



**PUGET SOUND ENERGY**  
*The Energy To Do Great Things*

# LOON FLOATING NEST PLATFORM PLAN

SETTLEMENT AGREEMENT ARTICLE 507

Appendix E to the SA 501 Terrestrial Resource Management Plan

**BAKER RIVER PROJECT**  
**FERC No. 2150-033**



**Puget Sound Energy**  
Bellevue, Washington

**September 30, 2009**

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## 1.0 Executive Summary

This Loon Floating Nest Platform Plan establishes standards and guidelines for the design, construction, installation, and monitoring of floating nest platforms on the Baker River Project reservoirs. It has been prepared as directed by License Settlement Agreement Article (SA) 507, “Loon Floating Nest Platforms” of the *Order on Offer of Settlement, Issuing New License and Dismissing Amendment Application as Moot* for the Baker River Hydroelectric Project (FERC Project No. 2150). It is also designed to be consistent with SA 304, “Baker Reservoir Recreation Water Safety.” This plan was prepared collaboratively by the Baker River Project Terrestrial Resource Implementation Group (TRIG), which is composed of representatives of the signatories to the Settlement Agreement and other interested parties.

## 2.0 Introduction

This Loon Floating Nest Platform Plan has been prepared for the Baker River Hydroelectric Project (or “Baker Project”), pursuant to the *Order on Offer of Settlement, Issuing New License and Dismissing Amendment Application as Moot* dated October 17, 2008 (the “license”). In Appendix A of the license, License Settlement Agreement Article (SA) 507, “Loon Floating Nest Platforms,” sets forth the applicable requirements for this plan.

This plan describes the steps Puget Sound Energy will take to meet the requirements of SA 507. It establishes the goals and objectives for loon platform installation and monitoring that will occur over the term of the license. This plan was prepared collaboratively by the Baker River Project Terrestrial Resources Implementation Group (TRIG), which includes representatives of Puget Sound Energy and other signatories to the Settlement Agreement.

This plan includes:

- Reviews of the pertinent license articles and Settlement Agreement articles to ensure the plan meets the requirements of each.
- Statements of the goals and objectives of the plan.
- Regulatory references and definitions to maintain consistency between the plan and other pertinent laws, regulations and policies.
- General provisions to describe the process by which the plan has been developed and can be modified in the future.
- Plan implementation requirements describing the site-specific and project-specific criteria and actions that will be taken under the plan.
- Reporting procedures that describe the content and format for annual reports, as required by the license.

## 3.0 Basis for the Plan

### 3.1 Settlement Agreement Article 507

The Loon Floating Nest Platform Plan has been prepared in response to SA 507, provided here in its entirety:

Within one year after license issuance, licensee shall, in consultation with the TRIG, install and maintain three common loon floating nest platforms in suitable locations, consistent with Article 304, on one or both of the project reservoirs, in accordance with the Terrestrial Resources Management Plan required by Article 501, for the purpose of establishing nesting use on the project reservoirs to increase nesting loon populations in Western Washington.

Licensee, in consultation with the TRIG, may substitute the placement of one floating nests platform on project reservoirs with making funding available to a third party for the purpose of placing and maintaining a floating nest platform on non-Project lands. Funding made available for this purpose is not to exceed \$2,500 for construction and placement of the nest platform, and \$1,000 annually for maintenance.

Following installation of any floating nest platforms on Project reservoirs, licensee shall place log booms, boundary buoys, or other appropriate devices to establish use restriction zones around each nesting platform to restrict public access. The nest platforms and public restriction devices on Project reservoirs shall be in place between April 1 and July 31 of each year. Licensee may remove and store the nest platforms required by this article when they are not required to be in place. Following review and comment by the TRIG, licensee shall install three additional floating nest platforms in the Project reservoirs if nesting success is determined at any time during the term of the floating nest platform program.

During the first fifteen years following platform installation, licensee shall monitor all floating nest platforms installed in the Project reservoirs twice per month between April 1 and through July 31 to determine nesting activity, and the effectiveness of access restriction devices. By December 31 of each year, licensee shall file draft monitoring reports with the TRIG for a 30-day review and comment period. Annual monitoring reports shall summarize loon observations, nesting attempts, nesting activity, nest productivity, and platform maintenance activity within the project reservoirs during the previous breeding season. Final reports shall be filed with the Commission by June 1 of the following year.

During the sixteenth year following platform installation, licensee shall submit a draft effectiveness report summarizing the results of the 15-year monitoring period to assess loon breeding success on the installed nesting platforms. The report shall make recommendations as to the continuation of the floating nest platform program based on the presence or absence of nesting activity, according to the following general criteria: observed loon nest-building activity or use of nest suggests loon nesting success, and a lack of breeding attempts on one or more of the platforms by the end of the 15-year period suggests a lack of platform success. If the floating nest platform program is continued past year 15, annual monitoring and reporting shall continue.

If the report determines the program is unsuccessful, licensee shall, following consultation with the TRIG, either remove the loon nesting platforms and make the

remaining funds available from the program to the TERF, or make the remaining funds available for a similar program by a third party at another location on non-Project lands. Any funding made available to third parties for nesting platform installations, monitoring, and management for a similar program on non-Project lands shall terminate licensee's obligations under this article. For purposes of this article, "remaining funds" shall be calculated by multiplying the number of years remaining in the license term by the actual average annual cost of maintenance and monitoring during years 6 through 15 following nest platform installation.

### ***3.2 Settlement Agreement Article 304***

The plan has also been designed to comply with License Article 304, which states:

Within one year of license issuance, or on an alternative schedule to be submitted to the Commission for approval, the licensee shall file Baker Reservoir Recreation Water Safety Plan (BRRWSP) with the Commission for approval.

The Loon Floating Nest Platform Plan has been designed to comply with Baker Reservoir Recreation Water Safety Plan, in consultation with the TRIG and the Recreation Resources Group (RRG). This includes posting signs to inform the public recreating on Project reservoirs about the loon floating nest platform program and location of associated log booms, buoys, or other appropriate devices to establish use restriction zones around each nesting platform.

## **4.0 Goal and Objectives**

The goal of the Floating Nest Platform Plan is to provide habitat features that will improve the potential for loon nesting on the Baker River Project Reservoirs with the hope of establishing nesting use and increasing the nesting loon population in western Washington.

The objectives of the Floating Nest Platform Plan are to:

- Install and maintain three floating nest platforms on project reservoirs.
- Install and maintain informational and restricted access apparatus such as log booms, buoys, signs, or other devices.
- Annually monitor common loon activity on the project reservoirs during the common loon breeding season (April 1–July 31) twice monthly for 15 years, and continue annual monitoring if the nest platform program is continued past 15 years.
- Determine the nest platform program's overall effectiveness after 15 years.
- Install three additional nesting platforms if the TRIG verifies common loon nesting success.

## 5.0 Regulatory References and Definitions

The placement and maintenance of loon nest platforms under this plan will be in compliance with all applicable local, state, and federal laws and regulations. If conflicts exist between the objectives or management guidelines of this plan and any applicable law or regulation, the objectives and guidelines will be followed to the extent possible while still complying with the law or regulation.

### 5.1 Federal Authority and Reference

#### **The Migratory Bird Treaty Act —**

The Floating Loon Nest Platform plan has been designed to be consistent with conditions of the Migratory Bird Treaty Act.

### 5.2 Washington State Authority and Reference

#### 5.2.1 Hydraulic Project Approval

A Hydraulic Project Approval (HPA) is required for instream work that uses, diverts, obstructs, or changes the natural flow or bed of any of the salt or fresh waters of the state (RCW Chapter 77.55.021). The Washington Department of Fish and Wildlife issued an HPA for each of the loon platforms.

## 6.0 Plan Implementation

### 6.1 Plan Area

The plan applies to the Project reservoirs, Baker Lake and Lake Shannon. One platform on Project reservoirs may be replaced by providing funding to a third party for platform placement on non-project lands, following consultation with the TRIG.

### 6.2 Funding

Settlement Agreement Article 507 is a delivered article with no budgetary limits on Project lands. All funding for implementation of the Loon Floating Plan on Project lands will be provided by Puget Sound Energy.

Per provisions in SA-507, Puget Sound Energy, in consultation with the TRIG, may elect to substitute the placement of one floating nest platform on project reservoirs with funding to a third party for placement and maintenance of a similar platform on non-project lands. Puget Sound Energy funding for such a substitution is not to exceed \$2,500 (\$2006) for construction and placement of the nest platform, and \$1,000 (\$2006) annually for maintenance.

### 6.3 Development and Modification of the Plan

The Loon Floating Nest Platform Plan was developed by consensus of the TRIG for approval by the FERC. The TRIG may propose future modifications of the plan to the FERC according to the procedures described in *TRMP, Section 3.2.1, Process for TRMP Implementation and Modification*.

## 6.4 Implementation Schedule

SA 507 directs installation of loon nest platforms to occur by October 2009 (i.e. within one year of license issuance). Platforms and public access restriction devices will be in place between April 1 and July 31 each year. From 2009 through 2024, Puget Sound Energy will annually monitor loon activity on project reservoirs twice monthly during the breeding season, April 1 through July 31. After year 15, Puget Sound Energy, in consultation with the TRIG, will review the results of the loon floating nest platform program to determine loon nesting success and the further continuation of the program.

## 6.5 Procedures, Standards, and Criteria

### 6.5.1 Platform Construction, Installation and Maintenance

Puget Sound Energy will construct, install and maintain loon floating nest platforms according to the following standards and criteria:

- By October 1, 2009, Puget Sound Energy will design, construct and install three loon floating nest platforms on one or both Project reservoirs.
- The placement of one platform on Project reservoirs may be substituted by providing funds to a third party for the purpose of placing and maintaining a platform on non-project lands.
- Nest platform design will consider designs successfully deployed in western Washington and elsewhere. Final design for each nest platform will be determined in consultation with the TRIG.
- Locations for platform installation on Project reservoirs will be selected according to the following criteria, in consensus with the TRIG:
  - Platform locations should provide as much protection from wind, waves, and human activity as possible and be in the vicinity of natural stream confluences or natural islands if available.
  - Platform locations should provide underwater access (preferably 1.6 to 16 feet deep) for adult loons through August.
  - Consideration will be given to locations that receive spring and early summer use by loons.
  - Platform areas should have loon brood habitat (emergent vegetation or areas with exposed logs and/or root wads) if possible.
  - Platforms will be placed away from eagle foraging areas when possible. Platforms placed near eagle foraging areas may be adjusted to protect loons from predation by eagles.
- Nest platforms on Project reservoirs will be in place from April 1 through July 31 of each year.
- Platforms may be removed and stored when not required to be in place.



### 6.5.2 Public Access Restriction and Information

Puget Sound Energy will take measures to restrict access to areas with deployed floating nest platforms and provide signage, as described below, to inform the public of the Loon Floating Nest Platform program and to warn boaters of the access restriction devices.

- Puget Sound Energy will place log booms, boundary buoys, or other appropriate devices to establish use restriction zones around each nesting platform to restrict public access, following installation of any floating nest platforms on Project reservoirs.
- Access restriction devices on Project reservoirs will be in place from April 1 through July 31 of each year.
- Informational signs will be posted at several locations to inform visitors to the project reservoirs about the Loon Floating Nest Platform program. There will be signs posted in close proximity to the platforms themselves, to promote boating safety around the platforms, aiming to reduce disturbance to potentially nesting loons or other wildlife.

### 6.6 Rationale

Loons have been using artificial nesting platforms for over 30 years (Matheson 1969; McIntyre and Matheson 1977; Belant and Anderson 1991; Meyer and Woodford 1996; Piper et al 2002). Loons were first recorded using platforms in 1969, when six of eight waterways with artificial waterfowl island groups in Minnesota had an island occupied by common loons (Matheson 1969). Since that time, artificial nesting platforms have been shown to maintain or increase nesting success on lakes both with and without significantly fluctuating water levels (McIntyre and Matheson 1977; Belant and Anderson 1991; Piper et al 2002). Nesting platforms can improve nesting success by providing nesting areas where they are lacking, providing protection from mammalian predators, and providing protection from fluctuating water levels (Richardson et al. 2000).

In addition to providing nesting platforms, protection of loon nests, young, and brood-rearing habitat is important to the successful breeding of common loons. The use of log booms, float ropes, buoys, and informational signs may minimize disturbance from recreational activities occurring on the project reservoirs. When installing access-restriction devices, Puget Sound Energy, in consultation with the TRIG, will consider Washington Department of Fish and Wildlife current available Wildlife Management Recommendations.

In the past, Puget Sound Energy has documented loon presence on the Project reservoirs during the spring period. The TRIG identified placement of floating loon nesting platforms as a priority for the basin. Puget Sound Energy will place three floating loon nesting platforms in an effort to determine if loons will nest on Project reservoirs, if suitable nesting platforms are present. If loon nesting success is verified, Puget Sound Energy may install three additional nest platforms.

## 6.7 Monitoring and Adaptive Management

Monitoring of loon floating nest platforms will be consistent with SA 514, “Use of Habitat Evaluation Procedures” (HEP). The monitoring procedures and schedule will be developed in consultation with the TRIG.

### 6.7.1 Loon nest monitoring

All platforms will be monitored twice per month between April 1 and July 31 for the first 15 years after initial installation to determine nesting activity and the effectiveness of public access restrictions. At least one visit each year will occur between April 15 and April 31, with another between May 15 and May 31. If monitoring results indicate that success might be improved by modifications to the platforms, Puget Sound Energy may implement such modifications subject to TRIG approval.

### 6.7.2 Platform monitoring and maintenance

Puget Sound Energy, in consultation with the TRIG, will annually monitor the loon nest platforms throughout the season for any issues or concerns with the design, stability, or function of the platforms and anchoring systems. Any TRIG member may propose a modification to the design, stability, or function of the platforms and anchoring systems. The TRIG will consider the proposed modification and determine whether a consensus exists according to the procedures outlined in SA 601. For purposes of modifying the platforms, TRIG approved modifications will be implemented the following year. Maintenance and modifications will be reported in the annual report provided to the FERC.

In the sixteenth year after platform installation, Puget Sound Energy will submit a draft Loon Platform Effectiveness Report summarizing the results of the 15 years of monitoring to assess loon breeding success on the platforms. The report will make recommendations as to the continuation of the floating nest platform program based on the presence or absence of nesting activity, according to the following general criteria:

- Observed loon nest-building activity or use of nests (suggesting nesting success).
- Lack of breeding attempts on one or more of the platforms by the end of the 15-year period (suggesting lack of success).

If the report determines the program is unsuccessful, Puget Sound Energy, following consultation with the TRIG, will either remove the loon nesting platforms and make the remaining funds available from the program to the TERF, or make the remaining funds available for a similar program by a third party at another location on non-Project lands. For purposes of this article, “remaining funds” will be calculated by multiplying the number of years remaining in the license term by the actual average annual cost of maintenance and monitoring during years 6 through 15 following nest platform installation.

## 7.0 Reporting

Reporting on implementation of the Loon Floating Nest Platform Plan will be consistent with *TRMP, Chapter 5.0, Monitoring and Reporting*. Puget Sound Energy will prepare annual reports that document implementation of the Loon Floating Nest Platform Plan for each

12-month period (January 1 through December 31) according to the schedule for annual reporting set forth in SA 501. Reports will be provided to the TRIG for review and comment prior to being filed with the FERC.

Puget Sound Energy will prepare a draft Loon Platform Effectiveness Report summarizing the results of the 15 year monitoring to assess loon breeding success on the platforms during the sixteenth year following platform installation.

### ***7.1 Schedule***

Puget Sound Energy will provide a draft loon nest platform monitoring report to the TRIG for 30-day review by March 31 of the year following the reporting period (e.g., March 31, 2010 for the January 1-December 31, 2009 reporting year). Revised annual reports incorporating TRIG comments will be combined with revised annual reports for other terrestrial articles into the Terrestrial Resource Management Plan (TRMP) annual report, and provided to the TRIG for 30-day review by February 1 of the following year (e.g., February 1, 2011 for the January 1-December 31, 2009 reporting year). Final TRMP annual reports will be submitted to the FERC by April 1 of that same year, 16 months after the end of the reported period.

In the sixteenth year after platform installation, Puget Sound Energy will submit a draft Loon Platform Effectiveness Report summarizing the results of the 15 year monitoring to assess loon breeding success on the platforms.

### ***7.2 Annual Report Format***

The annual report may include:

- A summary of activities including platform maintenance or modifications.
- Monitoring methodology (type of survey, frequency of surveys, sample survey sheets), data collected (date of survey, weather conditions, platform conditions, loon observations, etc.) and results (nesting attempts, nesting activity, and nest productivity).
- A list of expenditures incurred by the loon nest platform budget for the reported year.
- A summary of any issues or concerns raised by PSE or other members of the TRIG regarding loon nest platform implementation for the reported year.
- Any proposed modifications to the plan.

## 8.0 References

- Belant, J. L., and R. K. Anderson. 1991. Common loon, *Gavia immer*, productivity on a northern Wisconsin impoundment. *Canadian Field-Naturalist* 105:29-33.
- Lewis, J. C., R. Milner and M. Whalen. 2004. Common loon (*Gavia immer*). In E. M. Larsen, J. M. Azerrad, and N. Nordstrom, editors. *Management Recommendations for Washington's Priority Species, Volume IV: Birds* [Online]. Available <http://wdfw.wa.gov/hab/phs/vol4/comloon.htm>
- Mathisen, J. E. 1969. Use of man-made islands as nesting sites of the common loon. *Wilson Bulletin* 81:331.
- McIntyre, J. W., and J. E. Mathisen. 1977. Artificial islands as nest sites for common loons. *Journal of Wildlife Management* 41:317-319.
- Meyer, M. W., and J. E. Woodford. 1996. Enhancing osprey (*Pandion haliaetus*) and common loon (*Gavia immer*) reproduction on impacted Wisconsin waterways. Wisconsin Department of Natural Resources, Final Report, WI P-001-W/Segment 8/. 34 pp.
- Piper, W. H., M. W. Meyer, M. Klich, K. B. Tischler and A. Dolsen. 2002. Floating platforms increase reproductive success of common loons. *Biological Conservation* 104:199-203.
- Richardson, S., D. Hays, R. Spencer, and J. Stofel. 2000. Washington State status report for the common loon. Washington Department of Fish and Wildlife, Olympia. 53 pp.

## 9.0 Review Comments and Responses

Puget Sound Energy prepared a final draft and distributed it via certified US Mail to the TRIG for a 30-day review period on August 14, 2009. Comments on the final draft were due September 14, 2009.

### 9.1 Distribution List

Table 1. Loon Floating Nest Platform Plan reviewers.

| Name            | Organization               | Address   |
|-----------------|----------------------------|---|
| Brock Applegate | WA Dept of Fish & Wildlife | Post Office Box 1100<br>La Conner, WA 98257       |
| Cathy Baker     | The Nature Conservancy     | 1917 First Avenue<br>Seattle, WA 98101            |
| Len Barson      | The Nature Conservancy     | 1917 First Avenue<br>Seattle, WA 98101            |
| Mignonne Bivin  | National Park Service      | 7280 Ranger Station Road<br>Marblemount, WA 98267 |
| Bob Carey       | The Nature Conservancy     | 410 N. 4th Street<br>Mount Vernon, WA 98273       |

| Name                | Organization                              | Address   |
|---------------------|---|---|
| Chris Danilson      | Sauk-Suiattle Indian Tribe                | 5318 Chief Brown Lane<br>Darrington, WA 98273                 |
| Don Gay             | USDA Forest Service                       | 810 State Route 20<br>Sedro-Woolley, WA 98284                 |
| Patrick Goldsworthy | North Cascades Conservation Council       | P.O. Box 95980<br>Seattle, WA 98145                           |
| Joann Gustafson     | WA Dept of Natural Resources              | 919 North Township<br>Sedro-Woolley, WA 98284                 |
| Mark Hunter         | WA Dept of Fish & Wildlife                | 600 Capitol Way North<br>Mail Stop 43143<br>Olympia, WA 98501 |
| Lou Ellyn Jones     | US Fish & Wildlife Service                | 510 Desmond Dr. SE, Suite 102<br>Lacey, WA 98503              |
| Robert Kuntz        | National Park Service                     | 810 State Route 20<br>Sedro-Woolley, WA 98284                 |
| Chris Madsen        | Northwest Indian Fisheries Commission     | 6730 Martin Way East<br>Olympia, WA 98512                     |
| Laura Martin        | USDA Forest Service                       | 42404 SE North Bend Way<br>North Bend, WA 98405               |
| Greta Movassaghi    | USDA Forest Service                       | 810 State Route 20<br>Sedro-Woolley, WA 98284                 |
| Bob Nelson          | Rocky Mountain Elk Foundation             | 45 Overmeyer Road<br>Raymond, WA 98577                        |
| James Roberts       | Sauk-Suiattle Indian Tribe                | 5318 Chief Brown Lane<br>Darrington, WA 98241                 |
| Regina Rochefort    | National Park Service                     | 810 State Route 20<br>Sedro-Woolley, WA 98284                 |
| William Rogers      | Skagit County Noxious Weed Control Board  | 302 South First Street<br>Mount Vernon, WA 98233              |
| Scott Schuyler      | Upper Skagit Indian Tribe                 | 25944 Community Plaza<br>Sedro-Woolley, WA 98284              |
| Jon-Paul Shannahan  | Upper Skagit Indian Tribe                 | 25944 Community Plaza<br>Sedro-Woolley, WA 98284              |
| Laurel Shiner       | Whatcom County Noxious Weed Control Board | 901 W. Smith Road<br>Bellingham, WA 98226                     |
| Stan Walsh          | Swinomish Indian Tribe                    | P.O. Box 368<br>La Conner, WA 98233                           |
| Brenda Werden       | WA Dept of Natural Resources              | 919 North Township<br>Sedro-Woolley, WA 98284                 |
| Todd Wilbur         | Swinomish Indian Tribe                    | P.O. Box 368<br>La Conner, WA 98233                           |

## 9.2 Transmittal Letter

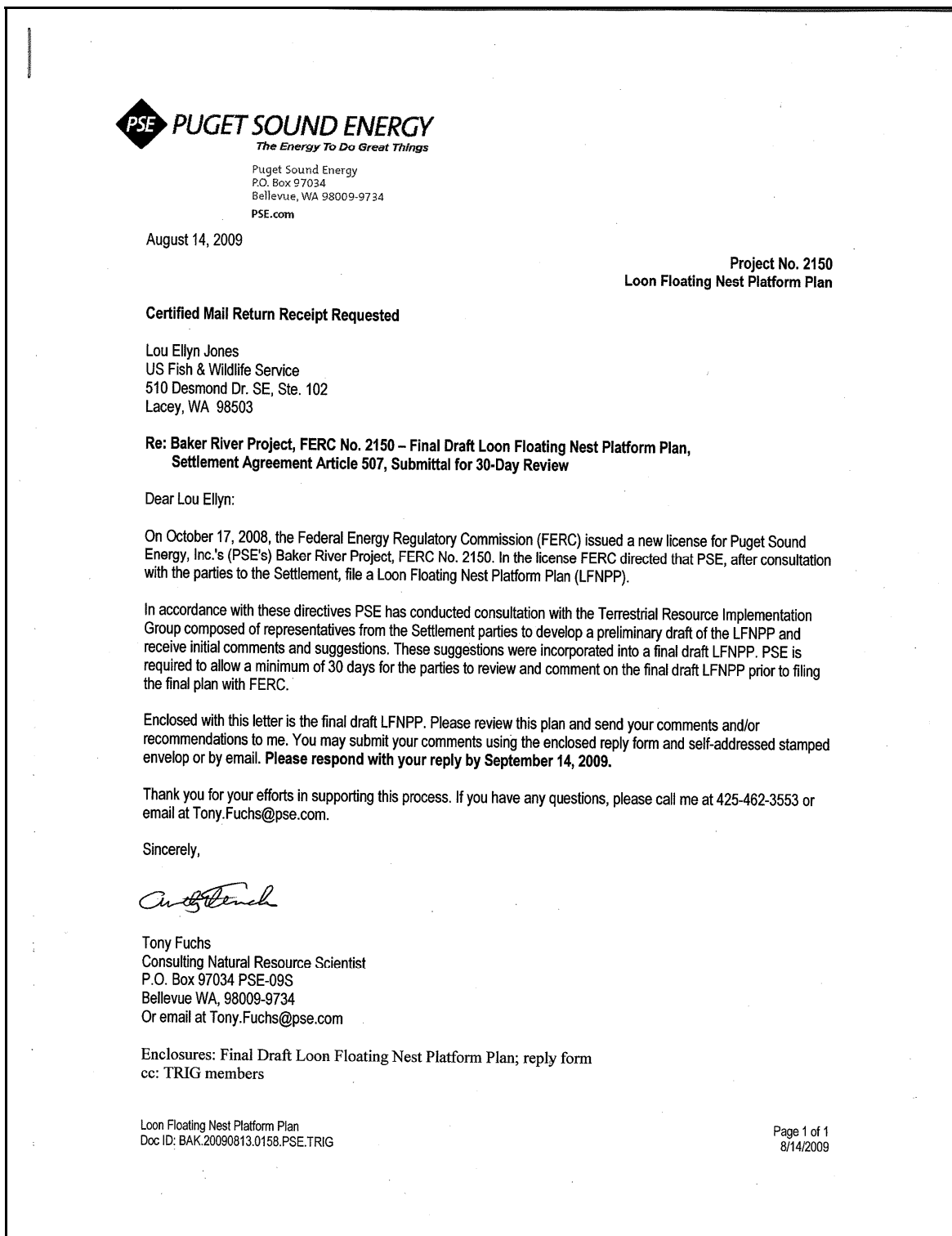


Figure 1. Sample transmittal letter from PSE,.

### 9.3 Reviewer Comments and PSE Responses

Table 2. Comments following formal review of the Loon Floating Nest Platform Plan, August 14 – September 14, 2009

| Comment  | Puget Sound Energy Response   |
|--|---|
| <b>WDNR – JoAnn Gustafson, received August 26, 2009</b>  |   |
| I have no comments (checked on comment form)   | Comment noted. No revisions to plan.  |
| <b>NCCC – Patrick Goldsworthy, received August 27, 2009</b>  |   |
| I have no comments (checked on comment form)   | Comment noted. No revisions to plan.  |
| <b>NPS – Mignonne Bivin, received August 19, 2009</b>  |   |
| I have no comments (checked on comment form)   | Comment noted. No revisions to plan.  |
| <b>WDFW – Brock Applegate, received September 14, 2009 (via e-mail)</b>  |   |
| [Comment 1.] The Washington Department of Fish and Wildlife (WDFW) has reviewed the Final Draft Loon Floating Nest Platform Plan, Settlement Agreement (SA) Article 507. We offer the following comments. As a member of the Terrestrial Resources Implementation Group (TRIG), WDFW has participated in continuous consultation and collaboration with Puget Sound Energy (PSE) and other TRIG members for many years before and after the issuance of the Baker River Project License. WDFW appreciates PSE's collaborative process and willingness to work with all TRIG members and SA signatories on the implementation of their license articles.  | [Response 1.] Comment noted.  |
| [Comment 2.] Overall, WDFW approves of the current Article 507 Loon Floating Nest Platform Plan. We have listed a few specific comments at the end of the letter. In general, WDFW would like to see more specifics in the plan. WDFW has sensed hesitancy to record possible management actions, specific buffer distances for wildlife, and management recommendations from the TRIG because of the fear of becoming committed to implementing them without any alternatives or flexibility. In the current plan, WDFW would like our recommendations, particularly our buffer distances around the nest platforms, and other comments recorded as options to consider for the future writing of more specifics in the plan. | [Response 2.] The Plan contains the amount of specificity necessary by the TRIG to implement SA 507. Suggestions that are inconsistent with SA 507, or did not represent the consensus view of the TRIG were not be included.<br><br>After two years of implementing SA 507 (2008 and 2009), PSE has learned that the design and placement of floating platforms and public access restriction devices is extremely site-specific and will require on-going adjustment. We have therefore left detailed design specifications out of this Plan to allow for effective adaptive management during Plan implementation. |
| [Comment 3.] When considering protective, no-disturbance buffers around the floating nest platforms, WDFW recommends that the log booms, buoys, or other physical impediments around the no-disturbance buffer remain at certain distances from the platform. We offer our recommendations for the TRIG to consider and encourage other TRIG members to produce documented, science-based buffer distances for the TRIG's review.  | [Response 3.] Implementation of SA 507 will continue in consultation with the TRIG. As a member of the TRIG, WDFW will have input to the design, placement and maintenance of each floating nest platform. As noted above, the design and placement of platforms will be site-specific and reflected in implementation plan documents. PSE anticipates WDFW will express its preferences for site-specific design and placement throughout Plan implementation.   |

| Comment  | Puget Sound Energy Response  |
|--|--|
| <p>[Comment 4.] WDFW recommends:</p> <ol style="list-style-type: none"> <li>Maintaining a 150m (492 ft) disturbance buffer around nest sites from 1 April to 15 July. If loons nest successfully on the Baker Lake or Lake Shannon, maintain a 150m (492 ft) disturbance buffer around potentially occupied brood-rearing areas (nursery pools) from 15 July to 1 September, (Lewis et al. 2004).</li> </ol>   | <p>[Response 4.] SA 507 requires that public access restriction devices be in place from April 1 through July 31. Section 6.5.2 of the Plan is consistent with this. The distance from devices to platforms (disturbance buffer) is not specified in the Plan because distance will be dictated by site-specific conditions. The topography of reservoir bottoms (anchoring sites), the timing and extent of reservoir fluctuations, the need to maintain public access to key recreational fishing locations, and the need to maintain safety for fishermen and other recreational users are all factors that cannot be altered to accommodate the Loon Floating Nest Platform Plan. Platforms and access restriction devices will need to be designed and situated in ways that accommodates these factors. This may result in buffer distances that are more or less than 492 feet.</p> <p>As specified in Section 6.7.1, loon floating nest platforms will be monitored for nesting activity and success. If it is determined that human disturbance in nursery pools is limiting nesting success, additional measures can be considered as part of the adaptive management program. These measures could involve the placement of physical buffers, or additional education of reservoir users as specified in Section 6.5.2. Again, the design and placement of any additional access restriction devices would be subject to the site-specific constraints of the reservoirs.</p> |
| <p>[Comment 5.]</p> <ol style="list-style-type: none"> <li>Protecting potential nesting loons by considering the location of the platform. A restriction zone radius of 300 feet works well for a well-concealed, inconspicuous platform behind vegetation, pilings, etc, and away from the view of boaters. Nest platforms in the open water, where boaters can easily spot them, require a 500-foot tough boom/log and/or float rope barrier. The loons may become very agitated during the nesting and breeding period when curious boaters get too close to the platform. When these disturbances occur, the loons may abandon the nest site, (Spencer 2007).</li> </ol> | <p>[Response 5.] See Response 4. The actual design and placement of access restriction devices will accommodate site-specific conditions, and may result in buffer distances more or less than suggested by WDFW. Public boat access to both reservoirs is limited to a small number of launches, and the majority of public use on the reservoirs is for fishing. PSE believes that public education through the placement of signs at the boat launches (see Section 6.5.2) will be the safest and most effective way to limit disturbance of nesting loons.</p>   |
| <p>[Comment 6.] WDFW welcomes the opportunity to work with PSE on future projects. We value our working relationship with PSE and encourages future dialog. If you have any questions or need more information or clarification to comments from the WDFW, please feel free to call me at (360) 466-4345 x254.</p>   | <p>[Response 6.] Comment noted.</p>  |



| Comment   | Puget Sound Energy Response  |
|---|--|
| <p>[Comment 7.]<br/>SPECIFIC COMMENTS CONCERNING THE DRAFT LOON FLOATING NEST PLATFORM PLAN, ARTICLE 507:</p> <p>4.0 Goals and Objectives, third bullet. WDFW appreciates PSE's efforts in monitoring common loon activity on the project reservoirs twice monthly. As stated in SA Article 507, please monitor all floating nest platforms and the effectiveness of access restriction devices (the log booms, buoys, etc.) twice monthly as well. "During the first fifteen years following platform installation, licensee shall monitor all floating nest platforms installed in the Project reservoirs twice per month between April 1 and through July 31 to determine nesting activity, and the effectiveness of access restriction devices," (Puget Sound Energy 2009).</p> | <p>[Response 7.] The monitoring of platforms and public access restrictions is already specified in Section 6.7.1 of the Plan. Additional text is not needed in Section 4.0.</p>   |
| <p>[Comment 8.] WDFW recommends that the Goals and Objectives third bullet should read:</p> <p>"Annually monitor common loon activity on the project reservoirs, the floating nest platforms, and the effectiveness of access restriction devices (the log booms, buoys, etc) during the breeding season (1 April–July 31) twice monthly for 15 years, and continue annual monitoring if the nest platform program is continued past 15 years."</p>   | <p>[Response 8.] The details of monitoring in the suggested text are already specified in Section 6.7.1. Section 4.0 is simply a statement of the goal for monitoring. Additional text is not needed in Section 4.0.</p> |
| <p>[Comment 9.]<br/>7.2 Annual Report Format. According to the SA Article 507, PSE will monitor the effectiveness of access restriction devices twice monthly. Please make a report to the TRIG of the effectiveness of the access restriction devices in the Annual Report.</p>  | <p>[Response 9.] Text has been added to Section 7.2 to clarify that the effectiveness of access restriction devices will be addressed in annual reports.</p>   |
| <p><b>USDA-FS – Greta Movassaghi, received September 14, 2009 (via e-mail)</b></p>  |  |
| <p>I have no comments (checked on comment form)</p>   | <p>Comment noted. No revisions to plan.</p>  |
| <p><b>RMEF – Bob Nelson, received September 21, 2009</b></p>  |  |
| <p>I have no comments (checked on comment form).</p>  | <p>Comment noted. No revisions to plan.</p>  |

## 9.4 Comment Correspondence

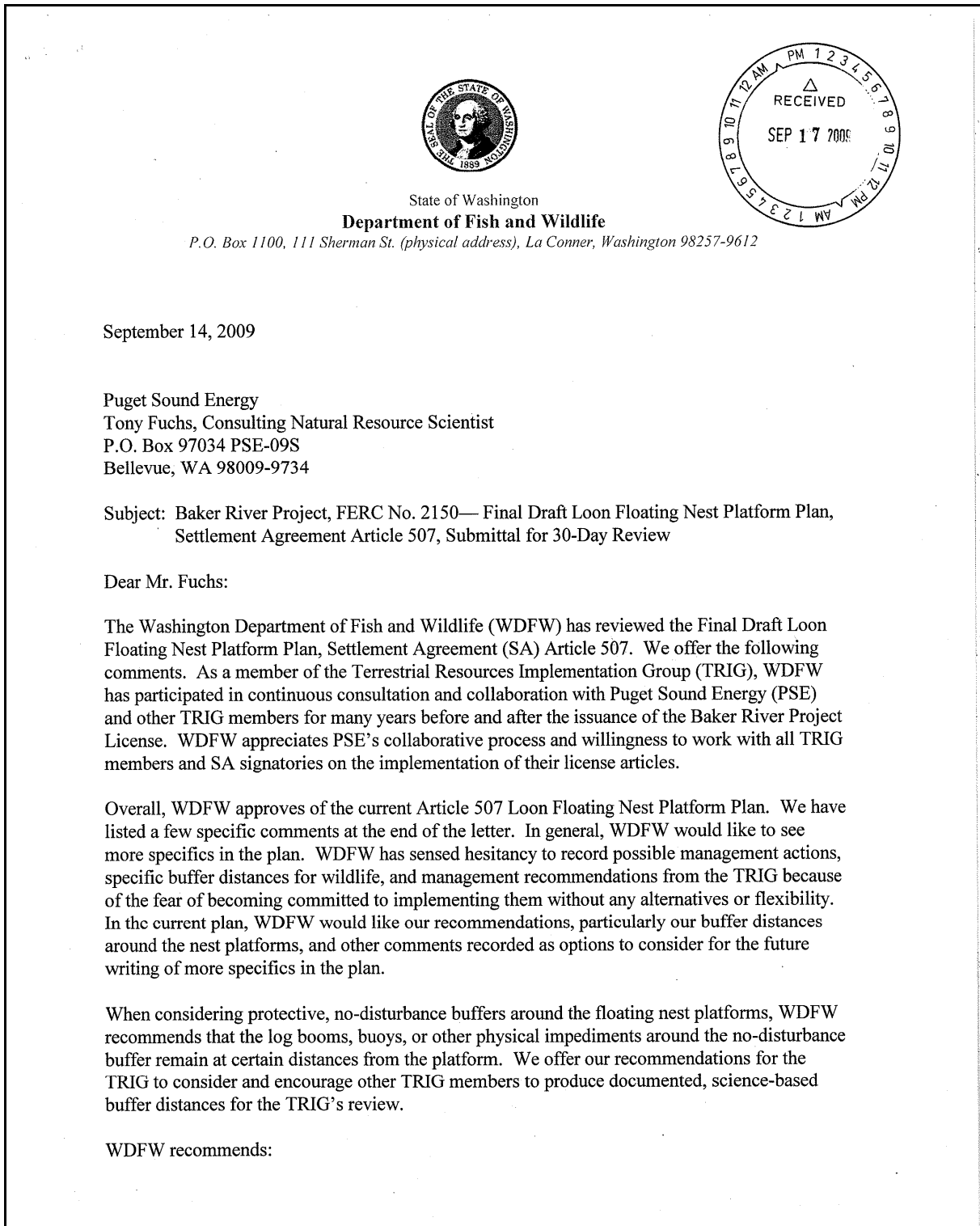


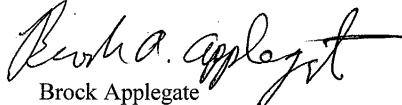
Figure 2. Reply from Brock Applegate, Washington Department of Fish and Wildlife.

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- 1) Maintaining a 150m (492 ft) disturbance buffer around nest sites from 1 April to 15 July. If loons nest successfully on the Baker Lake or Lake Shannon, maintain a 150m (492 ft) disturbance buffer around potentially occupied brood-rearing areas (nursery pools) from 15 July to 1 September, (Lewis et al. 2004).
- 2) Protecting potential nesting loons by considering the location of the platform. A restriction zone radius of 300 feet works well for a well-concealed, inconspicuous platform behind vegetation, pilings, etc, and away from the view of boaters. Nest platforms in the open water, where boaters can easily spot them, require a 500-foot tough boom/log and/or float rope barrier. The loons may become very agitated during the nesting and breeding period when curious boaters get too close to the platform. When these disturbances occur, the loons may abandon the nest site, (Spencer 2007).

WDFW welcomes the opportunity to work with PSE on future projects. We value our working relationship with PSE and encourages future dialog. If you have any questions or need more information or clarification to comments from the WDFW, please feel free to call me at (360) 466-4345 x254.

Sincerely,

  
Brock Applegate  
Fish and Wildlife Biologist

Cc: David Brock, WDFW Mill Creek  
Mike Davison, WDFW La Conner  
Bob Everitt, WDFW Mill Creek  
Mark Hunter, WDFW Olympia  
Lora Leschner, WDFW Mill Creek

Figure 2, continued.

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**SPECIFIC COMMENTS CONCERNING THE DRAFT LOON FLOATING NEST  
PLATFORM PLAN, ARTICLE 507:**

**4.0 Goals and Objectives, third bullet.** WDFW appreciates PSE's efforts in monitoring common loon activity on the project reservoirs twice monthly. As stated in SA Article 507, please monitor all floating nest platforms and the effectiveness of access restriction devices (the log booms, buoys, etc.) twice monthly as well. "During the first fifteen years following platform installation, licensee shall monitor all floating nest platforms installed in the Project reservoirs twice per month between April 1 and through July 31 to determine nesting activity, and the effectiveness of access restriction devices," (Puget Sound Energy 2009).

WDFW recommends that the Goals and Objectives third bullet should read:

"Annually monitor common loon activity on the project reservoirs, the floating nest platforms, and the effectiveness of access restriction devices (the log booms, buoys, etc) during the breeding season (1 April–July 31) twice monthly for 15 years, and continue annual monitoring if the nest platform program is continued past 15 years."

**7.2 Annual Report Format.** According to the SA Article 507, PSE will monitor the effectiveness of access restriction devices twice monthly. Please make a report to the TRIG of the effectiveness of the access restriction devices in the Annual Report.

Figure 2, continued.

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September 14, 2009  
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**Literature Cited**

Lewis, J. C., R. Milner and M. Whalen. 2004. Common loon (*Gavia immer*). In E. M. Larsen, J. M. Azerrad, and N. Nordstrom, editors. Management Recommendations for Washington's Priority Species, Volume IV: Birds [Online]. Available at <http://wdfw.wa.gov/hab/phs/vol4/comloon.htm>.

Puget Sound Energy, 2009. Final Draft Loon Floating Nest Platform Plan, Settlement Agreement Article 507, Baker River Project, FERC No. 2150. Bellevue, Washington. 11 pp.

Spencer, Rocky. Wildlife Biologist, Region 4, Washington Department of Fish and Wildlife, Mill Creek, WA. Personal e-mail communication with Brock Applegate (WDFW), 6 February 2007.

Figure 2, continued.