May 29, 2012

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

RE: Spokane River Project License, FERC Project No. 2545, Appendix B Section 5.3 (G) and Article 413, Submittal of the Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program

Dear Secretary Bose:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License, Avista developed the Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program (Plan). The Plan is a requirement of Article 413, and Appendix B Section 5.3 (G) of the License and the Washington Department of Ecology's Section 401 Water Quality Certification (Certification).

The Plan addresses wetland monitoring in the Nine Mile Hydroelectric Development Reservoir, along with wetland creation, restoration, enhancement and protection for Lake Spokane, the reservoir created by the Long Lake Hydroelectric Development. Avista consulted with the Washington Department of Ecology (Ecology), Washington Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service as the Plan was developed, then submitted it to Ecology for final review and approval, as required in the Certification. Ecology approved the Plan on May 22, 2012. Copies of the consultation record, which includes the three agencies' comments and recommendations, and Avista's responses to them, are included in Appendix A of the Plan.

With this, Avista is filing the Ecology-approved Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program with FERC for approval. Once approved by FERC, Avista will move forward with its efforts to fulfill its License requirements.

Please feel free to call me at (509) 495-4998 or David Armes at (509) 495-2796 in my absence, if you have any questions or wish to discuss the Plan.

Sincerely,

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Marcie Mangold (Ecology)
Graham Simon (WDFW)
Erin Britton (USFWS)

Doc. No. 2012-0167

AVISTA CORPORATION

LAKE SPOKANE WETLAND PLAN

AND

NINE MILE
WETLAND MONITORING PROGRAM

Article 413
Washington 401 Certification, Appendix B 5.3(G)

Spokane River Hydroelectric Project
FERC Project No. 2545

Prepared By:

May 29, 2012

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LAKE SPOKANE WETLAND PLAN

1.0 INTRODUCTION

The Avista Corporation (Avista) currently operates five hydroelectric developments (HEDs) along the Spokane River in eastern Washington and northern Idaho. The five HEDs include Post Falls, which is located in Idaho, and the Upper Falls, Monroe Street, Nine Mile and Long Lake HEDs, which are all located in Washington. The five HEDs are collectively known as the Spokane River Project (Project) and are operated under license from the Federal Energy Regulatory Commission (FERC). FERC issued a new license (License) authorizing Avista to continue the operation of the Project (FERC Project No. 2545) on June 18, 2009.

1.1 License Requirements

Appendix B of the License incorporates Ecology's Section 401 Water Quality Certification (WQC). Section 5.3 (G) of the WQC requires Avista, in collaboration with Ecology, to develop a site-specific wetland creation, restoration, enhancement, and protection plan ("Wetland Plan") for the Long Lake HED, in which Avista will acquire, restore and/or enhance a minimum of 42.51 acres of wetlands in the vicinity of Lake Spokane, the reservoir impounded by Long Lake Dam.

In an effort to develop the Wetland Plan Avista held a pre-plan meeting with the Washington Department of Ecology (Ecology), Washington Department of Fish and Wildlife (WDFW), and the United States Fish and Wildlife Service (USFWS) (consulting agencies) on November 8, 2011. During the meeting Avista and the consulting agencies reviewed preferred and alternative wetland mitigation locations, the License requirements, and an outline prior to agreeing to proceed with developing the Wetland Plan. In addition to meeting the terms of the License and Ecology's WQC, this Wetland Plan is based upon the Guidance on Wetland Mitigation in Washington State, Ecology publication 04-06-013a (current version is publication 06-06-011, March 2006).

1.2 Background

Lake Spokane is located in the northeastern part of Washington State and is fed by the Spokane and Little Spokane rivers (Figure 1), with the Spokane River providing about 90 percent of its flow and the Little Spokane River about 10 percent of its flow. Lake Spokane is located approximately 20 miles northwest of the city of Spokane in Lincoln, Spokane and Stevens Counties, Washington and is approximately 24 miles in length with a maximum surface area of approximately 5,060 acres and an average depth of about 45 feet.

The upper 3 miles of Lake Spokane is riverine and has limited shoreline development. The next 15 miles of the reservoir transitions into more lacustrine habitat and is substantially developed with residential properties on both shorelines. The lower 6 miles are predominately lacustrine habitat with very little development, primarily because Avista is the landowner on both sides of the lower reservoir. The upper section is also characterized by having gentle, sloping shorelines

and shallow bays with aquatic bed, emergent, scrub-shrub and forested wetlands present. The lower portion of the lake has steeper banks with less emergent and wetland areas, with the exception of a few shallow bays.

1.3 Primary Objective

The primary objective of this Wetland Plan is for Avista to acquire, restore, and/or enhance a minimum of 42.51 acres of wetlands in the following proportions of wetland type: forested 58%, scrub-shrub 37% and forested/cottonwood 5%, preferably on Lake Spokane or near the confluence of the Spokane River with the Little Spokane River or with Hangman Creek. This Wetland Plan guides the development of future Site-Specific Wetland Plans, with the objective to achieve these proportions. Individual sites may not yield the total objective to meet these proportions on their own, as such it may be necessary to pursue multiple properties. It is also possible that the actual proportions achieved may vary slightly from those identified in the License.

1.4 Mitigation Definitions

The following definitions are from Wetland Mitigation in Washington State Part 1: Agency Policies and Guidance (Ecology, 2006).

Enhancement
The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres.

Restoration
The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into *re-establishment* and *rehabilitation*. Re-establishment represents a net gain in acres while rehabilitation does not.

a) Re-establishment
The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres and functions.

b) Rehabilitation
The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland.

Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres.

Establishment/Creation
The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Establishment results in a gain in wetland acreage (and function).

Preservation
Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes activities commonly associated with the term preservation, such as placing a property in long term protection that will maintain the current habitats or may result in a gain in functions over the long term.

Upland Buffers
Vegetated areas adjacent to wetlands, or other aquatic resources, that can reduce impacts from adjacent land uses through various physical, chemical, and/or biological processes.

Wetlands
Wetlands are defined by the Washington State Wetlands Delineation Manual (Ecology 1997), and the United States Army Corps of Engineers (USACE) (Federal Register 1982) as "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas".

1.5 Mitigation Ratios

In accordance with the License and the WQC, Avista's mitigation efforts will be credited per the following ratios:

- Enhancement/Restoration 1:1
- Establishment/Creation 1:1
- Preservation 10:1

Additionally, Appendix B 5.3(G) of the License states "Buffers and uplands at mitigation sites may be considered as part of the mitigation package. Credit is determined on a case-by-case basis in accordance with Guidance on Wetland Mitigation in Washington State, Ecology publication 04-06-013a."

2.0 MITIGATION SITE SELECTION

Avista has been pursuing wetland mitigation opportunities downstream of Nine Mile HED to Long Lake HED and in the vicinity of the confluence of the Spokane River and Little Spokane River, and the confluence of the Spokane River and Hangman Creek. If, however, wetland

mitigation opportunities prove not to be available at these locations, Avista will review and pursue opportunities in the Little Spokane River Watershed and the Hangman Creek Watershed as discussed in the pre-plan meeting on November 8, 2011 and upon Ecology approval.

When evaluating potential wetland mitigation sites, Avista will assess the needs of the waterway and watershed, as well as what functions and values of the watershed are impaired and how those functions and values can be enhanced and/or partly restored. In addition, Avista will consider the relative importance of a wetland or aquatic system in relationship to other wetlands, habitats, and processes occurring within the local area and/or watershed. Prior to acquiring a site for mitigation, Avista will conduct feasibility analysis verifying whether or not the site is suitable for wetland mitigation. Upon acquisition of a specific property (or conservation easement) Avista will prepare site-specific wetland mitigation plans as outlined in Section 4.0 of this Wetland Plan.

2.1 Preferred Wetland Mitigation Locations

To date Avista has evaluated two potential locations for completing the wetland mitigation requirements, Site 1 and Site 2 (Figure 2).

Site 1 (Sportsman's Paradise)
The Sportsman's Paradise property was identified by the Terrestrial Resources Work Group, including the consulting agencies, as the preferred site for a wetland and upland restoration project during Avista's Spokane River Project relicensing process. The property is located along Lake Spokane's southern shoreline adjacent to a farm and is historically referred to as Sportsman's Paradise. The farm's shoreline property has a mixture of emergent, scrub-shrub wetlands, associated upland buffer and agricultural lands. Avista was pursuing the acquisition (fee title ownership or conservation easement) of approximately 47 acres, which included the shoreline and up to 300 feet inland from the shoreline, for over one mile of total linear shoreline. Potential mitigation enhancement projects included planting 47 acres of emergent and scrub-shrub wetlands, associated upland buffers, and agricultural lands with native woody vegetation. This would enhance the wetlands, from emergent and scrub-shrub to forested wetlands. This enhancement project would have reduced nutrient loading in Lake Spokane by providing a large buffer between the lake and the agricultural lands. Between 2010 and 2012, Inland Northwest Land Trust and Avista staff discussed purchasing the property or placing a conservation easement on it with the landowners. The landowners stated in 2012 they were not interested in selling the property or working with Avista on a wetland mitigation project. This led Avista to pursue other mitigation opportunities on Lake Spokane.

Site 2 (Granger Property)
Avista is currently in the process of evaluating a 66 acre parcel located adjacent to Lake Spokane's southern shoreline, approximately three-quarters of a mile upstream from the Nine Mile Recreation Area. This parcel contains a mixture of aquatic bed, emergent and scrub-shrub wetlands, as well as associated upland buffers. To date, Avista has evaluated

the property and is in the process of completing a feasibility study that will identify several wetland mitigation alternatives. These alternatives could include enhancement of up to an estimated 25 acres of wetlands, with the goal of achieving the proportions outlined in Section 1.3 (forested 58%, scrub-shrub 37% and forested/cottonwood 5%). Specific acreage totals by wetland type, however have not been determined at this time, but will be included in a site-specific wetland mitigation report should Avista move forward with this property. Because the acquisition process is ongoing we have not been able to establish wetland maps/ratios at this time. In addition to completing the feasibility study, Avista has met with the property owner on several occasions and is conducting soil profiling, a title search and appraisal of the property.

If Avista cannot complete wetland mitigation projects on Site 2, other mitigation opportunities will be pursued based upon requirements outlined in the License and WQC. These include other potential sites around Lake Spokane or within the vicinity of the two tributaries, the Little Spokane River and Hangman Creek confluences with the Spokane River (Figure 2).

Avista has tentatively identified two potential wetland mitigation opportunities within the vicinity of the confluence of the Little Spokane River and the Spokane River. The first opportunity is a property owned by the Washington Department of Parks and Recreation located at the confluence of the Spokane River and the Little Spokane River. This property is approximately 43 acres and contains over one mile of Spokane River/Little Spokane River shoreline. It has a mixture of emergent and scrub-shrub wetlands, as well as associated uplands. Mitigation opportunities could include wetland enhancement projects converting the emergent and scrub-shrub wetlands to forested wetlands and controlling or eradicating the non-native species.

The second potential wetland mitigation opportunity, which Spokane County also identified as a wetland mitigation opportunity in 2009 (PBS&J, 2009), is located along the Little Spokane River approximately one and a half miles above the confluence with the Spokane River. This site consists of two properties, totaling 42 acres and includes wetland mitigation opportunities such as preservation and enhancement projects, and controlling or eradicating the non-native species.

2.2 Alternative Locations Using a Watershed Approach

If the mitigation opportunities discussed above are not available, and as agreed to by the consulting agencies in the pre-plan meeting, Avista will pursue alternative wetland mitigation locations using a watershed approach. These include the Little Spokane River Watershed, Water Resource Inventory Area (WRIA) 55, and the Hangman Creek Watershed WRIA 56.

The Washington portion of the Spokane River watershed is divided into the Lower, Middle, Little Spokane River, and Hangman Creek watersheds. The watershed approach, when used in selecting sites for wetland mitigation is based on:

- understanding how ecological processes, such as the movement of water, determine the characteristics and ecological functions in a drainage basin;

- determining the extent to which the ecological processes have been altered;
- identifying areas where these ecological processes can be most effectively restored, and where they need to be protected; and
- assessing the role that restoration, including compensatory mitigation, can play in repairing those ecological processes and replacing wetland functions lost in the watershed (Ecology, 2010).

To date, and in an effort to move forward with the License's mitigation requirements, Avista has been working with resource agencies, non-profit conservation groups, such as Ducks Unlimited and land trusts, to identify potential mitigation opportunities in the Little Spokane River and Hangman Creek watersheds in the instance mitigation properties cannot be acquired at Lake Spokane or near the mouths of the Little Spokane River or Hangman Creek. This process has identified two specific wetland mitigation opportunities, Sacheen Springs and Grouse Creek Ranch, discussed below.

2.2.1 Little Spokane River Watershed

The Little Spokane River watershed includes about 432,000 acres located within Spokane, Stevens and Pend Oreille counties (Figure 3). It is part of the Spokane - Coeur d'Alene watershed which encompasses about 6,600 square miles in parts of northeastern Washington and Idaho. The document Potential Wetland Project Sites WRIAs 55 and 57 (PBS&J, 2009) identified 3,893 acres of potential wetland mitigation projects within the Little Spokane River watershed.

Wetland mitigation opportunities in the Little Spokane River watershed include:

- Sacheen Springs, a 110 acre parcel, contains approximately ½ mile of the West Branch of the Little Spokane River shoreline. Wetland mitigation opportunities include both enhancement and preservation projects. In addition to the Sacheen Springs property, the two opportunities listed below are identified in the document Potential Wetland Project Sites WRIAs 55 and 57 and are being evaluated by Avista.
- The Diamond N, Diamond NE, Diamond SW and Diamond W properties, collectively totaling 415 acres, with 75 or more potential acres of wetland mitigation.
- The Sacheen S property, totaling 145 acres has 70 potential acres of wetland mitigation.

2.2.2 Hangman Creek Watershed

The Hangman Creek watershed has a total drainage area of 430,000 acres (of which 275,000 acres are in Washington, the remaining acreage is in Idaho) (Figure 4). No known mitigation studies of the Hangman Creek watershed have been identified. To date, Avista is in the process of obtaining information, reviewing potential mitigation properties and scheduling land owner meetings in the Grouse Creek area, located near the Hangman Creek and Grouse Creek confluence.

2.3 In-Lieu Of/Mitigation Banks

As outlined in the License and WQC, Avista can propose in-lieu of mitigation, or utilize mitigation bank credits in lieu of purchasing and completing a wetland mitigation project. This type of mitigation occurs in circumstances where funds are provided to an in-lieu-fee sponsor instead of completing project-specific mitigation. Mitigation banking would include buying credits at an Ecology pre-approved mitigation bank.

3.0 PROPERTY ACQUISITION/MANAGEMENT RIGHT ACQUISITION

Owning the property "in fee" or at least the appropriate "developmental rights" through a conservation easement is an important factor to consider when selecting a mitigation site since it must be legally protected over the long term. Both these methods of acquisition help ensure long-term protection of the property. Other ownership or management strategies for wetland mitigation properties not discussed in this section will require Ecology approval.

3.1 Fee Title Ownership

Fee title ownership gives the land owner complete interest in the land, entitling them to use the property in any manner consistent with federal, state, and local laws and ordinances. In this instance, it would provide Avista the right to fulfill the approved wetland mitigation requirements.

3.2 Conservation Easement

A conservation easement is a legal agreement between a landowner and another entity, such as a land trust or government agency, that permanently limits uses of the land (e.g., development rights) in order to protect its values for conservation. The holder of the conservation easement may or may not accept responsibility for management of the site depending on the original agreement. In the instance when the holder accepts responsibility for the management of the easement, they will ensure the protection of the site and monitor the property on a regular basis to determine that it remains in the condition agreed to in the easement. Avista would ensure the property is managed and/or monitored to ensure the mitigation efforts are successful and that the terms of the conservation easement are upheld.

4.0 RECOMMENDED OUTLINE FOR SITE-SPECIFIC MITIGATION PLANS

Upon completing acquisition of a mitigation property (or properties), Avista will develop a detailed site-specific wetland mitigation plan(s) in accordance with the following outline based upon the Ecology publication "Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans" (Ecology 2006). Site-Specific Mitigation Plans will be submitted to the consulting agencies for a 30 day review and comment period prior to being finalized and submitted to Ecology for approval.

Site-Specific Wetland Mitigation Plan Outline:

- **Cover/Title Page**
- **Table of Contents**
- **List of Figures**
- **List of Tables**
- **Responsible Parties** – Includes the names, titles, addresses, and phone numbers for individuals involved in the development of the mitigation project.
- **Executive Summary** – The executive summary will summarize the proposed mitigation.
- **Project Description** – One or two paragraphs describing the development project requiring the mitigation.
- **Proposed Mitigation Site** – This section will include the site location; site ownership; rationale for why the site was chosen; and description of the constraints at the site.
- **Existing (Baseline) Conditions of the Mitigation Site** – This section will document the existing conditions of the site that will be used for compensatory mitigation. The technical information provided shall demonstrate that the chosen mitigation site has the potential to meet the overall goals of the mitigation project.
- **Mitigation Site Plans/Design** – This section will include a qualitative description of the water regime and how adequate amounts of water will be provided to support a wetland over the long term; discuss how the mitigation will improve existing functions and values within the watershed; provide schematic drawings showing proposed changes in topography, water control structures, proposed distribution of plant communities, habitat structures and their location and existing and proposed buffers.
- **Grading Plan/Site Maps** – This section will include a topographical site survey (if needed) or existing and proposed elevation contours; property boundaries, wetland boundaries (existing and proposed); on-site floodplain and ordinary high water mark boundaries; survey benchmarks (if needed); location and elevation of soil borings or test pits; location and elevation of water level sampling devices; locations of soils to be stockpiled, if any; description of methods of erosion control and bank stabilization, if applicable; buffer areas proposed for the mitigation site and their boundaries.
- **Water Regime** – Description of the proposed frequency and duration of flooding, inundation, or soil saturation; description of the proposed groundwater and surface water sources and characteristics; description of the elevation of the water table and dates when measured; engineering drawings of any proposed water control structures.
- **Planting/Landscape Plans** – This section will include a list of plant materials and species; expected natural re-vegetation to occur; description of the methods that will be used to control invasive and exotic plants; a plan for irrigating the plants until they are established; description of soil amendments; protective measures; a map of the location and type of habitats and habitat features.
- **Site Specific Goals, Objectives, and Performance Standards** – Description and quantification of the long-term goals; target functions and values to be restored or created; description of the objectives of each goal; a list of performance standards for each objective.
- **Monitoring Plan –** Describes the methods used to collect and analyze data needed to show that performance standards are being met; variables to be measure; sampling

methods for each variable; schedule; a map of sampling locations; timetable for reporting results.

- **Site Protection** – Specifics what measures will be taken to protect the site for the long term.
- **Maintenance and Contingency Plans** – These plans shall include any necessary maintenance or contingencies needed shall the actions undertaken for the mitigation fail or only partially succeed.
- **Implementation Schedule** – This schedule shall include a construction sequence for grading, water diversions, plantings, etc; time schedule and completion dates; any permit conditions specifying time limits. Any new permits required shall be included in this section.

5.0 SCHEDULE

- 2010 – Avista evaluated potential wetland mitigation properties at Lake Spokane (Site1);
- 2011 – Avista discussed wetland mitigation opportunities with the landowners of Site 1 and initiated wetland mitigation opportunity discussions with the landowner of Site 2.
- 2012 – Avista will prepare a wetland mitigation feasibility analysis for Site 2, and will continue evaluating it as a potential wetland mitigation property;
- 2013 – Avista will continue to pursue wetland mitigation opportunities in the preferred and alternative locations identified in the Wetland Plan;
- 2014 – Avista will acquire the necessary mitigation property or properties prior to May 8, 2014.
- 2015 – Avista will complete the site-specific mitigation plans within one year of site acquisition, which is on or before May 8, 2015.
- 2015-2016 – Upon Ecology approval, Avista will implement the site-specific mitigation plan.
- 2016-2020 – Avista will continue implementation of the site-specific management plan, including management and monitoring of the site.

NINE MILE RESERVOIR WETLAND MONITORING PROGRAM

6.0 Introduction

The Nine Mile dam, located approximately 7 miles northwest of the City of Spokane in Spokane County includes a spillway that is about 58 feet high by 220 feet long and has a crest elevation of 1,596.6 feet. The spillway section of the dam allows excess water to flow over when river flows exceed the hydraulic capacity of the turbines in the powerhouse. The reservoir behind Nine Mile Dam is approximately 6 miles long, 440 acres in size at its full pool elevation of 1,606.6 feet (above mean sea level), and has a maximum depth of approximately 60 feet. A mixture of wetland and riparian vegetation exists along portions of the reservoir's shoreline. The reservoir substrate varies with sand predominantly in the lower reservoir. Dry Creek, which is intermittent during part of the year, is the only tributary that enters the reservoir. Its mouth is located approximately 1 mile upriver of the dam on the reservoir's southern shoreline.

6.1 License Requirements

License Article 413 requires Avista to include a Nine Mile Reservoir Wetland Monitoring Program (provisions to monitor wetlands at Nine Mile Reservoir after installation of the rubber dam and to file a report of the results along with any recommendations for additional wetland enhancement) in the Lake Spokane Wetland Plan. The License Article also states that the report of the monitoring results and any recommendations shall be due to FERC within 6 months of completing the required wetlands monitoring.

6.2 Background

Prior to 2010, two tiers of 5 foot high flashboards raised the Nine Mile Reservoir an additional 10 feet above the dam crest to elevation 1,606.6 feet. These flashboards kept the reservoir at its full pool elevation to maximize power generation. In 2010, Avista replaced the old flashboard system with an Obermeyer spillway gate (rubber dam), which was installed on the crest of the dam. This new spillway gate system consists of a series of metal plates and rubber bladders, which when inflated maintain the reservoir at the same elevation as the flashboards did. To the extent possible, the reservoir level will be maintained at its normal full pool elevation year-round and will no longer experience the drawdowns that occurred when the flashboards were removed.

More specifically, prior to the installation of the rubber dam the reservoir elevation varied between its normal full pool elevation and 10 feet below the full pool elevation, based on the inflows and the necessity to remove all or part of the flash boards to accommodate high flows. In some years the reservoir was maintained at its full pool elevation, whereas in others it dropped 5 to 10 feet below the full pool elevation depending on how many of the flashboards needed to be removed. This change in annual operations, in which the reservoir will now be maintained at its full normal pool elevation, to the extent possible, on a year-round basis is the reason for this Nine Mile Wetlands Monitoring Program.

The Wetland and Riparian Habitat Mapping and Assessment report that was completed for the Spokane River Project, including Nine Mile Reservoir, during the Project relicensing effort, identified 16 individual wetlands in the reservoir (Parametrix, 2004). Parametrix defined wetlands according to the United States Fish and Wildlife Service Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979), which we plan to adhere to for this program. The wetlands identified in the Parametrix report provide the baseline for comparison against any potential changes due to the rubber dam installation and the associated change in Project operations.

6.3 Primary Objective

The primary objective for monitoring wetlands in Nine Mile Reservoir is to determine if any wetland conversions or changes take place due to the increased time frame that Nine Mile Reservoir is at its full pool elevation following the installation of the rubber dam. The focus of the monitoring is on the wetlands (approximately 5.5 acres) located immediately upstream of the Nine Mile Dam. On November 8, 2011 Avista met the consulting agencies to review and discuss the results of the 2011 monitoring activities and continued monitoring activities in 2012 and 2019.

Our initial assessment, due to the change in Project operations associated with the rubber dam, include the following possible conversions. Submerged wetlands in Nine Mile Reservoir could experience a conversion from forested to emergent, aquatic bed or open water. Conversion to open water could mean a loss of wetlands. Upland areas along the shoreline may also experience a long-term conversion along the full pool elevation mark. These uplands could convert to emergent, scrub shrub or forested wetlands over time.

6.4 Monitoring Methodology

Avista will monitor the wetlands associated with Nine Mile Reservoir in 2011 and 2012 (baseline) to establish a baseline of information and then again in 2019 (re-evaluation) to re-evaluate the information to see if any wetland changes or conversations have occurred. Wetlands in Nine Mile Reservoir will be classified according to the Classification of Wetlands and Deepwater Habitats of the United States. These classifications include lacustrine aquatic bed, emergent, scrub-shrub and forested. In addition to the above, the wetlands will be rated based upon the Washington State Wetland Rating System for Eastern Washington (Ecology, 2004). This rating system provides a numerical rating (category I-IV) for wetlands based upon water quality functions, hydrologic functions and habitat functions. This numerical scoring is the basis for determining the wetland category (I-IV), with I being the highest and IV the lowest.

Avista monitored the wetlands associated with Nine Mile Reservoir in 2011 and will continue the monitoring effort in 2012 to document the baseline conditions, classifications and ratings now that the rubber dam is fully operational. The wetlands will be monitored again in 2019 to compare with the baseline information to see if any wetland changes or conversions have occurred. Specific comparisons between the baseline conditions and those in 2019 will be based

on comparing the 2011 and 2012 wetland classifications and ratings with those identified in 2019. The year 2019 was selected because any wetland conversions that may occur are likely to take place within this timeframe. In addition, this seven year monitoring period exceeds the five year timeframe for monitoring wetlands recommended in Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans (Ecology, 2006), which should yield better comparative results.

The Nine Mile Wetland Monitoring Report will include the wetland classifications and wetland rating forms from the 2011-2012 monitoring efforts and the 2019 re-evaluation. Once the comparisons are made and a determination of whether or not mitigation recommendations are warranted, due to the change in operations, Avista will provide FERC and the consulting agencies with the Nine Mile Wetland Monitoring Report within six months of completing the 2019 wetlands monitoring.

The Nine Mile Wetland Monitoring Report will contain the following information:

1. Background information.
2. Name and contact information for the party responsible for the monitoring activities and report.
3. Whom the report was prepared for (name, address, and phone number) {*if different from number 2 above*}.
4. Month and year the monitoring data were collected.
5. Month and year the report was produced.
6. Description of the methodology.
7. The following baseline information collected in 2011-2012
   a) Classification of the wetlands,
   b) Ratings of the wetlands,
   c) Size of the wetlands,
   d) Photographs of the wetlands,
   e) Map of the wetland locations.
8. The wetland re-evaluation completed in 2019 will include the information listed in #7.
9. A summary table comparing the baseline information (#7) with the re-evaluation information (#8).
10. A results section discussing any wetland changes or conversions that may have taken place.
11. Recommendations based upon the results.

6.5 Nine Mile Monitoring Program Schedule

- 2011 – Avista initiated the wetlands monitoring program in Nine Mile Reservoir;
- 2012 – Avista will complete the baseline wetlands monitoring effort;
- 2019 – Avista will conduct the 2019 wetlands monitoring effort;
- 2019 – Avista will complete the Nine Mile Wetland Monitoring Report and submit it to FERC and the consulting agencies six months after completion of the 2019 monitoring effort. Prior to submitting the final monitoring report to FERC, Avista will submit it to Ecology, WDFW and USFWS for a 30 day review and comment period.

REFERENCES

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. (Version 04DEC1998).

Parametrix, 2004. Spokane River Hydroelectric Project Wetland and Riparian Habitat Mapping and Assessment.

PBS & J, 2009. Potential Wetland Project Sites WRIAs 55 and 57.

United States Army Corps of Engineers 1982 Federal Register.

Washington State Department of Ecology, 2010. Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington). Washington Department of Ecology Publication #10-06-007.

Washington State Department of Ecology, 2006. Wetland Mitigation in Washington State Part 1: Agency Policies and Guidance. Washington Department of Ecology Publication #06-06-011a.

Washington State Department of Ecology, 2006. Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans. Washington Department of Ecology Publication #06-06-011b.

Washington State Department of Ecology, 2004. Washington State Wetland Rating System for Eastern Washington, Annotated Version March 2007. Publication #04-06-15

Washington State Department of Ecology, 1997. Washington State Wetlands Identification and Delineation Manual. Washington Department of Ecology Publication #96-94.

FIGURES

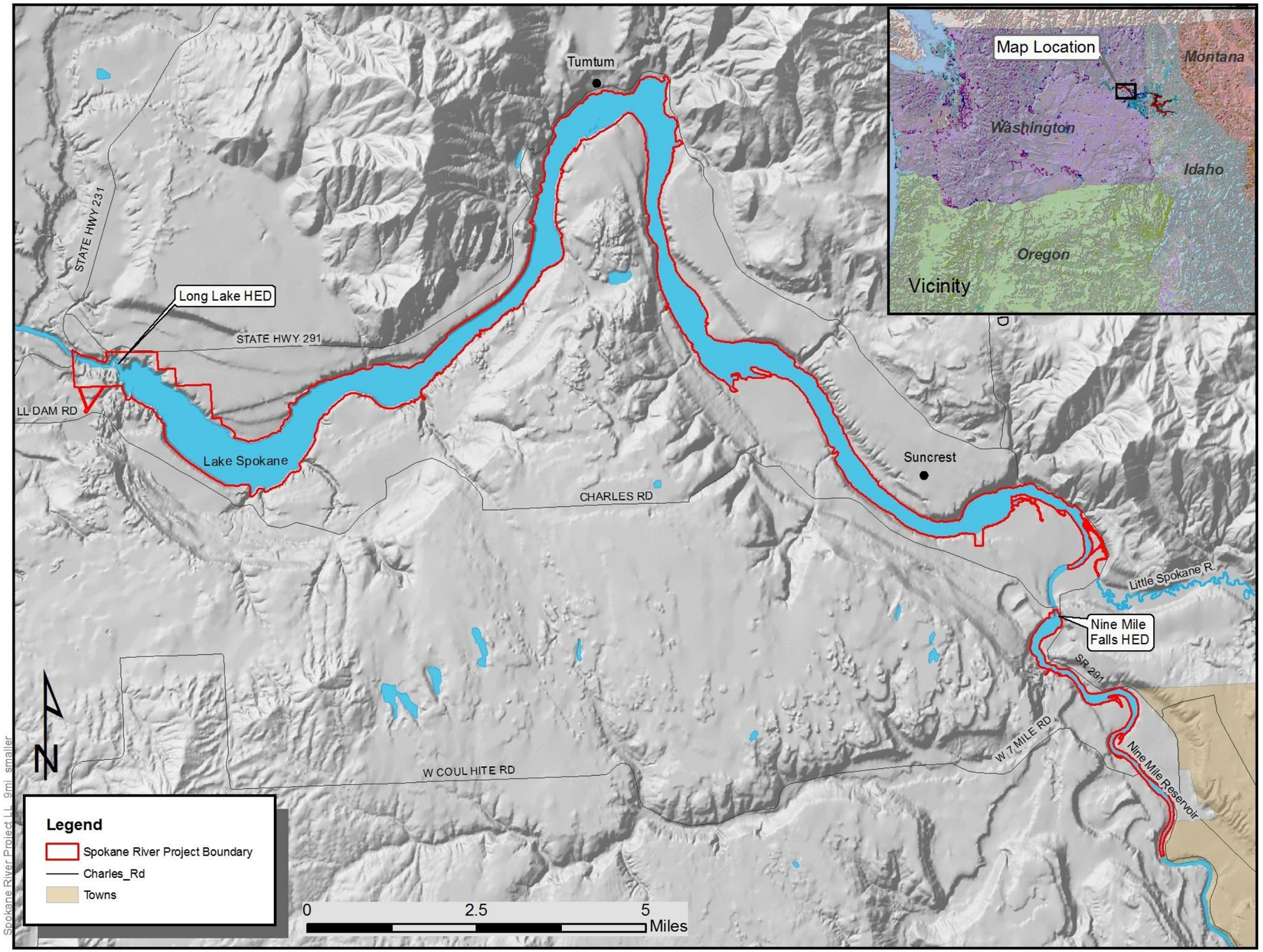

Figure 1. Lake Spokane and Nine Mile Reservoir Project Boundary Map

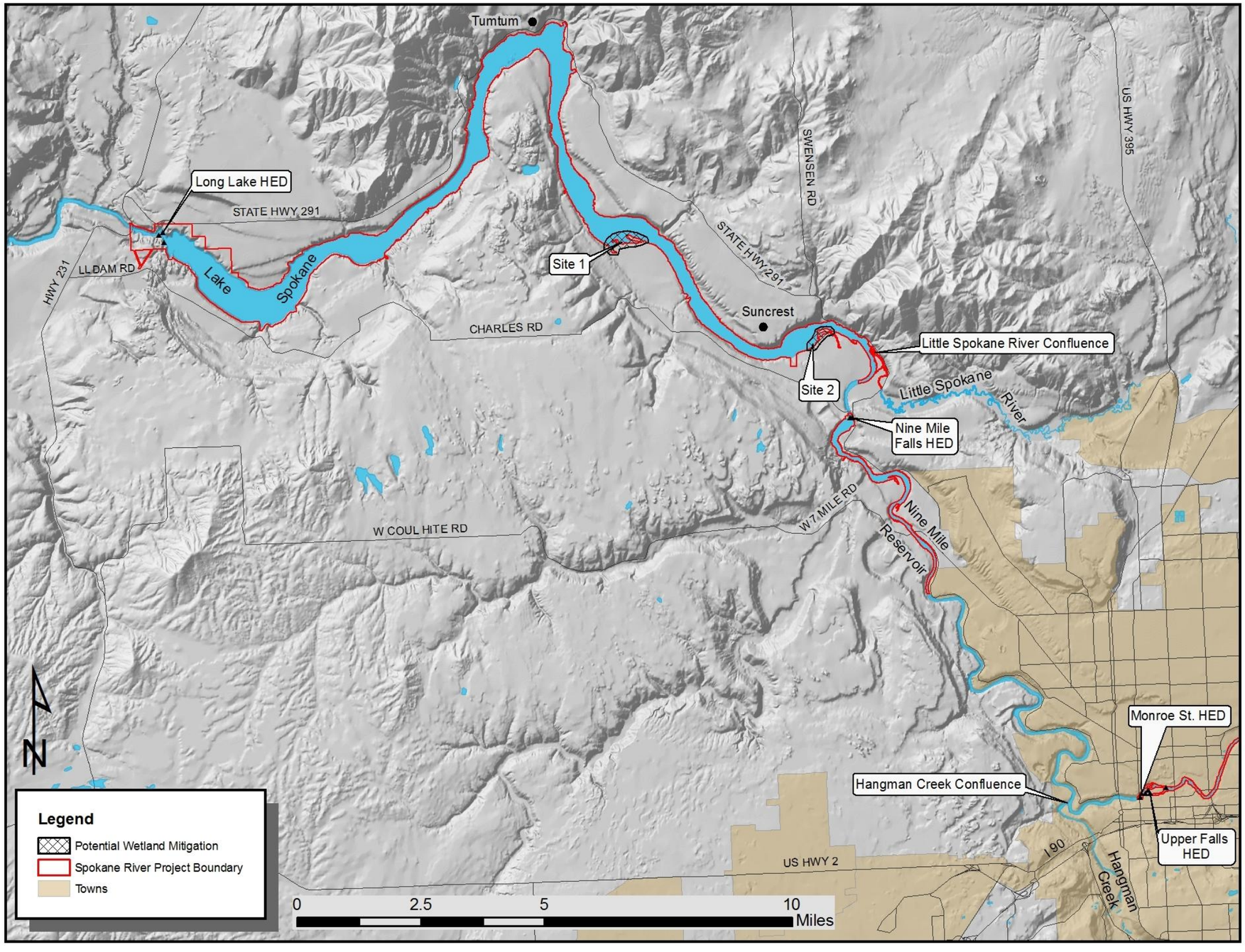

Figure 2. Wetland Mitigation Locations

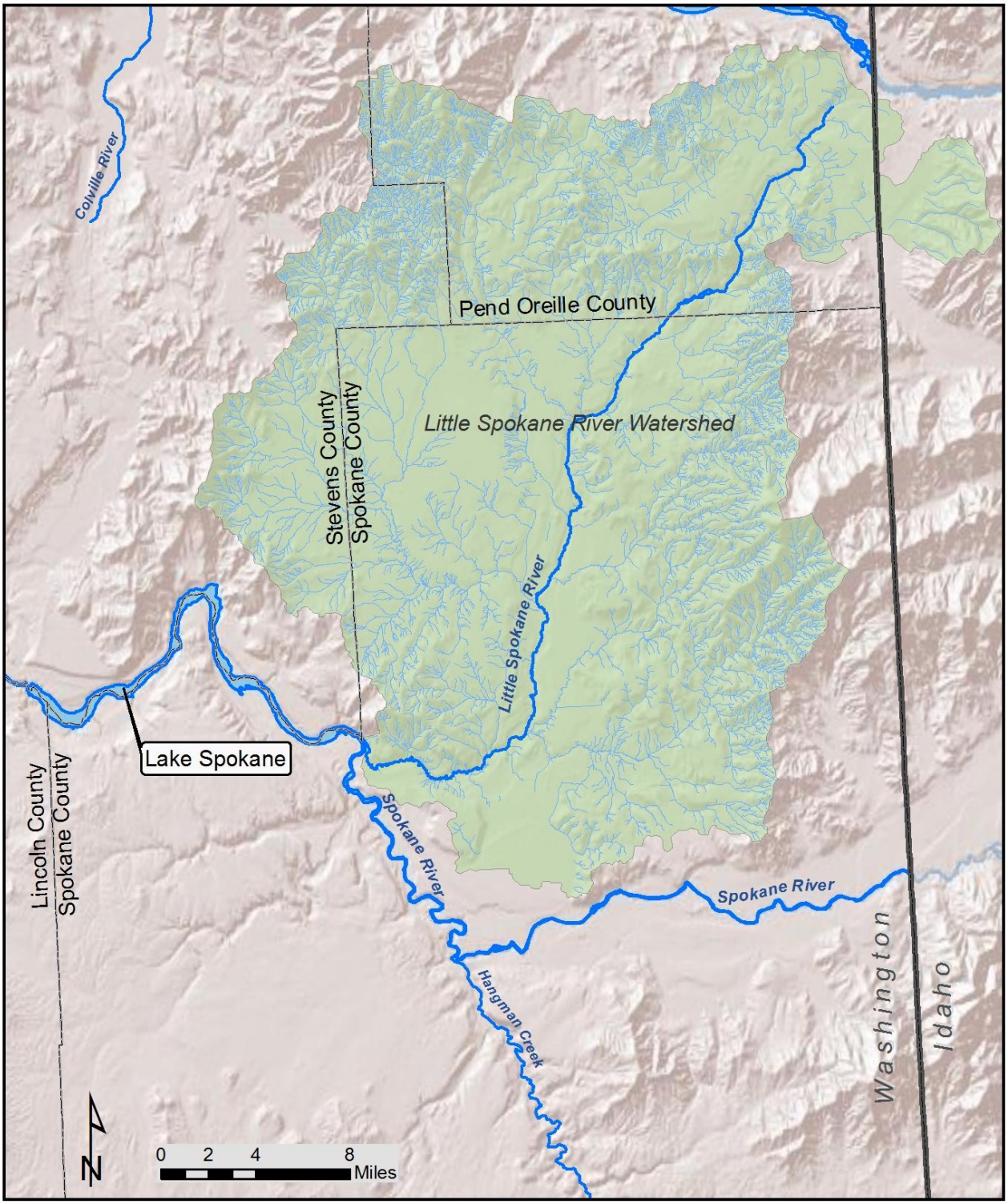

Figure 3. Little Spokane River Watershed

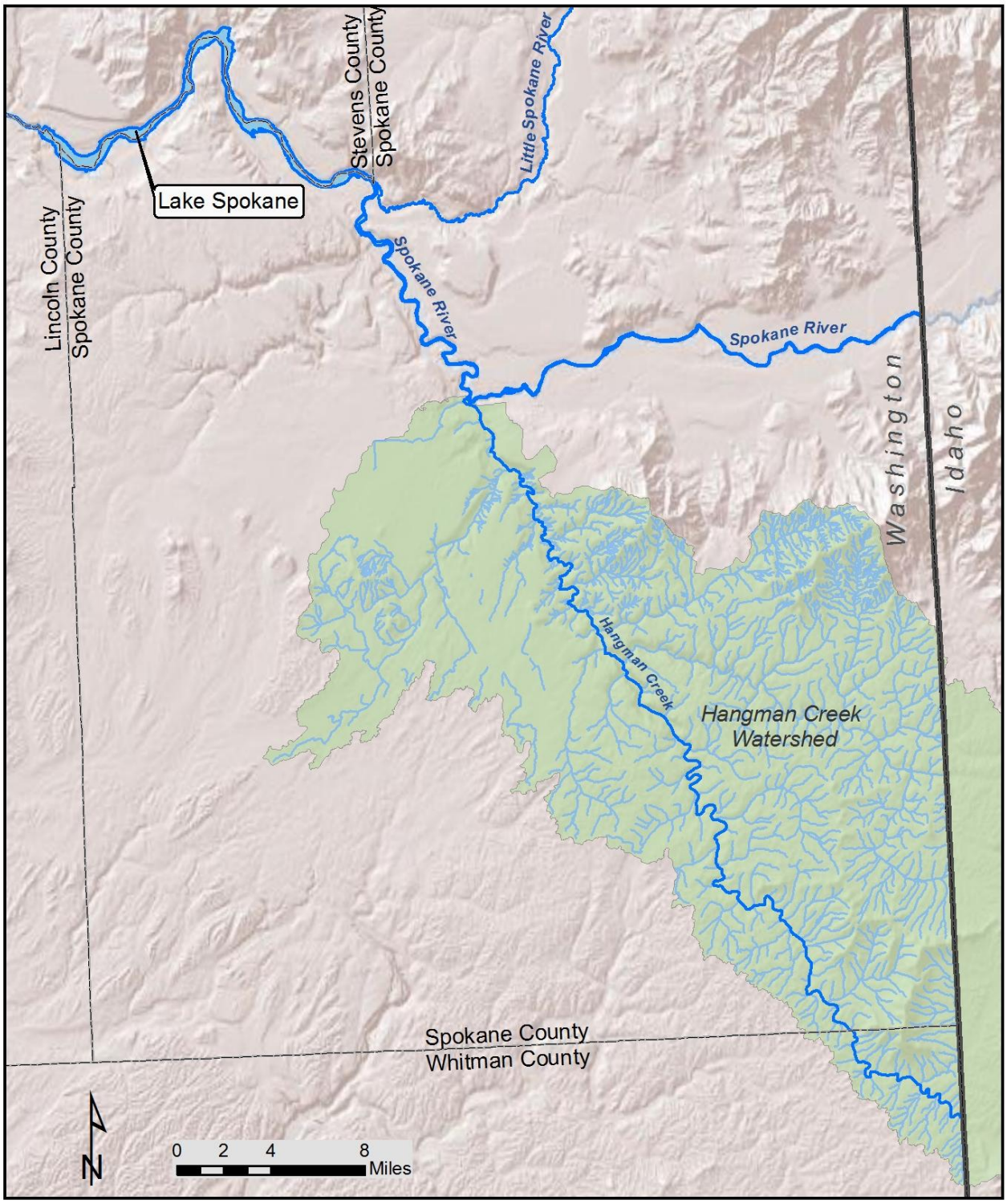

Figure 4. Hangman Creek Watershed

APPENDIX A
CONSULTATION RECORD

CONSULTATION WITH WASHINGTON DEPARTMENT OF ECOLOGY

May 8, 2012

Ms. Marcie Mangold
Washington Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295

RE: Spokane River Hydroelectric Project (FERC Project No. 2545)
Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program

Dear Ms. Mangold,

The Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License includes Appendix B, the Washington Department of Ecology Certification Conditions Under Section 401 of the Federal Clean Water Act (Certification). Section 5.3 (G) of the Certification requires Avista to develop a Lake Spokane Wetland Plan for Ecology's review and approval. In addition to this, License Article 413 requires Avista to include provisions in the Lake Spokane Wetland Plan to monitor wetlands in its Nine Mile Reservoir following the installation of the rubber dam, which was completed in 2010.

In accordance with the License, Avista has developed the enclosed Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program (Plan) for Ecology's review and approval. In developing the Plan, Avista consulted with your agency, as well as with the Washington Department of Fish and Wildlife, and the United States Fish and Wildlife Service. The consultation record, which includes the agencies' comments and Avista's responses to them, is included in Appendix A of the Plan.

With this, we are submitting the enclosed Plan to you for Ecology's final approval. Once we receive your approval, we will submit the Plan to FERC. We would appreciate your approval by June 8th, which will allow us to submit the final Plan to FERC by June 18th.

If you have any questions regarding the Plan, please feel free to call me at (509) 495-4998 or in my absence contact David Armes at (509) 495-2796.

Sincerely,

Elvin "Speed" Fitzhugh
Spokane River License Manager

cc: David Armes

Enclosure

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

MAY 22 2012

May 22, 2012

Mr. Elvin "Speed" Fitzhugh
Spokane River License Manager
Avista Corporation
1411 East Mission Ave., MSC-1
Spokane, WA 99220-3727

RE: Request for Final Approval – Spokane River Hydroelectric Project No. 2545
Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program
Washington 401 Certification, Section 5.3.G and Article 413

Dear Mr. Fitzhugh:

We have reviewed the **Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program** that was emailed to the Department of Ecology (Ecology) on May 8, 2012, for final approval. We thank you for working with us, answering our questions and incorporating them into the final document.

Ecology approves the **Lake Spokane Wetland Plan and Nine Mile Wetland Monitoring Program May 8, 2012**.

Please feel free to contact me at (509) 329-3450 or by email at dman461@ecy.wa.gov if you have any further questions regarding this matter.

Sincerely,

D. Marcie Mangold

D. Marcie Mangold
Water Quality Program

DMM:dw
cc: Brian Crossley, Spokane Tribe of Indians
Erin Kuttel, USFWS
Graham Simon, WDFW
Sara Hunt, Ecology/SEA
James M. Bellatty, Ecology/WQP

AVISTA

March 30, 2012

Ms. Marcie Mangold
Washington Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295

RE: Federal Energy Regulatory Commission's Spokane River Project (FERC Project No. 2545) License, Appendix B, Section 5.3 (G) and License Article 413 Lake Spokane and Nine Mile Reservoir Wetland Requirements

Dear Ms. Mangold,

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a new License (License) for the Spokane River Hydroelectric Project, FERC Project No. 2545. Appendix B, Section 5.3 (G) of the License includes the Washington Department of Ecology Section 401Water Quality Certification (WQC) condition that requires Avista to develop and submit a wetland plan for the Long Lake Hydroelectric Development (HED) within three years of issuance of the WQC. In addition, FERC License Article 413 requires Avista to include provisions in the wetland plan to monitor wetlands and include any recommendations for additional wetland enhancements in the Nine Mile Reservoir after the rubber dam has been installed.

To address the above requirements, Avista developed the enclosed Lake Spokane Wetland Enhancement Plan and Nine Mile Wetland Monitoring Program (Plan). This includes the efforts that we have undertaken to date to identify potential wetland properties and to monitor wetlands at the Nine Mile Reservoir, as well as the efforts that we will undertake in the future to fulfill our wetland obligations.

With this, please review the enclosed Plan and provide any comments that you may have by April 30, 2012. Upon receiving your comments, we will revise the Plan if necessary and file the Plan with FERC for its review and approval. If you have any questions regarding the Plan, feel free to call me at (509) 495-4998 or in my absence, please contact David Armes at (509) 495-2796.

Sincerely,

Speed Fitzhugh

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Graham Simon, Washington Department of Fish and Wildlife
Erin Britton, U. S. Fish & Wildlife Service
David Armes, Avista

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

800.227.9187
www.avistautilities.com

Armes, David

From: Sikes, Jeremy (ECY) [JSIK461@ECY.WA.GOV]
Sent: Friday, April 27, 2012 12:49 PM
To: Armes, David
Cc: Mangold, Marcie (ECY); Hunt, Sara (ECY); Simon, Graham A (DFW)
Subject: RE: Lake Spokane Wetland Enhancement Plan
Attachments: Lake Spokane Wetland Enhancement Plan_ECY_sikes.docx

I attached the wrong document. Please see this one.

Jeremy Sikes
Wetland Specialist
Shorelands and Environmental Assistance Program
Department of Ecology - Eastern Region
4601 N Monroe
Spokane, Washington 99205
(509) 329-3426

Flex Schedule: 7am-4:30pm; 2nd and 4th Mondays off.

http://www.ecy.wa.gov/programs/sea/wetlands/index.html

From: Sikes, Jeremy (ECY)
Sent: Friday, April 27, 2012 11:55 AM
To: David Armes (david.armes@avistacorp.com)
Cc: Mangold, Marcie (ECY); Hunt, Sara (ECY); Simon, Graham A (DFW)
Subject: RE: Lake Spokane Wetland Enhancement Plan

Thanks David,

Please find my comments in track changes attached. Please feel free to contact me with any questions. A conference call with the reviewers might not be a bad idea as well.

Jeremy Sikes
Wetland Specialist
Shorelands and Environmental Assistance Program
Department of Ecology - Eastern Region
4601 N Monroe
Spokane, Washington 99205
(509) 329-3426

Flex Schedule: 7am-4:30pm; 2nd and 4th Mondays off.

http://www.ecy.wa.gov/programs/sea/wetlands/index.html

1

Please consider the environment before printing this e-mail

From: Armes, David [mailto:David.Armes@avistacorp.com]
Sent: Friday, March 30, 2012 1:45 PM
To: Mangold, Marcie (ECY)
Cc: Fitzhugh, Speed (Elvin); Goloborodko, Yelena
Subject: Lake Spokane Wetland Enhancement Plan

Marcie,

Attached is the Lake Spokane Wetland Enhancement Plan (Plan) and cover letter. Please review the Plan and provide any comments that you may have by April 30, 2012. If you have any questions please feel free to contact me at any time.

Thanks!

David Armes | Avista Utilities
Terrestrial Resource Specialist
Spokane River Licensing Branch
1411 E. Mission Ave MSC-1 | Spokane, WA 99202
office: (509) 495-2796 | cell: (509) 999-4475
david.armes@avistacorp.com
Before printing, please think about the environment.

2

The following four comments were extracted from the red-lined version of the plan attached to Ecology's April 27, 2012 e-mail.

1. Ecology Comment:
Lake Spokane Wetland Enhancement Plan - I think a more appropriate title might be Mitigation Development Plan or something. This report is more of a plan to develop the plan.

Avista Response:
The title of the report has been changed to "Lake Spokane Wetland Plan".

2. Ecology Comment:
Section 1.5 Mitigation Ratios - This ratio comports with Ecology recommendations, but I can't figure out what is being proposed here. As far as I recall, mitigation for lost wetland buffer was not (but probably should have been) required. Avista could not be credited wetland mitigation for upland buffer area.

Avista Response:
Avista understands the crediting protocol for the wetland requirements however, the FERC License which includes the Washington 401 Water Quality Certification section on wetlands in Appendix B 5.3(G) states "Buffers and uplands at mitigation sites may be considered as part of the mitigation package. Credit is determined on a case-by-case basis in accordance with Guidance on Wetland Mitigation in Washington State, Ecology publication 04-06-013a." Credit in accordance with the License and WA 401 WQC is specific to wetland enhancement/restoration, creation, preservation, buffers and uplands at mitigation sites, and mitigation bank credits. Avista understands upland buffers are included in this and plans to achieve its obligations through a combination of these options. Section 1.5 was modified to match the verbiage listed in the License.

3. Ecology Comment:
Section 2.1 Granger Property - Avista will need to articulate how the breakdown of wetlands on this site (or potential wetlands) will comport with the required ratios from Section 1.3 (forested 58%, scrub-shrub 37% and forested/cottonwood 5%). The enhancement of upland buffers cannot be credited toward the wetland ratios (but is commendable).

Avista Response:
Section 2.1 Site 2 (Granger Property) was modified to include the ratios discussed in Section 1.3 and also to incorporate up to date information obtained since preparing the draft report. Specific text is listed below:

"To date, Avista has evaluated the property and is in the process of completing a feasibility study that will identify several wetland mitigation alternatives. These alternatives could include enhancement of up to an estimated 25 acres of wetlands, with the goal of achieving the proportions outlined in Section 1.3 (forested 58%, scrub-shrub 37% and forested/cottonwood 5%). Specific acreage totals by wetland type, however have not been determined at this time, but will be included in a site-specific wetland mitigation report should Avista move forward with this property. Because the acquisition process is ongoing we have not been able to establish wetland maps/ratios at this time."

4. Ecology Comment:
Section 6.2 Monitoring Methodology - This methodology section needs to be fleshed out with more detail. Please look at Monitoring requirements from the Ecology Mitigation Guidelines on pages 62 (Section 3.6.3) and page 113 (Section 1.14 of the recommended outline) for a detailed description of what the plan should look like. Also, please see the attached example mandatory conditions for monitoring under SEA 401 permits for a handy reference (pasted at end). It is specific to typical wetland mitigation site monitoring, but could be tailored to meet the objectives of this project

Avista Response:
Section 6.4 Monitoring Methodology was modified to include the applicable information listed in the Ecology Mitigation Guidelines as well as additional specific information relative to monitoring the wetlands in Nine Mile Reservoir. The specific text is listed below:

"The Nine Mile Wetland Monitoring Report will include the wetland classifications and wetland rating forms from the 2011-2012 monitoring efforts and the 2019 re-evaluation. Once the comparisons are made and a determination of whether or not mitigation recommendations are warranted, due to the change in operations, Avista will provide FERC and the consulting agencies with the Nine Mile Wetland Monitoring Report within six months of completing the 2019 wetlands monitoring.

The Nine Mile Wetland Monitoring Report will contain the following information:
1. *Background information.*
2. *Name and contact information for the party responsible for the monitoring activities and report.*
3. *Whom the report was prepared for (name, address, and phone number) {if different from number 2 above}.*
4. *Month and year the monitoring data were collected.*
5. *Month and year the report was produced.*
6. *Description of the methodology.*
7. *The following baseline information collected in 2011-2012*
   a) *Classification of the wetlands,*
   b) *Ratings of the wetlands,*
   c) *Size of the wetlands,*
   d) *Photographs of the wetlands,*
   e) *Map of the wetland locations.*
8. *The wetland re-evaluation completed in 2019 will include the information listed in #7.*
9. *A summary table comparing the baseline information (#7) with the re-evaluation information (#8).*
10. *A results section discussing any wetland changes or conversions that may have taken place.*
11. *Recommendations based upon the results."*

CONSULTATION WITH WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

From: Armes, David
Sent: Friday, March 30, 2012 1:46 PM
To: Simon, Graham A (DFW)
Cc: Fitzhugh, Speed (Elvin); Goloborodko, Yelena
Subject: Lake Spokane Wetland Enhancement Plan
Attachments: WDFW Cover Letter.pdf; Lake Spokane Wetland Enhancement Plan.docx

Graham,

Attached is the Lake Spokane Wetland Enhancement Plan (Plan) and cover letter. Please review the Plan and provide any comments that you may have by April 30, 2012. If you have any questions please feel free to contact me at any time.

Thanks!

David Armes | Avista Utilities
Terrestrial Resource Specialist
Spokane River Licensing Branch
1411 E. Mission Ave MSC-1 | Spokane, WA 99202
office: (509) 495-2796 | cell: (509) 999-4475
david.armes@avistacorp.com

1

March 30, 2012

Mr. Graham Simon
Washington Department of Fish and Wildlife
3860 Chelan Hwy N
Wenatchee, WA 98801

RE: Federal Energy Regulatory Commission's Spokane River Project (FERC Project No. 2545) License, Appendix B, Section 5.3 (G) and License Article 413 Lake Spokane and Nine Mile Reservoir Wetland Requirements

Dear Mr. Simon,

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a new License (License) for the Spokane River Hydroelectric Project, FERC Project No. 2545. Appendix B, Section 5.3 (G) of the License includes the Washington Department of Ecology Section 401 Water Quality Certification (WQC) condition that requires Avista to develop and submit a wetland plan for the Long Lake Hydroelectric Development (HED) within three years of issuance of the WQC. In addition, FERC License Article 413 requires Avista to include provisions in the wetland plan to monitor wetlands and include any recommendations for additional wetland enhancements in the Nine Mile Reservoir after the rubber dam has been installed.

To address the above requirements, Avista developed the enclosed Lake Spokane Wetland Enhancement Plan and Nine Mile Wetland Monitoring Program (Plan). This includes the efforts that we have undertaken to date to identify potential wetland properties and to monitor wetlands at the Nine Mile Reservoir, as well as the efforts that we will undertake in the future to fulfill our wetland obligations.

With this, please review the enclosed Plan and provide any comments that you may have by April 30, 2012. Upon receiving your comments, we will revise the Plan if necessary and file the Plan with FERC for its review and approval. If you have any questions regarding the Plan, feel free to call me at (509) 495-4998 or in my absence, please contact David Armes at (509) 495-2796.

Sincerely,

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Marcie Mangold, Washington Department of Ecology
Erin Britton, U. S. Fish & Wildlife Service
David Armes, Avista

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

800.227.9187
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Armes, David

From: Simon, Graham A (DFW) [Graham.Simon@dfw.wa.gov]
Sent: Monday, April 30, 2012 12:49 PM
To: Armes, David
Cc: Robison, Douglas L (DFW); Mangold, Marcie (ECY); Sikes, Jeremy (ECY)
Subject: RE: Lake Spokane Wetland Enhancement Plan

David:

Thank you for the opportunity to comment on the March 29, 2012 Lake Spokane Wetland Enhancement Plan and Nine Mile Wetland Monitoring Program. The Washington Department of Fish and Wildlife reviewed the current plan and offer the following comments for inclusion into the Plan.

Lake Spokane

Section 1.0

It is important that the title of this document be changed to a more appropriate title since the plan is still in the development stages. This draft plan generally commits to developing a wetland enhancement plan once a site is selected. A better title might be Lake Spokane Wetland Enhancement *Development* Plan. and Nine Mile Wetland Monitoring Program

Section 1.5

In this section, credit for acquired upland habitat is shown as receiving the same mitigation ratios as wetlands. Please review the amended 401 for the Spokane River Hydroelectric Project Appendix 5.3(G) of the license and incorporate the data from the tables into this plan. Appendix 5.3(G) of the license states that Avista *will develop a site-specific wetland creation, restoration, enhancement, and protection plan. This plan shall include, but not be limited to, schedules, developmental plans, permitting, construction, operation and maintenance and monitoring plans. It also states the Licensee shall acquire, restore and/or enhance a minimum of 42.51 acres of wetlands downstream of Nine Mile Dam. The primary objective is to create proportions of wetland type based on existing proportions along free-flowing stretches of the Spokane River to include Scrub Shrub (37%), Forested (58%) and Forested/Cottonwood (5%).* The tables in section 1.5 of this plan should focus on and include the wetland habitat types required as mitigation and the associated ratios. This section needs to reflect, at a minimum, the required mitigation ratios that may be applied to the habitat types, however, buffers for wetlands could provide additional benefits depending on the geography of the selected site. Though it should be clear that upland habitat will not be substituted for the required acreage for wetland habitat mitigation.

Section 2.1

This section discusses the preferred locations with enhancement potential. According to the enhancement plan which is an action plan, site one has no potential so this option should be omitted from the final plan.

Site two within the plan currently has the greatest potential and needs to be expanded with maps showing existing wetlands, possible enhancement opportunities on the site, and how mitigation rations could be applied to the specific habitat types to achieve the required mitigation. The plan simply states that Avista will include enhancement of up to 40 acres of wetlands and 14 acres of upland. Since Avista is already doing the feasibility studies on this property, additional relevant data should be included. Please incorporate this into the plan.

Since this plan is still in the development stages Avista should add additional information in section 1.3 (objectives) that explains that this plan is preliminary and the targeted site may not be feasible to meet the intent of mitigation.

Section 4.0

1

This section needs to include language stating that agencies, including WDFW, will have the opportunity to review and approve the selected site and the subsequent site-specific wetland enhancement/mitigation plan before it is implemented.

Nine Mile

Section 6.3

This section should clarify that conversion could mean loss of wetlands. Please add a section/table to explain what the total area of wetland habitat that could be lost or converted. There should be a map of the locations of potential loss or conversion and baseline photos of the areas of concern.

Please add a section addressing how mitigation would be completed if there was a loss or conversion, what the consultation process would be, timelines for mitigation, and how it would be monitored or maintained similar to the Lake Spokane Wetland Enhancement Development Plan.

Please add a section to show an additional monitoring time period for 2016. The rate of potential wetland loss or conversion is uncertain, therefore, an additional monitoring year would be helpful for determining this. Also if conversion is occurring slowly over a longer time period, additional monitoring should be extended beyond the 2019 date. There should be language added in this section for consultation with Ecology and WDFW for the decision to continue monitoring beyond 2019.

Section 6.4

This section needs to be expanded on. It does not clearly state what particular methodology Avista will follow and how they will do so. Please look at DOE Mitigation and Monitoring Guidelines. This section appears to be a description of what the rating system is. There should be, at a minimum, additional information in this methods section with more detail on where the wetlands are (photo points), how they will be monitored, potential areas where wetland acres are gained or lost, the number and type of indicator species used in the analysis, and how will Avista track and determine if wetlands are gained or lost over time.
A draft monitoring report should be provided to the agencies, including WDFW, for a 30 day review period before it is finalized and submitted to FERC. Please incorporate these changes and additions into the monitoring program.

Section 6.5

Please add 2016 as an additional monitoring year with the potential to continue monitoring after consultation with the agencies based on the data available.

If you have any questions please feel free to give me a call at your convenience

Thanks,

Graham Simon
Renewable Energy Habitat Biologist
3860 Chelan Hwy N.
Wenatchee, WA 98801
(509) 662-0503 Desk
(509) 670-0742 Cell
(509) 662-0492 Fax
graham.simon@dfw.wa.gov

From: Armes, David [mailto:David.Armes@avistacorp.com]
Sent: Friday, March 30, 2012 1:46 PM
To: Simon, Graham A (DFW)
Cc: Fitzhugh, Speed (Elvin); Goloborodko, Yelena
Subject: Lake Spokane Wetland Enhancement Plan

1. WDFW Comment:

Lake Spokane

Section 1.0 – It is important that the title of this document be changed to a more appropriate title since the plan is still in the development stages. This draft plan generally commits to developing a wetland enhancement plan once a site is selected. A better title might be Lake Spokane Wetland Enhancement Development Plan and Nine Mile Wetland Monitoring Program.

Avista Response:
The title of the report has been changed to "Lake Spokane Wetland Plan".

2. WDFW Comment:
Section 1.5 – In this section, credit for acquired upland habitat is shown as receiving the same mitigation ratios as wetlands. Please review the amended 401 for the Spokane River Hydroelectric Project Appendix 5.3(G) of the license and incorporate the data from the tables into this plan. Appendix 5.3(G) of the license states that Avista will develop a site-specific wetland creation, restoration, enhancement, and protection plan. This plan shall include, but not be limited to, schedules, developmental plans, permitting, construction, operation and maintenance and monitoring plans. It also states the License shall acquire, restore and/or enhance a minimum of 42.51 acres of wetlands downstream of Nine Mile Dam. The primary objective is to create proportions of wetland type based on existing proportions along free-flowing stretches of the Spokane River to include Scrub Shrub (37%), Forested (58%) and Forested/Cottonwood (5%). The tables in section 1.5 of this plan should focus on and include the wetland habitat types required as mitigation and the associated ratios. This section needs to reflect, at a minimum, the required mitigation ratios that may be applied to the habitat types; however, buffers for wetlands could provide additional benefits depending on the geography of the selected site. Though it should be clear that upland habitat will not be substituted for the required acreage for wetland habitat mitigation.

Avista Response:
Avista understands the crediting protocol for the wetland requirements however, the FERC License which includes the Washington 401 Water Quality Certification section on wetlands in Appendix B 5.3(G) states "Buffers and uplands at mitigation sites may be considered as part of the mitigation package. Credit is determined on a case-by-case basis in accordance with Guidance on Wetland Mitigation in Washington State, Ecology publication 04-06-013a." Credit in accordance with the License and WA 401 WQC is specific to wetland enhancement/restoration, creation, preservation, buffers and uplands at mitigation sites, and mitigation bank credits. Avista understands upland buffers are included in this and plans to achieve its obligations through a combination of these options. Section 1.5 was modified to match the verbiage listed in the License. Wetland proportions based on wetland type are discussed in Section 1.3.

3. WDFW Comment:
Section 2.1 – This section discusses the preferred locations with enhancement potential. According to the enhancement plan which is an action plan, site one has no potential so this option should be omitted from the final plan.

Avista Response:
While agreed this is an action plan, Avista believes it is also important to document potential wetland mitigation properties evaluated prior to development of the Wetland Plan, such as the Sportsman's Paradise Property. Additionally this was the site initially preferred and recommended by the consulting agencies for Avista to pursue. Documentation of the effort is included in the plan to demonstrate Avista has been working to achieve its requirements, and that if the opportunity to pursue purchasing the property in the future should arise, Avista will strive to do so.

4. WDFW Comment:
Site two within the plan currently has the greatest potential and needs to be expanded with maps showing existing wetlands, possible enhancement opportunities on the site, and how mitigation rations could be applied to the specific habitat types to achieve the required mitigation. The plan simply states that Avista will include enhancement of up to 40 acres of wetlands and 14 acres of upland. Since Avista is already doing the feasibility studies on this property, additional relevant data should be included. Please incorporate this into the plan.

Avista Response:
Section 2.1 Site 2 (Granger Property) has been modified to include the goal of achieving the proportions of wetlands discussed in Section 1.3, and include the most current information on the site. Currently, Avista is continuing efforts to evaluate the feasibility of mitigation on this property, prior to initiating any wetland mitigation; a site-specific wetland mitigation plan will be completed. This plan will incorporate wetland mitigation totals by wetland type (forested, scrub shrub, etc…) as well as the detailed information listed in Section 4.0 of the Wetland Plan.

5. WDFW Comment:
Since this plan is still in the development stages, Avista should add additional information in section 1.3 (objectives) that explains that this plan is preliminary and the targeted site may not be feasible to meet the intent of mitigation.

Avista Response:
Section 1.3 was modified to include the requested addition and now reads:
"The primary objective of this Wetland Plan is for Avista to acquire, restore, and/or enhance a minimum of 42.51 acres of wetlands in the following proportions of wetland type: forested 58%, scrub-shrub 37% and forested/cottonwood 5%, preferably on Lake Spokane or near the confluence of the Spokane River with the Little Spokane River or with Hangman Creek. This Wetland Plan guides the development of future Site-Specific Wetland Plans, with the objective to achieve these proportions. Individual sites may not yield the total objective to meet these proportions on their own, as such it may be necessary to pursue multiple properties. It is also possible that the actual proportions achieved may vary slightly from those identified in the License."

6. WDFW Comment:
Section 4.0 – This section needs to include language stating that agencies, including WDFW, will have the opportunity to review and approve the selected site and the subsequent site-specific wetland enhancement/mitigation plan before it is implemented.

Avista Response:
Avista has added language in Section 4.0 in regard to WDFW reviewing and commenting on the Ecology approved plan: "Site-Specific Mitigation Plans will be submitted to the consulting agencies for a 30 day review and comment period prior to being finalized and submitted to Ecology for approval."

7. WDFW Comment:
Nine Mile
Section 6.3 – This section should clarify that conversation could mean loss of wetlands. Please add a section/table to explain what the total area of wetland habitat that could be lost or converted.

Avista Response:
The following sentences were modified in Section 6.3: "Submerged wetlands in Nine Mile Reservoir could experience a conversion from forested to emergent, aquatic bed or open water. Conversion to open water could mean a loss of wetlands." The Nine Mile Wetland Monitoring Report will include a table comparing wetland acreages during the baseline monitoring (2011-2012) with those during the re-evaluation (2019).

8. WDFW Comment:
There should be a map of the locations of potential loss or conversion and baseline photos of the areas of concern. Please add a section addressing how mitigation would be completed if there was a loss of conversion, what the consultation process would be, timelines for mitigation, and how it would be monitored or maintained similar to the Lake Spokane Wetland Enhancement Development Plan.

Avista Response:
A map of the locations of wetlands, baseline photos, recommendations or mitigation will be included in the Nine Mile Wetland Monitoring Report. Should wetland loss occur, recommendations on the consultation process, timelines for mitigation and how it would be monitored or maintained will be included as necessary in the Nine Mile Wetland Monitoring Report. Ecology, WDFW and USFWS will have an opportunity to review and comment on the Nine Mile Wetland Monitoring Report (discussed below in WDFW Comment #9) prior to submittal to FERC. Avista monitored the wetlands in Nine Mile Reservoir in 2011 and will continue monitoring in 2012 to determine the baseline conditions.

9. WDFW Comment:
Please add a section to show an additional monitoring time period for 2016. The rate of potential wetland loss or conversion is uncertain, therefore, an additional monitoring year would be helpful for determining this. Also if conversion is occurring slowly over a longer time period, additional monitoring should be extended beyond the 2019 date. There should be language added in this section for consultation with Ecology and WDFW for the decision to continue monitoring beyond 2019.

Avista Response:
Avista believes the current schedule is adequate to address potential wetland conversion/losses given the change in operation is not that different from before the rubber dam was installed (flash boards were not removed entirely or even partially every year). The seven year monitoring period exceeds the duration recommended by Ecology, which should yield better comparative results. Avista will include language in

the Nine Mile Wetland Monitoring Report to address additional monitoring if Avista and the consulting agencies believe it is necessary based on the results. The following text was added to section 6.5: "Prior to submitting the final monitoring report to FERC, Avista will submit it to Ecology, WDFW and USFWS for a 30 day review and comment period."

10. WDFW Comment:
Section 6.4 – This section needs to be expanded on. It does not clearly state what particular methodology Avista will follow and how they will do so. Please look at DOE Mitigation and Monitoring Guidelines. This section appears to be a description of what the rating system is. There should be, at a minimum, additional information in this methods section with more detail on where the wetlands are (photo points), how they will be monitored, potential areas where wetland acres are gained or lost, the number and type of indicator species used in the analysis, and how Avista track and determine if wetlands are gained or lost over time.

Avista Response:
Section 6.4 was modified to include the applicable information listed in the Ecology Mitigation Guidelines as well as include additional specific information relative to monitoring the wetlands in Nine Mile Reservoir. The following text was added to Section 6.4:

The Nine Mile Wetland Monitoring Report will include the wetland classifications and wetland rating forms from the 2011-2012 monitoring efforts and the 2019 re-evaluation. Once the comparisons are made and a determination of whether or not mitigation recommendations are warranted, due to the change in operations, Avista will provide FERC and the consulting agencies with the Nine Mile Wetland Monitoring Report within six months of completing the 2019 wetlands monitoring.

The Nine Mile Wetland Monitoring Report will contain the following information:

1. *Background information.*
2. *Name and contact information for the party responsible for the monitoring activities and report.*
3. *Whom the report was prepared for (name, address, and phone number) {if different from number 2 above}.*
4. *Month and year the monitoring data were collected.*
5. *Month and year the report was produced.*
6. *Description of the methodology.*
7. *The following baseline information collected in 2011-2012*
    a. *Classification of the wetlands,*
    b. *Ratings of the wetlands,*
    c. *Size of the wetlands,*
    d. *Photographs of the wetlands,*
    e. *Map of the wetland locations.*
8. *The wetland re-evaluation completed in 2019 will include the information listed in #7.*
9. *A summary table comparing the baseline information (#7) with the re-evaluation information (#8).*
10. *A results section discussing any wetland changes or conversions that may have taken place.*
11. *Recommendations based upon the results.*

11. WDFW Comment:
A draft monitoring report should be provided to the agencies, including WDFW, for a 30 day review period before it is finalized and submitted to FERC. Please incorporate these changes and additions into the monitoring program.

Avista Response:
The following text was added to Section 6.5:
"Prior to submitting the final monitoring report to FERC, Avista will submit it to Ecology, WDFW and USFWS for a 30 day review and comment period."

12. WDFW Comment:
Section 6.5 – Please add 2016 as an additional monitoring year with the potential to continue monitoring after consultation with the agencies based on the data available.

Avista Response:
Addressed in WDFW Comment #9.

CONSULTATION WITH THE UNITED STATES FISH AND WILDLIFE SERVICE

March 30, 2012

Ms. Erin Britton
United States Fish & Wildlife Service
11103 E. Montgomery Drive
Spokane Valley, WA 99206

RE: Federal Energy Regulatory Commission's Spokane River Project (FERC Project No. 2545) License, Appendix B, Section 5.3 (G) and License Article 413 Lake Spokane and Nine Mile Reservoir Wetland Requirements

Dear Ms. Britton,

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a new License (License) for the Spokane River Hydroelectric Project, FERC Project No. 2545. Appendix B, Section 5.3 (G) of the License includes the Washington Department of Ecology Section 401Water Quality Certification (WQC) condition that requires Avista to develop and submit a wetland plan for the Long Lake Hydroelectric Development (HED) within three years of issuance of the WQC. In addition, FERC License Article 413 requires Avista to include provisions in the wetland plan to monitor wetlands and include any recommendations for additional wetland enhancements in the Nine Mile Reservoir after the rubber dam has been installed.

To address the above requirements, Avista developed the enclosed Lake Spokane Wetland Enhancement Plan and Nine Mile Wetland Monitoring Program (Plan). This includes the efforts that we have undertaken to date to identify potential wetland properties and to monitor wetlands at the Nine Mile Reservoir, as well as the efforts that we will undertake in the future to fulfill our wetland obligations.

With this, please review the enclosed Plan and provide any comments that you may have by April 30, 2012. Upon receiving your comments, we will revise the Plan if necessary and file the Plan with FERC for its review and approval. If you have any questions regarding the Plan, feel free to call me at (509) 495-4998 or in my absence, please contact David Armes at (509) 495-2796.

Sincerely,

Elvin "Speed" Fitzhugh
Spokane River License Manager

Enclosure

cc: Graham Simon, Washington Department of Fish and Wildlife
Marcie Mangold, Washington Department of Ecology
David Armes, Avista

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Spokane, Washington 99220-3727

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Armes, David

From: Erin_BrittonKuttel@fws.gov
Sent: Monday, April 16, 2012 12:34 PM
To: Armes, David
Cc: Fitzhugh, Speed (Elvin); Goloborodko, Yelena
Subject: Re: Lake Spokane Wetland Enhancement Plan
Attachments: Lake Spokane Wetland Enhancement Plan.docx; USFWS Cover Letter.pdf

Good Afternoon , David,

After review, I have no comments or concerns regarding the Lake Spokane Wetland Enhancement Plan and Nine Mile Wetland Monitoring Program. Thank you for the opportunity to review.

Erin Britton Kuttel
Fish and Wildlife Biologist
U.S. Fish & Wildlife Service
11103 E. Montgomery Drive
Spokane Valley, WA 99206
Erin_BrittonKuttel@fws.gov
509.893.8029 (Phone)
509.891.6748 (Fax)

"Armes, David" <David.Armes@avistacorp.com>

03/30/2012 01:47 PM

To "Erin_BrittonKuttel@fws.gov" <Erin_BrittonKuttel@fws.gov>
cc "Fitzhugh, Speed (Elvin)" <SpeedElvin.Fitzhugh@avistacorp.com>, "Goloborodko, Yelena" <Yelena.Goloborodko@avistacorp.com>
Subject Lake Spokane Wetland Enhancement Plan

Erin,

Attached is the Lake Spokane Wetland Enhancement Plan (Plan) and cover letter. Please review the Plan and provide any comments that you may have by April 30, 2012. If you have any questions please feel free to contact me at any time.

Thanks!

David Armes | Avista Utilities
Terrestrial Resource Specialist
Spokane River Licensing Branch
1411 E. Mission Ave MSC-1 | Spokane, WA 99202
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