NORTH UMPQUA HYDROELECTRIC PROJECT

FERC P-1927

Protection, Mitigation, and Enhancement Measures



2008 Annual Report



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Executive Summary

PacifiCorp Energy ("PacifiCorp") is implementing Protection, Mitigation, and Enhancement measures (PM&Es) on the North Umpqua Hydroelectric Project ("Project") identified in the June 13, 2001 Settlement Agreement ("Settlement Agreement, or SA") and the Federal Energy Regulation Commission ("FERC") license (FERC P-1927) issued on November 18, 2003. The license was considered final on October 18, 2005, as defined in the Settlement Agreement. This milestone initiated full implementation of PM&Es identified in the Settlement Agreement. This annual report documents PacifiCorp's project and fiduciary activities for the calendar year timeframe (January – December 2008).

Representatives from the four federal and three state agencies that signed the Settlement Agreement, in addition to PacifiCorp, function as the Resource Coordination Committee (RCC), which facilitates activities associated with the Settlement Agreement. During the reporting period, the RCC conducted 11 regularly scheduled meetings that involved opportunities for public participation. The Policy Group, established to make decisions regarding policy-level issues, conducted a conference call on April 30, 2008, to discuss the potential for a process to evaluate an alternative to fish passage facilities at Soda Springs. This topic was resolved in two follow-up special sessions of the RCC during July and September. As in past years, the RCC again sponsored an on-site public tour of ongoing implementation projects on October 21, 2008

In 2008, key PM&E accomplishments included:

- Development of the 90% design of the Soda Springs fish passage facilities, overcoming a design challenge for returning screened juvenile fish to the river (SA Section 4.1.1, 4.1.2).
- Completion of construction of the Fish Creek downstream fish screen, and began planning for the evaluation study in 2009 (SA Section 4.3.2a).
- Completion of the last facility to ensure delivery of minimum instream flows and ramping requirements at Slide Creek (SA Section 5.1).
- Implementation of experimental water management and monitoring at Lemolo Reservoir in an effort to develop a long-term solution to blooms of blue-green algae.
- Progress on development of an Aquatic Connectivity Plan, which will include designs, locations, and schedule for reconnection of aquatic sites along project waterways (SA Section 10.6).
- Completion of designs for wetlands at Ranawapiti near the Clearwater waterway and at the planned Lemolo 1 forebay expansion. (SA Section 11.5).
- Completion of construction of a canal shutoff and drainage system along the Clearwater 2 waterway, and development of the 90% design of a similar facility on the Lemolo 2 waterway (SA Section 14.2).

- Remediation of four erosion sites, bringing to a total of 47 erosion sites completed since signing of the Settlement Agreement (SA Section 14.4).
- Completion of the fish habitat enhancement structures in East Fork Rock Creek, part of a long-term study that will guide future use of funding to provide for aquatic resources in the Rock Creek basin (SA Section 19.1)
- Completion of 5-year rolling action plans, as part of various Management Plans, that provide long-term guidance for cooperative management of multiple resources within the Project area (SA Section 21.1)

The RCC met in January to plan actions for the year, as specified in the Resource Coordination Plan. This forum will be conducted annually to coordinate the Parties' collaborative efforts in meeting the intent of the Settlement Agreement. Regularly scheduled RCC meetings will continue to oversee current and future PM&Es.

SECTION 1.0 INTRODUCTION

Located on the west side of the Cascades mountain range in southern Oregon, the North Umpqua Hydroelectric Project consists of eight dams that have a combined capacity to generate 188.5 megawatts of power. The project was constructed between 1947 and 1956.

In the early 1990s, as the expiration of the first FERC license approached, PacifiCorp initiated the relicensing application preparation process with FERC. In June 2001, the relicensing process culminated in the development and signing of the North Umpqua Hydroelectric Project Settlement Agreement. The Settlement Agreement identifies annual reporting requirements that range from fiduciary reporting to narrative description of actions, including:

- SA Section 7.2.3 (amended) Gravel Augmentation Program Funding and Accounting: Written annual report describing the amounts deposited and disbursed.
- SA Section 8.3.5 (amended) North Umpqua River Habitat Restoration/Creation Project Funding and Accounting: Written annual report describing the amounts deposited and disbursed.
- SA Section 19.1.1.3 Tributary Enhancement Program Funding and Accounting: Written annual report describing the amounts deposited and disbursed.
- SA Section 19.3.1 Mitigation Fund Annual Reporting: Written annual report describing the amounts deposited and disbursed.
- SA Section 21.4.2 Environmental Coordinator Reports: An annual report on the activities of the RCC and on the implementation of the PM&Es.

1.1 Background

On June 13, 2001, PacifiCorp filed a Settlement Agreement pursuant to FERC Rule 602, 18 Code of Federal Regulations §385.602, to resolve issues concerning the relicensing of the North Umpqua Hydroelectric Project (FERC P-1927). Parties to the Settlement Agreement include PacifiCorp, the USDA Forest Service ("USDA-FS"), the USDI Fish and Wildlife Service ("USFWS"), the USDI Bureau of Land Management ("BLM"), the National Marine Fisheries Service ("NMFS"), the Oregon Department of Environmental Quality ("ODEQ"), the Oregon Department of Fish and Wildlife ("ODFW"), and the Oregon Water Resources Department ("OWRD"), referred to collectively as the

"Parties." As required by statute, FERC conducted a National Environmental Policy Act process that concluded with a Final Environmental Impact Statement ("FEIS") issued in March 2003. Based on the findings of the FEIS, FERC developed articles for a new license for the North Umpqua Hydroelectric Project. FERC formally issued the new license on November 18, 2003, designating a term of 35 years.

Under the provisions of the Settlement Agreement, the license is not final until all administrative and judicial appeals are exhausted. The license was appealed to the Ninth U.S. Circuit Court of Appeals on May 21, 2004. On September 1, 2005, the Court ruled the case in favor of FERC, USDA-FS, and PacifiCorp. The license was therefore considered final on October 18, 2005.

Copies of the Settlement Agreement and the FERC license are available from FERC upon request or on the PacifiCorp Web site at: http://www.pacificorp.com/Article/Article44907.html

1.2 Resource Coordination Committee

SA Section 21 establishes a process to facilitate coordination and decision-making concerning implementation of Settlement Agreement measures. To accomplish this objective, it provides for the creation of the Resource Coordination Committee (RCC) consisting of representatives from the signing Parties. The purposes of the RCC, discussed in detail in Section 2.1 of this report, are to 1) facilitate coordination and consultation on plans developed by PacifiCorp for the implementation of PM&Es; 2) coordinate the implementation of PM&Es and ongoing monitoring requirements by PacifiCorp; 3) establish appropriate procedures for conducting activities; and 4) establish subcommittees to accomplish these objectives.

1.3 Report Organization and Review

The 2008 North Umpqua Hydroelectric Project Annual Report provides the following information:

Section 2.0 Resource Coordination Committee

Section 2.1 RCC Roles and Responsibilities

Section 2.2 RCC Members

Section 2.3 RCC Meetings

Section 3.0 Protection, Mitigation, and Enhancement Measures

Section 3.1 Implementation of PM&Es Section 3.2 FERC License Actions

Section 4.0 Fiduciary Reporting

Section 5.0 Conclusion

SECTION 2.0 RESOURCE COORDINATION COMMITTEE

This section provides an overview of RCC roles and responsibilities according to the Settlement Agreement and as subsequently implemented. It also presents a summary of RCC meetings held during the reporting period, including major discussion points, decisions, and action items associated with each meeting.

2.1 RCC Roles and Responsibilities

The purpose and role of the RCC, as defined in SA Section 21.1, is to facilitate coordination and implementation of PM&Es. The RCC also looks at implementation requirements, and through collaboration and sharing of information, works to achieve desired results. Specifically excluded from RCC responsibility and authority is the administration of the Tributary Enhancement Program and Mitigation Fund set forth in SA Section 19. However, responsible Parties may consult with the RCC concerning measures conducted pursuant to this program and fund.

The structure and process of the RCC is intended to provide a forum to address time-sensitive matters, give early warning of problems, and coordinate member organization actions, schedules, and decisions to save time and expense. As described in the Settlement Agreement, the RCC must endeavor to conduct its business by consensus. However, in the event of disagreements, the Parties may refer disagreements to appropriate policy-level decision-makers. Decisions of the RCC may not usurp the authority of individual Parties or specific governmental agencies identified in the Settlement Agreement as having approval authority regarding specific PM&Es.

The RCC is responsible for the following measures pursuant to the Settlement Agreement:

- Facilitate coordination of the implementation of the Resource Coordination Plan (RCP), including ongoing operations and maintenance (SA Section 21.1).
- Coordinate the implementation of PM&Es and ongoing monitoring requirements by PacifiCorp (SA Section 21.1).
- Coordinate responses and evaluations specifically assigned to the RCC (SA Sections 8.2.2, 8.3.3, 12.2, 14.3.3, 14.5, 17.8, 19.2.1 and 22.5.2, and SA Amendment Section 7.2).
- Facilitate coordination and consultation on plans developed by PacifiCorp (SA Section 21.1).

- Review and comment on the draft annual report of RCC activities and implementation of PM&Es (SA Section 21.4.2).
- Serve as a common point of contact for public information regarding Settlement Agreement implementation.

The following measures are specifically excluded from RCC responsibility:

- Administration of the Tributary Enhancement Program through ODFW's Memorandum of Understanding (SA Section 19.1).
- Administration of the Mitigation Fund through USDA-FS (SA Section 19.3).
- Approval of plans and actions regarding specific PM&Es assigned to individual organizations for resource protection (SA Section 21.2).

The RCC defined discrete goals and functional responsibilities to enhance its effectiveness:

- Interpret the Settlement Agreement: Apply provisions to on-the-ground planning and implementation.
- Monitor implementation of the Settlement Agreement as a whole to provide a wider view than one agency's perspective.
- Avoid surprises and errors through effective communication.
- Track progress: Serve as the interface for the Parties as implementation takes place.
- Identify policy issues: As policy issues arise, work collectively to define and clarify the issues and options for transmittal to the executive members of the Parties.
- Provide public information: Serve as a point of information regarding Settlement Agreement implementation with a collective voice.
- Promote efficiency: Share information among organizations; communicate changes in policy, procedure, or regulation; consult before decision-making; and share technical resources.
- Implement the Settlement Agreement collaboratively to ensure that all Parties' interests continue to be valued throughout the new license term.

• Effectively communicate its progress through the development of a Web site at: http://www.pacificorp.com/Article/Article44907.html

2.2 RCC Members

The Parties have each appointed a member and an alternate to the RCC. The members are shown in Table 2.2-1. The RCC members work with a designated caucus within their respective organizations.

TABLE 2.2-1 2008 Resource Coordination Committee Members

RCC Member	Organization
Pam Sichting	USDA Forest Service, Umpqua National Forest, Roseburg, Oregon
Craig Tuss	USDI Fish and Wildlife Service, Roseburg, Oregon
Ariel Hiller	USDI Bureau of Land Management - Roseburg District, Roseburg, Oregon
Ed Meyer	National Marine Fisheries Service, Portland, Oregon
Dave Harris	Oregon Department of Fish and Wildlife, Roseburg, Oregon
Chris Stine	Oregon Department of Environmental Quality, Eugene, Oregon
Craig Kohanek	Oregon Water Resources Department, Salem, Oregon
Monte Garrett	PacifiCorp Energy, Portland, Oregon

2.3 RCC Meetings

During the reporting period, the RCC conducted 11 regularly scheduled meetings to finalize study plans, discuss implementation objectives for PM&Es, and facilitate the overall Settlement Agreement implementation. In addition to these regularly scheduled meetings, an annual work planning session is held in January each year to discuss what worked well and what could be improved, and to review project work plans (including the SA 19.3 Mitigation Fund projects) for the coming year. The formal ground rules established and adopted by the RCC provide the functional framework for this

collaborative work. These ground rules are provided on the PacifiCorp Web site at: http://www.pacificorp.com/File/File52306.pdf.

Meeting summaries are drafted for RCC meetings. The draft summaries are distributed to the RCC members for review and comment. At a subsequent meeting, after corrections have been made as appropriate and when work in progress is completed, the RCC approves the summaries by consensus. Meetings are open to the public for comment, and any comments received are added to the meeting summaries.

This section summarizes the issues covered at RCC meetings and the items where consensus was reached during the reporting period. Meeting summaries are provided on the PacifiCorp Web site at: http://www.pacificorp.com/Article/Article26523.html.

RCC Meeting No. 1 February 20, 2008

• *The North Umpqua Hydroelectric Project Continuum* video, showcasing implementation progress to date, was completed and distributed to RCC members.

RCC Meeting No. 2 March 19, 2008

- Approved extension of modifications to ramping limits to allow for gate testing into April and May, of the Slide Creek diversion instream flow facility.
- Verbally approved proposed schedule changes necessary for Soda Springs fish passage project, due to hydraulic concerns related to the fish return flume. The concern was that flow velocity within the flume may cause hydraulics that could stress or damage the fish. Modeling was proposed to test and improve the design. MWH Americas, Inc. (MWH) will contract with ENSR Consulting & Engineering (ENSR) to build and run a model to describe the resulting hydraulics. This may delay the 90% design process and require shifting the project schedule and date for final designs to FERC, as well as the construction schedule. The project completion date would still be 2012.

RCC Meeting No. 3 April 16, 2008

• Approved a change in schedule for the Lemolo 2 canal shutoff & drainage project to be constructed in 2009.

RCC Meeting No. 4 May 21, 2008

• Reported that modeling by ENSR is proceeding as planned on the Soda Springs fish passage project. When the model is operational, a site visit will be scheduled.

RCC Meeting No. 5 June 18, 2008

• Approved the TWG-recommended Lemolo Reservoir Experimental Management Plan.

RCC Meeting No. 6 July 16, 2008

- Approved additional expenditure of \$14K (ODFW indirect costs) spent on the SA 19.2 budget in 2007. Understood that the additional ODFW indirect costs for 2007 and 2008 result in the SA 19.2 fund being depleted by the end of 2008.
- Approved request for extension of time to file Soda Springs Fish Passage final designs with FERC to the end of the year.
- Approved request by TWG for retroactive drawdown of Lemolo Reservoir of more than 0.5 ft/day (July 10-11 exceeded that rate).

RCC Meeting No. 7 August 20, 2008

- The Clearwater 2 canal shut-off and drainage project has begun.
- Some of the RCC members met at ENSR for the first view of the hydraulic model created for the Soda Springs fish passage project. After discussion with the RCC, ENSR will continue to do more research for adjustments that need to be made with regards to velocity concerns.

RCC Meeting No. 8 September 17, 2008

• Approved the plan and ramping modification for the rapid shutdown test for the Lemolo 2 canal shut-off and drainage project.

RCC Meeting No. 9 October 15, 2008

• Scheduled the annual public tour for October 21, 2008.

- The Stump Lake Connectivity Invertebrate Ladder project has been completed.
- Agreed that the TWG meeting schedule would not be posted on the PacifiCorp Web site; however, the public may occasionally attend by invitation of the TWG members. Agreed this was an appropriate format for communication and decision-making.

RCC Meeting 10 November 19, 2008

- Approved TWG recommendation to replace Fallen Mountain wetland with Ranawapiti wetland.
- Approved expenditures of up to \$200K for 2009 for the 19.2 Long-Term Monitoring/Predator Control Program. This includes an advance of funds from 2011. It was agreed that funds can be advanced from future years to accommodate a more complete baseline study, understanding that in future years funding will be commensurately lower to compensate for these advances.
- Approved request for extension of time to file Soda Springs Fish Passage final designs with FERC to mid-March 2009.

RCC Meeting 11 December 17, 2008

- Confirmed dates of January 27-28 for the 2009 Annual Planning Workshop.
- Reported on the Soda Springs tailrace barrier hydraulics site visit.

SECTION 3.0 PROTECTION, MITIGATION, AND ENHANCEMENT MEASURES

This section presents 2008 progress of PM&Es defined in the North Umpqua Settlement Agreement and the FERC license. A summary of all documents submitted to FERC and their current status is also presented.

The Parties have agreed to modify the schedule of PM&Es, if necessary. In such instances, the Parties may convene and modify Settlement Agreement implementation dates if all Parties are in agreement that such modifications are warranted. Delays in implementation are typically needed only to further refine plans for the action in order to ensure greater success.

3.1 Implementation of PM&Es

The schedule for all PM&Es and their status is presented in Table 3.1-1. The status of the PM&Es specific to the timeframe of this report is presented in Table 3.1-2.

During the report period, Settlement Agreement and license actions focused on planning, monitoring, construction projects, and engineering designs. All Parties have worked cooperatively toward meeting Settlement Agreement schedule commitments.

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TABLE 3.1-1 Implementation Schedule and Status of PM&Es

	Key
	Due Date
X	In Progress
•	Complete

		YEAR														
SA Section	PM&E	2001	2002	2003	2004	2002	2006	2002	2008	2009	2010	2011	2012	2013	2014	2015+
	4.0 FISH	PASS	AGI	E MI	EAS	URE	S									
4.1.1(a)	Soda Springs Fish Ladder Design						x	x	x							
	Soda Springs Fish Ladder O&M/															
4.1.1(d)	Evaluation Plan	4					X	X	X							
4.1.1(e)	Soda Springs Fish Ladder Construction															
1111(0)	Soda Springs Tailrace Barrier	+														
4.1.1(f)	Design/Construction					X	X	•								
4.1.1(f)	Slide Creek Tailrace Barrier Design															
	Slide Creek Tailrace Barrier															
4.1.1(f)	Construction															
4 4 2 ()	Soda Springs Downstream Screen															
4.1.2(a)	Design Soda Springs Downstream Screen	+					X	Х	X							
4.1.2(b)	O&M/Evaluation Plan						x	х	х							
(1)	Soda Springs Downstream Screen															
4.1.2(d)	Construction															
	Soda Springs Downstream Passage															
4.1.2(f)	Spillway Modifications Design Soda Springs Downstream Passage	+					X	X	X							
4.1.2(f)	Construction															
		+														
4.3.1(a)	Lemolo 2 Fishway Modifications Design Lemolo 2 Fishway Modifications	+			X	•										-
4.3.1(a)	Construction					x	•									
	Lemolo 2 Fishway Modifications O&M/															
4.3.1(c/d)	Evaluation Plan				X	•										
4.3.1(d)	Lemolo 2 Post-construction Evaluation							x	•							
4.3.2(a)	Fish Creek Downstream Screen Design					x	x	•								
	Fish Creek Downstream Screen															
4.3.2(a)	Construction							X	•							
4.3.3	Toketee Trashrack Modification								X							
	5.0 IN	ISTR	EAM	1 FL	OW:	S										
5.1	Soda Springs Table 1 Flows			•												
5.1	Implement Table 1 Flows					•										
5.1	Implement Table 2 Flows															
5.3	Reconsideration of Instream Flows					•										
5.4	Lemolo 2 Full Flow Reach					х	х	х	х							
5.5	Instream Flow Gage Installation		•													
5.5	Instream Flow Monitoring Plan		х		•											

TABLE 3.1-1 Implementation Schedule and Status of PM&Es

	Key		
	Due Date		
X	Due Date x In Progress		
•	Complete		

		7EAR														
SA Section	PM&E	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
	5.0 IN	STR	EAI	VI FL	_OW											
5.6	ODFW Holding Ponds Water Supply	•	•	•	•	•	•	•	•							
	6.0) R/	AMP	INC	}											
6.1	Lemolo 2 Full Flow Reach Installation					X	Х	Х	Х							
6.2.1	Slide Creek Ramping Monitoring Plan Slide Creek Ramping Monitoring Plan															
6.2.1	Implementation															
6.4	Wild & Scenic Ramping Restrictions	•	•	•	•	•	•	•	•							
6.5	Bypass Reach Ramping Restrictions (0.2 ft/hr)	•	•	•	•	•										
6.6	Project Maintenance - Appendix D Schedule						•	•	•							
6.7	Emergency Shutdown Ramp Restrictions						•	•	•							
6.8	Soda Springs Emergency Bypass Valve Slide Creek Emergency Bypass				•											
6.9	Valve Evaluation						х	х	х							
	7.0 RESTORATIO	ΝO	FFL	.UV	AL	PRO	DCE:	SSE	S			1				
7.1	Gravel Augmentation below Soda Springs Dam				•											
7.2	Gravel Augmentation Program	•	•	•	•	•	•	•	•							
7.3	Passage of Woody Debris	•	•	•	•	•	•	•	•							
7.4	Passage of Sediment (if high flows present)	•	•	•	•	•	•	•	•							
7.5	Reconnection of Clearwater River - Design					•										
	8.0 MAINSTEM	HAB	ITA	ΤE	NHA	NC	EME	NT								
8.2.1	Slide Creek Implementation Plan	х	•													
8.2.2	Slide Creek Monitoring Plan		х	х	•											
8.2.3	Slide Creek Baseline Habitat Survey		•													
8.2.4	Slide Creek Test Boulder Placement		•	•	•	•										
8.3.1	Soda Springs Feasibility Assessment			•												
8.3.2	Soda Springs Implementation Plan			•												
8.3.3 8.3.4	Soda Springs Monitoring Plan Soda Springs Baseline Habitat Survey and Monitoring Plan			•	•											
8.3.5	Soda Springs Funding and Accounting				•	•	•	•	•							
8.3.6	Soda Springs Completion				•											

TABLE 3.1-1 Implementation Schedule and Status of PM&Es

	Key
	Due Date
Х	In Progress
•	Complete

								Υ	ΈΑ	R						
SA Section	PM&E	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
	9.0 RESERVOIR A	ND F	OR	EBA	Y M	ANA	AGE	MEN	ΙT							
9.1	Stocking of Rainbow Trout Funding				•	•	•	•	•							
0.2	Rainbow Trout Broodstock															
9.2	Development				•											
9.3	Management of Lemolo Lake Reservoir Lemolo Reservoir Fluctuations	•	•	•	•	•	•	•	•							
9.3.3	(0.5 ft/day)						•	•	•							
9.5	Salvage of Fish During Shutdowns	•	•	•	•	•	•	•	•							
	10.0 AQ	UATI	C R	ESC	UR	CES										
10.2	Stump Lake Connectivity Invertebrate Ladder						x	x								
10.2	Clearwater River Reconnection						^									
10.3	Design/Construction					X	•									
10.4	Diversion Structure Removal - Lemolo Named Creeks			•												
10.4	Potter Creek Diversion Removal					•										
10.4	Deer Creek Diversion Removal						•									
10.5	Riparian Restoration - White Mule Creek						X	•								
10.5	Riparian Restoration - Potter Creek		х	х	х	х	•									
	Reconnecting Aquatic															
10.6	Connectivity Sites 11.0 TERR	ГСТГ		DE	SOL	IDC	X	Х	Х							
		ESIR	KIAL	. KE		JRC	E 3									
11.1	Big Game Bridge Widening (29)				•											
11.2	Wildlife Crossings (34)	-					Х	Х	Х							
11.3	Wildlife Monitoring Plan						Х	•								
11.4	Wildlife Underpasses (9)					•										
11.5	Stump Lake Wetland						•									
11.5	Stinkhole Wetland															
11.5	Ranawapiti Pond Wetland															
11.5	Lemolo/Forebay Expansion Area								х							
11.5	Lemolo Lake Wetland							•								
11.5	Wetland Areas: #1, #2, & #3															
	12.0 VEGET	ATI	NC	MAN	IAG	EME	NT									
12.1	Vegetation Management Plan Development and Implementation				•	•	•	•	•							
12.2	Noxious Weed Control	•	•	•	•	•	•	•	•							

TABLE 3.1-1 Implementation Schedule and Status of PM&Es

	Key
	Due Date
Х	In Progress
•	Complete

		YEAR														
SA Section	PM&E	2001	2002	2003	2004	2005	2006	2007	2008	5005	2010	2011	2012	2013	2014	2015+
	13.0 AV	AN	PRO	OTE	СТІ	ON										
13.4	Records & Database Management System	•		•	•				•							
	14.0 EROSION	& S	EDI	ME	NT (CON	TRO	DL								
	Canal Shutoff & Drainage System -															
14.2	Fish Creek Canal Shutoff & Drainage System -						Х	X	Х							
14.2	Clearwater 2							x	х							
14.2	Canal Shutoff & Drainage System - Lemolo 2								х							
14.4.2	High Priority Erosion Sites: Fish Creek				•											
14.4.2	High Priority Erosion Sites: Clearwater & Lemolo				х	х	х	х	х							
14.4.3	Medium Priority Erosion Sites (27)				х	х	х	х	х							
14.5	Erosion Monitoring	•	•	•	•	•	•	•	•							
14.7	Seismic & Geological Hazard Evaluation			•												
	15.0 TR	ANS	SPO	RTA	TIC	N										
15.1	Transportation Management Plan				•											
15.1	Transportation Management Plan Implementation				•	•	•	•	•							
15.2	PPL Roads to USDA-FS Standards	•	•	•	•	•	•	•	•							
15.3	Cost Sharing for Joint Roads and Maintenance					•	•	•	•							
15.4	Road Decommissioning		х	х	х	х	х	х	х							
15.5	Bridges - Inspections/Maintenance	•	•	•	•	•	•	•	•							
15.5.1	Bridge Maintenance Cost Sharing					•	•	•	•							
15.6	Fish Culvert Upgrades					х	х	х	х							
15.6	100-Year Flood Culvert Upgrades			х	х	х	х	х	х							
15.6	Culvert Maintenance on PPL Use Roads		•	•	•	•	•	•	•							
	16.0	AE	STH	ETI	cs											
16.1	Aesthetics Management Plan Implementation				•	•	•	•	•							
16.2	Landscaping Clearwater Shop						x	•								
16.2	Landscaping Clearwater Switchyard						х	•								
16.4	Transmission Line Evaluation (Design)					•										
16.4	Transmission Line Mitigation (11 Sites)								х							

TABLE 3.1-1 Implementation Schedule and Status of PM&Es

	Key		
	Due Date		
X	Due Date x In Progress		
•	Complete		

		- 0 0 4 10 0 1 0 0 0 1 0 0 4 4 10 0 1 0 1														
SA Section	PM&E	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
	17.0	RE	CRE	ATI	ON											
17.2	Recreation O&M Funding				•	•	•	•	•							
17.7	Law Enforcement Funding				•	•	•	•	•							
17.8	Recreation - Deferred Capital Improvement Funding		•	•	•			•								
17.8	Recreation - Capital Improvements							•	•							
17.9	Public Information Funding				•	•	•	•	•							
17.10	Annual Monitoring Funding				•	•	•	•	•							
17.11	Recreation: NW Forest Plan Compliance Funding				•			•								1
	18	.0 C	ULT	URA	L											
18.1	Historic Properties Management Plan			х	х	х	•									
18.1	Historic Properties Management Plan Implementation					•	•	•	•							
18.3/18.6	Site Discovery/Monitoring	•	•	•	•	•	•	•	•							
18.4	Protection, Restoration, and Recovery				•	•	•	•	•							
		O MI	TIG	ATI	ON											
19.1.1	Tributary Enhancement Account (MOU) Funding				•	•	•	•	•							
19.1.1	Tributary Enhancement Account - Use of Funds					•	•	•	•							
19.2	Long-Term Monitoring/Predator Control Funding				•	•	•	•	•							
19.2.1	Long-Term Monitoring/Predator Control Disbursements				•	•	•	•	•							
19.3.3	Federal Mitigation Funding				•	•	•	•	•							
19.5	Early Implementation Funding		•	•	•	•										
19.5.2	Early Implementation Fund Annual Reporting		•	•	•	•										
	21.0 COORDINA	TION	1 & 1	DEC	ISI	-NC	MAk	ano	G							
21.1	Resource Coordination Committee	•	•	•	•	•	•	•	•							
21.1	Resource Coordination Plan - Developed and Implemented					х	•	•	•							
21.4.2	Annual Report		•	•	•	•	•	•	•							
21.5	Site Specific Plan Development	•	•	•	•	•	•	•	•							

TABLE 3.1-2 Detailed Status of PM&Es

SA Section	PM&E	Due Date	Status
4.1	Fish Passage at Soda Springs Dam Design/Construct/ Evaluate/Operations and Maintenance	2009 – design and prepare plans 2011 – complete construction 2012 – complete evaluation	Design progressed to 90%, assisted by completion of a hydraulic model. Final design and plans (O&M and evaluation) are expected to be completed in March 2009. Construction will begin in 2009 and conclude in 2011.
4.1.1(f)	Soda Springs Tailrace Barrier Design/ Construct	2007	The project was built and became operational in 2007. This year, finishing touches on equipment to assure facility operation (i.e., gantry crane functionality and cleaning equipment) were completed. PacifiCorp and agencies continued evaluating flow velocities across pickets to meet NMFS criteria.
4.3.2(a)	Fish Creek Downstream Fish Passage Design/ Construct/Evaluate/ Operations and Maintenance	2005/2008	High snow levels hampered work until mid-April when contractor installed Tee-screens and finished the electrical and mechanical work. Facilities provide the downstream passage and screening, but continue in a semi-automated mode until communication issues are resolved. Restoration plantings were completed in the fall. The hydraulic evaluation was completed and the biological evaluation is scheduled for 2009.
5.1	Instream Flow Increases in Project Bypass Reaches	2005	New minimum flows are assured by a combination of new and existing facilities in all bypass reaches. The last of these new facilities at Slide Creek dam is expected to be operational in 2009.
5.4, 6.1	Lemolo 2 Full-Flow Reach	2011	Cultural clearances were completed to support geotechnical explorations in 2009. Final design and permitting is expected in 2010.

SA Section	PM&E	Due Date	Status	
5.5	Instream Flow Monitoring Plan	Ongoing	Monitoring and reporting continues as required in the Plan.	
6.4	Wild and Scenic Ramping Restrictions	Ongoing	Ramp rate requirements have been followed within equipment limitations per the Flow Monitoring Plan.	
6.5, 6.6	Bypass Reach Ramping Restrictions	Ongoing	New ramping restrictions have been followed per the Flow Monitoring Plan. New facilities were constructed at Slide and Fish Creek diversions. Further improvements are planned at these and other sites.	
6.9	Slide Creek Powerhouse Emergency Ramping Evaluation	2006	Evaluation was completed and conclusions will be considered during design and construction of the Slide Creek tailrace barrier.	
7.2	Gravel Augmentation Program (as per SA Amendment No. 1)	2002+	Monitoring continues on the results of the experimental gravel pulse built in 2004 and subsequent gravel dynamics. The TWG will use these findings to modify the implementation and monitoring plans for long-term use.	
7.3	Passage of Woody Debris at Soda Springs and Slide Creek Dams	Ongoing	Passage of woody debris continued according to the plan.	
8.2.1	Slide Creek Bypass Reach Habitat Project Implementation/ Monitoring	2002-2011	Monitoring continues according to the plan. The second and final year of monitoring is expected to be 2011.	
8.3.2	North Umpqua River Habitat Restoration/ Creation Implementation/ Monitoring	2004+	Annual monitoring occurred according to the plan. An annual report was submitted to the RCC.	
9.1	Funding Production of Rainbow Trout	2004+	PacifiCorp provided \$17,927.47 to the ODFW.	

SA Section	PM&E	Due Date	Status	
9.3	Lemolo Lake Management Plan and Limits on Drawdown Rate and Elevations	Ongoing	Water levels and drawdown rates were monitored according to the Flow Monitoring Plan. Lake management and consultation proceeded according to the Lemolo Reservoir Management Plan.	
9.5	Salvage of Fish During Maintenance Shutdowns	Ongoing	Advance notice of maintenance shutdowns and the salvage and liberation of fish continued as require	
10.2	Stump Lake Connectivity Invertebrate Ladder	2007	The Clearwater 1 connectivity project became fully operational in July 2008 This project connects Stump Lake wit the Clearwater River to allow movement of aquatic amphibians and macroinvertebrates across the dam using a simulated stream channel.	
10.3	Reconnection of Clearwater River	2005	Facility evaluation by the ODFW continued according to the plan, and is expected to continue into 2009. Aesthetic screening vegetation was planted in the spring.	
10.4	Breaching Diversions	2006	All required diversions have been modified to return full flows to the stream channel and support natural processes as required.	
10.5	Riparian Restoration	2006	Additional native plantings were installed at the White Mule Creek restoration project, constructed in 2007. Monitoring of restoration success will continue on an annual basis; noxious weeds will be treated and augmentation planting may occur as necessary.	
10.6	Aquatic Connectivity	Ongoing	Additional review and coordination by PacifiCorp, the ODFW, and the USDA-FS continued this year on reconnection sites and preliminary design solutions. Conceptual designs are currently being generated for identified reconnection sites. Twelve sites have been selected to be built during 2009. The Aquatic Connectivity Plan is currently being	

SA Section	PM&E	Due Date	Status	
			drafted and is expected to be finalized by the end of 2009.	
11.2	Wildlife Crossings	2009	Construction of the remaining 24 sites began this year and is scheduled for completion in 2009.	
11.5	Wetland Development	2006-2011	Ranawapiti Pond was identified as a replacement site for Fallen Mountain Creek, which was identified by the Settlement Agreement but determine to be a poor site for wetland enhancement. Wetland enhancement designs were developed for Ranawap and the Lemolo 1 forebay wetland, both of which will be constructed in 2009. Stinkhole wetland design consultation will commence in 2010.	
12.1	Vegetation Management Plan Implementation	Ongoing	The Vegetation Management Plan (VMP) is being implemented. Noxious weed treatments are being conducted on both BLM and USDA-FS lands on an annual basis. The noxious weed training program was developed and implemented and will continue on an annual basis per the VMP. The horticultural invasive species program was also developed and implemented and will continue as necessary to satisfy VMP requirements. The 2009 draft VMP 5-year rolling action plan was presented to both the USDA-FS and the BLM in December.	
13.1	Power Pole Modification	Ongoing	No power pole modifications were needed this year.	
13.4	Records Database Management System	Ongoing	PacifiCorp continued to maintain a database for management of birds on power lines. An annual report summarizing avian-powerline program activities occurring within the Project area was submitted to the USDA-FS.	

SA Section	PM&E	Due Date	Status
14.1, 14.5	Erosion Control Plan Implementation/ Monitoring	Ongoing/ Annual	The Erosion Control Plan is final and undergoing implementation. Erosion sites were monitored and an annual report was produced and distributed to the agencies in December.
14.2	Canal Shutoff and Drainage Systems	2007-2009	Fish Creek: Construction was completed in early summer, but communication problems required a complete replacement of radios in late fall. Initial tests of the new radios resulted in the need for additional power requirements. Efforts toward full functionality will continue into 2009. Clearwater 2: Design was completed and approved in the winter and construction occurred from June through December. The facility was completed on schedule. Lemolo 2: Design reached 90% completion by year's end. The design and construction will be completed in 2009.
14.4	Erosion Site Remediation		Erosion remediation was conducted at four sites this year: LM2-12, CW2-1, CW2-4, and CW2-5. Scheduled remediation at two sites (LM2-24 and LM2-29) was postponed to coincide with related aquatic connectivity projects. Erosion remediation for 2009 includes three sites (LM2-4, LM2-18, and LM2-23).
15.1 – 15.4	Transportation Management Plan Implementation	2004+	The Transportation Management Plan is final and undergoing implementation. Culvert assessment was finalized and maintenance was performed. The 5-year RAP was developed in consultation with the USDA-FS and the BLM. Road decommissioning continued in 2008 and will be completed in 2009. The 2008 road maintenance cost share amount was \$288,022; of which PacifiCorp's share was \$61,866.

SA Section	PM&E	Due Date	Status
15.5, 15.5.1	Bridges – Inspections/ Maintenance; Bridge Cost Sharing	Annual	Bridge inspections have been conducted on PacifiCorp-exclusive and jointly maintained roads every two years: 2003, 2005, and 2007. All critical bridge maintenance has been completed. Major progress has been made toward completion of non-critical bridge maintenance and differed maintenance tasks by 2015. A cost-sharing agreement will be finalized in 2009 to provide the guidelines for cost-sharing on jointly maintained bridges.
15.6	Fish Passage and Q100 Culvert Upgrades	2005-2010	All fish passage projects on PacifiCorpexclusive roads have been completed. The last remaining Q100 culvert upgrade on PacifiCorp-exclusive roads (culvert no. 1035) has been postponed to coincide with related aquatic connectivity projects. PacifiCorp continues to fund the USDA-FS culvert upgrades on jointly maintained roads.
16.1, 16.3, 16.4	Visual Resources (Aesthetics) Management Plan	Ongoing	The Visual Resources (Aesthetics) Management Plan is final and undergoing implementation. The 5-year rolling action plan (RAP) is developed annually in December. The transmission line visual screen sites were planted in 2008, and maintenance of existing aesthetics plantings continued throughout the year.
17.1	Recreation Resources Management Plan Implementation	Ongoing	The Plan is final and implementation occurs through the 5-year RAP process. The 2008 RAP was approved the by the USDA-FS and identified actions were completed.
17.2	Campground Operations and Maintenance	Annual	PacifiCorp provided \$92,366 to the USDA-FS. These funds are to be used for the operation and maintenance expenses for campground facilities on or near PacifiCorp project waters.
17.7	Law Enforcement	Annual	PacifiCorp provided \$9,561 to the USDA-FS for land-based law

SA Section	PM&E	Due Date	Status	
			enforcement support at recreation facilities in the FERC project boundary.	
17.8	Capital Improvements	Annual through 2012; future years will be monitoring- dependent	PacifiCorp provided \$41,831 to the USDA-FS.	
17.9	Public Information	Annual	PacifiCorp provided \$8,569 to the USDA-FS.	
17.10	Recreation Monitoring	Annual	PacifiCorp provided \$8,569 to the USDA-FS.	
	Recreation Monitoring (Periodic Surveys)	2007, 2013, 2019, 2025, 2031, and 2037		
18.1	Cultural Resources (Historic Properties) Management Plan Implementation	Ongoing	The Historic Properties Management Plan is finalized and undergoing implementation. The 2008 5-year RAP was developed in consultation with the USDA-FS, the BLM, and the SHPO. The Historic Structures Plan was finalized and distributed to operations staff and the SHPO.	
18.6	Cultural Resources Monitoring	Ongoing	PacifiCorp will continue to coordinate ground-disturbing activities with the USDA-FS, the BLM, and the SHPO to continue monitoring and protection of historic properties.	
19.1.1	Tributary Enhancement Account	Annual	PacifiCorp deposited \$513,920.75 to this account for future work associated with the ODFW Memorandum of Understanding. It funded work on fish habitat enhancements and fish passage improvements.	
19.2	Long-Term Monitoring and Predator Control	Annual	PacifiCorp deposited \$119,516.45 to this account. Long-term monitoring and predator study work proceeded according to the study plan.	

SA Section	PM&E	Due Date	Status
19.3	Mitigation Fund	Annual	PacifiCorp deposited \$298,791.13 to the USDA-FS account.
19.4	Oversight Costs	2006+	PacifiCorp provided \$193,616.65 to the ODFW for the funding of two full-time ODFW personnel to help oversee and monitor work associated with the ODFW MOU.
21.4.1	RCC	Ongoing	The RCC continued to facilitate the implementation of PM&Es. It held one 2-day work session, one public tour, and routine monthly meetings. Technical working groups met much more frequently to address detailed consultation issues.

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3.1.1 Major Accomplishments

During the reporting period, PacifiCorp continued progress on implementing PM&Es in compliance with the Settlement Agreement. Major accomplishments are described below by Settlement Agreement section.

Soda Springs Tailrace Barrier (SA Section 4.1.1f)



While this project was completed in 2007, minor construction continued this year with the addition of security fencing, safety features, and additions to the gantry crane. PacifiCorp and interested agencies participated in hydraulic evaluations of the panels under varying flows. Consultation continues regarding hydraulic performance.

Fish Passage at Soda Springs Dam (SA Section 4.1-2)

Design work proceeded in earnest for the fish ladder, fish screens, and spillway modification. PacifiCorp completed design to a 90% level following extensive hydraulic modeling of the fish return from the fish screen structure, completion of seismic analysis of the existing facility, and proposed fish passage modifications. Based



on the hydraulic modeling results, the fish bypass system was refined and design of the final layout of the facilities proceeded. Facility design is expected to be complete in 2009, with construction complete by 2012.

Fish Creek Fish Screen (SA Section 4.3.2a)

The screen is intended to exclude fish from the canal system and provide safe downstream passage. This project was 75% complete in 2007. An unusually high snowpack in January 2008 caused delays in construction startup. Screens were installed in May and were only operational in a manual mode due to the communication problems tied to the Canal Shutoff & Drainage project. Late fall precipitation delayed plant startup and further communication testing. Work will continue in 2009 to resolve a radio



communication issue. The biological evaluation is also scheduled for 2009. Revegetation of both the Fish Creek fish screen and the Fish Creek canal shutoff and drainage system was completed this year.

<u>Instream Flow Facilities (SA Section 5.1)</u>

Minor modifications were made to the Slide Creek Obermeyer weir to make the facility fully operational. In order to allow the weir to cycle faster, final weir operational refinements are scheduled for early 2009.

Lemolo 2 Full-Flow Reach (SA Section 6.1)



Progress continues to be made toward constructing a partially buried pipeline to direct the discharge flows from the Lemolo 2 powerhouse to upper Toketee Lake. This bypassing of flows will reduce ramping impacts to the main-stem of the North Umpqua River from operation of Lemolo 2 powerhouse. The conceptual design of this facility was agreed to by the Parties in 2005. Initial design surveying was completed in 2007, and clearances for cultural studies were completed in 2008 to allow for exploratory borings. Geotechnical investigation and final

design efforts are to commence in July 2009, leading a final design and permitting in 2010. Construction is scheduled for 2011.

Management of Lemolo Reservoir (SA Section 9.3)

A technical workgroup was convened in 2007 to address water quality issues related to blue-green algae blooms and possible relationships with management of Lemolo Reservoir via the Lemolo Reservoir Management Plan. During 2008, investigations and actions included an experimentally low late summer water level, trapping of fish, and monitoring of fish and water quality conditions. Investigations are expected to continue into 2009.



Stump Lake Connectivity Invertebrate Ladder (SA Section 10.2)

PacifiCorp has completed construction on an invertebrate ladder at Stump Lake that will allow aquatic amphibians and macro-invertebrates (but not fish) to move across the dam. This structure includes a walkway across the Dam spillway to allow easy access to the pump that feeds water from Stump Lake. This pump will keep the





surface of the ladder wetted with flowing water during times when amphibian movement is anticipated. Native plants have been placed on the structure along with gravel, rocks and wood debris to help enhance the site. Many types of creatures have already been seen using this route over the embankment since construction was completed in June.

Reconnecting Aquatic Sites (SA Section 10.6)

Initial field review was completed in 2007, with follow up stream-width measurements and site design work completed this year. A contract was awarded for development of conceptual site designs that will further inform the collaborative planning process with the USDA-FS and ODFW. A combination of original and alternative aquatic reconnection sites will be selected for completion over an 11-year period of the new license. Many of these efforts will be coordinated to also provide crossings over waterways for big game and other small wildlife. These combination bridges provide both terrestrial and aquatic connectivity over project waterways. Nine combination bridges were completed prior to 2008. Three additional combination bridges were initiated in 2008, but were not completed due to the onset of winter weather. The three bridges will be completed as soon as weather allows in spring 2009. Additional aquatic reconnection structures are planned for construction in summer 2009. The Aquatic Connectivity Plan is being developed concurrently and is anticipated to be finalized by the end of 2009. It will include a final list of the structures to be completed, as well as a schedule for implementation.

Wildlife Crossings (SA Section 11.2)

In 2008, 24 sites, five on Clearwater, two on Fish Creek, four on Lemolo 1, and 13 on Lemolo 2 were contracted for construction. Five of these sites are combination aquatic/wildlife crossings. To optimize benefits for terrestrial and aquatic wildlife, five of these wildlife crossings were combined with the reconnection of aquatic sites (SA Section 10.6). The wildlife crossing and five combined wildlife crossing/stream bridges were constructed according to the same specifications and designs developed for big game bridges. Currently, the Clearwater, Fish Creek, and Lemolo 1 sites are substantially complete, with bridge sections laid down. The completion of these sites and the construction of the Lemolo 2 sites will be finished in spring 2009 when the snow conditions allow.

Enhancement of Wetland Species Diversity (SA Section 11.5)



forebay and Ranawapiti wetlands, with construction for both projects scheduled for 2009. The Ranawapiti wetland

PacifiCorp, the ODFW, and the USDA-FS coordinated on designs for the Lemolo 1



enhancement site was collaboratively selected in lieu of the Fallen Mountain Creek site, which was identified by the Settlement Agreement but was determined to be an unsuitable site for wetland enhancement. Planning for the four remaining wetland enhancement projects will continue in 2009. The Stinkhole area is the next wetland enhancement site identified by the Settlement Agreement with construction anticipated in 2011. Efforts will be made in 2010 to identify the remaining three wetland enhancement sites that do not have defined locations in the Settlement Agreement.

Canal Shutoff and Drainage Systems (SA Section 14.2)

Three facilities will automatically sense flume breaches and drain water or divert waters from impacted project waterways in a controlled manner to minimize the potential for erosion.

Fish Creek System



This project was constructed in conjunction with the Fish Creek Downstream Fish Screen project due in part to having shared equipment for both projects. Construction began in 2007 and reached 75% completion in December. Unusually high snow conditions caused a late startup in 2008 and nearly all elements were in place by June when flows dropped off. A preliminary test of the system in May revealed communication problems. A new radio network was purchased and installed by late

October. However, the solar panels were found to be insufficient in providing adequate power to the new, more powerful, radios due to the shady conditions of the Fish Creek canyon. These issues will continue to be addressed in 2009.

Clearwater 2 System

Design began in 2007 and reached 60% by year end. Design was finalized in April 2008. Construction began in June for five radial gate structures, upgraded headgate and equipment, and a single monitoring site. The gate facilities were in place by November and new electrical headgate panel installation was scheduled to be completed by year's end.



Lemolo 2 System

The Lemolo 2 design utilizes similar design features developed from the previous two drainage systems designs. The Lemolo 2 gate structures are approximately 30% larger that the Clearwater 2 gate structures. The engineering design was nearly complete in 2008. The final 100% design is scheduled for completion in February 2009, with construction to follow in June 2009. This project is scheduled to be completed by October 2009.

Erosion-Site Remediation (SA Section 14.4)

Remediation of erosion sites continues to progress in advance of the schedule set forth in the Settlement Agreement. Four erosion sites were completed in 2008. Work has been completed at 47 of the 65 (72%) identified erosion sites. Seven of the remaining sites still require mitigation while 11 other sites require no action except continued annual monitoring. Designs for remediation of three erosion sites planned for 2009 and one site in 2010 have been submitted for review. Inspections of erosion sites continue to be conducted annually.



<u>Transportation Management Plan (SA Section 15.1)</u>

Progress continues on the implementation of the Transportation Management Plan. The USDA-FS and PacifiCorp continued to jointly share the costs associated with road and bridge maintenance. An agreement was developed by the USDA-FS and PacifiCorp to refine the definition of deferred maintenance with respect to bridges and major culverts as presented in the TMP and to catalog the deferred maintenance required prior to cost-sharing associated with bridges on jointly-maintained roads. Scheduled culvert replacements, inventories of Level 1 roads and roads decommissionings were completed this year. The remaining 1.41 miles of road decommissioning, bridge inspections, bridge maintenance, and culvert replacements are planned for 2009.





Tributary Enhancement Program (SA Section 19.1)

PacifiCorp worked with the ODFW, the BLM, and a consultant to design and construct four habitat structures consisting of large wood in the study reach of East Fork Rock Creek to complete the treatment of 39 structures for the effectiveness monitoring study. Future effectiveness monitoring will provide direction for use of SA Section 19.1 funding to benefit aquatic resources in the Rock Creek basin.

In addition, ODFW constructed instream enhancement structures by placing 200 logs and 1,000 boulders within 0.89 miles of the East Fork of Rock Creek downstream of the effectiveness monitoring study reach. This project further enhanced the original structures that were placed as part of a project completed by ODFW in 1987.

Design of modifications to the Rock Creek Fish Hatchery dam fish ladder have progressed during 2008, with construction anticipated to begin in 20



construction anticipated to begin in 2009. The conservation easement program was pursued as in past years, but has been unsuccessful; funds may be reallocated to other parts of the program.

Long-Term Monitoring and Predator Control Study Program (SA 19.2)



Soda Springs' dam. Annual reports provide a running summary of results and help direct the program of work each year.

During 2008, substantial information was collected to help characterize baseline conditions from which to judge the success of providing anadromous fish passage at



Watson Ridge Communication Facility (supporting SA Sections 5.1, 5.5, 6.5, and 14.2)

After several years of planning, design and agency consultation, the communication engineering design was completed in 2008. The civil construction is scheduled to start on June 1, 2009. This project is scheduled to be finished prior to snowfall in 2009, and will provide the communications infrastructure for obligations required by Settlement Agreement Sections 5.1, 5.5, 6.5, and 14.2. This project installs radio and microwave communications and provides for the capability of a communications link from the North Umpqua Project to the Hydro Control Center.

3.1.2 Plans and Reports

The following plans and reports were completed and/or revised:

- Soda Springs Spawning Habitat Annual Report, January 2008 (SA Section 8.3)
- **Historic Structures Plan**, March 2008 (SA Section 18.1)
- **2007** Annual Avian Protection Report, March 2008 (SA Section 13.4)
- Soda Springs Water Quality Station Annual Report, USGS No. 14316460, for Water Year 2007; August 2008 (401 Certification)
- **2007 Long Term Monitoring and Predator Control Study**; December 2008 (SA Section 19.2)
- Lemolo Reservoir Management Report; December 2008 (SA Section 9.3)
- Stream Temperature Monitoring Plan Report, Water Year 2007; December 2008 (401 Certification)
- Erosion Control Plan Annual Report, December 2008 (SA Section 14.5)

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3.2 FERC License Actions

The FERC license contains actions that are required in addition to those actions in the Settlement Agreement. Table 3.2-1 summarizes the FERC License requirements that were fulfilled during this reporting period.

Table 3.2-1 FERC License Actions Status

Date	License Article	Settlement Agreement	5	Status/
Filed	No.	Section No.	Description Townstrial Commontivity Plans	Comments
9/3/07	402	11.3	Terrestrial Connectivity Plan	Approved 4/14/08
2/28/08	403	n/a	Revised Flow Monitoring Plan	Approved 6/4/08
				Letter order
				acceptance issued
			2007 Threatened & Endangered	4/3/08; filing
	411 &	,	Species Monitoring and Bald	requirement
3/6/08	412	n/a	Eagle Report	satisfied
			Request for Extension of time to	
			complete construction of Lemolo	
			2 Canal Shut-off & Drainage	
4/24/08	401	14.2	System (to 12/31/09)	Approved 8/20/08
			Clearwater 2 Canal Shut-off &	
			Drainage System Plan,	
5/28/08	401	14.2	Specifications, QCIP and TCEAP	Approved 8/25/08
			2007 Resource Coordination	
6/20/08	401	21.4.2	Committee Annual Report	
		USDA-FS	Request for Extension of Time to	
	Appendix	4(e) Cond.	file Survey and Manage Species	
7/24/08	В	17	Plan (to 12/31/08)	Approved 8/27/08
			Request for Extension of Time for	
			completion of designs for Soda	
			Springs Fish Passage facilities	
8/18/08	401	4.1.1 & 4.1.2	(to 12/31/08)	Approved 9/17/08
			Request for Extension of Time for	
			completion of designs for Soda	
			Springs Fish Passage facilities	
12/2/08	401	4.1.1 & 4.1.2	(to 3/24/09)	Approved 12/19/08
		USDA-FS	Request for Extension of Time to	
	Appendix	4(e) Cond.	file Survey and Manage Species	
12/12/08	В	17	Plan (to 6/30/09)	
			2008 Historic Properties Annual	
12/16/08	414	18.1 & 18.2	Report/Action Plan	

SECTION 4.0 FIDUCIARY REPORTING

Consistent with Settlement Agreement fiduciary reporting requirements, this section provides account information for the following actions and fulfills the requirement to annually report the amounts deposited into and disbursed from each account:

- SA Section 7.2.3 (amended) Gravel Augmentation Program
- SA Section 8.3.5 (amended) North Umpqua River Habitat Restoration/Creation Project
- SA Section 19.1.1.3 Tributary Enhancement Program
- SA Section 19.3.1 Mitigation Fund

The Settlement Agreement does not require annual reporting for SA Section 19.2 Long-Term Monitoring and Predator Control Fund. Since this was likely an oversight, the account information for this fund is also provided in this section.

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Fiduciary Reporting SA Section 7.2 Gravel Augmentation Program

Date	Item	Expenditures	Funding	Balance
2008	Opening Balance			\$34,238.21
2008	2008 Escalation (as per SA 22.4.4)		\$819.19	\$35,057.40
2008	Expenditures	\$0.00		
2008	Total Expenditures	\$0.00		\$35,057.40
2008	Ending Balance			\$35.057.40

Fiduciary Reporting SA Section 8.3 North Umpqua River Habitat Restoration/Creation Project

Date	Item	Expenditures	Funding	Balance
2008	Opening Balance			\$209,161.01
	2008 Escalation (as per SA			
2008	22.4.4)		\$5,004.45	\$214,165.46
2008	Expenditures	\$0.00		
2008	Total Expenditures	\$0.00		\$214,165.46
2008	Ending Balance			\$214,165.46

Fiduciary Reporting SA Section 19.1 Tributary Enhancement Program Fund

Date	Item	Expenditures	Funding	Balance
2008	Opening Balance			\$3,636,626.16
2008	Annual Funding (\$430K escalated)		\$513,920.75	\$4,150,546.91
2008	Expenditures		, ,	, , ,
	Barnes & Associates			
	Rock Creek Environmental			
	Assessment	(\$7,303.74)		
	Blue Ridge Timber			
	Log placement via cable pulling	(\$21,825.00)		
	Robert Hall			
	Fish habitat logs	(\$7,815.00)		
	Kevin Saylor Excavating			
	Fish habitat structure construction	(\$49,617.88)		
	Knife River Materials			
	Rip rap	(\$18,031.75)		
	McCord Bees & Things			
	Fish habitat logs	(\$24,619.00)		
	ODFW			
	19.2 EBA Technicians (Jul-Aug)	(\$36,448.86)		
	Peter McCord			
	Fish habitat logs	(\$16,226.00)		
	Roseburg Forest Products			
	Production of large boulders	(\$21,330.00)		
	Rundell			
	Boulder hauling & sorting	(\$12,725.00)		
	Seneca Jones Timber			
	Douglas Fir stumps	(\$4,240.00)		
	Stillwater Sciences			
	Rock Creek design oversight	(\$11,659.23)		
	Willard Marshall Trucking			
	Log hauling	(\$13,200.00)		
	Total Expenditures	(\$245,041.46)		\$3,905,505.45
2008	Interest Earned		\$104,644.31	\$4,010,149.76
2008	Bank Fees	(\$10,282.15)		\$3,999,867.61
2008	Ending Balance			\$3,999,867.61

Fiduciary Reporting SA Section 19.2 Long Term Monitoring/Predator Control Fund

Date	Item	Expenditures	Funding	Balance
2008	Opening Balance			\$21,165.62
2008	Annual Funding (\$100K escalated)		\$119,516.45	\$140,682.07
2008	Expenditures			
	Partnership for Umpqua Rivers (PUR)			
	Fish Sampling	(\$27,867.80)		
	ODFW			
	EBA Technicians	(\$92,776.70)		
	E.G. Solutions			
	Rotary Screw Fishtrap Repair	(\$9,836.00)		
2008	Total Expenditures	(\$130,480.50)		\$10,201.57
2008	Interest earned		\$4,896.56	\$15,098.13
2008	Bank fees	(\$451.19)		\$14,646.94
2008	Ending Balance			\$14,646.94

Note: Opening balance is \$39.92 higher than 2007 ending balance due to Stillwater's final 2007 carryover costs being less by this amount.

Fiduciary Reporting SA Section 19.3 Mitigation Fund

Date	Item	Expenditures	Funding	Balance
2008	Opening Balance			\$2,571,998.00
2008	Annual Funding (\$250K escalated)		\$298,791.13	\$2,870,789.13
2008	Expenditures			
	Mitigation Projects			
	Buster & Johnson Instream Restoration			
	Illahee Flats Big Game Enhancement			
	Lemolo Lake Reservoir Coop Investigation			
	Unique Habitat Restoration Planning			
	Lemolo Lake Reservoir Toxic Algae Public Health			
	Forage Regeneration - Mowich Park (18 acres)			
	Riparian Restoration - The Natural Way (Beaver Transplant)			
	Shrubland Habitat Maintenance			
	Stump Lake Wetlands Potholes 2			
	Food Plot Creation - Mowich Park (7 acres)			
	Upper NUR Anad Fish Spawning Habitat Restoration			
	Diamond Lake RD Knapweed Control			
	Mill Creek Culvert 2230			
	Mill Creek Culverts 2515 and 2245			
2008	Total Expenditures	(\$583,050.00)		\$2,287,739.13
2008	Interest Earned		\$8,006.97	\$2,295,746.10
2008	Ending Balance			\$2,295,746.10

SECTION 5.0 CONCLUSION

The material presented in the 2008 Annual Report represents benefits of a productive year that was made possible through the dedication of the Parties to the Settlement Agreement and their respective staff, PacifiCorp's implementation team members, and the public. This collaborative approach provided an effective framework for realizing benefits of the Settlement Agreement in a highly valued watershed.

The RCC ground rules and protocols for interagency teamwork and communication have provided an effective framework for watershed management consistent with the goals of the Settlement Agreement. Parties worked cooperatively toward meeting Settlement Agreement commitments during the report period and in most cases, projects were completed on schedule. The date for completing the final design of the Soda Springs fish passage facilities was modified by mutual consent of the Parties in order to develop the best option for returning juvenile fish safely downstream of the dam; this schedule change, however, will not affect the timing of construction. The schedule for wetland creation and enhancement was accelerated by developing plans for two wetlands to be constructed in 2009.

Significant accomplishments during the reporting period included 1) reaching consensus on final designs for the Soda Springs fish passage facilities; 2) completing construction of all facilities at project diversion dams to ensure minimum instream flow requirements; 3) completing designs of two wetlands, one in association with a new forebay at Lemolo 1; 4) completing construction of the canal shutoff and drainage system at Clearwater 2, as well as designs for a similar facility at Lemolo 2; and 5) completing annual Rolling Action Plans for ongoing programs to manage vegetation, erosion, transportation, aesthetics, recreation, and cultural resources in the North Umpqua Project area.

There were also notable challenges during 2008. Blooms of blue-green algae again emerged at Lemolo Reservoir, and the technical working group met the challenge with additional monitoring and actions (alternative reservoir management and a pilot trapnetting study) in an effort to find solutions. The canal shutoff and drainage system at Fish Creek faced difficulties in resolving communication issues; this is expected to be overcome in 2009. And, finally, the Parties have worked toward the development of modifications to the Soda Springs tailrace barrier. Such modifications are expected to benefit anadromous fish that have been drawn to the enhanced habitat in the bypass reach.

We have high expectations for 2009, as initial construction activities on the fish passage facilities at Soda Springs begin. However, most significant in the coming year are the projects on the Lemolo developments. Construction of the canal shutoff and drainage system at Lemolo 2 is scheduled, and will be coordinated with the dredging of the Lemolo 2 forebay, construction of the Lemolo 1 forebay expansion and wetland, and overhauls at both power

plants. Other projects scheduled for 2009 include completion of wildlife crossings, beginning work on aquatic reconnections, and developing designs for the Toketee trashrack modification and the Lemolo 2 reroute project.

- End of report -