December 29, 2014

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St. N.E.
Washington, DC 20426

Subject: **Spokane River Project, FERC Project No. 2545**
Submittal of the Annual 2014 Bald Eagle Monitoring Report
as required by FERC's May 11, 2011 Order Approving Bald Eagle
Management Plan Pursuant to Article 414

Dear Secretary Bose:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista developed and submitted a Bald Eagle Management Plan (Plan) for FERC review and approval. FERC approved the Plan in its May 11, 2011 Order Approving Bald Eagle Management Plan Pursuant to Article 414.

The Plan requires Avista to submit an annual report that summarizes the activities it implemented during 2014. The report, which is to be submitted to the U.S. Fish and Wildlife Service, the Idaho Department of Fish and Game, the Washington Department of Fish and Wildlife, and to FERC, discusses annual occupancy and productivity, surveys for new nests, and territory investigations.

With this, Avista is submitting the enclosed 2014 Bald Eagle Monitoring Report for your records. Please contact me at (509) 495-4998 or David Armes at (509) 495-2796 if you have any questions regarding this report.

Sincerely,

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Kathleen Fulmer, USFWS
Mary Terra-Berns, IDFG
Karin Divens, WDFW
David Armes, Avista

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PO Box 3727
Spokane, Washington 99220-3727

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December 29, 2014

Mary Terra-Berns
Idaho Department of Fish and Game
2750 Kathleen Ave.
Coeur d'Alene, ID 83814

Subject: **Spokane River Project, FERC Project No. 2545**
Submittal of the Annual 2014 Bald Eagle Monitoring Report
as required by FERC's May 11, 2011 Order Approving Bald Eagle
Management Plan Pursuant to Article 414

Dear Ms. Terra-Berns:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista developed and submitted a Bald Eagle Management Plan (Plan) for FERC review and approval. FERC approved the Plan in its May 11, 2011 Order Approving Bald Eagle Management Plan Pursuant to Article 414.

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December 29, 2014

Kathleen Fulmer
US Fish and Wildlife Service
11103 E. Montgomery
Spokane, WA 99206

Subject: **Spokane River Project, FERC Project No. 2545**
Submittal of the Annual 2014 Bald Eagle Monitoring Report
as required by FERC's May 11, 2011 Order Approving Bald Eagle
Management Plan Pursuant to Article 414

Dear Ms. Fulmer:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista developed and submitted a Bald Eagle Management Plan (Plan) for FERC review and approval. FERC approved the Plan in its May 11, 2011 Order Approving Bald Eagle Management Plan Pursuant to Article 414.

The Plan requires Avista to submit an annual report that summarizes the activities it implemented during 2014. The report, which is to be submitted to the U.S. Fish and Wildlife Service, the Idaho Department of Fish and Game, the Washington Department of Fish and Wildlife, and to FERC, discusses annual occupancy and productivity, surveys for new nests, and territory investigations.

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Sincerely,

Speed Fitzhugh

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Mary Terra-Berns, IDFG
Karin Divens, WDFW
David Armes, Avista

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December 29, 2014

Karin Divens
Washington Department of Fish and Wildlife
2315 N Discovery Place
Spokane Valley, WA 99216

Subject: **Spokane River Project, FERC Project No. 2545**
Submittal of the Annual 2014 Bald Eagle Monitoring Report
as required by FERC's May 11, 2011 Order Approving Bald Eagle
Management Plan Pursuant to Article 414

Dear Ms. Divens:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista developed and submitted a Bald Eagle Management Plan (Plan) for FERC review and approval. FERC approved the Plan in its May 11, 2011 Order Approving Bald Eagle Management Plan Pursuant to Article 414.

The Plan requires Avista to submit an annual report that summarizes the activities it implemented during 2014. The report, which is to be submitted to the Washington Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the Idaho Department of Fish and Game, and to FERC, discusses annual occupancy and productivity, surveys for new nests, and territory investigations.

With this, Avista is submitting the enclosed 2014 Bald Eagle Monitoring Report for your records. Please contact me at (509) 495-4998 or David Armes at (509) 495-2796 if you have any questions regarding this report.

Sincerely,

Speed Fitzhugh

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Kathleen Fulmer, USFWS
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AVISTA CORPORATION

2014

BALD EAGLE MONITORING REPORT

ARTICLE 414

SPOKANE RIVER HYDROELECTRIC PROJECT

FERC PROJECT NO. 2545

Prepared By:

Avista Corporation

December 29, 2014

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1.0 INTRODUCTION

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a license for Avista Corporation's (Avista) Spokane River Project (Project), FERC Project No. 2545, for a 50-year license term. The Project consists of five hydroelectric developments (HED) located on the Spokane River in northern Idaho (in Kootenai and Benewah Counties) and eastern Washington (in Spokane, Stevens, and Lincoln Counties). The FERC licensed Project boundary generally follows the normal full pool elevation of the impoundment associated with each HED. The five HEDs, from upstream to downstream, include:

- Post Falls (River Mile [RM] 102)
- Upper Falls (RM 74.2)
- Monroe Street (RM 74)
- Nine Mile (RM 58)
- Long Lake (RM 34)

Under Article 414 of the License Avista developed a Bald Eagle Management Plan (Plan), which was approved by FERC on May 11, 2011. The Plan included: (i) known bald eagle (*Haliaeetus leucocephalus*) nests associated with waters impounded by the Project; (ii) a framework for annual occupancy and productivity monitoring (Monitoring); (iii) annual surveys to identify new nests (Surveys); (iv) investigations to identify bald eagle nesting territories including primary use areas, home ranges, and key use sites (Investigations); and (iv) reporting requirements.

The Plan defines the Monitoring Area as the area that encompasses bald eagle nest sites associated with waters impounded by the Project. In general, this area extends ½ mile beyond the boundaries of the Project. Annual Monitoring, Surveys, and Investigations are completed within this area. Within the Monitoring Area the Plan defines the Planning Area. The Planning Area pertains to the geographic area associated with the requirement to prepare and file (with FERC) site-specific management plans for bald eagle nests. The Planning Area includes Avista-owned lands where an active or alternate nest associated with waters impounded by the Project is present, and select additional nesting territories where investigations indicate that (1) Project operations may have negative effects on bald eagle productivity or habitats, and (2) opportunities for protection are available.

Avista hired David Evans and Associates, Inc. (DEA) to assist with implementation of the Plan. This annual monitoring report includes the results for implementation of the Plan. Original and electronic copies of all field forms, photographs, geographic information system (GIS) databases, and reports are on file at Avista.

2.0 OCCUPANCY AND PRODUCTIVITY MONITORING

2.1 Methods

Location of Territories Monitored. Twenty-seven nesting territories that were associated with waters impounded by the Project were monitored in 2014 to determine annual occupancy and productivity. *Figures 1and 2* show the locations of these nesting territories.

Dates of Monitoring. Monitoring occurred between February 1 and July 31. The methods described below follow those detailed in the Plan. Supplemental efforts included additional observation dates and extending the observation period to midday for watercraft and some land-based monitoring.

Each known nest was observed a minimum of three occasions during the nesting season to determine occupancy and productivity. The first observation was an initial determination of occupancy that occurred between February 1 and April 15; the second observation, an update of nesting status, occurred between April 1 and June 15; the third observation, a determination of productivity, occurred between June 15 and July 31.

Observations were generally made from first light to midday. Observations required up to one and one-half hours determining occupancy and productivity. High-resolution optics were used to facilitate observations. Observations were conducted from watercraft, land vehicle, and on foot. Land-based observations took place from a vehicle whenever possible to avoid disturbance to eagles. Nests approached on foot, took place with the observer remaining at least 330 feet from the nest and/or hidden from view. Observers retreated if eagles displayed agitated behavior. During each visit, recorded data pertinent to the determination of nest occupancy and productivity, included:

- Nest condition
- Nest repair or construction
- Presence and behavior of adults
- Adult incubation or brooding posture
- Number of eggs
- Number and age of young using a standardized aging key based on plumage, size, and posture (Carpenter 1990)

Observers also noted any habitat alterations or activities that have occurred near the nest site that may affect eagle productivity. Based on the results of observations and professional judgment, one of the following occupancy determinations was made for each monitored territory.

1. Active: Two adults present in a territory containing a nest during the nesting season, or one adult observed incubating with young, or near a known nest. Nesting determination is the activity status of the nest. “Active” is a transitional designation. A nest that is deemed “Active” at the beginning of the nesting season will receive a determination of “Successful”, “Active, Not Successful”, “Nest Abandoned”, or “Active, Success Unknown” at the completion of monitoring.

Active Successful: One or more young fledged from the nest. When the "Successful" determination is used, the annual report includes the number of eagles fledged from the nest. According to the Plan, productivity results assume the young noted in the nest during the last observation have successfully fledged. However, the pre-fledging period is considered a very sensitive period. Nestlings at this stage are developing flight abilities, may flush from the nest prematurely, and perish due to disruption (USFWS 2007). Therefore, actual numbers of fledglings and percentages may be the same or lower.

Active, Not Successful: An occupied territory where no young were produced. When the "Active, Not Successful" determination is used, observers try to determine the cause of reproductive failure where possible, and note this cause in the annual report.

Nest Abandoned: Bald eagles were observed in the nesting territory, but deserted or stopped attending a nest, and did not subsequently return and successfully raise young in a nest for the duration of the breeding season. When the "Nest Abandoned" determination is used, observers document activities and/or habitat alterations that may have contributed to abandonment of the nest. The annual report includes information on the nature, extent, and location of such activities or habitat alterations. "Nest Abandoned" determinations are included in "Active, Not Successful" for productivity results.

Active, Success Unknown: Occupied territory not adequately monitored to determine success. The use of this determination will require an explanation as to why the territory was not adequately monitored to determine success.

2. Not Active: No nesting activity and no adults in a nesting territory. When the "Not Active" determination is used, observers recorded any modifications or disturbances to habitat that have occurred near the nest site and the distance to those disturbances. The nature, extent, and proximity of habitat modifications/disturbances should be included in the annual report. These nests are not included in the analysis of project area productivity, nest productivity, and nest failure rates.

3. Status Unknown: Territory not checked or incompletely checked to determine occupancy. The use of the "Status Unknown" determination will require an explanation of why the territory was not checked or why observations were not adequate to determine occupancy. The annual report includes recommendations to allow for adequate observations during subsequent monitoring.

All territory occupancy, nesting activity status, and productivity data was recorded on standardized data forms. Copies of these forms are included in *Appendix A.*

2.2 Results

Territory Occupancy, Nesting Activity Status, and Productivity Determination

Twenty-seven nests were monitored in 2014. Twenty-three nests in Project waters were monitored in 2013. Nineteen nests were monitored in 2012. The 2014 monitoring results are shown in *Table 1* and summarized as follows:

- Occupancy: 82%: 27 known nesting territories were monitored; 22 nesting territories had active nests and were considered occupied. Five territories did not have not active nests and were considered unoccupied.

- Active nests: 22 nests; 22 with known productivity.
  Active, Successful: 18 nests.
  Active, Not Successful: 4 nests
  Active, Success Unknown: 0 nests.
- Not Active nests: 5
- Status Unknown nests: 0
- Project area productivity: 1.18.Twenty-six young were fledged from the 22 active nests with known productivity, (n=22). The average number of fledglings per active Project nest was 1.18.
- Failure rate: 18%. (n=22). Four of 22 active nests with known productivity were not successful.
- Successful nest productivity: 1.44. Eighteen of 22 active nests with known productivity were successful. Twenty-six young were fledged from the eighteen successful nests. (n=18). The average number of fledglings per successful nest was 1.44.

Annual productivity of nesting territories in Project waters is summarized in *Table 2.*

Table 1. 2014 Bald Eagle Territory Nest Monitoring Results

Territory Name	Nest Number	Nest in Planning Area	Potential Disturbance Factors	2014 Nest Determination	# of Fledglings 2014	2013	2012
IDAHO							
Anderson Lake	07I03101	No	Many osprey nests, Trail of CDA	Not Active	0	0	0
Blessing Slough	07I07601	No	None	Active, Successful	2	0	unknown
Cougar Bay	07I03502	No	Residential, osprey nests	Active, Successful	2	unknown	0
Eddyville	07I07701	No	Residential	Active, Successful	2	2	2
Falls Creek	07I03703	No	Ranch operations, jet boat race	Active, Successful	1	0	0
Fernan	07I03402	No	Residential	Active, Successful	1	1	NA
Harrison West*	08I00001	No	Residential, agriculture	Not Active	0	NA	NA
Hepton Lake	07I10101	No	Residential, near Hwy 3.	Active, Successful	2	2	NA
Heyburn Park	07I05702	No	Park roadways, hiking, Trail of CDA.	Active, Successful	1	2	0
Killarney Lake	07I01702	No	None	Active, Successful	1	1	2
Mica Bay	07I05401	No	Residential	Active, Successful	2	1	2

Table 1. 2014 Bald Eagle Territory Nest Monitoring Results (continued)

Territory Name	Nest Number	Nest in Planning Area	Potential Disturbance Factors	2014 Nest Determination	# of Fledglings 2014	2013	2012
Post Falls	07I08001	Yes	Residential, roadway, osprey, 2014 construction	Active, Successful	1	2	1
Rainy Hill	07I07402	No	None	Active, Successful	2	unknown	unknown
Rose Lake	07I01902	No	Residential	Active, Not successful	0	1	0
St. Maries	07I04301	No	None	Not Active	0	2	1
Swan Lake	07I02002	No	Picnic area recreation on island	Not Active	0	unknown	2
Turner Bay	07I06603	No	Near highway	Active, Not successful	0	1	2
Turtle Lake	07I02402	No	Ranch, residence, jet boat race	Active, Successful	1	2	0
Upper Spokane River	07I10201	No	Development opposite side of river	Not Active	0	unknown	NA
Windy Bay	08I00103	No	None	Active, Successful	2	unknown	1
WASHINGTON							
Charles Maas	6W3055	No	WA Park and residential	Active, Successful	1	1	1
Long Lake South	6W2210	Yes	Residential	Active, Not Successful	0	0	2
Lower Spokane River	6W10101	No	Numerous: osprey, Hwy 291, residential	Active, Successful	1	0	NA
Northshore*	06W10401	Yes	Ravens, access area	Active, Successful	2	NA	NA
Suncrest*	06W10302	No	Residential, trail	Active, Not Successful	0	NA	NA
Whalen	06W2973	Yes	Osprey	Active, Successful	1	2	3
Willow Bay*	06W10201	No	Residential	Active, Successful	1	NA	NA
Total fledglings					**26 (n=22)**	**20 (n= 16)**	**19 (n=17)**
Fledglings/ nest					**1.18**	**1.25 (n=16)**	**1.12 (n=17)**
Fledglings/ successful nest					**1.44(n=18)**	**1.54 (n=13)**	**1.73 (n=11)**

*/ NA=monitoring start in year indicated, no previous year information

Table 2. Annual Summary of Project Area Bald Eagle Productivity

	2014	2013	2012
Number of territories checked	27	23	19
Number of active territories	22	21	19
Percent active	87	91	100
Number successful nests	18	13	11
Number of nest failures	4	3	6
Number success unknown	0	5	2
Number of fledglings	26	20	19
Percent nest success	82	81	65
Percent nest failure	18	19	35
Fledglings /nest	1.18	1.25	1.12
Fledglings/ successful nest	1.44	1.54	1.73

2.3 Discussion

The occupancy and productivity percentages of the nest territories are similar to 2012, 2013, and previous studies conducted by Idaho Fish and Game (IDFG) from 1979 to 2006 in the Idaho Eagle Management Area 7 of north Idaho and Montana (Sallabanks 2006). There were a similar percentage of successful and unsuccessful nests in 2014 than in 2013. The number of fledglings per nest has been consistent.

The following section discusses the factors affecting occupancy and productivity of the individual nesting territories. They are ordered according to the final nesting activity status.

Active, Successful. Eighteen active nests were successful. Eight nests successfully fledged two nestlings; ten nests successfully fledged one nestling. Generally nesting eagles were acclimated to the existing level of human activities. Most of these nest sites experience some human caused disturbance and habitat alterations from nearby residences, transportation elements, or human recreation as shown in *Table 1.* Only a few of the nests are in isolation from these types of ongoing disturbances. Osprey nests were considered a natural disturbance, except where nesting platforms have been erected.

Active, Not Successful: Four of 22 active nests were not successful**.**

The Rose Lake nest was active with an adult on the nest on March 14th, 2014. However no adults were observed on or near the nest during subsequent observations.

The Turner Bay nest was active with 2 nestlings. There were other eagle(s) at the nest site, adult interactions, and reported adult eagle mortality by nearby landowner by May 14, 2014. The landowner contacted Birds of Prey North West (BOPNW), who retrieved the nestlings. This was verified by Janie Fink BOPNW. Nestlings are to be released in 2014. This was considered to be a nest failure due to adult mortality.

The Long Lake South nest had an incubating adult in late March; however the nest was subsequently abandoned and appeared collapsed by June 4, 2014. No apparent cause of failure.

The Suncrest nest had an incubating female and a male near nest through the first week of May. Subsequently, the adults were near the nest but not observed on the nest through late May. This nest was a 2014 Territory Investigation. The cause on failure was not identified. Potential nest disturbances include nearby residential area, hiking trail with 100 feet of nest, and great-horned owl pair within the nesting territory.

Not Active. Five nesting territories were not active: Anderson Lake, Harrison West, St. Maries, Swan Lake, and Upper Spokane River. There were no eagles seen in the Anderson Lake nest area during the monitoring period, the nest collapsed prior to 2012. There were no eagles seen in the Harrison Lake nest area during the monitoring period. The nest condition went from "poor" to "collapsed". One adult was observed perched near the St. Maries nest, but not on the nest in mid-march. There were no other eagle observations during the monitoring period. One adult was observed in the Swan Lake area (Blue Lake) in late March, but not at the nest site. There were no other eagle observations during the monitoring period. At the Upper Spokane River site, no eagles were observed during the monitoring period. There were no observed disturbances or habitat alterations at any of these nest sites. Therefore these nests were determined inactive, the cause was not determined.

3.0 SURVEYS TO IDENTIFY NEW NESTS

3.1 Methods

The methods described below follow those detailed in the 2010 Plan, with a minor adjustment that extended the survey period through the monitoring period.

Avista coordinates with the US Fish and Wildlife Service (USFWS), Idaho Fish and Game (IDFG), Washington Department of Fish and Wildlife (WDFW) and other entities to identify potential new bald eagle territories or nests. Supplemental efforts included communications with local and nearby residents of the Project area during the course of ongoing investigations.

Survey Routes. The survey routes by watercraft followed the shorelines of Project waters. Other surveys were conducted by land-based vehicle, watercraft, or on foot to locations where there were new observations of adult eagles. Investigators tracked adult eagles outside of known territories and looked for nests in other likely locations.

Survey Dates. Surveys were conducted on March 14, March 20, March 21, and March 26 through March 28th, 2014. Supplemental survey efforts occurred during the ongoing monitoring and territory investigations. Documentation for any new nest, or suspected new nest, encountered during surveys included a minimum of two nest photographs, GPS location, and relevant

descriptive information indicating nest location, nest condition, proximity to known nests, and significant habitat alterations. All new nest data was recorded on standardized data forms.

3.2 Results

Seven new nests were located during the survey efforts. One of the new nests was a new alternate nest located within an existing territory. Six of the new nests were in new territories. The new alternate nest was included in the 2014 monitoring effort.

Table 3, Figures 1 and 2, and attached *Appendix B* provide:

- Locations of previously undocumented territories and nests
- Relationship of new nests to known nests
- Photographs of new nests
- Descriptions of new nests
- Notes regarding significant alterations to habitats

Table 3. 2014 New Bald Eagle Nests

Territory Name	Number	Latitude, Longitude	Nest in Planning Area	Location/ Relationship to known nests	Notes
NEW NEST, EXISTING TERRITORY					
Suncrest, WA	06W10302	47.820181,-117.610472	No	0.5 miles south of other Suncrest nest, 2 miles east of Sportsman nest.	Active 2013 and 2014.
NEW NEST, NEW TERRITORY					
Ahrs Creek, ID*	07I10301	47.322432, -116.387767	No	3.5 miles downstream of Falls Creek nest.	Northshore of St. Joe, cottonwood, upstream of campground.
Deep Creek, WA*	06W10901	47.762886, -117.550514	No	2 miles south of Riverside Launch.	Upstream of Nine Mile Dam, North of Deep Creek
Four Mound, WA*	06W10501	47.863, -117.671	No	Between Whalen (2.5 miles) and Sportsman (1.6 miles) nests.	Ponderosa pine, on ridge.
Powerball, WA*	06W10701	47.858305, -117.70575	Yes	Between Whalen and Northshore nests, 2+ miles.	Ponderosa pine at shore, south of power line.
Riverside Launch, WA*	06W10601	47.788302, -117.535102	No	1.3 miles east of Charles Maas	Ponderosa pine, across from boat launch.
Sportsman, WA*	06W10801	47.828733, -117.649004	No	Between Four Mound and Suncrest nests, 1.6 miles.	Douglas-fir northwest of residence.

* Monitoring to start in 2015

The new alternate nest and new territories found in 2014 are shown on *Figures 1 and 2* and included in the GIS database along with the locations of the previous years' bald eagle nests. Documentation of the new alternate nest and the six new nests in new territories found in 2014 are included in *Appendix B.*

At the conclusion of the 2014 investigations, a total of 33 territories have been determined to be within the Monitoring Area. These nests are planned to be monitored in 2015 and subsequent years in accordance with the Plan. Adjustments to the monitoring area will be made with concurrence of the USFWS, IDFG and WDFW during the annual coordination meeting. Alternate nest locations that have collapsed or been destroyed will remain on the maps for three complete breeding seasons, in the circumstance that eagles may reoccupy the site, according to USFWS National Bald Eagle Guidelines (USFWS 2007). The alternate nest locations will be retained in the GIS database.

4.0 NESTING TERRITORY INVESTIGATION

The purpose of the investigations is to identify nesting territories and associated primary use areas, home ranges, and key use sites of all known bald eagle nesting territories within the monitoring area. Nesting territories are only omitted from investigation with mutual agreement of USFWS, IDFG, and WDFW as appropriate. New nest territories documented during the course of annual surveys to identify new nests will be added to scheduled territory investigations.

The Nesting Territory Investigation is conducted over two consecutive years. The Nesting Territory Investigation Report will include the results of habitat use investigations for those nesting territories that are not part of the Planning Area. The Lower Spokane River territory investigation results for 2013 and 2014 are included in the following Nesting Territory Investigation Report and are summarized in *Table 4.* The Northshore and Suncrest were initiated in 2014 and will conclude in 2015.

For those territories with active or alternate nests within the Planning Area, the results of the habitat-use investigations are reported within each site-specific management plan in the appendix. The Post Falls territory in Idaho was within the Planning Area therefore, the 2013 and 2014 investigation results are included and reported in *Appendix C. Site-Specific Management Plans* and summarized in *Table 4.*

4.1 Methods

The methods summarized below follow those detailed in the Plan (2010). Professional judgment was used when required to modify these methods for site-specific circumstances.

Location of Territories. Territory locations were identified by water body; Washington or Idaho county; Section, Township and Range; parcel owners; nearby developments; and land use.

Study Dates and Schedules. Observers collected two nesting seasons of habitat-use data at each of the nests. Observation periods were scheduled once every two weeks, for each nest under investigation, from March 1 through July 31st. Observation periods occurred from either (i) first light to mid-morning or (ii) two to three hours before sunset to dusk. A combination of morning and evening observation data was collected for each territory under investigation. The observation periods were extended into early afternoon for investigations conducted with watercraft.

Study Methods. During each observation period, eagle activity was recorded on standardized data forms in a time-interval format referenced to locations marked on a map and/or recorded by GPS. The information documented included: begin and end time, eagle (female, male, or

juvenile), location (referenced to map/ or with GPS), activity, disturbances, and other pertinent information described in the Plan. Observers summarized habitat use by the number of minutes each eagle spent using each habitat feature. Time-interval records that include observations of agitated behavior were summarized by the type of disturbance, frequency, duration, and distance to the source of disturbance.

Observers followed nesting eagles as far as safely and legally possible during the observation period. Observations were conducted from water and/or land, and a variety of vantage points were used. The observation locations were marked on a map or recorded by GPS.

Eagle activities, locations, and habitat features referenced during the investigation were entered into a spatially-linked GIS database after two years of investigations. Habitat use was summarized by the number of minutes each eagle spent using each habitat feature. GIS analysis was used to identify, delineate and quantify the bald eagle nesting territories, home range, primary use areas, and key use sites from the data collected during the field investigations.

Home range, Nesting territory, Primary use areas, Key use sites, and Disturbances. Territory size and shape are affected by topography, available tree structure and prey base. Home range is defined as the geographic area defined by movements and locations of bald eagles. The area may be defined annually, seasonally, daily or any part thereof (Montana Bald Eagle Working Group 1994). Territory observations were conducted from March 1 through July 31st; during the nesting and brood rearing periods. Therefore the home range boundaries were delineated using the extent of eagle movement during this observation period and supplemented with relevant information from other sources. Movement and location during the fall and winter were not investigated and were therefore not included as part the home range in this report.

The nesting territory includes primary use areas and key use sites occupied by eagles during the period of March 1st through July 31st. Primary use areas were defined as areas occupied by eagles greater than 75% of the time recorded during investigations. Key use sites include nests, primary perches, and roosting stands. Nesting territory boundaries were delineated by incorporating a 660-foot buffer around the active nest sites and a 300-foot buffer around the primary perches to encompass the flight patterns between these sites.

Disturbances are those activities noted during investigations or from other sources that resulted in disturbance or agitation to nesting eagles and/or reduced the quality or availability of local nesting habitat.

4.2 Results

Table 4 summarizes the results of the 2013 and 2014 consecutive seasons of nesting territory investigations for the Lower Spokane River and Post Falls bald eagle territories and those from previous annual reports.

Table 4. Bald Eagle Nesting Territory Investigation Summary

Territory Name	Territory Number	Planning Area	Distance to Nearest Nest	Location	Study Dates	Home Range Estimate	Nesting Territory Estimate	Disturbance to Eagles or Habitat
Lower Spokane River, WA	06W2209	No	2.1 miles	RM 33.3	2013/ 2014	208 ac.	88 ac.	Osprey, other eagles, human activities.
Post Falls Dam, ID	07I08001	Yes	5.9 miles	RM 102	2013/ 2014	201 ac.	42.5 ac.	Osprey, other eagles, construction
Whalen, WA	06W2973	Yes	1 mile	RM 44.5	2012/ 2013	675 ac.	120 ac.	Osprey, other eagles, anglers.
Long Lake South, WA	06W2209	Yes	2 miles	RM 39.5	2012/ 2013	800 ac.	260 ac.	Other eagles, ranching operations.
Northshore, WA	06W10401	Yes	2 miles	RM 36	2014/ 2015	TBD	TBD	TBD
Suncrest, WA	06W10301	No	2 miles	RM 53	2014/ 2015	TBD	TBD	TBD

4.2.1 Lower Spokane River Nesting Territory Investigation Report

Location. The Lower Spokane River bald eagle territory is located along the Spokane River at river mile 33.3 in Stevens and Lincoln County, Washington. Stevens County is north of the Spokane River center channel; Lincoln County is located south. The territory is located primarily in Section 17, Township 27 north and Range 39 east, but also extends into adjacent sections. Parcel owners in the bald eagle territory area include private properties, tribal lands, and Avista-owned lands.

Habitat is generally undeveloped seral conifer forest with nearshore riparian and aquatic habitat. The bald eagle territory is bisected perpendicularly by the SR 231 bridge of the Spokane River. Eagle View Lane is an unpaved, private, dead end, residential roadway that runs parallel and south of the Spokane River. Electric utility and telephone lines are located along Eagle View Lane. Development includes Avista facilities, Union Gospel Mission Camp, adjacent residential and the private lands. These developed areas have buildings, utilities, limited access roads, and recreational uses. Some of the residences are year-round. The closest proximity to residence is about 600 feet from the 2013 and 2014 active nest. The Long Lake Dam picnic, recreation, and launch area is about 1/3 mile upstream from the nest. The Long Lake Dam and powerhouse is located over ½ mile upstream and east of the nest. The dam facility cannot be seen from nest but during nesting season water released at the spillway can be heard. Water levels fluctuate in the Spokane River and are controlled by the dam. Other land use in the vicinity includes forest practice operations and ranching operations.

Study dates and Schedules. Territory observation periods in 2013 and 2014 were conducted once every two weeks from March 1st through July 31st as detailed in the Plan. A combination of

morning and evening data was collected. A total of 11 territory investigation observations were conducted per year, for a total of 22 territory investigation observation dates in 2013 and 2014.

Study methods. Study methods detailed in the Plan for investigations produced time-interval records about eagle activities, locations, habitat use, and potential disturbances in order to characterize home ranges nesting territory, primary use areas, and key use sites. The data identified disturbances or potential disturbances to nesting eagles. Background research of the territory area, annual monitoring reports, landowner communications, agency communications, and supplemental notes provided information about ongoing activities and those that may or have caused loss or degradation of habitat within a nesting territory.

Results. The results of habitat-use investigations include a brief narrative and map conveying the information about home range estimates, primary use areas, key use sites, and disturbances to nesting eagles or eagle habitat. Home ranges, nest territories, nest sites, perch trees, and night roost stands are not permanent locations and are anticipated to change over time.

Productivity of the breeding pair has been variable. In 2012 the pair fledged two young. In 2013 the nest had two nestlings, but subsequently failed in late May due to non-specific causes. In 2014, the pair fledged one young.

Home range estimates. The home range is approximately 208 acres: about 1.5 miles long and up to 0.33 miles wide as shown in *Figure 3.* The home range primarily encompasses the Spokane River and shorelines between Long Lake dam and Chamokane Creek. The home range is primarily within private holdings and Avista-owned lands.

Nesting territory estimates. The nesting territory is approximately 88 acres; about 0.88 miles long along the Spokane River and up to 0.25 miles wide as shown in *Figure 3.* Nesting territory boundaries were delineated on the maps incorporating primary use areas. The method to determine the nesting territory used a 300-foot buffer around primary perches to encompass the flight patterns between these sites. A 660-foot buffer is a maximum buffer used at active nest sites following USFWS (2007) guidelines. For the purposes of this report, the primary prey capture areas are also included in the nesting territory.

The nesting territory is long and narrow. Habitat in the nesting territory is primarily seral conifer stands and the aquatic areas of the Spokane River. The upland nesting territory is located primarily on the steep riverbanks and river terraces north and south of the river. The river is about 300 feet wide in the nesting territory.

Primary use areas defined as occupied by eagles greater than 75% of the time, included the one 2013/2014 nest site, eight primary perches, and a night roost stand.

Key use sites (including nest sites, primary perches, prey capture sites, and roost stands)

Nest sites. The one active nest was located in a Ponderosa pine with an overhead canopy. It was in one of the tallest trees on the ridge overlooking the territory, less than 100 feet to shore. This nest was located within the Union Gospel Mission property. No alternate nest has been identified.

Primary perches. Perch locations for territory defense were typically large diameter, tall trees or snags situated along the river to give a view of the nest, upstream, downstream. They appeared to be strategically located primarily for prey capture but also afforded a view to the

nest area. Perch locations overlooking prey capture sites were live ponderosa or snags located on the shoreline.

Prey capture sites. Eight prey capture locations were identified. Aquatic areas used for prey capture extended up to 2,000 feet from the nest. Prey capture sites were typically in the pools and backwater areas of the river. Prey species were primarily aquatic fish species. Upland prey captures of ground squirrels were less frequently observed on the north riverbank.

Roost stands. The Lower Spokane River night roosting stand was located in a thicket of trees west of the nest site on the Union Gospel Mission property. Two communal roosting stands were identified outside of the nesting territory, but within the home range: near the base of the Long Lake Dam spillway and at the confluence of Chamokane Creek and Spokane River.

Disturbances

Typically eagles are not disturbed by routine use of roads, homes, or other facilities particularly where such use was present prior to successful nesting in a given area. The Lower Spokane River breeding pair appeared acclimated to existing human activities and habitat conditions. There are numerous land use changes in the nesting territory and home range. See *Figure 3.* There were also numerous ongoing activities observed, some alone or in combination had the potential to result in loss or degradation of habitat within a nesting territory. Activities noted below are listed according to highest frequency. The activities were either observed during investigations to disturb nesting eagles, or to have the potential to disturb the nesting eagles. Despite these disturbances, this nest site has been active for over six years according to local residents.

Osprey. Ospreys were observed to be the most frequent disturbance of the nesting pair. The Lower Spokane River territory has had three documented active osprey nest locations within about a mile of the nest. The closest was a tree nest in 2013 about 850 feet upstream and at platform in 2014, about 1,200 feet upstream. Another location was located above the dam spillway on a utility structure platform. There was probably a nest further downstream of the territory judging from the flight patterns up and down the river. The ospreys were first observed in the area in mid-April. At this point the eagle pair had been through courtship, nest-building, and incubation was underway. Prior to the osprey arrival the nesting eagles would hunt and perch along the full extent of the north and south shorelines. The nesting eagles typically stayed west of the bridge once the osprey arrived. In 2013, they occasionally hunted east of the bridge but then generally perched on the north side of the river. In 2014 the nesting eagles were rarely observed east of the bridge. Other osprey from downstream would fly overhead through the home range, nest territory, and occasionally near the nest. Typically the male eagle drove them off when near the nest.

Competition from other eagles. In 2014**,** other adult eagles were present in the nesting territory. Through mid-March there was up to six adults observed simultaneously in the nesting territory prior to incubation starting. When incubation started the first week of April only one pair remained. Although the same nest was used in 2013 and 2014, because at least one eagle used some entirely different perch locations during the 2014 nesting season, it is proposed that one of the 2013 pair may have been replaced in 2014.

In 2013 and after incubation commenced 2014, other adults were occasionally observed flying overhead along the river or along the home range territory margins to and from the

communal roost stands. The closest occupied nest of another bald eagle pair was the Northshore nest, upstream and about two miles due east of the Lower Spokane River nest. The Northshore nest and eagles could not typically be visible from the nesting territory, primary use areas, and key use sites of the Lower Spokane River territory because of topography. The communal roost stand at Long Lake dam was visible from the Lower Spokane River home range but not the nesting territory, or nest due to topography.

In 2014 immature eagles were regularly observed flying overhead or lingering in the adult nesting territory through the nesting season. In 2013, an immature eagle was observed in the nesting territory only at the end of the nesting season.

Potential predators or competition. In 2013 the nest failed with two nestlings, the cause of failure was determined to be due to non-specific causes. However, at the beginning of the 2014 nesting season, prior to incubation, a great blue heron was perched in a tree top within 50 feet and level with of the nest. During the investigation period, great blue herons were observed flying over the nest, two to three times per session. Heron were often observed feeding in the shallow downstream from the spillway. Heron are known to prey on avian eggs or nestlings. Heron predation may have caused the 2013 nest failure.

In 2013 and 2014, there were up to a dozen turkey vultures perching simultaneously and repeatedly observed on snags located about 2,000 feet south of the nest. A sharp-shinned hawk was observed in the nesting territory in 2013. A red-tailed hawk was observed in the nesting territory in 2014. These other types of potential disturbance could directly disrupt nesting activities or indirectly affect through competition for prey.

Human activity. With the nearby human land use there are many potential human actions that may disturb eagles such as the highway, residential and private property use and recreation on the river. In 2014 there was a pole building constructed in two weeks of April during incubation about 600 feet from the nest. The eagles did not appear disturbed by the workers actions. In April 2013, SR 231 bridge maintenance personnel used a compressor to clean the bridge about 400 feet from the nest. The male did not forage or defend the territory during that event and appeared agitated, perching in the night roost area. The female was incubating and visibly distressed during that event.

Other human recreation activities observed but without disturbance included daily walks by local residents along Eagle View Lane with their leashed dogs. The Gospel Mission Camp boundary is located about ¼ mile northwest of the nest. No camp users were observed during the investigations. The Long Lake Dam picnic, recreation, and launch area was observed to be used by recreationalists beginning in late June and through late July. Early nesting efforts were not impacted as the nests were built, eggs laid, and typically hatched by June.

There is limited land based-motorized vehicle access for authorized personnel to the nest territory, primary use areas, and key use sites. The regular traffic on SR 231 and Eagle View Lane had no observed disturbances to the nesting pair.

Avista Project operations. There are no Avista infrastructure elements located in the Lower Spokane River home range, nesting territory, and the facility is out of line of sight from the

nest. Observed Avista operational activities during the territory investigations included high water discharge and occasional associated sounds from water spilling over the dam. There were high numbers of eagles at the communal roost stand foraging downstream of the spillway during water release.

5.0 REFERENCES

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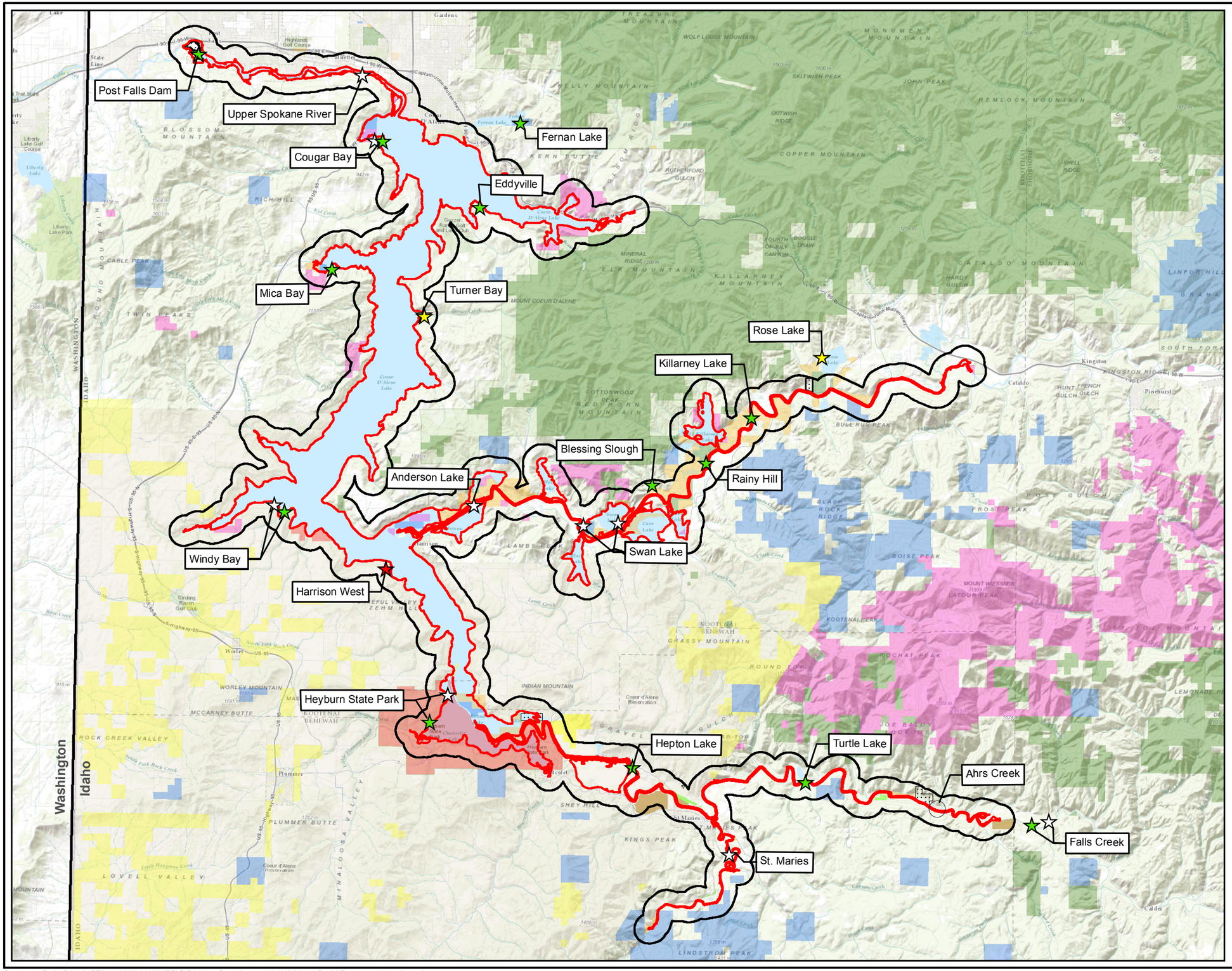
FIGURES



LEGEND

2014 Bald Eagle Nests

- New
- Active, Successful
- Active, Not Successful
- Active, Success Unknown
- Not Active/Alternate
- Collapsed
- Post Falls HED Boundary
- Monitoring Area
- Avista-Owned Land/Planning Area

Surface Land Management/Ownership

- Benewah County
- Bureau of Land Management
- City of St. Maries
- Forest Service
- Idaho Department of Fish and Game
- Idaho Department of Lands
- Idaho Department of Parks and Recreation
- Other Idaho State Agencies
- Tribal Land

Bald eagle nest location data are confidential and are not for public circulation

N

0 4

Scale in Miles

Map Projection:
Idaho State Plane
West Zone (ft) NAD 1983

Source:
Avista (HED areas, land ownership),
USDA-NRCS (quadrangle county mosaics),
Bureau of Land Management (surface land management),
WDFW (bald eagle locations),
David Evans and Associates, Inc. (bald eagle locations),
Background Service Layers: ESRI, DeLorme, NAVTEQ, TomTom, Intermap, USGS

FIGURE **1**

BALD EAGLE NESTING LOCATIONS ASSOCIATED WITH WATERS IMPOUNDED BY THE SPOKANE RIVER PROJECT IN IDAHO

AVISTA/ECOLOGY 401 CERT/WA

Whalen
Willow Bay
Powerball
Four Mound
Lower Spokane River
North Shore
Long Lake South
Sportsman
Suncrest
Riverside Launch
Charles-Mass
Deep Creek

LEGEND

2014 Bald Eagle Nests

- New
- Active, Successful
- Active, Not Successful
- Active, Success Unknown
- Not Active/Alternate
- Collapsed
- Monroe St./Upper Falls HED Boundary
- Nine Mile Falls HED Boundary
- Long Lake HED Boundary
- Monitoring Areas
- Avista-Owned Land/Planning Area

Surface Land Management/Ownership

- Tribal Land
- Washington State Land
- Riverside State Park

Bald eagle nest location data are confidential and are not for public circulation

N

0 4

Scale in Miles

Map Projection:
Washington State Plane
North Zone NAD 1983

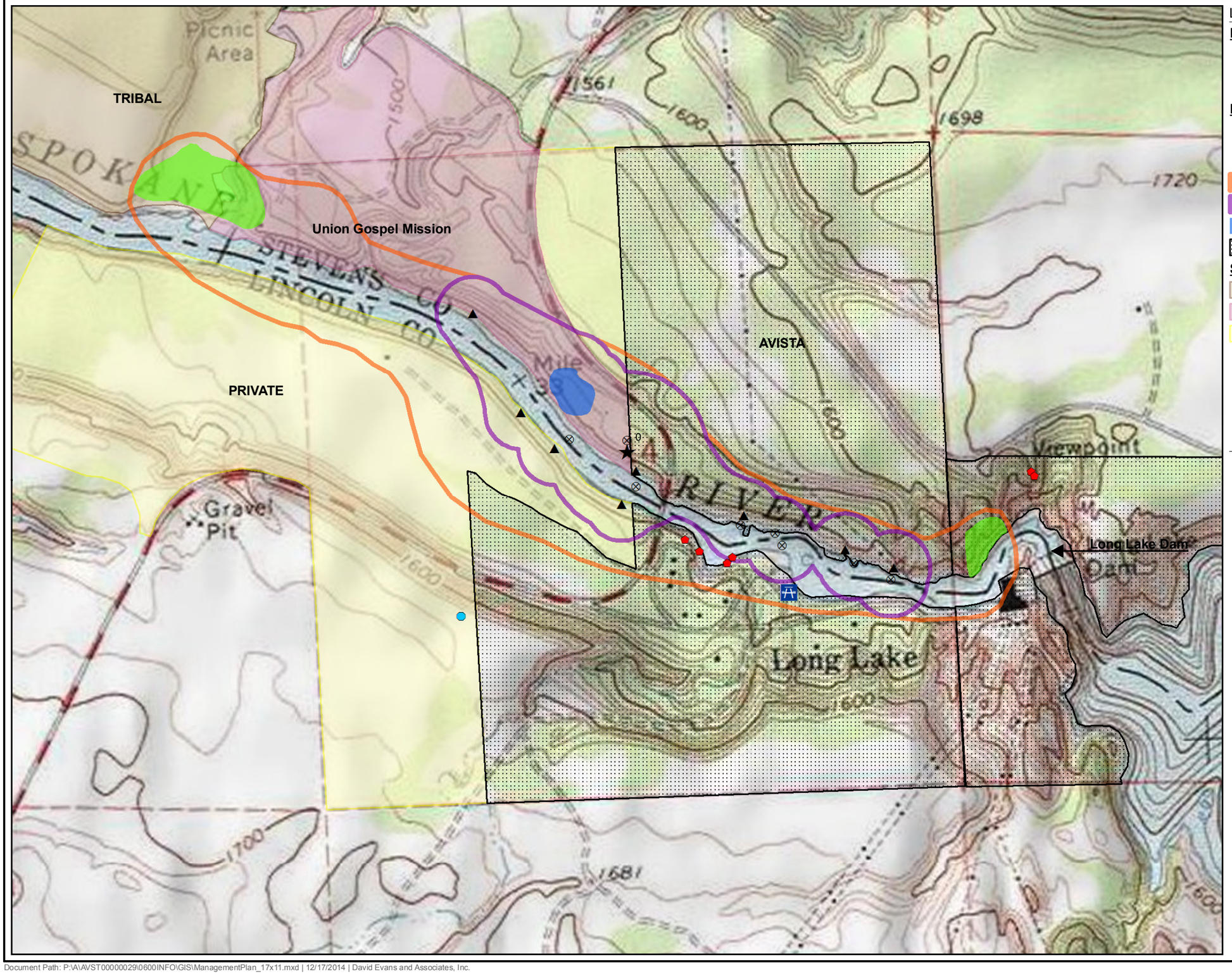
Source:
Avista (HED areas, land ownership),
USDA-NRCS (quadrangle county mosaics),
Bureau of Land Management (surface land management),
WDFW (bald eagle locations),
David Evans and Associates, Inc. (bald eagle locations),
Background Service Layers: ESRI, DeLorme, NAVTEQ, TomTom, Intermap, USGS

This figure was originally produced in color. Reproduction in black and white may result in a loss of information.

FIGURE **2**

BALD EAGLE NESTING LOCATIONS ASSOCIATED WITH WATERS IMPOUNDED BY THE SPOKANE RIVER PROJECT IN WASHINGTON

AVISTA/ECOLOGY 401 CERT/WA



LEGEND

Key Points of Interest

- Osprey Nest
- Turkey Vulture Roost
- Picnic Area

Bald Eagle Territory Details

- Active
- Alternate
- Prey Capture Sites
- Primary Perches
- Home Range
- Nesting Territory
- Night Roost
- Communal Roost
- Night/Communal Roost
- Avista-Owned Land/Planning Area

Surface Land Management/Ownership

- Tribal
- Union Gospel Mission
- Private

Bald eagle nest location data are confidential and are not for public circulation

N

0 0.3

Scale in Miles

Map Projection:
Washington State Plane
North Zone NAD 1983

Source:
Avista (HED areas, land ownership),
USDA-NRCS (quadrangle county mosaics),
Bureau of Land Management (surface land management),
WDFW (bald eagle locations),
David Evans and Associates, Inc. (bald eagle locations),
Background Service Layers: ESRI, DeLorme, NAVTEQ, TomTom, Intermap, USGS

This figure was originally produced in color. Reproduction in black and white may result in loss of information.

FIGURE **3**
LOWER SPOKANE RIVER
BALD EAGLE TERRITORY
AVISTA/ECOLOGY 401 CERT/WA

APPENDIX A

2014 OCCUPANCY AND MONITORING FORMS

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Anderson Lake Territory/Nest Number: 07I03101 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☒ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☐ (3) Fair ☐ (4) Poor ☒ (5) Nest Destroyed: destroyed or collapsed in 2012

Nesting Determination
☐ (1) Status Unknown ☒ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy							
February 1 – March 31 (pre-egg laying and early incubation)	3/26/14	∅		∅			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/21/14	∅		∅			
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/26/14	∅		∅			

 Territory/Nest Number: 07I.03101

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure: no adult eagles

Nest Abandoned (Yes/No), date: 2012

Reason for abandonment: collapsed not rebuilt

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Many osprey nests, Trail of CDA

Prepared by: DA **Date:** 8/14/2014

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: BLESSING SLOUGH Territory/Nest Number: OTIG7601 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☑ (5) Active ☐ (6) Unsuccessful ☑ (7) Successful

Nest Condition Code
☐ (1) New ☑ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☑ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26/14	GOOD	NESTING	1 AD IN AREA	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	5/21/14	Good		1 AD	NA	1	
Determine Productivity **June 15 – July 31** (late nestling and fledging)	6/25/14	Good		—		2	

 Territory/Nest Number: 07I07601

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: Cougar Bay Territory/Nest Number: 07I03502 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy							
February 1 – March 31 (pre-egg laying and early incubation)	3/28/14	Good		∅			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/22/14	"		2 AD		2JUV	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/26/14	"				2JUV	

 Territory/Nest Number: 07I0350 2

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) residential land use, osprey

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Eddyville Territory/Nest Number: 67E07701 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)							
	3/28/14			∅			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/22/14	Good		1 AD		1 JUV	
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/26/14	Good				2 JUV	

 Territory/Nest Number: 07I07701

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Residential nearby

Prepared by: DA **Date:** 8/14/2014

Reviewed by: L. Staglis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: FALLS CREEK Territory/Nest Number: 07I03 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☑ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☑ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☑ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/14/14*	FAIR (3)	No BAEA observed	NONE		0	
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	5/14/14	FAIR		1 AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/24/14					1 juv	

* Observed nest for 1 HR

 Territory/Nest Number: 07I 03703

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest) Jetboat race

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Ranch operations

Prepared by: DA **Date:** 8/14/2014

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: Fernan Lake Territory/Nest Number: 07I03402 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)							
	3/28/14			♀			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/22/14	Good		1 AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/26/14	Good				1 JUV	

 Territory/Nest Number: 07I 03402

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) residential land use nearby

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: HARRISON WEST Territory/Nest Number: OSI10001 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☒ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☐ (3) Fair ☐ (4) Poor ☒ (5) Nest Destroyed: Collapsed

Nesting Determination
☐ (1) Status Unknown ☒ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26/14	Poor	—	Ø			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/4/14	Poor	—	Ø			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25	destroyed/collapsed		Ø			

Territory/Nest Number: ISI 10001

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: No adults observed, nest went from poor condition to an observed collapsed nest. Territory may have been abandoned.

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: J. Stragis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: HEPTON Territory/Nest Number: 07I1001 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☑ (5) Active ☐ (6) Unsuccessful ☑ (7) Successful

Nest Condition Code
☐ (1) New ☑ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☑ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/14/14	Good	1 AD BAEA → INC.	1 AD BAEA	INC	–	–
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/21/14	Good		1 AD		2 JUV	
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/24/14					2 JUV	

Territory/Nest Number: 07I1010 1

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Residential, Hwy 3 adjacent

Prepared by: DA **Date:** 8/14/14

Reviewed by: L Stagis **Date:** 10/27/14

Page 1 of 2

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: ~~HEYBURN~~ (SOUTH NEST) Territory/Nest Number: 07I05702 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/27/14	GOOD	Nesting	1 AD BAEA	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/21/14	Good		1 AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25/14	Good				1 JUV	

 Territory/Nest Number: 07I05702

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Park roadways, hiking, Trail of CDA

Prepared by: DA **Date:** 8/14/14

Reviewed by: J. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: KILLARNY Territory/Nest Number: OTT01702 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26	GOOD	NESTING	1AD BAEA	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/21/14	GOOD		1AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25/14	GOOD				1 JUV	

Territory/Nest Number: 07I01702

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staglis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Mica Bay Territory/Nest Number: 07I 05401 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)							
	3/28/14	Good		✓			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/22/14			2 AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/26/14					2 JUV	

 Territory/Nest Number: 07I05401

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Residential land use.

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Post Falls Territory/Nest Number: 07108061 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/6/2014	good		2 adults,	♀ inc	–	–
	3/18/	"		"	"	–	–
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	4/2/2014	"		2 adults	♀ inc	–	–
	4/17/	"		"	"	–	–
	5/1	"		"	"	–	–
	5/15	"	Juv in nest	"	—	1	?
Determine Productivity **June 15 – July 31** (late nestling and fledging)	5/30	"	"	"	—	1	?
	6/11	"	Juv @ nest	"	AD not @ nest	1	
	6/26	"	"	"	—	1	
	7/9	"	"	"	—	1	
	7/23	"	"	"	—	1	

Territory/Nest Number: 07I08001

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:	prior to 3/6/14	**Date of adult dispersal:**	—
Date of egg laying:	incubating @ 3/6	**Clutch size:**	—
Date of hatching:	between 5/1 and 5/14	**Date/Number of fledglings at dispersal:**	—
Date of fledging:	—	**Banding data:**	—

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest) S. channel of Post Falls Dam had construction activities in 2014

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) see above

Prepared by: DA **Date:** 8/14/14

Reviewed by: J. Stragis **Date:** 10/27/2014

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: RAINEY HILL Territory/Nest Number: 07I07402 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26	GOOD	NESTING	1 AD BAEA	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/24/14	Good	"	1 AD		2 JUV	
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25	"				1 JUV	

 Territory/Nest Number: OTI0702

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: J. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Rose Lake Territory/Nest Number: OTI01902 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☒ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy							
February 1 – March 31 (pre-egg laying and early incubation)	3/14/14 (F+G)	FAIR		1 AD			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/21/14 (F+G)	FAIR	?	Ø			
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/24/14	FAIR		Ø			

 Territory/Nest Number: Rose Lake 07IO1902

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Residential nearby

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stragis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: ST MARIES Territory/Nest Number: 07I04301 Observer Initial: DA Reviewer Initial: KS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☒ (1) Unoccupied ☐ (2) Other Species ☒ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☒ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/14/14	Good	No BAEA observed on NEST	AD BAEA	PER - near nest	✓	✓
	3/27/14	11		Ø			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/21/14			AD?			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25/14		Ø	Ø		Ø	

Territory/Nest Number: 07I04301

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: 5/21/14 or earlier

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: SWAN LAKE Territory/Nest Number: OTI02002/01 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☑ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☒ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26	(occ)	ø	1 AFBAEA ON BLUE LAKE	ø		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/21/14	"	ø	ø	ø		
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25/14	"	ø	ø	ø		

 Territory/Nest Number: OTI02002/1

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: no adults @ nest

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Turner Bay Territory/Nest Number: 07I06603 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☐ (3) Fair ☒ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)
call it a failure

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)							
	3/28			∅			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	5/14	poor	AD mortality w/ nestlings w/ BOPNW			2	
	5/22/14			∅			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/22/14			∅			
	9/2/14	2 fledglings @ BOPNW				2	fledgling

see back page

Territory/Nest Number: 67T06603

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest) other AD eagles @ nest. The landowner reported to Birds of Prey NW that there was a territory dispute - incubating female was killed. Landowner retrieved the body. Nestling were retrieved by a BOPNW climber and are at the BOPNW. They will be released fall of 2014. Contact w/ Janie Fink 9/2/2014, 208-582-0797, janie@bopnw.org

~~Habitat Alterations (record type, extent, and proximity to nest)~~

Ongoing Disturbances (record type, extent, and proximity to nest) Near highway - construction @ intersection and up Burma road late 2013, and 2014 - winter, spring, + summer

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: TURTLE LAKE Territory/Nest Number: OTI 06603 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/14/14	GOOD	INC	1 AD BAEA	INC		
	3/27/14	"	"	"	"		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	~~DATE~~	~~GOOD~~		~~1 AD INC~~		1	
	5/16/14		"	1 AD	"		
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/24/14						
						1 JUV	

 Territory/Nest Number: 07I02402

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Ranch, residence, boat race - May 24+25th

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/2014

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20 14

I. ID

Territory Name: Upper Spokane River Territory/Nest Number: OTI0201 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☒ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☐ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☒ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)							
	3/28/14	Poor	Ø	Ø			
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)							
	5/22/14	Poor	Ø	Ø			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/26/14	Poor	Ø	Ø			

Territory/Nest Number: 07I10201

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Development across river, boating / docks on River

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staglt **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: WINDY BAY Territory/Nest Number: 08I 00103 Observer Initial: DA Reviewer Initial: ES

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/26	GOOD	Nesting	1 AD BAEA	INC		
	3/26			1 AD BAEA	PER		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	5/21/14	Good		2 AD			
Determine Productivity **June 15 – July 31** (late nestling and fledging)							
	6/25/14	Good				2 JUV	

 Territory/Nest Number: 08100103

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Staggs **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: CHARLES-MAAS Territory/Nest Number: 6W3053 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/4	GOOD	FLYING TOWARDS NEST	1 AD BA			
	3/21						
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	6/4	Good		1 AD BA	INC		
Determine Productivity **June 15 – July 31** (late nestling and fledging)	7/2	Good		1 AD BE / 1 SBE	PER	1	

 Territory/Nest Number: GW 3055

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) WA State Park and residential land use.

Prepared by: DA **Date:** 8/14/14

Reviewed by: J. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20__

I. ID

Territory Name: LONG LAKE SOUTH Territory/Nest Number: GW 22010 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☒ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☒ (5) Nest Destroyed: Collapsed by 6/4

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☒ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/24	GOOD	1 ON NEST	1 AD BAEA	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	6/4		—	—	—	—	—
Determine Productivity **June 15 – July 31** (late nestling and fledging)	7/2	collapsed		NO AD BE		0	

 Territory/Nest Number: 6W2209

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) Ranch/residential use in BAEA nesting buffer.

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: Lower Spokane River WA Territory/Nest Number: OkW 10101 Observer Initial: LS Reviewer Initial: DA

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/6/14	3	Ø	M+F upstream			
	3/17/14	2	nest building	M+F	Perching/not inc.		
	4/3/14	good	complete	2AD, 1 on nest	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	5/1/14	"	"	"	"		
	5/14/14	"	"	"	BRD	1juv	1B
	5/23/14	"	"	2 AD, Feeding juv	Perching	1juv	
	6/12/14	"	"	"	"	1juv	3B
Determine Productivity **June 15 – July 31** (late nestling and fledging)	6/23/14	"	"	2 AD	Perching	1juv	
	7/11/14	"	"	"	"	1juv	fledged
	7/25/14			AD - dispersed upstream		1juv	fledged

 Territory/Nest Number: 06W1010 1

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	7/25
Date of egg laying:	prior to 4/3	**Clutch size:**	1
Date of hatching:	prior to 5/14	**Date/Number of fledglings at dispersal:**	
Date of fledging:	prior to 7/11	**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest)

Prepared by: L. Staglis **Date:** 8/21/14

Reviewed by: L. Staglis **Date:** 8/21/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: NORTHSHORE Territory/Nest Number: 06W10401 Observer Initial: LS Reviewer Initial: DA

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☑ (5) Active ☐ (6) Unsuccessful ☑ (7) Successful

Nest Condition Code
☐ (1) New ☑ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☑ (6) Successful

Number of Fledglings: 2 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/21	GOOD	1 AD BAEA ON NEST	1 AD BAEA	INC		
	(3/6)	Good	complete	2 AD, 1 on nest	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	4/3/14	Good	"	2 AD, 1 on nest	INC		
	4/30/14	Good	"	AD's away from nest more	BRD	?	
	5/13/14	Good	"			2 juv	3A/2
Determine Productivity **June 15 – July 31** (late nestling and fledging)	6/18/14	"	"	2 AD		2 juv	3B
	7/9/14	"	"	2 AD		2 juv	both fledged
	(6/24/14					2 juv	1 fledged
	7/24/14			only 2 AD	Ø	Ø	

 Territory/Nest Number: 06W10401

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	7/24/14
Date of egg laying:		**Clutch size:**	2
Date of hatching:	4/30/14 or earlier	**Date/Number of fledglings at dispersal:**	7/9/14 : 2
Date of fledging:	first 6/24, second 7/9	**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest) Ravens harrassing incubation BASA over 1 hour on 4/16/14.

Habitat Alterations (record type, extent, and proximity to nest) thinning of forest 2013-2014, 800' & closest proximity Boat launch & vault toilets & campsite 800' from nest, mostly outside of nesting territory, ie upland. But a few perch loss

Ongoing Disturbances (record type, extent, and proximity to nest) three. Boating & camping ~800' south

Prepared by: L. Stagis **Date:** 8/21/2014

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: SUNCREST Territory/Nest Number: 06W10302 Observer Initial: LS Reviewer Initial: DA

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☑ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☑ (4) Occupied ☑ (5) Active ☑ (6) Unsuccessful ☐ (7) Successful

Nest Condition Code
☐ (1) New ☑ (2) Good ☑ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☑ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☐ (6) Successful

Number of Fledglings: 0 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy	3/21	OCCD	1 ON NEST	2 AD BAEA	INC		
February 1 – March 31							
(pre-egg laying and early incubation)	5/2/14	Good	nesting	2 AD, 1 on nest	INC		
	5/14/14	Good	"	2 AD/not at nest			
Update Nesting Status	6/4		∅	∅	—	—	—
April 1 – June 15	(5/29/14	fair	∅	2 AD/not at nest			
(late incubation and nestlings)	6/30	"		"			
Determine Productivity	7/2		∅	∅	—	—	—
June 15 – July 31	7/10		∅	∅	∅	∅	
(late nestling and fledging)	7/28		∅	∅	∅	∅	

 Territory/Nest Number: 06W10302

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: 5/14/14 or earlier, during incubation.

Reason for failure: not determined

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) residences above nest, trail below nest, sometimes within 100' of nest

G-H owls, nearby - in nest territory.

Prepared by: J. Shagis **Date:** 8/21/14

Reviewed by: J. Shagis **Date:** 8/21/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
20__

I. ID

Territory Name: WHALEN Territory/Nest Number: GW 2973 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☐ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/21	Good	ON NEST	1 AD BAEA	INC Near Nest		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	6/4	Good	SOARING	1 AD		1 JUV	
Determine Productivity **June 15 – July 31** (late nestling and fledging)	7/2	Good		Ø			
	7/24				all	fledged	

 Territory/Nest Number: GW2973

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) OSPREY

Prepared by: DA **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
2014

I. ID

Territory Name: WILLOW BAY Territory/Nest Number: 06W10201 Observer Initial: DA Reviewer Initial: LS

II. SURVEY SUMMARY

Survey Code
☐ (1) Not Checked ☐ (2) Not Located ☐ (3) No Initial Occupancy Determination ☐ (4) No Nesting Status Update ☐ (5) Productivity Not Determined
☒ (6) Complete Survey, Productivity Determined

Status Code
☐ (1) Unoccupied ☐ (2) Other Species ☐ (3) Single Adult ☐ (4) Occupied ☒ (5) Active ☐ (6) Unsuccessful ☒ (7) Successful

Nest Condition Code
☐ (1) New ☒ (2) Good ☐ (3) Fair ☐ (4) Poor ☐ (5) Nest Destroyed: _____

Nesting Determination
☐ (1) Status Unknown ☐ (2) Not Active ☐ (3) Nest Abandoned ☐ (4) Active, Not Successful ☐ (5) Active, Success Unknown ☒ (6) Successful

Number of Fledglings: 1 young (at or near fledging age)

III. SURVEY RESULTS

OBSERVATION PERIOD	Date Checked	Nest Condition	Nesting Activity (construction etc.)	Adult Presence / Behavior	Incubation/Brooding Posture	Number of Young	Stage of Young
Initial Determination of Occupancy **February 1 – March 31** (pre-egg laying and early incubation)	3/24/14						
	4/30/14	Good		AD @ nest	INC		
Update Nesting Status **April 1 – June 15** (late incubation and nestlings)	6/4	Good	PGR	1 AD		1 JUV	
Determine Productivity **June 15 – July 31** (late nestling and fledging)	7/2	Good	0			0	
	7/24	Good		ø	ø	ø	

Territory/Nest Number: 06W10201

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:		**Date of adult dispersal:**	
Date of egg laying:		**Clutch size:**	
Date of hatching:		**Date/Number of fledglings at dispersal:**	
Date of fledging:		**Banding data:**	

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure:

Reason for failure:

Nest Abandoned (Yes/No), date:

Reason for abandonment:

Disturbing Activities (record type, duration, and proximity to nest)

Habitat Alterations (record type, extent, and proximity to nest)

Ongoing Disturbances (record type, extent, and proximity to nest) residences below nest.

Prepared by: L. Stagis **Date:** 8/14/14

Reviewed by: L. Stagis **Date:** 10/27/14

APPENDIX B

2014 NEW NEST DOCUMENTATION

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Ahrs Creek

Territory/nest number (if known): 07I10301

Reported by: David Armes Date: 3/27/2014

Location: T 46N R 41E Section 19 ¼ NW ¼

State: ID County: Benewah

Elevation: 2135' Aspect: flat/south

Lat/Long: 47.322432, -116.387767 Hydrologic unit: St. Joe River

Nest stratum: tree Nest height (circle ft or m): 80

Position on slope: bottomland Nest condition: good

Tree species: Cottonwood Tree height (circle ft or m): 100 DBH (circle in or cm): 36" +

Land ownership: private

USGS Quad name: St. Joe, ID

Directions to nest: St. Joe River Road, on northshore of St. Joe River, east of campground

Comments:

Observer Initial: DA Date: 3/27/2014 Reviewer Initial: LS Date: 10/22/14

Attach locator map and photos showing nest site and nest*

Google

Ahrs Creek Nest 47.322432, -116.387767

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Deep Creek

Territory/nest number (if known): 06W10901

Reported by: David Armes Date: 6/04/2014

Location: T 26N R 42 E Section 7 ¼ SE ¼

State: WA County: Spokane

Elevation: 1720 Aspect: East

Lat/Long: 47.762886, -117.550514 Hydrologic unit: Spokane River

Nest stratum: tree Nest height (circle ft or m): 80

Position on slope: ridge Nest condition: good

Tree species: Douglass-fir Tree height (circle ft or m): 80 DBH (circle in or cm): 24

Land ownership: Riverside State Park

USGS Quad name: Nine Mile Falls, WA

Directions to nest: Upstream of Nine Mile Dam, along N. Aubrey White Park Drive, on ridge before Deep Creek.

Comments:

Observer Initial: DA Date: 6/04/2014 Reviewer Initial: LS Date: 10/22/14

Attach locator map and photos showing nest site and nest

Deep Creek Nest 47.762886, -117.550514

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Four Mound

Territory/nest number (if known): 06W10501

Reported by: David Armes Date: 3/21/2014

Location: T 27 R 41E Section 6 ¼ ¼

State: WA County: Spokane

Elevation: 1680 Aspect: Northeast

Lat/Lon: 47.863N, -117.671W Hydrologic unit: Spokane River

Nest stratum: tree Nest height (circle ft or m): 65

Position on slope: ridge Nest condition: poor/good

Tree species: Ponderosa pine Tree height (circle ft or m): 95 DBH (circle in or cm): 24

Land ownership: WDNR

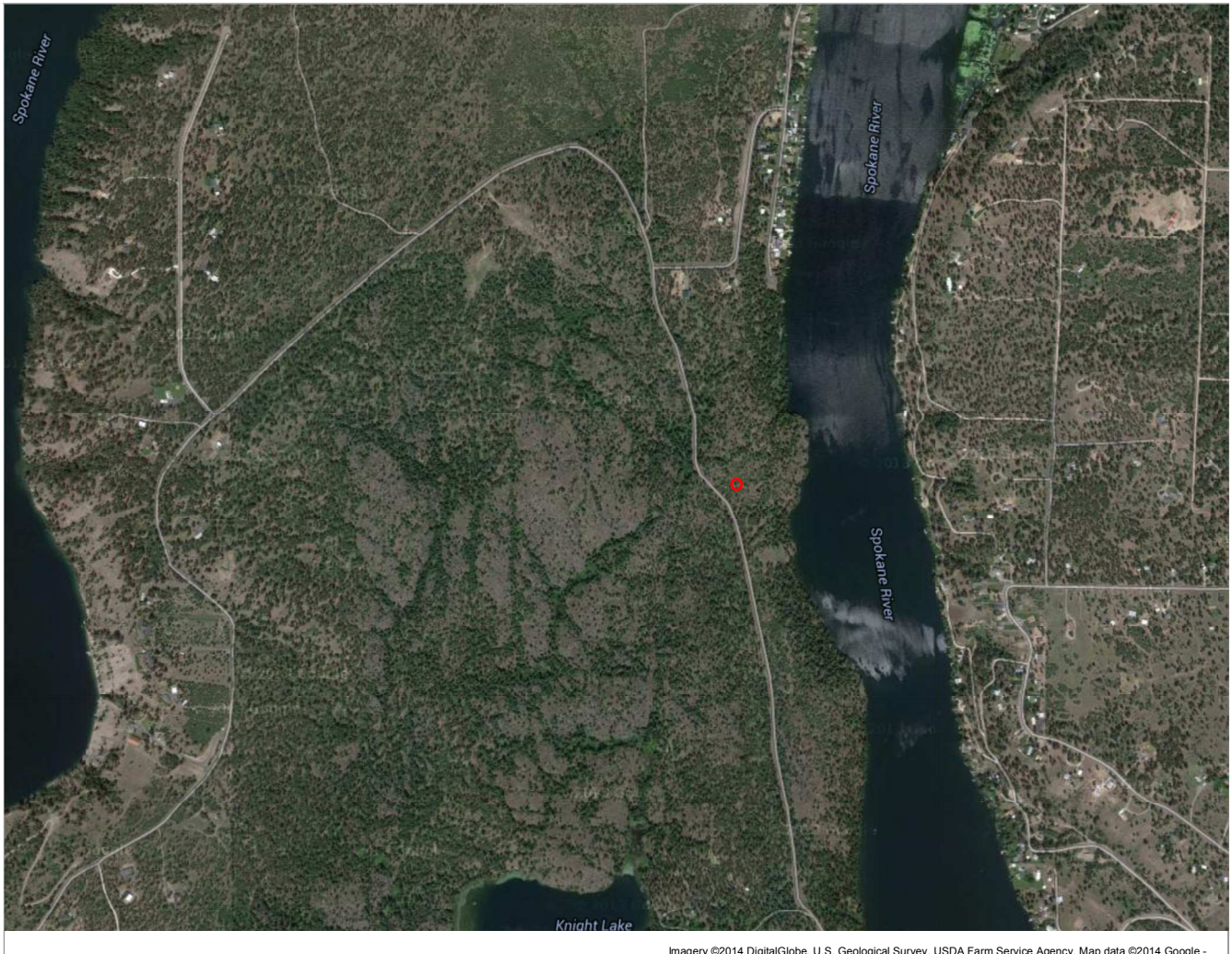
USGS Quad name: Nine Mile Falls, WA

Directions to nest: Viewed from the River. Land access unknown, but may be visible from South Bank Road or Felton on the opposite side of the River.

Comments: Two AD BAEA; one in nest and one perched above nest. Active- Incubating

Observer Initial: DA Date: 8/14/14 Reviewer Initial: LS Date: 10/22

Attach locator map and photos showing nest site and nest



Four Mound Nest 47.863, -117.671

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Powerball

Territory/nest number (if known): 06W10701

Reported by: Tim Vore Date: 6/04/2014

Location: T 27N R 40 E Section 12 ¼ NW ¼

State: WA County: Stevens

Elevation: 1540' Aspect: East

Lat/Long: N47 51 30.3, W117 42 19.9 Hydrologic unit: Spokane River

47.858305, -117.705757 corrected

Nest stratum: tree Nest height (circle ft or m): 75

Position on slope: nearshore Nest condition: good

Tree species: Ponderosa Pine Tree height (circle ft or m): 100 DBH (circle in or cm): 24

Land ownership: Avista

USGS Quad name: Four Mound Prairie, WA

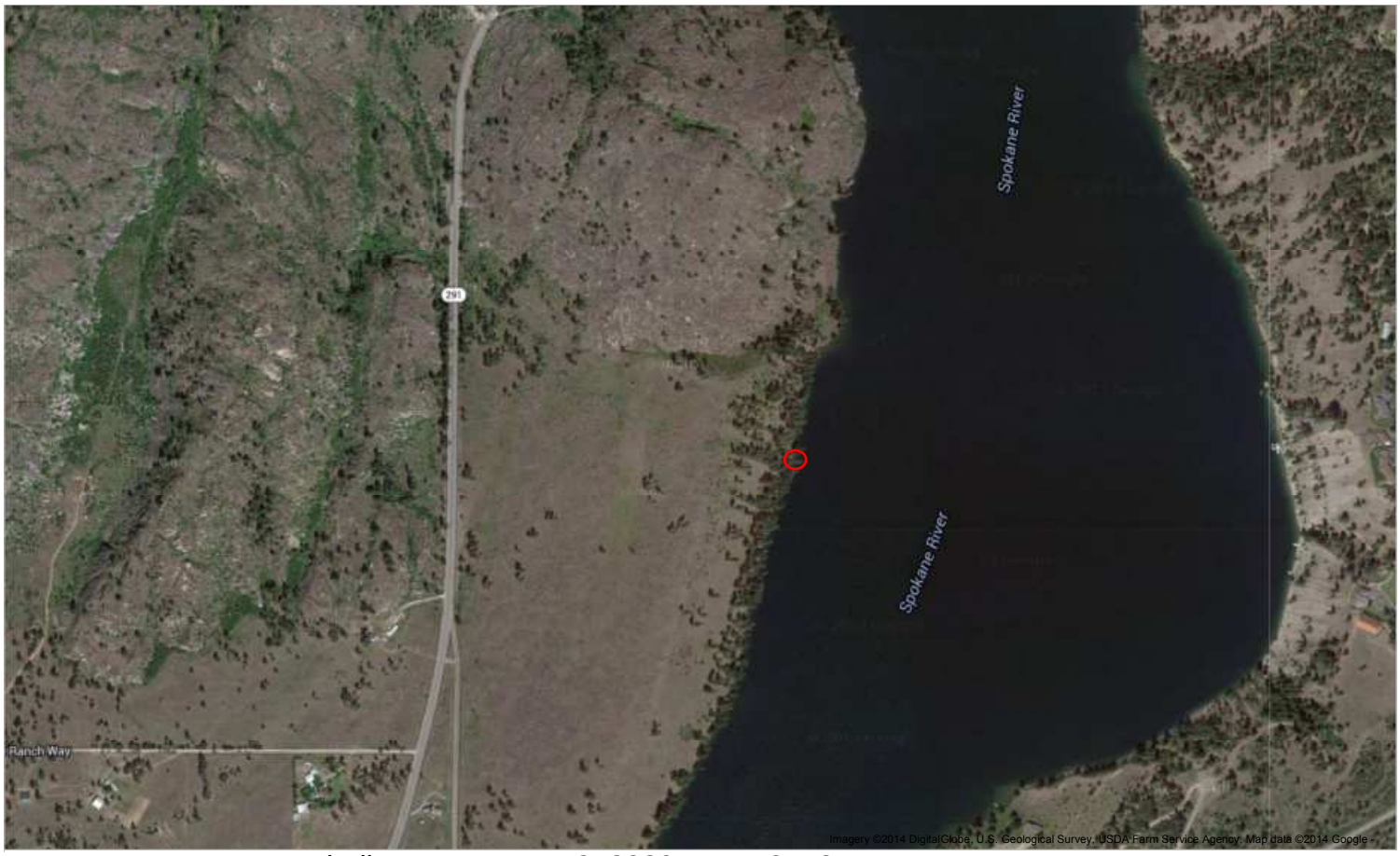
Directions to nest: 3 miles southwest of Tum Tum, east of SR 291, no road access to nest. Hike in on Avista lands? Across lake from West South Bank Road. Visible by boat, just south of power line.

Comments Three juveniles observed.

Observer Initial: TV Date: 6/04/2014 Reviewer Initial: LS Date: 10/22/14

Attach locator map and photos showing nest site and nest

Google



Powerball Nest 47.858339,-117.705781

Powerball Nest 47.858339,-117.705781

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Riverside Launch

Territory/nest number (if known): 06W10601

Reported by: Tim Vore Date: 6/04/2104

Location: T 27N R 42 E Section 32 ¼ SW ¼

State: WA County: Spokane

Elevation: 1530' Aspect: East

Lat/Long: 47.788302, -117.535102 Hydrologic unit: Spokane River

Nest stratum: tree Nest height (circle ft or m): 70

Position on slope: flat Nest condition: good

Tree species: Ponderosa Pine Tree height (circle ft or m): 95 DBH (circle in or cm): 20

Land ownership: private

USGS Quad name: Nine Mile Falls

Directions to nest: North Spokane County, Hwy 291 to the N end of N. Shoemaker Lane, then to the Spokane River and to the Riverside launch. Nest is directly opposite.

Comments: Two juveniles observed

Observer Initial: TV Date: 6/04/2014 Reviewer Initial: LS Date: 10/22/2014

Attach locator map and photos showing nest site and nest

Google

Riverside Launch Nest 47.788302, -117.535102

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Sportsman

Territory/nest number (if known): 06W10801

Reported by: Lee Stragis Date: 6/04/2014

Location: T 27N R 41 E Section 20 ¼ NE ¼

State: WA County: Spokane

Elevation: 1545' Aspect: East

Lat/Long: N47 49 44.7, W117 38 53.8 Hydrologic unit: Spokane River

47.828733, -117.649004 corrected

Nest stratum: tree Nest height (circle ft or m): 85

Position on slope: bottomland Nest condition: good

Tree species: Douglas-fir Tree height (circle ft or m): 100 DBH (circle in or cm): 24

Land ownership: Private

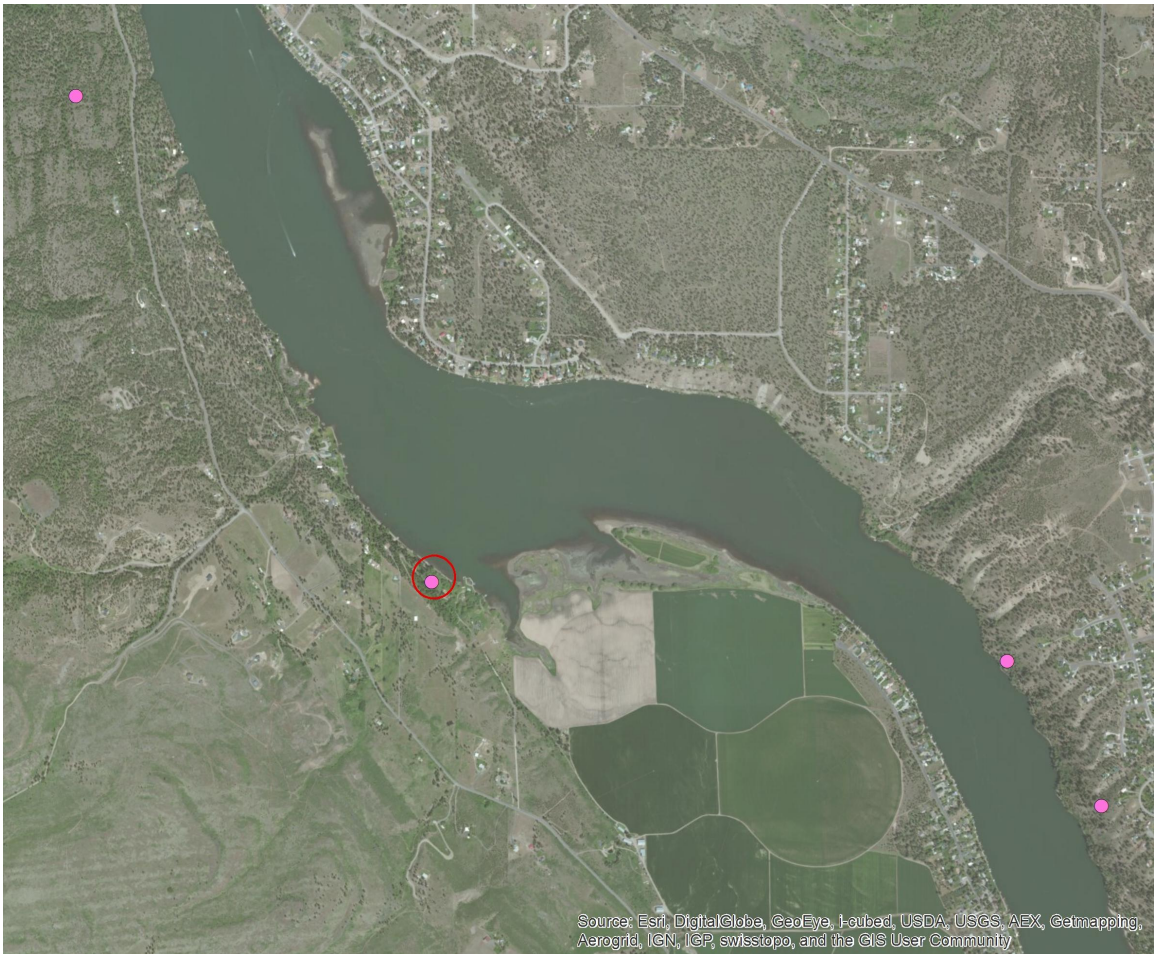
USGS Quad name: Four Mound Prairie, WA

Directions to nest: Between Tum Tum and Nine Mile Falls. On pastureland of residence @ 18724 N. Sportsman Lane. Visible by boat, tree northwest of residence.

Comments: Between Four Mounds and Suncrest nests.

Observer Initial: LS Date: 6/04/2014 Reviewer Initial: LS Date: 11/3/2014

Attach locator map and photos showing nest site and nest



Sportsman 47.828733, -117.649004

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
RAPTOR NEST RECORD

Species: Bald eagle

Territory name (if known): Suncrest

Territory/nest number (if known): 06W10302 used in 2013 and 2014

Reported by: Lee Stragis Date: 3/24/2014

Location: T 27N R 41 E Section 22 ¼ SE ¼

State: WA County: Stevens

Elevation: 1700 Aspect: Southwest

Lat/Long: 47.820181,-117.610472 Hydrologic unit: Spokane River

Nest stratum: tree Nest height (circle ft or m): 75

Position on slope: midslope Nest condition: good

Tree species: Ponderosa Pine Tree height (circle ft or m): 90 DBH (circle in or cm): 35

Land ownership: Private

USGS Quad name: Nine Mile Falls, WA

Directions to nest: North of Suncrest Association Beach. Best View from N. West Shore Association Beach access.

Comments: 0.5 miles south of other Suncrest nest, 2 miles east of Sportsman nest, 3 miles to Charles Mas nests.

Observer Initial: LS Date: 3/24/2014 Reviewer Initial: LS Date: 10/22/2014

Attach locator map and photos showing nest site and nest

Suncrest Nest 47.820181,-117.610472

APPENDIX C

2014 SITE-SPECIFIC MANAGEMENT PLAN: POST FALLS TERRITORY

SITE-SPECIFIC MANAGEMENT PLAN Post Falls Bald Eagle Territory

Introduction

Avista's 2010 Bald Eagle Management Plan (Plan) requires the preparation of a Site-specific Management Plan for nesting territories located within the Planning Area. The Plan defines the Planning Area as Avista owned lands where an active or alternate nest associated with Project waters
is present and select additional nesting territories where investigations indicate that (1) Project operations may have negative effects on bald eagle productivity or habitats, and (2) opportunities for protection are available. This Site-specific Management Plan contains the results of the habitat-use investigations and identifies nesting territory, home range, primary use areas, and key sites used during nesting, brood rearing, and fledging periods as well as activities that result in potential disturbances to nesting eagles and ongoing activities that result in loss or degradation of habitat within a nesting territory. Additionally, measures are proposed to reduce bald eagle/human conflicts based on identified threats primarily on areas where Avista has some management authority to protect habitat and may have the ability to enforce seasonal restrictions on activities found to disturb nesting eagles. Avista will coordinate with United States Fish and Wildlife Service (USFWS), Idaho
Department of Fish and Game (IDFG), and Washington Department of Fish and Wildlife (WDFW)
as appropriate to determine whether management plans are already available.

This Site-specific Management Plan may need periodic updating as home ranges, nest territories, nest sites, perch trees, night roost stands are not permanent locations. Therefore, spatial and temporal restrictions in regard to buffer zones for nest sites, perching, foraging, and roosting stands may require updating.

Post Falls Nesting Territory Investigation Report

Location

The Post Falls bald eagle territory is located along the Spokane River upstream and adjacent to the Post Falls Dam at river mile 102. The territory is located primarily in Section 3 and 4 of Township 50 North, Range 5 West in Kootenai County, Idaho. Land owners in the territory area primarily include Avista/BLM lands with adjacent private parcels. The habitat includes undeveloped seral conifer forest, Spokane River aquatic habitat, some nearshore riparian habitat, and some highly disturbed post- industrial sites. There are two islands within the Spokane River where the Post Falls HED is located. Access to these islands is restricted to authorized personnel. A transportation corridor containing US-90 and Burlington Northern Pacific Railway is located a quarter mile directly north. Residential areas are located east and adjacent to the territory. There are limited access roads, trails, and recreation opportunities in the home range and none in the nesting territory. Two recreational sites are within the home range. This includes Q'emlin Park to

the southeast, owned by Avista and the City of Post Falls and operated by the City of Post Falls Parks and Recreation Department. It contains picnic areas, fishing access and a boat launch. The Falls Park is located to the northeast of the home range. Water levels of the Spokane River within the territory are managed Avista for about half the year annually.

Study dates and Schedules

Territory observation periods in 2013 and 2014 were conducted once every two weeks from March 1 through July 31st as detailed in the Plan. A combination of morning and evening data was collected. A total of 21 territory investigations were conducted in 2013 and 2014.

Study methods

Study methods detailed in the Plan for investigations produced time-interval records about eagle activities, locations, habitat use, and potential disturbances in order to characterize home ranges nesting territory, primary use areas, and key use sites. The data identified disturbances or potential disturbances to nesting eagles. Background research of the territory area, annual monitoring reports, landowner communications, agency communications, and supplemental notes provided information about ongoing activities and those that may or have caused loss or degradation of habitat within a nesting territory.

Results

The results of habitat-use investigations include a brief narrative and maps conveying the information about home range estimates, primary use areas, key use areas, and disturbances to nesting eagles or eagle habitat.

Home range estimates. The home range is approximately 201 acres: about 0.9 miles long and up to 0.5 mile wide as shown in *Figure 1.* The home range includes the islands, the south shore and some of east shore of the Spokane River where eagles were often seen soaring. The home range ownership includes Avista and City of Post Falls lands with some private converted land use.

Nesting territory estimates. The nesting territory is approximately 42.5 acres; about 0.4 miles long along the Spokane River and up to about 0.3 miles wide as shown in *Figure 1.* Nesting territory boundaries were delineated on the maps incorporating primary use areas. The method to determine the nesting territory used a 300-foot buffer around primary perches to encompass the flight patterns between these sites. A 660-foot buffer is a maximum buffer used at active nest sites following USFWS guidelines as shown in *Table 1.* For the purposes of this management plan the primary prey capture areas are also included in the nesting territory.

The nesting territory was located fully within and between the two Avista owned islands. Upland habitat is primarily seral conifer stands interspersed with terrace grasslands. Some of the grasslands have been altered by the utility development and industrial use. Aquatic areas used for prey capture generally extended about 100 feet from the shore, typically in small bays and nearshore areas close to the nests and primary perches. Prey species were primarily aquatic fish species. Upland prey captures were not observed.

Primary use areas are defined as occupied by eagles greater than 75% of the time, included the one nest sites, three primary perches, and the night roost stand.

Key use sites (including nest sites, primary perches, and roost stands)

Nest sites. The active nest was located in a Ponderosa pine with an overhead canopy. It was located in one of the tallest trees on the south island overlooking central channel of the river, about 100 feet to water. This nest was successful in 2012, 2013, and 2014. No alternate nest has been identified for this territory.

Primary perches. There were three primary perches identified in the territory. Perch locations for territory defense were typically tall trees and snags situated to give a view of the river and the nest. They appeared to be strategically located to view approaches to the nesting territory as well as the nest. Perch locations near prey capture sites were located along the shoreline.

Roost stands. There was one night roosting stand located in a thick grove of trees west of the nest.

Disturbances

Typically eagles were not disturbed by routine use of roads, homes, or other facilities particularly where use was present prior to nesting. The Post Falls Dam breeding pair appeared acclimated to existing human activities and habitat conditions. Productivity has not been negatively impacted. Generally, the active nesting territory was generally isolated from habitat disturbances. There were no ongoing activities observed in 2013 that resulted in loss or degradation of habitat within the nesting territory. In 2014 Post Falls South Channel spillway gate replacement project was implemented, however the eagles were not visibly disturbed by Project activities. Activities noted below were observed during investigations to disturb nesting eagles, listed according to highest frequency.

Osprey. Osprey were regularly seen flying along and above the river there, however there were no documented disturbances to the nesting pair. There were two osprey nests documented within the Post Falls Dam home range. Osprey presence in the area is unrelated to human–caused activities.

Competition from other eagles. No competition from other eagles was observed.

Human activity. Human activity was/not observed to disturb the nesting pair.

Post Falls Dam Management Plan

The primary objective of the site-specific management plan is will identify and characterize activities that result in disturbance to nesting eagles. The site-specific management plan will also describe ongoing activities that result in loss or degradation of habitat within a nesting territory. Site-specific bald eagle management plans will include proposed measures to reduce bald eagle/human conflicts based on identified threats.

Avoidance and Protection Measures

To meet the objectives of the Plan, measures may be proposed to avoid or reduce bald eagle/human conflicts based on identified threats. This site-specific management plan will focus

on areas where Avista has the management authority to protect habitat and the ability to enforce seasonal restrictions on activities found to disturb nesting eagles.

There are no proposed measures to reduce bald eagle /human conflicts at this time. The existing level of human activities, including Avista Project operations have not had a deleterious effect on the eagles. Avista does not have management authority on public or private lands where activities may disturb nesting eagles.

The following guidance is specifically for new or a new change in activities or development such as: timber and forestry operations, vertical infrastructure, linear infrastructure such as roads, trails, canals, power lines, other utilities (USFWS 2007), or recreation facilities. To avoid disturbing nesting bald eagles, the USFWS recommends (1) maintaining natural forested (or vegetative) buffers around nest trees to minimize visual and auditory impacts associated with human activities and (2) avoiding certain activities during the nesting season or breeding season. The breeding season extends from January 1 through August 15 in the Pacific Northwest (USFWS 2007). These recommendations are applicable only to those key sites and activities where Avista has management authority.

Table 1. Recommended Spatial and Temporal Restrictions to Protect Bald Eagles Key Sites from New Disturbances

Bald Eagle Use	Buffer Zone Size	Temporal Restriction	Other Restrictions
Nest sites	330 feet (660 feet if action is visible from the nest.)	January 1 through August 15	Year round- avoid permanent development, pesticides, clear cutting, or removal of over story within 330 feet of nest
Primary perches	case-by-case*	January 1 through August 15	Retain snags. Avoid or minimize impacts
Prey capture sites	case-by-case*	January 1 through August 15	Avoid or minimize impacts
Roost stands	case-by-case*	January 1 through August 15	Avoid or minimize impacts

* Primary perches, prey capture sites, and roost stands do not have a defined buffer by USFWS. However to minimize potentially disruption in the eagles nesting territory, the above buffers are proposed.

Additional Guidelines and Management Practices

The following list is a compilation of guidelines and management practices from various projects and agencies that may be applicable to the Post Falls Dam territory.

1. Maintain forested habitat in home range to provide secure habitat for eagles.

2. Retain mature trees and old growth stands, particularly within one-quarter mile from water as applicable to Avista-owned lands, to allow for recruitment of snags and other perch trees.

3. Habitat enhancement, i.e. restoration, thinning, burning, or other activities may be conducted outside of breeding season.

4. Avoid blasting and other activities that produce extremely loud noises within one half mile of active nests during breeding season, unless greater tolerance to the activity (or similar activity) has been demonstrated by the eagles in the nesting area.

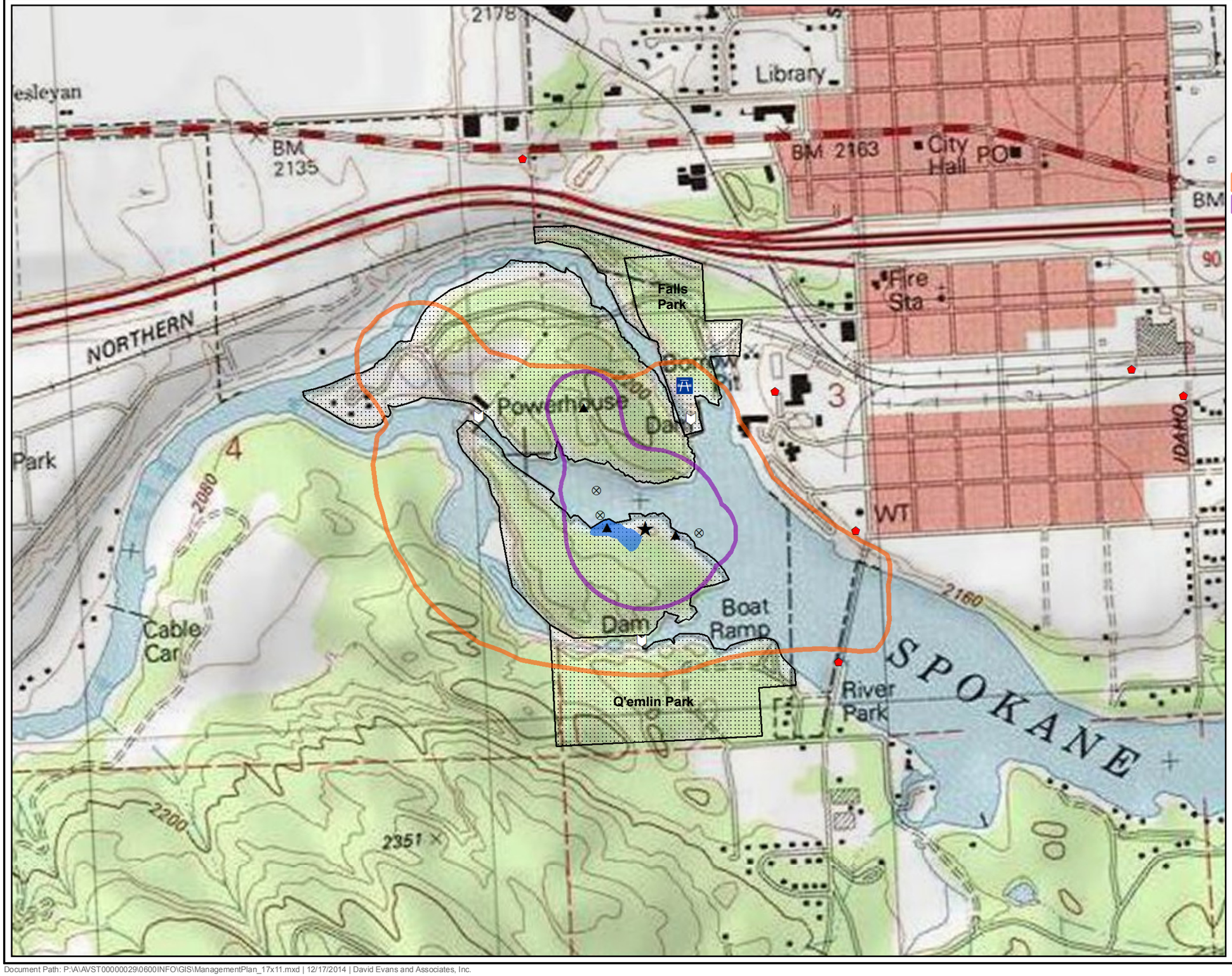
5. Monitor nest alternate sites for up to three years.

6. Verify nest sites, key sites and regulatory buffers prior to permanent or intense development activities in order to avoid deleterious effects to nesting pairs.

7. Continue conscientious use of pesticides, herbicides, fertilizers, and other chemicals only in accordance with Federal and State laws to avoid impacts to eagles directly or indirectly thru prey species.

References

US Fish and Wildlife Service (USFWS) 2007. National Bald Eagle Management Guidelines. U.S. Fish and Wildlife Service. May 2007. http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/NationalBaldEagleManagementGuidelines.pdf. Retrieved October 29, 2014.



LEGEND

Key Points of Interest

- Osprey Nest
- Turkey Vulture Roost
- Dam
- Picnic Area

Bald Eagle Territory Details

- Active
- Alternate
- Prey Capture Sites
- Primary Perches
- Home Range
- Nesting Territory
- Night Roost
- Communal Roost
- Night/Communal Roost
- Avista-Owned Land/Planning Area

Surface Land Management/Ownership

- Bureau of Land Management
- Tribal Land
- Idaho Department of Lands
- Idaho Department of Fish and Game
- Other Idaho State Agencies
- Idaho Department of Parks and Recreation
- Forest Service

Bald eagle nest location data are confidential and are not for public circulation

N

0 0.3

Scale in Miles

Map Projection:
Washington State Plane
North Zone NAD 1983

Source:
Avista (HED areas, land ownership),
USDA-NRCS (quadrangle county mosaics),
Bureau of Land Management (surface land management),
WDFW (bald eagle locations),
David Evans and Associates, Inc. (bald eagle locations),
Background Service Layers: ESRI, DeLorme, NAVTEQ, TomTom, Intermap, USGS

This figure was originally produced in color. Reproduction in black and white may result in loss of information.

FIGURE **1**
POST FALLS
BALD EAGLE TERRITORY
AVISTA/ECOLOGY 401 CERT/WA