



**PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY**  
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**VIA ELECTRONIC FILING**

November 6, 2007

Honorable Kimberly D. Bose, Secretary  
FEDERAL ENERGY REGULATORY COMMISSION  
888 First Street, NE  
Washington, DC 20426

Re: **Lake Chelan Hydroelectric Project No. 637-022**  
**Article 403 – Final Stehekin Area Implementation Monitoring Plan dated**  
**November 6, 2007**

Dear Secretary Bose:

The Federal Energy Regulatory Commission (Commission) issued the “Order on Offer of Settlement and Issuing New License”<sup>1</sup> (License) and “Order on Rehearing”<sup>2</sup> for the Lake Chelan Hydroelectric Project (Project) on November 6, 2006, and April 19, 2007, respectively. License Article 403 requested the Public Utility District No. 1 of Chelan County, Washington (Chelan PUD or Licensee), to file the following plan for Commission approval.

- Article 403. *Stehekin Area Implementation Monitoring Plan.*

Within one year of the issuance date of the license, the licensee shall file for Commission approval, a plan to monitor the measures implemented in accordance with the Stehekin Area Implementation Plan required by Article 4 of the Lake Chelan Settlement Agreement and contained in Chapter 4 of the comprehensive plan attached to the settlement agreement. The purpose of the plan is to provide details on the measures that would be implemented to monitor reductions in dust emissions, establishment of native riparian vegetation, and reductions in non-native plants in the reservoir drawdown zone and along the reservoir shoreline in the area of Stehekin. The plan shall include, but not be limited to, the following:

(a) a detailed description of the methods that will be used to monitor the environmental effects of large woody debris placed in the drawdown zone to reduce dust emissions and establish native riparian vegetation.

<sup>1</sup> 117 FERC ¶ 62,129

<sup>2</sup> 119 FERC ¶ 61,055

- (b) a detailed description of the methods that will be used to monitor the success of efforts to establish native riparian plants and remove non-native plants;
- (c) a schedule for filing a report for Commission approval in years 5, 10, 15, and 20 of the license detailing the measures implemented to reduce dust emissions, results of the total suspended particulate sampling, and any recommendations for additional measures to achieve a reduction in the magnitude and duration of dust events by 50 percent by year 20 of the license; and
- (d) a schedule for filing a report for Commission approval every 5 years of the license describing the success of establishing native riparian vegetation and reducing non-native species and any recommendations for additional measures.

The plan shall be developed in consultation with the U.S. Park Service (Park Service). The licensee shall include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the Park Service, and specific descriptions of how the Park Service' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Park Service to comment and to make recommendations before filing the plan with the Commission. If the licensees do not adopt a recommendation, the filing shall include the licensees' reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the plan is approved by the Commission. Upon Commission approval, the licensees shall implement the plan, including any changes required by the Commission.

In accordance with the above License requirements, Chelan PUD hereby files the Final Stehekin Area Implementation Plan dated November 6, 2007. Appendix A provides a record of consultation with the Park Service agency members during the development of the plan.

Please do not hesitate to contact me or Janel Duffy (509-661-4400) of my office regarding any questions or comments regarding this plan.

Sincerely,



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

cc: Erich Gaedeke, FERC-PRO

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# **STEHEKIN AREA IMPLEMENTATION MONITORING PLAN**

## **FERC License Order Article 403**

<b>Final</b>
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**LAKE CHELAN HYDROELECTRIC PROJECT  
FERC Project No. 637**

**November 6, 2007**



**Public Utility District No. 1 of Chelan County  
Wenatchee, Washington**

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## ***EXECUTIVE SUMMARY***

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The Federal Energy Regulatory Commission (FERC) Order on Offer of Settlement and Issuing New License (License) for the Lake Chelan Hydroelectric Project No. 637 (Project) was issued November 6, 2006 to the Public Utility District No. 1 of Chelan County (Chelan PUD). Article 403 of the License requires Chelan PUD to submit to FERC a Stehekin Area Implementation Monitoring Plan by November 6, 2007. This plan describes the methods and schedule used to reduce and monitor dust, establish native riparian habitat and reduce non-native plants, and monitor wildlife in the reservoir drawdown zone and along the reservoir shoreline in the area of Stehekin required by the License, as specified in the License articles, and the Lake Chelan Comprehensive Settlement Agreement, October 8, 2003 (Settlement Agreement). Included in this plan are provisions for how the National Park Service (NPS) intends to use funding made available by the Chelan PUD to improve ecological conditions in the drawdown zone.

## ***SECTION 1: INTRODUCTION***

The Federal Energy Regulatory Commission (FERC) Order on Offer of Settlement and Issuing New License (License) for the Lake Chelan Hydroelectric Project No. 637 (Project) was issued on November 6, 2006 to the Public Utility District No. 1 of Chelan County (Chelan PUD). The License requires a number of measures related to riparian habitat enhancement and protection measures and dust abatement to be implemented in the drawdown zone and along the reservoir shoreline in the area of Stehekin, as described in the Lake Chelan Comprehensive Settlement Agreement (Settlement Agreement), October 8, 2003. The Settlement Agreement is Appendix A to the License.

License Article 403 requires Chelan PUD, within one year of the License issuance date, to file with FERC a Stehekin Area Implementation Monitoring Plan (SAIMP). The components of the SAIMP relate to riparian habitat improvements and dust abatement in the Stehekin area that are specified in the Settlement Agreement, as stated below.

Article 403. *Stehekin Area Implementation Monitoring Plan.* Within one year of the issuance date of the license, the licensee shall file for Commission approval, a plan to monitor the measures implemented in accordance with the Stehekin Area Implementation Plan required by Article 4 of the Lake Chelan Settlement Agreement and contained in Chapter 4 of the comprehensive plan attached to the settlement agreement. The purpose of the plan is to provide details on the measures that would be implemented to monitor dust emissions, establishment of native riparian vegetation, and reductions in non-native plants in the reservoir drawdown zone and along the reservoir shoreline in the area of Stehekin.

The Settlement Agreement also included two wildlife monitoring tasks in the SAIMP. They are described in this SAIMP, whereas other wildlife projects and tasks are described in the Wildlife Habitat Plan.

This SAIMP describes the work that the NPS anticipates conducting to address issues associated with vegetation and wildlife in the drawdown zone and dust concentrations during drawdown in order to meet the requirements of the License and Settlement Agreement. The organization of this SAIMP is in sections that relate to specific clauses in Article 403. Each section begins with the relevant requirements of the License, followed by a description of the methods that will be used to monitor and report compliance with the License.



## ***SECTION 2: DUST EMISSIONS***

### ***2.1 Background***

Fine sediments that are deposited in Lake Chelan by the Stehekin River cover most of the drawdown zone. The sediments are exposed after the snow melts, which varies from late February to mid-March. They are dried by the air and, except when wetted by rain, remain dry until the lake is refilled in June. Strong down-valley diurnal winds can lift the fine sediments into the air, creating a dust cloud as much as several hundred feet in the air and several miles down lake. Some of this dust is deposited at Stehekin Landing. Dust events usually occur between mid-March and mid-June.

Chelan PUD and the NPS jointly funded an air quality study to determine the timing and duration of dust events, the magnitude (amount and size of particulates), and the chemical composition of dust in the air at Stehekin Landing (ARS, 2001). Dust concentrations were measured for three particle size ranges. These were PM<sub>2.5</sub> (smaller than 2.5 microns), PM<sub>10</sub> (smaller than 10 microns) and total suspended particulates (TSP). The PM<sub>2.5</sub> and PM<sub>10</sub> sizes are known as respirable dust and concentration limits are included in EPA standards. EPA standards no longer regulate concentrations of particles larger than PM<sub>10</sub>, since they are generally no longer considered a health threat. The study determined that dust measured at Stehekin Landing did not exceed any federal air quality standards. The measured concentrations of dust in the PM<sub>2.5</sub> and PM<sub>10</sub> particle size ranges were below the EPA standards for those ranges. As reflected in the TSP measurements, most of the particles were larger than the PM<sub>10</sub> particle size range and so are not regulated.

Although the study showed that the dust does not violate any air quality standards, the NPS considers the dust to be a significant problem, and is concerned about such things as reduced visibility, respiratory irritation from the dust, increased maintenance costs and increased wear and tear on computers and other equipment. Dust also affects the visitor experience and aesthetic values in the upper four miles of Lake Chelan.

Changes in the annual cycle of water levels and inundation period from the first license to the second license have produced some changes in the drawdown area, and have complicated efforts to understand related natural resource problems. Also, recent observations have shown that normal variations from year to year in the lake level cycle can produce substantial differences in the source area and the dust.

The NPS used photography taken during the fugitive dust events monitored by the air quality study in 2000, together with previous aerial photography and a geographic information system (GIS), to map the areas in the 300-acre drawdown zone that contribute to the airborne dust. Ninety acres of the drawdown zone appear to be of sufficient elevation to dry out when dewatered during the spring. During 2000 and 2001, only 10 to 30 acres of these 90 acres produced the bulk of airborne particulates. In 2002, the spring lake levels were lower and the source area was observed to have expanded to about 50 acres. Also, observations suggested that the frequency and severity of dust events was greater. This sort of variation should be taken into account in planning dust control efforts.

## **2.2 Goals & Objectives**

Defining a measurable objective for the dust abatement effort has proven to be problematic. The intent is to substantially reduce the objectionable effects of dust, primarily impaired visibility and discomfort. Because visibility is difficult to measure objectively, and discomfort is largely subjective, Chelan PUD and the NPS simply chose to seek a 50 percent reduction in the magnitude and duration of dust events, in the expectation that such a reduction would create substantial improvements in conditions at Stehekin Landing. The goal of a 50 percent reduction assumes use of the measurements in the existing study report (ARS, 2001) as a baseline.

More specifically, the objective is to reduce the duration of dust events and the concentration of total suspended particulates (TSP) measured at Stehekin Landing during dust events by at least 25 percent within the first 10 years of the License period, and to reach the goal of 50 percent total reduction by year 20 of the License period, and then continue at that level or better for the remainder of the License. The concentration of TSP will be monitored using a nephelometer, which measures light scatter that can be related directly to TSP mass concentration during the dust event. Chelan PUD and the NPS do not know whether this objective is attainable, or how much such a reduction in dust would increase visibility and/or decrease discomfort, but they anticipate that the benefits of such a reduction would be considerable.

## **2.3 Mitigation Method**

It is unlikely that any single management action will completely solve the problem of fugitive dust. A combination of actions by the NPS may be required to reduce airborne dust from the drawdown zone to the desired degree. The effort to reduce dust in this situation is essentially experimental. It is anticipated that in 2008 and 2009 treatment options will be investigated and small-scale tests of one or more possible approaches will be completed. Depending on these initial results, full-scale implementation will begin in years 2010 through 2012. Treatments may include the following:

### Irrigation of the main dust producing areas:

Higher elevation areas of the mudflats are subject to more wind exposure and consequently will be drier. Areas with drier dust particles and increased wind exposure produce the greatest amount of fugitive dust. Installation of an irrigation system to wet these areas will be examined.

### Placement and anchoring of large woody debris:

Place large woody debris (LWD) with rock anchors in the fugitive dust source areas (about 50 acres) to serve as windbreaks. The LWD will be placed roughly perpendicular to the prevailing wind direction and anchored directly to the lake bed so that they do not move.

## **2.4 Environmental Effects Monitoring**

The NPS plans to perform periodic monitoring of airborne dust at Stehekin Landing. A nephelometer will be purchased in 2010 in order to monitor the effectiveness of the treatments and will be used to monitor the abatement program throughout the term of the License. The indicator to be used to determine the extent of success of dust abatement work is the product of the duration of dust events and the mass concentration of TSP. The NPS plans to conduct TSP monitoring on the roof of the cabana at Stehekin Landing, where the air quality monitoring equipment was located in 2000. A remote weather station will be placed with the TSP sampler

to document weather conditions associated with dust events, including wind speed and direction, temperature, and humidity. The Particle and Visibility Monitoring Data Analysis Report (ARS, 2001) will serve as the baseline for comparing levels of TSP. Key data from that report are summarized in the table below (Table 1).

During the experimental phase, to determine the preferred treatment option(s), monitoring will be conducted annually during the spring dust period. Beginning in 2011, monitoring will be conducted every five years. Monitoring will occur from mid-March to mid-June, using a nephelometer. The goal is to reduce the cumulative mass of airborne dust by 50 percent from baseline measurements taken in 2000. The percent reduction achieved is calculated by comparison of a year's average product (TSP times duration) measured during dust events with the comparable number based on measurements from the 2000 monitoring period stated in the report noted above (ARS, 2001). The minimum and maximum durations and mass concentrations will also be analyzed for significant changes.

**Table 1: Key Dust Data from 2000**

Dust Event Date (day)	Approx. Duration (hours)	TSP Mass conc. ( $\mu\text{g}/\text{m}^3$ )	Product: (TSP x Duration)	Lake Elevation (feet)
03/28/00	6.50	376.9	2450	1088.1
04/19/00	4.25	332.2	1412	1088.4
04/22/00	7.75	132.5	1027	1088.8
05/03/00	4.25	68.5	291	1089.6
05/05/00	8.25	69.6	574	1089.7
05/10/00	4.50	44.9	202	1090.0
05/16/00	8.75	52.4	459	1090.1
05/17/00	11.50	82.0	943	1090.4
05/21/00	7.25	93.9	681	1091.0
05/22/00	5.00	36.9	185	1091.4
<b>Averages</b>	<b>6.80</b>	<b>129.0</b>	<b>822</b>	<b>1089.8</b>
References: Table 4-2, Event Particulate Data, page 4-4; Table 4-3, Particulate Data Recovery and Mass Concentration Statistics, page 4-5; and Table 5-2, Summary of Parameters for Event Sampling Days, page 5-11; Stehekin, Washington, March 15 to June 12, 2000.				

The NPS and Chelan PUD understand that the monitoring may be influenced by random variations between years in weather, lake level cycle, and possibly other factors. Also, a certain degree of judgment will have to be exercised to decide whether developing conditions merit monitoring as a dust event, and to determine its starting and ending times. Annual variations and the small amount of subjectivity required are unavoidable, and should be considered in evaluating results.

## 2.5 Reporting

License Article 403 requires the SAIMP to include:

(c) a schedule for filing a report for Commission approval in years 5, 10, 15, and 20 of the license detailing the measures implanted to reduce dust emissions, results of the total suspended solids particulate sampling, and any recommendations for additional measures to achieve a reduction in the magnitude and duration of dust events by 50 percent by year 20 of the license; and

### 2.5.1 Report Content and Schedule

Chelan PUD will prepare a report for Commission submittal as required by License Article 403. The report will be a joint effort developed by NPS and Chelan PUD. Submittal dates and content are anticipated to be as follows:

**Table 2: Reporting Schedule for Dust Abatement**

<b>Date</b>	<b>Contents</b>	<b>Submit to</b>
November 6, 2011	Mitigation measures installed and monitoring results	FERC by Chelan PUD and NPS
November 6, 2016	Mitigation measures installed and monitoring results	FERC by Chelan PUD and NPS
November 6, 2021	Mitigation measures installed and monitoring results	FERC by Chelan PUD and NPS
November 6, 2026	Mitigation measures installed and monitoring results	FERC by Chelan PUD and NPS

## 2.6 Budget - Dust Emissions

The budget for dust emission abatement was originally researched in 2002. As additional planning has been conducted, the costs have been evaluated still using the original values provided in 2003 dollars. The work will begin in 2008, and this plan was developed in 2007. To try to provide as convenient of format as possible for the implementers, the costs are presented in this plan in both 2003 and 2007 dollars, using the CPI adjustment provided in Section 19.1 of the Settlement Agreement. This should allow for cross checking to original planning, as well as proper budgeting for current work. The anticipated costs, in each year's dollars, are presented in Table 3 and Table 4.

**Table 3: Budget for Dust Emissions Abatement in 2003 dollars**

Available funds		2007	2008	2009	2010	2011	2012	2013	2014	2016	2026	2036	2046
\$100,000	Dust Abatement		\$5,000	\$30,000	\$30,000	\$35,000							
\$45,000	Additional abatement or monitoring									\$15,000	\$12,000	\$12,000	\$6,000
\$15,000	Monitoring & Evaluation			\$9,000	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200				

**Table 4: Budget for Dust Emissions Abatement in 2007 dollars**

Available funds		2007	2008	2009	2010	2011	2012	2013	2014	2016	2026	2036	2046
\$112,067	Dust Abatement		\$5,603	\$33,620	\$33,620	\$39,223							
\$50,430	Additional abatement or monitoring									\$16,810	\$13,448	\$13,448	\$6,724
\$16,810	Monitoring & Evaluation			\$10,086	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345				

## ***SECTION 3: ESTABLISHMENT OF NATIVE RIPARIAN VEGETATION AND ENHANCEMENT OF WILDLIFE HABITAT***

### ***3.1 Background***

*Native Riparian Plants* - Riparian wildlife habitat along the shoreline and at the head of Lake Chelan was lost or diminished as a result of historic human activity and the construction of Chelan Dam. A need has been identified to protect and enhance riparian vegetation along the shoreline of Lake Chelan to provide wildlife habitat as well as providing conductivity from Lake Chelan to the surrounding forested areas for wildlife. A more detailed description can be found in the Riparian Zone Investigation study report (DE&S, 2000).

Since these low-lying areas are not submerged and have some native plants, they are prime areas for revegetation. The success of native riparian plant rehabilitation efforts is expected to depend to a great extent on the influence of the lake level on ground water levels and on the type and quality of soil present. Also, at the highest lake levels, small channels that penetrate these low-lying areas are flooded. This appears to have a negative effect on stability and retention of the surface soils. The species diversity and species richness of native vegetation along the drawdown zone shoreline is believed to have decreased since the mid-1970s, based on evaluation of aerial photography. Proposed changes to Project operations are expected to decrease the period of inundation and encourage more plant growth in some parts of the drawdown zone, as compared with the existing baseline conditions. This will be a beneficial effect of operation under the License, though its magnitude is presently unknown.

A variety of native grasses, sedges, shrubs, willows, and trees are necessary to create a diverse, multi-storied riparian habitat. Propagation and planting of native vegetation is needed to restore or improve the species richness, structure, and function of the shoreline riparian areas. Selected native plant species can out-compete the non-native reed canary grass, and these native species will be planted to assist in controlling this exotic grass. Native species planting will also improve the habitat for wildlife species using the riparian zone. Based on photographs taken during spring dust events and GIS modeling, it appears that the revegetation of the shoreline will have little or no effect on wind speed on the flats.

*Native Riparian Wildlife* - Kuntz and Glesne (1993) and Duke Engineering and Services, Inc. (DE&S 2000) provide a baseline of current condition of wildlife and riparian habitat resources at the mouth of the Stehekin River. DE&S (2000), in their Riparian Zone Investigation, describes the Stehekin River area as being the most extensive and structurally developed of any of the nine areas studied on Lake Chelan. According to the study, the Stehekin River has the highest mammal, bird, and amphibian species diversity, and the highest mammal and bird species abundance of the nine areas. It is also the only location where a zone of emergent vegetation was found.

Inundation causes areas of the drawdown zone to remain unsuitable as wildlife habitat for much of the annual cycle. During spring and early summer, rising water levels flood the nests of breeding waterfowl. The current project operation limits the natural development of riparian

habitat. Under the new lake level regime, which calls for earlier drawdown and refill than the previous license, and through mitigation measures outlined in this section these effects should be reduced greatly.

*Wildlife Monitoring* - NPS Management Policies (National Park Service, 2006) direct parks to inventory and monitor park resources to aid in wildlife management and protection. In 1998 Congress passed the National Parks Omnibus Management Act mandating a "program of inventory and monitoring of National Park system resources to establish baseline information and to provide information on the long-term trends in the condition of National Park system resources."

### **3.2 Goals & Objectives**

The primary goal of this section of the plan is to protect existing riparian habitat along the shoreline and in the inundation zone at the head of Lake Chelan, and to enlarge and connect it where feasible, so that it will function as a multi-storied, diverse, riparian vegetation and wildlife corridor. The specific goals include:

- Protecting existing shoreline riparian vegetation to prevent a decrease in total acreage, and to maintain plant species diversity, forest structure, and connectivity.
- Improving the species richness, function of wildlife habitat, and diversity of forest structure within existing riparian vegetation.
- Reducing shoreline riparian habitat fragmentation, and improve fish and wildlife habitat by enlarging and connecting existing riparian vegetation.
- Improving riparian wildlife habitat for vertebrate and invertebrate species.

### **3.3 Mitigation Method**

NPS plans to recreate, where feasible, a multi-storied, multi-species native riparian vegetation corridor along the lakeshore at the head of Lake Chelan. To be most effective, species of native trees and shrubs (from local genetic stock) should be propagated locally to preserve their genetic integrity, and then planted at designated locations, thereby improving, expanding, and connecting existing riparian vegetation. Both deciduous and coniferous shrub and tree species are desired to provide necessary cover and forage for a variety of wildlife species. It is expected that native riparian plants such as willow, red alder, black cottonwood, big-leaf maple, red osier dogwood, western red cedar, and various sedges can be propagated at the NPS native plant nursery and planted to assist in these efforts. To be most effective this work will be coordinated with erosion control efforts, where possible.

In 2008 and 2009, NPS staff will refine their GIS map of the drawdown zone to delineate the extent of reed canary grass infestation and existing native riparian vegetation. NPS will set priorities for the native riparian vegetation areas to create a schedule for future enhancement and maintenance and, in 2009, will test the efficacy of the proposed management actions at selected sites. Information from these efforts will be used to develop a Riparian Zone Plan for the expansion of existing riparian areas and the establishment of new riparian zones with the overall goal of providing a continuous riparian corridor for wildlife. This plan will be completed by the end of 2009.

Regrading of deltas and islands:

Efforts to rehabilitate native riparian vegetation on the deltas and islands at the head of Lake Chelan may require some initial regrading of contours. This is expected to improve the conditions for riparian plant survival and growth, increase the number of species for which these sites are suited, and deepen adjacent channels. Regrading will occur in winter and spring during times of low water levels. This component will likely occur sometime during the first 5 years of habitat enhancement work (2010 to 2014) and will be further outlined in the 2009 plan.

Riparian habitat improvements: The following management actions will occur between 2010 and 2019:

- Collect and propagate selected native plants, particularly shrubs and trees considered of high value to wildlife species inhabiting the Stehekin Valley and that are competitive against reed canary grass infestations;
- Re-contour selected sites within the drawdown area;
- Plant selected sites, working from established intact native riparian areas outward to enlarge their perimeter and size;
- Contain the reed canary grass by mowing, trimming seed heads, and pulling along the site perimeter; and
- Work with private landowners to control reed canary grass and plant native herbaceous, shrub, and tree species on their shoreline property.

During the remaining years of the License NPS intends to continue containment of reed canary grass from the perimeter of areas native riparian vegetation to achieve 50 percent native plant cover along the drawdown zone shoreline, and plant native riparian plants on sediment islands where LWD has been anchored in shallow water for permanent windbreaks and more erosion control of the flats.

**3.4 Environmental Effects Monitoring**

The monitoring frequency and parameters at each riparian planting site will be presented in the 2009 Riparian Zone Plan (to be written). In general, the riparian rehabilitation sites will be monitored for two consecutive years starting in 2014, and then in 2020, 2025, and 2030 (for a total of eight years over the 16 year period). This correlates to years 8-9, 14-15, 19-20, and 24-25 of the New License, or approximately a 5-year interval. Monitoring will be conducted as due diligence following the riparian rehabilitation.

Monitoring faunal biodiversity responses to riparian habitat restoration efforts may include the following two criteria:

- Species richness and abundance of vertebrate and invertebrate fauna using riparian habitats at the head of Lake Chelan.
- Community patterns (total functional diversity, functional richness, and functional redundancy) and functional responses of communities (resilience, resistance, and attenuation).



Duke Engineering & Services Inc. (2000) and Kuntz and Glesne (1993) provided a baseline for riparian habitats and associated wildlife in the lower Stehekin Valley. NPS will conduct wildlife monitoring of riparian habitat improvement projects in 2022 and 2023, 2037 and 2038, and 2051 and 2052 utilizing the same methods as the Duke Engineering & Services (2000) inventory. These dates correlate to years 16-17, 21-22, and 45-46 of the New License. This differs from Section 6.4 of Chapter 4 of the Comprehensive Plan which states that this work will be conducted in years 10-11, 20-21, and 40-41 of the New License. Monitoring will be conducted as due diligence following the riparian rehabilitation, which will not occur as originally anticipated. We request FERC consider a change to these dates from that proposed in the Comprehensive Plan. Comparison between baseline conditions of current functioning riparian habitats and habitat restoration areas at the time of monitoring using the above criteria will determine how effective rehabilitation efforts are.

Starting in 2008, NPS will conduct annual surveys along shorelines (and near-shore areas) on Lake Chelan and the Stehekin River (below Harlequin Bridge) within Lake Chelan National Recreation Area (LACH) to locate and monitor osprey and bald eagle nesting activities. All nest sites, both new and historic, will be monitored annually to determine site occupancy and productivity. This effort will require two visits to each active site. Occupancy surveys will occur from mid to late April to determine if a nest site is occupied. The second survey, for productivity (number of young fledged per nest site), will occur in July. Products will include an annual administrative report and technical report every 5<sup>th</sup> year.

### **3.5 Reporting**

License Article 403 requires the SAIMP to include:

(d) a schedule for filing a report for Commission approval every 5 years of the license describing the success of establishing native riparian vegetation and reducing non-native species and any recommendations for additional measures.

#### **3.5.1 *Report Content and Schedule***

Chelan PUD will prepare a report for Commission submittal as required by License Article 403. This report will be a joint effort developed by NPS and Chelan PUD. One report will be developed to describe revegetation and reduction of non-native plants. Submittal dates and content are anticipated to be as follows:

**Table 5: Reporting Schedule for Revegetation, Wildlife Habitat Restoration, and Reduction of Non-native Plants**

<b>Date</b>	<b>Contents</b>	<b>Submit to</b>
Annually, Nov. 6	Report on results of bald eagle/osprey surveys	Chelan PUD by NPS
Nov. 6, 2009	Riparian Zone action plan completed	FERC by Chelan PUD and NPS
Nov. 6, 2011	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2016	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2021	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2023	Final Report for “Monitor wildlife in drawdown zone” survey	FERC by Chelan PUD and NPS
Nov. 6, 2026	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2031	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2036	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2038	Final Report for “Monitor wildlife in drawdown zone” survey	FERC by Chelan PUD and NPS
Nov. 6, 2041	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2046	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2051	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS
Nov. 6, 2052	Final Report for “Monitor wildlife in drawdown zone” survey	FERC by Chelan PUD and NPS
Nov. 6, 2056	Conduct & monitor mitigation measures, technical report	FERC by Chelan PUD and NPS

**3.6 Budget – Native Riparian Vegetation and Wildlife Habitat Enhancement**

The budget for native riparian vegetation and wildlife habitat enhancement was originally researched in 2002. As additional planning has been conducted, the costs have been evaluated still using the original values provided in 2003 dollars. The work will begin in 2008, and this plan was developed in 2007. To try to provide as convenient of format as possible for the implementers, the costs are presented in this plan in both 2003 and 2007 dollars, using the CPI adjustment provided in Section 19.1 of the Settlement Agreement. This should allow for cross-checking to original planning, as well as proper budgeting for current work.

The anticipated costs, in each year’s dollars, (Table 6 and Table 7) shows anticipated expenditures yearly from 2007 to 2028, and then switches to show the lump sum that will be

expended during the period of 2029 to 2055. Because many of the projects will necessarily have to adjust to respond to what is found through monitoring, it is prudent to wait until 2029 approaches before the subsequent years' budgets are determined. The total amount of funds expected to be expended for the various projects in years 2029 to 2055 is shown as a total amount in the column 2029 to 2055.

**Table 6: Budget for Revegetation, Wildlife Habitat Restoration, and Reduction of Non-native Plants in 2003 Dollars**

Riparian Vegetation / Wildlife	Total Funds	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029 - 2055	2056	
Collect plant material	<i>\$15,400</i>			\$1,000	\$1,000	\$1,000	\$1,000	\$1,000					<i>\$1,250</i>	<i>\$1,250</i>	<i>\$1,250</i>	<i>\$1,250</i>							\$5,400		
Propagate plants	<i>\$79,800</i>				\$5,700	\$5,700	\$5,700	\$5,700	\$5,700	\$5,700	\$5,700			<i>\$5,700</i>	<i>\$5,700</i>	<i>\$5,700</i>							\$22,800		
Regrade deltas & islands	<i>\$12,000</i>					\$6,000	\$6,000																		
Contain reed canary grass	<i>\$117,600</i>			\$9,600	\$9,600	\$9,600	\$9,600	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$22,500	
Plant nursery stock	<i>\$27,000</i>					\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800		<i>\$1,800</i>	<i>\$1,800</i>	<i>\$1,800</i>								\$9,000	
Crew leader	<i>\$135,000</i>			\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	<i>\$7,500</i>	<i>\$7,500</i>	<i>\$7,500</i>								\$37,500	
Plant ecologist oversight	<i>\$43,200</i>		\$4,800	\$4,800	\$4,800	\$4,800		\$4,800						\$4,800										\$14,400	
Collect Baseline information	<i>\$15,000</i>	\$7,500	\$7,500																						
Riparian Vegetation Monitoring	<i>\$15,000</i>							\$3,000	\$3,000					\$3,000					\$3,000					\$3,000	
Osprey & Bald Eagle Surveys	<i>\$50,000</i>	\$2,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$27,000	\$1,000
Monitor Wildlife in Drawdown Zone	<i>\$90,000</i>															\$15,000	\$15,000							\$60,000	
Monitor Effects of LWD	<i>\$50,000</i>											\$10,000											\$10,000	\$20,000	\$10,000
<b>Totals</b>	<b><i>\$650,000</i></b>	\$9,500	\$13,300	\$23,900	\$29,600	\$37,400	\$32,600	\$32,000	\$26,200	\$23,200	\$23,200	\$27,500	\$16,950	\$26,550	\$18,750	\$33,750	\$17,500	\$2,500	\$5,500	\$2,500	\$2,500	\$12,500	\$221,600	\$11,000	

Note: Costs for License Article 9c2b are presented in italics.

**Table 7 Budget for Revegetation, Wildlife Habitat Restoration, and Reduction of Non-native Plants in 2007 Dollars**

Riparian Vegetation / Wildlife	Total Funds	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029 - 2055	2056
Collect plant material	<i>\$17,258</i>			\$1,121	\$1,121	\$1,121	\$1,121	\$1,121					<i>\$1,401</i>	<i>\$1,401</i>	<i>\$1,401</i>	<i>\$1,401</i>							\$6,052	
Propagate plants	<i>\$89,429</i>				\$6,388	\$6,388	\$6,388	\$6,388	\$6,388	\$6,388	\$6,388			\$6,388	\$6,388	\$6,388							\$25,551	
Regrade deltas & islands	<i>\$13,448</i>					\$6,724	\$6,724																	
Contain reed canary grass	<i>\$131,791</i>			\$10,758	\$10,758	\$10,758	\$10,758	\$8,069	\$8,069	\$8,069	\$8,069	\$8,069	\$8,069	\$1,681	\$1,681	\$1,681	\$1,681	\$1,681	\$1,681	\$1,681	\$1,681	\$1,681	\$25,215	
Plant nursery stock	<i>\$30,258</i>					\$2,017	\$2,017	\$2,017	\$2,017	\$2,017	\$2,017	\$2,017		<i>\$2,017</i>	<i>\$2,017</i>	<i>\$2,017</i>							\$10,086	
Crew leader	<i>\$151,290</i>			\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405	\$8,405							\$42,025	
Plant ecologist oversight	<i>\$48,413</i>		\$5,379	\$5,379	\$5,379	\$5,379		\$5,379						\$5,379									\$16,138	
Collect Baseline information	<i>\$16,810</i>	\$8,405	\$8,405																					
Riparian Vegetation Monitoring	<i>\$16,810</i>							\$3,362	\$3,362					\$3,362					\$3,362				\$3,362	
Osprey & Bald Eagle Surveys	<i>\$56,034</i>	\$2,241	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$1,121	\$30,258	\$1,121
Monitor Wildlife in Drawdown Zone	<i>\$100,860</i>															\$16,810	\$16,810						\$67,240	
Monitor Effects of LWD	<i>\$56,034</i>											\$11,207										\$11,207	\$22,413	\$11,207

Totals **\$728,436** \$10,646 \$14,905 \$26,784 \$33,172 \$41,913 \$36,534 \$35,861 \$29,362 \$26,000 \$26,000 \$30,818 \$18,995 \$29,754 \$21,013 \$37,823 \$19,612 \$2,802 \$6,164 \$2,802 \$2,802 \$14,008 \$248,340 \$12,327

Note: Costs for License Article 9c2b are presented in italics.

## ***SECTION 4: REDUCTION OF NON-NATIVE PLANTS IN STEHEKIN***

### ***4.1 Background***

Non-native plants are invading disturbed and undisturbed lands along the shoreline of the reservoir, and threaten the structure and function or ecological integrity of native plant communities. Disturbed lands along the shoreline provide a conduit for invasive non-native plants.

Some of the riparian, wetlands and lakeshore areas on Lake Chelan have been infested with many exotic plants, most importantly the aggressive reed canary grass. This grass has historically been used for cattle and horse feed as well as soil stabilization and dust reduction. Cereal rye and reed canary grass were planted in the drawdown zone during the 1980s to reduce the problem of windborne dust. These attempts were not successful. Reed canary grass has since advanced to inland riparian areas and onto shoreline private property. In the shoreline deltas and islands where the land was cleared for the reservoir, but not inundated, reed canary grass has become the predominant plant cover. Reed canary grass is currently found in riparian zones and wetlands in Stehekin as far north as the Stehekin Airstrip.

This specie can tolerate some drought as well as complete immersion for months. It reproduces by seed as well as rhizome and once established it becomes a monoculture, excluding most native plant species at a site. It is critical to reduce these populations to protect the native wetlands and riparian zones within the Lake Chelan National Recreation Area.

### ***4.2 Goals & Objectives***

The primary goal of this section of the plan is to reduce the current abundance, distribution, and cover of reed canary grass and control the spread of other non-native plants along the shoreline. Two specific objectives include:

- Reduce the cover of reed canary grass from the perimeter of areas of native riparian vegetation, and plant native vegetation to achieve 50 percent native plant cover along the drawdown zone shoreline within the first 25 years of the License.
- Reduce the total shoreline area currently covered by non-native plant species by 50 percent within the first 25 years of the License, and avoid new invasions.

### ***4.3 Mitigation Methods***

The reed canary grass infestation will be mapped by NPS staff, using GIS/GPS technology, beginning in 2008. A preliminary examination of a GIS-generated map using aerial photography shows about 10 acres of private land and 12 acres of public land along the shoreline infested with reed canary grass. It also shows 12 acres of private land and seven acres of public land with some native riparian vegetation. About four of the seven acres of public land were initially cleared for the reservoir, but have never been completely inundated and offer a prime site to begin riparian rehabilitation. The amount of similar private land is unknown.

Initial field work will include a survey to delineate the current cover of both native and non-native plant species on NPS lands. These areas will also be identified on private lands where permission is granted. This field work will provide the basis of information needed to write a plan for treatments on specific sites identified in the initial field work. Initial removal of reed canary grass will precede riparian planting. This may occur over several seasons prior to and conjunction with riparian planting.

If herbicides are used, they will be non-residual and applied very selectively to control reed canary grass at the head of the lake to insure that no harm occurs to aquatic biota and water quality. Most herbicide brands that can be used near water state that they cannot be used within a half mile of potable water sources. Several valley residents live at the head of the lake, and residual herbicide use could affect residential water sources, although techniques will be used in any herbicide applications that will minimize that risk.

The NPS will use an integrated pest management approach to contain and control invasive non-native plants along the shoreline within Lake Chelan National Recreation Area. New invasions of non-native plants will be controlled quickly and aggressively to assure success, reduce environmental impacts, and keep future costs at a minimum.

#### **4.4 Monitoring Methods to Determine Success**

The efficacy of the reduction and removal of the reed canary grass populations will be detailed in the Riparian Zone Plan (to be written in 2009), following field work that will initiated in 2008. Removal of reed canary grass will begin in 2010 and proceed to 2019. Monitoring of the results of the control efforts will be conducted yearly until 2028 and will continue after that time if necessary. This differs from Chapter 4 of the Comprehensive Plan, which states that monitoring will be conducted on a five year interval. Based on further consideration by the Chelan PUD and the NPS, it was determined that monitoring would be more appropriately conducted more frequently, for hopefully a shorter period of time to allow for removal of new growth as it occurs.

#### **4.5 Reporting**

License Article 403 requires the SAIMP to include:

- (d) a schedule for filing a report for Commission approval every 5 years of the license describing the success of establishing native riparian vegetation and reducing non-native species and any recommendations for additional measures.

The reports for reducing non-native species will be included with the reports for establishing native riparian vegetation, and are presented in Table 5.

#### **4.6 Budget**

The budget for Section 4: Reduction of Non-Native Plants in Stehekin is embedded within the budget for Section 3.6 (Table 6 and Table 7) of this plan.

## ***SECTION 5: MEMORANDUM OF AGREEMENT REGARDING PAYMENT***

All payments for work conducted by the NPS will be in accordance with Section 19 of the Settlement Agreement. See Memorandum of Agreement, Appendix B. Funding will be provided on a reimbursement basis within (90) ninety days of the Agency submitting a quarterly invoice/variance form and only after review and approval by Chelan PUD. As a condition of payment for any work performed under the Settlement Agreement, NPS must submit a certification that the work was performed in a manner consistent with the Settlement Agreement, as well as annual planning reports no later than January 31 of each year. The annual planning reports must document all work that was completed during the preceding year, and the actual cost of that work. In addition, they must contain a detailed description of the work to be undertaken in the current year, a general description of the work to be undertaken in the following year, and the estimated costs of that work. . Planned and completed work provided by NPS will be summarized annually and included in an Annual Report submitted to the Commission by Chelan PUD.



## ***SECTION 6: LITERATURE CITED***

- Air Resource Specialists, Inc., (ARS). 2001. Particle and visibility monitoring data analysis report, Stehekin, Washington. Prepared by ARS, Fort Collins, Colorado. Prepared for Chelan PUD and the U.S. Department of the Interior, National Park Service, January 10, 2001. 192 pp.
- Duke Engineering and Services (DE&S). 2000. Riparian zone investigation – final, Lake Chelan Hydroelectric Project NO. 637. Prepared by DE&S, Bellingham, Washington. September 26, 2000. 230 pp.
- Kuntz, RC, and RS Glesne. 1993. A terrestrial vertebrate inventory of the Stehekin Valley, Lake Chelan National Recreation Area. Technical Report NPS/PNRNOCA/NRTR-93/010. North Cascades National Park Service Complex, Sedro-Woolley, Washington. 36 pp.
- USDI, National Park Service. 2006. Management Policies 2006. Washington, DC. 168 pp.



## ***APPENDIX A: CONSULTATION***

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## Record of Communications

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Article 403 of the Project License requires that Chelan PUD “file for Commission approval, a plan to monitor the measures implement in accordance with the Stehekin Area Implementation Plan”. Additionally, “The plan shall be developed in consolation with the U.S. Park Service (Park Service). The licensee shall include with the plan documentation of consultation, copies of recommendation on the completed plan after it has been prepared and provided to the Parks Service, and specific descriptions of how the Park Service’s comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Park Service to comment and to make recommendations before filing the plan with the Commission. IF the licensees do not adopt recommendations, the filing shall include the licensees’ reasons, based on project-specific information. The Commission reserves the right to make changes to the plan submitted.”

This plan was developed collaboratively by Chelan PUD and the NPS. Chelan PUD has completed the consultation requirements, beginning on 2/5/07 by meeting with the NPS and determining the most efficient means of developing the required plan. Meetings between the two entities were conducted on the following dates:

February 5, 2007  
February 27, 2007  
April 20, 2007  
May 7, 2007  
June 19, 2007  
July 19, 2007  
October 24, 2007



## 30 Day Comments

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As required by the License, the draft final plan was sent to the NPS for a 30-day review on September 25<sup>th</sup>. A copy of the transmittal e-mail is provided below.

-----Original Message-----

**From:** Bitterman, Deborah **On Behalf Of** Duffy, Janel

**Sent:** Tuesday, September 25, 2007 4:21 PM

**To:** (Jack\_Oelfke@nps.gov); (Annelise\_Lesmeister@nps.gov)

**Cc:** Smith, Michelle

**Subject:** Chelan PUD: Request for Comment re Final Stehekin Area Implementation Monitoring Plan Pursuant to Article 403 for the Lake Chelan Project No. 637

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY  
P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801  
(509) 663-8121 • Toll free 1-888-663-8121 • [www.chelanpud.org](http://www.chelanpud.org)

To: Jack Oelfke, National Park Service  
Annelise Lesmeister, National Park Service

From: Janel Duffy  
Public Utility District No. 1 of Chelan County (Chelan PUD)  
[janel.duffy@chelanpud.org](mailto:janel.duffy@chelanpud.org)  
509.661.4400

Re: Lake Chelan Hydroelectric Project No. 637 (Project)  
Article 403 - Stehekin Area Implementation Monitoring Plan

In accordance with Article 403, Chelan PUD invites comment letters on the attached final Stehekin Area Implementation Monitoring Plan. To open the document, click on the following link:  
[http://www.chelanpud.org/documents/9395\\_1.pdf](http://www.chelanpud.org/documents/9395_1.pdf).

Please submit your comment letters on or before 5:00 p.m., October 25, 2007 to me via email at [janel.duffy@chelanpud.org](mailto:janel.duffy@chelanpud.org).

Pursuant to Article 403 Chelan PUD will file the Stehekin Area Implementation Monitoring Plan with FERC (Commission) by November 6, 2007. All received comment letters will be appended to the plan with a description of how each comment or recommendation was incorporated in the plan, or, if the licensee does not adopt a recommendation, the filing with the Commission will include the licensee's reasons, based on project-specific information for not adopting such recommendation.

If you have any questions, please do not hesitate to contact me.

Additionally, further discussions and changes to the plan were made during a telephone conference with NPS. The changes were incorporated during the discussion and sent for final approval. The email transmittal of the changes is provided below.

-----Original Message-----

**From:** Duffy, Janel  
**Sent:** Monday, October 29, 2007 3:29 PM  
**To:** 'Annelise\_Lesmeister@nps.gov'  
**Cc:** 'Jack\_Oelfke@nps.gov'; Sokolowski, Rosana  
**Subject:** 9395\_1 FINAL 10 29 07.DOC

Annelise:

Based on our telephone conference today, please find attached the changes to the plan we discussed. Please forward this to the appropriate individuals and provide all final comment as per the email sent with the 30-day comments.



9395\_1 FINAL  
29 07.DOC (24'

Thank you,

Janel Duffy  
phone: 509-661-4400  
fax: 509-661-8155  
email: janel.duffy@chelanpud.org

On October 31, 2007, the NPS provided a letter accepting the plan as written. It is included below.

Janel,

Annelise and I have reviewed changes to the Stehekin Area Implementation Monitoring Plan. We agree these changes are appropriate. We have no further comment on this plan and feel it is ready for submittal. Jack Oelfke will be out of our office for the next 2 weeks. If you have further questions or concerns, please call or email me. I will be happy to discuss any issues you have..

Robert C. Kuntz II  
Wildlife Biologist  
North Cascades National Park  
810 State Route 20  
Sedro-Woolley, WA 98284  
(360) 854-7320  
robert\_kuntz@nps.gov



***APPENDIX B: MEMORANDUM OF AGREEMENT***

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**MEMORANDUM OF AGREEMENT # G9471071098**  
**Between the**  
**U.S. Department of Interior, National Park Service**  
**North Cascades National Park Service Complex**  
**And the**  
**Public Utility District No. 1 of Chelan County**

**Title: Lake Chelan License Payment Agreement**

This Memorandum of Agreement (MOA) ((also known as the Payment Agreement, which implements the payment provisions of the Lake Chelan Settlement Agreement)) is entered into by and between the United States Department of Interior (DOI), the National Park Service (NPS), and North Cascades National Park Service Complex (NOCA), with the Public Utility District No.1 of Chelan County (Chelan PUD), a corporation organized under the laws of the State of Washington.

**ARTICLE I – BACKGROUND AND OBJECTIVES**

It is the mission of the NPS at NOCA to manage the natural and cultural resources for the benefit of future generations, and in such a manner to ensure that students, scientists, and visitors can enjoy and appreciate the park. The Lake Chelan Settlement Agreement allows NOCA and Chelan PUD to implement the following Statement of Work as discussed in Article III below.

This Payment Agreement has been executed pursuant to, and is to be used in conjunction with, the mutually acceptable method of payment regarding Proposed License Article 2, 4, 6, 9, and 11, as required by Section 19.2.2 of the Lake Chelan Settlement Agreement dated October 8, 2003.

Section 19 of the Settlement Agreement is incorporated herein by reference. This Payment Agreement has been executed pursuant to, and is to be used in conjunction with, the Settlement Agreement. In the event of a direct conflict between the provisions of this Payment Agreement and the Settlement Agreement, the Settlement Agreement shall control.

**ARTICLE II – AUTHORITIES**

**A. Federal:** This Payment Agreement is entered into by authority of:

1. The Act of August 25, 1916, 39 Stat. 535, and amendments thereto, 16 U.S.C. 1, et seq., declares that the NPS shall promote and regulate the use of the various Federal areas known as the national park system, conform to the fundamental purpose of the national park system, which purpose is to conserve the scenery and natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations; and

**B. State:** Chelan PUD has the legal authority to enter into this instrument and the institutional, managerial and financial capability (including funds sufficient to pay the

required payments) to ensure proper planning, management and completion of the requirements of this Payment Agreement.

C. **Mutual** - Chelan PUD and the NPS/NOCA has agreed to the Settlement Agreement and therefore this Payment Agreement has been executed pursuant to, and is to be used in conjunction with the mutually acceptable method of payment regarding Proposed License Article 2, 4, 6, 9, and 11, as required by Section 19.2.2 of the Lake Chelan Settlement Agreement dated October 8, 2003.

### **ARTICLE III - STATEMENT OF WORK**

#### **A. Chelan PUD agrees to:**

1. **Erosion Control and Monitoring** – Pursuant to License Article 2 and Chapter 2 of the Comprehensive Plan, incorporated herein by reference, Chelan PUD will reimburse \$576,500 to NOCA for the implementation of erosion control work and monitoring at seven sites in accordance with Chapter 2 of the Comprehensive Plan.

2. **Dust Control and Monitoring** – Pursuant to License Article 4 and Chapter 4 of the Comprehensive Plan, incorporated herein by reference, Chelan PUD will reimburse the following:

- a. \$100,000 for dust abatement efforts;
- b. \$45,000 additional, if needed and demonstrated by the NPS in its documentation of the amount and cost of the work completed.
- c. \$15,000 to monitor and evaluate the effectiveness of dust abatement efforts.

3. **Fishery Plan** - Pursuant to License Article 6 and in accordance with Chapter 6 of the Comprehensive Plan, incorporated herein by reference, Chelan PUD agrees to reimburse to the NPS, the following:

- a. Its pro rata share, to be determined by the Lake Chelan Fishery Forum (LCFF), of up to \$20,000 in annual costs incurred for implementing, in conjunction with the USDA Forest Service and WDFW, an annual plan for monitoring and evaluating fish in Lake Chelan in accordance with Chapter 6 of the Comprehensive Plan. Chelan PUD shall review the plan. The plan with further input from the NPS will be filed with and approved by the FERC before Chelan PUD will provide reimbursement to the NPS for costs incurred in implementation.
- b. Its pro rata share, to be determined by the LCFF, of an additional amount of up to \$20,000 in annual costs incurred in implementing, in conjunction with the USDA Forest Service and WDFW, its responsibilities under an annual plan for monitoring and evaluating fish that has been approved by Chelan PUD and submitted to and approved by FERC. Such additional amounts shall only be paid if a source approved by LCFF provides a one-for-one match of cash or in-kind contributions is made by December 31 of the year following the NPS's expenditure of the implementation costs.

**4. Wildlife Habitat Plan** – Pursuant to License Article 9 and in accordance with Chapter 9 of the Comprehensive Plan, incorporated herein by reference, Chelan PUD will reimburse to the NPS:

- a. \$20,000 per year for the first five years of the New License and \$10,000 per year during the remainder of the New License for costs associated with undertaking habitat improvements in the Stehekin area. In order to receive reimbursement for costs incurred, the improvement measures carried out by the NPS must be in accordance with the Wildlife Habitat Plan developed by the Lake Chelan Wildlife Form (LCWF) and approved by FERC. Before Chelan PUD will provide reimbursement for costs incurred, the NPS must submit a detailed description of the upland habitat and wildlife enhancement measures that were carried out, including a description of the location where the improvements occurred and a statement certifying that such improvements were designed to be self-sustaining.
- b. \$50,000 for enhancing riparian habitat in the Lake Chelan basin. In order to receive reimbursement for costs incurred, the improvement measures carried out by the NPS must be in accordance with the Wildlife Habitat Plan developed by the LCWF and approved by FERC. Before Chelan PUD will provide reimbursement for costs incurred, the NPS must submit a detailed description of the riparian habitat enhancements that were carried out, including a description of the location where the improvements occurred and a statement certifying that such improvements were designed to be self-sustaining.

**5. Recreation Plan** – Pursuant to License Article 11 and in accordance with Chapter 11 of the Comprehensive Plan, herein incorporated by reference, Chelan PUD agrees to reimburse to the NPS:

- a. \$149,000 to the NPS to repair, replace, and maintain the NPS docks described in Table 11-15 of Chapter 11 of the Comprehensive Plan;
- b. \$871,000 (less a credit of \$5,500 as agreed between the Parties in the Collection Agreement dated May 19, 2005) for the NPS to enhance and stabilize the NPS recreation sites within the Project Area, and for administrative costs associated with recreation projects, specifically :
  1. Site 71 – Weaver Point Dock;
  2. Site 72 – Stehekin Road;
  3. Site 73 – Stehekin Landing;
  4. Site 75 – Stehekin Access Road;
  6. Site 76 – Lakeshore Trail;
  7. Site 82 – Lakeshore Trail;
  8. Site 83 – Flick Creek Dock;
  9. Site 113 – Lakeshore Trail;
  10. Site 210 – Stehekin Landing
- c. Up to \$130,000 on or after the 30<sup>th</sup> anniversary of the New License for the NPS to expand on implementation of recreational enhancements at the NPS recreation sites within or adjacent to the lake Chelan Basin, consistent with the recommendations of

the recreational use and needs assessment study funded by Chelan PUD pursuant to Section 4.3 of Chapter 11 of the Comprehensive Plan.

**B. NPS/NOCA agrees to:**

**1. Erosion Control and Monitoring**

Use the \$576,500 of the funds under this MOA to implement erosion control work and monitoring at the following seven sites:

1. Site 61 – Riddle Creek Cabins
2. Site 79 – Lakeshore Trail
3. Site 80 – Lakeshore Trail
4. Site 81 – Lakeshore Trail
5. Site 90 – Manly Wham
6. Site 109 – Lakeshore Trail
7. Site 110 – Lakeshore Trail

**2. Dust Control and Monitoring**

- a. To accomplish dust abatement efforts in accordance with the License Article 2 and Chapter 2 of the Comprehensive Plan at the seven sites shown above, up to \$100,000 to be provided by Chelan PUD as discussed above in Article A. 2 (a) Dust Control and Monitoring.
- b. May accomplish additional dust control or monitoring efforts, as needed and documented to Chelan PUD, up to an additional cost of \$45,000.
- c. Shall also monitor and evaluate the effectiveness of the dust abatement efforts, up to the cost of \$15,000.

**3. Fishery Plans**

- a. Shall develop its portion of the monitoring and evaluation plan in conjunction with the USDA Forest Service and WDFW and in consultation with the LCFF. Such plan shall be approved by Chelan PUD.
- b. Shall obtain one-to-one matching and conduct its portion of the work, up to \$20,000 per year, as agreed to by the LCFF, of additional work associated with the original implementation for monitoring and evaluating fish in Lake Chelan.

**4. Wildlife Habitat Plan**

- a. Shall, in accordance with the License Article 9 and Chapter 9 of the Comprehensive Plan, undertake habitat improvements in the Stehekin area up to \$20,000 per year for the first five years of the New License and \$10,000 per year during the remainder of the New License. Shall provide documentation of the

NPS efforts to LCWF and FERC and receive approval of same before submitting the same documentation to Chelan PUD for reimbursement for the work.

- b. To accomplish riparian habitat enhancement in the Lake Chelan basin up to \$50,000. Reimbursement for costs incurred shall occur after the improvement measures have been approved by LCWF and FERC. The NPS shall submit the approved description of the riparian habitat enhancements to Chelan PUD for reimbursement for the work.

## 5. Recreation Plan

- a. To accomplish repair, replacement and maintenance of NPS docks up to \$149,000 as described in Table 11-15 of Chapter 11 of the Comprehensive Plan.
- b. To enhance and stabilize the following recreation sites within the Project Area up to \$871,000, (less a credit of \$5,000 agreed to between the parties in the Collection Agreement dated May 19, 2005):
  - 1. Site 71 – Weaver Point Dock;
  - 2. Site 72 – Stehekin Road;
  - 3. Site 73 – Stehekin Landing;
  - 4. Site 75 – Stehekin Access Road;
  - 6. Site 76 – Lakeshore Trail;
  - 7. Site 82 – Lakeshore Trail;
  - 8. Site 83 – Flick Creek Dock;
  - 9. Site 113 – Lakeshore Trail;
  - 10. Site 210 – Stehekin Landing
- c. To implement recreational enhancements at NPS recreation sites within or adjacent to the Lake Chelan Basin consistent with the Recreational and Use Needs Assessment Study funded by Chelan PUD pursuant to Section 4.3 of Chapter 11 of the Comprehensive Plan. \$130,000 is available for this project on or after the 30<sup>th</sup> Anniversary of the New License.

## ARTICLE IV – ANNUAL PLANNING AND ESTIMATING REPORTS

A. As a condition of payment for any work performed under the Settlement Agreement, the NPS shall submit to Chelan PUD an annual planning report by October 1<sup>st</sup> of each year during the term of the New License and any subsequent annual licenses. For measures that, in the Order on Rehearing issued April 19, 2007 FERC deemed “would not be required under the comprehensive development standard of section 10(a) (1) of the FPA, but nevertheless must be included in the license because they were mandatory conditions submitted by the agencies”<sup>1</sup> and that FERC does not intend to include within the project boundary, the reports shall document, by measure and task, the following:

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<sup>1</sup> License Articles 11e and 11f (Docks and Recreation Enhancements) were included in this list by FERC. This list may be expanded to include License Article 9c2B (Riparian Habitat Improvements) if presented in the

1. All work completed during the preceding year;
2. The actual costs of such work; and
3. An estimate of the funds required in the current and future years with a brief explanation of where the money will be spent.

For measures that FERC has “determined to be required by the FPA (Federal Power Act)”<sup>2</sup> the reports shall document, by measure and task, the following:

1. All work completed during the preceding year;
2. The actual costs of such work;
3. A detailed description of the work to be undertaken in the current year;
4. A detailed estimate of the costs of such work; a description of the work to be undertaken in the following year and as many subsequent years as possible; and
5. An estimate of the costs of such work.

Pursuant to the Order on Rehearing issued by FERC on April 19, 2007, funding specified in the Settlement Agreement is likely to be sufficient for the measures required by the FPA. However, FERC requires notice and opportunity for hearing for any change in funding levels for specific measures.

To estimate future costs for each remaining measure the NPS shall, with Chelan PUD’s assistance as needed, annually develop a Total Estimation Sheet by populating Task Detail Estimation Sheets for each remaining task (see Attachment A). In this process the NPS is required to identify all of the funds to be expended, the type of funds, the anticipated year of expenditure, and any taxes or contingencies that are expected. To facilitate estimation, on September 1<sup>st</sup> of each year, Chelan PUD will provide the NPS with a balance sheet, which describes the remaining available funding. The estimate identified by the NPS for the subsequent fiscal year will be reviewed and approved by Chelan PUD and will then become the next year’s budget.

B. Pursuant to Section 22, Title 41, United States Code, no member of, or Delegate to Congress shall be admitted to any share or part of this instrument, or any benefits that may arise there from.

#### **ARTICLE V – DOCUMENTATION & CERTIFICATION OF COMPLETED WORK**

As a condition of payment for any work performed under the Settlement Agreement, the NPS shall provide Chelan PUD with a quarterly Invoice/Variance form for each measure that was anticipated to have costs charged against it. The Invoice/Variance form (see Attachment A) will be used to summarize work completed in the quarter, plans for the subsequent quarter, any variances from the plan, and all requested reimbursements. Each form must be signed by

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Wildlife Plan and FERC approved as an enhancement conducted outside of the Project Boundary with no clear Project nexus.

<sup>2</sup> This includes any measures not listed in footnote 1 for which a plan is not required (License Article 2, NPS Erosion Control Plan). It is anticipated that FERC will make a determination on remaining License Articles as plans are received and approved by FERC.



the NPS to certify the amount and cost of the work completed that such work was performed in a manner consistent with the Settlement Agreement. The NPS must support requested reimbursements with copies of invoices and payroll charges. Chelan PUD reserves the right to verify the certification by on-site inspection of all work and validation of the charges. The Chelan PUD Project Manager and/or Licensing & Compliance Manager, and/or their representative, shall accomplish this inspection and/or validation. In a given fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), payments for satisfactory performance of work shall not exceed the annual budgeted amount, unless the Parties mutually agree to a higher amount prior to the commencement of any work which will cause the maximum payment to be exceeded.

#### **ARTICLE VI – METHOD & TIMING OF PAYMENTS**

A. The proposed amount set-aside by Chelan PUD for the work to be accomplished by the NPS/NOCA will not exceed **\$2,481,000**, plus NPS/NOCA's pro rata share of the \$2,000,000 for fish monitoring and evaluation, as determined by the LCFF, over the life of this Payment Agreement. All costs, balances, or payment amounts shall be in accordance with Section 19.1 of the Lake Chelan Settlement Agreement.

B. The NPS shall invoice for work completed and/or on-going in accordance with Article V above. Chelan PUD shall provide payment to the NPS in the amount requested or the amount specified in the applicable subsection 3 of this Payment Agreement within ninety (90) days of receipt of an invoice.

C. All payments shall be sent to Margie Allen, as shown below:

Margie Allen, Administrative Officer  
 North Cascades National Park  
 810 State Route 20  
 Sedro Woolley, WA 98284  
 360-856-5700 ext. 354  
 Fax: 360-856-1934  
 E-mail: margie\_allen@nps.gov

#### **ARTICLE VII – LIABILITY**

The NPS and Chelan PUD, which are governmental parties, each accept responsibility for any property damage, injury, or death caused by the acts or omissions of their respective employees, contractors, and agents acting within the scope of their employment, to the fullest extent permitted by respective applicable laws (for the NPS, re: the Federal Tort Claims Act, Title 28 U.S.C.).

#### **ARTICLE VIII – DISPUTE RESOLUTION**

Disputes arising out of the interpretation or implementation of this Payment Agreement (this MOA), including, but not limited to, disagreements regarding documentation, payment or related matters, shall be resolved using the dispute resolution process provided for in the Settlement Agreement.

**ARTICLE IX - TERM OF AGREEMENT**

A. This Payment Agreement will become effective upon the date of the final signature of all parties and shall conclude ten years from that date. As the Chelan PUD New License will expire in the year 2056, it will be necessary for NOCA to reissue a new MOA every ten years due to limitations on the amount of time a Memorandum of Agreement can be kept in place. At that time a new agreement may be written and signed if agreed to by both parties.

**ARTICLE X - KEY OFFICIALS**

A. All communications and notices regarding this Payment Agreement shall be directed to the following key official(s) for each party. Nothing in this Article X modifies or amends the provisions of the Settlement Agreement or license articles as to the appropriate contact person or notice provisions. This provision is only intended to describe the contact person for issues under this Payment Agreement.

**For the Chelan PUD Signatory and Point of Contact:**

Michelle Smith, Licensing & Compliance Manager  
Chelan County Public Utility District  
327 North Wenatchee Avenue  
Wenatchee, WA 98801  
(509) 661-4180  
Fax: 509-661-8155  
E-mail: michelle@chelanpud.org

**For NPS/North Cascades National Park**

Palmer (Chip) Jenkins, Superintendent  
North Cascades National Park  
810 State Route 20  
Sedro Woolley, WA 98284  
360-854-7204  
Fax: 360-856-1934  
E-mail: chip\_jenkins@nps.gov

**Administrative**

Margie Allen, Administrative Officer  
North Cascades National Park  
810 State Route 20  
Sedro Woolley, WA 98284  
360-854-7210  
Fax: 360-856-1934  
E-mail: margie\_allen@nps.gov

Joyce E. Bolin, Contracting Officer  
North Cascades National Park  
810 State Route 20  
Sedro Woolley, WA 98284  
360-854-7219

Fax: 360-856-1934  
E-mail: joyce\_bolin@nps.gov

B. No change in key officials shall be made either by the NPS or Chelan PUD without written notification reasonably in advance of the proposed change. The notification shall include a justification in sufficient detail to permit evaluation of the impact on the scope of work outlined in this Payment Agreement. Changes in key officials shall be approved by modifying this Payment Agreement.

#### **ARTICLE XI – PUBLIC INFORMATION**

A. **Federal** - Any information furnished by the NPS under this Payment Agreement is subject to the Freedom of Information Act (5 U.S.C. 552).

B. **State** - Any information furnished to Chelan PUD under this Payment Agreement is subject to the Public Disclosure Act (R.C.W. 42.56).

#### **ARTICLE XII – PROPERTY UTILIZATION**

Improvements placed on NPS land at the direction of either party shall become the property of the United States, subject to other requirements and limitations of the Federal Power Act, 16 U.S.C. 791 et seq, and shall be subject to the same regulations and administration of the NPS improvements of a similar nature. No part of this instruction shall entitle any other entity to any share or interest in the project other than the right to use and enjoy the same under existing regulations of the NPS, except as provided in the Federal Power Act and the License Order.

#### **ARTICLE XIII – MODIFICATION AND TERMINATION**

A. This Payment Agreement may be modified or amended by written mutual consent of Chelan PUD and the NPS/NOCA. No modification or amendment to this Payment Agreement shall become effective unless in writing and signed by the General Manager of Chelan PUD and the Superintendent of NOCA of the NPS.

#### **ARTICLE XIV – GENERAL AND SPECIAL PROVISIONS**

A. **General Provisions** – All OMB Circulars referenced below may be found on the following website: <http://www.access.gpo.gov/nara/cfr/>

1. **OMB Circulars and Other Regulations** – The following OMB Circulars and other regulations are incorporated by reference into this Payment Agreement.

a. *OMB Circular A-87*, “Cost Principles for State, Local, and Indian-Tribal Governments.”

b. *OMB Circular A-97* “Provisions for Specialized and Technical Services to State and Local Governments.”

c. *OMB Circular A-102*, as codified by 43 *CFR Part 12, Subpart C*, “Uniform Administrative Requirements for Grants-in-Aid to State Governments.”

d. *OMB Circular A-133*, “Audits of States, Local Governments, and Non-Profit Organizations.”

e. 43 *CFR 12 Subpart E*, “Buy American Requirements for Assistance Agreements.” (43 *CFR 12.2(b)*).

f. *FAR Clause 52.203-12, Paragraphs (a) and (b)*, “Limitation on Payments to Influence Certain Federal Transactions.”

## **ARTICLE XV – PRIOR APPROVAL**

Not Applicable.

## **ARTICLE XVI – STANDARD CLAUSES**

### **A. Civil Rights**

During the performance of this Payment Agreement, the participants agree to abide by the terms of the U.S. Department of the Interior-Civil Rights Certification, non-discrimination and will not discriminate against any person because of race, color, religion, sex, or national origin. The participants will take affirmative action to ensure that applicants are employed without regard to their race, color, sexual orientation, national origin, disabilities, religion, age or sex.

### **B. Promotions**

Chelan PUD will not publicize or otherwise circulate promotional material (such as advertisements, sales brochures, press releases, speeches, still and motion pictures, articles, manuscripts, or other publications), which states or implies Governmental, Departmental, bureau or Government employee endorsement of a product, service or position which Chelan PUD represents. No release of information relating to this Payment Agreement may state or imply that the Government approves of Chelan PUD’s work product, or considers Chelan PUD’s work product to be superior to other products or services.

### **C. Publications of Results of Studies**

No party will unilaterally publish a joint publication without consulting the other party. This restriction does not apply to popular publication of previously published technical matter. Publications pursuant to this Payment Agreement may be produced independently or in collaboration with others; however, in all cases proper credit will be given to the efforts of those parties contributing to the publication. In the event no agreement is reached concerning the manner of publication or interpretation of results, either party may publish data after due notice and submission of the proposed manuscripts to the other. In such instances, the party publishing the data will give due credit to the cooperation but assume full responsibility for any statements on which there is a difference of opinion.

**ARTICLE XVII – PARTICIPATION IN SIMILAR ACTIVITIES**

This Payment Agreement in no way restricts the NPS or Chelan PUD from participating in similar activities with other public or private agencies, organizations and individuals.

**ARTICLE XVIII– MISCELLANEOUS PROVISIONS**

A. By entering into this Payment Agreement, no party shall be deemed to have made any admission or waived any contention of fact or law relating to subsequent legal proceedings. This Payment Agreement shall not be offered in evidence or cited as precedent by any party to this Payment Agreement except a proceeding to establish the existence of or enforce, implement or interpret this Payment Agreement. This subsection shall survive any termination of this Payment Agreement.

B. Nothing in this Payment Agreement shall be construed as limiting or expanding the statutory or regulatory responsibility of either party in performing functions granted to them by law.

C. Nothing in this Payment Agreement shall be construed as expanding the liability of either Party, or otherwise altering the obligations of the Parties under the Settlement Agreement.

D. Without limiting the applicability of rights granted to the public pursuant to applicable law, this Payment Agreement shall not create any right or interest in the public, or any member of the public, as a third-party beneficiary of this Payment Agreement and shall not authorize any non-party to maintain a suit at law or equity pursuant to this Payment Agreement. The duties, obligations and responsibilities of the Parties with respect to third parties shall remain as imposed under applicable law.

E. No member of, or delegate to, Congress or official of either Party shall be admitted to any share or part of this Payment Agreement, or to benefit that may arise there from.

F. During the performance of this Payment Agreement the Parties agree to abide by the terms of Executive Order 11246 on nondiscrimination against any person because of race, color, religion, sex, or national origin.

**ARTICLE XIX – ATTACHMENTS**

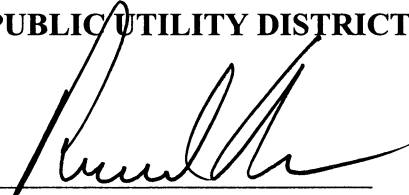
The following documents are attached and made a part of this Payment Agreement:

- A. Invoicing and Estimating Example Sheets
- B. DI-2010, U.S. Department of the Interior Certification Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirement and Lobbying.
- C. Section 19 of the Lake Chelan Settlement Agreement dated October 8, 2003.

**ARTICLE XII - SIGNATURES**

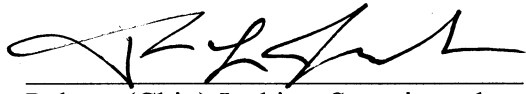
**IN WITNESS WHEREOF**, the parties hereto have executed this Payment Agreement on the date(s) set forth below. Each signatory to this Payment Agreement certifies that he/she is authorized to execute this Payment Agreement and to legally bind each party he/she represents, and that such Party shall be fully bound by the terms hereof upon such signature without any further act, approval or authorization by such party.

**For the PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY**

  
\_\_\_\_\_  
Rich Riazzi, General Manager

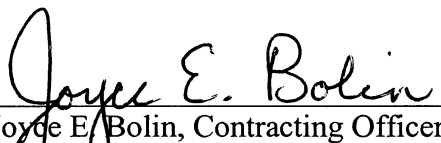
6/12/07  
Date

**For the NATIONAL PARK SERVICE**

  
\_\_\_\_\_  
Palmer (Chip) Jenkins, Superintendent  
North Cascades National Park

5/21/07  
Date

**Reviewed By:**

  
\_\_\_\_\_  
Joyce E. Bolin, Contracting Officer  
North Cascades National Park

5/10/07  
Date

U.S. Department of the Interior

**Certifications Regarding Debarment, Suspension and  
Other Responsibility Matters, Drug-Free Workplace  
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - **The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.** See below for language to be used or use this form certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

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**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters-  
Primary Covered Transactions**

*CHECK  IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -  
Lower Tier Covered Transactions**

*CHECK  IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART C: Certification Regarding Drug-Free Workplace Requirements**

*CHECK  IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.*

**Alternate I. (Grantees Other Than Individuals)**

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's policy of maintaining a drug-free workplace;
  - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
  - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
  - (1) Abide by the terms of the statement; and
  - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
  - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
  - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

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Check  if there are workplaces on files that are not identified here.

**PART D: Certification Regarding Drug-Free Workplace Requirements**

*CHECK  IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.*

**Alternate II. (Grantees Who Are Individuals)**

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.



**PART E: Certification Regarding Lobbying**  
**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

CHECK  IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

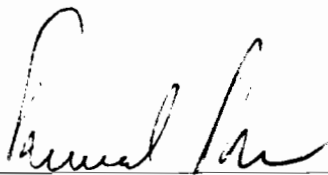
CHECK  IF CERTIFICATION FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.



SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

Richard Riazzi, General Manager

TYPED NAME AND TITLE

August 8, 2007

DATE