2 Adults	80: Success Unknown	Success Unknown	Behr Turner/GCPUD
2013	2/3	2 Adults	80: Success Unknown	Success Unknown	Behr Turner/GCPUD

### 2014 Occupancy/Productivity Observations

Please use the codes at the bottom of the page to record nest observations in the spaces below. Blank lines are for new nests. Locations of new nest locations can be reported using GPS coordinates and datum, or shown on the reverse map or a separate custom map.

Observer/Affiliation Mark Woodward/GCPUD Observer/Affiliation \_\_\_\_\_

Observer/Affiliation \_\_\_\_\_ Observer/Affiliation \_\_\_\_\_

Early Season Surveys											Late Season Surveys											
Nest Occupancy Surveys: February 21 - March 8 in Good Weather											Nest Productivity Surveys: June 15 - 25											
Nest Productivity Surveys: April 7 - 21																						
NEST #	Date (MM / DD)	NEST COND	#DET	LIFESTAGE 1-4			BEHAVIOR 1-4				OCCOBS	Date (MM / DD)	NEST COND	#DET	LIFESTAGE 1-4			BEHAVIOR 1-4				PRODOBS
1820-3	2 26	RM	2	A	A			P			5											
1820-3	3 19	RM	1	A				PN			5											
1820-3	3 31	RM	1	A				I			5											

- Use the Following Space to:
- (1) Describe new nests (please provide tree species and/or nest type and location, nest height, aspect, landowner information, directions to the site, etc.)
  - (2) Update and expand on descriptions of previously reported nests.
  - (3) Note other conditions that don't fit into the form, such as occupancy by another species.

**Nest Condition:** N = New; R = Repaired; U = Disrepair; RM = Remnant

**Lifestage:** A = Adult; S = Subadult; J = Juvenile; N = Nestling; D = Downy; F = Feathered; FL = Fledgling; E = Egg

**Behavior:** BG = Begging; BR = Brooding; CP = Copulating; CS = Courtship; D = Defensive; F = Flying; H = Hunting; I = Incubating; N= Nest Building; P = Perching; PN = Perched in Nest; T = Tending Young; V = Vocalizing

Occupancy Observation (OCCOBS) Code	Productivity Observation (PRODOBS) Code
1 Occupancy Unknown (visit during nonbreeding season)	50 Productivity unsuccessful or nest empty
2 Occupied, adult/subadult pair	60 Productivity successful, # of young known
3 Occupancy Unknown (repaired nest considered occupied by Postupalsky)	70 Productivity successful, # of young unknown
4 Single bird/nest unrepaired, or pair not near known nest site	80 Productivity unknown, adult obstructing view
5 Occupied, activity unknown	
6 Occupied, active (breeding)	<b>OCCOBS/PRODOBS Code</b>
7 Occupied, inactive	9 Destroyed
8 Unoccupied (no birds, nest unrepaired)	10 Not located
	11 Not checked

Bald Eagle Territory # 1820  
 Priest Pool – Goose Island



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