



**PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY**  
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April 29, 2011

Honorable Kimberly D. Bose, Secretary, and  
Nathaniel J. Davis, Sr., Deputy Secretary  
FEDERAL ENERGY REGULATORY COMMISSION  
888 First Street, NE  
Washington, DC 20426

**VIA ELECTRONIC FILING**

Re: **Lake Chelan Hydroelectric Project No. 637-043**  
**Article 403 – Stehekin Area Implementation Monitoring Plan**  
**2010 Annual Report and 2011 Work Plan**

Dear Secretary Bose and Deputy Secretary Davis:

On May 6, 2008, the Federal Energy Regulatory Commission (Commission) issued the “*Order Modifying and Approving Stehekin Area Implementation Plan Under Article 403*”<sup>1</sup> requiring the Public Utility District No. 1 of Chelan County, Washington (Chelan PUD) to file an annual report on work planned and completed with funding provided to the U.S. Forest Service (USFS), U.S. Department of the Interior, National Park Service (NPS) and the Washington Department of Fish and Wildlife (WDFW) by April 30 each year, beginning 2009. The Stehekin Area Implementation Monitoring Plan states that all payments for work conducted will be in accordance with section 19 of the Settlement Agreement.<sup>2</sup>

In accordance with Ordering Paragraph (C) of the above Order, Chelan PUD hereby files the 2010 Annual Report and 2011 Work Plan to the Commission.

Please do not hesitate to contact me regarding any questions or comments regarding this report.

Sincerely,

Michelle Smith  
Licensing and Compliance Manager  
[michelle.smith@chelanpud.org](mailto:michelle.smith@chelanpud.org)  
(509)661-4180

Enclosure

c: Annelise Lesmeister, NPS

<sup>1</sup> 123 FERC ¶ 62,100 (2008)

<sup>2</sup> Chelan PUD, on behalf of the signatories, filed a comprehensive settlement agreement on October 17, 2003.

# LAKE CHELAN HYDROELECTRIC PROJECT NO. 637

## Stehekin Area Implementation Monitoring Plan

### 2010 Annual Report and 2011 Work Plan

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#### Introduction

In accordance with Article 403 of the new License,<sup>1</sup> the Public Utility District No. 1 of Chelan County, Washington (Chelan PUD) filed to the Federal Energy Regulatory Commission (Commission) a Stehekin Area Implementation Monitoring Plan (SAIMP) on November 6, 2007. The purpose of this plan is to provide details on the measures that will be implemented to monitor reductions in dust emissions, establishment of native riparian vegetation, and reduction in non-native plants in the reservoir drawdown zone and along the reservoir shoreline in the area of Stehekin, as specified in the License articles, and the Lake Chelan Comprehensive Settlement Agreement (Settlement Agreement), dated October 8, 2003 (Appendix A of the Project License).

On April 10, 2008, the Commission approved and modified the Wildlife Habitat Plan under Article 406. The plan submitted to the Commission provided details on the implementation of riparian habitat improvements. The improvements or enhancements to the Stehekin area habitat overlap with measures to be implemented under Article 403, so the U.S. Department of the Interior, National Park Service (NPS) and Chelan PUD agreed to combine these in the SAIMP.

Additionally, on May 6, 2008, the Commission issued the “*Order Modifying and Approving Stehekin Area Implementation Plan Under Article 403*”<sup>2</sup> requiring Chelan PUD to file an annual report on work planned and completed with funding provided to the U.S. Forest Service (USFS), NPS and the Washington Department of Fish and Wildlife (WDFW). However, most of the actions for the SAIMP will be undertaken by the NPS. The SAIMP states that all payments for work conducted by the NPS will be in accordance with section 19 of the Settlement Agreement. The annual report is to be submitted by April 30 each year, beginning April 30, 2009.

The following report provides a summary of SAIMP activities completed with funding provided by Chelan PUD during 2010 and a description of anticipated activities with funding to be provided during 2011. A table is provided at the end of this report that summarizes agency funding provided in 2010 and anticipated funding for 2011.

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<sup>1</sup> 117 FERC ¶ 62,129 (2006)

<sup>2</sup> 123 FERC ¶ 62,100 (2008)

## **Activity during the Previous Calendar Year 2010**

In 2010, the NPS continued collection of baseline data of the riparian vegetation, explored dust abatement options, conducted one or more small-scaled tests, and completed the Riparian Zone Plan. Details of the 2010 work are provided below:

### DUST ABATEMENT WORK

#### LC04a, Task 1: Dust Abatement Options

The temporary irrigation system proposal was presented to the NPS Interdisciplinary Team on March 18, 2010. During the meeting, it was recommended that a temporary sprinkler system be installed on the entire 10 acre site that was identified. The goal of the test is to confirm that irrigation of areas within that 10 acre site would considerably reduce the amount of dust at the landing. The temporary system was tentatively scheduled to be installed in late April to early May of 2010, and then be removed prior to high water from spring run-off. The sediment monitoring plots that were installed in 2009 were also to be read at this time. Observations were to be recorded and photos taken to document the irrigation system's effects on reducing dust at the landing. If the test proved unfavorable, further research and planning was to occur for new techniques and dust abatement approaches. In addition to the sprinkler system test, NPS was to continue to research options to obtain water rights or the ability to utilize an existing right.

Due to the persistent rain during that period and the minimal drawdown, the flats did not dry out during the 2010 season. Consequently, the temporary irrigation system was not installed. There were no noticeable dust storms at the landing area. The test of the temporary sprinkler system is now scheduled for spring of 2011.

The NPS was informed by Gene Yow that the Chelan PUD did not own water rights in the vicinity of the flats. Consequently, using a portion of an existing Chelan PUD water right was not an option for this project.

#### LC04a, Task 3: Monitoring Evaluation

Research was completed for purchase of a nephelometer. An E-sampler ambient particulate monitor with a wind speed/direction sensor was determined to be the preferred instrument to provide air quality measurements for its ability to measure both fine and coarse dust particles.

Installation of the nephelometer will occur during the spring of 2011.

### STEHEKIN HABITAT WORK

#### Riparian Zone Plan

On November 1, 2010, Chelan PUD submitted the Riparian Zone Plan for Commission approval as required under the Order Granting Extension of Time Under Article 403 (issued November 20, 2009). The plan was developed in consultation with the NPS. On June 2, 2010, representatives from Chelan PUD and NPS met at Stehekin to continue

development of the Riparian Zone Plan. Habitat mapping and developing final plan provided the bulk of activity in 2010.

LC09c1, Task 1, Item 6: Crew Lead

The NPS crew lead continued to document, using aerial photos, LIDAR and GPS the reed canary grass and native plant species on NPS lands. Data collected helped guide the final draft of the Riparian Zone Plan. In addition, research and documentation continued on the best management practices for treatment of the reed canary grass, salvage and propagation of native species and guidelines for revegetation. Components of this effort are contained in the submitted Riparian Zone Plan.

LC09c1, Task 1, Item 7: Plant Ecologist

The plant ecologist was responsible for the initial drafting and revisions to the Riparian Zone Plan and for supervision of the crew lead.

LC09c1, Task 2: Monitoring Riparian Vegetation (Collect Baseline Data)

Some monitoring was conducted to facilitate the Riparian Zone Plan. The plan establishes a schedule for monitoring the expansion of existing riparian areas and establishment of new riparian zones with the overall goal of providing a continuous riparian corridor for wildlife.

LC09c1, Task 3: Osprey and Eagle Surveys

No additional work was done in 2010.

***2010 Meeting Activity***

Chelan PUD and NPS staff met in Stehekin on June 2, 2010 to continue discussions on completing the draft Riparian Zone Plan submitted on November 1, 2010.

The NPS and Chelan PUD met on September 28, October 14 and December 2, 2010, to discuss 2010 activities and estimated costs for proposed 2011 work. In addition to the above meetings, telephone and email correspondence ensued.

**Activity Planned for Calendar Year 2011**

In 2011, the NPS plans to continue, to explore dust abatement options, potentially conducting one or more small-scaled tests, and pending Commission approval, begin implementation of the Riparian Zone Plan.

DUST ABATEMENT WORK

LC04a, Task 1: Dust Abatement Options

A temporary sprinkler system was to be installed in either late April or early May 2010 to reduce the amount of dust generated by spring winds and exposure of the Stehekin Flats located at the end of the lake.

Because of persistent rain during spring 2010, the flats did not dry out and the temporary sprinkler system was not installed. Consequently, the NPS plans to install the temporary system during spring of 2011. Installation of the nephelometer will also occur in spring 2011 prior to the sprinkler activation.

The nephelometer will be used to compare dust blown to the landing during wind events when the flats are dry and also after areas have been wetted. In addition to providing information for a potential long-term irrigation design, this test will provide information to develop an annual water budget for the project.

Data collected during the test will be used to determine the feasibility and effectiveness of irrigating a portion of the flats to reduce dust at the landing area. NPS staff will meet following the test to discuss the results and determine the next steps for proceeding with the dust abatement treatments (additional treatments to be tested or design of a long-term irrigation system). Gene Yow (Chelan PUD) will be updated on the test results and will be invited to participate in the follow-up meeting to discuss the irrigation test and next steps. Once the next step determination has been made, the compliance document will be prepared.

The NPS will explore options to obtain water for a potential long-term irrigation design. NPS staff will involve a representative from the region's Water Resources Division (WRD) to provide technical assistance regarding water rights issues. WRD will research the options and regulatory procedures to secure water rights for a well.

#### LC04a, Task 3: Dust Monitoring and Evaluation

Installation of the nephelometer will occur in April of 2011. Installation of the nephelometer will occur prior to the sprinkler activation. The nephelometer will be used to track particulate matter, wind speed and direction from dust events, and will be installed early April.

### STEHEKIN HABITAT WORK

#### LC09c1, Task 1, Item 1: Collect Plant Material

Pending FERC approval of the Riparian Zone Plan, seeds, cuttings and propagules will be collected in late summer and early fall. Plants will be salvaged on sites that are slated for weed control.

#### LC09c1, Task 1, Item 2: Plant Propagation

Pending FERC approval of the Riparian Zone Plan, seeds and cutting collected will be propagated in the NPS Marblemount greenhouse facility in the fall of 2011.

#### LC09c1, Task 1, Item 6: Crew Lead

Work will resume once the Riparian Zone Plan is approved.

LC09c1, Task 1, Item 7: Plant Ecologist

Work will resume once the Riparian Zone Plan is approved.

LC09c1, Task 2: Monitoring Riparian Vegetation (Collect Baseline Data)

The first technical report on activities conducted under this plan, if approved, will be submitted by November 6, 2011.

**Funding Activity**

Section 19.3 of the Settlement Agreement requires Chelan PUD to enter into payment agreements with the NPS prior to allocation of funds. Chelan PUD coordinated with the NPS to obtain a 2011 annual work plan, including estimated funding amounts, by October 1, 2008, as prescribed under Section 19.3 of the Settlement Agreement and in the payment agreement.

The table below provides a summary of funds available, stated in net present value, where applicable. The amounts have been adjusted to 2011 dollars using the CPI adjustment as of January 31, 2011, as outlined in Section 19.1 of the Settlement Agreement.

**FUNDING PROVISIONS – YEAR 2010 ACTIVITIES – YEAR 2011 ESTIMATED COSTS**  
**March 4 – 2011 YEAR START**

AGMT ARTICLE	DESCRIPTION	ESTIMATED ACTIVITIES 2010	First Qtr Jan - Mar	Second Qtr Apr - June	Third Qtr July - Sept	Fourth Qtr Oct - Dec	TOTAL SPENT 2010	ESTIMATED ACTIVITIES 2011	ESTIMATED COSTS 2011	TOTAL FUNDING AVAILABLE AS OF JANUARY 31, 2011
LC04a One Time (Combo)	NPS Stehekin Dust Abatement (SAIMP)	Task 1: Abatement Task 3: Monitoring and Evaluation	\$3,123.15 \$5,082.10				\$3,123.15 \$5,082.10	Task 1: Abatement Task 3: Monitoring and Evaluation	\$33,977.85 \$6,671.90	\$182,298.32
LC09c1 (Combo)	NPS Stehekin Habitat (made part of SAIMP)	Task 1, Item 6: Crew lead Task 1, Item 7: Plant Ecologist  Task 2, Item 2: Close balance Q1 10. Task 2, Item 3: No surveys for 2010.	\$11,077.85 \$288.36	\$2,548.45			\$2,548.45 \$11,077.85 \$288.36 \$0.00 \$0.00	Task 1, All Items: Enhance Riparian Habitat (add 2010 CO of \$9,851.55 and \$522.15)	\$29,123.40	\$317,308.86
LC09c2B One Time (Combo)	NPS Lake Chelan Basin Riparian Habitat (made part of SAIMP)	No activity planned					\$0.00	No activity planned	\$0.00	\$60,599.73
			\$19,571.46	\$2,548.45			\$22,119.91		\$69,773.15	