

AVISTA CORPORATION

2016

BALD EAGLE MONITORING REPORT

ARTICLE 414

SPOKANE RIVER HYDROELECTRIC PROJECT

FERC PROJECT No. 2545

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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)

Article 414 of the License required the development of a Bald Eagle Management Plan (Plan), which was approved by FERC on May 11, 2011. The Plan included: (i) 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 (v) reporting requirements. This Bald Eagle Monitoring Report (Report) summarizes the 2016 results of the Plan implementation.

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 one-half mile beyond the Project boundaries. Annual Monitoring, Surveys, and Investigations are completed within this area. Within the Monitoring Area the Plan defines the Planning Area, which is the geographic area associated with the requirement to prepare 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 specific 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 Licia Stragis, Timberland Management Company senior biologist, 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

Thirty-two nesting territories were monitored in 2016 to determine annual occupancy and productivity. *Figures 1 and 2* show the locations of these nests.

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 and the third observation, a determination of productivity, occurred between June 15 and July 31.

Observations were generally made from first light to midday and required up to one and one half hours to determine the 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 and observers retreated if eagles displayed agitated behavior. During each visit, data pertinent to the determination of nest occupancy and productivity were recorded, which included:

- Nest condition
- 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 received a determination of “Successful”, “Active, Not Successful”, 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 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 tried to determine the cause of reproductive failure where possible, and note the nature, extent, and location of activities or habitat alterations in the territory. As of 2015, this determination includes previous “nest abandoned” designation where eagles had deserted or stopped attending the nests.

Active, Success Unknown: Occupied territory not adequately monitored to determine success. The use of this determination requires 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 requires 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

Thirty-two nests were monitored in 2016, 32 were monitored in 2015, 27 were monitored in 2014, 23 nests were monitored in 2013 and 19 nests were monitored in 2012. The number of nests that are being monitored has increased from 19 to 32 over the five-year period, an increase of approximately 68 percent. The 2016 monitoring results are shown in *Table 1* and summarized below.

- Occupancy: 91%: Of the 32 nests that were monitored; 29 nesting territories were occupied and had active nests. Three were unoccupied and were not active.
- Active nests: Of the 29 active nests; 25 had known productivity.

Active, Successful: 22 nests.
Active, Unsuccessful: 3 nests.
Active, Success Unknown: 4 nests.

- Project area productivity: Thirty-three young were fledged from the 25 active nests with known productivity. The average number of fledglings per active Project nest was 1.32.
- Successful nest productivity: 88%. Of the 25 active nests with known productivity, 22 were successful. Thirty-three young were fledged from the twenty-two successful nests. The average number of fledglings per successful nest was 1.5.

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

Table 1. 2016 Bald Eagle Territory Nest Monitoring Results

Territory Name	Nest Number	Nest in Planning Area	Potential Disturbance Factors	2016 Nest Determination	# of Fledglings				
					2016	2015	2014	2013	2012
IDAHO									
Ahrs Creek	07I10301	No	Jet boat race, ranch	Active, Successful	1	1	NA	NA	NA
Blessing Slough	07I07601	No	None. No nest found	Not active	0	0	2	0	UNK
Cougar Bay	07I03502	No	Residential, osprey nests	Active, Successful	2	0	2	UNK	0
Eddyville	07I07701	No	Residential	Active, Successful	2	2	2	2	2
Falls Creek	07I03703	No	Jet boat race	Active, Success Unknown	UNK	1	1	0	0
Fernan	07I03401	No	Residential	Active, Successful	1	1	1	1	NA
Hepton Lake	07I10101	No	Residential, Hwy 3	Active, Successful	1	2	2	2	NA
Heyburn Park S	07I05702	No	Park roadways, Trail of CDA.	Active, Successful	1	2	1	2	0
Heyburn Park N (active prior to 2012)	07I05701	No	Park roadways, Trail of CDA.	Active, Successful	2	-	-	-	-
Killarney Lake	07I01702	No	None	Active, Successful	2	0	1	1	2
Mica Bay	07I05401	No	Residential	Active, Successful	1	2	2	1	2
Post Falls	07I08002	Yes	Residential, roadway, osprey	Active, Successful	1	2	1	2	1
Rainy Hill	07I07402	No	None. Collapsed	Active, Not Successful	0	1	2	UNK	UNK
Rose Lake	07I01902	No	Residential	Active, Not Successful	0	1	0	1	0
St. Maries	07I04301	No	None	Active, Success Unknown	UNK	UNK	0	2	1

Territory Name	Nest Number	Nest in Planning Area	Potential Disturbance Factors	2016 Nest Determination	# of Fledglings				
					2016	2015	2014	2013	2012
Swan Lake	07I02002	No	Picnic area, recreation. No nest found.	Not Active	0	0	0	UNK	2
Turner Bay	07I06604	No	Residence, near Hwy.	Active, Successful	2	0	0	1	2
Turtle Lake	07I02402	No	Residence, jet boat race	Active, Successful	1	1	2	2	0
Upper Spokane River	07I10201	No	Development opposite nest. Collapsed	Not Active	0	UNK	0	UNK	NA
Windy Bay	08I00103	No	None	Active, Successful	2	1	2	UNK	1

WASHINGTON

Charles Maas	06W3055	No	WA Park and residential	Active, Successful	2	1	1	1	1
Deep Creek	06W10901	No	WA Park and trails	Active, Success Unknown	UNK	2	NA	NA	NA
Four Mound	06W10502	No	Residential	Active, Successful	1	2	NA	NA	NA
Long Lake South	06W22010	Yes	Residential	Active, Not Successful	0	0	0	0	2
Lower Spokane River	06W10101	No	Osprey, Hwy 291, residential	Active, Successful	2	1	1	0	NA
Northshore	06W10403	Yes	Dock	Active, Successful	1	NA			
Powerball	06W10701	Yes	None	Active, Successful	2	2	NA	NA	NA
Riverside Launch	06W10601	No	Recreational access	Active, Successful	2	2	NA	NA	NA
Sportsman	06W10801	No	Residence	Active, Successful	1	1	NA	NA	NA
Suncrest	06W10301	No	Residential, trails	Active, Successful	1	1	0	NA	NA

Territory Name	Nest Number	Nest in Planning Area	Potential Disturbance Factors	2016 Nest Determination	# of Fledglings				
					2016	2015	2014	2013	2012
Whalen	06W29703	Yes	Osprey	Active, Success Unknown	UNK	1	1	2	3
Willow Bay	06W10201	No	Other eagles, osprey, resort, Hwy 291	Active, Successful	2	2	1	NA	NA
Total fledglings					33 (n=25)	33 (n=23)	27 (n=22)	20 (n= 16)	19 (n=17)
Fledglings/ nest					1.32 (n=25)	1.44 (n=23)	1.23 (n=22)	1.25 (n=16)	1.12 (n=17)
Fledglings/ successful nest					1.50 (n=22)	1.44 (n=23)	1.50 (n=18)	1.54 (n=13)	1.73 (n=11)

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

UNK=Status unknown

n=total number of nests

Table 2. Annual Summary of Project Area Bald Eagle Productivity

	2016	2015	2014	2013	2012
Number of territories checked	32	32	27	23	19
Number of active territories	29	26	22	21	19
Percent active (occupancy)	91	81	81	91	100
Number of nests with known productivity	25	23	22	16	17
Number of successful nests	22	23	18	13	11
Number of active nest failures	3	0	4	3	6
Number success unknown	4	2	0	5	2
Percent active nest success	88	100	82	81	65
Percent active nest failure	12	0	18	19	35
Number of fledglings	33	33	27	20	19
Fledglings /nest	1.32	1.44	1.23	1.25	1.12
Fledglings/ successful nest	1.50	1.44	1.50	1.54	1.73

2.3 Discussion

The occupancy and productivity percentages in 2016 are similar to the previous 2012-2015 Project monitoring results, 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). The number of territories in 2016 remained the same as 2015 but the monitored nests changed status. The Heyburn Park territory was categorized as two territories in 2016, Heyburn Park North and Heyburn Park South. Both of the alternate nests were occupied, active, and fledged young. The Harrison west territory was categorized as a historic and removed from monitoring in 2016.

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. Natural disturbances include many other species such as osprey (*Pandion haliaetus*), owls, hawks, other birds, and other predators. Additionally, only five of the 32 nest sites are within the Planning Area, lands owned and managed by Avista.

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

Active, Successful. Twenty-two of 25 active nests were successful. Eleven nests successfully fledged two nestlings; eleven nests successfully fledged one nestling.

Active, Not Successful. There were three territories where adults were present in the territory during the nesting season but nesting was not successful: Rainey Hill, Rose Lake, and Long Lake South.

The Rainey Hill territory was determined active with a perched adult observed in late February. On the May 10 and June 1 monitoring dates no adults were observed and the nest in the cottonwood tree had collapsed. There was no sighting of eagles after February 25. Therefore adult presence and incubation indicated an active status, but due to lack of nesting activities the nest was determined to be unsuccessful. Aside from the collapsed nest, there were no disturbances or habitat alterations.

The Rose Lake territory was determined active with an adult perched by the nest on May 11. On June 1 a perched adult was also observed, but the nest was in poor condition. Therefore, adult presence indicated an active status, but due to a lack of nesting activities the nest was determined to be unsuccessful. There were no observed or potential disturbances or habitat alterations.

The Long Lake South territory was determined active with one incubating and one perched adult on March 16. On May 19, a perched adult was observed. June 16 also had a perched adult, but the nest was in poor condition. Therefore adult presence and incubation indicated an active status but due to lack juveniles, the nest was determined to be unsuccessful. There were no observed or potential disturbances or habitat alterations.

Active, Success Unknown: There were four territories where adults were present in the territory during the nesting season, but nesting success was not confirmed: Falls Creek, St. Maries, Deep Creek, and Whalen.

The Falls Creek territory was determined active with one adult observed within the vicinity in early June. Therefore adult presence indicates an active nest, but due to the lack of observed nest or young, success was unknown. No disturbances or habitat alterations were observed.

The St. Maries territory was determined active with adults observed at the late February and mid-May monitoring dates. An adult was observed incubating at the nest on May 10. At the June 1 monitoring date, a perching adult was observed but no nestlings or fledglings. However, the nest at this time was no longer visible in the dense cottonwood canopy. Therefore, adult presence and incubation indicated an active nest, but due to the lack of observed young, success was unknown. There were no observed or potential disturbances or habitat alterations.

The Deep Creek territory was determined active with a pair of adults flying in the territory in mid-March. At the April 12 monitoring date, no adults or nesting behaviors were observed. On

July 8, an adult was observed perched away from the known nest. It is possible there is an unidentified alternative nest in the territory. Therefore, adult presence indicated an active status, but due to the lack of observed nesting activities at the known nest and the potential alternative nest, success was unknown. There were no observed disturbances or habitat alterations. Potential disturbances at the known nest site included the nearby trails of Riverside State Park.

The Whalen territory was determined active with a perched adult observed in mid-March. On the May 19 monitoring date, no adults were observed. On June 19, two adults were observed in the territory. There were no observed nesting activities at the known nest. It is possible there is an unidentified alternative nest in the territory. Therefore, adult presence indicated an active status, but due to the lack of nesting activities and the potential alternative nest, success was unknown. Osprey were determined to be a major disturbance to Whalen eagles during previous territory investigations. There were no observed habitat alterations.

Not Active. Three nesting territories were not active: Blessing Slough, Swan Lake, and Upper Spokane River. There were no eagles seen in these nesting territories area during the monitoring period, except for a late observation at Falls Creek.

The Blessing Slough territory was inactive in 2016, with no adults and no nests observed. There were no observed or potential disturbances or habitat alterations. It was inactive in 2015. It was active and successful in 2014.

The Swan Lake territory was inactive in 2016. There were no adults and no nest observed. No disturbances or habitat alterations were observed. Potential disturbances are from recreation. It was also inactive in 2015 and 2014.

The Upper Spokane River territory was inactive in 2016. The nest was collapsed, no adults were observed. Potential disturbances or habitat alterations that may have contributed to failure in addition to the collapsed nest include river recreation and industrial development across the river. It was active in 2015 and 2013.

Historic Territories

Territories which are not active or occupied by adult eagles for three successive years are considered historic territories. These are not included in the monitoring results. However, the location of these nests is retained in the GIS database, and the area is included in surveys for new nests.

The Harrison West territory, nest 08I10001, became a historic nest in 2016. It was a new nest in 2013. It collapsed in 2014. It was inactive in 2014, 2015, and 2016. No disturbances or habitat alterations were observed. However, the site was subject to high wind exposure. The Anderson Lake territory, nest 07I03101, became a historic nest in 2015.

At the conclusion of the 2016 investigations, a total of 33 territories were determined to be within the Monitoring Area. One new territory, Bull Run, was identified in Idaho near Rose Lake. *See Section 3.* Adjustments to the monitoring area may be made with concurrence of the

U.S. Fish and Wildlife Service (USFWS), IDFG and Washington Department of Fish and Wildlife (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, as the eagles may reoccupy the site, according to USFWS National Bald Eagle Guidelines (USFWS 2007). These alternate nest locations will be retained in the GIS database.

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 to allow for more efficient surveys.

Avista coordinates with the USFWS, IDFG, 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 Project shorelines. 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 February 23, 24, 25, March 11, and April 7 during the ongoing monitoring and territory investigations, which started on February 23, 2016 and ended on July 28, 2016. Documentation for any new nest, or suspected new nest, encountered during the 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

Four new nests were located during the survey efforts (Table 3): one new nest territory and three new alternative nests. The Bull Run territory was first identified in 2016 and monitoring will begin in 2017. The new Turner Bay, Four Mound, and Northshore alternative nests were constructed in 2016 and included in the 2016 monitoring effort. These new nests are included in the GIS database along with the locations of the previous bald eagle nests (*Figures 1 and 2*). Documentation of the new nests is included in *Appendix B*.

Table 3. 2016 New Bald Eagle Nests

Territory Name	Number	Latitude, Longitude	Nest in Planning Area	Location/ Relationship to known nests	Notes
NEW NEST, NEW TERRITORY					
Bull Run , ID*	07I10401	47.531159, -116.485804	No	1.6 mi. S of Rose Lake, upstream of Killarney	Active in 2016, on transmission pole
NEW NEST, EXISTING TERRITORY					
Northshore, WA	06W10403	47.822921, -117.786500	Yes	1.25 mi. E of Northshore 06W10401	Active in 2016
Turner Bay, ID	07I06604	47.572135, -116.784696	No	0.22 mi. WSW of Turner Bay 07I06603	Active in 2016
Four Mound, WA	06W10502	47.844578, -117.665043	No	1.3 mi. south of Four Mound 06W10501	Active in 2016

* Monitoring to start in 2017

4.0 NESTING TERRITORY INVESTIGATION

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

Results of the investigations for nesting territories that are not located in the Planning Area are summarized in this Report. Site-specific Management plans are completed and included in Appendix C if nesting territories are located within the Planning Area. There were no territory investigations conducted for nesting territories in the Planning Area in 2016, as they have been completed.

4.1 Methods

The methods summarized below follow those detailed in the Plan. Professional judgment was used as appropriate 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 31. 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 occasionally extended into late morning hours for investigations if temperatures remained moderate.

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 by 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 31 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 1 through July 31. Primary use areas were defined as areas occupied by eagles greater than 75% of the time 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

The 2016 was the second year of the investigations for the Mica Bay, Idaho and Willow Bay, Washington territories. It was the first year of investigations for the Powerball and Riverside Launch nesting territories. *Table 4* summarizes the results of the 2015 and 2016 consecutive seasons of nesting territory investigations for the Mica Bay and Willow Bay and bald eagle territories and those from previous annual reports.

Table 4. Bald Eagle Nesting Territory Investigation Summary

Territory Name	Territory Number	Planning Area	Nearest Active Eagle 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	1247 ac.	103 ac.	Ravens, other eagles.
Suncrest, WA	06W10301	No	2 miles	RM 53	2014/2015	434 ac.	106 ac.	Human activities, great horned owl.
Mica Bay, ID	07I05401	No	3.5 miles	RM 117.5	2015/2016	567ac.	113 ac.	Residential.
Willow Bay, WA	06W10201	No	1mile	RM 45.6	2015/2016	966 ac.	202 ac.	Other eagles, osprey, Hwy, resort.
Powerball, WA	06W10701	Yes	2.2 miles	RM 42.5	2016/2017	TBD	TBD	TBD
Riverside Launch, WA	06W10601	No	1.3 miles	RM 56.6	2016/2017	TBD	TBD	TBD

4.3 Mica Bay Nesting Territory Investigation

Location

The Mica Bay bald eagle territory is located on the northern end of Coeur d'Alene Lake in Kootenai County. The territory is located primarily in Sections 15 and 16, Township 49 north and Range 4 west. Parcels in the bald eagle territory area are primarily private properties; however, there is one public campground and one public boat launch located within the nesting territory. The topography in the territory is generally mountainous. Habitat in the territory includes the aquatic habitat of the lake and near shore riparian; residential development at the shoreline, conifer forest, and upland areas. The topography, land use, home range, and nesting territory elements are shown in *Figure 3*.

Study Dates and Schedules

Territory observation periods in 2015 and 2016 were conducted once every two weeks from March 1 through July 31 as detailed in the Plan. A combination of morning and evening data was collected. A total of 11 territory investigations observation were conducted per year, for a total of 22 territory investigation observation dates in 2015 and 2016.

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.

Home Range Estimates

The home range is approximately 567 acres: about 2.4 miles long and up to 1.0 miles wide. The home range encompasses the northern and southern shorelines of Mica Bay and includes several primary perch locations along the southern shoreline.

Nesting Territory Estimates

The nesting territory is approximately 113 acres; about 0.3 miles wide and up to 0.8 miles long. Nesting territory boundaries were delineated on the maps incorporating primary use areas. The method to determine the nesting territory used a minimum of 300-foot buffer around primary perches and the nest location. A 660-foot buffer is a maximum buffer used at active nest sites following USFWS (2007) guidelines. The prey capture sites near the primary perches are

included in the nesting territory. The nesting territory includes three primary perches on the southern shoreline of Mica Bay.

Primary Use Areas

These areas are defined as occupied by nesting eagles greater than 75% of the time and include one nest site and three primary perches.

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

Nest Sites. The 2016 active nest was located in the east portion of the nesting territory in a Ponderosa pine (*Pinus ponderosa*). This nest site has been utilized since monitoring was initiated in 2012, no alternative nest locations have been identified in the territory.

Primary Perches. The primary perch locations were all located along the southern shoreline of Mica Bay near prey capture locations.

Prey Capture Sites. Four prey capture sites were identified within the nesting territory. Aquatic areas used for prey capture were primarily along the southern shoreline.

Disturbances

Typically the eagles were not disturbed by routine activities present prior to nesting in the area such as vehicles on roads, residents, or recreation activities. No observable land use changes or construction was observed in the nesting territory during the two year investigation. This nest has successfully fledged young since monitoring began in 2012.

4.4 Willow Bay Nesting Territory Investigation

Location

The Willow Bay bald eagle territory is located along the Spokane River at river mile (RM) 45.6 in both Stevens and Spokane County, Washington. Stevens County is located east of the Spokane River center channel; Spokane County is located west of the center channel. The territory is located primarily in Section 32, Township 28 north and Range 40 east, but also extends north and south to adjacent sections. Parcel owners in the bald eagle territory area include private properties, Spokane County McLellan Conservation Area, adjacent Department of Natural Resources (DNR) and Avista-owned lands.

The topography in the territory is generally terraced from the river. To the northeast it rises steeply to the rocky outcrop of Saddle Mountain. Habitat in the territory includes the aquatic habitat of the river and near shore riparian; residential and resort development at the shoreline, managed seral conifer forest adjacent to the shore and upland areas. Most of the shoreline residences have boat docks. Highway 291 is aligned on the east shore behind the shoreline developments. Other land use in the vicinity includes the community of Tum Tum about ½ mile to the northwest, timber harvesting, a gravel pit, ranch, and farm operations.

The Willow Bay nest site is located at east extent of the territory on the west slope of Saddle Mountain at the base of the rock outcrops. The nest site is on private property above residences. Improvements near the nest include the Willow Bay Resort, residential buildings, access roads,

lawns, picnic areas, boat docks and launches. Water levels in the Spokane River and are controlled by the Long Lake HED. The topography, land use, home range and nesting territory elements are shown in *Figure 4*.

Study Dates and Schedules

Territory observation periods in 2015 and 2016 were conducted once every two weeks from March 1 through July 31 as detailed in the Plan. A combination of morning and evening data was collected. A total of 11 territory investigations observation were conducted per year, for a total of 22 territory investigation observation dates in 2015 and 2016.

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.

Home Range Estimates

The home range is approximately 966 acres: about 2.44 miles long and up to 1.2 miles wide. The home range encompasses both sides of the Spokane River, shorelines, and upland areas. A communal roosting stand used primarily by immatures is located at the tip of the peninsula opposite the community of Tum Tum. It is located at the edge of the home range, but outside of the nesting territory.

Nesting Territory Estimates

The nesting territory is approximately 202 acres; about 0.83 miles wide across Spokane River and up to 0.4 miles long. 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. The prey capture sites near the primary perches are included in the nesting territory.

The nesting territory includes three primary perches on the east side of the river near the nest and five primary perches on the west side of the river. The river width at this location is about ½ mile. There is one remote primary perch with prey capture sites located over a mile upstream from the other primary perches. Because of the distance, the primary perch and prey captures sites are not connected to the main nesting territory boundary, but are included in the nest

territory area measurement. The primary perches, prey capture sites and roost stands were located predominantly in undeveloped areas. Habitat in the nesting territory includes the river, the associated aquatic and riparian areas, and the seral conifer stands at the shoreline and upland areas.

Primary Use Areas

These areas are defined as occupied by nesting eagles greater than 75% of the time, included two nest sites, eight primary perches, and one night roost stand.

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

Nest Sites. The 2016 active nest was located in the east portion of the nesting territory in a Ponderosa pine with a broken top with some overhead canopy. This nest site was also used in 2013. It was located in a tree stand 50 feet south of the 2014 and 2015 nest site. Both nesting trees were still standing at the end of the 2016 season.

Primary Perches. The primary perch locations were taller trees with large diameters. West side primary perches were in the tallest along the shoreline. The perches were located near prey capture sites and had a good view of the nest and nest territory. The primary perches did not change during the two year investigation.

Prey Capture Sites. Eight prey capture sites were identified within the nesting territory. Aquatic areas used for prey capture were primarily along the west shoreline. Fish were the prey species most commonly observed. Upland prey capture sites were mostly near the nest these included both a ground squirrel and tree squirrel carried to the nest. An adult eagle was observed feeding at a deer carcass off of Highway 291. Potential prey species include waterfowl, turkey, quail, and pocket gophers.

Roost Stands. There was one night roost stand utilized during the two year investigation. It is located northeast of the nest in a conifer thickets with north aspect.

Disturbances

Typically the eagles were not disturbed by routine activities present prior to nesting in the area such as vehicles on roads, residents, or the resort recreation activities. No observable land use changes or construction was observed in the nesting territory during the two year investigation. This nest has successfully fledged young since monitoring began in 2014.

Disturbances 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.

Competition from Other Eagles. In 2016, other eagles were observed to be the most frequent disturbance of the nesting pair. Immature eagles were present flying through the nesting territory during incubation and brooding. Later during the nesting period they were observed flying overhead along the home range territory margins. Other adult eagles were present during the fledging period. Their presence in the nesting territory and home range resulted in vocalizations and territory defense behavior by the nesting pair. In 2016 a pair of adult eagles were observed disturbing the nesting pair on three occasions. This competition may be due to the proximity of the Whalen nest and territory. The Whalen nest is only

0.35 miles at closest proximity to the edge of the Willow Bay home range. The nests are only about one mile apart and are visible to each other. Additionally, the communal nesting is located at the north extent of both territories.

Osprey. Ospreys were also observed to be a frequent disturbance of the nesting pair in 2015 and 2016. They were first observed in the Project area in early June. By this time the eagle pair had been through courtship, nest-building, incubation, and juveniles were perching at the nest edge. There were two documented osprey nests in the territory during the investigation. In 2015 the osprey from the west side nest were regularly observed vigorously driving and flushing the eagles from the nearby primary perches. This osprey nest was abandoned in 2016. Another osprey nest was in the small bay south of Willow Bay Resort in 2015 and 2016. These osprey were observed frequently hunting the river or flying near the eagle nests. The eagles responded with vocalizations.

Potential Predators or Competition. Great blue heron, ravens, Cooper's hawk, and turkey vultures were observed and heard within the nesting territory in both 2015 and 2016. There were no disturbances observed. An adult Canada goose was observed circling and diving at the incubating eagle in mid April 2015 for about two minutes. At that time there were geese with hatchlings near shore at the resort. Goslings may have been taken as prey. The eagle watched the goose but did not vocalize or move.

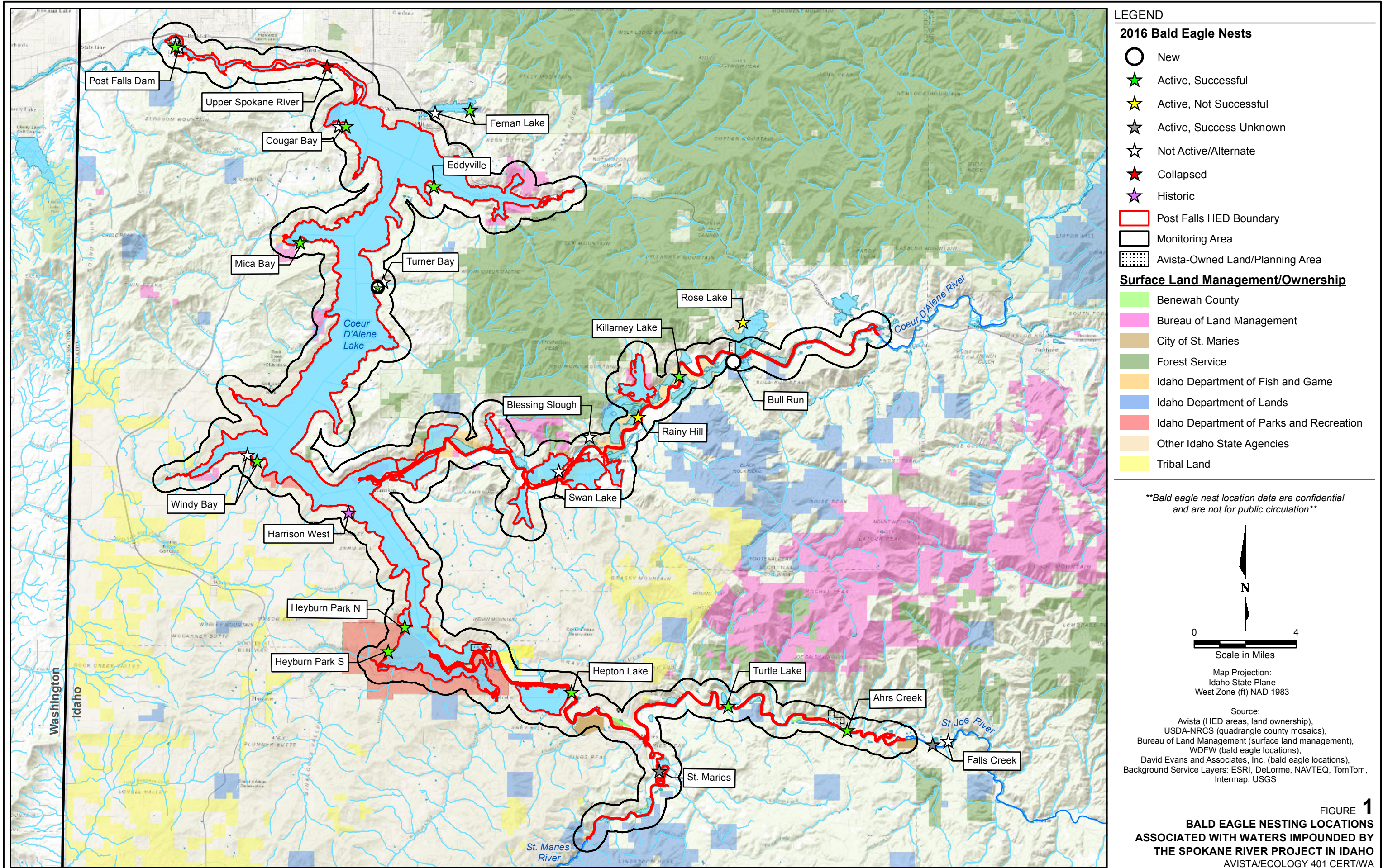
Human Activity. Although the Willow Bay Resort was located below the nest site and partially within the nesting territory, there were no observed disturbances to the nesting pair. The resort provided camping, swimming, fishing, and a boat launch facilities. Walkers with dogs were also observed in the nesting territory (along roadways and trails) and the home range. The highest occupancy of the resort began in early July when the nestlings first fledged. In 2015, one of the two fledglings repeatedly stayed near a sprinkler at the north end of the resort during the 4 of July holiday. The resort personnel put up road barricades to keep visitors away from this area. Both fledglings were later observed perching elsewhere in the nesting territory. Traffic is continual along Highway 291, located along the east side of the home range and nesting territory.

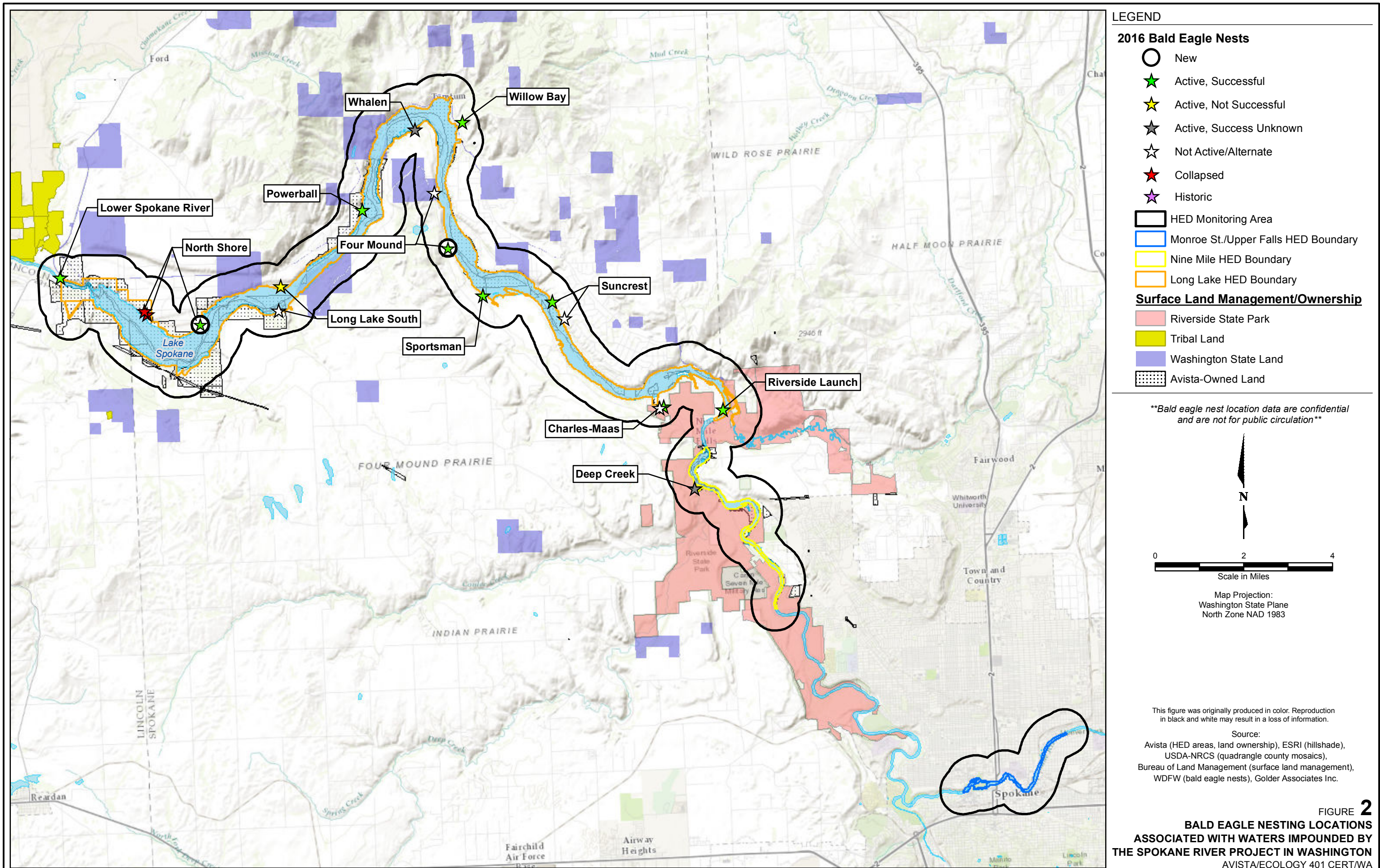
Avista Project Operations. There were no Avista infrastructure elements located in the Willow Bay home range or nesting territory with the exception of utility lines to the residential and commercial areas.

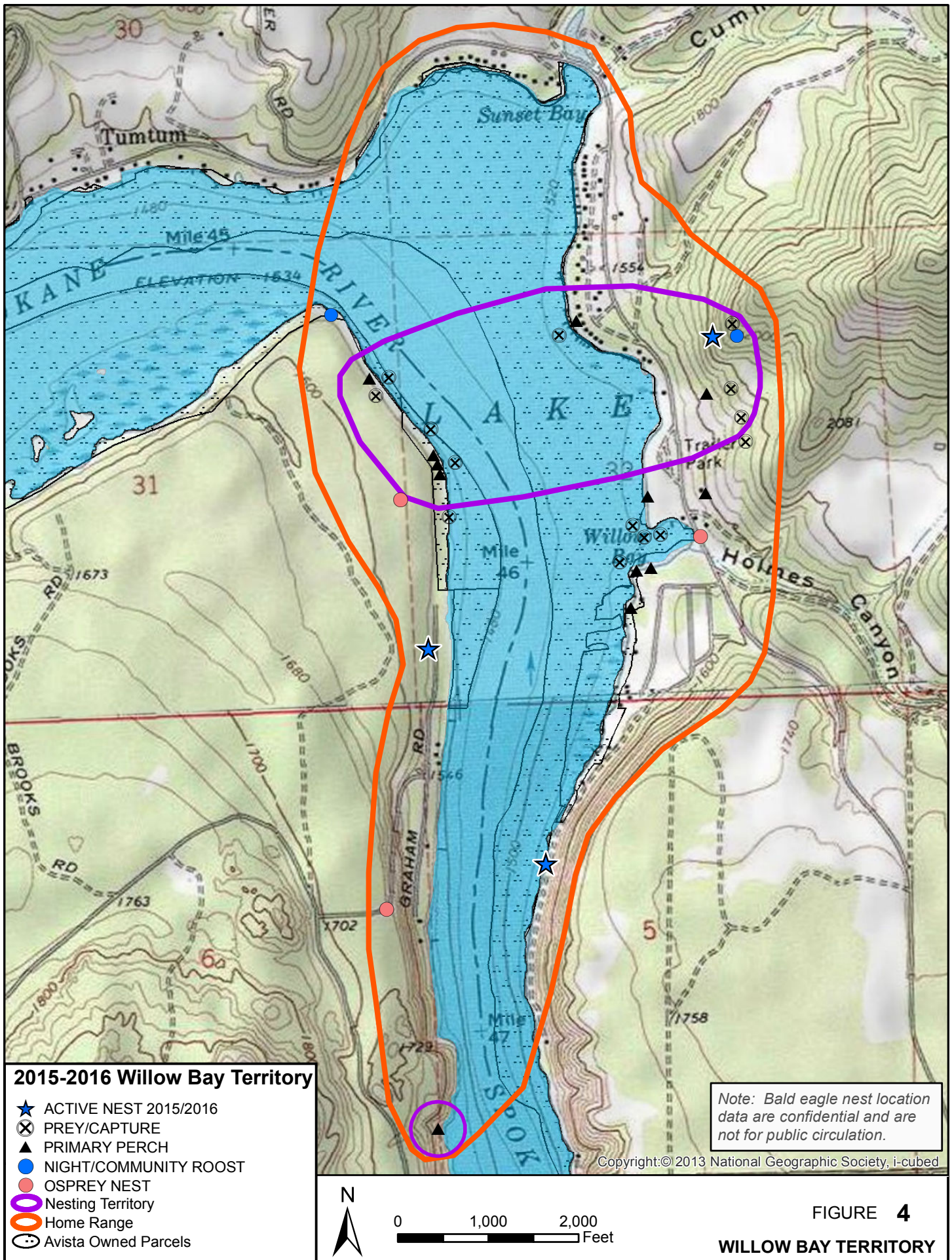
5.0 REFERENCES

- Carpenter, G. 1990. An Illustrated Guide for Identifying Developmental Stages of Bald Eagles Nestlings in the Field. San Francisco Zoological Society, San Francisco, CA.
- Golder Associates, Inc. 2010. Bald Eagle Management Plan; Spokane River Hydroelectric Project: FERC Project No. 2545. 55pp. May 7, 2010.
- Montana Bald Eagle Working Group. 1994. Montana Bald Eagle Management Plan. 2nd edition. Bureau of Reclamation. 104 pp.
- Sallabanks, Rex. Idaho Bald Eagle Nest Monitoring 2006 Annual Report. Idaho Department of Fish and Game Nongame and Endangered Wildlife Program. Boise, Idaho.
<https://collaboration.idfg.idaho.gov/WildlifeTechnicalReports/Bald%20Eagle%20Nesting%20Report%202006.pdf>. Retrieved August 19, 2016.
- US Fish and Wildlife Service (USFWS) 2007. National Bald Eagle Management Guidelines. U.S. Fish and Wildlife Service. May 2007.
https://www.fws.gov/pacific/eagle/all_about_eagles/Bald_Eagle_Management_Guidelines.html. Retrieved September 28, 2016.

FIGURES







APPENDIX A
2016 OCCUPANCY AND MONITORING FORMS

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

20 16**I. ID**

Territory Name: Ahrs Creek Territory/Nest Number: 07E 10301 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)	<u>2/23/16</u>	<u>Good</u>		<u>1AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	<u>4/7/16</u>	<u>Good</u>		<u>1AD</u>	<u>PER</u>	<u>—</u>	
Determine Productivity June 15 – July 31 (late nestling and fledging)	<u>6/1/16</u>	<u>Good</u>		<u>1AD</u>	<u>PER</u>	<u>1</u>	<u>JUV</u>

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Blessing Slough Territory/Nest Number: 07I 076 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: no nest not confirmed
no adults

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)	2/25/16	—		0			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/10/16	—		0			
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/1/16			0			

complete survey: no adults observed, nest not confirmed = not active

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Cougar Bay Territory/Nest Number: 07I 035 02 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)	<u>2/23/16</u>	<u>Good</u>		<u>∅</u>			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/11/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>	<u>1</u>	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/16/16</u>	<u>Good</u>		<u>∅</u>		<u>2</u>	<u>JUV</u>

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Eddyville Territory/Nest Number: 07I07701 Observer Initial: DA Reviewer Initial: AS

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)	2/23/16	Good		2 AD	PER	1	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/11/16	Good		1 AD	PER	1	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/16/16	Good		1 AD	PER	2	JUV

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Falls Creek Territory/Nest Number: OTI 03703 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)	3/11/16	Poor		<u>0</u>	<u>—</u>		
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	4/17/16	"		<u>0</u>	<u>—</u>		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/1/16	"		1AD	PER	NA	

Only one adult observed, and after most of nesting season = not active

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Fernan Lake Territory/Nest Number: 07I03401 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)							
	3/11/16	Good		2AD	PER	—	
Update Nesting Status April 1 – June 15 (late incubation and nestlings)							
	5/11/16	Good		1AD	PER	1	
Determine Productivity June 15 – July 31 (late nestling and fledging)							
	6/16	Good		1D	PER	1	

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Hepton Lake Territory/Nest Number: 07L10101 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)	2/24/16	Good		2 AD	PER	—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	4/7/16	Good		1 AD	INC	—	
	5/10/16	Good		—	—	1	JUV
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/1/16	Good		—	—	1	JUV

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

2016**I. ID**

Territory Name: Heyburn State Territory/Nest Number: OTI 05702 Observer Initial: DA Reviewer Initial: LS
of Park S

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)							
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)							
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/30</u>	<u>good</u>				<u>1</u>	<u>50%</u>

North nest was also active + successful this year. 2 pro of Adults.

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Heyburn State Park North Territory/Nest Number: 07T05701 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)	<u>2/24/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>6/1/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/30/16</u>	<u>Good</u>		<u>—</u>		<u>2</u>	<u>JUV</u>

South nest also active & successful.

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 20 16

I. ID

Territory Name: Killarney Lake Territory/Nest Number: 07I01702 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)	<u>2/25/16</u>	<u>Good</u>		<u>2AD</u>	<u>PER/INC</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/10/16</u>	<u>Good</u>		<u>1AD</u>	<u>PER</u>	<u>2</u>	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/1/16</u>	<u>Good</u>		<u>1AD</u>	<u>PER</u>	<u>2</u>	<u>JUV</u>

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Mica Bay Territory/Nest Number: 07E05401 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)	<u>2/23/16</u>	<u>Good</u>		<u>2 AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/11/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>	<u>1</u>	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/16/16</u>	<u>Good</u>		<u>2 AD</u>	<u>PER</u>	<u>1</u>	

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

2016**I. ID**

Territory Name: Post Falls Dam Territory/Nest Number: 07E08001 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)							
	3/11/16	Good		2 AD	PER	—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)							
	5/11/16	Good		1 AD	PER		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)							
	6/16	Good		1 AD	PER	1	JUV

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Rainy Hill Territory/Nest Number: 07E 07402 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: between 2/25 and 5/10

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)	<u>2/25/16</u>	<u>good</u>		<u>1 AD</u>	<u>PER</u>	<u>0</u>	
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	<u>5/10/16</u>			<u>0</u>			
		<u>destroyed - collapse - in cottonwood</u>					
Determine Productivity June 15 – July 31 (late nestling and fledging)	<u>6/1/16</u>	<u>destroyed</u>		<u>0</u>		<u>0</u>	

No AD after 2/25 sighting

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: Rose Lake Territory/Nest Number: OTL 019 02 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)	4/7/16	good		Ø			
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/11/16	good+		1 AD PER near nest tree		Ø	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/1/16	poor		1 AD	PER	Ø	

1 AD near nest tree = active, no INC or JUV observed = not successful

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

BALD EAGLE NEST MONITORING FORM

2016

I. ID

Territory Name: St. Maries Territory/Nest Number: 07I 04301 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: UNK 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)	<u>2/24/16</u>	<u>Good</u>		<u>2 AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	<u>5/10/16</u>	<u>Good</u>		<u>1 AD</u>	<u>INC</u>		
Determine Productivity June 15 – July 31 (late nestling and fledging)	<u>6/1/16</u>			<u>1 AD</u>	<u>PER</u>	<u>UNK</u>	

could not see clearly into cottonwood stand for juveniles.

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Swan Lake Territory/Nest Number: 07I 080 02 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: no nest observed, no AD

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)	2/25/16	no nest		Ø			
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	5/10/16	no nest		Ø			
Determine Productivity June 15 – July 31 (late nestling and fledging)	6/1/16	no nest		Ø			

no adults = not active

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

2016**I. ID**

Territory Name: Turner Bay Territory/Nest Number: 07I 066 04 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)	<u>2/23/16</u>	<u>Good</u>		<u>2 AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/11/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>	<u>1</u>	
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/16/16</u>	<u>Good</u>		<u>—</u>	<u>—</u>	<u>2</u>	<u>JUV</u>

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Turtle Lake Territory/Nest Number: 07I 02402 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	2/24/16	Good		1 AD	PER		
February 1 – March 31 (pre-egg laying and early incubation)				1 AD flying high above		—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	4/7/16	Good		1 AD	INC		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/1/16	Good		1 AD	PER	1	JUV

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Upper Spokane River Territory/Nest Number: 07I10201 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)	<u>2/23/16</u>	<u>collapsed</u>	<u>_____</u>	<u>Ø</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>
Update Nesting Status April 1 – June 15 (late incubation and nestlings)							
Determine Productivity June 15 – July 31 (late nestling and fledging)	<u>6/23/16</u>			<u>none</u>			

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

20 16**I. ID**

Territory Name: Windy Bay Territory/Nest Number: 08I00103 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)	<u>2/24/16</u>	<u>Good</u>		<u>2AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/10/16</u>	<u>Good</u>		<u>2D</u>	<u>PER</u>		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/1/16</u>	<u>Good</u>		<u>φ</u>		<u>2</u>	<u>JUV</u>

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

2016**I. ID**
 Territory Name: Charles Maas Territory/Nest Number: 06 W 305 04 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)	3/16/16	Good		φ		—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	4/12/16	Good		φ			
	5/19/19	good		1 AD	PER		
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	7/8	good		φ		2	JUV

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

20 16**I. ID**

Territory Name: Deep Creek Territory/Nest Number: 06W 109 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)	3/10/16	Good		2 AD flying in territory = active	—	—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	4/12/16	Good		∅			
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	7/8/16	Good		2 AD PER, not a nest			

possible alternative location for active nest - not found yet although monitored.
 success unknown

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

2016**I. ID**

Territory Name: Four Mound Territory/Nest Number: 06W 10502 Observer Initial: DA Reviewer Initial: LS
new alternate

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)	<u>03/16/16</u>	<u>at</u>	<u>last years nest</u>		<u>Ø</u>		
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	<u>5/19/16</u>	<u>at new alt nest</u>		<u>1 AD</u>	<u>PER</u>	<u>1</u> <u>from photo-LS</u>	<u>JUV</u>
Determine Productivity June 15 – July 31 (late nestling and fledging)	<u>6/21/16</u>			<u>1 AD</u>	<u>PER</u>	<u>1</u>	<u>JUV</u>

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

2016**I. ID**

Territory Name: Long Lake South Territory/Nest Number: 06W 220 10 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)	3/16/16	good		2 AD	PER, INC		
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	5/19/16	good		1 AD	PER		
Determine Productivity June 15 – July 31 (late nestling and fledging)	6/19/16	poor-damaged		1 AD	PER	0	

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

20 16

I. ID

Territory Name: Lower Spokane River Territory/Nest Number: 06W10101 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

Nest within AUST boundary in snag

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	3/2/16	Good	New in alt. nest	AD/Per	perched on nest		
February 1 – March 31 (pre-egg laying and early incubation)	3/28	"	snag	AD	Incubating	1	1
Update Nesting Status	4/29	"	active	2 AD @ nest	FY, feed young	1(+?)	1 (bottle head)
April 1 – June 15 (late incubation and nestlings)	5/24	"	active	AD, Adult feed		2	
Determine Productivity	6/24	fair	active	2 AD @ down beam	perches	dark head	2 (body 2/3 size)
June 15 – July 31 (late nestling and fledging)	7/9	fair	only one observed, other in nest or fledged (Willow Bay had a fldg today)			1 @ nest	3 (full size)
			search area under nest - lots of white wash, no carcasses			1	fledged

just downstream of const

assumed 2 fledged. No AD seen, heard 1 VCL. Saw 1 juv East of bridge - closer to construction area. 1 AD across from construction in tree @ park edge shoreline. Acclimated to human activities, as noted in terr. studies

(45 min)

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:	<u>prior to 3/2</u>	Date of adult dispersal:	
Date of egg laying:	<u>prior to 3/28</u>	Clutch size:	<u>2</u>
Date of hatching:	<u>prior to 4/28</u>	Date/Number of fledglings at dispersal:	<u>prior to 7/19</u>
Date of fledging:	<u>1st prior to 6/24</u>	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) Construction 2016highway, residences, recreation, osprey

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

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

construction ongoing thru 7/19/16Prepared by: J. StaggisDate: 8/4/16

Reviewed by: _____

Date: _____

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

2016

I. ID

Territory Name: North shore^{*} Territory/Nest Number: 106W10463 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 6/21

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)	3/16	Good		2 AD	PER/INC	—	
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	5/19	Good		1 AD		1	JUV
Determine Productivity June 15 – July 31 (late nestling and fledging)	6/21	destroyed		∅			

With JUV, we can assume fledged.

Willow Bay had similar nesting activity dates & fledge date.

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

2016**I. ID**

Territory Name: Powerball Territory/Nest Number: 06W10701 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)	3/1/16	good	construction	2 AD	∅		
	3/15	"	done	2 AD	inc		
	3/30	"	"	"	"		
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	4/15	"	"	"	inc/brd	1	1a
	4/27	"	"	"	brd	1	1a/b
	5/10	"	"	"	brd	2	1a/b
	5/25	"	"	"	brd	2	2
	6/7/1	"	"	"	brd	2	3a/b
Determine Productivity June 15 – July 31 (late nestling and fledging)	6/22	"	"	"	"	2	3b/c
	7/7	"	"	"	∅	2	fldg
	7/20	fair	—	"		2	fldg

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:	prior to 3/1/16	Date of adult dispersal:	
Date of egg laying:	" " 3/15	Clutch size:	2
Date of hatching:	" " 4/15	Date/Number of fledglings at dispersal:	7/20/17
Date of fledging:	" " 7/7	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) PowerlinesOngoing Disturbances (record type, extent, and proximity to nest) recreation - boaters in river, osprey- 2 nests in territory, starlings from powerline balls a nest div. incubation?Prepared by: J. Stogis Date: 8/8/16

Reviewed by: _____ Date: _____

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

20 16**I. ID**

Territory Name: Riverside Launch Territory/Nest Number: 06W 106 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: 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	<u>03/17/16</u>	<u>Good</u>		<u>1AD</u>	<u>INC</u>	<u>—</u>	
February 1 – March 31 (pre-egg laying and early incubation)							
Update Nesting Status	<u>4/12/16</u>	<u>Good</u>		<u>1AD</u>	<u>INC</u>	<u>—</u>	
April 1 – June 15 (late incubation and nestlings)	<u>5/19/16</u>	<u>Good</u>		<u>1AD</u>	<u>PSR</u>	<u>1</u>	<u>JUV</u>
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/21/16</u>	<u>Good</u>				<u>2</u>	<u>JUV</u>
	<u>7/28/16</u>	<u>Good</u>				<u>2</u>	<u>fledg.</u>

LS

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

2016**I. ID**

Territory Name: Sportsman Territory/Nest Number: 06 W 108 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: 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)	<u>3/16/16</u>	<u>Good</u>		<u>1 AD</u>	<u>PER</u>	<u>—</u>	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	<u>5/19/16</u>			<u>1 AD</u>	<u>PER</u>	<u>1</u>	<u>JUV</u>
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	<u>6/19/16</u>			<u>1 AD</u>	<u>PER</u>	<u>1</u>	<u>JUV</u>

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

BALD EAGLE NEST MONITORING FORM

20 16

I. ID

Territory Name: Suncrest Territory/Nest Number: 06W 103 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: 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)	3/16/16	Good		1 AD	PER	—	
Update Nesting Status							
April 1 – June 15 (late incubation and nestlings)	5/19/16	Good		1 AD	PER	1	JUV
Determine Productivity							
June 15 – July 31 (late nestling and fledging)	6/21/16	Good		1 AD	PER	1	JUV

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

2016

I. ID

Territory Name: Whalen Territory/Nest Number: 06W 297 03 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: UNK 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	3/16/16	Good		1 AD	PER		
February 1 – March 31 (pre-egg laying and early incubation)							
Update Nesting Status	5/19/16	Good		∅	∅		
April 1 – June 15 (late incubation and nestlings)							
Determine Productivity	6/19/16	Good		2 AD in territory	∅		
June 15 – July 31 (late nestling and fledging)							

2 Ad. in territory during nest season - active
 no inc or juv observed - else where, another nest?
 This pair closer to Willow Bay nest territory this year

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

20 16**I. ID**Territory Name: Willow Bay Territory/Nest Number: 06W10201 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)	3/2/16	good	done	couple 2 AD	inc	1	1
	3/16/16	"	"	inc/ 2 AD	inc	"	"
	3/28	"	"	"	"	"	"
Update Nesting Status April 1 – June 15 (late incubation and nestlings)	4/16	"	"	"	inc, 1st hatch?		1
	4/28	"	"	2 AD	brd	2	1a/b
	5/13	"	"	"	"	"	1/2 one larger
	5/24	"	"	"	"	"	"
	6/8/16	"	"	"	"	"	3 a/b
Determine Productivity June 15 – July 31 (late nestling and fledging)	6/23	"	"	"	"	2	3/4 one fledg
	7/6	"	"	"	"	2	both fledg.
	7/19	"	"	"	"	2	Fledg

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

Date of adult arrival:	Prior to 3/2	Date of adult dispersal:	
Date of egg laying:	" " 3/16 (one eaten)	Clutch size:	2
Date of hatching:	" " 4/16 (1st)	Date/Number of fledglings at dispersal:	2, prior to 7/6
Date of fledging:	first " 6/23	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) recreation @ resort, osprey, whalen eagles.
+ immaturesPrepared by: J. StigisDate: 8/4/2016

Reviewed by: _____

Date: _____

APPENDIX B

2016 NEW NEST DOCUMENTATION

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

Species: Bald eagle

Territory name (if known): Bull Run

Territory/nest number (if known): 07I10401

Reported by: David Armes Date: 02/25/2016

Location: T 48 N R 1W Section 5 $\frac{1}{4}$ NW of $\frac{1}{4}$ SE

State: ID County: Kootenai

Elevation: 2180 feet Aspect: North

Lat/Lon: 47.531159, -116.485804 Hydrologic unit: Coeur d'Alene River

Nest stratum: Transmission pole Nest height (circle ft or m): Top of pole, ~80

Position on slope: Terrace at shoreline Nest condition: good

Tree species: NA Tree height (circle ft or m): NA DBH (circle in or cm): NA

Land ownership: Private

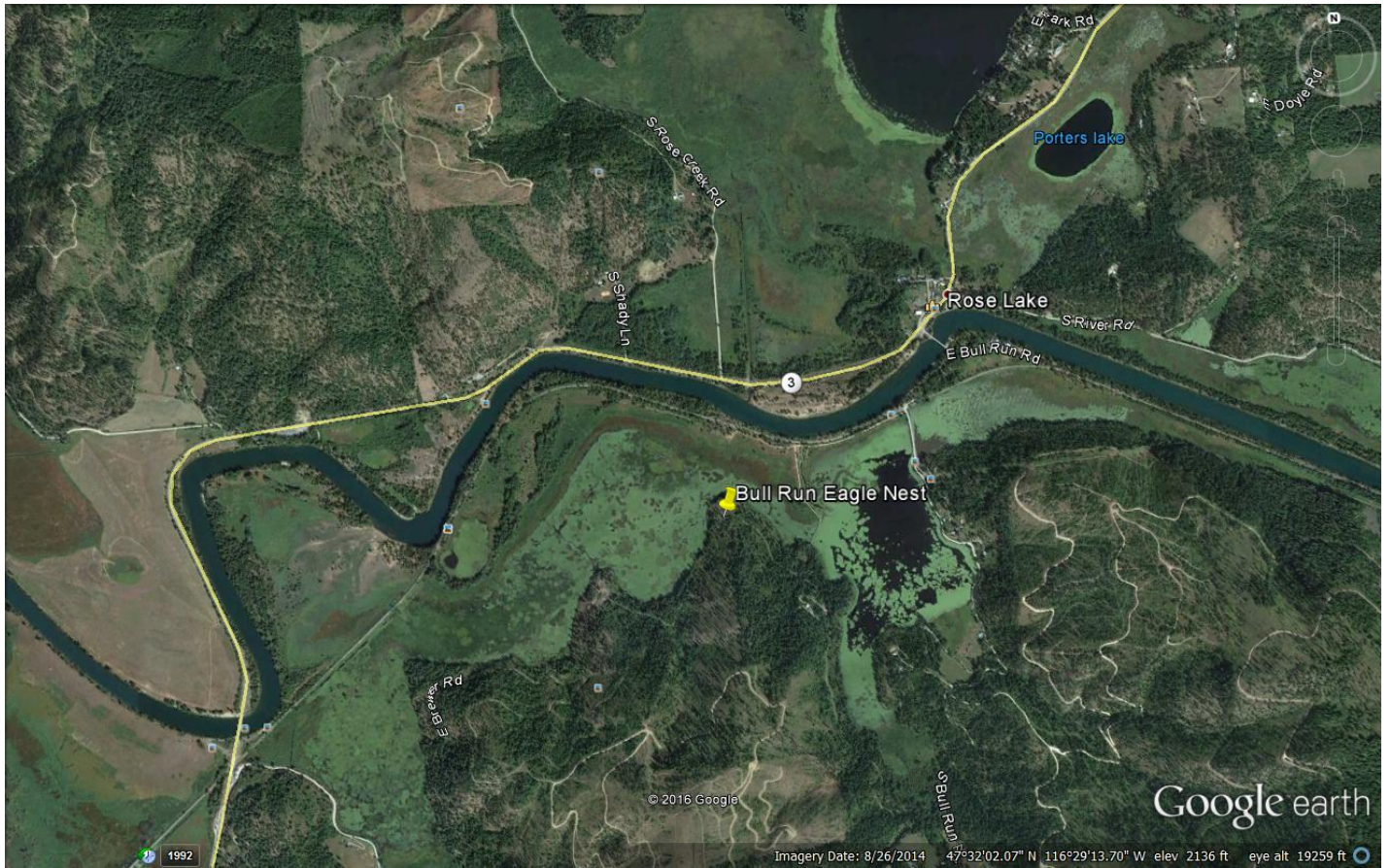
USGS Quad name: Rose Lake

Directions to nest: Viewed from CDA River or travel south across River to West Bull Run Road, Turn right and travel to E. Brewer Rd. if needed. Located at the point, on top of the transmission pole.

Comments: First observed in 2016 nesting season. 1.6 miles S of Rose Lake nest, 2.2 miles upstream of Killarney nest. Nest material is planned for permitted removal in fall of 2016.

Observer Initial: DA Date 02/25/16 Reviewer Initial: LS Date: 10/06/2016

****Attach locator map and photos showing nest site and nest****



Locator Map



Photo 1. View southeast across Coeur d'Alene River.

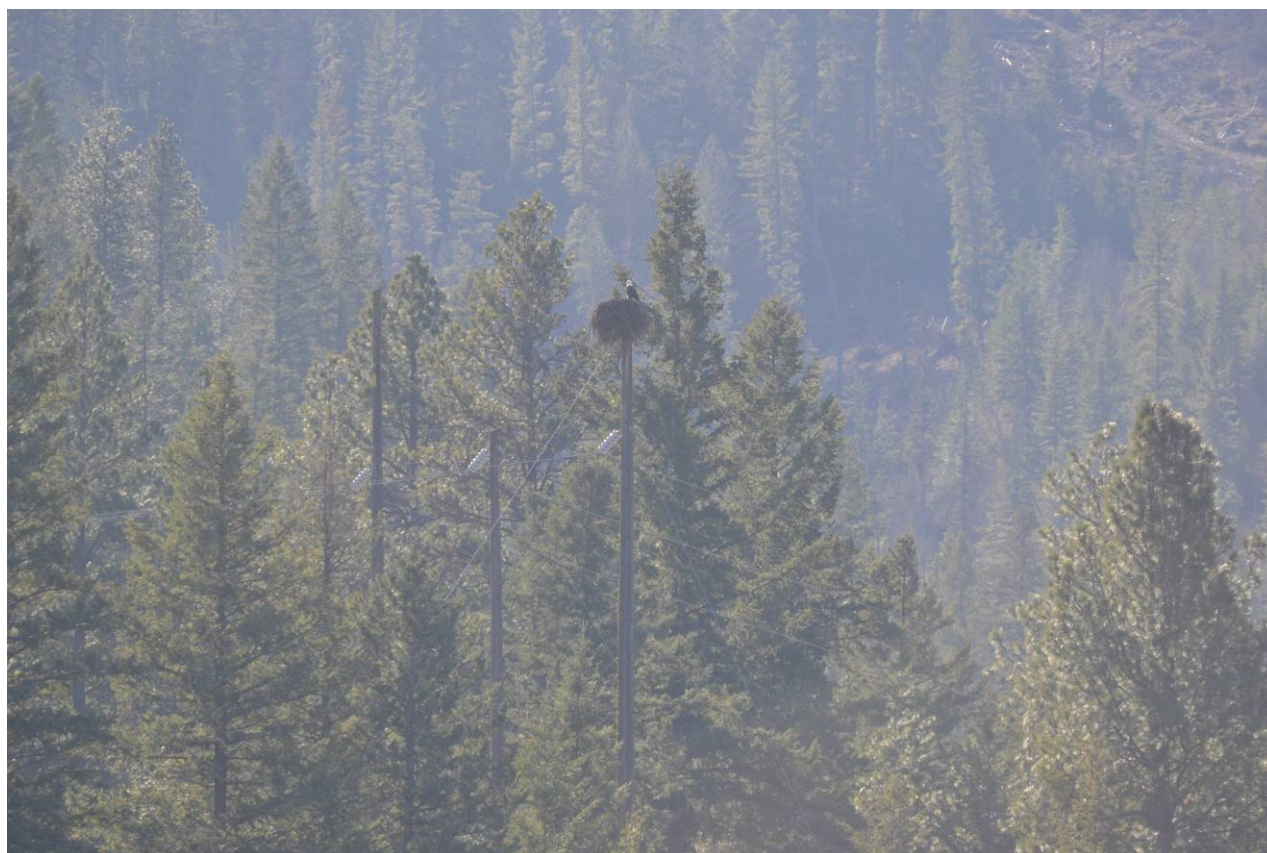


Photo 2. View southeast on transmission pole.

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): 06W10502

Reported by: David Armes Date: 05/19/2016

Location: T 27 N R 41 E Section 17 $\frac{1}{4}$ NW of $\frac{1}{4}$ NW

State: WA County: Spokane

Elevation: 1597 feet Aspect: South

Lat/Lon: 47.844578, -117.665043 Hydrologic unit: Spokane River

Nest stratum: Tree Nest height (circle (ft or m): 100

Position on slope: Terrace above shore Nest condition: good

Tree species: Ponderosa pine Tree height (circle ft or m): 125 DBH (circle in or cm): 28

Land ownership: Private

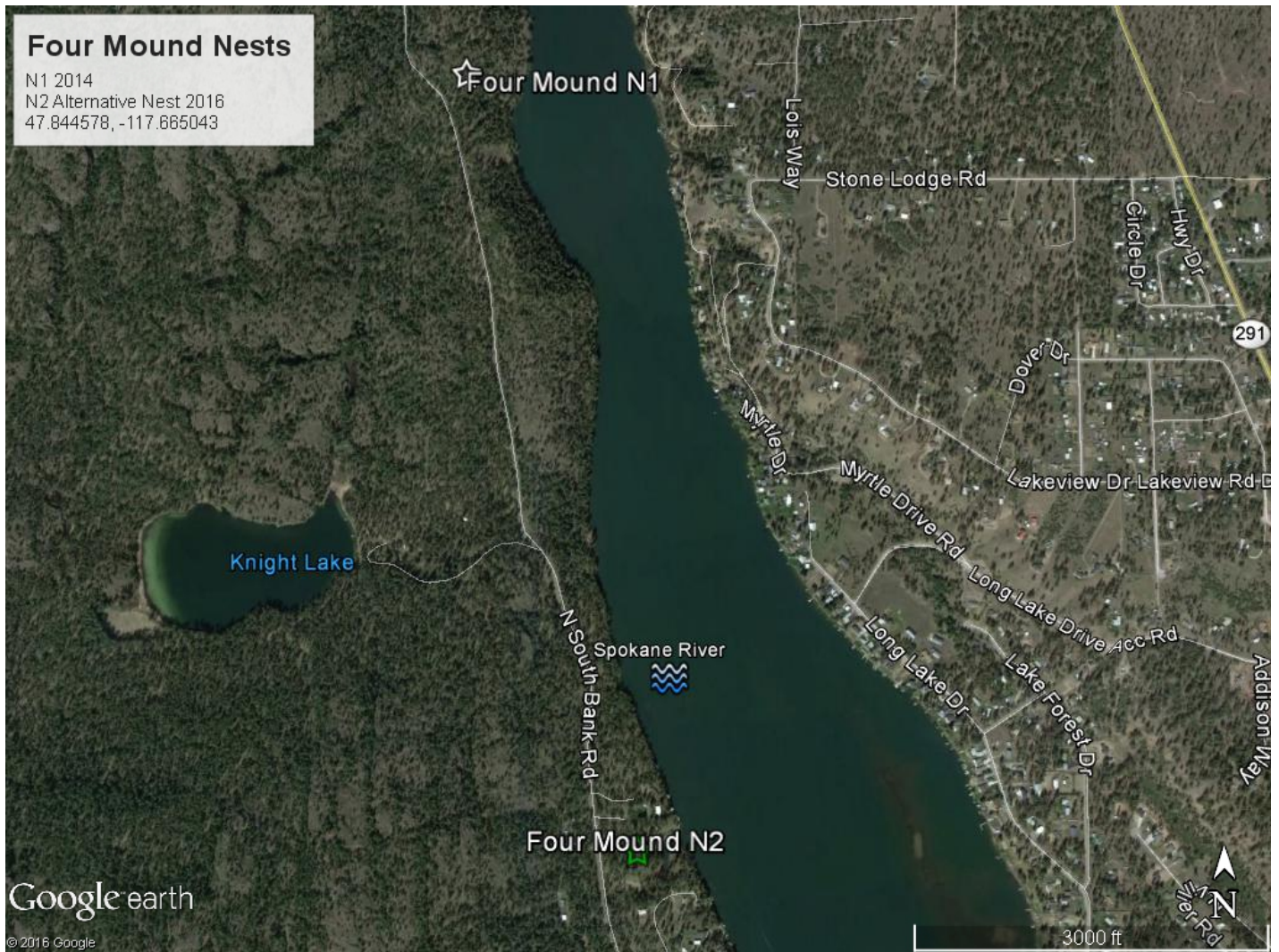
USGS Quad name: Four Mound Prairie

Directions to nest: From community of Nine Mile Falls, travel west on Charles Maas Rd. (Rte. 1) about 5 miles, turn right on N South Bank Rd. Travel north about 3 miles .Driveway address is 201515 N South Bank Rd.

Comments: Viewed from River. Located behind residence. Could be observed from of the two Community access
areas across the River along Long Lake Rd. First observed in 2016 nesting season.

Observer Initial: DA Date 05 /19/16 Reviewer Initial: LS Date: 10/04/2016

****Attach locator map and photos showing nest site and nest****



Locator Map



Photo 1. View west from Spokane River, behind residence.



Photo 2. View northwest from Spokane River. Adult with 1 nestling.

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

Species: Bald eagle

Territory name (if known): Northshore

Territory/nest number (if known): 06W10403

Reported by: David Armes Date: 03/16/2016

Location: T 27 N R 40 E Section 20 $\frac{1}{4}$ NW of $\frac{1}{4}$ SE

State: WA County: Stevens

Elevation: 1540 feet Aspect: East

Lat/Lon: 47.822921, -117.786500 Hydrologic unit: Spokane River

Nest stratum: Tree Nest height (circle ft or m): 90

Position on slope: Terrace above shore Nest condition: good

Tree species: Ponderosa pine Tree height (circle ft or m): 100 DBH (circle in or cm): 16

Land ownership: Avista

USGS Quad name: Long Lake

Directions to nest: Hwy 291 south to Sand Street to Avista ownership. Viewed from River, or view at Public / Avista access across the River from West Long Lake Road/ Devils Gap Road about 5.2 miles east of Hwy 231.

Comments: First observed in 2016 nesting season as a Northshore alternative, 1.25 mi. E of Northshore 06W10401 and 2 miles west of Long Lake South 06W22010. Located in a small bay. Nest collapsed after juvenile observed.

Observer Initial: DA Date 03/16/16 Reviewer Initial: LS Date: 10/06/2016

****Attach locator map and photos showing nest site and nest****



Locator Map



Photo 1. View northwest from Spokane River.



Photo 2. View northwest from Spokane River.

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

Species: Bald eagle

Territory name (if known): Turner Bay

Territory/nest number (if known) 07I06604

Reported by: David Armes Date: 2/23/2016

Location: T49N, R3W Section 19 $\frac{1}{4}$ SW of $\frac{1}{4}$ SW

State: ID County: Kootenai

Elevation: 2133 feet Aspect: Northwest

Lat/Lon: 47.572135°, -116.784696° Hydrologic unit: Spokane River/ Coeur D'Alene Lake

Nest stratum: Tree Nest height (circle ft or m): 80 feet

Position on slope: Shoreline Nest condition: good

Tree species: Ponderosa pine Tree height (circle ft or m): 100 DBH (circle in or cm): 20+

Land ownership: Private

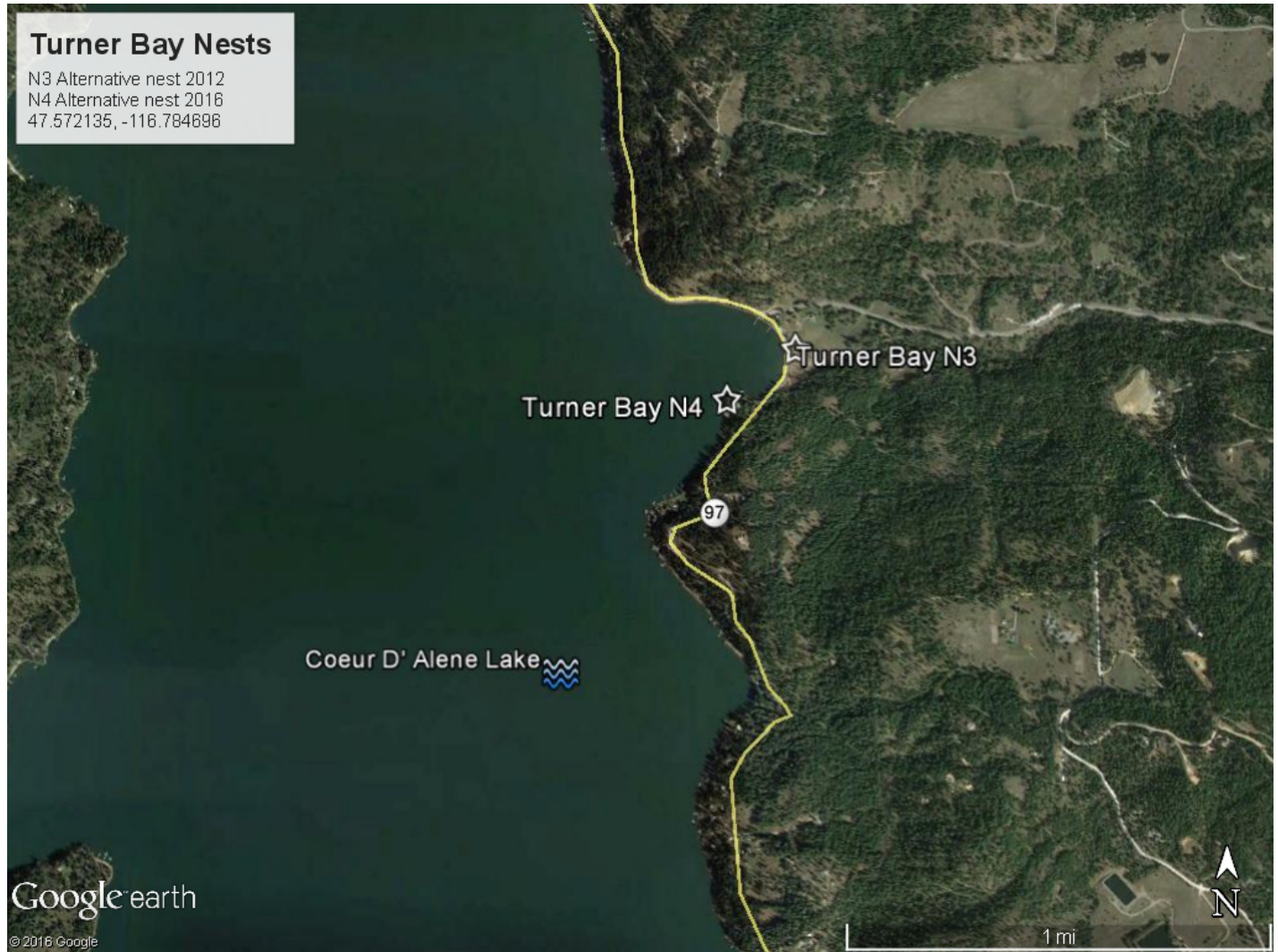
USGS Quad name: Mica Bay

Directions to nest: Travel south on Hwy 97, $\frac{1}{4}$ mile south of E, Burma Road junction. The nest is at the shoreline, west of the home located on the point.

Comments: In split-top pine between house and dock. First observed in 2016 nesting season.

Observer Initial: DS Date: 2/23/2016 Reviewer Initial: LS Date: 10/3/2016

****Attach locator map and photos showing nest site and nest****



Locator Map



Photo 1. View southeast from lake.



Photo 2. View east from Lake. Two adults.