



1411 East Mission Avenue
PO Box 3727
Spokane, WA 99220-3727

Electronically Filed

December 30, 2019

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

**Subject: Spokane River Project License, FERC Project No. 2545, Article 414,
Submittal of 2019 Annual Bald Eagle Monitoring Report**

Dear Secretary Bose:

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

The Plan requires Avista to submit a Bald Eagle Monitoring Report, summarizing the activities that it implements to monitor bald eagles associated with the Spokane River Project, to FERC, the U.S. Fish and Wildlife Service (USFWS), the Idaho Department of Fish and Game (IDFG), and the Washington Department of Fish and Wildlife (WDFW) by December 31 on an annual basis.

With this, Avista is submitting the enclosed 2019 Annual Bald Eagle Monitoring Report for your records, which discusses annual occupancy and productivity, and provides an overview of the surveys for new nests that were conducted during 2019.

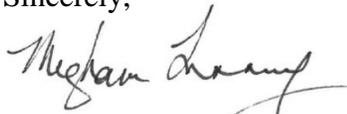
Of additional importance, and as referenced in the 2016, 2017 and 2018 annual reports, Avista has been working with the USFWS, IDFG, and the WDFW to revise the Plan to better represent bald eagle monitoring needs associated with the Spokane River Project. The basis for the revisions are due to the number of nesting territories and nests being stable since 2015, an indication that the overall monitoring area appears to be at or close to carrying capacity. Additionally, only four of the 35 bald eagle nests are on Avista's property, where it or FERC have management authority, and the birds are no longer listed as Threatened or Endangered by the USFWS, threatened by WDFW, or as a Species of Greatest Conservation Need by IDFG.

In addition to working with the above agencies during annual meetings to address how to best revise the Plan, Avista submitted a Revised Bald Eagle Management Plan to them for a 30-

day consultation period on December 27, 2018. Given significant staff turnover within the agencies, as well as comments received during 2019, Avista worked with the agencies to incorporate comments, as appropriate. The Revised Bald Eagle Management Plan (Revised Plan), dated December 30, 2019, was distributed to the agencies for an additional 30-day comment period. Avista anticipates filing the Revised Bald Eagle Management Plan, including agency consultation, to FERC for approval in the spring of 2020.

If you have any questions regarding the 2019 Annual Bald Eagle Monitoring Report, please feel free to call me at (509) 495-4643.

Sincerely,



Meghan Lunney
Spokane River License Manager

Enclosure

cc:

Kiira Siitari, IDFG
Erin Britton-Kuttel, USFWS
Leslie King, WDFW
Jeff Lawlor, WDFW
Merritt Horsman, IDFG



1411 East Mission Avenue
PO Box 3727
Spokane, WA 99220-3727

December 30, 2019

Leslie King
Washington Department of Fish and Wildlife
Region 1 Habitat Biologist
2315 North Discovery Place
Spokane Valley, WA 99216-1566

Subject: Spokane River Project License, FERC Project No. 2545, Article 414, Submittal of the 2019 Annual Bald Eagle Monitoring Report and Request for Comments on the Revised Bald Eagle Management Plan

Dear Ms. King:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista Corporation (Avista) developed a Bald Eagle Management Plan (Plan) after consulting with the U.S. Fish and Wildlife Service (USFWS), Idaho Department of Fish and Game (IDFG), and the Washington Department of Fish and Wildlife (WDFW). Following agency consultation, the Plan was filed with the FERC, which approved the Plan in its May 11, 2011 Order.

The Plan requires Avista to submit an annual Bald Eagle Monitoring Report that summarizes the bald eagle monitoring activities associated with the Spokane River Project by December 31. The enclosed 2019 Annual Bald Eagle Monitoring Report is being provided for your records. It discusses annual occupancy and productivity and provides an overview of the surveys for new nests that were conducted in 2019.

As you are aware, Avista has also been working with the USFWS, IDFG, and the WDFW over the last couple of years to revise the Plan to better represent bald eagle monitoring needs associated with the Spokane River Project. The basis for the revisions are due to the number of nesting territories and nests being stable since 2015, an indication that the overall monitoring area appears to be at or close to carrying capacity. Additionally, only four of the 35 bald eagle nests are on Avista's property, where it or FERC have management authority, and the birds are no longer listed as Threatened or Endangered by the USFWS, threatened by WDFW, or as a Species of Greatest Conservation Need by IDFG.

The enclosed Revised Bald Eagle Management Plan (Revised Plan), dated December 30, 2019, incorporates our discussions through November 2019. We would greatly appreciate your review and comments, if you have any, on the Revised Bald Eagle Management Plan by **January 30, 2020**. This will allow us to incorporate your comments, as appropriate, and file the revised Plan with FERC by early spring 2020.

Leslie King
December 30, 2019
Page 2

If you have any questions regarding the 2019 Annual Bald Eagle Monitoring Report or the Revised Bald Eagle Management Plan, please feel free to call me at (509) 495-8340.

Sincerely,

A handwritten signature in blue ink that reads "Robert Stephens". The signature is fluid and cursive, with the first name being more prominent than the last.

Robert Stephens
Restoration Biologist

Enclosures (2)

cc: Katie Powell, USFWS
Erin Britton-Kuttel, USFWS
Merritt Horsmon, IDFG
Jeff Lawlor, WDFW



1411 East Mission Avenue
PO Box 3727
Spokane, WA 99220-3727

December 30, 2019

Katie Powell
U.S. Fish and Wildlife Service
Northern Idaho Field Office, Manager, Conservation Planning
11103 East Montgomery Drive
Spokane Valley, WA 99206

Subject: Spokane River Project License, FERC Project No. 2545, Article 414, Submittal of the 2019 Annual Bald Eagle Monitoring Report and Request for Comments on the Bald Eagle Management Plan (Revised 2019)

Dear Ms. Powell:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista Corporation (Avista) developed a Bald Eagle Management Plan (Plan) after consulting with the U.S. Fish and Wildlife Service (USFWS), Idaho Department of Fish and Game (IDFG), and the Washington Department of Fish and Wildlife (WDFW). Following agency consultation, the Plan was filed with the FERC, which approved the Plan in its May 11, 2011 Order.

The Plan requires Avista to submit an annual Bald Eagle Monitoring Report that summarizes the bald eagle monitoring activities associated with the Spokane River Project by December 31. The enclosed 2019 Annual Bald Eagle Monitoring Report is being provided for your records. It discusses annual occupancy and productivity monitoring conducted in 2019.

As you are aware, Avista has also been working with the USFWS, IDFG, and the WDFW over the last couple of years to revise the Plan to better represent bald eagle monitoring needs associated with the Spokane River Project. The basis for the revisions are due to the number of nesting territories and nests being stable since 2015, an indication that the overall monitoring area appears to be at or close to carrying capacity. Additionally, only four of the 35 bald eagle nests are on Avista's property, where it or FERC have management authority, and the birds are no longer listed as Threatened or Endangered by the USFWS, threatened by WDFW, or as a Species of Greatest Conservation Need by IDFG.

The enclosed Revised Bald Eagle Management Plan (Revised Plan), dated December 30, 2019, incorporates our discussions through November 2019. We would greatly appreciate your expedited review and comments, if you have any, by **January 30, 2020**. This will allow us to incorporate your comments, as appropriate, and file the revised Plan with FERC by early spring 2020.

Katie Powell
December 30, 2019
Page 2

If you have any questions regarding the 2019 Annual Bald Eagle Monitoring Report or the Revised Bald Eagle Management Plan, please feel free to call me at (509) 495-8340.

Sincerely,



Robert Stephens
Restoration Biologist

Enclosures (2)

cc: Erin Britton-Kuttel, USFWS
Merritt Horsmon, IDFG
Leslie King, WDFW
Jeff Lawlor, WDFW



1411 East Mission Avenue
PO Box 3727
Spokane, WA 99220-3727

December 30, 2019

Merritt Horsman
Idaho Department of Fish and Game
2885 W. Kathleen Ave
Coeur d'Alene, ID 83814

Subject: Spokane River Project License, FERC Project No. 2545, Article 414, Submittal of the 2019 Annual Bald Eagle Monitoring Report and Request for Comments on the Revised Bald Eagle Management Plan

Dear Mr. Horsman:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Article 414, Avista Corporation (Avista) developed a Bald Eagle Management Plan (Plan) after consulting with the U.S. Fish and Wildlife Service (USFWS), Idaho Department of Fish and Game (IDFG), and the Washington Department of Fish and Wildlife (WDFW). Following agency consultation, the Plan was filed with the FERC, which approved the Plan in its May 11, 2011 Order.

The Plan requires Avista to submit an annual Bald Eagle Monitoring Report that summarizes the bald eagle monitoring activities associated with the Spokane River Project by December 31. The enclosed 2019 Annual Bald Eagle Monitoring Report is being provided for your records. It discusses annual occupancy and productivity and provides an overview of the surveys for new nests that were conducted in 2019.

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The enclosed Revised Bald Eagle Management Plan (Revised Plan), dated December 30, 2019, incorporates agency discussions through November 2019. We would greatly appreciate your review and comments, if you have any, on the Revised Bald Eagle Management Plan by **January 30, 2020**. This will allow us to incorporate your comments, as appropriate, and file the revised Plan with FERC by early spring of 2020.

Merritt Horsman
December 30, 2019
Page 2

If you have any questions regarding the 2019 Annual Bald Eagle Monitoring Report or the Revised Bald Eagle Management Plan, please feel free to call me at (509) 495-8340.

Sincerely,

A handwritten signature in blue ink that reads "Robert Stephens". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert Stephens
Restoration Biologist

Enclosures (2)

cc: Katie Powell, USFWS
Erin Britton-Kuttel, USFWS
Leslie King, WDFW
Jeff Lawlor, WDFW

AVISTA CORPORATION

2019

ANNUAL BALD EAGLE MONITORING REPORT

ARTICLE 414

SPOKANE RIVER HYDROELECTRIC PROJECT
FERC PROJECT NO. 2545

Prepared by
Licia A. Stragis
Timberland Management Company

For
Avista Corporation
Spokane, Washington

December 30, 2019

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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, FERC Project No. 2545 (Project), for a 50-year license term. The Project consists of five hydroelectric developments located on the Spokane River in northern Idaho (in Kootenai and Benewah counties) and eastern Washington (in Spokane, Stevens, and Lincoln counties). The Project boundary generally follows the normal full pool elevation of each hydroelectric development's impoundment, which 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 Avista to develop 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 territory 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 (Annual Reports). This Annual Bald Eagle Monitoring Report (Report) summarizes the results of implementing the Plan in 2019.

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 further defines the Planning Area, which is the geographic area associated with nests that occur on Avista-owned lands and 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 met with the U.S. Fish and Wildlife Service (USFWS), Idaho Department of Fish and Game (IDFG), and the Washington Department of Fish and Wildlife (WDFW) on March 27, 2019 to discuss the annual implementation of the Plan. Licia Stragis, Timberland Management Company Senior Biologist, assisted Avista in implementing the Plan and prepared the Report. Original and electronic copies of all field forms, photographs, geographic information system (GIS) databases, and reports are filed at Avista.

2.0 TERRITORY OCCUPANCY AND PRODUCTIVITY MONITORING

2.1 Methods

Location of Territories Monitored. *Figures 1 and 2* show the locations of the nesting territories monitored. A nest territory is an area occupied by a pair of breeding bald eagles that typically defend against intrusion by other eagles. A territory may include one or more alternate nests (nests built or maintained by the eagles but not used for nesting in a given year) (UFWS 2007). The territory is considered occupied if it contains an active nest.

Dates of Monitoring. Monitoring occurred between February 1 and July 31, following the methods described below and detailed in the Plan. Supplemental efforts included additional observation dates and extending the observation period to midday for watercraft and some land-based monitoring. According to the Plan, each known nest is to be observed a minimum of three times during the nesting season to make a nesting determination and assess productivity. The first observation was an initial determination of nesting activity that occurred between February 1 and April 15; the second observation, an update of nesting status, occurred between April 15 and June 15 and the third observation, a determination of productivity, occurred between June 15 and July 31.

Data Collection. Observations were generally made from first light to midday and required up to one and one half hours to determine nest activity 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. This included:

- Nest condition
- Nest repair or construction
- Presence and behavior of adults
- Adult incubation or brooding posture
- Number of eggs (where visible)
- 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.

Nest Determinations. A nesting determination is the activity status of the nest and subsequently, it is used to determine if a territory is occupied. The five potential nest determinations are (1) Active Successful, (2) Active, Not Successful, (3) Active, Success Unknown, (4) Not Active, and (5) Status Unknown. Based on the results of observations and professional judgment, a determination 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. “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. During the 2015 annual meeting, Avista and the agencies agreed 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. The annual report will include recommendations to rectify inadequacies in subsequent monitoring.

2. Not Active: No nesting activity and no adults observed near a nest 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 Monitoring 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

2019 Territory Occupancy, Nesting Activity Status, and Productivity Determination

Thirty-five territories were monitored in 2019. The 2012-2019 monitoring results are shown in *Table 1* and summarized below.

- Territory Occupancy: 86%. Of the 35 territories that were monitored, 30 contained active nests, four did not have active nests, and one had a status of unknown.
- Active nests: All of the 30 active nests had known productivity;
 - Active, Successful: 24 nests.
 - Active, Not Successful: 6 nests.
 - Active, Success Unknown: 0 nests.
- Monitoring Area Productivity: Thirty-five young fledged from the 30 active nests with known productivity, (n=30). The average number of fledglings per active nest was 1.17.
- Successful Nest Productivity: 80%. Of the 30 active nests with known productivity, 24 were successful. Thirty-five young were fledged from the twenty-four successful nests. (n=24). The average number of fledglings per successful nest was 1.46.

Annual productivity of nesting territories in the Monitoring Area is summarized in *Table 2*.

Table 1. Annual Bald Eagle Monitoring Results

| Territory Name | Nest Number | Nest in Planning Area | Potential Disturbance Factors | 2019 Nest Determination | # of Fledglings | | | | | | | |
|----------------|-------------|-----------------------|-------------------------------|-------------------------|-----------------|------|------|------|------|------|------|------|
| | | | | | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
| IDAHO | | | | | | | | | | | | |
| Ahrs Creek | 08I10301 | No | Jet boat race, ranch | Active, Successful | 1 | 2 | 1 | 1 | 1 | NA | NA | NA |
| Chippy Point | 08I10501 | No | Residential | Active, Successful | 1 | 1 | NA | | | | | |
| Cougar Bay | 07I03502 | No | Residential, osprey nests | Active, Successful | 1 | 2 | 0 | 2 | 0 | 2 | UNK | 0 |
| Eddyville | 07I07701 | No | Residential | Active, Successful | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Falls Creek | 07I03703 | No | Jet boat race | Not Active | 0 | UNK | 1 | UNK | 1 | 1 | 0 | 0 |
| Fernan W | 07I03403 | No | Osprey | New, Active, Successful | 1 | 1 | 2 | 1 | 1 | 1 | 1 | NA |
| Fernan E | 07I03402 | No | Recreation | Active, Not Successful | 0 | 0 | 1+ | - | | | | |
| Hepton Lake W | 08I10101 | No | Residential, Hwy 3 | Active, Successful | 2 | 0 | 1 | 1 | 2 | 2 | 2 | NA |
| Hepton Lake E | 08I10102 | No | Residential, Hwy 3 | Active, Successful | 1+ | 0 | - | | | | | |
| Heyburn Park S | 08I05702 | No | Park, roads, Trail of CDA | Active, Successful | 2 | 1 | UNK | 1 | 2 | 1 | 2 | 0 |
| Heyburn Park N | 08I05701 | No | Park, roads, Trail of CDA | Active, Successful | 1 | 1 | 2 | 2+ | - | - | - | - |
| Killarney Lake | 07I01702 | No | None | Active, Successful | 3 | 1 | 1 | 2 | 0 | 1 | 1 | 2 |
| Mica Bay | 07I05401 | No | Residential | Active, Successful | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 |
| Post Falls Dam | 07I08001 | Yes | Residential, dam, osprey | Status Unknown | UNK | UNK | 0 | 1 | 2 | 1 | 2 | 1 |
| Rainy Hill | 07I07402 | No | None | Active, Successful | 2 | 1 | 0 | 0 | 1 | 2 | UNK | UNK |
| Rose Lake | 07I01902 | No | Residential | Active, Successful | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |

| Territory Name | Nest Number | Nest in Planning Area | Potential Disturbance Factors | 2019 Nest Determination | # of Fledglings | | | | | | | | |
|---------------------|-------------|-----------------------|-------------------------------|-------------------------|-----------------|------|------|------|------|------|------|------|--|
| | | | | | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | |
| St. Joe/Benewah | 08I10601 | No | None | Not Active | 0 | 0 | NA | | | | | | |
| St. Maries | 08I04301 | No | None | Active, Successful | 1 | 1 | 1 | UNK | UNK | 0 | 2 | 1 | |
| Turner Bay | 07I06604 | No | Residence, near Hwy. | Active, Successful | 2 | 2 | 2 | 2 | 0 | 0 | 1 | 2 | |
| Turtle Lake | 08I02403 | No | Jet boat race | Active, Not Successful | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | |
| Upper Spokane River | 07I10202 | No | Residences across river | Active, Not Successful | 0 | 1 | 1 | 0 | UNK | 0 | UNK | NA | |
| Windy Bay | 08I00103 | No | None | Not Active | 0 | 2 | 2 | 2 | 1 | 2 | UNK | 1 | |

WASHINGTON

| | | | | | | | | | | | | | |
|---------------------|----------|-----|------------------------------|-------------------------|---|-----|---|-----|---|----|----|----|--|
| Charles Maas | 06W30505 | No | WA Park and residential | Active, Not Successful | 0 | UNK | 2 | 2 | 1 | 1 | 1 | 1 | |
| Deep Creek | 06W10901 | Yes | Trails | Active, Successful | 2 | 0 | 0 | UNK | 2 | NA | NA | NA | |
| Four Mound | 06W10502 | No | Residential | Active, Successful | 2 | 2 | 1 | 1 | 2 | NA | NA | NA | |
| Little Sandy | 06W11001 | No | Trails | New, Active, Successful | 1 | NA | | | | | | | |
| Long Lake South | 06W22010 | Yes | Residential | Active, Successful | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | |
| Lower Spokane River | 06W10101 | No | Osprey, Hwy 291, residential | Active, Not Successful | 0 | 1 | 0 | 2 | 1 | 1 | 0 | NA | |
| North Shore | 06W10403 | Yes | Dock | Active, Successful | 1 | 0 | 0 | 1 | 1 | 2 | NA | NA | |
| Powerball | 06W10701 | Yes | Osprey, other eagles | Active, Successful | 1 | 1 | 2 | 2 | 2 | NA | NA | NA | |
| Riverside Launch | 06W10601 | No | Osprey, recreation | Active, Successful | 2 | 0 | 2 | 2 | 2 | NA | NA | NA | |
| Sportsman | 06W10801 | No | Residence | Active, Not Successful | 0 | 2 | 2 | 1 | 1 | NA | NA | NA | |
| Suncrest | 06W10302 | No | Residential, trails | Active, Successful | 1 | 1 | 1 | 1 | 1 | 0 | NA | NA | |

| Territory Name | Nest Number | Nest in Planning Area | Potential Disturbance Factors | 2019 Nest Determination | # of Fledglings | | | | | | | |
|------------------------------------|-------------|-----------------------|---------------------------------------|-------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | | | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
| Whalen | 06W29703 | Yes | Osprey | Not Active | 0 | 0 | UNK | UNK | 1 | 1 | 2 | 3 |
| Willow Bay | 06W10201 | No | Other eagles, osprey, resort, Hwy 291 | Active, Successful | 2 | 1 | 1 | 2 | 2 | 1 | NA | NA |
| Total fledglings | | | | | 35 | 32 | 32 | 33 | 33 | 27 | 20 | 19 |
| | | | | | (n=30) | (n=25) | (n=26) | (n=25) | (n=23) | (n=22) | (n=16) | (n=17) |
| Fledglings/ nest | | | | | 1.17 | 1.28 | 1.23 | 1.32 | 1.44 | 1.23 | 1.25 | 1.12 |
| | | | | | (n=30) | (n=25) | (n=26) | (n=25) | (n=23) | (n=22) | (n=16) | (n=17) |
| Fledglings/ successful nest | | | | | 1.46 | 1.39 | 1.39 | 1.50 | 1.44 | 1.50 | 1.54 | 1.73 |
| | | | | | (n=24) | (n=23) | (n=23) | (n=22) | (n=23) | (n=18) | (n=13) | (n=11) |

NA =not applicable, monitoring started in year indicated, no previous year information

UNK =success or status unknown

+ = territory split, alternate nest with another BAEA pair

- = alternate nest status

Table 2. Annual Summary of Bald Eagle Productivity in the Monitoring Area

| | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|------|------|------|------|------|------|------|------|
| Number of territories checked | 35 | 34 | 33 | 32 | 32 | 27 | 23 | 19 |
| Number of active territories | 30 | 28 | 28 | 29 | 26 | 22 | 21 | 19 |
| Percent active (occupancy) | 86 | 82 | 85 | 91 | 81 | 81 | 91 | 100 |
| Number of nests with known productivity | 30 | 25 | 26 | 25 | 23 | 22 | 16 | 17 |
| Number of successful nests | 24 | 23 | 23 | 22 | 23 | 18 | 13 | 11 |
| Number of active nest failures | 6 | 2 | 3 | 3 | 0 | 4 | 3 | 6 |
| Number success unknown | 0 | 3 | 2 | 4 | 2 | 0 | 5 | 2 |
| Percent active nest success | 80 | 92 | 88 | 88 | 100 | 82 | 81 | 65 |
| Percent active nest failure | 20 | 8 | 12 | 12 | 0 | 18 | 19 | 35 |
| Number of fledglings | 35 | 32 | 32 | 33 | 33 | 27 | 20 | 19 |
| Fledglings /nest | 1.17 | 1.28 | 1.23 | 1.32 | 1.44 | 1.23 | 1.25 | 1.12 |
| Fledglings/ successful nest | 1.46 | 1.39 | 1.39 | 1.50 | 1.44 | 1.50 | 1.54 | 1.73 |

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-four of 30 active nests were successful, fledging a total of 35 nestlings. The average fledglings per successful nest was 1.46 with one or two fledglings. However, the Killarney Lake nest had three fledglings. The previous record of three fledglings was at the Whalen nest in 2012.

Active, Not Successful. There were six territories where adults were present in the territory and near or at the nest during the nesting season but nesting was not successful: Fernan East, Turtle Lake, Upper Spokane River, Charles Maas, Sportsman, and Lower Spokane River.

The Fernan East nest was determined active on March 6th with two adults perching and repairing the nest. On May 27th both adults were perching in the territory, however the nest was collapsed. On July 8th, one adult eagle was observed perching on the ridge below the collapsed nest site. Therefore, initial adult perching and repairing nest indicated an active nest, but due to subsequent observations of a collapsed nest, the nest was determined to be not successful. There were no observed disturbances or habitat alterations to indicate the cause of failure.

The Turtle Lake nest was determined active with one adult perched on a limb above the nest on May 28th. A nestling was also observed in the nest at the 3b stage. This stage is approximately 3.5 to 5.5 weeks until fledging and is considered a very sensitive period as young are vulnerable to elements and predators (Carpenter 1990, and USFWS 2007). The nest was in fair condition. On June 25 an adult was observed about 50 feet from the nest, but no movement was observed in the nest. The nest was in poor condition. On July 16th no adults were observed near the nest or in the territory. No activity was observed at the nest. Therefore, adult presence near the nest and a nestling indicate an active nest. But due to lack of observed young on subsequent observation dates, the vulnerable age when the nestling was last seen, and the poor condition of the nest, the nest was determined to be not successful. The nest failure occurred between May 28th and June 25th. There were no observed disturbances or habitat alterations to indicate the cause of failure. Potential disturbances include a dirt road within 300 feet, residences within 1,000 feet and a paved highway within 1,000 feet.

The Upper Spokane River nest was determined active by March 31st with two adults present, conducting nest repair, and incubation. During two observation dates in April incubation continued but the bottom of the nest appeared loose. A hatching was observed on May 14th along with two adults present in the territory. However by May 28th, the nest was completely collapsed. The adults were observed upstream of the nest. Through the subsequent observation in June and July only one adult was observed in the territory. Therefore, adult presence at the nest and a nestling indicate an active nest. The nest collapsed occurred between May 14th and May 28th. The nest was determined to be not successful. There were no observed disturbances or habitat alterations to indicate the cause of failure aside from the nest collapse. Potential disturbances included residences across the river from the nest but these were well away from the nest location which was on the opposite hillslope ridge.

The Charles Maas nest was determined active by May 31st, when fresh nest material was observed, implying previous adult presence at the nest. No adults were observed on that date. There was no sign of nest use or adult presence observed on subsequent dates. The nest was in good condition. The alternate east nest was not found. There were no observed disturbances or habitat alterations.

The Sportsman nest was determined active by May 31st, when fresh nest material was observed, implying previous adult presence at the nest. No adults were observed on that date. There was no sign of nest use or adult presence on subsequent dates. The nest was in good condition. This nest has been active and successful since 2015. There were no observed disturbances or habitat alterations.

The Lower Spokane River nest was determined active on March 18th and April 18th with an incubating adult on the nest. By April 20th, June 12, and July 24th, no adult eagles were observed in the territory. No young were observed. The nest remained in good condition. Therefore, adult presence incubating at the nest indicate an active nest. But lack of adult presence or young at subsequent observation indicated the nest was not successful. Potential disturbances include residences across the river from the nest, a paved highway with a bridge 800 feet from the nest, and two osprey nests. Habitat alterations include a transmission line upgrade in the fall of 2018, adjacent to this territory and 0.45 miles east of the nest. No other disturbances or habitat alterations were observed.

Active, Success Unknown. All 30 active nests were determined to be successful or not successful. There were no active, success unknown nests.

Not Active. Four nests in territories were not active: Falls Creek, St. Joe/Benewah, Windy Bay, and Whalen.

The Falls Creek territory was not active. There was no adult eagle presence or nesting activity observed at the 07I03703 nest. The nest was in fair condition. The nest was last active in 2017. The Falls Creek 07I03702 nest was not detected. There were no observed disturbances or habitat alterations.

The St. Joe/Benewah territory was not active. There was no adult eagle presence or nesting activity observed. The nest was in fair condition. The nest was active, not successful in 2018. There were no observed disturbances or habitat alterations.

The Windy Bay territory was not active. There was no adult eagle presence or nesting activity observed. The 08I00103 nest was active and successful in 2018, but the nest was found to be mostly fallen out of the tree in 2019. The two alternate nests have also collapsed. There were no observed disturbances or habitat alterations.

The Whalen Territory was not active. Although an adult was observed on two occasions, it was not observed at any time near the nest location or involved in nesting activities. The nest was in fair to poor condition. There have been no observed successful nesting at this territory since 2015. There may be an alternate nest since eagles have been observed using the territory in previous years. There were no observed disturbances or habitat alterations.

Status Unknown. The status of the Post Falls Dam nest was unknown. The territory was incompletely checked in 2019. There were no monitoring observation dates prior to July 2nd. At that point no nest was detected and was assumed destroyed. An adult eagle was observed perched near the previous nest location on that date and on July 15th. Because of the incomplete survey, the status was determined as unknown. Complete surveys will be conducted in future monitoring efforts.

Historic Territories. Territories not active or not occupied by adult eagles for three successive years are considered historic territories and are not included in monitoring results. However, the location of these nests is retained in the GIS database and the area is included in surveys for new nests. Historic territories include Blessing Slough 2018, Swan Lake in 2017, Harrison West in 2016, Mission Slough in 2015, and Anderson Lake in 2015. There were no historic determinations in 2019.

Other. In 2018 and again in 2019 Bull Run was determined not to be a nesting territory. Adult eagles were observed flying through the area for the past three years, but no nest was located.

2.3 Discussion

The occupancy and productivity percentages in 2019 are similar to the previous 2012-2018 Project monitoring results, and to the 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 identified and occupied nesting territories has stabilized since 2015. The initial increase of nesting territories from 19 in 2012 to 35 in 2019 was likely due to Plan

implementation, i.e. annual survey for new nests, and nests found during monitoring. It is important to note that nest locations and territories are not permanent. The dynamics that affect eagle presence, nest locations, and territory boundaries include eagle mortalities, nesting efforts of younger eagles, natural and human caused disturbances, and competition for habitat and prey with other eagles and other species.

In 2019 the one new nesting territory documented was the Little Sandy on the Spokane River. The Hepton territory was split into two territories; Hepton East and Hepton West. Both were occupied, active, and fledged young. Bull Run was determined not to be a territory and was removed from monitoring in 2019.

The Monitoring Area also appears to be at or close to carrying capacity to support nesting pairs of bald eagles. Figures 1 and 2 show the locations of the nests and Tables 3 and 4 measure the distances between some of the nests and territories. From this information we have found that eagle nests are nearly predictable within a five mile interval. In which case, it can be concluded that most of the territories in the monitoring area may currently be identified.

It is important to note though, this is not an absolute count of nests. There are locations in the Monitoring Area where nests have not been found. For example, some remote river locations are inaccessible. Some lake locations are exposed to severe weather and winds, which have minimized available tall and mature trees for nest sites protected from the wind. Ospreys, which are numerous in many parts of the Monitoring Area, are the most frequent disturbance to nesting eagles and sufficient numbers may deter nesting success. Other natural disturbances that can impact nesting include competing eagles or other species such as owls, hawks, other birds, and predators. See *Tables 1 and 4*. Most of the territories experience some human caused disturbance and habitat alterations from nearby residences, transportation elements, infrastructure or human recreation as shown in *Tables 1 and 4*. Only a few of the nests are in isolation from these types of ongoing disturbances. There has been no documentation or observations of disturbances to nesting eagles as a result of Project activities.

3.0 SURVEYS TO IDENTIFY NEW NESTS

3.1 Methods

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

Avista coordinates with the 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 Monitoring Area during the course of ongoing investigations to obtain local information of eagle sightings and potential new nests.

Survey Routes. The survey routes by watercraft followed the Project shorelines. Other surveys were conducted by land-based vehicles, or on foot to locations where there were new observations of adult eagles.

Survey Dates. Surveys were initiated in March with the monitoring efforts, during the ongoing monitoring, and during territory investigations. Documentation for any new nest, or suspected

new nest encountered during the surveys include 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 and are included in *Appendix B*.

3.2 Results

Two new nests were located during the survey efforts in 2019: One nest in a new territory and one new alternative nest (*Table 3*). The new territory of Little Sandy was first identified this year. The new Fernan Lake West nest was constructed this year during the nesting season. Both new nests are included in the 2019 monitoring effort. These new nests are included in the GIS database along with the locations of the other bald eagle nests (*Figures 1 and 2*).

Table 3. 2019 New Bald Eagle Nests

| Territory Name | Number | Latitude, Longitude | Nest in Planning Area | Location/ Relationship to known territories | Notes |
|-------------------------------------|---------------|----------------------------|------------------------------|--|----------------|
| NEW NEST, NEW TERRITORY | | | | | |
| Little Sandy, WA | 06W11001 | 47.829281, -117.619037 | No | 0.75 mi. northwest of Suncrest 02; 1.4 miles east of Sportsman | Active in 2019 |
| NEW NEST, EXISTING TERRITORY | | | | | |
| Fernan West, ID | 07I03403 | 47.670694, -116.737262 | No | 250 feet uphill of Fernan 01 nest | Active in 2019 |

4.0 NESTING TERRITORY INVESTIGATION

The nesting territory investigations are conducted over two consecutive years. The purpose of these investigations 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.

Results of the investigations for nesting territories that are located in the Planning Area are to be included in Appendix C as site specific management plans. There were no territory investigations conducted in 2018 and 2019 located in the Planning Area and therefore there are no Appendix C site specific management plans within this report.

Results of the investigations for nesting territories that are not located in the Planning Area are summarized below. 2019 was year two of investigations for the Fernan West and Heyburn Park South nesting territories in Idaho. 2019 was year one for the Upper Spokane River nesting territory in Idaho and Four Mound nesting territory in Washington.

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.

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). 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. Home ranges, nest territories, nest sites, perch trees, and roost stands are not permanent locations and are anticipated to change over time. Movement and use sites 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. 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 following USFWS (2007) guidelines.

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

Fernan West Nesting Territory Investigation

Location. The Fernan West bald eagle territory is located at Fernan Lake, RM 2.3, in Kootenai County, Idaho. It is 1.3 miles west of the active Fernan East nesting territory. The territory is located primarily in the north half of Section 20, Township 5 North, Range 03 West. The parcels in the bald eagle territory area include Idaho Department of Lands, City of Coeur d'Alene, and private ownership. Habitat in the territory includes the aquatic habitat of Fernan Lake and the steep north facing hillslope of mixed conifer forest. There is a public boat launch at the west end of Fernan Lake and two public fishing access pullouts along East Fernan Lake Road which is at the north boundary of the territory. There is residential development only at the west end of the territory. There are two overhead transmission corridors that intersect the territory.

Study dates and Schedules. Territory observation periods in 2018 and 2019 were conducted as detailed in the Plan. A total of 11 territory investigations observation were conducted per year, for a total of 22 territory investigations.

Study methods. Study methods detailed in the Plan for investigations produced time-interval records about eagle activities, locations, habitat use, and potential disturbances.

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. The topography, land use, home range, and nesting territory elements are shown in *Figure 3*.

Home range estimates. The home range extends over 444 acres: over 1.3 miles long and 0.66 miles wide. The home range encompasses the north and south shorelines of Fernan Lake and East Fernan Lake Road. There is a wetland at the west outlet. The home range also extends west beyond Fernan Lake over Interstate 90 to unknown locations by Coeur d'Alene Lake. The eagles were observed flying to and returning from that direction. Attempts to follow the eagles to locations beyond Fernan Lake were not successful. Therefore the west extent of the home range boundaries and acreage are the minimum used by the eagles.

Nesting territory estimates. The nesting territory is approximately 135 acres: up to 0.97 miles along the south shore of Fernan Lake and up to 0.32 miles wide. Nesting territory boundaries were delineated on the maps incorporating primary use areas. The nesting territory includes Fernan Lake, the south shoreline, and the adjacent forested hillslope. There are no wetlands in the nesting territory. There is one north/south overhead transmission corridors that spans the nesting territory. There are no roads or other development in the nesting territory.

Primary use areas and key use sites (including nest sites, primary perches, prey capture sites, and roost stands)

Nest sites. Prior to 2017 there was one nesting pair with one active (07I03401) and one alternative (07I03402) nest at Fernan Lake. Since 2017, the Fernan Lake Territory was split into two territories, Fernan West (107I03401) and Fernan East (07I03402) each with a nesting pairs of eagles. In 2019 the Fernan West pair built another nest (07I03403) at the start of the nesting season. The new Fernan West nest is located about 250 feet uphill of the 2017/2018 nest in a split top Douglas fir. The change in nest location may have been the result of a change of one or more of the nesting pair.

Primary perches. There are nine primary perches. All primary perch locations are located along the south hillslope. The primary perches are in trees that afforded optimal views of the nesting territory and at prey capture sites. Three are at shoreline locations.

Prey capture sites. There were nine identified prey capture sites. Eight were aquatic. Four of the nine eight prey capture locations were identified within the nesting territory. Fish were observed as the dominant prey. Other potential prey species include hatchlings of waterfowl or unidentified upland prey.

Roost stands. There was one roost stand that was utilized during the investigation. It is located east of the nest in a conifer thicket.

Disturbances

Typically the eagles were not disturbed by the routine activities such as transportation, development, or infrastructure that were present prior to eagle nesting. Disturbances noted below are listed according to highest degree of disturbance and frequency. The activities were either observed during investigations to disturb nesting eagles, or to have the potential to disturb the nesting eagles. No observable land use changes or construction was observed in the nesting territory during the two year investigation. Despite the potential for disturbances from osprey, ravens, and recreation, productivity has been stable at this nesting territory.

Osprey. Osprey caused the main disturbances to nesting eagles; they were present at nearly all observation dates. They were first observed in the territory at the end of March. By this time the eagle pair had been through courtship, nest-building, and started incubation. There were no osprey nests observed within the home range. Territory defense actions within the home range and nesting territory and conflicts over aquatic prey captures were regular occurrences with vocalizations and pursuit flights.

Ravens. Ravens were also observed disturbing the nesting eagles in May and June. They usually flew in groups of two to four as close as 50 feet from the nest causing the eagles territory defense actions such as vocalizations and pursuit typically for a duration of about two minutes, although one interaction was off and on for 30 minutes. There may have been nests or a rookery within the territory.

Human activity. The eagles were generally not disturbed by the regular human activities, but there was regular recreation observed during the investigations including anglers in boats, motor boats, weekly crew practice with up to six vessels, and kayaking. Watercraft was launched at the public boat ramp. North shore anglers were not observed disturbing the eagles. On a couple occasions when boaters momentarily approached the primary perches, the eagles appeared distracted or flushed to a nearby perch. There were no hiking trails or hikers in the nesting territory

Other Disturbances. On one occasion two Canada geese flew after the female eagle after her prey capture attempt of goslings. The geese followed the eagle to the nest and circled while vocalizing for about two minutes.

The Fernan West pair occasionally flew to the east territory boundary to meet and challenge the Fernan East eagles. Flight and vocalizations were the common territory defense actions.

Avista Project Operations. There are no Avista infrastructure elements located in the Fernan West home range or nesting territory with the exception of a north/south transmission line spanning the lake. There was no observed disturbance.

Heyburn Park South Nesting Territory Investigation

Location. The Heyburn Park South bald eagle territory is located at Chatcolet Lake south of Coeur d'Alene Lake, RM 1.7, in Benewah County, Idaho. It is 1.2 miles southwest of the active Heyburn Park North nesting territory. The territory is located primarily in Section 1, Township 46 North, and Range 04 West. Nearly all of the terrestrial bald eagle territory area is in Heyburn State Park. Habitat in the territory includes the aquatic habitat of Chatcolet Lake and the surrounding hillslopes of mixed conifer forest. There are cliffs on the southeast facing hillslope. The wetland is located at the west bay of Chatcolet Lake at the Plummer Creek inlet. There are several park features within the territory including campgrounds, day use areas, park office headquarters, interior roads, sewer treatment, hiking trails, several boat docks, and also the paved Trail of the Coeur d'Alene's. State Highway 5 is located at the south boundary of the territory. There are leased cabins concentrated at Hawley's Landing.

Study dates and Schedules. Territory observation periods in 2018 and 2019 were conducted as detailed in the Plan. A total of 11 territory investigations observation were conducted per year, for a total of 22 territory investigations.

Study methods. Study methods detailed in the Plan for investigations produced time-interval records about eagle activities, locations, habitat use, and potential disturbances.

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. The topography, land use, home range, and nesting territory elements are shown in *Figure 4*.

Home range estimates. The home range extends about 960 acres: 1.61 miles long and 1.27 miles wide. The home range encompasses the northwest and south hillslopes, wetlands, shorelines, and Chatcolet Lake and much of the Park infrastructure.

Nesting territory estimates. The nesting territory is approximately 212 acres: 0.81 miles long and 0.66 miles wide. Nesting territory boundaries were delineated on the maps incorporating primary use areas. The prey capture sites near the primary perches are included in the nesting territory. The nesting territory includes the west portion of Chatcolet Lake, the east edge of the wetlands, the northeast shoreline with adjacent forested hillslopes shoreline and a perch on the south shoreline. Some of the park interior roads, trails, and day use areas intersect the nesting territory.

Primary use areas and key use sites (including nest sites, primary perches, prey capture sites, and roost stands)

Nest sites. The Heyburn Park South nest has been located in the same very large tall snag since monitoring began in 2012. It is located on the southeast facing slope just above the park interior road.

Primary perches. There are five primary perches. All but one primary perches are located near the nest. The primary perches are in trees that afforded optimal views of the nesting territory and at prey capture sites. Three are at shoreline locations.

Prey capture sites. Eight of nine prey capture locations are identified in the nesting territory. All but one are were aquatic locations with fish identified as the prey species. Other potential prey species include the numerous waterfowl hatchling opportunities of the bay.

Roost stands. There were two roost stands that were utilized during the investigation. Both were located southwest of the nest in conifer thickets.

Disturbances

Typically the eagles were not disturbed by the routine activities such as transportation, development, or infrastructure that were present prior to eagle nesting. Disturbances noted below are listed according to highest degree of disturbance and frequency. The activities were either observed during investigations to disturb nesting eagles, or to have the potential to disturb the nesting eagles. No observable land use changes or construction was observed in the nesting territory during the two year investigation. There were relatively very few disturbances or potential disturbances observed at the Heyburn Park South territory during the two year investigation. Productivity has been stable.

Human activity. The eagles were generally not disturbed by the regular human activities, but there was regular recreation observed during the investigations including anglers in boats, motor boats, with bicycling and walking on the numerous trails. On a couple occasions when anglers or walkers approached eagles they appeared distracted or flushed to a nearby perch. There were no observable land use changes or construction was observed in the nesting territory during the two year investigation.

Other eagles. Immature eagles were observed in the territory on just a couple occasions early in the nesting season, but no disturbance was observed to the nesting pair.

Other. On a single observation, an osprey flew within 100 feet of the nest. The male eagle pursued it for 12 minutes circling up and out of the territory. There were no observed osprey nests in the territory. On two occasions an eagle was observed pursuing an osprey with a fish until the osprey dropped it. The fish was then retrieved by the eagle. On a single observation, a turkey vulture flew about 100 feet from the nest and the eagle pursued it for 10 minutes out of the territory.

Avista Project Operations. There are no Avista infrastructure elements located in the home range or nesting territory.

4.3 Discussion

Fifteen territory investigations have been initiated since 2012. *Table 4* summarizes the current results of the seasons of nesting territory investigations through 2019.

Table 4. Bald Eagle Nesting Territory Investigation Summary (2012 – 2019)

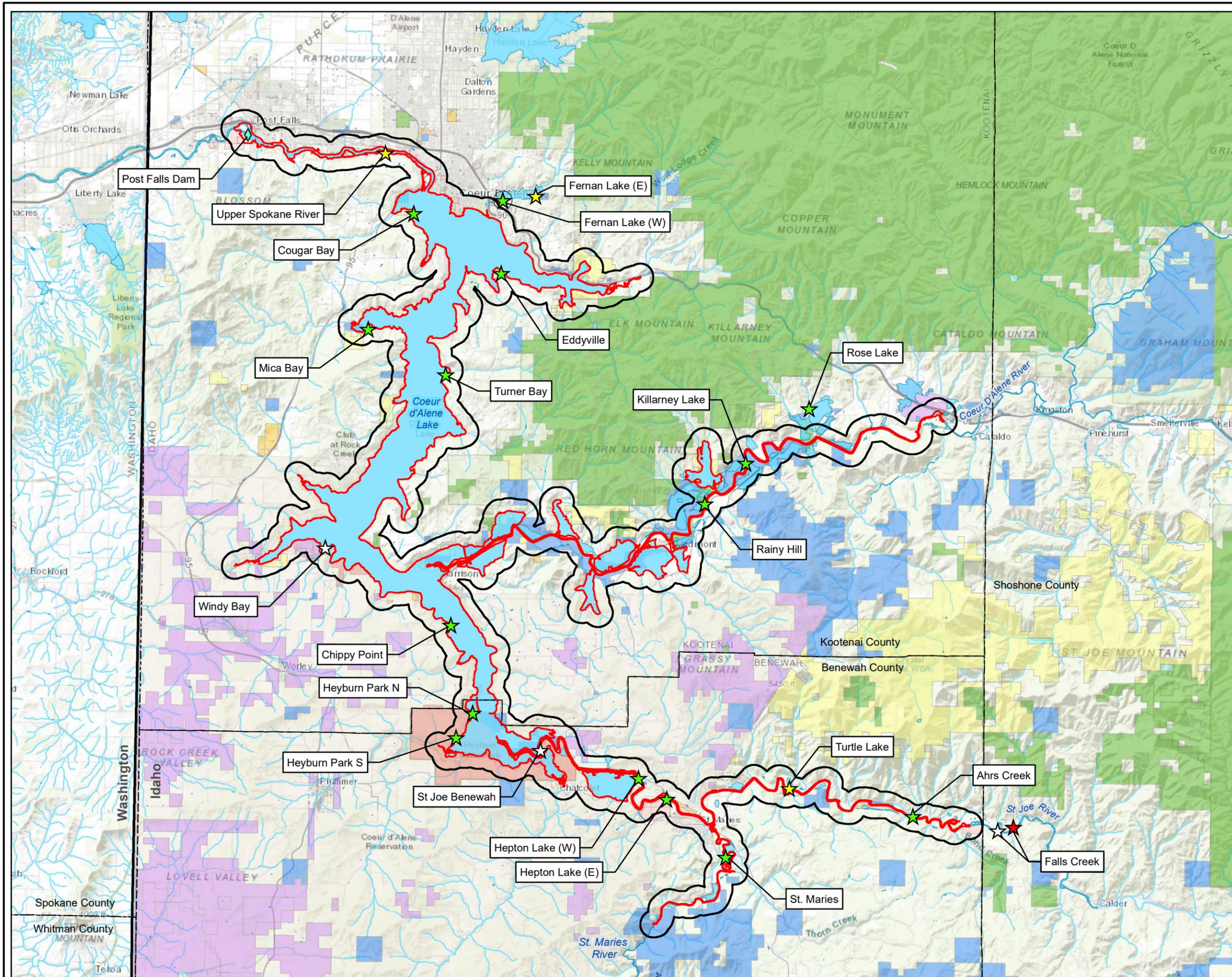
| Territory Name | Territory Number | Planning Area | Distance to Nearest Nest | Location | Study Dates | Home Range Estimate | Nesting Territory Estimate | Disturbance to Eagles or Habitat |
|-------------------------|------------------|---------------|--------------------------|----------|-------------|---------------------|----------------------------|------------------------------------|
| Whalen, WA | 06W2973 | Yes | 1 mile | RM 44.5 | 2012/2013 | 675 ac. | 120 ac. | Osprey, other eagles, angler |
| Long Lake South, WA | 06W2209 | Yes | 2 miles | RM 39.5 | 2012/2013 | 800 ac. | 260 ac. | Other eagles, ranching operations |
| Lower Spokane River, WA | 06W2209 | No | 2.1 miles | RM 33.3 | 2013/2014 | 208 ac. | 88 ac. | Osprey, other eagles, human |
| Post Falls, ID | 07I08001 | Yes | 2.5 miles | RM 102 | 2013/2014 | 201 ac. | 42.5 ac. | Osprey, other eagles, construction |
| North Shore, WA | 06W10401 | Yes | 2 miles | RM 36 | 2014/2015 | 1247 ac. | 103 ac. | Ravens, other eagles, recreation |
| Suncrest, WA | 06W10301 | No | 2 miles | RM 53 | 2014/2015 | 434 ac. | 106 ac. | Human, great horned owl |
| Mica Bay, ID | 07I05401 | No | 3.5 miles | RM 117.5 | 2015/2016 | 567 ac. | 113 ac. | Residential |
| Willow Bay, WA | 06W10201 | No | 1 mile | 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 | 598 ac. | 240 ac. | Osprey, other eagles |
| Riverside Launch, WA | 06W10601 | No | 1.3 miles | RM 56.6 | 2016/2017 | 410 ac. | 102 ac. | Osprey, recreation |
| Deep Creek, WA | 06W10902 | Yes | 2.2 miles | RM 60 | 2017/2018 | 529 ac. | 191 ac. | Osprey, recreation, residential |
| Fernan West, ID | 07I03403 | No | 1.3 miles | RM 2.3 | 2018/2019 | 444+ ac. | 135 ac. | Osprey, ravens, recreation |
| Heyburn Park South, ID | 08I05702 | No | 1.2 miles | RM 1.7 | 2018/2019 | TBD | TBD | Park recreation |
| Upper Spokane River, ID | 07I10202 | No | 2.5 miles | TBD | 2019 | TBD | TBD | TBD |
| Four Mound, WA | 06W10502 | No | 1.3 miles | TBD | 2019 | TBD | TBD | TBD |

Within the Planning Area, there are currently six bald eagle territories, all of which have had territory investigations and site-specific management plans completed. These plans are located in Appendix C of the Annual Bald Eagle Management Plan reports dated 2012-2018 as shown in *Table 4*. Any new nests located within the Planning Area will have site-specific management plans completed. Nesting territories are omitted from investigations with mutual agreement of USFWS, IDFG, and WDFW as appropriate.

5.0 REFERENCES

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FIGURES



LEGEND

2019 Bald Eagle Nests

- New
- ★ Active, Successful
- ★ Active, Not Successful
- ★ Active, Success Unknown
- ☆ Not Active/Alternate
- ★ Collapsed
- ★ Historic
- ◇ Status Unknown

▭ Post Falls HED Boundary

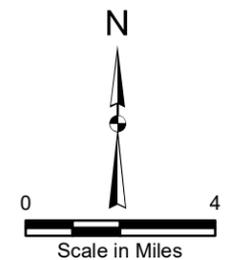
▭ Survey Area

▨ Avista-Owned Land/Planning Area

Surface Land Management/Ownership

- ▭ BLM
- ▭ City
- ▭ County
- ▭ FED
- ▭ State
- ▭ State Parks
- ▭ Tribe
- ▭ USFS

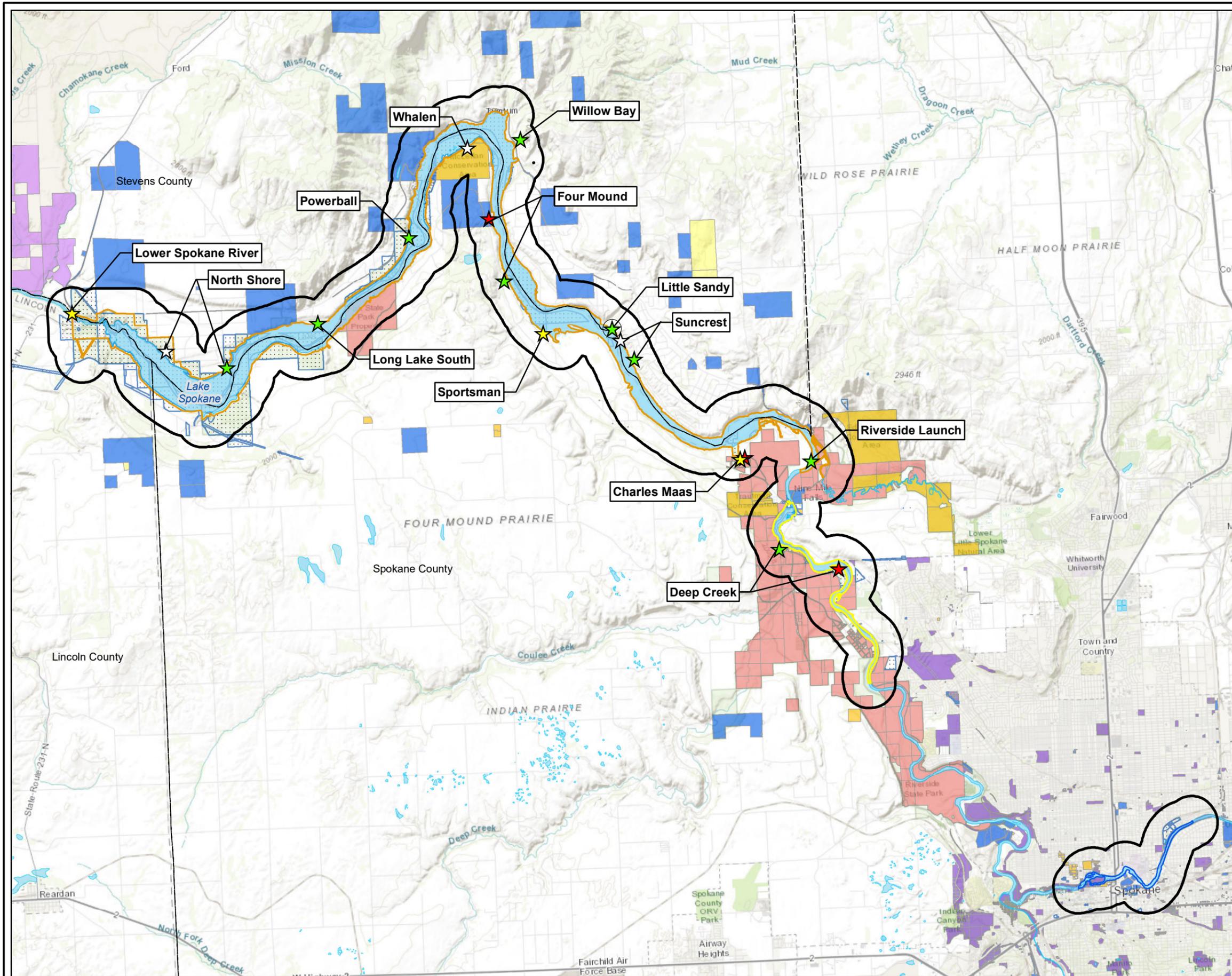
Bald eagle nest location data are confidential and are not for public circulation



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

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

FIGURE 1
BALD EAGLE NESTING LOCATIONS
ASSOCIATED WITH WATERS IMPOUNDED BY
THE SPOKANE RIVER PROJECT IN IDAHO
LICENSE ARTICLE 414



LEGEND

2019 Bald Eagle Nests

- New
- ★ Active, Successful
- ★ Active, Not Successful
- ☆ Not Active/Alternate
- ★ Collapsed

- ▭ Survey Area
- ▭ Monroe St./Upper Falls HED Boundary
- ▭ Nine Mile HED Boundary
- ▭ Long Lake HED Boundary

Surface Land Management/Ownership

- ▭ Avista
- ▭ BLM
- ▭ City
- ▭ County
- ▭ State
- ▭ State Parks
- ▭ Tribe

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



Map Projection:
Washington State Plane
North Zone NAD 1983

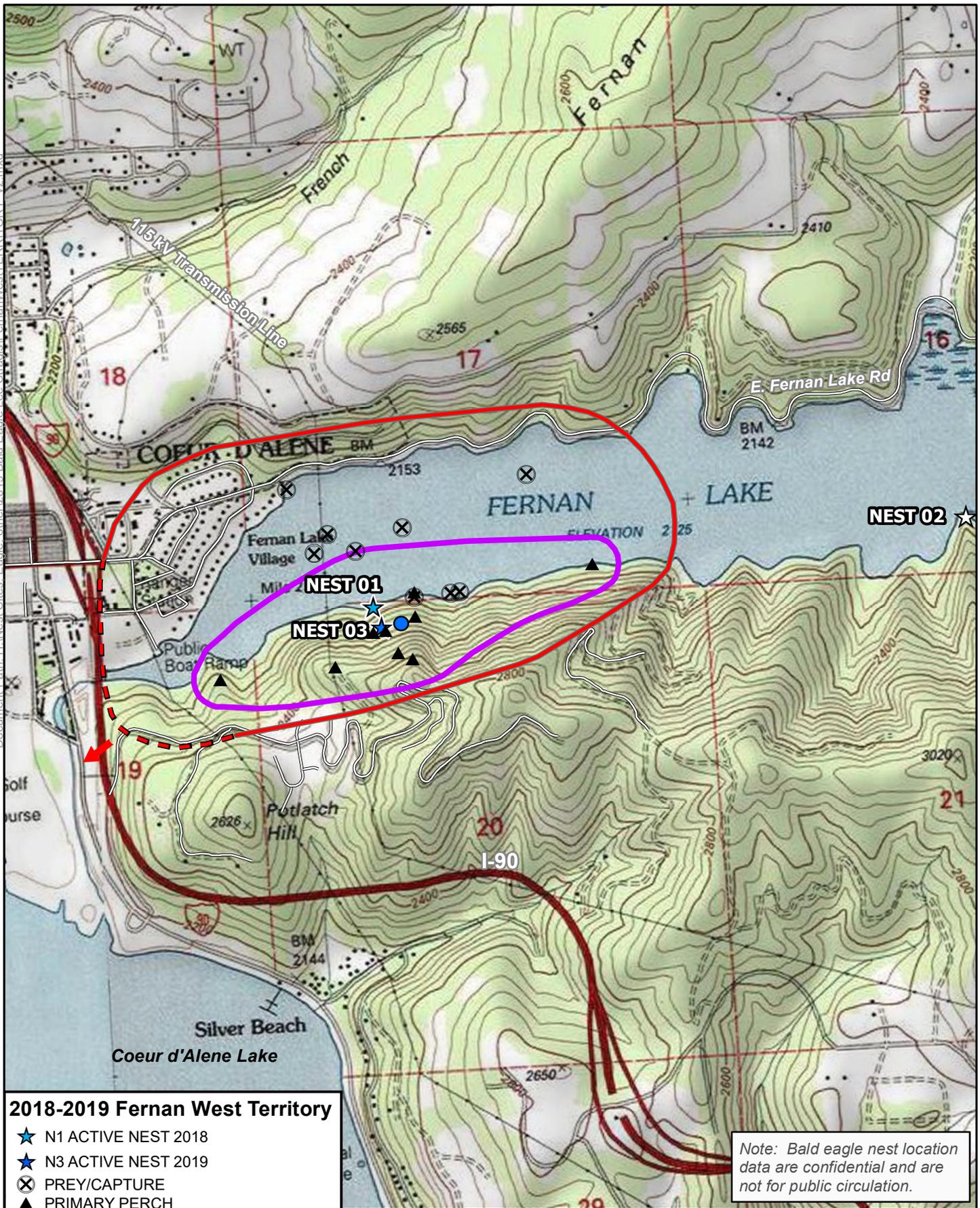
This figure was originally produced in color. Reproduction in black and white may result in a loss of information.

Source:

Avista (HED areas, land ownership), ESRI (hillshade),
USDA-NRCS (quadrangle county mosaics),
Bureau of Land Management (surface land management),
WDFW (bald eagle nests), Golder Associates Inc.

FIGURE 2
BALD EAGLE NESTING LOCATIONS
ASSOCIATED WITH WATERS IMPOUNDED BY
THE SPOKANE RIVER PROJECT IN WASHINGTON
LICENSE ARTICLE 414

Document Path: H:\Nest Sites_Eagle_other\2019 Bald Eagle_Lee Stragis\FernanWestTERRITORY_v2.mxd



2018-2019 Fernan West Territory

- ★ N1 ACTIVE NEST 2018
- ★ N3 ACTIVE NEST 2019
- ⊗ PREY/CAPTURE
- ▲ PRIMARY PERCH
- ROOST STAND
- Nesting Territory
- Home Range
- ⤴ Indicates flight beyond lake basin

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

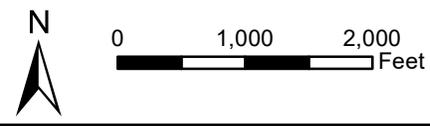
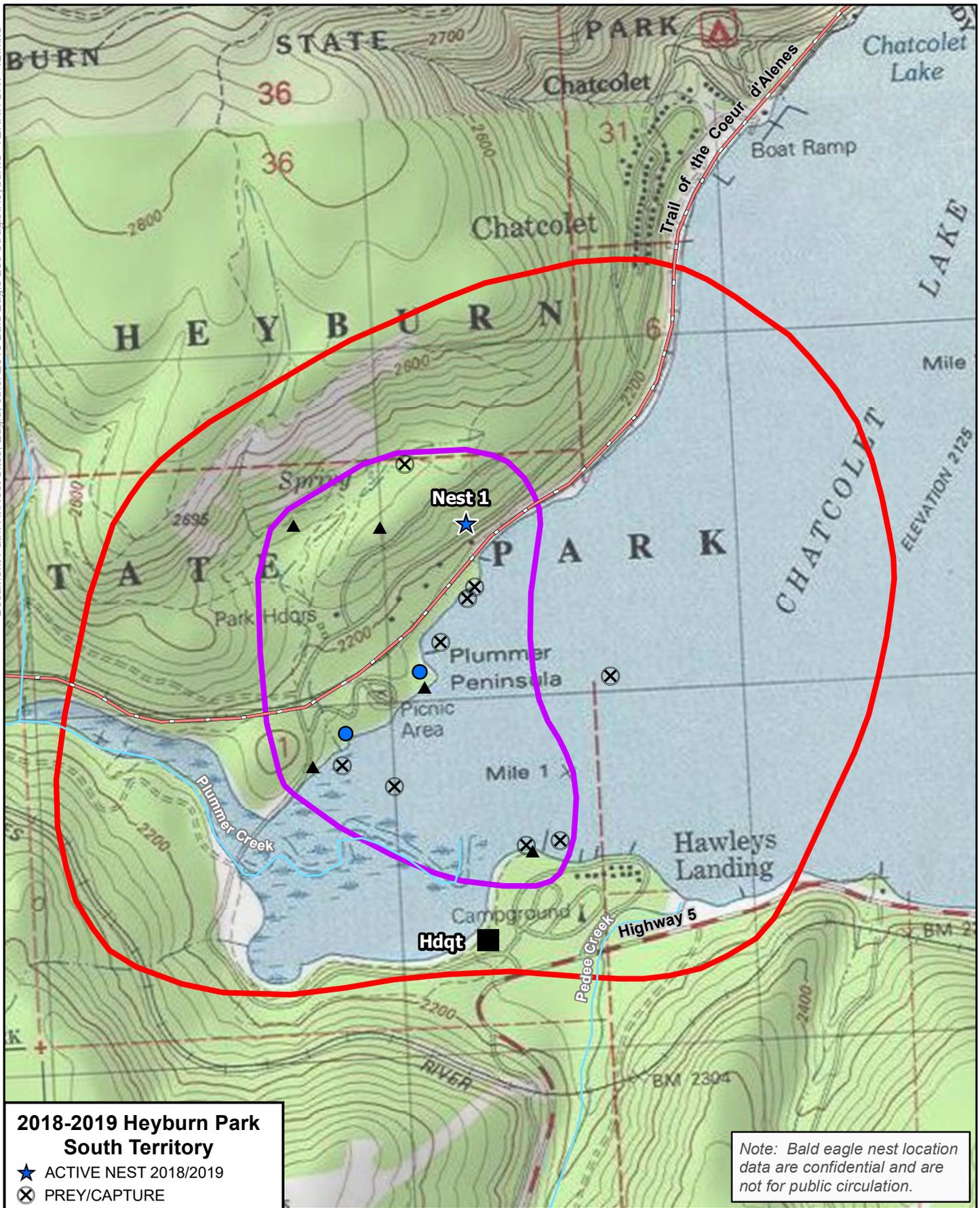


FIGURE 3
FERNAN WEST TERRITORY



2018-2019 Heyburn Park South Territory

- ★ ACTIVE NEST 2018/2019
- ⊗ PREY/CAPTURE
- ▲ PRIMARY PERCH
- ROOST STAND
- Nesting Territory
- Home Range

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

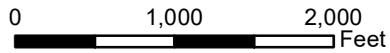


FIGURE 4

HEYBURN PARK SOUTH TERRITORY

APPENDIX A

2019 OCCUPANCY AND MONITORING FORMS

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID
 Territory Name: Ahrs Cr. Territory/Nest Number: 103-01 Observer Initial: RS 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)

by St. Joe City Sub boxes + pull out

III. SURVEY RESULTS

Nest tree is a live cottonwood. It IS visible from St. Joe River Road.

| 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) | 5/28/19 | 2 | n/a | Not present | n/a | 2 | 3b |
| <i>Nest visible from shoulder of St. Joe River Rd. In cottonwood tree. 200m away. Both B.E. have brown feathers on head.</i> | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/25/19 | 2 | (1 adult observed circling 2x over nest tree & then flew out of view.) | couldn't see it well | but it was flapping its wings near nest edge. | ≥ 1 | 3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/16/19 | 2 | | ⊙ | | ⊙ | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Chippy Pt. Territory/Nest Number: 105-01 Observer Initial: RS 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) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/12 | 2 | n/a | 1 Adult perched ~ 20m away from nest | n/a | 2 | 3c |
| | 7/1/19 | 2 | | 0 | | 1 | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/23/19 | 2 | | 0 | | 0 | |
| | | | | | | | |
| | | | | | | | |

nest tree is 20m from house

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: _____

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Nest tree is 20m from a house

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

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

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

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

2019

I. ID

Territory Name: Cougar Bay Territory/Nest Number: 35-02 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/11/19 | 203 | | Absent | n/a | ≥ 1 | |
| | 7/1/19 | 2 | | 1 - Perched 200m to N | | 1 | 3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/22/19 | 2/3 | | 2 | | | |
| | | | | Perched in snag 100m away | | 1 - Perched on nest rim. | |

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: _____

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Two houses w/in 100m of nest. House on S side is burning in yard & smoke going up towards nest. 6/11/19 It's a small fire & amount of smoke.

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

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

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID
 Territory Name: Eddyville Territory/Nest Number: 077-01 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/11/19 | 2 | | ♀ Perched on limb below nest | n/a | 2 | |
| | 7/1/19 | 2 | | No adults | | ≥ 1 | 3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/22/19 | 2/3 | | ⊙ 1 fledgling on limb below nest | | 1 | |
| | | | | | | | |

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

2019

I. ID

Territory Name: Falls Cr. W Territory/Nest Number: 37-03 Observer Initial: RS 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 | 5/28 | 3 | n/a | None observed | n/a | 0 | |
| February 1 – March 31 (pre-egg laying and early incubation) | No nest nest material observed in nest. Difficult to see through. Nest appears to be collapsing. I did not detect "Falls Cr. E." John Darden owns land the nest is on. | | | | | | |
| Update Nesting Status | | | | | | | |
| April 1 – June 15 (late incubation and nestlings) | | | | | | | |
| Determine Productivity | 6/25/19 | 3 | No sign of B.E. activity at nest | | | 0 | |
| June 15 – July 31 (late nestling and fledging) | | | | | | | |

5/28/19 (cont.) - I talked w/his son, Jack Darden Jr. + he said his dad might give access to walk 2-track through his hay field 208 245-3983. I observed nest from Railroad Grade Rd., not visible from St. Joe River Rd.

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

BALD EAGLE NEST MONITORING FORM

2019

I. ID

Territory Name: Falls Creek E Territory/Nest Number: 037-02 Observer Initial: RS 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: Not found

Nesting Determination

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

Number of Fledglings: _____ 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) | <u>5/29</u> | <u>Not found</u> | | | | | |
| | <u>6/25</u> | <u>Not found</u> | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

 Territory Name: Fernan West Territory/Nest Number: 07103401/03 ^{new} Observer Initial: LS Reviewer Initial: RS

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 | 3/6/19 | fair N1 | ∅ | ∅ | ∅ | / | / |
| February 1 – March 31 (pre-egg laying and early incubation) | 3/19/19 | new N3 | construction N3 | both | NA | NA | NA |
| | 3/31/19 | new N3 | " | both, mating | " | " | " |
| | 4/19/19 | " | complete | both | inc | " | " |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 5/2/19 | " | " | " | inc | " | " |
| | 5/14/19 | " | " | " | inc | unk | hatchlings? |
| | 5/27/19 | " | " | both | brd | unk | hatchlings? |
| | 6/13/19 | good | " | " | brd | 1 | nestling |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/25/19 | ∅ " | " | " | per | 2? | nestling |
| | 7/8/19 | " | " | both | per | 1 | 3c ✓ |
| | 7/22/19 | " | " | both | per | 1 | 3d |

7/9 nestling - 3c = perching on edge of nest

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

2019

I. ID

Territory Name: Fernan East Territory/Nest Number: 07103402 Observer Initial: LS Reviewer Initial: RA

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 5/27/19

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>3/6/19</u> | <u>good</u> | <u>construction</u> | <u>2AD, PER + NR at nest & in nest</u> | <u>NA</u> | | |
| Update Nesting Status | <u>5/27/19</u> | <u>collapsed</u> | <u>none</u> | <u>2AD</u> | <u>NA</u> | | |
| April 1 - June 15 (late incubation and nestlings) | <u>Both AD perching in nesting territory - neither obs obs. 75min. would have if nesting 0910-1025</u> | | | | <u>nest or potential nest</u> | | |
| Determine Productivity | | | | | | | |
| June 15 - July 31 (late nestling and fledging) | <u>7/2/19</u> | <u>collapsed</u> | <u>none</u> | <u>1 AD, PER below N location on ridge</u> | <u>NA</u> | | |

No disturbances or habitat alterations observed.
 Only nest collapse

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

BALD EAGLE NEST MONITORING FORM

2019

I. ID

Territory Name: Hepton W Territory/Nest Number: 101-07 Observer Initial: RS 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

Nest is in cottonwood snag ~ 35' tall.

| 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) | 6/12/19 | 2 | | 1 | | 2 | 3a |
| | | Adult flew to nest tree as we approached by boat & shielded nestling from the sun. | | | 1 - perched on nest | | 0 |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/25/19 | | | | | 0 | |
| | 7/16/19 | 2 | | 0 | | 2 | |

7/23/19 2

1 at nest

2

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Hepton Lake (East) Territory/Nest Number: 101-02 Observer Initial: RS 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>5/28/19</u> | <u>2</u> | <u>Both adults perched w/in 100m of nest. Nest in tall cottonwood w/ thick canopy; too tough to see nest. Couldn't see juveniles nestlings. Both adults circled & vocalized while I searched for nest. Based on that, highly likely nestling(s) present. Observe from Hwy 31/ Century 21 pull out area.</u> | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6/25/19</u> | <u>2</u> | <u>No adults observed.</u> | <u>At least 1 juvenile nestling was in the nest calling.</u> | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/16/19</u> | <u>2</u> | | <u>0</u> | | <u>0</u> | |

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

2019

I. ID

Territory Name: Heyburn S. Territory/Nest Number: 57-02 Observer Initial: RS 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>5/28/19</u> | | <u>1 adult B.E. on nest at sunset</u> | | | <u>/</u> | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6/10/19</u> | <u>2</u> | <u>♀ was at nest & male came & went during Time-Budget obs</u> | | | <u>2</u> | <u>1</u> |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>6/25/19</u> | <u>2</u> | <u>2 adults came & went during Time-Budget obs.</u> | | | <u>2</u> | <u>3c</u> |
| | <u>7/16/19</u> | <u>2</u> | | <u>2 Adults - 1 perched on nest for 1 obs. flying & unsuccessful hunt</u> | | <u>2</u> | <u>3d</u> |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Heyburn Park N Territory/Nest Number: 057-01 Observer Initial: RS 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) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/12/19 | 2 | | Perched on nest edge | na | ≥ 1 | |
| | 7/1/19 | 2 | | Nestling on rim of nest flapping wings. No adults present. | | 1 | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | | | | | | | |
| | 7/23/19 | 2 | | 1 | | 1 | 3d |
| | | | | | | | Fledgling perched on limb in nest tree. |

Nest is in different location than coordinates indicate. It is in a tall Ponderosa Pine on the ridgeline with a few branches of tree crown (+ needles) above nest. Fill out new nest form

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Killarney Lake Territory/Nest Number: 017-02 Observer Initial: RS 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: 3 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) | <u>5/28/19</u> | | | <u>Not observed</u> | | <u>3</u> | <u>7.5-9.5 weeks</u> |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>6/25/19</u> | <u>2</u> | <u>Adult eagle called as I approached nest from > 300m away. Saw 2 fledglings flying around prior to getting to nest. Fledglings are strong flyers already.</u> | | | | |

3B or 3C

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

2019

I. ID

Territory Name: Mica Bay Territory/Nest Number: 054-01 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/11/19 | 2 | na | 1 Adult perched on nest rim + few away | (nk) as we arrived | ≥ 1 | Flapping wings |
| | 7/1/19 | 2 | | 1 - Perched 25m from nest tree. | | 1 | 3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/22/19 | 2 | | 2 Adults | | 0 | |
| | | | | Perched ~ 200 ft ~ 100 m from nest. | | | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Post Falls Dam Island Territory/Nest Number: 080-01 Observer Initial: RS 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: Not present

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) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/2/19 | 5 | No nest detected | 1 adult perched in nest area. Called as it flew away + landed ~ 150 yard to west. There was lots of muting under | | 0 | |
| | | | | | | | |
| | | | | | | | |

7/16/19

No nest

(1) Perched in same tree I flushed her from on 7/2/19.

0

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID
 Territory Name: RAINY HILL Territory/Nest Number: 074-02 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/11/19 | 2 In cottonwood | No adults observed. | n/a | n/a | 2 | 3b/c |
| | 7/1/19 | Nest is seen | from upstream. I could hear what I thought was the fledgling(s) in the nest stand calling but no visual. | | | 0 | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/22/19 | 2 | 0 | | | 0 | |

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

2019New Nest

I. ID

Territory Name: Rose Lake Territory/Nest Number: 019-02 Observer Initial: RS 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

Difficult to see due to rain + clouds. Not repositioned nest

| OBSERVATION PERIOD | Date Checked | Nest Condition | ^{repair} Nesting Activity (construction etc.) | Adult Presence / Behavior | Incubation/Brooding Posture | Number of Young | Stage of Young |
|---|----------------|------------------------|--|---------------------------|-----------------------------|-----------------|----------------|
| Initial Determination of Occupancy | <u>5/24/19</u> | <u>Poor visibility</u> | WADAWAD <u>Rainy + cloudy</u> | <u>?</u> | <u>?</u> | | |
| February 1 – March 31 (pre-egg laying and early incubation) | <u>5/28/19</u> | <u>Not observed</u> | <u>No B.E. seen</u> | <u>10:50 - 11:20</u> | <u>NA</u> | <u>NA</u> | <u>NA</u> |
| | | | <u>Need advice on best location to observe / detect nest from. I was a west side of lake boat ramp.</u> | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6/26/19</u> | <u>2</u> | <u>Nest is a new nest from last years location. It's in a cottonwood along marshy-edge of Rose Lake. One adult perched in nest tree + I saw movement in the nest but couldn't count individuals. Observation was after sunset from my kayak.</u> | | | | <u>(live)</u> |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/16/19</u> | <u>2</u> | | <u>0</u> | | <u>0</u> | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: St. Joe Benawah Territory/Nest Number: 106-01 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/12/19 | 2/3 | | None observed but active osprey nest about 200 m upstream | | | |
| | 7/1/19 | 3 | | 0 | | 0 | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | | | We walked under nest + no fresh sign of eagle use. | | | | |
| | 7/23/19 | 3 | | 0 | | 0 | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: St. Maries Territory/Nest Number: 043-01 Observer Initial: RS 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

Nest is in a live cottonwood

| 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>5/28/19</u> | <u>2</u> | <u>No nest observed. Talked to lady that lives adjacent to St. Maries River Sportsman Access + she said BE nest fell down a few weeks ago but wasn't used this year, but was last year. She saw 2 BE flying today while kayaking further in from Hwy 3.</u> | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6/26/19</u> | <u>2</u> | <u>As I approached by kayak ~ 300m from nest, 2 adults flew by to the East. Saw a nestling head barely poking out above nest.</u> | | | <u>1</u> | <u>?</u> |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/16/19</u> | <u>2</u> | | <u>1 Flying Nestling was perched on rim of nest</u> | | <u>1</u> | <u>3d</u> |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

 Territory Name: Turner Bay Territory/Nest Number: 066-04 Observer Initial: RS 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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/11/19 | 2 | | Not present | X | 2 | 3 EC |
| | 7/1/19 | 2 | | No adults present | | 2 | 3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/22/19 | 2 | | 0 | | ≥ 1 | |
| | | | | | | | |

Saw 1 nestling perched on limb above nest. It was calling & another bird was calling about 100-200m away. Couldn't get visual on 2nd one.

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: _____

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Nest is in ponderosa pine ~ 100' from 2 houses.

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

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

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: _____

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Nest is in ponderosa pine ~ 100' from 2 houses.

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

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

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

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

2019

I. ID

Territory Name: Turtle Lake Territory/Nest Number: 24-03 Observer Initial: RS 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) | Couldn't | see a nest | from St. Joe River Rd. Should I access from Railroad Grade Rd.? (pull out w/view of nest area) | | | | |
| | I drove 5/28/19 | 2 | Railroad Grade Rd + didn't observe nest. This is road to look from though. | 1 Adult | | 1 | 3b |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/25/19 | 3 | Adult flew into tree ~ 50m from nest tree after I'd been watching the nest for ~ 10-15 minutes. Never saw any movement in the nest. | | (+ perched) | 0 | |
| | 7/16/19 | | | 0 | | 0 | |

5/28/19 { Mike + Tommy Fish - Drive way off of R.R. Grade
B.E. Adult perched on limb above nest. 1 fledgling in nest, 3b or 3c. Nest is in top of live P. pine on tallest tree on hill.

IV. SUPPLEMENTAL NESTING INFORMATION (if known)

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

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: between 5/28/ and 6/25 nest failed

Reason for failure: not determined

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) residences within 300m - potential

Habitat Alterations (record type, extent, and proximity to nest) none

Ongoing Disturbances (record type, extent, and proximity to nest) highway 300m, dirt road 100m

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

Nesting attempt failed (Yes/No), date/nesting period of failure: between 5/28/ and 6/25 nest failed

Reason for failure: not determined

Nest Abandoned (Yes/No), date: _____

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) residences within 300m - potential

Habitat Alterations (record type, extent, and proximity to nest) none

Ongoing Disturbances (record type, extent, and proximity to nest) highway 300m, dirt road 100m

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

 Territory Name: Upper Spokane River Territory/Nest Number: OTT 10202 Observer Initial: LS Reviewer Initial: RS

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: 5/28/19

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) | 3/3/19 | Good | nest repair | both | inc | / | / |
| | 4/19/19 | fair-bottom loose | | both | inc | / | / |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 4/30/19 | fair | | both | inc | | |
| | 5/14/19 | " | | " | per | UNK | hatching |
| | 5/28/19 | collapsed | AD w/ grass? | both upstream | none | / | failed |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/14/19 | " | none | only ♀ | " | | |
| | 6/27/19 | " | " | " | " | | |
| | 7/9/19 | " | " | only 1 AD | " | | |
| | 7/23/19 | " | " | only 1 AD | " | | |

No disturbances or habitat alterations observed. Nest on hillside ridge
 Ongoing residential activity on opposite shore has had no previously observed disturbance to BAEAs.

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Windy Bay Territory/Nest Number: 001-03 Observer Initial: RS 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: Nest not found

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

Supposed to be the most interior nest location in bay. No nest found

| 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) | <u>6/12/19</u> | <u>No nest found</u> | <u>n/a</u> | <u>n/a</u> | <u>n/a</u> | <u>n/a</u> | |
| | | | <u>We did find an alternate nest about 200m to E. Nest is partially collapsed</u> | | | | |
| | | | <u>Unless Windy Bay nest was inaccurately mapped</u> | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/1/19</u> | <u>Not found</u> | <u>0</u> | | | <u>0</u> | |
| | <u>7/22/19</u> | <u>Not found</u> | <u>0</u> | | | <u>0</u> | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: WINDY BAY Territory/Nest Number: ~~1000000000~~ Old nest Observer Initial: RS Reviewer Initial: LS

II. SURVEY SUMMARY

47.472330, -116.878073

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) | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6/11/19</u> | <u>Not found</u> | | <u>None observed.</u> | | | |
| | | | <u>Is Rockford nest where this pair relocated too?</u> | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/22/19</u> | <u>4</u> | | <u>0</u> | | <u>0</u> | |
| | | 4 | <u>Nest is mostly fallen out of tree. The nest tree is the tallest ponderosa pine at top of the point.</u> | | | | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

 Territory Name: Deep Creek Territory/Nest Number: 06 W10901 Observer Initial: LS Reviewer Initial: RS

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) | 03/18/19 | UNK | access thru Park snowboard | | unk determination | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 04/18/19 | good | NI? nest? check 3 obs prints 1+ hour | white head on nest may be Osprey - inc AD RASA @ south end of trail by Near N2 | | UNK | eggs |
| | 6/13/19 | good | vulture + RTHA near N1 yes @ N1 | 2 AD + DEF S. end one flew to nest | RSA @ nest | 2 | slightly smaller |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/2/19 | unk | Done | | | 2 | fledg |
| | Hiked to Deep Creek Tot. trail to find another obs. point - not found but 2 fledglings perched together on hill slope below approx location. Went up trail to locate nest - not found | | | | | | |

→ Near N1 - need to check next time + new access @ bridge on bridge trail? 7 mile overlook? see photos. Marked rock here @ 11724 Nine Mile Rd. w/goggles + den tooth. Nest NW on S (NW) slope below ridge that extends to bridge. Limited out today

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

 Territory Name: Four Mound Territory/Nest Number: 06W10502 Observer Initial: LS Reviewer Initial: RS

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 | 3/4/19 | Good | none | both per/nest | unk | | |
| February 1 – March 31 (pre-egg laying and early incubation) | 3/18/19 | " | " | both | inc | UNK | |
| | 4/2/19 | " | " | both | inc | " | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 4/18/19 | " | " | " | " | " | |
| | 5/17/19 | " | " | both | " | | hatchlings? 1A |
| | 5/24/19 | " | " | " | not obs | | UNK |
| | 5/30/19 | " | " | " | brd | 2 | 3a/b |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/12/19 | " | " | " | per | | 3c |
| | 6/24/19 | " | " | " | per | | 3d |
| | 7/12/19 | " | " | " | " | 2 | flgd |
| | 7/24/19 | " | " | " | " | " | " |

5/30/ nestlings upright
6/12 nestlings perching

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

20__

I. ID

Territory Name: Four Mound N Territory/Nest Number: 105-01 Observer Initial: RS 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) | 5/31/19 | | No nest found | 0 | | 0 | |
| | 6/18/19 | | No nest found | 1 adult perched ~100m of where map indicates nest used to be. It flew towards Willow Bay | | 0 | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/18/19 | | | 0 | | 0 | |
| | | | | | | | |

6W 11001
103-03

Territory will be renamed.

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

I. ID
Territory Name: Little Sandy Territory/Nest Number: 103-~~03~~ 2019 47.829281
Suncrust -117.619037 Observer Initial: RS 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) | | | Nest is in a P. pine; top of tree is dead | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 5/31/19 | 2 | No adults present | X | X | 1 | 3b |
| | 6/18/19 | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 6/18/19 | 2 | 1 adult landed/perched in tree 70m upslope of nest tree. | | Nestling in tree ~30m of nest tree. | 1 | 3c/3d |
| | 7/18/19 | 2 | | 0 | | 0 | |

Saw 4 eagles flying high overhead ≥ 2 juveniles.

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Lower Spokane River Territory/Nest Number: 06 W10101 Observer Initial: LS Reviewer Initial: RS

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) | | | | | | | |
| | | | | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 3/18/19 | good | — | Imm by dam fornest | N/A Inc. | — | — |
| | 4/18/19 | good | | " | " | | |
| | 4/22/19 | good | — | ∅ | ∅ | | |
| | 6/12/19 | good | ∅ | ∅ | ∅ | | |
| anglers did not see any bald eagle last yr or so - just osprey | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | | | | | | | |
| | 7/24/19 | good | ∅ | ∅ | | | |

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: unknownNest Abandoned (Yes/No), date: prior to 4/22/19, after 4/18/19 observations

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Fall 2018, ~45 miles from nest
transmission line upgrade, 1 month duration, outside of established
BASA territory, but adjacent to it

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

NA

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

residential, across river from nest;
osprey nests upstream (2) within territory; highway bridge ~ 800' = noisePrepared by: L. Stogis Date: _____

Reviewed by: _____ Date: _____

IV. SUPPLEMENTAL NESTING INFORMATION (If known)

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

V. NARRATIVE INFORMATION

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

Reason for failure: unknown

Nest Abandoned (Yes/No), date: prior to 4/22/19, after 4/18/19 observations

Reason for abandonment: _____

Disturbing Activities (record type, duration, and proximity to nest) Fall 2018, .45 miles from nest transmission line upgrade, 1 month duration, outside of established BAEA territory, but adjacent to it

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

Ongoing Disturbances (record type, extent, and proximity to nest) residential, across river from nest; osprey nests upstream (2) within territory; highway bridge ~ 800' = noise

Prepared by: L. Skagis Date: _____

Reviewed by: _____ Date: _____

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID
 Territory Name: North Shore (E) Territory/Nest Number: 104-03 Observer Initial: RS 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)

Nest tree ~ 80m of Google Map coord.

III. SURVEY RESULTS

Nest tree is P. pine ~ 20' from shore & behind other pines. Tree is spindly.

| 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) | 5/31/19 | 2 | Adult perch on branch above nest. | | | 1 | |
| Update Nesting Status | 6/18/19 | 2 | | 1 adult | | 1 | |
| April 1 – June 15 (late incubation and nestlings) | | | | | | | |
| Determine Productivity | 7/18/19 | 2 | | 1 | | 1 | |
| June 15 – July 31 (late nestling and fledging) | | | | | | | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID
 Territory Name: N. Shore (W) Territory/Nest Number: 104-02 Observer Initial: RS 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 *late start*

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

Nest tree is P. Pine @ top of ridge w/ live canopy. 180 yards to shoreline.

| 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) | 6/18/19 | 2/3 | | 0 | | 0 | |
| | | | | | | | |
| | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/18/19 | | | 0 | | 0 | |
| | | | | | | | |
| | | | | | | | |

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

2019

I. ID

Territory Name: Riverside Launch Territory/Nest Number: 106-01 Observer Initial: RS 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) | 5/31/19 | 2 | No adult observed | x | x | 1 | 3b/3c |
| | | | Nest observed directly across river from boat launch. | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 4/18/19 | 2 | NA | 1AD F | INC | — | — |
| | 6/26/19 | 2 | No adult observed | | | 2 | 3c/3d |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/30/19 | 2 3 | | 0 | | 0 | |
| | | | | | | | |

LS

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Sportsman Territory/Nest Number: 108-01 Observer Initial: RS 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) | 5/31/19 | 2 | Nice nest by house | None | | 0 | |
| | | | Can't see any nestlings but difficult to see if they are laying down. Based on nest material having new twigs, guessing that it is active. | | | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/18/19 | 2 | No adults | No sign of nestlings present | | 0 | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/18/19 | | 0 | | | 0 | |

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

2019

I. ID

Territory Name: Suncrest Territory/Nest Number: 103-02 Observer Initial: RS 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>5/31/19</u> | | <u>No adults present</u> | <u>x</u> | <u>x</u> | <u>≥ 1</u> | <u>3b</u> |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | <u>6-18-19</u> | <u>2</u> | <u>(Nest in a P. Pine ~ 80' tall + nest is ~ 60'. Tree has a live canopy. Nest was not surveyed on 5/31/19.)</u> | | <u>Nestling is perched on limb ~ 3' below nest.</u> | <u>1</u> | <u>3c</u> |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | <u>7/18/19</u> | <u>2</u> | <u>1 juvenile observed soaring high overhead</u> | <u>⊙</u> | | <u>⊙</u> | |

SPOKANE RIVER HYDROELECTRIC PROJECT (FERC Nos. 2545-091 and 12606-000)
BALD EAGLE NEST MONITORING FORM
 2019

I. ID

Territory Name: Whalen Territory/Nest Number: 297-03 Observer Initial: RS 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) | 5-31-19 | 3 | | Adult perched w/in 200m of nest. Closer to shore | | 0 | |
| | 6/12/19 | 3/4 | NA | AD @ cove, PCAP | ∅ | | |
| Update Nesting Status April 1 – June 15 (late incubation and nestlings) | 6/18/19 | 3/4 | | ∅ | | 0 | |
| | | | | | | | |
| Determine Productivity June 15 – July 31 (late nestling and fledging) | 7/18/19 | | | ∅ | | 0 | |
| | | | | | | | |

AD in territory, no nesting activity.

APPENDIX B
2019 NEW NEST DOCUMENTATION

SPOKANE RIVER HYDROELECTRIC PROJECT
RAPTOR NEST RECORD

Species: Bald Eagle

Territory name (if known): Fernan West

Territory/nest number (if known): 07103403

Reported by: L. Stragis Date: 3/19/2019

Location: T 50 N R 3 W Section 20 $\frac{1}{4}$ NE of $\frac{1}{4}$ NW

State: Idaho County: Kootenai

Elevation: ~2,500 feet Aspect: North

Lat/Long: 47.670694, -116.737262 Hydrologic unit: Fernan Lake

Nest stratum: tree, split top Nest height (circle ft or m): 80 ft.

Position on slope: over 1/2 way up slope Nest condition: good

Tree species: Douglass fir Tree height (circle ft or m): 90 ft DBH (circle in or cm): 24+

Land ownership: Private

USGS Quad name: Fernan Lake

Directions to nest: can be viewed along Fernan Road at first fishing turnout

Comments:

This nest is nearly directly above Fernan N1 along a side ridge, 1/2 way to the top. The tree is situated below a rock outcrop with taller dead firs surrounding it. Labeled as N3, because this is the third nest located on Fernan Lake. In 2017 and 2018, two pairs of eagles began nesting on the Lake @ N1 and N2. In years previous, only one pair were observed to be nesting, alternating between N1 and N2.

Observer Initial: LS Date 07/30/2019 Reviewer Initial: RS Date: 9/3/19

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



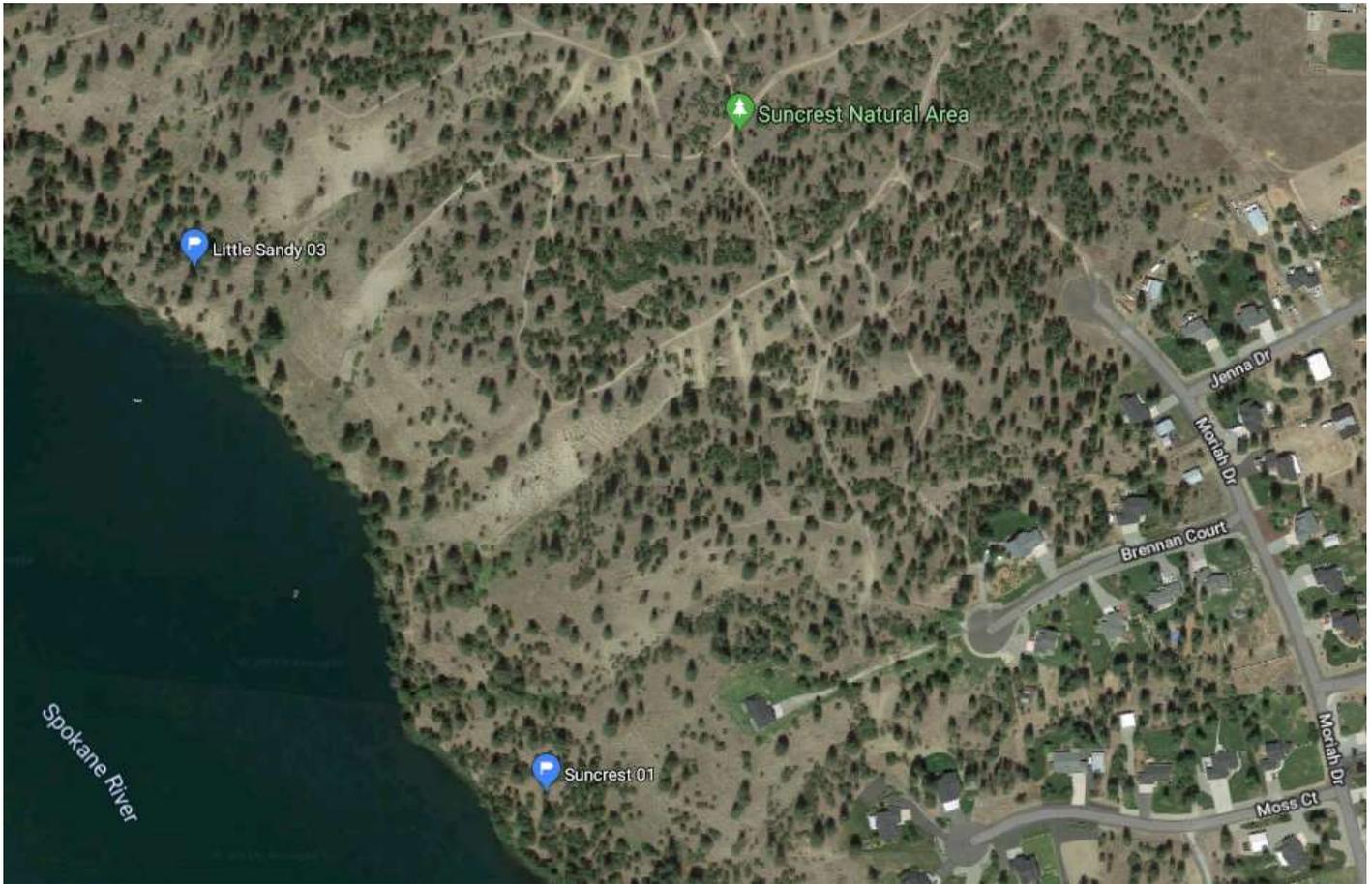
Locator Map



Photo 1. View south over Fernan Lake, N3 above N1.



Photo 2. View south, N3 in split top fir



Locator Map



Photo 1. View northeast above Spokane River in Ponderosa Pine.



Photo 2. Nest with adult eagle.