

Rocky Reach Wildlife Forum 2017 Wildlife Monitoring Proposal FINAL

January 13, 2017

Background

During the Rocky Reach Hydroelectric Project (Project 2145) relicensing process, the Public Utility District No. 1 of Chelan County (Chelan PUD) and multiple agencies executed the Rocky Reach Comprehensive Settlement Agreement (Chelan PUD 2006). In the Rocky Reach Comprehensive Settlement Agreement (Settlement Agreement) Chelan PUD proposed to continue to conduct wildlife surveys similar to those conducted during the original license in coordination with the Rocky Reach Wildlife Forum (RRWF) for a cost not to exceed \$10,500 or equivalent staff-days during the term of the new license. Furthermore, the Settlement Agreement goes on to state that:

“The intent of this funding is to survey and monitor threatened, endangered, and sensitive species on a periodic schedule as directed by the RRWF. Survey techniques and schedule will be developed in coordination with the RRWF. Surveys should be conducted on an annual basis and address priority species.”

The Settlement Agreement was submitted to the Federal Energy Regulatory Commission (FERC) for approval on March 20, 2006 as part of the application for a new operating license for the Rocky Reach Hydroelectric Project. In Article 403 of the FERC License Order (FERC 2009), issued on February 9, 2009, the FERC directed Chelan County PUD to develop a Wildlife Habitat Management Plan (WHMP) to be updated at a minimum of every 5-years. With regard to wildlife surveys, Article 403 states that:

“The plan shall also contain provision and a schedule for the licensee to conduct annual winter bald eagle surveys and Canada goose nesting surveys on the project reservoir and the report the results to the Washington DFW. The annual wildlife surveys shall be conducted in coordination with the Washington DFW and may be altered upon agreement with WDFW.”

During the first WHMP (2010-2015) approved by the FERC on September 22, 2010, Chelan PUD continued monthly winter bald eagle monitoring from November – March and Canada Goose nest monitoring along Rocky Reach Reservoir as directed (Chelan PUD 2010). In addition, annual bald eagle nest monitoring within the Rocky Reach Wildlife Area (RRWA) was added as a monitoring requirement for the first WHMP (2010-2015). Results of these monitoring efforts can be found in the 5-Year Summary Report (Chelan PUD 2015a).

The average cost of wildlife surveys conducted by Chelan PUD from January 2011 through December of 2015 under the first WHMP (2010–2015) was approximately \$11,309. The average cost for the most recent 3 years (2013-2016) was \$11,543. For the 2017 Wildlife Monitoring effort, the RRWF has approximately \$13,000 available to conduct wildlife monitoring.

2017 RRWF Wildlife Monitoring Proposal

Annual wildlife monitoring will be carried out by Chelan PUD or a contractor (including any agency) and final reports will be provided to the RRWF summarizing the monitoring effort, cost, and results. Chelan PUD would only be responsible for conducting the monitoring and providing the data for annual monitoring efforts to the RRWF, not for any protection, mitigation, or enhancement measures that might be identified from the monitoring efforts. Consistent with the Rocky Reach Settlement Agreement (2006), Chelan PUD will conduct annual wildlife monitoring for a cost not to exceed \$10,500 (adjusted annually) or equivalent man-days (Chelan PUD 2006). The funding amount available for 2017 wildlife monitoring will be approximately \$13,000.00. Consistent with the Rocky Reach Settlement Agreement (2006), funding allocations for annual wildlife monitoring will be made available each year and any unspent funds will not accumulate for future use.

For the second 5-Year WHMP (2016-2020), approved by the FERC on December 1, 2015 (Chelan PUD 2015b), the RRWF proposed a more adaptive approach for wildlife monitoring by meeting annually each fall to identify and prioritize potential wildlife monitoring efforts for the subsequent year. Each year, the RRWF would propose a wildlife monitoring activity that would be reviewed and approved by the RRWF prior to implementation. Proposals would be limited to wildlife species and habitats that are present in, or likely to be present in the RRWA. Each annual proposal would include the area to be monitored, monitoring frequency, and protocol to be used for the proposed survey effort and be within the annual funding allocation per the Rocky Reach Settlement Agreement (2006). This is the finalized 2017 Annual Wildlife Monitoring Proposal for 2017.

As proposed during the 8 November 2016 RRWF meeting, the 2017 wildlife monitoring effort within the RRWA will include: maintenance of 20 Canada goose nest tubs, bald eagle nest monitoring, golden eagle nest monitoring, and one wintering bald eagle survey conducted in January 2017 consistent with the National Midwinter Bald Eagle Count. If no additional wildlife monitoring is proposed by the RRWF, Canada goose nest monitoring has been added as a contingency item, and would commence as in years past during spring of 2017.

1.1 Winter Bald Eagle Monitoring

As directed under the approved RRWHMP (2016-2020), Chelan PUD will conduct one wintering bald eagle survey on Rocky Reach Reservoir. The timing of the survey will be in early to mid-January and coincide with the National Midwinter Bald Eagle Count. The 2017 count is scheduled to occur between 4 January 2017 and 18 January 2017 with target dates of 13 – 14 January. A report will be due to the RRWF by April 30, 2017.

1.1.1 Survey Methods

Data collected will be consistent with previous midwinter bald eagle monitoring efforts. Since golden eagles are a sensitive species in Washington State, both bald and golden eagles will be documented during the winter bald eagle survey. The survey will be conducted by boat with a minimum of 2 observers. Observers on each side (port and starboard) of the boat will monitor the respective shoreline (i.e., Chelan or Douglas) and both shorelines will be surveyed concurrently while traveling upriver along Rocky Reach Reservoir.

The survey will begin at Lincoln Rock State Park boat launch and proceed along the Douglas County shoreline downriver to the Rocky Reach Dam Boat Restriction Zone, then across the Reservoir to the Chelan County side and upriver along the Chelan County Shore to the upriver end of Turtle Rock Island (river mile 476). At this point the route crosses back over the main channel and downriver along the west side of Turtle Rock Island. At the downriver end of Turtle Rock Island the boat will navigate back upriver, along the east shoreline of Turtle Rock Island and the Douglas County shoreline. From the upriver end of Turtle Rock Island, the survey route continues upriver to the tailrace at Wells Dam. The river just below Wells Dam is quite wide, making it difficult for surveyors to see adequately from the middle of the river. Therefore, the boat will travel near the Douglas County shore beginning at river mile 515.0. Surveyors will focus solely on the Douglas County shoreline at this point, continuing upriver to a safe distance below Wells Dam. After the tailrace area is thoroughly surveyed, the Chelan County shoreline will then be surveyed downriver to river mile 514.9 where the survey then terminates.

Eagles will be identified to species (bald or golden) and age class (adult or sub-adult) whenever possible. Bald eagles will be classified as an adult if they exhibit an all-white head or as a sub-adult in any other color phase. Golden eagles will also be aged based on plumage characteristics as described in Wheeler & Clark (1995). If age or species of eagles cannot be identified, they will be recorded as unknown species and/or unclassified age. The location of eagles observed will be recorded to the 1/10th river mile as well as bank (Chelan or Douglas) and the perch substrate.

1.1.2 Proposed budget

Based on the monitoring costs from the most recent midwinter bald eagle monitoring (January 2016), the expected cost for this single survey should be approximately **\$1,870** including data entry and summary. In order to accommodate for any unexpected cost increases, this amount includes a 10% contingency in order to accommodate for any unexpected cost increases.

1.2 Bald Eagle Nest Monitoring

Consistent with the first RRWHMP (2010-2015), Chelan PUD will conduct nest monitoring at known bald eagle nesting sites within the RRWA in 2017. A report summarizing findings will be due to the RRWF by September 30, 2017.

1.2.1 Survey Methods

Nesting sites can be accessed by car or boat and observations will be conducted from a distance using binoculars and/or spotting scopes to reduce potential disturbance to nesting eagles. During March and April, known bald eagle nest sites will be visited at least twice a month to determine if the nesting territory is occupied. Occupancy will be defined as a pair of eagles exhibiting courtship, building nests, or an adult incubating eggs. If no breeding behavior is observed during the March and April period at a known site, the site will be considered unoccupied and no further monitoring will be conducted at that site.

Occupied sites will continue to be visited twice a month (at a minimum) to determine breeding success. Sites that fledge (chicks branching or that are approximately 10 weeks old) one or more

young will be considered breeding successful. Occupied sites where the success is unknown will be classified as breeding unknown success, while sites where breeding is confirmed but no young fledge, will be classified as unsuccessful.

1.2.2 Proposed Budget

Based on the monitoring costs during the most recent bald eagle nest monitoring efforts (2016), the cost of this monitoring should be approximately **\$1,200** which includes a 10% contingency in order to accommodate for any unexpected cost increases.

1.3 Canada Goose Nest Tub Maintenance

Consistent with the first WHMP (2010-2015), Chelan PUD will conduct Canada goose nest tub maintenance on Rocky Reach Reservoir in 2017. A total of 20 artificial goose nest platforms will be cleaned, filled with straw prior to nesting season, and maintained as necessary to enable use by nesting geese by mid-March 2017. Documentation of this activity will be provided to the RRWF by April 30, 2017.

1.3.1 Survey Methods

Artificial goose nesting platforms will be filled with straw in late February or early March to provide nesting substrate.

1.3.2 Proposed budget

Based on the cost during the most recent nest tub maintenance effort, the cost of this nest tub maintenance should be approximately **\$1,044** which includes a 10% contingency in order to accommodate for any unexpected cost increases.

1.4 Golden Eagle Nest Monitoring

Chelan PUD will conduct nest monitoring at known golden eagle nesting sites within the RRWA in 2017. A report summarizing findings will be provided to the RRWF by September 30, 2017.

1.4.1 Survey Methods

Nesting sites can be accessed by car or boat and observations will be conducted from a distance using binoculars and/or spotting scopes to reduce potential disturbance to nesting eagles. During February and March, known golden eagle nest sites will be visited at least twice a month to determine if the nesting territory is occupied. Occupancy will be defined as a pair of eagles exhibiting courtship, building nests, or an adult incubating eggs. If no breeding behavior is observed during the February and March period, the site will be considered unoccupied and no further monitoring will be conducted at that site.

Occupied sites will continue to be visited twice a month (at a minimum) to determine breeding success. Sites that fledge (chicks branching or that are approximately 10 weeks old) one or more young will be considered breeding successful. Occupied sites where the success is unknown will be classified as breeding unknown success, while sites where breeding is confirmed but no young fledge, will be classified as unsuccessful.

1.4.2 Proposed Budget

Golden eagle nest monitoring has not previously occurred under the RRWHMP. However, efforts should be similar to that of the bald eagle nest monitoring. Based on the monitoring costs during the most recent bald eagle nest monitoring efforts (2016), the cost of the golden eagle nest monitoring should be similar; approximately **\$1,200** which includes a 10% contingency in order to accommodate for any unexpected cost increases.

1.5 Contingency: Canada Goose Nest Monitoring Surveys

No other wildlife monitoring activities were proposed by the RRWF for 2017. Thus, Chelan PUD will conduct Canada goose nest monitoring on Rocky Reach Reservoir during 2017 as they have in years prior. This survey activity will be in addition to maintaining the 20 artificial goose nest platforms. For this survey effort, Chelan PUD will monitor nests in the provided goose tubs and natural nests that occur on Rocky Reach Reservoir. A report summarizing findings will be provided to the RRWF by August 30, 2017.

1.5.1 Survey Method

Nest monitoring will be conducted by boat beginning in late March or early April. The surveys take place along Rocky Reach Reservoir from river miles 474.6 to 493.0. Generally, each nest is visited 2 - 3 times per season—one visit during nest initiation, incubation, and following hatch. Throughout the nesting season, the location and number of nests encountered, number of eggs laid, and the fate of each nest attempt (including causes of predation and other unsuccessful nesting attempts) will be recorded during nest surveys. Successful nests will be those from which at least one egg hatched and at least one gosling left the nest. Since Canada geese may re-nest, new nests encountered while conducting the monitoring effort will be added to the monitoring schedule and will require additional subsequent visits to determine nest success.

1.5.2 Proposed Budget

Based on the monitoring costs during the first WHMP (2010-2015) and during the 2016 effort, the cost of this monitoring will be approximately **\$4,950** including data entry and summary, which also includes a 10% contingency in order to accommodate for any unexpected cost increases.

Summary

In 2017, the RRWF proposes to have Chelan PUD conduct one winter bald eagle survey in January, bald and golden eagle nest monitoring, and maintenance of 20 Canada goose nest tubs. Canada goose nest monitoring will be conducted as a contingency since no other proposals were brought forward by the RRWF for 2017. Per the RRWHMP (2016-2020) and FERC license Article 403, this wildlife monitoring will be conducted within the RRWA for approximately \$10,264 including contingency costs. A summary of the results for each monitoring effort will be provided to the RRWF once data summary for the monitoring efforts are complete.

Literature Cited

Federal Energy Regulatory Commission (FERC), 2009. Order on Offer of Settlement and Issuing New License. Project No. 2145-060, 126 FERC ¶ 61,338, February 19, 2009.

Chelan PUD, 2006. Rocky Reach Comprehensive Settlement Agreement. Chelan County Public Utility District, Wenatchee, WA

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