SETTLEMENT AGREEMENT

AMONG PACIFICORP

PUBLIC UTILITY DISTRICT NO. 1 OF COWLITZ COUNTY, WASHINGTON NATIONAL MARINE FISHERIES SERVICE

NATIONAL PARK SERVICE

UNITED STATES BUREAU OF LAND MANAGEMENT UNITED STATES FISH AND WILDLIFE SERVICE

USDA FOREST SERVICE

CONFEDERATED TRIBES AND BANDS OF THE YAKAMA NATION
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
WASHINGTON INTERAGENCY COMMITTEE FOR OUTDOOR RECREATION
COWLITZ COUNTY

COWLITZ-SKAMANIA FIRE DISTRICT NO. 7 NORTH COUNTRY EMERGENCY MEDICAL SERVICE CITY OF WOODLAND

WOODLAND CHAMBER OF COMMERCE LEWIS RIVER COMMUNITY COUNCIL LEWIS RIVER CITIZENS AT-LARGE

AMERICAN RIVERS

FISH FIRST

ROCKY MOUNTAIN ELK FOUNDATION, INC.
TROUT UNLIMITED
THE NATIVE FISH SOCIETY

DATED NOVEMBER 30, 2004

CONCERNING THE RELICENSING OF THE LEWIS RIVER HYDROELECTRIC PROJECTS FERC PROJECT NOS. 935, 2071, 2111, 2213 COWLITZ, CLARK, AND SKAMANIA COUNTIES, WASHINGTON

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PARTIES TO THIS AGREEMENT

This Settlement Agreement ("Agreement") is entered into this 30th day of November, 2004 (the "Effective Date") pursuant to Federal Energy Regulatory Commission (the "Commission") Rule 602, 18 C.F.R. § 385.602, by and between PacifiCorp ("PacifiCorp") and Public Utility District No. 1 of Cowlitz County, Washington ("Cowlitz PUD") (each individually, the "Licensee" and collectively, the "Licensees"); National Marine Fisheries Service ("NOAA Fisheries"); National Park Service ("NPS"); United States Bureau of Land Management ("USBLM"); United States Fish and Wildlife Service ("USFWS"); USDA Forest Service ("USDA-FS"); Confederated Tribes and Bands of the Yakama Nation ("Yakama Nation"); Washington Department of Fish and Wildlife ("WDFW"); Washington Interagency Committee for Outdoor Recreation ("IAC"); Cowlitz County; Cowlitz-Skamania Fire District No. 7 ("FD#7"); North Country Emergency Medical Service ("NCEMS"); the City of Woodland; Woodland Chamber of Commerce; Lewis River Community Council; Lewis River Citizens At-Large; American Rivers; Fish First; Rocky Mountain Elk Foundation, Inc. ("RMEF"), Trout Unlimited, and The Native Fish Society, each of which, once having signed this Agreement, are referred to individually, as a "Party" and collectively, as the "Parties."

RECITALS

- A. The Lewis River Hydroelectric Projects consist of the Merwin Project (Project No. 935), Yale Project (Project No. 2071), Swift No. 2 Project (Project No. 2213), and Swift No. 1 Project (Project No. 2111) (each individually referred to as a "Project" and collectively as the "Projects") and associated powerhouses, transmission facilities, recreational facilities, hatcheries, reservoirs, canals, and lands within the Projects' Boundaries and wildlife lands managed outside the Project Boundaries. PacifiCorp owns the Merwin Yale and Swift No. 1 Project, while Cowlitz PUD owns the Swift No. 2 Project (the combined Projects of Swift No. 1 and Swift No. 2 are referred to collectively as the "Swift Projects"). Construction of the Projects began with the Merwin Dam in 1929 and was completed with the construction of Swift No. 1 and Swift No. 2 ending in 1958. The Federal Power Commission issued the first license for Merwin on November 29, 1929, which expired on November 29, 1979. That license was renewed on October 6, 1983 and was originally due to expire on April 30, 2009 but was accelerated by a Commission Order and now expires on April 30, 2006. The original license for Yale was issued on April 24, 1951 and expired on April 30, 2001. The original license for Swift No. 1 was issued on May 1, 1956 and expires on April 30, 2006. The original license for Swift No. 2 was issued on November 29, 1956, effective May 1, 1956, and expires on April 30, 2006.
- B. In January 1999, PacifiCorp and Cowlitz PUD filed a request with the Commission for approval of the use of the Commission's Alternative Licensing Procedures and for the simultaneous and coordinated processing of the license applications for all four Projects. In April 1999, the Commission approved this request and issued an order accelerating the Merwin license expiration. An application to relicense the Yale Project was submitted to the Commission in 1999. The Commission granted PacifiCorp's request that processing of the Yale license application be deferred until the applications for Merwin, Swift No. 1, and Swift No. 2 were filed on or before April 30, 2004. The Parties anticipate concurrent environmental review

of all four Projects. On April 29 and 30, 1999, PacifiCorp and Cowlitz PUD initiated the collaborative process with a public meeting. A Memorandum of Agreement and Communications Protocol among the Parties was developed for the collaborative process.

NOW, THEREFORE, in consideration of their mutual covenants in this Agreement, the Parties agree as follows:

DEFINITIONS

"401 Certification" is a certification issued by WDOE pursuant to section 401 of the Clean Water Act.

"ACC" is the Aquatics Coordination Committee described in Section 14.

"ADAAG" is defined in Section 11.2.1.4.

"Adjusted for Inflation" means that the stated dollar amount shall be adjusted according to the following formula:

 $AD = D \times (NGDP/IGDP)$

WHERE:

AD = Adjusted dollar amount as of April 30 of the year in which the adjustment is made.

D = Dollar amount prior to adjustment.

IGDP = GDP-IPD for the fourth quarter of the year prior to the previous April 30 adjustment date.

NGDP = GDP-IPD for the fourth quarter of the year prior to the current April 30 adjustment date.

"GDP-IPD" is the value published for the Gross Domestic Product Implicit Price Deflator by the U.S. Department of Commerce, Bureau of Economic Analysis (being on the basis of 2000 = 100), in the third month following the end of the applicable quarter. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by the Parties. If the base year for GDP-IPD is changed or if publication of the index is discontinued, the Parties shall promptly make adjustments or, if necessary, select an appropriate alternative index to achieve the same economic effect.

If a sum is stated in 2003 dollars, then the first adjustment shall be as of April 30, 2004. If a sum is stated in 2004 dollars, then the first adjustment shall be as of April 30, 2005.

[&]quot;Adjustment Period" is defined in Section 6.1.4.a.

- "Adult Trap Efficiency" or "ATE" is defined in Table 4.1.4.
- "Agencies" means NOAA Fisheries, NPS, USBLM, USFWS, USDA-FS, WDFW, and IAC, and, if a Party, Washington State Department of Natural Resources.
- "Agreement" means the entirety of this agreement and all attached exhibits, schedules, and appendices.
- "Alternative Dispute Resolution" or "ADR Procedures" refers to the dispute resolution process set forth in Section 15.10 of this Agreement.
- "American Rivers" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Americans with Disabilities Act" or "ADA" means the federal statute set forth at 42 U.S.C. §§ 12101-12213.
- "Annual Release Quantity" is defined in Section 6.1.
- "Annual Operating Plan" is defined in Section 8.2.3.
- "Annual Plan" is defined in Section 10.8.3.
- "Appeal" means a request for rehearing, or appeal or other formal agency adjudication during the designated period as provided under the applicable agency's statutes and regulations.
- "Aquatics Fund" is defined in Section 7.5.
- "Bypass Reach" is defined in Section 6.1.
- "Canal Drain" is defined in Section 6.1.
- "CIT" or "Cowlitz Indian Tribe" is listed as a potential additional Party to this Agreement in Section 17.3.
- "City of Woodland" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Clark County" is listed as a potential additional Party to this Agreement in Section 17.3.
- "Clark Skamania Fishers" is listed as a potential additional Party to this Agreement in Section 17.3.
- "Clean Water Act" means the federal statute set forth at 33 U.S.C. §§ 1251-1387.
- "Collection Efficiency" or "CE" is defined in Table 4.1.4.
- "Collection Survival" or "CS" is defined in Table 4.1.4.
- "Combined Flow Schedule" is defined in Section 6.1.

- "Commission" means the Federal Energy Regulatory Commission (defined herein), or any successor agency created during the terms of the New Licenses.
- "Consensus" means that all Parties participating in a committee or other decision-making group consent to a decision. Consent does not necessarily imply that a Party agrees completely with a particular decision, just that the Party is willing to go along with the decision rather than block the action.
- "Conservation Groups" means American Rivers, Fish First, RMEF, Trout Unlimited, and The Native Fish Society, and, if Parties, Clark Skamania Fishers and Federation of Fly Fishers.
- "Constructed Channel" is defined in Section 6.1.3.a.
- "Construction Costs" is defined in Section 6.1.3.b.
- "Consultation" or "Consult" means that the Licensees shall obtain the views of and attempt to reach Consensus among the specified Parties whenever this Agreement requires the Licensees to Consult with one or more of the Parties. When Consultation is required under this Agreement, the Licensees shall allow a minimum of 30 days for the specified Parties to provide comments prior to filing written plans, reports, or other items with the Commission. If Consensus is not reached, the Licensees shall take action according to the schedule provided in this Agreement or the New Licensees and shall describe to the Commission how the Licensees' submission accommodates the comments and recommendations of the Parties. If the Licensees do not adopt a recommendation, the filing shall include the Licensees' reasons, based on Project-specific information. The Licensees shall provide the Commission with a copy of the Parties' comments. Any Party may seek to resolve such disagreements in accordance with the ADR Procedures provided under Section 15.10. The Parties may submit their own comments to the Commission.
- "Cougar Creek Conservation Covenant" is defined in Section 10.6.2.
- "Counties" means Cowlitz County and, if Parties, Clark County and Skamania County.
- "Cowlitz County" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Cowlitz PUD" or "Public Utility District No. 1 of Cowlitz County, Washington" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Descaling" is defined in Table 4.1.4.
- "Devil's Backbone Conservation Covenant" is defined in Section 10.6.1.
- "Downstream Transport Plan" is defined in Section 4.1.8.e.
- "Effective Date" is defined in the first paragraph of this Agreement, entitled "Parties to this Agreement."

- "Endangered Species Act" or "ESA" means the federal statute set forth at 16 U.S.C. §§ 1531-1544.
- "Evaluation Methodology" is defined in Section 3.1.1.
- "FCC" is the Flow Coordination Committee described in Section 6.2.5.
- "FD#7" or "Cowlitz-Skamania Fire District No. 7" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Feasibility Report" is defined in Section 6.1.3.a.
- "Federal Power Act" or "FPA" means the federal statute set forth at 16 U.S.C. §§ 791a-828c.
- "Federation of Fly Fishers" is listed as a potential additional Party to this Agreement in Section 17.3.
- "Fee Agreement" is defined in Section 11.2.17.
- "FEMA" is the Federal Emergency Management Agency.
- "FEMA Agreement" is defined in Section 12.2.
- "Final Terms and Conditions" refers, individually and collectively, to the following terms, conditions, recommendations, and prescriptions filed with the Commission by certain of the Agencies in final or modified form as of the date of issuance of each of the New Licenses: (1) final terms and conditions filed by USDA-FS under section 4(e) of the FPA; (2) fishway prescriptions filed by NOAA Fisheries or USFWS under section 18 of the FPA; (3) recommendations filed by NOAA Fisheries, USFWS, or WDFW under section 10(j) of the FPA; (4) terms of the 401 Certifications for the Projects given by WDOE; and (5) terms and conditions of the biological opinion(s) and incidental take statement(s) issued by USFWS and

NOAA Fisheries under section 7 of the ESA. "Fish First" is listed as a Party in the first

"Flood Management Season" is defined in Section 12.8.a.

paragraph of this Agreement, entitled "Parties to This Agreement."

- "Force Majeure" is defined in Section 16.3.
- "Forecasted Flow" is defined in Section 12.8.d.
- "Forest Road 90" is defined in Section 13.2.2.1.
- "Habitat Preparation Plan" is defined in Section 7.4.
- "Hatchery Facilities" is defined in Section 8.1.
- "Hatcheries Capacity Limit" is defined in Section 8.1.
- "Hatchery and Supplementation Plan" or "H&S Plan" is defined in Section 8.1.

- "Hatchery and Supplementation Program" is defined in Section 8.1.
- "Hatchery Ocean Recruits" means those Ocean Recruits that were spawned in a hatchery.
- "Hatchery Target" is defined in Section 8.3.
- "Hatchery Target Floor" is defined in Section 8.3.2.3.
- "HEP" is defined in Section 10.8.4.
- "HGMPs" is defined in Section 8.2.
- "HPA" means Hydraulic Project Approval, set forth in Washington State Law at RCW 77.55.100.
- "HPMP" is defined in Section 13.1.1.
- "HSI" is defined in Section 10.8.4.1.
- "I&E Program" is defined in Section 11.2.5.
- "IAC" or "Washington Interagency Committee for Outdoor Recreation" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "In Lieu Fund" is defined in Section 7.6.
- "Inconsistent" or "Inconsistency" means one or more of the Final Terms and Conditions, terms in the New Licenses (defined below), Permits, or other measures issued by courts or agencies materially, either individually or cumulatively, conflicts with, or adds to, omits portions of or prevents implementation of the PM&E Measures (defined below) and other commitments made in this Agreement.
- "Injury" is defined in Table 4.1.4.
- "Interests in Land" is defined in Section 10.1.
- "Issuance" or "Issued" means that WDOE has issued its 401 Certification for the referenced New License(s), NOAA Fisheries and USFWS have issued their biological opinions and incidental take statements for the referenced New License(s), and the Commission has issued the referenced New License(s).
- "Issuance of all New Licenses" means that WDOE has issued its 401 Certification for all four of the New Licenses, NOAA Fisheries and USFWS have issued their biological opinions and incidental take statements for all four of the New Licenses, and the Commission has issued the last of the four New Licenses.
- "Juvenile Production" is defined in Section 8.4.
- "Juvenile Production Targets" is defined in Section 8.4.1.

- "LCFRB" or "The Lower Columbia Fish Recovery Board" is listed as a potential additional Party to this Agreement in Section 17.3.
- "Lewis River Citizens At-Large" refers to John Clapp of 9315 N.E. Etna Road, Woodland, Washington, and Noel Johnson of 6412 N.W. Amidon Road, Woodland, Washington, and is listed in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Lewis River Fund" is defined in Section 10.3.
- "License" means the regulatory authorization for construction, maintenance, and operation of a hydroelectric project subject to the jurisdiction of the Commission pursuant to the FPA.
- "Licensee" and "Licensees" are defined in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Lower Lewis River Access Sites" means the Cedar Creek River Access Site, Island River Access Site, Merwin Hatchery River Access Site, Johnson Creek River Access Site, and Lewis River Hatchery River Access Site.
- "LRC" is the Lewis River Recreation Advisory Committee described in Section 11.2.16.
- "Lewis River Community Council" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "LWD" means large woody debris.
- "LWD Fund" is defined in Section 7.1.1.
- "*M&E Plan*" is defined in Section 9.1.
- "Manual" is defined in Section 12.2.
- "Merwin Downstream Bull Trout Facility" is defined in Section 4.10.1.
- "Merwin Downstream Facility" is defined in Section 4.6.
- "Merwin Trap" is defined in Section 4.2.b.
- "Merwin Trap Upgrades" is defined in Section 4.2.c.
- "Merwin Upstream Transport Facility" is defined in Section 4.3.
- "National Environmental Policy Act" or "NEPA" means the federal statute set forth at 42 U.S.C. §§ 4321-4370f.
- "Natural Ocean Recruits" means those Ocean Recruits that were produced on natural spawning grounds.

- "Natural Production Threshold" is defined in Section 8.3.2.3.
- "NCEMS" or "North Country Emergency Medical Service" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "New Information" is defined in Section 4.1.9.c.
- "New License" or "New Licenses" means the license for one or more Projects contained in an order or orders issuing new licenses and issued by the Commission under the FPA. 16 U.S.C. §808.
- "NOAA" is the National Oceanic and Atmospheric Administration.
- "NOAA Fisheries" or "National Marine Fisheries Service" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "NPS" or "National Park Service" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to this Agreement."
- "Ocean Recruit Methodology" is defined in Section 8.3.2.2.
- "Ocean Recruits" is defined in Section 8.1.
- "Other Governmental Entities" means Cowlitz County and City of Woodland, and, if Parties, Clark County, Skamania County, and LCFRB.
- "Overall Downstream Survival" or "ODS" is defined in Table 4.1.4.
- "PacifiCorp" is an Oregon corporation and is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Party" and "Parties" are defined in the first paragraph of this Agreement, entitled "Parties to This Agreement," and include additional entities that become Parties pursuant to Section 17.3.
- "Permit" and "Permits" are defined in Section 2.2.
- "Phase I Status Check" is defined in Section 3.4.
- "Phase II Status Check" is defined in Section 3.5.
- "Phase One" is defined in Section 11.2.2.2.
- "Phase Three" is defined in Section 11.2.2.4.
- "Phase Two" is defined in Section 11.2.2.3.
- "Plateau Change" is defined in Section 6.2.2.b.

- "Plateau Step" is defined in Section 6.2.2.a.
- "Pre-Releases" is defined in Section 12.8.b.
- "Proceeding" is defined in Section 2.2.
- "Project" and "Projects" are defined in Recital A.
- "Project Boundary" refers, for the Yale, Merwin, and Swift No. 1 Projects, to the boundary of each Project described in Exhibit G to each of PacifiCorp's Applications for New Licenses for the Yale, Merwin, and Swift No. 1 Projects (submitted in April 2004 for Merwin and Swift No. 1, and April 1999 for Yale), and for the Swift No. 2 Project, to the boundary of the Swift No. 2 Project described in Exhibits G-1 and G-6 (submitted to the Commission in April 2004).
- "Protection, Mitigation, and Enhancement Measures" or "PM&E Measures" refers to the measures set forth in Sections 3 through 13 of this Agreement for the protection and enhancement of the environment of the Projects and for the mitigation of any adverse impacts of the Projects.
- "Ramping" is defined in Section 6.2.1.
- "RDSUP" is defined in Section 11.2.1.1.
- "Recreation Resources Management Plan" or "RRMP" is defined in Section 11.1.
- "Reintroduction Outcome Goal" is defined in Section 3.1.
- "Release Points" is defined in Section 6.1.
- "Release Ponds" is defined in Section 4.4.3.
- "Relicensing Proceeding" means the process of applying for and obtaining New Licenses for the Projects.
- "Reservoir Survival" is defined in Section 7.5.3.
- "Resource Projects" is defined in Section 7.5.
- "RMEF" or "Rocky Mountain Elk Foundation, Inc." is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "RRMP" is defined in Section 11.1.
- "Section" includes the referenced section number as well as all subsections of and tables included in that particular section.
- "Services" means NOAA Fisheries and USFWS.
- "Skamania County" is listed as a potential additional Party to this Agreement in Section 17.3.

- "Swift Downstream Facility" is defined in Section 4.4.1.
- "Swift Fund" is defined in Section 10.2.
- "Swift Projects" is defined in Recital A.
- "Swift Upstream Bull Trout Facility" is defined in Section 4.10.2.
- "Swift Upstream Facility" is defined in Section 4.8.
- "TCC" means the Terrestrial Coordination Committee described in Section 14.
- "The Native Fish Society" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Tracking Account" means a record maintained by a Licensee either electronically or on paper that functions like a checkbook register that is used to keep track of the amount of funding that such Licensee is obligated to provide under a particular provision of this Agreement. Tracking Accounts shall indicate the amounts disbursed, interest accrued, if any, and remaining balance available for expenditure for each fund. The Licensees shall maintain separate Tracking Accounts for each fund established under this Agreement. A Tracking Account does not represent an actual cash or bank account. Interest on funds is provided in the following Sections: 7.7, 10.5, and 10.8.2.3.
- "Transported Anadromous Species" is defined in Section 4.1.7.
- "Transported Species" is defined in Section 4.1.7.
- "Trout Unlimited" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Turbine Entrainment" is defined in Section 9.2.1.f.
- "Turbine Survival" is defined in Section 9.2.1.g.
- "Undeveloped Lands Agreement" is defined in Section 11.2.17
- "Upper Release Point" is defined in Section 6.1.
- "Upstream Passage Survival" or "UPS" is defined in Table 4.1.4.
- "Upstream Transport Plan" is defined in Section 4.1.8.c.
- "USBLM" or "United States Bureau of Land Management" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "USDA-FS" or "USDA Forest Service" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to this Agreement."

- "USFWS" or "United States Fish and Wildlife Service" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "USGS" means the United States Geological Survey. "WDFW" or "Washington Department of Fish and Wildlife" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "WDNR" or "Washington State Department of Natural Resources" is listed as a potential additional Party to this Agreement in Section 17.3.
- "WDOE" means the Washington Department of Ecology.
- "Wildlife Habitat Management Plan" or "WHMP" is defined in Section 10.8.
- "Woodland Chamber of Commerce" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "WSDOT" means the Washington State Department of Transportation.
- "Yakama Nation" or "Confederated Tribes and Bands of the Yakama Nation" is listed as a Party in the first paragraph of this Agreement, entitled "Parties to This Agreement."
- "Yale Downstream Bull Trout Facility" is defined in Section 4.10.1.
- "Yale Downstream Facility" is defined in Section 4.5.
- "Yale Fund" is defined in Section 10.1.
- "Yale Upstream Bull Trout Facility" is defined in Section 4.10.2.
- "Yale Upstream Facility" is defined in Section 4.7.

SECTION 1: PURPOSE AND EFFECT OF THIS AGREEMENT

- 1.1 Purpose of Agreement. The Parties have entered into this Agreement for the purpose of resolving all issues between the Licensees and the other Parties regarding relicensing of the Projects and for the purpose of obtaining a Commission order or orders issuing to PacifiCorp and to Cowlitz PUD New Licenses for their respective Projects, subject to the Protection, Mitigation, and Enhancement Measures set forth in this Agreement. For these purposes, the Parties agree that this Agreement is fair and reasonable and in the public interest within the meaning of Commission Rule 602 governing offers of settlement. 18 C.F.R. § 385.602. The Parties request that the Commission accept this Agreement in its license orders and incorporate, without material modification, all of PacifiCorp's obligations under this Agreement into each of its New Licenses and all of Cowlitz PUD's obligations under this Agreement into its New License. The Parties request that the Commission incorporate into each of the New Licenses for both PacifiCorp and Cowlitz PUD any obligations that both Licensees are obligated to perform under this Agreement. The Parties request that the Commission refrain from including in the New Licenses any conditions Inconsistent with this Agreement or any PM&E Measures or other commitments contained in this Agreement, except as may be necessary to enable the Commission to ascertain and monitor the Licensees' compliance with the New Licenses, and to comply with the FPA and its implementing regulations and other federal and state laws. Each of the Parties agrees that, except as specifically provided below, each Licensee's performance of its obligations under this Agreement and the Final Terms and Conditions will be consistent with and will fulfill the Licensee's existing statutory and regulatory obligations as to each Party relating to relicensing and operation of the Projects under the New Licenses. Subject to the terms of this Agreement, so long as the Licensees faithfully implement the terms of this Agreement and the New Licenses, the other Parties will not assert before the Commission or in other proceedings that the Licensees' operation of the Projects under the New Licenses is in breach of or inconsistent with the laws referenced in Section 1 of this Agreement. Subject to the terms of this Agreement, so long as the Licensees faithfully implement the terms of this Agreement and the New Licenses, the CIT and the Yakama Nation will not assert before the Commission or in other proceedings that the Licensees' operation of the Projects under the New Licenses is inconsistent with the rights of the CIT and the Yakama Nation referenced in Section 1.1.4 below. So long as a Licensee does not withdraw from this Agreement in the manner provided in Section 15 below, such Licensee's obligations under this Agreement and its New License(s) shall include any Inconsistent provisions incorporated into the New License(s) or any Permits. Without limiting the generality of the preceding sentences, the Parties agree that each Licensee's performance of its obligations in this Agreement and the Final Terms and Conditions are consistent with and will fulfill all obligations under the following laws:
- 1.1.1 Section 18 of the FPA, 16 U.S.C. § 811. Section 18 of the FPA states that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as the Secretaries of the U.S. Departments of Commerce (through NOAA Fisheries) and of the Interior (through USFWS) may prescribe. NOAA Fisheries and USFWS intend that any Final Terms and Conditions under section 18 of the FPA will be consistent with the relevant provisions of this Agreement, and that any Inconsistency shall be resolved in accordance with Section 15 below.

- 1.1.2 Section 4(e) of the FPA, 16 U.S.C. § 797(e). Section 4(e) of the FPA states that the Commission may issue a license for a project on a reservation only if it finds that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired. Such a reservation includes, without limitation, USDA-FS- and USBLM-administered land. Section 4(e) of the FPA requires that a Commission license for a project located on a reservation include the conditions that the Secretary of the department under whose supervision the reservation falls deems necessary for the adequate protection and utilization of such reservation. USDA-FS and USBLM intend that any Final Terms and Conditions under section 4(e) of the FPA will be consistent with the relevant provisions of this Agreement and that any Inconsistency shall be resolved in accordance with Section 15 below.
- 1.1.3 Section 10(j) of the FPA, 16 U.S.C. § 803(j). Section 10(j) of the FPA requires the Commission, when issuing a license, to consider and include conditions based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat)" affected by the Projects. NOAA Fisheries, USFWS, and WDFW intend that their Final Terms and Conditions under section 10(j) of the FPA will be consistent with the relevant provisions of this Agreement and that any Inconsistency shall be resolved in accordance with Section 15 below.
- 1.1.4 Federal Trust Responsibility and Treaty Rights. Nothing in this Agreement is intended to nor shall it in any way abridge, limit, create, expand, diminish, abrogate, adjudicate, acknowledge, or resolve any Tribal or Indian right reserved or protected in any treaty, executive order, statute, court decree, federal trust responsibility, or other federal law. Nothing in this Agreement shall establish or be used as evidence of the absence or presence of usual and accustomed places, grounds, stations, traditional use areas, aboriginal rights, or any other Tribal or Indian rights or claims under any treaty of the United States or federal law. The Projects are not located upon tribal reservation land.
- 1.1.5 Threatened and Endangered Species. Section 7 of the ESA requires a federal agency to ensure that its actions are not likely to jeopardize the continued existence of federally listed or proposed-for-listing threatened or endangered species or result in the destruction or adverse modification of designated or proposed-for-designation critical habitat. The Commission's relicensing of the Projects will be the basis for a section 7 consultation between the Commission and NOAA Fisheries and USFWS. It is anticipated that the Commission will use the provisions of this Agreement as the proposed federal action, and any ESA biological opinions and incidental take statements issued by NOAA Fisheries and USFWS relating to relicensing of the Projects will address and evaluate such provisions. The Commission has designated PacifiCorp and Cowlitz PUD as the nonfederal representatives for the purpose of preparing draft biological assessments for the proposed federal action (which is anticipated to be consistent with the provisions of this Agreement). NOAA Fisheries and USFWS anticipate that the measures in this Agreement will be adequate to avoid jeopardy to the continued existence of any federally listed threatened or endangered species, to avoid the destruction or adverse modification of any designated critical habitat, and to minimize any incidental take occurring as a result of the Projects' operations for listed threatened or endangered species. In addition, NOAA Fisheries anticipates that the measures in this Agreement will be adequate to avoid jeopardy to the continued existence of any species proposed for listing under the ESA as a threatened or endangered species. As of the Effective Date, there are no species proposed for

listing by the USFWS that are affected by the Projects and there is no habitat proposed for designation as critical habitat by either USFWS or NOAA Fisheries. As of the Effective Date, consultation under section 7 of the ESA has not been completed on relicensing of the Projects consistent with the PM&E Measures and any other relevant commitments in this Agreement. Therefore, NOAA Fisheries and USFWS do not formally bind themselves to take any particular action with respect to ESA compliance or to issue any specific terms and conditions in the biological opinions and incidental take statements. NOAA Fisheries and USFWS are not prejudging the outcome of any consultation and expressly reserve the right, consistent with federal law, to make findings and take such future actions as necessary to meet their obligations under the ESA. The Services expressly contemplate that the Commission will take subsequent actions with respect to issuance of the New Licenses, and any subsequent modification, change, condition, or omission made with respect to the New Licenses, must fully satisfy the requirements of ESA section 7, including the terms and conditions contained in any biological opinions and incidental take statements issued by NOAA Fisheries and/or USFWS. The Parties acknowledge that the Commission may not issue the New Licenses until it has completed ESA section 7(a)(2) consultation with NOAA Fisheries and USFWS with respect to any threatened or endangered species that may be affected by the Projects. The Parties reserve the right to request rehearing and seek judicial review in the event that the Commission issues the New Licenses prior to completing consultation.

- 1.1.6 401 Certification. Except as provided expressly in Section 6.1.7 below, the non-utility Parties do not take a position on the adequacy of the PM&E Measures to meet water quality standards and uses. The Licensees shall include, without limitation and in addition to addressing all water quality standards, in their respective applications for 401 Certification, methods to bring the Projects into compliance with numerical water quality standards, if necessary. PacifiCorp has developed a draft Water Quality Adaptive Management Plan and has distributed copies to the Parties. Cowlitz PUD has developed a draft Water Quality Assessment and Management Plan and has distributed copies to the Parties. While it is uncertain whether such plans will be accepted as adequate by WDOE, the Licensees acknowledge that inclusion in the 401 Certification of the measures contemplated by PacifiCorp's draft Water Quality Adaptive Management Plan and Cowlitz PUD's draft Water Quality Assessment and Management Plan submitted to WDOE would not be Inconsistent with this Agreement, provided that if WDOE requires additional material measures it may be considered an Inconsistency. Measures required, if any, by WDOE as part of its 401 Certification to resolve the water right at the Speelyai Power Canal Diversion shall not be considered Inconsistent with this Agreement.
- 1.1.7 <u>NEPA Analysis</u>. In connection with the issuance of the New Licenses, the Commission will complete an environmental analysis under NEPA. The Parties intend that the Commission will incorporate the PM&E Measures under this Agreement into the Commission's preferred alternative for the draft and final environmental analysis under NEPA. If the draft or final environmental analysis issued by the Commission indicates that the final license order may contain measures that are Inconsistent with this Agreement, the Parties will confer to determine how to preserve the benefits of this Agreement.

With respect to PM&E Measures to be implemented by the Licensees on National Forest System or USBLM lands, if the PM&E Measure is specified as to nature and location in the Commission's environmental analysis (such as changes to shoreline recreation sites under Section 11.2.1.1 below), and is consistent with this Agreement, then USDA-FS or USBLM,

respectively, agree no further analysis is necessary from USDA-FS or USBLM, respectively, and USDA-FS or USBLM shall not unreasonably withhold written authorization for such activities. If any PM&E Measure is not specified as to its nature and location in the Commission's environmental analysis (such as Juvenile Acclimation Sites to be created under Section 8.8 below), then the Licensees shall conduct further environmental analysis as determined by the Commission and shall obtain written authorization of USDA-FS or USBLM prior to implementation of the measure. For any proposed measure on USDA-FS or USBLM lands outside existing Project Boundaries, the Licensees shall request a USDA-FS or USBLM special use authorization for the measure. The Licensees shall fund any USDA-FS or USBLM environmental analyses related to the issuance of the special use authorization. USDA-FS or USBLM does not intend that its written authorization of any project shall impose upon the Licensees conditions Inconsistent with this Agreement or impose any additional costs or charges beyond stipulations for fire protection, safety, or other standard special use authorization measures consistent with the requirements in effect at the time for implementation of similar actions on National Forest System or USBLM lands prior to their being undertaken by the Licensees or their contractors. This paragraph does not apply to projects implemented by third parties or Parties other than the Licensees, or projects funded from the Aquatics Fund, the In Lieu Fund, the Swift Fund, the Yale Fund, the LWD Fund, or the Lewis River Fund, for which such costs shall be paid from the funds or by project sponsors. The provisions of this paragraph are subject to changes in statutes or regulations governing USDA-FS or USBLM NEPA procedures.

- 1.2 <u>Limitations</u>. This Agreement establishes no principle or precedent with respect to projects or matters not covered by this Agreement, or with regard to any Party's participation in any other pending or future licensing proceeding. Further, no Party to this Agreement shall be deemed to have approved, accepted, agreed to, or otherwise consented to any operation, management, valuation, or other principle underlying any of the matters covered by this Agreement, except as expressly provided in this Agreement. Without affecting the enforceability of this Agreement, by entering into this Agreement, no Party shall be deemed to have made any admission or waived any contention of fact or law that it did make or could have made in the Relicensing Proceeding. This Agreement shall not be offered as evidence or cited as precedent except in a proceeding to establish the existence of or to enforce or implement this Agreement including filing this Agreement with the Commission under 18 C.F.R. § 385.602. This Section 1.2 shall survive any termination of this Agreement.
- Representations Regarding Consistency and Compliance with Statutory Obligations. By entering into this Agreement, the Agencies represent that they believe their statutory and other legal obligations are, or can be, met through implementation of this Agreement and the Final Terms and Conditions. Nothing in this Agreement shall be construed to limit any government agency with jurisdiction directly related to the Projects from complying with its obligations under applicable laws and regulations or from considering and responding to public comments received in any required environmental review or regulatory process related to the Projects, in accordance with this Agreement. This Agreement shall not be interpreted to predetermine the outcome of any environmental review or appeal process.
- 1.4 <u>License Terms</u>. The Licensees will seek a 50-year term for each of the New Licenses and the Parties agree to support or not to oppose such request.

1.5 <u>Commission Approval</u>. The Parties recognize that implementation of the PM&E Measures contained in this Agreement, including development of plans, studies, and designs, may be subject to the approval of the Commission. The Licensees shall file plans, studies, and designs with the Commission for review and approval, as necessary. The Licensees shall notify the Aquatic Coordination Committee ("ACC") (Section 14) or the Terrestrial Coordination Committee ("TCC") (Section 14) as appropriate, of any changes required by the Commission.

SECTION 2: ACTIONS UPON EXECUTION OF THIS AGREEMENT

- 2.1 <u>Commission Filings</u>. Following the Effective Date, on or about November 30, 2004, PacifiCorp and Cowlitz PUD shall jointly file with the Commission a fully executed copy of this Agreement in accordance with Commission regulations at 18 C.F.R. § 385.602.
- 2.2 Permits. In accordance with this Agreement, PacifiCorp and Cowlitz PUD shall apply for and use their best reasonable efforts to obtain in a timely manner and in final form all necessary federal, state, regional, and local permits, licenses (not including the New Licenses), authorizations, certifications, determinations, and other governmental approvals (each individually, a "Permit" and collectively, the "Permits") for purposes of implementing this Agreement and the New Licenses for their respective Projects. The Parties anticipate that the Permits will be issued in a timely manner. PacifiCorp and Cowlitz PUD shall also use their best reasonable efforts to obtain the New Licenses in a timely manner. Except as expressly provided in this Agreement, PacifiCorp and Cowlitz PUD shall not be required by this Agreement to implement any action under this Agreement or the Final Terms and Conditions until all applicable Permits required for that action are obtained and are final. For the purposes of this provision, "final" means that any and all applicable periods for a petition for administrative or judicial rehearing, review, or appeal or any similar proceeding (collectively, "Proceeding") relating to any Permit have expired without any such Proceeding having been commenced or, in the event any such Proceeding is commenced, any such Proceeding is terminated. In the event any Permit is not obtained and final in a timely manner, the Parties shall confer to evaluate the effect of such delay on implementation of this Agreement and seek to develop actions to respond to the delay. If prolonged delay in performance of one or more PM&E Measures due to delay in receiving required Permits materially reduces the benefit of this Agreement, a Party may initiate the ADR Procedures and, if unsuccessful in agreeing upon alternative actions or courses of performance, may withdraw from this Agreement. In addition, if delay in obtaining a Permit prevents performance of one or more PM&E Measures for a prolonged period, the Parties recognize that reinitiation of consultation under the ESA may be required.
- 2.3 <u>Actions Required upon License Issuance</u>. Where this Agreement requires an action to be implemented or completed at or upon issuance or Issuance of one or more of the New Licenses, such action shall not be required to be implemented or completed until the 10th day following the issuance or Issuance of the referenced New License or New Licenses.

SECTION 3: ANADROMOUS FISH REINTRODUCTION OUTCOME GOALS

- Anadromous Fish Reintroduction Outcome Goals. The reintroduction outcome goal of the comprehensive aquatics program contained in Sections 4 through 9 of this Agreement is to achieve genetically viable, self-sustaining, naturally reproducing, harvestable populations above Merwin Dam greater than minimum viable populations ("Reintroduction Outcome Goal"). For the purpose of this Section 3, "harvest" includes all forms of harvest including, without limitation, commercial, tribal, and recreational. Notwithstanding the previous sentences, the Licensees shall not be responsible for limiting factors that are not related to Project effects, e.g., harvest. The Licensees shall implement the relevant PM&E Measures in this Agreement, including the commitments in this Section 3, to achieve Reintroduction Outcome Goals for stocks of Chinook, steelhead, and coho that are being transported under this Agreement. These Reintroduction Outcome Goals are separate from and shall have no relationship to the targets listed under Section 8 below relating to numbers of returning hatchery fish.
- 3.1.1 Phase I Reintroduction Outcome Goals. Prior to the later of: (a) the 27th anniversary of Issuance of all New Licenses, or (b) the 12th year after reintroduction of anadromous fish above Swift No. 1 Dam together with the operation of both the Merwin Upstream Transport Facility (Section 4.3) and the Swift Downstream Facility (Section 4.4), the Services, after discussion with the ACC, shall determine how they will assess whether Reintroduction Outcome Goals have been met, e.g., metric, model, qualitative factors ("Evaluation Methodology"). The determination shall take into account the variability of the factors influencing the success of the comprehensive aquatics program over time such as cycles of ocean conditions and will include an appropriate temporal component in developing and applying the Evaluation Methodology. The Services will evaluate the program pursuant to Section 3.4 using the Evaluation Methodology to determine if Reintroduction Outcome Goals have been achieved.
- 3.1.2 <u>Phase II Reintroduction Outcome Goals</u>. Prior to the later of the following: (a) the 37th anniversary of Issuance of all New Licenses, or (b) the seventh year after the Phase I Status Check (Section 3.4), the Services, in Consultation with the ACC, shall determine whether changed circumstances make it appropriate to update the Reintroduction Outcome Goals applied in the Phase I Status Check and, if so, how to update such Reintroduction Outcome Goals.
- Monitoring and Evaluation. The Licensees, in Consultation with the ACC and with the final approval of the Services, shall monitor progress for achieving Reintroduction Outcome Goals periodically as set forth in Section 9. The results of such monitoring shall be included in the reports on monitoring and evaluation to be provided by the Licensees under Section 9.1 below. The Licensees' monitoring shall rely on the work of regional recovery groups (e.g., the Technical Recovery Team and the LCFRB) relating to North Fork Lewis River populations to the extent possible, in combination with the data gathered by the Licensees under Section 9 below. The Licensees shall supplement such work if needed to determine whether the Reintroduction Outcome Goals have been achieved or whether they are on track to being achieved on a timely basis.
- 3.3 <u>First Phase of Aquatics Program</u>. Prior to the Phase I Status Check (Section 3.4), the Licensees shall implement Sections 4 through 9 below.

- 3.4 <u>Phase I Status Check.</u> On or after the later of: (a) the 27th anniversary of Issuance of all New Licenses, or (b) the 12th year after reintroduction of anadromous fish above Swift No. 1 Dam together with the operation of both the Merwin Upstream Transport Facility (Section 4.3) and the Swift Downstream Facility (Section 4.4), the Services, using the approach developed pursuant to Section 3.1.1 above, shall determine whether the Reintroduction Outcome Goal has been achieved for each North Fork Lewis River anadromous fish population that is being transported pursuant to this Agreement ("Phase I Status Check").
- 3.4.1 <u>Reintroduction Outcome Goals Met</u>. If the Phase I Status Check shows that all Reintroduction Outcome Goals have been met, the Licensees shall continue to implement the measures provided in Sections 4 through 9 for the remainder of each New License term, including adjusting and modifying fish passage facilities as needed to meet relevant performance standards as provided in Section 4.1.6.
- 3.4.2 <u>Any Reintroduction Outcome Goal Not Met</u>. If the Phase I Status Check shows that any of the Reintroduction Outcome Goals have not been met, PacifiCorp shall perform a limiting factors analysis, in Consultation with the ACC and subject to final approval and acceptance of the Services.
 - a. If the limiting factors analysis concludes, for all Reintroduction Outcome Goals that are not being met, that all significant limiting factors contributing to the failure to meet such goals are unrelated to Project effects, the Licensees shall continue implementation of the measures contained in Sections 4 through 9, including adjusting and modifying fish passage facilities as provided in Section 4.1.6, but shall not be obligated to implement any additional measures. Examples of factors unrelated to Project effects include, but are not limited to, harvest, upstream of Merwin off-Project habitat conditions (e.g., degradations in habitat due to forest management practices and natural catastrophic events), and ocean conditions.
 - b. If the limiting factors analysis concludes that a Project effect is a significant limiting factor in any Reintroduction Outcome Goal not being met, in addition to continuing implementation of the measures contained in Sections 4 through 9, including adjusting and modifying fish passage facilities as provided in Section 4.1.6, PacifiCorp shall implement those actions that the Services, informed by discussions with the ACC in a meeting that PacifiCorp shall convene, determine would provide biological benefits adequate to thoroughly offset the impact of the identified Project-related limiting factor(s) for North Fork Lewis populations (e.g., habitat enhancement projects, continuing juvenile supplementation, etc.) provided the Licensees shall not be required to (1) make structural or operational changes with respect to their generating facilities or Project reservoirs to achieve standards, (2) replace any fish passage facility with another passage facility, or (3) install additional collection and transport facilities or alternative fish passage facilities.
- 3.5 <u>Phase II Status Check.</u> On or after the later of: (a) the 37th anniversary of Issuance of all New Licenses, or (b) the seventh year after the Phase I Status Check, the Services, using the approach developed pursuant to Section 3.1.1 above, shall determine whether the Reintroduction Outcome Goals have been achieved ("Phase II Status Check").

- 3.5.1 <u>Reintroduction Outcome Goals Met</u>. If the Phase II Status Check shows that the Reintroduction Outcome Goals have been met, the Licensees shall continue to implement the measures provided in Sections 4 through 9 for the remainder of each New License term, including adjusting and modifying fish passage facilities as needed to meet certain performance standards as provided in Section 4.1.6.
- 3.5.2 <u>Any Reintroduction Outcome Goal Not Met</u>. If the Phase II Status Check shows that any of the Reintroduction Outcome Goals have not been met, PacifiCorp shall perform a limiting factors analysis, in Consultation with the ACC and subject to the final approval and acceptance of the Services.
 - a. If the limiting factors analysis concludes, for all Reintroduction Outcome Goals not being met, that all significant limiting factors contributing to the failure to meet such goals are unrelated to Project effects, the Licensees shall continue implementation of the measures contained in Sections 4 through 9, including adjusting and modifying fish passage facilities as provided in Section 4.1.6, but shall not be obligated to implement any additional measures. Examples of factors unrelated to Project effects include, but are not limited to, harvest, upstream of Merwin off-Project habitat conditions (e.g., degradations in habitat due to forest management practices and natural catastrophic events), and ocean conditions.
 - b. If the limiting factors analysis concludes that a Project effect is a significant limiting factor in any Reintroduction Outcome Goal not being met, in addition to continuing implementation of the measures contained in Sections 4 through 9, including Facility Adjustment and Facility Modifications as provided in Section 4.1.6, the Licensees shall consult with the Services to determine what further actions by the Licensees would be necessary to meet Reintroduction Outcome Goals. Such actions may include, without limitation, consideration of structural or operational changes with respect to the generating facilities or Project reservoirs or construction of new or replacement passage facilities. In the event that the Services and the Licensees cannot reach agreement on implementing such further actions, the Services may exercise their applicable authorities to direct what actions should be implemented, subject to the approval of the Commission.

SECTION 4: FISH PASSAGE MEASURES

- 4.1 Common Provisions Regarding Fish Collection and Transport Facilities. The provisions of this Section describe the design, construction, and operation of passage facilities at the Projects for upstream and downstream collection and transport of Chinook, coho, steelhead, bull trout, and sea-run cutthroat. For each of the passage facilities, at an early stage in the study and design process, the appropriate Licensee (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall develop an implementation schedule and timeline that identifies each significant step in the process, starting from study selection and extending through completion of the facility. Such implementation schedules and timelines shall be provided to the ACC.
- 4.1.1 Studies to Inform Design Decisions. PacifiCorp, in Consultation with the ACC and subject to the final approval of the Services, shall develop and implement studies to inform the design of upstream and downstream fish passage facilities described in Sections 4.3 to 4.8 and 4.10 (including the Merwin Upstream Transport Facility) with the goal of improving the likelihood that the passage facilities will be successful as initially constructed. Needed information may include the hydraulic characteristics of the Swift No. 1, Yale, and Merwin forebays and tailrace (e.g., a three-dimensional numerical flow-field analysis) and the movement of adult and juvenile salmonids. PacifiCorp shall complete these studies sufficiently in advance of the design decisions required in Section 4.1.2 so that PacifiCorp, the Services, and the ACC can take the resulting information into account when making final design decisions.
- 4.1.2 Design Review. The appropriate Licensee (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall design the fish passage facilities to be constructed pursuant to Sections 4.1.8, 4.3 through 4.8, and 4.10, subject to Section 4.1.9, to meet the performance standard targets set out in Section 4.1.4.b, as applicable. The Licensee shall use the best available technology for the type of passage facility being constructed, and design the passage facility to provide flexibility for subsequent expansion or Facility Adjustments, if needed, to meet performance standards. A fish passage facility may include duplication of some components (for example, multiple entrances) and still be considered a single passage facility. The Licensee shall coordinate with and shall provide 30% and 60% completed preliminary designs for review and comment to the Services and WDFW. The Licensee shall notify the ACC when design work has begun, and shall provide the 30% and 60% preliminary designs to any other Party at the Party's request. The Licensee shall provide the Services and WDFW 45 days to provide their comments. The Licensee shall submit the 90% preliminary designs with the relevant engineering, hydraulic, and biological work to the ACC at the times set forth in Sections 4.1.8, 4.3 through 4.8, and 4.10. The Licensee shall provide the ACC 45 days to provide its comments on the 90% preliminary designs and shall finalize the designs in Consultation with the ACC and with the approval of the Services. The Licensee shall consider and address in writing those written comments provided by the members of the ACC when submitting final designs to the Services for approval.

- 4.1.3 <u>Permits, Time for Construction</u>. Upon approval of passage facility designs by the Commission, the Licensee responsible for constructing any such passage facility (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall diligently and expeditiously acquire all required Permits. The time by which each such passage facility shall be placed in operation is set forth in the Sections below, and shall follow receipt of all required Permits as set out in Section 2.2.
- 4.1.4 Performance Standards. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall provide for the safe, timely, and effective passage of salmonids being transported past the Projects pursuant to Section 4.1.7 below, as provided in this Section 4. The sole performance standard for kelts and downstream migration of adult sea-run cutthroat shall be safe, timely, and effective passage. Specific life stages described below (not including kelts or downstream migrating sea-run cutthroat) have quantitative standards. The Licensees shall construct and provide for the operation and maintenance of fish passage facilities that (1) collect all life stages of salmonids that are present at the specific facility, and (2) function during all flows and during all seasons; except (i) for a downstream facility at Swift No. 1 when it is infeasible to function during flood events that require spill that could not be reasonably accommodated by the passage facility, or (ii) for upstream passage facilities, to the extent it is infeasible due to flood events that require spill that could not be reasonably accommodated by the passage facility. Table 4.1.4 defines the terms used below.

Table 4.1.4 – Defined Terms for Performance Standards

Adult Trap Efficiency ("ATE")	The percentage of adult Chinook, coho, steelhead, bull trout, and sea-run cutthroat that are actively migrating to a location above the trap and that are collected by the trap.
Collection Efficiency ("CE")	The percentage of juvenile anadromous fish of each of the species designated in Section 4.1.7 that is available for collection and that is actually collected.
Collection Survival ("CS")	The percentage of juvenile anadromous fish of each of the species designated in Section 4.1.7 collected that leave Release Ponds alive.
Injury	Visible trauma (including, but not limited to, hemorrhaging, open wounds without fungus growth, gill damage, bruising greater than 0.5 cm in diameter, etc.), loss of equilibrium, or greater than 20% descaling. "Descaling" is defined as the sum of the area on one side of the fish that shows recent scale loss. This does not include areas where scales have regenerated or fungus has grown.

Overall Downstream Survival ("ODS")	The percentage of juvenile anadromous fish of each of the species designated in Section 4.1.7 that enter the reservoirs from natal streams and that survive to enter the Lewis River below Merwin Dam by collection, transport, and release via the juvenile fish passage system, passage via turbines, or some combination thereof, calculated as provided in Schedule 4.1.4.
Upstream Passage Survival ("UPS")	Percentage of adult fish of each of the species designated in Section 4.1.7 that are collected that survive the upstream trapping-and-transport process. For sea-run cutthroat and bull trout, "adult" means fish greater than 13 inches in length.

- a. Overall Performance Standards for Salmonids. For each species, the Licensees shall achieve the following overall performance standards for fish passage: ODS of greater than or equal to 80% until such time as the Yale Downstream Facility is built or the In Lieu Fund in lieu of the Yale Downstream Facility becomes available to the Services, after which time ODS shall be greater than or equal to 75%; UPS of greater than or equal to 99.5%; and ATE to be established after the Effective Date pursuant to Section 4.1.4.c below. The Parties acknowledge that ODS of 80% or 75% are aggressive standards and it is likely that they will take some time to achieve. If these performance standards are not achieved, the Licensees (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall take the actions set forth in Section 4.1.6.
- b. Passage Facility Design Performance Standards for Salmonids. PacifiCorp shall design and construct downstream fish passage facilities to achieve the following standards for each species (i) a CE of equal to or greater than 95% and (ii) a CS of equal to or greater than 99.5% for smolts and 98% for fry, and (iii) adult bull trout survival of equal to or greater than 99.5%. Design performance objectives for Injury are less than or equal to 2%. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall design and construct upstream fish passage facilities to achieve the UPS equal to or greater than 99.5% and the ATE to be established after the Effective Date pursuant to Section 4.1.4.c below.
- c. <u>Adult Trap Efficiency for Salmonids</u>. As soon as practicable, the Licensees, together with the Services, WDFW, Yakama Nation, and the CIT, and in Consultation with the ACC, shall develop an ATE performance standard for the terms of each New License to ensure the safe, timely, and effective passage of adult salmonids. Until such time as the standard has been developed, the Licensees shall use NOAA Fisheries' fish passage guidelines [*Anadromous Salmonid Passage Facility Guidelines*]

and Criteria, NMFS (Jan. 31, 2004)]. The Parties shall consider without limitation entry rate, fall back, crowding at the entrance, delay, and abandonment of the trap area. When performance standards for ATE have been developed, the Licensees shall submit the standards to the Commission and such standards will be used to judge performance for the facilities (as provided in Section 4.1.6.d below).

- 4.1.5 <u>Monitoring and Evaluation.</u> Once any passage facility, upstream or downstream, is constructed and placed in operation, and after each Facility Adjustment or Facility Modification, the Licensees (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall evaluate, in Consultation with the ACC and with the approval of the Services, whether performance standards are being met for each of the species designated in Section 4.1.7. This monitoring and evaluation shall be conducted as described in Section 9.
- 4.1.6 Adjustments or Modifications to Passage Facilities. For purposes of this Agreement, a "Facility Adjustment" shall be a physical passage facility upgrade, improvement, or addition that was part of the original design of the passage facility, or an adjustment to the fish passage facility or its operations. A "Facility Modification" shall be a physical alteration or addition to a physical passage facility that requires a new design. When making Facility Modifications, the Licensees shall follow the design process set out in Section 4.1.2 above, including Consultation with the ACC. Whenever any Facility Adjustment or Facility Modification is completed, the operation of the relevant facility shall be tested for a reasonable time to determine the effectiveness of such adjustment or modification. Throughout the term of each New License, at the direction of the Services, and after Commission approval, if required, and obtaining all required Permits, the Licensee (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall make Facility Adjustments and Facility Modifications to each passage facility to achieve the relevant performance standards for each of the species designated in Section 4.1.7 as soon as practicable as follows:
 - a. If ODS is not being met, then PacifiCorp shall make Facility Adjustments or Facility Modifications to downstream passage facilities as follows:
 - (1) If the CE is less than 95% and greater than or equal to 75% or the CS for smolts is less than 99.5% and greater than or equal to 98%, or the CS for fry is less than 98% and greater than or equal to 96%, or Injuries to juvenile Transported Anadromous Species caused by downstream collection and transport are greater than 2% but less than 4%, PacifiCorp shall make Facility Adjustments directed by the Services to achieve the performance standard or standards that are not being met, but shall not be required to make Facility Modifications; or
 - (2) If the CE is less than 75%, or the CS for smolts is less than 98%, or the CS for fry is less than 96%, or Injuries to juvenile Transported Anadromous Species caused by downstream collection and transport are greater than or equal to 4%, PacifiCorp shall make the Facility Modifications directed by the Services to achieve the performance standard or standards that are not being met; provided

that if the Services believe a Facility Adjustment will likely achieve the performance standard or standards that are not being met, then PacifiCorp shall first make Facility Adjustments as directed by the Services.

- b. If the ODS is being met but the CE is less than 95%, the CS for smolts is less than 99.5%, the CS for fry is less than 98%, or Injury to juvenile Transported Anadromous Species caused by downstream collection and transport is greater than 2%, PacifiCorp shall make Facility Adjustments directed by the Services to downstream facilities but shall not be required to make Facility Modifications to achieve the performance standard or standards that are not being met.
- c. For bull trout, PacifiCorp shall make Facility Adjustments or Facility Modifications to downstream passage facilities as follows:
 - (1) If the survival of bull trout is less than 99.5% and is greater than or equal to 98%, or Injuries caused by downstream collection and transport are greater than 2% but less than 4%, PacifiCorp shall make Facility Adjustments directed by the Services to achieve the performance standard or standards that are not being met, but shall not be required to make Facility Modifications; or
 - (2) If the survival of bull trout is less than 98%, or Injuries caused by downstream collection and transport are greater than or equal to 4%, PacifiCorp shall make the Facility Modifications directed by the Services to achieve the performance standard or standards that are not being met; provided that if the Services believe a Facility Adjustment will likely achieve the performance standard or standards that are not being met, then Licensees shall make Facility Adjustments as directed by the Services.
- d. For Transported Species, if UPS and/or ATE are not being met, then the Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) will make Facility Adjustments or Facility Modifications to upstream passage facilities as directed by the Services.
- e. Except as required in a proceeding initiated consistent with Section 15.3.2, or as provided in Section 3.5.2.b, the Licensees (PacifiCorp for the Merwin Upstream Transport Facility, Merwin Downstream Facility, Yale Upstream Facility, Yale Downstream Facility, and Swift Downstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall not be required to (1) make structural or operational changes with respect to their generating facilities or Project reservoirs to achieve standards, (2) replace any fish passage facility with another passage facility, or (3) install additional collection and transport facilities or alternative fish passage facilities beyond those required by this Agreement. This provision is not intended to negate or otherwise alter any PM&E Measure agreed to elsewhere in this Agreement, including, without limitation, Section 4.3 and operational constraints required under Sections 4.2, 4.9.1, and 6.2.

4.1.7 Species Transported. For purposes of fish passage, the Licensees shall only provide for the transport of spring Chinook, winter steelhead, coho, bull trout, and sea-run cutthroat. Notwithstanding the preceding sentence, the Licensees, after Consultation with the ACC, and if directed by the Services, shall also provide for the transport of fall Chinook or summer steelhead that enter the passage facilities. All species to be transported pursuant to this Section 4.1.7 shall be referred to as the "Transported Species." Anadromous species to be transported pursuant to this Section 4.1.7 (spring Chinook, winter steelhead, coho, sea-run cutthroat, and, if appropriate in accordance with this Section, fall Chinook and summer steelhead) shall be referred to as "Transported Anadromous Species."

4.1.8 <u>Mode of Transport and Transport Plans</u>.

- a. <u>Upstream Transport Before Full Adult Fish Passage</u>. Unless and until alternative technologies are implemented pursuant to paragraph (b), below, the Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility, and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall provide for the transport by truck of all Transported Species collected at an upstream transport facility. Once the Merwin Upstream Transport Facility is completed, and for so long as trucks are used, the Licensees shall provide for transport according to the Upstream Transport Plan described below.
- <u>Upstream Transport After Full Adult Fish Passage</u>. On or before the 13th b. anniversary of the Issuance of all New Licenses, the Licensee responsible for each upstream transport facility (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall evaluate alternative adult fish transport technologies (such as fish trams, cable lifts, or other new technologies) at the facility that allow transportation of the fish with the least practicable amount of handling or other stress-inducing actions, considering the need for sorting fish. Such technologies shall be implemented provided that (1) such alternative technologies are determined, by engineers qualified in fish passage and designated respectively by WDFW, USFWS, NOAA Fisheries, PacifiCorp, and Cowlitz PUD, to be feasible and effective in transporting fish over dam facilities; (2) the Services determine that such technologies are suitable for meeting the Services' fish passage goals and the biological benefits are expected to be equal to or greater than the benefits of trapand-transport by truck; and (3) the costs of the selected technology (considering both initial capital cost and ongoing operational and maintenance costs) do not significantly exceed the costs of transporting fish by truck. Any Party that disagrees with the engineers' determination under (1), above, may initiate ADR Procedures pursuant to Section 15.10. Implementation of such technologies shall begin after acquisition of all required Permits according to the schedule set forth in Section 4.7 for the Yale Upstream Facility and Section 4.8 for the Swift Upstream Facility, and for the Merwin Upstream Transport Facility after any required time for transition between truck and alternative transport facilities but no earlier than upon operation of both the Yale Upstream Facility and Swift Upstream Facility. The Licensees' selection of such technologies and selection of final designs shall be made with the approval of the Services after Consultation with the ACC, pursuant to Section 4.1.2. The costs for such alternate technologies shall be considered cumulatively for all of the Lewis River Projects, so that a cost savings from alternate technology at one Project could offset a cost increase for such technology at

another Project, compared to trapping and transporting by truck. If costs are determined to significantly exceed the costs of transporting fish by truck, the Parties may make reasonable efforts to find more cost-effective facility designs that will achieve the same or greater biological benefit compared to trap-and-transport by truck. If (i) after due comparison of the costs of initial capital and ongoing operations and maintenance through the remaining term of the New Licenses of trapping and transporting by truck versus such costs of an alternative technology for upstream passage it appears that such alternate technologies would not be implemented because of increased costs; and (ii) any Party (other than the Licensees): (A) identifies alternate sources of funding, (B) provides a guarantee of payment acceptable to the Licensees of the difference in capital and ongoing operations and maintenance costs over the remaining term of the Licenses between trap-and-transport and such alternative technology, and (C) provides such funding without additional conditions unacceptable to the Licensees, express or implied; then the Licensee shall implement such technologies after acquisition of all required Permits according to the schedule set forth in Section 4.7 for the Yale Upstream Facility and Section 4.8 for the Swift Upstream Facility, and for the Merwin Upstream Transport Facility after any required time for transition between truck and alternative transport facilities but no earlier than upon operation of both the Yale Upstream Facility and Swift Upstream Facility. If alternative methods are not used at any facility because they do not meet the standards of this Section 4.1.8, then the Licenses shall continue to implement trap and transport by truck at such facility.

Upstream Transport Plan. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall develop, in Consultation with the ACC and with the approval of the Services, subject to Section 15.14, a plan that shall describe the frequency and procedures to achieve safe, timely, and effective upstream passage (the "Upstream Transport Plan"). The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall provide for the transport of fish at a minimum frequency of once daily, or more if necessary, to achieve safe, timely, and effective passage. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall submit the Upstream Transport Plan to the Commission before completion of the Merwin Upstream Transport Facility. This version of the Upstream Transport Plan need only address transport from the Merwin Upstream Transport Facility. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall modify the Upstream Transport Plan in Consultation with the ACC and with the approval of the Services, subject to Section 15.14, to (i) identify the distribution of adults transported to Yale Lake and Swift Reservoir when the Yale Downstream Facility is completed and prior to completion of the Yale Upstream Facility and Swift Upstream Facility, and (ii) address transport from the Yale Upstream Facility if trucking is to be used for transport from that facility, and shall submit the modified Upstream Transport Plan to the Commission before completion of the Yale Upstream Facility. The Licensees (PacifiCorp for the Merwin Upstream Transport Facility and Yale Upstream Facility; and PacifiCorp and Cowlitz PUD for the Swift Upstream Facility) shall modify the Upstream Transport Plan in Consultation with the ACC and with the approval of the Services, subject to Section

- 15.14, to address transport from the Swift Upstream Facility if trucking is to be used for transport from that facility, and shall submit the modified Upstream Transport Plan to the Commission before completion of the Swift Upstream Facility.
- d. <u>Downstream Transport</u>. PacifiCorp shall provide for the downstream transport of migrating Transported Species collected in the Swift Downstream Facility, Yale Downstream Facility, and Merwin Downstream Facility by truck. The Parties believe there may be benefits from downstream transport of migrating Transported Species via a bypass facility in lieu of trap and transport by truck.
 - (1) For the Yale Downstream Facility and Swift Downstream Facility, if:
 - (i) the Yale Downstream Facility and Swift Downstream Facility have been constructed;
 - (ii) a determination has been made pursuant to (2) or (3), below, that PacifiCorp shall construct and operate a bypass facility at the Merwin Downstream Facility;
 - (iii) the Services determine that a salmonid bypass passage system would provide equal or greater biological benefit; and
 - (iv) PacifiCorp does not determine that the capital, operation, and maintenance costs of such bypass would be significantly greater than the capital, operation, and maintenance costs of continued use of trap and transport by truck,

then PacifiCorp shall Consult with the ACC regarding a possible change in methods for downstream passage. Any Party may, but shall not be obligated to, develop additional information regarding methods for downstream passage and submit it to the Services. Studies to develop such information should be developed in coordination with the ACC and with the approval of the Services.

- (2) For the Merwin Downstream Facility, if:
 - (i) PacifiCorp has not yet commenced construction of the Merwin Downstream Facility, and
 - (ii) the Services determine that a salmonid bypass passage system would provide equal or greater biological benefit, and would not have unacceptable impacts on fish between Merwin Dam and the Release Ponds,

then PacifiCorp shall construct and provide for the operation of such bypass facility in lieu of trapping and transporting by truck. Any Party may, but shall not be obligated to, develop additional information regarding methods for downstream passage and submit it to the Services. Studies to develop such

information should be developed in coordination with the ACC and with the approval of the Services.

- (3) For the Merwin Downstream Facility, if:
 - (i) PacifiCorp has commenced construction of the Merwin Downstream Facility;
 - (ii) the Services determine that a salmonid bypass passage system would provide equal or greater biological benefit and would not have unacceptable impacts on fish between Merwin Dam and the Release Ponds; and
 - (iii) PacifiCorp does not determine that the capital, operation, and maintenance costs of such bypass would be significantly greater than the capital, operation, and maintenance costs of continued use of trap and transport by truck,

then PacifiCorp shall Consult with the ACC regarding a possible change in methods for downstream passage. Any Party may, but shall not be obligated to, develop additional information regarding methods for downstream passage and submit it to the Services. Studies to develop such information should be developed in coordination with the ACC and with the approval of the Services.

e. <u>Downstream Transport Plan.</u> PacifiCorp shall develop, in Consultation with the ACC and with the approval of the Services, subject to Section 15.14, a plan that shall describe the frequency and procedures to achieve safe, timely, and effective downstream transport (the "Downstream Transport Plan"). PacifiCorp shall submit the Downstream Transport Plan to the Commission before completion of the Swift Downstream Facility. This version of the Downstream Transport Plan need only address transport from the Swift Downstream Facility. PacifiCorp shall modify the Downstream Transport Plan in Consultation with the ACC and with the approval of the Services, subject to Section 15.14, to address transport from the Yale Downstream Facility and the Merwin Downstream Facility, and shall submit the modified Downstream Transport Plan to the Commission before completion of the Yale Downstream Facility and the Merwin Downstream Facility, respectively.

4.1.9 <u>Review of New Information Regarding Fish Transport into Lake Merwin and</u> Yale Lake.

a. The Licensees shall construct and provide for the operation and maintenance of both upstream and downstream fish collection and transport facilities at each of Merwin Dam, Yale Dam, and the Swift Projects as provided in the schedule in this Agreement unless otherwise directed by the Services pursuant to this Section. New Information (defined below) relevant to reintroduction and fish passage into Yale Lake or Lake Merwin may be available to the Services that may influence the implementation of fish passage into and out of these reservoirs, or that could result in the Services determining that reintroduction or fish passage for anadromous fish is inappropriate. If

the Services conclude upon review of the New Information that one or more of the passage facilities should not be constructed, in lieu of designing, permitting, constructing, and operating the passage facility, PacifiCorp shall provide additional funds for projects in lieu of fish passage, as set forth in Section 7.6. In this event, the Licensees shall also implement the bull trout passage measures as set forth in Section 4.10. The adult upstream fish passage facility at Merwin and juvenile downstream collector at Swift No. 1 are not subject to this review.

- b. Upon receipt and review of New Information relevant to reintroduction and fish passage from any party, the members of the ACC may provide written comments to the Services regarding such New Information. Such comments shall be provided to the Services no later than five years prior to the date that PacifiCorp and/or Cowlitz PUD is to begin operating the relevant passage facility. If any New Information and comments are submitted to the Services, then approximately four and a half years prior to the date that PacifiCorp and/or Cowlitz PUD is to begin operating the relevant passage facility, the Licensees shall convene a meeting of the ACC for the purpose of discussing the New Information and comments. At such meeting, the Licensees shall solicit and obtain the Services' response to the New Information and related comments, unless the Services have provided the results of their review to the ACC earlier. If the Services have concluded that one or more of the passage facilities should not be constructed, then within 60 days after the meeting of the ACC, the Services shall advise the ACC in writing of such conclusion.
- c. For purposes of this section, "New Information" is defined as information relevant to anadromous fish reintroduction and fish passage, including that presented by any Party, and provided to the Services and the Licensees. The Licensees must provide copies of such New Information to all the members of the ACC. This information may include, but is not limited to:
 - (1) Experience with upstream fish collection and transport facilities at other sites, including Merwin Dam.
 - (2) Experience with downstream fish collection facilities at other sites, including Swift No. 1 Dam.
 - (3) Experience with the reintroduction efforts of spring Chinook, coho, and steelhead above Swift No. 1 Dam.
 - (4) Consideration of broader contextual information beyond the Lewis River Basin, including regional anadromous fish recovery efforts.
- d. The Licensees shall inform the Commission of any determination by the Services that one or more of the fish collection and transport facilities should not be constructed. In this event, PacifiCorp shall provide additional funds for projects in lieu of fish passage, as set forth in Section 7.6.

4.2 Merwin Trap.

- a. <u>Fyke Repair</u>. As soon as practicable after the Effective Date, PacifiCorp shall repair the fyke portion of the Merwin Trap or install another fyke to decrease the risk of Injury to fish in the facility.
- b. Merwin Trap Flow Restrictions. From and after the Effective Date, PacifiCorp shall, to the extent feasible, limit the discharge from the generation facilities at Merwin Dam for safety purposes to a maximum of 5,250 cubic feet per second ("cfs") or other flow level to be determined by PacifiCorp and WDFW (measured at the Ariel gage) when personnel are working in the existing fish trap (the "Merwin Trap") until such time as upgrades to the Merwin Trap are made pursuant to Section 4.2.3 and PacifiCorp determines, in Consultation with WDFW, that such upgrades are effective in providing a greater margin of safety for such personnel. PacifiCorp shall coordinate with WDFW on scheduling such flows and times when fish collection will occur.
- c. Merwin Trap Upgrades. Within one year after the Effective Date, PacifiCorp shall determine what information is required to improve operating conditions for personnel working in the Merwin Trap by providing a greater margin of safety. PacifiCorp shall gather such information promptly to allow design of operating improvements. By the second anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall modify the Merwin Trap as needed to improve the human working environment such that flow restrictions under Section 4.2.2 are no longer necessary, without introducing additional risk to fish (the "Merwin Trap Upgrades"). PacifiCorp shall coordinate with and shall provide 30% and 60% completed preliminary designs for review and comment to the Services and WDFW. PacifiCorp shall provide the 90% preliminary designs for the Merwin Trap Upgrades to the ACC within 18 months after the Effective Date. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than 90 days after the Issuance of the New License for the Merwin Project or August 31, 2006, whichever is later. Once the Merwin Trap Upgrades are completed or beginning upon the second anniversary of the Issuance of the New License for the Merwin Project, whichever is later, PacifiCorp shall provide for fish to be sorted at the Lewis River Hatchery rather than at the Merwin Trap and shall provide up to two additional staffers, if necessary, to clear the Merwin Trap once daily for the benefit of the fish in the facility.
- d. <u>Interim Merwin Trap Operations</u>. Until construction of the Merwin Upstream Transport Facility, the upgraded Merwin Trap shall be operated solely for the following purposes: to collect hatchery fish returning from the ocean and to transport any bull trout collected to Yale Lake, and fish other than hatchery fish and bull trout will be returned to the river below Merwin Dam. Until the Merwin Upstream Transport Facility is completed, PacifiCorp, in coordination with WDFW, shall make reasonable efforts to operate the Merwin powerhouse to allow fish trapping operations at the Merwin Trap.
- 4.3 <u>Merwin Upstream Collection and Transport Facility</u>. By six months after the fourth anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall construct and provide for the operation of an adult trap and transport facility that shall collect, sort, and transport hatchery fish and upstream-migrating adult Transported Species (the "Merwin Upstream Transport Facility"). Initially, PacifiCorp shall provide for the transport of adult

Transported Anadromous Species to above Swift No. 1 Dam. When the Yale Downstream Facility is built as provided in Section 4.5, PacifiCorp shall provide for the transport of Transported Anadromous Species collected at Merwin Dam to either Yale Lake or Swift Reservoir, as designated in the Upstream Transport Plan, until upstream adult collection and transport facilities are constructed at all of the Merwin, Yale, and Swift Projects. Once upstream adult collection and transport facilities are constructed at all of the Merwin, Yale, and Swift Projects, then PacifiCorp shall provide for the transport of adult Transported Anadromous Species collected at Merwin Dam to Lake Merwin. PacifiCorp shall provide for the transport of any bull trout collected below Merwin Dam to Yale Lake unless otherwise directed by USFWS. The Merwin Upstream Transport Facility shall be designed by PacifiCorp, to the extent feasible, to be compatible both with truck transport and with alternate modes of transport that may be selected pursuant to Section 4.1.8 above. When designing the Merwin Upstream Transport Facility, PacifiCorp shall consider a wide range of design options for the trap and transport facility, including, without limitation, (a) a complete new facility and (b) incorporation of the Merwin Trap (as upgraded) into the new design. PacifiCorp shall consider designs for the Merwin Upstream Transport Facility such that it would meet applicable performance standards regardless of the operational state of the hydroelectric generation facilities at Merwin Dam. PacifiCorp shall provide for the operation of the passage facility year-round for the remaining term of the New License for the Merwin Project. In Consultation with the Services, PacifiCorp shall provide for safe, timely, and effective handling of all species entering the Merwin Upstream Transport Facility. Species that will not be transported above Merwin Dam or destined for the Hatchery Facilities shall be returned to the Lewis River below Merwin Dam in a manner and frequency that adequately protects them (i.e., fall Chinook that are close to their spawning time may require different considerations than other species). PacifiCorp shall provide the 90% preliminary designs to the ACC by the first anniversary of the Issuance of the New License for the Merwin Project and shall follow the procedures set forth in Section 4.1.2. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after the first anniversary of Issuance of the New License for the Merwin Project.

4.4 Downstream Transport at Swift No. 1 Dam.

4.4.1 <u>Modular Surface Collector</u>. By six months after the fourth anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, PacifiCorp shall construct and provide for the operation of a passage facility at the Swift No. 1 Dam, including a modular surface collector, to collect, sort, tag, and transport downstream-migrating Transported Species (the "Swift Downstream Facility"). PacifiCorp shall provide for the downstream transport of migrating Transported Anadromous Species to below Merwin Dam to a Release Pond (Section 4.4.3). Unless otherwise directed by USFWS, bull trout collected in the Swift Downstream Facility shall be transported to Yale Lake, except that bull trout with a smolt-like appearance, as determined by PacifiCorp (using methods devised in Consultation with the ACC), shall be transported to a location determined by USFWS below Merwin Dam. PacifiCorp shall Consult with the ACC concerning the precise location of the passage facility, which PacifiCorp shall incorporate into the design to be approved by the Services as provided in Section 4.1.2.

PacifiCorp shall provide for the tagging of a statistically valid sample of the fish transported as appropriate to accomplish the monitoring and evaluation objectives set forth in the M&E Plan

(Section 9), the methodology of such tagging to be determined by the Licensees in Consultation with the ACC and approved by the Services. PacifiCorp shall provide for the operation of the passage facility for the remaining term of the New License for the Swift No. 1 Project.

PacifiCorp shall provide the 90% preliminary designs to the ACC by the first anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after the first anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later.

- 4.4.2 Spring Chinook Satellite Collection Facility. If NOAA Fisheries determines that the Swift Downstream Facility does not adequately collect juvenile spring Chinook, PacifiCorp, in Consultation with the ACC and with the approval of NOAA Fisheries, shall evaluate the behavior of the spring Chinook to determine why they are not being collected by the Swift Downstream Facility. If NOAA Fisheries concludes that the Swift Downstream Facility is not working because of fish behavior and that a different type of satellite passage facility has a reasonable likelihood of collecting spring Chinook, PacifiCorp, in Consultation with the ACC and with the final approval of the Services shall design and install the satellite passage facility. The design would be developed to minimize unacceptable incidental impacts to species other than spring Chinook. PacifiCorp, as part of the monitoring and evaluation plan to be developed pursuant to Section 9.2.1 below, shall develop and implement a plan to monitor the satellite facility effectiveness and its effects on species other than spring Chinook. Should NOAA Fisheries conclude, given the behavior of the spring Chinook, that another passage facility would not likely be successful, PacifiCorp shall continue to attempt to collect spring Chinook at the Swift Downstream Facility and shall make any further Facility Adjustments or Facility Modifications required by Section 4.1.6.
- 4.4.3 Release Ponds. By six months after the fourth anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, PacifiCorp, in Consultation with the ACC and with the final approval of NOAA Fisheries, subject to Section 15.14, shall design and construct stress release ponds below Merwin to be used for downstream migrating fish that are collected at the Swift Downstream Facility ("Release Ponds") (the same Release Ponds shall be used subsequently for fish collected at the Yale Downstream Facility or the Merwin Downstream Facility). To the extent practicable, the Release Ponds will be located downstream of Eagle Island to minimize interaction of the transported fish with wild fall Chinook. PacifiCorp shall Consult with the ACC concerning the precise locations of the Release Ponds, which shall become part of the design to be approved by NOAA Fisheries. PacifiCorp shall provide preliminary designs to the ACC by the first anniversary of the Issuance of the New License for the Swift No. 1 Project. PacifiCorp shall submit final designs to the Commission upon approval by NOAA Fisheries, subject to Section 15.14, but not later than six months after the first anniversary of the Issuance of the New License for the Swift No. 1 Project.
- 4.5 <u>Downstream Passage at Yale Dam</u>. Unless otherwise directed by the Services pursuant to Section 4.1.9, on or before the 13th anniversary of the Issuance of the New License for the Yale Project, PacifiCorp shall complete construction and provide for the operation of a passage facility or facilities at Yale Dam to collect, sort, tag, and transport downstream-migrating Transported Species (the "Yale Downstream Facility"). Specifically, PacifiCorp shall either

construct a modular surface collector or, as directed by the Services, after discussion with the ACC, an alternate passage facility or set of facilities (which may include a scaled-down version of the modular surface collector), provided the detailed engineering estimate of the cost of such alternate facilities does not exceed the sum of the following: (1) the cost estimate for a modular surface collector based upon the detailed engineering designs of the Swift Downstream Facility modified to remove those features that are unique to the Swift facility due to its location, hydraulics, and topography (Adjusted for Inflation from the year on which the cost estimate is based), and (2) the cost estimate for features that are unique to the Yale or Merwin facilities, respectively, including, without limitation, location, hydraulics, and topography, based upon conceptual designs (Adjusted for Inflation from the year on which the cost estimate is based). PacifiCorp shall provide for the downstream transport of migrating Transported Species from Yale Lake to the Release Ponds below Merwin Dam.

Unless otherwise directed by the Services, after discussion with the ACC, PacifiCorp shall provide for the marking of all the juvenile anadromous salmonids collected by the Yale Downstream Facility until such time as the Yale Upstream Facility and the Swift Upstream Facility are completed, and shall provide for the tagging of a statistically valid sample of the fish transported as appropriate to accomplish the monitoring and evaluation objectives set forth in the M&E Plan (Section 9), the methodology of such tagging to be determined by the Licensee in Consultation with the ACC and approved by the Services. Bull trout collected in the Yale Downstream Facility shall be returned to Yale Lake unless otherwise directed by the USFWS, except that bull trout with a smolt-like appearance, as determined by PacifiCorp (using methods devised in Consultation with the ACC), shall be transported in the same manner as Transported Anadromous Species pursuant to Section 4.1.8 and shall be transported to a location determined by USFWS below Merwin Dam. PacifiCorp shall provide for the operation of the passage facility for the remaining term of the Yale New License unless at any time the Services, after discussion with the ACC, determine that operation of the Yale Downstream Facility should no longer be continued. If the Services make such determination after the passage facility has been operating, PacifiCorp shall notify the Commission of such decision. PacifiCorp shall provide 90% preliminary designs to the ACC on or before the ninth anniversary of the Issuance of the New License for the Yale Project. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after providing preliminary designs to the ACC.

4.6 <u>Downstream Passage at Merwin Dam.</u> Unless otherwise directed by the Services pursuant to Section 4.1.9 above, on or before the 17th anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall construct and provide for the operation of a passage facility or facilities at Merwin Dam to collect, sort, tag, and transport downstream-migrating Transported Species (the "Merwin Downstream Facility"). Specifically, PacifiCorp shall construct either a modular surface collector or, as directed by the Services after discussion with the ACC, an alternate passage facility or set of facilities (which may include a scaled-down version of the modular surface collector), provided the detailed engineering estimate of the cost of such alternate facilities does not exceed the sum of the following: (1) the cost estimate for a modular surface collector based upon the detailed engineering designs of the Swift Downstream Facility modified to remove those features that are unique to the Swift facility due to its location, hydraulics, and topography (Adjusted for Inflation from the year on which the cost estimate is based), and (2) the cost estimate for features that are unique to the Yale or Merwin facilities, respectively, including, without limitation, location, hydraulics, and topography, based upon

conceptual designs (Adjusted for Inflation from the year on which the cost estimate is based). PacifiCorp shall provide for the downstream transport of migrating anadromous juvenile and adult salmonids from Lake Merwin to the Release Ponds below Merwin Dam. Bull trout collected in the Merwin Downstream Facility shall be returned to Lake Merwin unless otherwise directed by USFWS; provided that bull trout with a smolt-like appearance, as determined by PacifiCorp (using methods derived in Consultation with the ACC), shall be transported in the same manner as Transported Anadromous Species pursuant to Section 4.1.8 and shall be transported to a location determined by USFWS below Merwin Dam. PacifiCorp shall provide for the tagging of a statistically valid sample of the fish transported as appropriate to accomplish the monitoring and evaluation objectives set forth in the M&E Plan (Section 9), the methodology of such tagging to be determined by the Licensees in Consultation with the ACC and approved by the Services. PacifiCorp shall provide for the operation of the passage facility for the remaining term of the Merwin New License unless the Services determine, after discussion with the ACC, that operation of the Merwin Downstream Facility should not continue. If the Services make such determination after the passage facility is operational, PacifiCorp shall notify the Commission of such decision. PacifiCorp shall provide 90% preliminary designs to the ACC on or before the 13th anniversary of the Issuance of the New License for the Merwin Project. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after submission of preliminary designs to the ACC.

- Upstream Passage at Yale Dam. Unless otherwise directed by the Services pursuant to 4.7 Section 4.1.9 above, on or before the 17th anniversary of the Issuance of the New License for the Yale Project, PacifiCorp shall complete construction and provide for the operation of an adult trap and transport facility to collect, sort, and transport upstream-migrating adult Transported Species from Lake Merwin into Yale Lake the ("Yale Upstream Facility"), except that USFWS may direct that bull trout be transported to a different location. PacifiCorp shall provide for the operation of the passage facility for the remaining term of the Yale New License unless the Services later determine, after discussion with the ACC, that operation of the Yale Upstream Facility should not continue. If the Services make such determination after the passage facility is operational, PacifiCorp shall notify the Commission of such decision. PacifiCorp shall provide preliminary designs to the ACC on or before the 14th anniversary of the Issuance of the New License for the Yale Project. PacifiCorp shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after providing preliminary designs to the ACC. The final design for the Yale Upstream Facility will address, if necessary based on the results of water quality monitoring pursuant to Section 9.4 below, temperature variations at the upper end of Lake Merwin arising from discontinuous operation of the Yale Project. If these facilities do not function as well to collect bull trout as the interim collection method based on effectiveness monitoring, as determined by USFWS, PacifiCorp shall continue the interim collection method established in Section 4.9.
- 4.8 <u>Upstream Passage at the Swift Projects</u>. Unless otherwise directed by the Services pursuant to Section 4.1.9 above, on or before the 17th anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, the Licensees shall complete construction and provide for the operation of an adult trap and transport facility at the single best site above Yale Lake, based on biological and hydrological factors, to collect, sort, and transport upstream-migrating adult Transported Species to above the Swift No. 1 Dam (the "Swift Upstream Facility"), except that USFWS may direct that bull trout be transported to a

different location. The specific location of the Swift Upstream Facility shall be determined by PacifiCorp and Cowlitz PUD in Consultation with the ACC and with the approval of the Services, subject to Section 15.14, on or before the 12th anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later. The Licensees shall provide for the operation of the Swift Upstream Facility for the remaining terms of the New Licenses for the Swift No. 1 and Swift No. 2 Projects unless the Services determine, after discussion with the ACC, that operation of the Swift Upstream Facility should not continue. If the Services make such determination after the Swift Upstream Facility is operational, PacifiCorp and Cowlitz PUD shall notify the Commission of such decision. The Licensee that builds the Swift Upstream Facility shall provide 90% preliminary designs to the ACC on or before the 14th anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, including any engineering, hydraulic and biological information considered by the design team. The Licensee shall submit final designs to the Commission upon approval by the Services, subject to Section 15.14, but not later than six months after providing preliminary designs to the ACC. If these facilities do not function as well to collect bull trout as the interim collection method based on effectiveness monitoring, as determined by USFWS, PacifiCorp and Cowlitz PUD shall continue the interim collection method for collecting bull trout established in Section 4.9.

4.9 <u>Interim Bull Trout Collection and Transport.</u>

Collect-and-Haul Programs. Until the earlier of (a) operation of the Yale Upstream Facility and the Swift Upstream Facility or (b) alternative measures are implemented as provided under Section 4.9.2 below, and unless otherwise directed by USFWS, PacifiCorp shall implement the collect-and-haul programs at Yale tailrace and Cowlitz PUD and PacifiCorp shall implement the collect-and-haul program below Swift No. 2. A description of the collectand-haul programs to be implemented below Swift No. 2 and at Yale tailrace is provided on attached Schedule 4.9.1. The operational practices at Yale included on Schedule 4.9.1 are not precluded by Section 4.1.6. PacifiCorp shall provide for the transport of bull trout collected at the Yale tailrace to Yale Lake. The Licensees shall provide for the transport of bull trout collected at Swift No. 2 to above Swift No. 1. Upon the request of and subject to approval by USFWS, the Licensees, in Consultation with the ACC, shall develop criteria, based on the latest research, to determine if, when, and where alternative release locations are needed. Any such alternative locations shall be accessible by transport truck or other mutually acceptable transportation system. At the direction of USFWS, the Licensees (PacifiCorp for the Yale tailrace, and PacifiCorp and Cowlitz PUD for below Swift No. 2) shall provide for the transport of bull trout to such alternative locations. Within 12 months from the Effective Date, and annually thereafter, the Licensees, in Consultation with the ACC and with the approval of USFWS, shall prepare a Bull Trout Collection and Transport Program outlining the manner of and schedule for bull trout collection and passage at Project facilities, incorporating as appropriate either (1) the collection method identified in this Section 4.9.1 and testing of alternative interim collection methods as provided in Section 4.9.2 below; or (2) an alternative collection method developed pursuant to Section 4.9.2. The Licensees may propose minor modifications to the program identified in Schedule 4.9.1 as part of the Bull Trout Collection and Transport Program. The Licensees shall not implement any modifications to the Bull Trout Collection and Transport Program until USFWS has approved those changes.

4.9.2 <u>Investigation of Alternative Collection Methods</u>. PacifiCorp and Cowlitz PUD with respect to the Swift No. 2 collect-and-haul program, and PacifiCorp with respect to the Yale collect-and-haul program, will investigate the use of alternative interim bull trout collection methods in Consultation with the ACC. Such methods may include, but are not limited to, fyke traps, Denil steep passes, seines, fish wheels, and other types of active and passive gear. Annual testing of alternative methods shall begin upon approval of the Bull Trout Collection and Transport Program described in Section 4.9.1, and shall continue until USFWS approves an alternate interim collection method or until operation of the Yale Upstream Facility and the Swift Upstream Facility. Within 90 days after each anniversary of the Effective Date, Licensees shall submit a draft report to the ACC evaluating alternative interim collection methods tested during the prior year. The Licensees shall provide the ACC 90 days to comment on the draft report. The Licensees shall finalize the report, responding to the comments of the ACC as required by Section 14.2.6. The Licensees shall submit a final report to the Commission within 180 days after sending out the report for comments.

If PacifiCorp (with respect to Yale) or PacifiCorp and Cowlitz PUD (with respect to Swift No. 2) identifies, as part of the annual reporting process, an alternative interim collection method that will more safely and effectively collect bull trout than the collection method in use at that time, and if USFWS concurs, then the collection method shall be modified. Cowlitz PUD and PacifiCorp shall, with respect to the Swift No. 2 collect-and-haul program, and PacifiCorp shall, with respect to the Yale collect-and-haul program, (1) within 180 days of submission of the report to the Commission, prepare a plan to implement such method in Consultation with the ACC and with the approval of USFWS, subject to Section 15.14, and the Commission; (2) implement such alternative method as soon as practicable after obtaining USFWS approval; and (3) continue to implement the alternative method until USFWS approves an alternate interim collection method or until operation of the Yale Upstream Facility and the Swift Upstream Facility.

4.9.3 Yale and Merwin Bull Trout Entrainment Reduction. Immediately following the Effective Date, PacifiCorp shall design and implement a study to evaluate bull trout entrainment reduction methods for Yale and Merwin dams in Consultation with the ACC. Potential entrainment reduction methods include installation of exclusion devices, such as strobe lights, and installation of barrier nets with submersible cork lines and designed to accommodate a Merwin-type floating trap. Due to the small numbers of bull trout in Yale and Merwin, any evaluation of strobe lights will be performed in Swift Reservoir. Based upon its study, PacifiCorp shall prepare, in Consultation with the ACC, a draft entrainment reduction plan for the Yale Project. The plan would be developed to minimize unacceptable incidental impacts to bull trout or other species. PacifiCorp shall submit the draft plan to members of the ACC for comment within 16 months after completing the entrainment reduction study. PacifiCorp shall allow at least 45 days for members of the ACC to comment on the draft plan. PacifiCorp shall finalize the plan and obtain the approval of USFWS. PacifiCorp shall submit the final plan to the Commission upon approval by USFWS, subject to Section 15.14, but not later than the third anniversary of the Effective Date. PacifiCorp shall commence the approved entrainment reduction measures at Yale Dam within one year after the Issuance of the New License for the Yale Project, and shall maintain such measures until commencing operation of the Yale Downstream Facility. Upon the request of USFWS, PacifiCorp shall, in Consultation with the ACC and subject to the approval of USFWS, develop criteria to determine when similar entrainment reduction measures should be implemented at Merwin Dam. PacifiCorp shall

submit the criteria to the Commission for approval after obtaining USFWS approval, subject to Section 15.14, within 12 months after the USFWS request for criteria. Once approved by the Commission, if and when such criteria are met PacifiCorp shall commence the same entrainment reduction measures approved for Yale at Merwin Dam, and shall maintain such measures until commencing operation of the Merwin Downstream Facility.

4.10 <u>Bull Trout Passage in the Absence of Anadromous Fish Facilities.</u>

4.10.1 Yale and Merwin Downstream Bull Trout Facilities. If, pursuant to Section 4.1.9, PacifiCorp does not build the Yale Downstream Facility described in Section 4.5, then PacifiCorp, on or before the 13th anniversary of the Issuance of the New License for the Yale Project, shall construct and provide for the operation of a downstream bull trout collection and transport facility in the Yale forebay (the "Yale Downstream Bull Trout Facility").

If, pursuant to Section 4.1.9, PacifiCorp does not build the Merwin Downstream Facility described in Section 4.6, then when USFWS determines that bull trout populations have increased sufficiently in Lake Merwin, but not sooner than the 17th anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall construct and provide for the operation of a passage facility similar to the Yale Downstream Bull Trout Facility at Merwin Dam (the "Merwin Downstream Bull Trout Facility").

The Yale and Merwin Downstream Bull Trout Facilities shall be similar in magnitude and scale to modular floating Merwin-type collectors and are not intended to be passage facilities of the same magnitude and expense as the Yale Downstream Facility and the Merwin Downstream Facility described in Sections 4.5 and 4.6 (recognizing that monies shall be contributed to the In Lieu Fund described in Section 7 below in lieu of constructing those passage facilities). PacifiCorp shall provide for monitoring of performance as provided in Section 9, and make necessary and appropriate Facility Adjustments and Facility Modifications to the Yale and Merwin Downstream Bull Trout Facilities, in Consultation with the ACC and with approval of USFWS, to achieve relevant performance standards as provided in Section 4.1.4 above, provided that such modifications shall not require installation of a different type of passage facility. PacifiCorp shall provide preliminary (30%) designs to the ACC for the Yale and Merwin Downstream Bull Trout Facilities within 12 months after the Services' determination under Section 4.1.9. PacifiCorp shall follow the provisions in Sections 4.1.1 through 4.1.3 when developing designs for the facilities. Pursuant to Section 15.14, PacifiCorp shall submit final designs to the Commission upon approval by USFWS, subject to Section 15.14, but not later than 60 days after submission of the final design to USFWS.

4.10.2 Yale and Swift Upstream Bull Trout Facilities. If (1) pursuant to Section 4.1.9, the Licensees do not build the Swift Upstream Facility, and (2) USFWS determines on or before the 13th anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, that collect-and-haul methods established under Section 4.9.1 or 4.9.2 are not meeting bull trout performance standards provided in Section 4.1.4, then on or before the 17th anniversary of the Issuance of the New License for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, the Licensees shall complete construction of and provide for the operation of alternate passage facilities (the "Swift Upstream Bull Trout Facility").

If (1) pursuant to Section 4.1.9, PacifiCorp does not build the Yale Upstream Facility, and (2) USFWS determines on or before the 17th anniversary of the Issuance of the New License for the Yale Project that collect-and-haul methods established under Section 4.9.1 or 4.9.2 are not meeting bull trout performance standards provided in Section 4.1.4, then on or before the 17th anniversary of the Issuance of the New License for the Yale Project PacifiCorp shall complete construction of and provide for the operation of alternate passage facilities (the "Yale Upstream Bull Trout Facility").

The Yale and Swift Upstream Bull Trout Facilities are not intended to be passage facilities of the same magnitude and expense as the Yale Upstream Facility and the Swift Upstream Facility described in Sections 4.7 and 4.8 (recognizing that monies shall be contributed to the In Lieu Fund described in Section 7 below in lieu of constructing those passage facilities). PacifiCorp (for Yale) and the Licensees (for Swift No. 2) shall select an alternative passage facility design for the Yale and Swift Upstream Bull Trout Facilities, in Consultation with the ACC and with the approval of USFWS, and PacifiCorp (for Yale) and the Licensees (for Swift No. 2) shall construct and provide for the operation of such passage facilities for the remaining term of the respective New Licenses. The Licensees shall follow the provisions of Sections 4.1 through 4.1.3 as applicable when developing designs for the facilities.

PacifiCorp shall monitor performance of the Yale Upstream Bull Trout Facility as provided in Section 9, and make necessary and appropriate Facility Adjustments and Facility Modifications to the Yale Upstream Bull Trout Facility pursuant to Section 4.1.6. The Licensees shall monitor performance of the Swift Upstream Bull Trout Facility as provided in Section 9 and make Facility Adjustments and Facility Modifications pursuant to Section 4.1.6 to the Swift Upstream Bull Trout Facility.

SECTION 5: ADDITIONAL AQUATIC MEASURES

- 5.1 Yale Spillway Modifications. PacifiCorp shall design, permit, and construct improvements to the Yale spillway by six months after the fourth anniversary of the Issuance of the New License for the Yale Project to improve fish survival over the spillway during spill events. PacifiCorp shall design the improvements in Consultation with the ACC and shall provide preliminary designs to the ACC within six months after Issuance of the New License for the Yale Project. PacifiCorp shall provide the ACC with 60 days to review and comment on the preliminary design. Pursuant to Section 15.14, the Licensee shall submit final designs to the Commission upon approval by the Services, but not later than the first anniversary of the Issuance of the New License for the Yale Project.
- 5.2 <u>Bull Trout Habitat Enhancement Measures</u>. The Licensees have conservation covenants for the protection of bull trout habitat and shall manage such Interests In Land as provided in Section 10.6. PacifiCorp shall manage the Cougar Creek Conservation Covenant (defined in Section 10.6.2) to benefit bull trout conservation by conducting no management actions within the covenant area with the exception of actions taken pursuant to Section 10.6 to protect bull trout. Cowlitz PUD shall manage the Devil's Backbone Conservation Covenant (defined in Section 10.6.1) in perpetuity to benefit bull trout consistent with the Declaration of Conservation Covenant recorded in Skamania County on June 11, 2003 and filed with the Commission on June 16, 2003.
- 5.3 [RESERVED]
- 5.4 [RESERVED]
- 5.5 <u>Bull Trout Limiting Factors Analysis</u>. By the second anniversary of the Effective Date, PacifiCorp shall provide a limiting factors analysis for bull trout occurring in Lake Merwin tributary streams and Swift Reservoir tributary streams and finalize this evaluation in Consultation with the ACC. If the Licensees, in Consultation with the ACC and with the approval of USFWS, determines that one or more locations have the potential to provide long-term, sustainable habitat for critical life stages of bull trout, the ACC may implement enhancement measures through the use of the Aquatics Fund as described in Section 7.5 below.
- 5.6 <u>Public Information Program to Protect Listed Anadromous Species</u>. PacifiCorp shall consider requests from the Services to create signs and educational materials to inform the public of efforts to reintroduce and protect listed anadromous fish to the Lewis River above Merwin Dam. Such materials, if created, will be included in the I&E Program described under Section 11.2.5 below.
- 5.7 <u>Public Information Program to Protect Bull Trout</u>. The Licensees shall undertake the following public information actions for each Project within six months after Issuance of the New License for that Project to further public understanding of bull trout:
- 5.7.1 <u>Signage</u>. PacifiCorp shall, during the term of its New License for each Project, provide informational signs at established angler access areas on land that PacifiCorp owns or leases, describing bull trout and the need to protect this species. Cowlitz PUD shall provide one

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informational sign, during the term of the New License for the Swift No. 2 Project, at the Swift No. 2 power canal bank fishing facility described in Section 11.3.1 below, describing bull trout and the need to protect this species.

5.7.2 <u>Flyers</u>. PacifiCorp shall, during the terms of the New Licenses, provide flyers at each of PacifiCorp's park entrance booths describing bull trout and the need to protect the species. The Licensees shall provide such flyers to WDFW and USFWS enforcement personnel to be distributed during public contacts.

SECTION 6: FLOW RELEASES FOR FISH AND OTHER AQUATIC SPECIES

- 6.1 Flow Releases in the Bypass Reach; Constructed Channel. The Licensees shall provide flow releases to the reach of the Lewis River downstream of Swift No. 1 ending at Yale Lake, which parallels the Swift No. 2 canal (the "Bypass Reach"), for the duration of each New License subject to the terms and limitations in this Section 6.1. The Licensees shall not be required to schedule flow releases in any year that exceeds, in the aggregate for that year, 55,200 acre-feet (55,349 acre-feet in each leap year) (the "Annual Release Quantity"). These amounts are sufficient to supply the flows described in Section 6.1.3(g) below. The Licensees shall release the Annual Release Quantity at the following two release points (the "Release Points"): (a) from and as measured at the outflow from a water delivery structure to be constructed at the upstream end of the Bypass Reach (such water delivery structure being referred to as the "Upper Release Point"); and (b) to a constructed channel described in Section 6.1.3 below (defined in Section 6.1.3(a) as the "Constructed Channel") from and as measured at the existing canal drain (the "Canal Drain") that is located approximately one-third the length of the canal downstream of the Swift No. 1 tailrace. The monthly schedule of flow releases from these two Release Points are together referred to as the "Combined Flow Schedule," which shall be determined as provided in Section 6.1.4 below.
- 6.1.1 <u>Commencement of Flow Releases from the Canal Drain</u>. The Licensees shall commence flow releases from the Canal Drain at the time that Swift No. 2 reconstruction is complete. Prior to completion of the Upper Release Point, the Licensees shall only be obligated to release the maximum discharge from the Canal Drain, without modification, estimated to be 47 cfs.
- 6.1.2 <u>Construction of Upper Release Point</u>. The Licensees shall determine the location to construct the Upper Release Point and shall design the necessary Project modifications to deliver water at the upstream end of the Bypass Reach by the first anniversary of the Effective Date. The Licensees shall commence construction of the Upper Release Point within six months after Issuance of the New Licenses for the Swift No. 1 Project or the Swift No. 2 Project, whichever is later, and all required Interests in Land and Permits have been obtained, and shall complete construction as soon as practicable.

6.1.3 Constructed Channel.

a. Swift Bypass Habitat Channel Reconnaissance Study. The Licensees, in Consultation with the Parties, have commissioned a study, conducted by Northwest Hydraulic Consultants, Inc., dated December 9, 2003, entitled "Swift Bypass Habitat Channel Reconnaissance Study" (the "Feasibility Report"), attached as Schedule 6.1.3, concerning the biological and technical feasibility of developing a constructed channel in the Bypass Reach downstream of the Swift No. 2 Canal Drain. The purpose of such a channel is to maximize the biological benefits of Canal Drain flows and to enhance connectivity with Yale Lake (the channel to be built and any measures undertaken in the lower Bypass Reach to connect that channel to Yale Lake shall be referred to collectively in this Agreement as the "Constructed Channel").

- b. Funding for the Constructed Channel. The Licensees shall provide funds in a Tracking Account for the construction of the Constructed Channel, including the costs of design, Permitting, construction, and the acquisition of necessary Interests in Land (the "Construction Costs"), subject to the cost limitations provided below. Costs shall be shared by Licensees as follows: Cowlitz PUD shall fund or cause to be funded Construction Costs in an amount not to exceed \$182,000; PacifiCorp shall fund Construction Costs in an amount not to exceed \$818,000. In the event total Construction Costs are less than \$1 million: (a) PacifiCorp shall make its portion of the remaining funds available (as Adjusted for Inflation until spent) for needed restoration or maintenance of the Constructed Channel beginning in year 19 after the Issuance of the New License for the Swift No. 1 Project; and (b) Cowlitz PUD shall make or cause to be made its portion of the remaining funds available (as Adjusted for Inflation until spent) for needed restoration or maintenance of the Constructed Channel beginning in year 21 after the Issuance of the New License for the Swift No. 2 Project. After PacifiCorp and Cowlitz PUD make such funds available, the funds shall be used for purposes of the Constructed Channel prior to the use of the other Aquatics Funds to support the Constructed Channel. The Licensees shall keep the ACC informed as to the progress of construction and shall notify the ACC within four working days after the Licensees determine that costs are likely to exceed \$1 million. If before or after construction begins, the Licensees expect the Construction Costs to exceed \$1 million, the Licensees shall inform the ACC and the ACC must decide whether to proceed, consistent with subsection (c) below, and draw the additional funds required from the Aquatics Fund or from other supplemental funds as may be available. If the ACC decides to proceed, all costs associated with the Constructed Channel in excess of \$1 million, including, but not limited to, construction, operational, and maintenance costs, shall be funded through the use of the Aquatics Fund (Section 7.5). Should the Constructed Channel be built, in no event shall more than \$20,000 per year on average be expended from the Aquatics Fund for maintenance of the Constructed Channel. The Parties other than the Licensees may pay such costs from third party funds that may be available to those Parties in lieu of using monies from the Aquatics Fund.
- Channel Design and Cost Estimate. The Licensees, in Consultation with the ACC, shall complete a design for the construction and maintenance of the Constructed Channel, including the estimated cost of such construction and maintenance, consistent with the findings of the Feasibility Report as soon as practicable after the Effective Date. The design shall include any modifications to the lower Bypass Reach that are required to connect the channel to Yale Lake. The Licensees shall provide the ACC with a period of 90 days after receipt of the design from the Licensees to either approve the design or provide comments and suggestions for changes to the design. Following receipt of any comments and suggestions, the Licensees shall review and revise the design for the Constructed Channel and provide the revised design to the ACC for approval. Alternatively, the ACC (other than the Licensees), with the concurrence of the CIT and Yakama Nation, may determine at that time that the Constructed Channel should not be built. If the WDOE requires Licensees to build the Constructed Channel as a condition of the 401 Certifications for either or both of the Swift No. 1 and Swift No. 2 Projects, and if the ACC later decides, with the concurrence of the CIT and the Yakama Nation, that the Constructed Channel should not be built, then at the time of such decision by the ACC, any Party may object to such 401 Certification requirement as

being Inconsistent with this Agreement and such Inconsistency shall be resolved in accordance with Section 15 below.

- d. <u>Permitting and Construction</u>. The Licensees shall obtain necessary Permits as soon as practicable following design approval by the ACC. The Licensees shall Consult with the ACC concerning construction contracts and methods to build the Constructed Channel. The Licensees shall commence and complete construction of the Constructed Channel as soon as practicable after the construction of the Upper Release Point is complete and all required Interests in Land and Permits have been obtained.
- e. <u>Maintenance of the Constructed Channel</u>. Licensees shall inspect the Constructed Channel at least once annually to determine whether maintenance may be required. After Consultation with the ACC, and using maintenance funds described in subsection b, above, the Licensees shall perform such maintenance as is determined to be necessary.
- f. <u>Flow Releases if Constructed Channel Is Not Constructed</u>. If the Constructed Channel is not constructed pursuant to Section 6.1.3.c, the Licensees shall implement the Annual Release Quantity pursuant to the Combined Flow Schedule provided under Section 6.1.4 below; provided that the Licensees, upon the recommendation of the ACC, may allocate all of the Combined Flow Schedule to the upstream end of the Bypass Reach.
- g. <u>Flow Releases During Construction of Channel</u>. During the construction of the Constructed Channel, the Licensees shall suspend discharges from the Canal Drain to facilitate construction activities. Licensees shall salvage fish during the dewatering of the channel, and any third-party cost associated with such efforts will be part of the cost of the Constructed Channel. During construction of the Constructed Channel, discharges from the Upper Release Point will conform to the following schedule, consistent with the conditions described in Section 6.1.5:
 - (i) July 1 through October 31, 60 cfs.
 - (ii) November 1 through January 31, 100 cfs.
 - (iii) February 1 through June 30, 75 cfs.

6.1.4 Interim Flow Schedule; Combined Flow Schedule.

a. On or before the date the Constructed Channel and the Upper Release Point are both operational, the Licensees shall, in Consultation with and with the approval of the ACC, design an Interim Combined Flow Schedule that shall (1) allocate the Annual Release Quantity by month for a complete twelve-month period; (2) allocate the monthly quantities between the Upper Release Point and the Canal Drain for a complete twelve-month period, and; (3) provide for flow releases that remain unchanged during any given month, but may vary from month to month subject to the conditions in Section 6.1.5. The Licensees shall implement the Interim Combined Flow Schedule when both the Constructed Channel and the Upper Release Point are operational, continuing until replaced by the Combined Flow Schedule. The Licensees shall, during the following twelve months (the "Adjustment Period"), in Consultation with and with

the approval of the ACC, make periodic adjustments to the Interim Combined Flow Schedule based on observation of discharges in the Constructed Channel and related biological considerations. Any such changes will conform to the conditions described in Section 6.1.5 below.

- b. During the final months of the Adjustment Period, the Licensees shall, in Consultation with and with the approval of the ACC, based on the experience and observations during the Adjustment Period, design a Combined Flow Schedule that shall (1) allocate the Annual Release Quantity by month; (2) allocate the monthly quantities between the Upper Release Point and the Canal Drain for a complete twelve month period; and (3) provide for flow releases that remain unchanged during any given month, but may vary from month to month, all subject to the conditions in Section 6.1.5. The Licensees shall implement such Combined Flow Schedule on or before the first anniversary of the date that the Constructed Channel and the Upper Release Point are both operational or approval of the ACC, whichever is later. The Combined Flow Schedule shall remain fixed for the duration of each New License, unless altered as described in Section 6.1.4.c below.
- The Combined Flow Schedule shall remain substantially unchanged c. during the New Licenses' terms; provided that, in response to significant physical changes in the channel (e.g., due to major spill events) or changes in biological priorities (e.g., species reintroduction or changes in species status), the Licensees, with the approval of the ACC, shall make changes to the Combined Flow Schedule based on clearly articulated biological or ecological justifications; provided further, however, that any such changes shall comply with the conditions in Section 6.1.5. The Licensees shall not be required to revise the Combined Flow Schedule pursuant to this subsection (c) more frequently than once every five years, except in response to a significant physical alteration of the Constructed Channel due to spill events. The Parties other than the Licensees may not require any change to the Combined Flow Schedule in a manner that necessitates physical modification to the Projects or related facilities, including, but not limited to, modification of the Upper Release Point or the Canal Drain, or require additional Permits. The Licensees shall implement the revised Combined Flow Schedule no later than twelve months after the written approval by the ACC of such change.

6.1.5 Conditions on Combined Flow Schedule.

- a. The Annual Release Quantity as scheduled for a given calendar year shall not constrain the Licensees' ability to spill water at Swift No. 1 and at the Swift No. 2 Canal during high flow events, for operational reasons, or during emergency circumstances; however, water spilled during such events shall not be charged against the Annual Release Quantity; provided that such spill may be counted to the extent that it displaces scheduled releases from the Upper Release Point, but shall not be counted toward nor displace scheduled releases from the Canal Drain. During the time that spills displace scheduled releases from the Upper Release Point, the Licensees may in their discretion stop releases through the Upper Release Point;
- b. No more than a total of 17,078 acre-feet of the Annual Release Quantity (equivalent to an average of 70 cfs for the four-month period) may be scheduled during

the period July 1st through October 31st, inclusive, and the maximum Combined Flow Schedule for those months shall not exceed 80 cfs in any month during the period July 1st through October 31st;

- c. During the period from November 1st through June 30th, the maximum Combined Flow Schedule in each month shall not exceed 100 cfs;
- d. The maximum flow that may be scheduled for release from the Canal Drain to the Constructed Channel shall be the maximum discharge capacity of the Canal Drain, without modification, estimated to be 47 cfs; and
- e. No portion of the Annual Release Quantity may be credited to a later year or otherwise carried over from year to year. All of the Annual Release Quantity shall be scheduled for release during each year.
- 6.1.6 <u>Response to Flow Reductions or Interruptions</u>. The Parties intend that the Combined Flow Schedule, once established, shall be implemented throughout the terms of the New Licenses, without interruption. Certain events may cause the flow to be reduced or interrupted at either the Canal Drain or the Upper Release Point. The Licensees shall deal with such reductions or interruptions in flow as follows:
 - a. If a non-emergency maintenance or replacement of release point facilities is required, and such activities could decrease or interrupt scheduled releases, the Licensees shall notify the Services, WDFW, and the ACC as far in advance as practicable. The Licensees shall utilize temporary replacement facilities (e.g., pumps, siphons) for the period of potential flow reduction or interruption to maintain release of scheduled amounts of water.
 - b. If emergency maintenance or replacement of release point facilities is required, or if any other event of Force Majeure occurs, and such activities or such event will decrease or interrupt scheduled releases, the Licensees shall notify the Services, WDFW, and the ACC as soon as practicable. The Licensees shall utilize temporary replacement facilities (e.g., pumps, siphons) for the period of potential flow reduction or interruption to maintain release of scheduled amounts of water to the extent practicable under such emergency or Force Majeure conditions. The Licensees shall take action to maintain or replace the release point facilities and to restore their normal operation as soon as is practicable.
 - c. On or before the date that the Licensees begin delivering flows from the Upper Release Point under this Section 6.1, the Licensees shall prepare and deliver to the Services, WDFW, and the ACC plans for expeditious installation and operation of temporary replacement facilities for delivery of flows from the Canal Drain and Upper Release Point, respectively, to avoid or minimize reductions or interruptions in flow to the extent practicable under the circumstances described in paragraphs (a) and (b) above.
 - d. If under paragraphs (a) and (b) above, discharge is reduced or interrupted at either release point, the Licensees shall document the duration (in days or hours), rate (in cfs),

and volume (in acre-feet) of flow reduction to the extent practicable, and shall provide such documentation to the Services, WDFW, and the ACC.

- 6.1.7 <u>Clean Water Act Certification</u>. WDFW shall support the Annual Release Quantity and Combined Flow Schedule described in this Section 6.1 (with or without the Constructed Channel) by filing supporting comments and recommendations with WDOE. WDFW further agrees that the Annual Release Quantity and Combined Flow Schedule are consistent with WDFW's biological and other objectives. The Licensees' applications for Clean Water Act certifications may or may not include reference to the Constructed Channel. A decision by the respective Licensees to not include the Constructed Channel in Licensee applications for 401 Certifications shall not discharge Licensee obligations to construct the Constructed Channel in accordance with Section 6.1.3, including the obligation to obtain necessary Permits. All Parties shall support or not oppose the Licensees' applications for Clean Water Act certifications, or the final certificates, relating to flows in the Bypass Reach that are consistent with this Section 6.1.
- 6.2 <u>Flow Fluctuations Below Merwin Dam</u>. Commencing upon Issuance of the New License for the Merwin Project, PacifiCorp shall implement the following operational regimes at Merwin Dam for the duration of the New License for the Merwin Project.
- 6.2.1 Ramping Rates Below Merwin Dam. All flow rates and Ramping rates described in this Section 6.2.1 shall be measured at the Ariel gage. "Ramping" means those Projectinduced increases ("up-Ramping") and decreases ("down-Ramping") in river discharge and associated changes in river surface elevation over time below Merwin Dam caused by Project operations or for Project maintenance. Ramping rate is the rate of change in stage resulting in regulated discharges. Ramping rates in this Agreement are stated in inches or feet of change in the surface elevation of the river per hour. Restrictions on Ramping shall not apply to (a) changes in flows due to natural increases or decreases in tributary input or surface runoff occurring entirely in the reach between Merwin Dam and the Ariel gage (such as changes caused by snowmelt or rain events), (b) PacifiCorp's operations to comply with high runoff procedures, or (c) PacifiCorp's response to emergency conditions related to an imminent threat to life or property. PacifiCorp shall limit the up-Ramping rate to 1.5 feet per hour below Merwin Dam for all periods when flows below Merwin Dam are at or less than hydraulic capacity of the Merwin Project turbines. PacifiCorp shall limit the down-Ramping rate to 2 inches per hour below Merwin Dam for all periods when flows below Merwin Dam are at or less than 8,000 cfs; except that during the period from February 16 through June 15, no down-Ramping shall occur (1) commencing one hour before sunrise until one hour after sunrise and (2) commencing one hour before sunset until one hour after sunset. PacifiCorp shall perform down-Ramping as gradually as practicable and shall avoid up-Ramping fluctuations during down-Ramping periods, to the extent practicable.
- 6.2.2 <u>Plateau Operations at Merwin Dam</u>. PacifiCorp shall further restrict daily fluctuation in flows below Merwin during the period of February 16 through August 15 of each year by maintaining flow plateaus (periods of near-steady discharge) as provided in this Section 6.2.2. Once a flow plateau is established, PacifiCorp shall maintain the flow plateau for as long a duration as practicable, but flow plateaus may be altered to a new level as a result of changes in natural flow or operational demands on the Lewis River power system, subject to the limitations of this Section 6.2.2. If any Party questions the duration of flow plateaus, they may

request a meeting with appropriate PacifiCorp staff to review the information PacifiCorp used in determining when Plateau Steps were required. PacifiCorp shall cooperate in providing necessary information about and explanation of the actions taken. PacifiCorp shall limit changes in flow plateaus during the period of February 16 through August 15 as provided in (a) and (b) below:

- a. Plateau Steps. For the purposes of this Agreement, a "Plateau Step" shall be defined to be down-Ramping in flow below Merwin that would result in a change in river elevation of more than 0.2 (2/10) foot at the Ariel gage. A single Plateau Step event will begin when the elevation drops by more than 0.2 (2/10) foot and be deemed complete when (i) the elevation rises by more than 0.2 (2/10) foot or (ii) does not change by more than plus or minus 0.2 (2/10) foot for more than 6 hours. Down-Ramping that results in changes in river elevation of less than or equal to 0.2 (2/10) foot shall not be considered a Plateau Step and will not be included in the accumulated total of Plateau Steps, provided that down-Ramping that results in a change of more than 0.2 (2/10) foot in any six-hour period will be considered a Plateau Step. Plateau Steps shall be limited to no more than one change in any 24-hour period, no more than 4 in any seven-day period, and no more than six in any calendar month. If PacifiCorp is required to release flows from Merwin Dam pursuant to the high runoff procedure, then for each such release pursuant to the high runoff procedure, down-Ramping to return to a level maintained for more than 6 hours without decreasing river elevation by more than 0.2 (2/10) feet shall not be counted as a Plateau Step. During flood season, if there is less than 5 feet of storage capacity in addition to the required 17 feet of storage capacity under the high runoff procedure, then the first down-Ramping after each flow release to restore the storage capacity shall not count as a Plateau Step. If PacifiCorp uses more than a single release episode to reach or exceed 22 feet of storage capacity, only the down-Ramping after the first such release shall not count as a Plateau Step; the subsequent down-Rampings shall be counted as Plateau Steps. Finally, if PacifiCorp is asked to lower flows below Merwin Dam for public safety reasons or to facilitate aquatics studies, such changes in river level shall not be counted as Plateau Steps.
- b. Plateau Changes. An accumulation of Plateau Steps will result in a "Plateau Change" as further defined in this Section. PacifiCorp shall limit Plateau Changes to no more than 20 during the period February 16 through August 15. When flows are greater than or equal to 3,500 cfs below Merwin Dam, a Plateau Change shall occur when any series of consecutive Plateau Steps totals 1 foot of down-Ramping between February 16 through August 15. Any periods of up-Ramping during such period shall be ignored in such calculations. When flows are less than 3,500 cfs below Merwin Dam, a Plateau Change shall mean a series of consecutive Plateau Steps, during the period February 16 through August 15, totaling 0.5 (5/10) foot. Any periods of up-Ramping during such period shall be ignored in such calculations. If a single Plateau Step in a series would cause the total to exceed one foot (when flows are greater than or equal to 3,500 cfs) or one-half foot (when flows are less than 3,500 cfs), the excess shall be counted toward the next Plateau Changes. If a Plateau Step begins when flows are greater than 3,500 cfs and ends when flows are less than 3,500 cfs, the Plateau Change will be determined by adding the fractions of a Plateau Change occurring before and after the river discharge below Merwin Dam passes 3,500 cfs. For example, if a Plateau Step begins when flows are at 5,000 cfs and has measured 6 inches when flows reach 3,500 cfs (one-half of a

Plateau Change for flows above 3,500 cfs) and continues to decline an additional 3 inches ending at 3,000 cfs (one-half of a Plateau Change for flows below 3,500 cfs), it would count as one full Plateau Change.

- 6.2.3 <u>Stranding Study and Habitat Evaluation</u>. By the third anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall complete a stranding study and a habitat evaluation study below Merwin Dam to assess the potential effects of Project operations on steelhead, coho salmon, Chinook salmon, and chum salmon, and their habitats. The total cost to complete both the study and evaluation is estimated to be \$300,000. PacifiCorp shall develop the stranding study objectives in Consultation with the ACC, with final approval by NOAA Fisheries and USFWS. The stranding study shall identify measurable factors affecting potential stranding, the relationship of such factors to each other, and the timeframe and season within which stranding may occur. The habitat evaluation study shall evaluate spawning and rearing habitat from Merwin Dam to the downstream end of Eagle Island across a range of minimum flow operational conditions. The design of the study and evaluations shall be limited to the objectives developed above, must be operationally implementable, and any operational changes implemented for the study and evaluation shall not be considered a breach of any other operational restrictions provided in this Agreement, e.g., shall not be considered a Plateau Change under Section 6.2.2. Based upon the results of the study and evaluation, the ACC may recommend to PacifiCorp, subject to the approval of NOAA Fisheries and USFWS, measures to minimize or mitigate stranding of salmonids below Merwin Dam. Such measures may include minor adjustments to instream flow levels, or minor adjustments to Merwin Project operations to address Project impacts below Merwin Dam. PacifiCorp shall consider any suggested adjustments to operations and flows of the Project, and shall make reasonable, good faith efforts to address such recommendations. In so doing, PacifiCorp should consider impacts on operational benefits of the Project, including, but not limited to, flood management, power generation, and recreational uses. If PacifiCorp determines not to implement the recommendations, because there would be significant impact on Project benefits, the ACC may elect to mitigate the impacts shown by the study and evaluation by development of habitat enhancement projects through the use of the Aquatics Fund.
- 6.2.4 Minimum Flows Below Merwin Dam. PacifiCorp shall provide the following minimum flows below Merwin Dam during the following time periods, subject to the limitations and requirements provided in Section 6.2.5: (1) July 31 through October 15, 1,200 cfs; (2) October 16 through October 31, 2,500 cfs; (3) November 1 through December 15, 4,200 cfs; (4) December 16 through March 1, 2,000 cfs; (5) March 2 through March 15, 2,200 cfs; (6) March 16 through March 30, 2,500 cfs; (7) March 31 through June 30, 2,700 cfs; (8) July 1 through July 10, 2,300 cfs; (9) July 11 through July 20, 1,900 cfs; and (10) July 21 through July 30, 1,500 cfs. The above flows and timing were designed for the purpose of the maintaining and enhancing species downstream of Merwin Dam, including native fall Chinook. The preceding sentence shall not modify or be used to modify the obligations stated in this Section 6.2.4.
- 6.2.5 Low Flow Procedures. During years when PacifiCorp projects that sufficient water will not be available to appropriately balance the respective needs of fishery resources, recreation, flood management, and power production, PacifiCorp shall convene a Flow Coordination Committee (the "FCC") consisting of representatives from PacifiCorp, NOAA Fisheries, USFWS, WDFW, the CIT, and the Yakama Nation. PacifiCorp shall provide the FCC with relevant information, and the FCC shall independently evaluate available data regarding

water availability during the projected low flow period and decrease or maintain the minimum flows levels provided in Section 6.2.4 as it deems appropriate. PacifiCorp shall maintain minimum flow levels provided in Section 6.2.4 unless such levels are temporarily decreased by Consensus of the FCC members; provided that if there is an impasse, determinations shall be made by a majority of the agency members of the FCC. Changes requested by the FCC shall not require PacifiCorp to violate its agreement with FEMA concerning high runoff management, as described in Section 12. The FCC shall consider the following interests in modifying minimum flow levels (the order of listing is not intended to indicate priority): (1) the needs of fish species, with a priority on ESA-listed species, including, without limitation, consideration for keeping redds watered, providing rearing habitat for wild fall Chinook, and pulse flows to assist in migration of juvenile fish if such pulse flows are shown to be effective; (2) the need to provide flood management benefits for down river areas; and (3) the desire to refill all Project reservoirs to achieve a combined target of 5 feet of available reservoir storage capacity by July 1, and a target of 15 feet of reservoir storage by Labor Day (to provide reasonable recreation uses between Memorial Day and Labor Day). The Counties and cities that are signatories to this Agreement may designate a local government liaison to the FCC. The liaison's purpose is to encourage communication between the FCC and local governments. PacifiCorp shall notify the local governments' liaison (a) when the FCC will be convened and (b) the general content of the agenda. The liaison may provide written comments to the FCC for its consideration.

SECTION 7: AQUATIC HABITAT ENHANCEMENT ACTIONS

7.1 <u>Large Woody Debris Program</u>. From the Effective Date until superseded as set forth below, PacifiCorp shall continue its current large woody debris ("LWD") program pursuant to a Hydraulic Project Approval ("HPA") from the State of Washington, attached as Schedule 7.1.

Within 180 days after the Issuance of the New License for the Swift No. 1 Project, the provisions of the current HPA from the State of Washington that are related to LWD shall be superseded by the provisions of this Section 7.1 and PacifiCorp shall apply for a new HPA consistent with this Section 7.1. The provisions of this Section 7.1 shall constitute the LWD management plan during the term of the New License for the Swift No. 1 Project. After Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall, in Consultation with the ACC, place LWD as such LWD is collected from the Swift Reservoir by PacifiCorp as part of its normal operations, into a fenced and locked storage area within the Lewis River Basin. The ACC may advise PacifiCorp of the type and quantity of LWD that is to be stored, considering anticipated habitat improvement projects in the coming years and anticipated frequency of the salvage efforts that it desires for habitat improvement purposes. PacifiCorp shall maintain the secure storage area for the duration of the New License for the Swift No. 1 Project, and provide reasonable access on business days to members of the ACC. Entities authorized by PacifiCorp (including ACC members) may pick up, transport, and place LWD for the purpose of restoring aquatic habitat in the Lewis River Basin. LWD may not be placed in or near any Project reservoir, forebay, canal, or other facility without the Licensee's approval. This does not preclude placing LWD in the Constructed Channel or elsewhere in the Bypass Reach.

- 7.1.1 Funding. Within 180 days after Issuance of the New License for the Merwin Project and annually thereafter, PacifiCorp shall make available in a Tracking Account up to \$2,000, which may be disbursed to qualified entities to defray the costs of LWD transportation and placement in the Lewis River Basin (the "LWD Fund"). The unspent balance of the LWD Fund in any year shall be carried forward and made available in subsequent years, in addition to the annual amount of \$2,000. In addition, within 180 days after Issuance of the New License for the Merwin Project and annually thereafter, PacifiCorp shall contribute \$10,000 to the Aquatics Fund (Section 7.5) that will be earmarked for LWD projects in the mainstem of the Lewis River below Merwin Dam that benefit anadromous fish. If there are not sufficient LWD projects, or if the LWD program is suspended as provided in Section 7.1.4 below, PacifiCorp, at the request of the ACC, shall use the funds for other Aquatics Fund projects that benefit anadromous fish in the mainstem of the Lewis River below Merwin Dam and then for other projects in the Lewis River Basin below Merwin Dam. For any LWD project below Merwin Dam, PacifiCorp shall provide for the transportation of LWD at its own expense to a staging area provided by the entity or individual carrying out the project.
- 7.1.2 <u>LWD Study</u>. PacifiCorp shall contract with a qualified consulting firm, selected in Consultation with the ACC, to develop and implement an LWD study to identify and assess the potential benefits of LWD projects below Merwin Dam. The general scope of the study is described on attached Schedule 7.1.2, and the total cost to complete the study is estimated to be \$60,000. PacifiCorp shall cause the consultant to submit a draft study plan to the ACC for review within 180 days after Issuance of the New License for the Merwin Project. The ACC may comment on the draft study plan within 60 days after receipt. PacifiCorp shall direct the

consultant to finalize the study plan within 90 days after submission of the draft to the ACC, to complete the study, and to deliver the completed study to the ACC. If at any point PacifiCorp provides comments to the consultant during preparation of the LWD study, PacifiCorp shall provide to the ACC copies of the consultant's original drafts and PacifiCorp's comments.

7.1.3 [RESERVED]

- 7.1.4 Liability for LWD Program; Partial Suspension of LWD Program. Entities picking up, transporting, and placing LWD shall bear all costs (except as otherwise provided in Sections 7.1, 7.1.1, and 7.5), risks, and responsibility for such LWD activities, and shall acquire all Permits necessary for such activities. PacifiCorp may require such entities to provide evidence of adequate liability insurance or self-insurance capability as a condition to providing access to the LWD. The Parties do not intend that PacifiCorp's funding of LWD activities result in PacifiCorp becoming liable for the placing entities' actions or the consequences thereof. In the event, however, that any third party makes a claim against PacifiCorp arising out of such actions and PacifiCorp suffers a loss or losses in the aggregate amount of \$500,000, PacifiCorp shall suspend the placement of LWD until such time as PacifiCorp's liability concerns have been addressed in a way that is mutually acceptable to the Parties (e.g., legislative immunity, indemnification by the placing entities). During any suspension of the LWD program, PacifiCorp shall continue to contribute \$10,000 annually to the Aquatics Fund as provided in Section 7.1.1; however, PacifiCorp shall be relieved of its annual obligation to defray transport and placement expenses up to the amount of \$2,000. PacifiCorp shall not have any obligation to store additional LWD during the period of suspension of the LWD program.
- 7.1.5 <u>Surplus LWD</u>; <u>Reporting</u>. PacifiCorp may use or dispose of in its sole discretion any LWD collected by PacifiCorp that is not placed in the storage sites under this Section 7.1 or that PacifiCorp, in Consultation with the TCC, determines is not needed for terrestrial habitat improvement projects. PacifiCorp shall include in its annual report under Section 14.2.6 information regarding (a) the quantity of LWD provided to the storage sites, and (b) the quantity of LWD sold by PacifiCorp to offset the cost of the LWD program, both (a) and (b) being described in truckloads, board-feet, or tons.

7.2 Spawning Gravel Study and Gravel Monitoring and Augmentation Plan.

- a. <u>Contracting with Consultant</u>. Within six months after the Effective Date, PacifiCorp shall contract with a qualified consulting firm, selected in Consultation with the ACC, to develop and implement a spawning gravel study and, on the basis of the study results, to develop a gravel monitoring and augmentation plan.
- b. <u>Draft Study Plan</u>. The general scope of the study is described on attached Schedule 7.2. PacifiCorp shall cause the consultant to submit a draft study plan to the ACC for review upon Issuance of the New License for the Merwin Project. In addition to any review by the ACC, PacifiCorp may provide input to the consultant when it is developing the plan, as long as PacifiCorp provides the ACC, prior to the ACC's 60-day review period, with the consultant's original drafts and PacifiCorp's comments. The ACC may comment on the draft study plan within 60 days after receipt.

- c. <u>Finalizing and Completing the Study and Preparing Study Report</u>. PacifiCorp shall direct the consultant to finalize the study plan within 90 days after submission of the draft to the ACC, to complete the study, and to deliver a draft study report to the ACC. Prior to the submission of the draft study report to the ACC, PacifiCorp may provide input to the consultant, so long as PacifiCorp provides the consultant's original drafts of the study report and PacifiCorp's comments to the ACC along with the draft study report. The ACC shall have 60 days to comment on the draft study report. PacifiCorp shall Consult with the ACC on the draft study report. PacifiCorp shall direct the consultant to finalize the study report within 120 days after submission of the draft study report to the ACC. The study report will include the results of the study and a gravel monitoring and augmentation plan that describes gravel monitoring, the mechanism to determine when gravel augmentation will occur, and how gravel augmentation shall occur if the monitoring shows augmentation is necessary, during the term of the New License for the Merwin Project.
- d. <u>Implementation of Gravel Monitoring and Augmentation Plan</u>. PacifiCorp shall implement the gravel monitoring and augmentation plan. The monitoring and augmentation plan shall not require any augmentation that would increase the gravel levels beyond those existing on the date of the consultant's study.
- 7.3 Predator Study. By the 10th anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall conduct a one-time study of whether predation in Lake Merwin is likely to be a limiting factor to the success of the anadromous salmonid reintroduction. PacifiCorp shall design the study in Consultation with the ACC, with final approval by the Services. PacifiCorp shall provide the final study report to the ACC. PacifiCorp shall consult with the ACC regarding the findings of the final study report, and if the study determines that predation is likely to be a limiting factor to successful reintroduction of anadromous salmonids, PacifiCorp may identify steps that could be undertaken to control predation.
- 7.4 Habitat Preparation Plan. Within six months after the Effective Date, PacifiCorp shall develop a plan (the "Habitat Preparation Plan") in Consultation with the ACC to release live adult hatchery anadromous salmonids into Swift Reservoir, Yale Lake, and Lake Merwin for the purpose of preparing the habitat in those locations for the reintroduction of anadromous salmonids. The objective of the Habitat Preparation Plan will be to make possible (1) nutrient enrichment in the waters through decay of the adult hatchery fish and, (2) tilling of the gravel by the released hatchery adults as they attempt to spawn. The number, sex, and species of hatchery adult salmonids shall be determined as part of the Habitat Preparation Plan. PacifiCorp's performance obligation under the Habitat Preparation Plan shall be limited to placing live adult hatchery anadromous salmonids for a period of five years in each of Swift Reservoir, Yale Lake, and Lake Merwin, commencing in each case five years prior to expected completion of the downstream fish passage facility from that reservoir. PacifiCorp shall implement the Habitat Preparation Plan at Swift Reservoir beginning as soon as practicable after the Habitat Preparation Plan is finalized and at the other reservoirs as provided in the Habitat Preparation Plan. PacifiCorp shall implement this program only to the extent there are excess hatchery fish available beyond those required for the Hatchery and Supplementation Plan described in Section 8. PacifiCorp shall not be required to pass or collect the progeny of hatchery adult anadromous salmonids introduced under the Habitat Preparation Plan unless and until collection and transport facilities for such progeny are constructed in accordance with Section 4. For the Merwin and

Yale Projects, PacifiCorp's obligations under this Section 7.4 shall cease if the Yale Downstream Facility or Merwin Downstream Facility, respectively, will not be constructed pursuant to Section 4.1.9.

7.5 Aquatics Fund. PacifiCorp and Cowlitz PUD shall establish the Lewis River Aquatics Fund ("Aquatics Fund") to support resource protection measures ("Resource Projects"). Resource Projects may include, without limitation, projects that enhance and improve wetlands, riparian, and riverine habitats; projects that enhance and improve riparian and aquatic species connectivity that may be affected by the continued operation of the Projects; and projects that increase the probability for a successful reintroduction program. The Aquatics Fund shall be a Tracking Account maintained by the Licensees with all accrued interest being credited to the Aquatics Fund. PacifiCorp shall provide \$5.2 million, in addition to those funds set forth in Section 7.1.1, to enhance, protect, and restore aquatic habitat in the Lewis River Basin as provided below. Cowlitz PUD shall provide or cause to be provided \$520,000 to enhance, protect, and restore aquatic habitat in the Lewis River Basin as provided below; provided that Cowlitz PUD's funds may only be used for Resource Projects upstream of Swift No. 2, including without limitation the Bypass Reach. The Licensees shall provide such funds according to the schedules set forth below.

7.5.1 <u>PacifiCorp's Contributions</u>.

- a. PacifiCorp shall make funds available as follows: on each April 30 commencing in 2005, \$300,000 per year until 2009 (a total of \$1.5 million).
- b. For each of the Merwin, Yale, and Swift No. 1 Projects, PacifiCorp shall make one-third of the following funds available as follows after the Issuance of the New License for that Project: on each April 30 commencing in 2010, \$300,000 per year through 2014 (a total of \$1.5 million); on each April 30 commencing in 2015, \$100,000 per year through 2018 (a total of \$400,000); and on each April 30 commencing in 2019, \$200,000 per year through 2027 (a total of \$1.8 million); provided that, for any New License that has not been Issued by April 30, 2009, the funding obligation for that Project shall be contributed annually in the same amounts but commencing on April 30 following the first anniversary of Issuance of the New License for that Project.
- c. PacifiCorp shall contribute \$10,000 annually to the Aquatics Fund as set forth in Section 7.1.1.
- 7.5.2 <u>Cowlitz PUD's Contributions</u>. Cowlitz PUD shall make or cause to be made funds available as follows: \$25,000 per year on each April 30 following the first anniversary of the Issuance of the New License for the Swift No. 2 Project through the April 30 following the 20th anniversary of the Issuance of the New License for the Swift No. 2 Project (a total of \$500,000); and a single amount of \$20,000 on the April 30 following the 21st anniversary of the Issuance of the New License for the Swift No. 2 Project.
- 7.5.3 <u>Use of Funds</u>. Decisions on how to spend the Aquatics Fund, including any accrued interest, shall be made as provided in Section 7.5.3.2 below; provided that (1) at least \$600,000 of such monies shall be designated for projects designed to benefit bull trout according to the following schedule: as of April 30, 2005, \$150,000; as of April 30, 2006, \$100,000; as of

April 30, 2007, \$150,000; as of April 30, 2008, \$100,000; and on or before the April 30 following the fifth anniversary of the Issuance of all New Licenses, \$100,000; and such projects shall be consistent with bull trout recovery objectives as determined by USFWS; (2) fund expenditures for the maintenance of the Constructed Channel (Section 4.1.3) shall not exceed \$20,000 per year on average; (3) if studies indicate that inadequate "Reservoir Survival," defined as the percentage of actively migrating juvenile anadromous fish of each of the species designated in Section 4.1.7 that survive in the reservoir (from reservoir entry points, including tributary mouths to collection points) and are available to be collected, is hindering attainment of the Overall Downstream Survival standard as set forth in Section 3, then at least \$400,000 of such monies shall be used for Resource Projects specifically designed to address reservoir mortality; and (4) \$10,000 annually shall be used for lower river projects as set forth in Section 7.1.1. Projects shall be designed to further the objectives and according to the priorities set forth below in Section 7.5.3.1.

7.5.3.1 <u>Guidance for Resource Project Approval and Aquatics Fund</u> Expenditures.

- a. Resource Projects must be consistent with applicable Federal, State, and local laws and, to the extent feasible, shall be consistent with policies and comprehensive plans in effect at the time the project is proposed. These may include, but are not limited to, Washington's Wild Salmonid Policy, the Lower Columbia River Bull Trout Recovery Plan, and the Lower Columbia River Anadromous Fish Recovery Plan.
- b. The Aquatics Fund shall not be used to fund Resource Projects that any entity is otherwise required by law to perform (not including obligations under this Agreement or the New Licenses for use of the Aquatics Fund), unless by agreement of the ACC.
- c. The Licensees shall evaluate Resource Projects using the following objectives:
 - (1) benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species;
 - (2) support the reintroduction of anadromous fish throughout the Basin; and
 - (3) enhance fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River.

For the purposes of this Section 7.5, the North Fork Lewis River refers to the portion of the Lewis River from its confluence with the Columbia River upstream to the headwaters, including tributaries except the East Fork of the Lewis River.

The Licensees shall also consider the following factors to reflect the feasibility of projects and give priority to Resource Projects that are more practical to implement:

(i) Whether the activity may be planned and initiated within one year,

- (ii) Whether the activity will provide long-term benefits,
- (iii) Whether the activity will be cost-shared with other funding sources,
- (iv) Probability of success, and
- (v) Anticipated benefits relative to cost.

7.5.3.2 <u>Resource Project Proposal, Review, and Selection.</u>

- (1) By the first anniversary of the Effective Date, the Licensees shall develop, in Consultation with the ACC, (a) a strategic plan consistent with the guidance in Section 7.5.3.1 above to guide Resource Project development, solicitation, and review; and (b) administrative procedures to guide implementation of the Aquatics Fund. Both may be modified periodically with the approval of the ACC.
- (2) Any person or entity, including the Licensees, may propose a Resource Project. In addition, the Licensees may solicit Resource Projects proposals from any person or entity.
- (3) The Licensees shall review all Resource Project proposals, applying the guidance set forth in Section 7.5.3.1. The Licensees shall provide an annual report describing proposed Resource Project recommendations to the ACC. The date for submitting such report shall be determined in the strategic plan defined in subsection 7.5.3.2(1) above. The report will include a description of all proposed Resource Projects, an evaluation of each Resource Project, and the basis for recommending or not recommending a project for funding.
- (4) The Licensees shall convene a meeting of the ACC on an annual basis, no sooner than 30 days and no later than 60 days after distribution of the report set forth in Section 7.5.3.2(2), for Consultation regarding Resource Projects described in the report.
- (5) Licensees shall modify the report on proposed Resource Projects, based on the above Consultation, and submit the final report to the ACC within 45 days after the above Consultation. Any ACC member may, within 30 days after receiving the final report, initiate the ADR Procedures to resolve disputes relating to Resource Projects. If the ADR Procedures are commenced, the Licensees shall defer submission of the final report on Resource Projects to the Commission, if necessary, until after the ADR Procedures are completed. If the ADR Procedures fail to resolve all disputes, the Licensees shall provide the comments of the ACC to the Commission. If no ACC member initiates the ADR Procedures, the Licensees shall submit the final report to the Commission, if necessary, within 45 days after submission of the final report to the ACC.

7.6 <u>In Lieu Fund</u>. If NOAA Fisheries and USFWS determine, pursuant to Section 4.1.9, that reintroduction of anadromous salmonids into Yale Lake or Lake Merwin is not required, and if as a result of such determination one or more of the Merwin Downstream Facility, Swift Upstream Facility, and the Yale Upstream and Downstream Facilities are not designed, permitted, constructed, and operated, then PacifiCorp shall establish the "In Lieu Fund" to support mitigation measures for anadromous salmonids in lieu of passage. The In Lieu Fund shall be a Tracking Account maintained by the Licensees, with all accrued interest being credited to the In Lieu Fund. PacifiCorp shall provide funds according to the schedule set forth below.

7.6.1 <u>PacifiCorp's Contributions</u>.

- a. PacifiCorp shall provide the following sums to the In Lieu Fund: \$10 million in lieu of a juvenile surface collector at Yale Dam; \$10 million in lieu of a juvenile surface collector at Merwin Dam; \$5 million in lieu of an upstream adult fish passage facility at Yale; and \$5 million in lieu of an upstream adult fish passage facility in the vicinity of the Swift Projects.
- PacifiCorp shall allocate funds in lieu of the Yale Downstream Facility as follows: \$3 million on each of the 11th and 12th anniversaries of the Issuance of the New License for the Yale Project, and \$4 million on the 13th anniversary of the Issuance of the New License for the Yale Project. PacifiCorp shall allocate funds in lieu of the Merwin Downstream Facility as follows: \$2.5 million on each of the 14th through the 17th anniversaries of the Issuance of the New License for the Merwin Project. PacifiCorp shall allocate funds in lieu of the Swift Upstream Facility as follows: \$1.25 million on each of the 14th through the 17th anniversaries of the Issuance of the New License for the Swift No. 1 Project. PacifiCorp shall allocate funds in lieu of the Yale Upstream Facility as follows: \$1.25 million on each of the 14th through the 17th anniversaries of the Issuance of the New License for the Yale Project. Funds shall be available for expenditure as soon as the decisions not to build the respective facilities are final and not subject to further review; provided that if any review delays the expenditure of In Lieu Fund monies for an extended period, the ACC will consult to discuss the delay and whether to propose an alternate course of action. PacifiCorp shall not be obligated to both spend In Lieu Funds and build the respective facilities.

7.6.2 <u>Mitigation Measure Proposal, Review, and Selection.</u>

- (1) By the first anniversary of establishment of the In Lieu Fund, PacifiCorp shall develop, in Consultation with the ACC and with the approval of the Services, (a) a strategic plan consistent with the guidance in Section 7.6.3 below to guide mitigation measure development, solicitation, and review; and (b) administrative procedures to guide implementation of the In Lieu Fund. Both may be modified periodically with the approval of the Services.
- (2) Any person or entity, including PacifiCorp, may propose a mitigation measure. In addition, PacifiCorp may solicit mitigation measure proposals from any

person or entity. A preliminary list of potential mitigation measures is attached as Schedule 7.6.2.

- (3) PacifiCorp shall review all mitigation measure proposals, applying the guidance set forth in Section 7.6.3. PacifiCorp shall provide an annual report describing proposed mitigation measure recommendations to the ACC. The date for submitting such report shall be determined in the strategic plan defined in this Section 7.6.2. The report will include a description of all proposed mitigation measures, an evaluation of each mitigation measure, and the basis for recommending or not recommending a measure for funding.
- (4) PacifiCorp shall convene a meeting of the ACC on an annual basis, no sooner than 30 days and no later than 60 days after distribution of the report described in Section 7.6.2(3), for Consultation regarding mitigation measures described in the report. The recommended measures shall be consistent with the guidance set forth in Section 7.6.3, as identified by the Services. If the Services identify one or more proposed measures that are not consistent with such guidance, PacifiCorp shall include a description of such measures in the final report with a notation that they are not consistent with the guidance and shall not be implemented using In Lieu Fund monies. At the conclusion of the Consultation, the Services may submit to PacifiCorp a list identifying the Services' prioritization of proposed mitigation measures (excluding those inconsistent with the guidance set forth in Section 7.6.3).
- (5) PacifiCorp shall modify the report on proposed mitigation measures, based on the above Consultation and any Service mitigation measure priority list, and submit the final report to the ACC within 45 days after the above Consultation. Any ACC member may, within 30 days after receiving the final report, initiate the ADR Procedures to resolve disputes relating to mitigation measures. If the ADR Procedures are commenced, then PacifiCorp shall defer submission of the final report on mitigation measures to the Commission, if necessary, until after the ADR Procedures are completed. If the ADR Procedures fail to resolve all disputes, then PacifiCorp shall provide the comments of the ACC to the Commission. If no ACC member initiates the ADR Procedures, then PacifiCorp shall submit the final report to the Commission, if necessary, within 45 days after submission of the final report to the ACC.
- 7.6.3 <u>Guidance and Criteria for Mitigation Measure Approval and In Lieu Fund Expenditures</u>. In Lieu Fund monies will be spent on mitigation measures that collectively contribute to meeting the objective of achieving benefits to anadromous fish populations equivalent to or greater than benefits that would have occurred if passage through Yale and/or Merwin reservoirs had been provided, as determined by the Services based on the best information available at such time. The Services may provide further guidance to PacifiCorp and the ACC from time to time, to guide the spending of In Lieu Fund monies consistent with the previous sentence. If measures to further benefit specifically the North Fork Lewis River populations have been exhausted, then any remaining funds will be used to benefit other anadromous fish populations in the applicable evolutionarily significant units.

The list of projects in Schedule 7.6.2 is provided to illustrate, without limitation as to scope or type, some projects that qualify as mitigation measures under the In Lieu Fund based on current

conditions. These specific projects may or may not be undertaken with the In Lieu Fund. Some measures identified may already have been completed by the time the In Lieu Fund becomes applicable.

- 7.7 Management of Aquatics Fund and In Lieu Fund. PacifiCorp and Cowlitz PUD shall each hold or cause to be held in a Tracking Account monies that it provides to the Aquatics Fund, and PacifiCorp shall hold monies provided to the In Lieu Fund, until expenditures for Resource Projects or mitigation measures are made. Each Licensee's contributions shall be made in 2004 dollars, Adjusted for Inflation. Each Licensee shall credit interest on its respective Fund monies from the date the monies are due to be placed into the Fund until expended. Interest will be calculated monthly at the prime interest rate, as published on the last day of the month in the Wall Street Journal, based on the average monthly balance. If such rate ceases to be published in the Wall Street Journal, the Parties shall agree upon an alternate source for the prime interest rate. The Licensees shall notify and Consult with the ACC with respect to the Aquatics Fund if it appears that a given project's costs will be significantly higher than expected, and PacifiCorp shall do the same with respect to the In Lieu Fund. Based on Consultation with the ACC, the Licensees (or PacifiCorp with respect to the In Lieu Fund) may determine not to proceed with or to modify that project. Funds not expended in any given year shall be carried over to the subsequent year.
- 7.7.1 Review. The Licensees shall provide an annual report regarding Aquatics Fund activities and expenditures under Section 7.5, and PacifiCorp shall provide such annual reports regarding In Lieu Fund activities and expenditures under Section 7.6, both including any monitoring information collected regarding Resource Projects or mitigation measures implemented through the Aquatics and In Lieu Funds. Such annual report may be included as part of the detailed annual reports of the ACC activities required by Section 14.2.6. Each Licensee shall make or cause to be made available its underlying records relating to the Aquatics Fund, and PacifiCorp shall make available its underlying records relating to the In Lieu Fund, for review by the Parties.
- 7.7.2 Administrative, Overhead, and Legal Costs. Each Licensee shall bear its costs for all administrative, legal, and overhead costs associated with the management of the Aquatics and In Lieu Funds as provided in Sections 7.5 through 7.7, including, without limitation, calculation of interest and reports to the ACC and Consultation with the ACC, and shall not assess any such costs against the Aquatics and In Lieu Funds; provided that all costs incurred to implement approved Resource Projects and mitigation measures shall be paid for out of the Aquatics and In Lieu Funds, respectively.
- 7.7.3 <u>Escalation of Costs</u>. Unless otherwise indicated, all costs or payment amounts specified in dollars in Sections 3, 4, 5, 6, 7, 8 and 9 shall be deemed to be stated as of the year 2004, and shall be Adjusted for Inflation as of April 30 of each year (beginning in April 2005).
- 7.8 Execution of Projects and Mitigation Measures. The Licensee(s) shall implement or provide funds through a grant or other means to another entity to implement Resource Projects developed under Section 7.5.3.2, in accordance with the approved plan and schedules for such Resource Projects. PacifiCorp shall do the same with respect to mitigation measures under Section 7.6.2.

SECTION 8: HATCHERY AND SUPPLEMENTATION PROGRAM

8.1 Hatchery and Supplementation Program. The Licensees shall undertake a hatchery and supplementation program. The goals of the program are to support (i) self-sustaining, naturally producing, harvestable native anadromous salmonid species throughout their historical range in the North Fork Lewis River Basin, and (ii) the continued harvest of resident and native anadromous fish species (the "Hatchery and Supplementation Program"). The Hatchery and Supplementation Program shall be consistent with the priority objective of recovery of wild stocks in the basin to healthy and harvestable levels. The intention of the foregoing sentence is not necessarily to eliminate the hatchery program but it recognizes the importance of recovering wild stocks and a potential that hatchery production may adversely affect recovery. The Hatchery and Supplementation Program shall be consistent with the ESA, applicable state and federal fisheries policies, and regional recovery plans, and should be consistent with recommendations of the Hatchery Science Review Group and the Northwest Power Planning Council's Hatchery Review (Artificial Production Review & Evaluation) to the extent practicable. The supplementation portion of the program shall be a part of the reintroduction program (in addition to fish passage) and shall be limited to spring Chinook, steelhead and coho as provided in this Section 8.

To ensure that the Hatchery and Supplementation Program is meeting its goals, the Licensees, in Consultation with the ACC and with the approval of the Services, shall develop and implement a hatchery and supplementation plan to adaptively manage the program and guide its management as set out in Section 8.2 below ("Hatchery and Supplementation Plan" or "H&S Plan"). The Licensees shall incorporate best methodologies and practices into the Hatchery and Supplementation Plan. The Hatchery and Supplementation Plan shall be designed to achieve the numeric Hatchery Targets provided for in Section 8.3 below, and those targets shall be calculated in terms of ocean recruits of hatchery origin, taking into account harvest and escapement. For purposes of this Agreement, "Ocean Recruits" shall mean total escapement (fish that naturally spawned above Merwin and hatchery fish) plus harvest (including ocean, Columbia River, and Lewis River harvest). Subject to the ESA, applicable federal and state fisheries policies, regional recovery plans, other applicable laws and policies, and the terms of this Agreement, the Licensees shall provide for the implementation of the Hatchery and Supplementation Program for the terms of the New Licenses.

As of the Effective Date, WDFW owns the existing Lewis River Hatchery facility. Use and operation of the Lewis River Hatchery is subject to agreements between PacifiCorp and WDFW. The Licensees shall ensure the existing Lewis River, Merwin, and Speelyai hatchery facilities (the "Hatchery Facilities") are modified pursuant to Section 8.7 below to meet their obligations under this Section 8. The Licensees shall ensure the Hatchery Facilities, including the relevant or necessary support facilities (e.g., employee housing, shops, hatcheries, and related infrastructure), as modified, are maintained as necessary to consistently deliver a high-quality hatchery product that will meet their obligations. The Licensees' hatchery production obligations as set forth in Section 8.4 below, including both anadromous and resident fish, shall be limited by the combined production capacity of the Hatchery Facilities ("Hatcheries Capacity Limit") as established after implementation of upgrades as set forth in Section 8.7. The Licensees may, after Consultation with the ACC, use different hatcheries than those described above; provided that such different hatcheries (a) have equal or greater capacity than the

Hatchery Facilities if that capacity is still required to meet the Licensees' obligations under this Section 8, (b) are of quality equal to or greater than that of the Hatchery Facilities, and (c) comply with transfer and disease protocols and other requirements of the H&S Plan.

8.2 <u>Hatchery and Supplementation Plan</u>. The Licensees, in Consultation with the ACC and subject to the approval of the Services, shall develop a Hatchery and Supplementation Plan to address hatchery operations, supplementation, and facilities as provided in Section 8.2.1 below. Until implementation of the Hatchery and Supplementation Plan, PacifiCorp shall continue to implement the hatchery program set forth in Articles 50 and 51 of the 1983 Merwin license, as amended.

The Hatchery and Supplementation Plan will address both anadromous and resident fish. The Licensees shall incorporate best methodologies and practices into all components of the H&S Plan, including, but not limited to, the Hatchery Facilities and supplementation facilities. When developing the H&S Plan, the Licensees and the ACC shall be guided, at a minimum, by the Fish Planning and Hatchery Review Documents (submitted as AQU-18 with the Licensees' applications for the Merwin, Swift No. 1, and Swift No. 2 Projects in April 2004), and shall take into consideration the results of ongoing relevant hatchery reviews and the experience of other supplementation programs in the region, such as the Yakama Nation's Cle Elum facility. The Licensees shall transition from the hatchery program set forth in Articles 50 and 51 of the 1983 Merwin license, as amended, to implementing the Hatchery and Supplementation Plan as soon as practicable after Issuance of the New License(s) for the Merwin Project or the Swift Projects, whichever occurs earlier, provided that supplementation will commence as provided in Section 8.5. When finalized, the Licensees shall submit the Hatchery and Supplementation Plan to WDFW and NOAA Fisheries for consideration in their development of applicable hatchery genetic management plans ("HGMPs").

- 8.2.1 <u>Development of Plan/Timing</u>. The Licensees, in Consultation with the ACC, shall produce and distribute a draft Hatchery and Supplementation Plan to the ACC by the first anniversary of the Effective Date. The Yakama Nation may chair a subgroup of interested members of the ACC for purposes of coordinating the ACC's input regarding the supplementation elements of the draft H&S Plan. The members of the ACC shall have 60 days to comment on the draft H&S Plan. The Licensees shall provide a 60-day period for the public to provide written comments. The Licensees shall consider and address in writing the written comments provided by the members of the ACC, including the rationale behind the Licensees' decision to not address a comment in the final H&S Plan. The Licensees shall consider comments and submit a revised H&S Plan to the Services for approval within 120 days of the first anniversary of the Effective Date.
- 8.2.2 <u>Hatchery and Supplementation Plan Contents</u>. The H&S Plan shall address the means by which the Licensees shall use the Hatchery Facilities to accomplish the goals and requirements of the Hatchery and Supplementation Program, including, without limitation, the Hatchery Targets. It shall also be consistent with the objective of restoring and recovering wild stocks in the basin to healthy and harvestable levels. The H&S Plan shall address, at a minimum, the following topics:
 - 8.2.2.1 A description of the Hatchery Facilities, including the upgrades identified in Schedule 8.7;

- 8.2.2.2 Identification of species and broodstock sources to be used for the Hatchery and Supplementation Program;
 - 8.2.2.3 The quantity and size of fish to be produced;
- 8.2.2.4 The allocation of smolts and adults between the hatchery and supplementation programs and a description of how the two programs are to be implemented at the same facility without causing unacceptable adverse impacts on each other;
- 8.2.2.5 Rearing and release strategies for each stock including, but not limited to, timing, planned distribution, locations for release, procedures to transport smolts to acclimation sites for supplementation purposes, and upward and downward production adjustments to accommodate natural returns;
 - 8.2.2.6 The Ocean Recruits Methodology referenced in Section 8.3.2.2 below;
 - 8.2.2.7 Plans and protocol for supplementation stocks;
 - 8.2.2.8 Broodstock collection and breeding protocols;
 - 8.2.2.9 Policies in effect regarding in-basin and out-of-basin stock transfers;
- 8.2.2.10 Measures to minimize potential negative impacts of the Hatchery and Supplementation Program on ESA-listed species;
- 8.2.2.11 Measures to protect production processes from predators, e.g., netting, consideration of evolving hatchery practices to condition fish to avoid predators;
- 8.2.2.12 A description of how the Hatchery and Supplementation Program monitoring and evaluation requirements will be implemented, including, but not limited to, marking strategies;
- 8.2.2.13 A description of the methods to prevent unacceptable adverse impacts, if any, of (1) the hatchery program on the reintroduction program, and (2) the supplementation program on native resident species; and
 - 8.2.2.14 Fish health protocols.
- 8.2.3 <u>Annual Operating Plan</u>. The Licensees shall provide for the implementation of the Hatchery and Supplementation Plan through an annual plan ("Annual Operating Plan"). The Annual Operating Plan shall be consistent with the Hatchery and Supplementation Plan. The Licensees, in Consultation with the hatchery managers and with the approval of the Services, shall develop the initial Annual Operating Plan as part of the Hatchery and Supplementation Plan. The Licensees shall develop subsequent Annual Operating Plans in Consultation with the hatchery managers and subject to the approval of the Services. The Annual Operating Plan may

be included as part of the detailed annual reports of the ACC activities required by Section 14.2.6.

The Annual Operating Plan shall, at a minimum, contain: (1) a production plan, which shall specify the species and broodstock sources; (2) the current Hatchery Target and Juvenile Production Target for each species to be produced at the Hatchery Facilities; (3) a release plan which shall identify by species the rearing schedule and planned distribution of fish and the schedules and locations for releases; (4) a list of facility upgrades to be undertaken that year; and (5) a description of relevant monitoring and evaluation to be undertaken that year.

- 8.2.4 Reporting Requirements. On an annual basis, the Licensees shall provide to the ACC for review and comment a report compiling all information gathered pursuant to implementation of the Hatchery and Supplementation Plan. The report also will include recommendations for ongoing management of the Hatchery and Supplementation Program. The ACC shall have 60 days to comment on the annual report. Within 60 days of the close of the comment period, the Licensees shall finalize the report after consideration of all comments. The Licensees shall also provide the comprehensive periodic review undertaken pursuant to Section 8.2.6 below to the ACC. The Licensees shall provide final annual reports and the comprehensive periodic review to the Services during the development of any required ESA permit or authorization for hatchery operations, including NOAA Fisheries' HGMP process. The report may be included as part of the detailed annual reports of the ACC activities required by Section 14.2.6.
- 8.2.5 <u>Plan Modifications</u>. The Licensees shall update the Hatchery and Supplementation Plan every five years or earlier if required by the HGMP, in Consultation with the ACC and with the approval of the Services, using the process set out in Section 8.2 above in order to adaptively manage the Hatchery and Supplementation Program. The Licensees shall consider recommendations from members of the ACC and the comprehensive review set forth below, and identify those recommendations that have not been incorporated into the H&S Plan with a brief statement as to why the changes were not made.
- Comprehensive Periodic Review. The Licensees shall undertake a comprehensive periodic review within 5 years after reintroduction above Swift No. 1 Dam, within 5 years after reintroduction into Yale Lake, and within 5 years after reintroduction into Lake Merwin, and then every 10 years after that. This schedule is to be followed even in the event that reintroduction into either Yale Lake or Lake Merwin does not occur. The Licensees, in Consultation with the ACC, shall hire an independent consultant to review the Hatchery and Supplementation Program to assess (i) the Program's impact on the reintroduction program and on listed species, (ii) the Program's effectiveness in achieving the goals set out in Section 8.1 above, and (iii) efficiency of hatchery operations. Factors to be considered in the review include current federal and state policies and plans, relevant best practices, and existing information regarding recent scientific advances. The reviewer will provide recommendations regarding ongoing management of the Hatchery and Supplementation Program and, if needed, recommend amendments to the Hatchery and Supplementation Plan. The Licensees shall incorporate recommendations for ongoing management of the Hatchery and Supplementation Program set forth in the review into the Hatchery and Supplementation Plan pursuant to Section 8.2.5 or explain why the recommendation is not being adopted.

- 8.3 <u>Anadromous Fish Hatchery Adult Ocean Recruit Target by Species</u>. The Licensees shall develop and implement the Hatchery and Supplementation Plan to achieve hatchery adult Chinook, steelhead, and coho ocean recruit targets ("Hatchery Targets") as described below.
- 8.3.1 <u>Hatchery Targets</u>. The following Hatchery Targets shall be in effect at the commencement of the Hatchery and Supplementation Program:

Table 8.3.1 – Hatchery Targets

	Spring Chinook	Steelhead	Coho	Total
Hatchery Targets (adult	12,800	13,200	60,000	86,000
Hatchery Ocean				
Recruits)				

8.3.2 <u>Modifications to Hatchery Targets</u>.

- 8.3.2.1 <u>Hatchery Targets</u>. The Licensees shall not increase any of the Hatchery Targets above the Hatchery Targets in Table 8.3.1 above during the terms of the New Licenses without the unanimous approval of the ACC.
- 8.3.2.2 Methods to Document Ocean Recruits. The Licensees, in Consultation with the ACC, shall determine the methods to document the number of Ocean Recruits and to separately identify Hatchery Ocean Recruits and Ocean Recruits from natural spawning in the Hatchery and Supplementation Plan ("Ocean Recruits Methodology"). The Ocean Recruits Methodology shall identify the appropriate assessment time frame over which to measure Hatchery Ocean Recruits and Natural Ocean Recruits.
- 8.3.2.3 Reductions in Hatchery Targets. When the Licensees determine, in Consultation with the ACC, through application of the Ocean Recruits Methodology that the number of Ocean Recruits from natural spawning grounds of any species exceeds the relevant natural production threshold(s) for that species identified in Table 8.3.2 ("Natural Production Threshold"), the Licensees shall decrease the appropriate Hatchery Target(s) identified in Table 8.3.1 on a fish-for-fish (1:1) basis. The Licensees shall not apply the amount of excess numbers of one species against another species' Hatchery Target. The Licensees shall not decrease the Hatchery Targets below the hatchery target floor ("Hatchery Target Floor") specified in Table 8.3.2.
- 8.3.2.4 <u>Unacceptable Adverse Impacts on Reintroduction Program or Fisheries Management Objectives</u>. If the Services determine that there are unacceptable impacts from hatchery production on the reintroduction program or fishery management objectives including, but not limited to, the recovery of wild stocks in the basin, then the Licensees, in Consultation with the ACC, shall identify and consider options to mitigate or avoid such unacceptable impacts. In Consultation with the ACC and at the direction of the Services, the Licensees shall implement options necessary to address such unacceptable adverse impacts, including, without limitation, modifying hatchery practices, reducing Hatchery Targets, or implementing other options that are identified pursuant to this Section 8.3.2.4.

8.3.2.5 <u>Increases in Previously Reduced Hatchery Targets</u>. If the Licensees reduce Hatchery Targets based on the number of Natural Ocean Recruits as determined by the Ocean Recruits Methodology, but the number of Ocean Recruits subsequently declines under such methodology, the Licensees, in Consultation with the ACC and at the direction of the Services, shall increase the Hatchery Targets on a fish-for-fish (1:1) basis, provided that the increased Hatchery Targets shall not exceed the initial Hatchery Targets in Table 8.3.1, and available data demonstrates that the hatchery fish are not the cause of decline or a significant limiting factor to self-sustaining, naturally producing, harvestable native anadromous salmonid species.

Table 8.3.2 – Numbers Governing Modifications to Hatchery Targets

	Spring Chinook	Steelhead	Coho	Total
Natural Production	2,977	3,070	13,953	20,000
Threshold for Hatchery				
Reduction				
Hatchery Target Floor	2,679	2,763	12,558	18,000

- 8.4 Anadromous Fish Hatchery Juvenile Production. Each year, the Licensees shall provide for the production of spring Chinook salmon smolts, steelhead smolts, and coho salmon smolts at levels specified below ("Juvenile Production"). The Licensees shall use the Juvenile Production to provide (1) juveniles for the supplementation program under Section 8.5, and (2) juveniles for harvest opportunities. To the extent that there are not sufficient juveniles for the Hatchery and Supplementation Program and to ensure that enough adults will return to ensure adequate broodstock for the Hatchery and Supplementation Program in future years, the Licensees shall, in Consultation with the ACC and subject to the approval of the Services, determine how best to allocate juveniles.
- 8.4.1 <u>Juvenile Production Targets</u>. The Licensees shall provide for the implementation of the following Juvenile Production targets ("Juvenile Production Targets") when the Hatchery and Supplementation Program commences. The following Juvenile Production Targets shall be used unless and until modified by the Licensees pursuant to Section 8.4.2 as part of the Hatchery and Supplementation Plan in accordance with Section 8.2.5:

Table 8.4 – Juvenile Production Targets

Smolt Production	Spring Chinook	Steelhead	Coho
H&S Plan Years 1 – 3	1.35 million	275,000	1.8 million
H&S Plan Years 4 – 5	1.35 million	275,000	1.9 million
H&S Plan Years 6 – 50	1.35 million	275,000	2.0 million

8.4.2 <u>Adjustment of Juvenile Production</u>. The Licensees, in Consultation with the ACC, shall adjust the Juvenile Production as needed to achieve the Hatchery Targets subject to the Hatcheries Capacity Limit, e.g., at some point in the future a smaller number of juveniles may be needed to get the same number of returning adults. When determining whether adjustments should be made, the Licensees, in Consultation with the ACC, shall consider the

hatchery practices component of the Hatchery and Supplementation Plan (e.g., density, best management practices), data from the Monitoring and Evaluation Plan identified in Section 9 (including, but not limited to, fish quality and adult return requirements), the periodic comprehensive review described in Section 8.2.6 above, and the terms of Section 8.1.

8.4.3 <u>Stock Selection</u>. The Licensees shall select stocks for the production of juveniles that are the most appropriate for the basin. The stock selected and the rationale shall be set forth in the Hatchery and Supplementation Plan. The following stocks shall be used unless and until modified by the Licensees as part of the Hatchery and Supplementation Plan in accordance with Section 8.2.5:

	Spring Chinook	Steelhead	Coho
Juveniles for	Lewis River hatchery	Lewis River wild	Lewis River hatchery
Supplementation	stock with Cowlitz	winter stock with	early (type S) stock
(release above	River hatchery stock	Kalama hatchery stock	
Merwin)	as contingency	as contingency	
Juveniles for	Same as for	Same as for	Same as for
Harvest (release	supplementation	supplementation and	supplementation and
below Merwin)		existing Lewis River	Lewis River hatchery
		hatchery summer and	late (type N) stock
		winter stock	

Table 8.4.3 – Broodstock

8.5 <u>Supplementation Program.</u>

- 8.5.1 <u>Juvenile Salmonids Above Swift No. 1 Dam</u>. The Licensees shall, for the purpose of supplementation, provide for the transport of juvenile anadromous salmonids to acclimation sites selected pursuant to Section 8.8.1, for the following periods of time:
 - (1) <u>Spring Chinook and Steelhead</u>. The Licensees shall provide the means to supplement juvenile spring Chinook and steelhead for a period of 15 years commencing upon completion of the Swift Downstream Facility pursuant to Section 4.4.1; and
 - (2) <u>Coho</u>. The Licensees shall provide the means to supplement juvenile coho salmon for a period of 9 years commencing upon completion of the Swift Downstream Facility.

At the end of these time periods, the Licensees shall assess on a year-by-year basis whether to extend the supplementation of juvenile salmonids. Upon ACC agreement and subject to the Services' approval, the Licensees shall continue to supplement juvenile salmonids. In evaluating whether to extend the supplementation of juveniles, the ACC shall consider, among other things, the impact of continuing supplementation on the overall reintroduction program and on ESA-listed species.

8.5.2 <u>Juvenile Salmonids to Yale Lake and Lake Merwin.</u> PacifiCorp shall, for the purposes of supplementation, provide for the transport of juvenile anadromous salmonids to

appropriate release sites in Yale Lake and Lake Merwin, as described in Section 8.8.2 below, for the following periods of time:

- (1) <u>Spring Chinook and Steelhead</u>. PacifiCorp shall provide the means to supplement juvenile spring Chinook and steelhead for a period of 15 years to Yale Lake commencing upon completion of the Yale Downstream Facility as provided in Section 4.5; and for a period of 15 years to Lake Merwin commencing upon completion of the Merwin Downstream Facility as provided in Section 4.6; and
- (2) <u>Coho</u>. PacifiCorp shall provide the means to supplement juvenile coho salmon into Yale Lake for a period of 9 years commencing upon completion of the Yale Downstream Facility and into Lake Merwin for a period of 6 years commencing upon completion of the Merwin Downstream Facility.

At the end of these time periods, PacifiCorp shall assess on a year-by-year basis whether to extend the supplementation of juvenile salmonids. Upon ACC agreement and subject to the Services' approval, the Licensees shall continue to supplement juvenile salmonids. In evaluating whether to extend the supplementation of juveniles, the ACC shall consider, among other things, the impact of continuing supplementation on the overall reintroduction program and on ESA-listed species.

- 8.5.3 Adult Salmonids. The Licensees shall begin providing for the supplementation of adult fish one year prior to completion of the Swift Downstream Facility. Throughout the terms of the New Licenses, the Licensees shall provide for the transport and release of supplementation stocks of adult spring Chinook, coho, and steelhead above Swift No. 1 as directed by the ACC. Throughout the terms of the New Licenses, PacifiCorp shall provide for the transport and release of supplementation stocks of adult spring Chinook, coho, and steelhead into Yale Lake and Lake Merwin as directed by the ACC. The ACC shall determine the timing for initiating supplementation into Yale Lake and Lake Merwin. The ACC, subject to the approval of the Services, may recommend discontinuing or recommencing the supplementation of such supplementation stocks, provided that any such recommendations are biologically based and not contrary to the goals of the ESA.
- 8.5.4 <u>Supplemental Juveniles</u>. The Licensees shall not mark supplementation juveniles in the same manner as hatchery fish are marked for harvest.

8.6 Resident Fish Production.

8.6.1 <u>Rainbow Trout Production</u>. Each year, for the terms of the New Licenses, subject to Section 8.6.3, the Licensees shall provide for the production of 20,000 pounds of resident rainbow trout. When the New License is Issued for either the Merwin Project or the Swift Projects, whichever is earlier, the Licensees shall fulfill their obligation by providing for the production of 800,000 juveniles with an estimated weight of 40 juvenile fish per pound, or an equivalent number, in pounds, of resident rainbow trout of a different life stage as directed by WDFW, following Consultation with the ACC. The Licensees shall provide for the stocking of such rainbow trout in Swift Reservoir. Resident rainbow trout will be managed separately from steelhead and shall not significantly interfere with the recovery of self-sustaining, naturally producing, harvestable populations of native steelhead.

- 8.6.2 Resident Kokanee Production. Each year, for the terms of the New Licenses, subject to Section 8.6.3, PacifiCorp shall provide for the production of 12,500 pounds of resident kokanee. When the New License is Issued for either the Merwin Project or the Swift Projects, whichever is earlier, PacifiCorp shall fulfill its obligation by providing for the production of 93,000 juveniles of various sizes which have an estimated weight of 12,500 pounds or an equivalent number, in pounds, of resident kokanee of a different life stage as directed by WDFW, following Consultation with the ACC. Unless otherwise determined by the ACC through the Hatchery and Supplementation Plan, PacifiCorp shall provide for the annual stocking of such resident kokanee in Lake Merwin.
- 8.6.3 Modifications in Resident Rainbow Trout and Kokanee Production. The Licensees shall modify resident rainbow trout and kokanee production numbers as part of the Hatchery and Supplementation Plan, in Consultation with the ACC and subject to the approval of the Services and WDFW, to address other management goals, including, without limitation, harvest considerations and impacts of the resident fish hatchery program on the reintroduction program; provided that the Licensees shall not increase (i) resident rainbow trout production above a cap of 20,000 pounds and, (ii) resident kokanee production above a cap of 12,500 pounds.
- Hatchery and Supplementation Facilities, Upgrades, and Maintenance. The Licensees 8.7 shall, in collaboration with the hatchery managers and hatchery engineers and in Consultation with the ACC, undertake or fund facility additions, upgrades, and maintenance actions as provided in Schedule 8.7, consistent with best methodologies and practices. The Licensees, in collaboration with the hatchery managers and hatchery engineers, and in Consultation with the ACC, shall design these facilities, upgrades, and maintenance actions to include elements that ensure usefulness of the facilities for supplementation and production fish culturing practices and to accommodate the facility additions, upgrades, and maintenance actions identified in Schedule 8.7. The Licensees shall complete the upgrades or actions by the deadlines identified in Schedule 8.7, provided that the Licensees shall schedule the updates or actions consistent with (i) the required hatchery production or (ii) the reintroduction program. The Licensees shall not be required to construct new hatchery facilities or to expand the existing Hatchery Facilities except as provided pursuant to this Section 8.7. WDFW retains the right and authority to operate its hatchery and conduct other or additional fish production activities that do not impact the goals set forth in Section 8.1 at the state-owned Lewis River Hatchery at no additional cost to the Licensees.

8.8 Juvenile Acclimation Sites.

8.8.1 Above Swift No. 1 Dam. Beginning upon completion of the Swift Downstream Facility, the Licensees shall place juvenile salmonid acclimation sites in areas reasonably accessible to fish hauling trucks and in practical areas in the upper watershed above Swift No. 1 Dam, as determined by the Licensees in Consultation with the Yakama Nation and the ACC. The acclimation sites shall consist of fish containment areas that allow juvenile fish to acclimate in natural or semi-natural waterways and allow necessary pre-release juvenile fish management; such sites will not consist of or include concrete-lined ponds or waterways, but may include other concrete structures necessary for facility functionality and structural integrity during the supplementation program.

8.8.2 In Yale Lake and Lake Merwin. Beginning upon completion of the Yale Downstream Facility and the Merwin Downstream Facility, respectively, PacifiCorp shall provide in-stream enclosures to confine juvenile salmonids in tributaries to Yale Lake and Lake Merwin after they are transported from rearing facilities for the purpose of allowing juveniles to adjust to the natural environment for a short period of time, to be determined by the Licensees, in Consultation with the ACC and with the approval of the Services, prior to being exposed to natural mortality factors such as predators. These enclosures are intended to provide an opportunity for the juveniles to acclimate to the natural environment prior to being exposed to predators. While it is assumed that there will be sufficient food in the natural stream, if evidence suggests, prior to placing juveniles in the enclosures, that this is not the case, the Licensees will Consult with the ACC to determine if feeding of juveniles in the enclosures should occur. Prior to completion of the Yale Downstream Facility and the Merwin Downstream Facility, respectively, the Licensees shall, in Consultation with the ACC, evaluate whether Hatchery and Supplementation Program goals will be cost-effectively served by establishing and operating acclimation sites for any of the targeted stocks in Yale Lake, Lake Merwin, or their tributaries. In the event that funding becomes available for acclimation facility establishment and operation in Yale Lake, Lake Merwin or their tributaries from Parties other than the Licensees or from third parties, the Licensees shall amend the H&S Plan, subject to the approval of the Services, to provide for placing of juvenile anadromous salmonids in such acclimation facilities for so long as the funding continues to be available and placement does not negatively impact the supplementation program or otherwise alter the obligations of the Licensees.

SECTION 9: AQUATIC MONITORING AND EVALUATION

9.1 Monitoring and Evaluation Plan. By the second anniversary of the Issuance of the first of the New Licenses, the Licensees shall complete a master monitoring and evaluation plan (the "M&E Plan") in Consultation with the ACC to implement the terms of this Section 9 to monitor and evaluate the effectiveness of aquatic PM&E Measures and to assess achievement of the Reintroduction Outcome Goals. The M&E Plan shall address the tasks, and the methods, frequency, and duration of those tasks, necessary to accomplish the monitoring and evaluation items described below. The Licensees shall provide a draft M&E Plan to the ACC by the first anniversary of the Issuance of the first New License. The Licensees shall allow the ACC a period of 90 days to provide comments on the draft M&E Plan as part of such Consultation. The Services shall have final approval authority over elements of the M&E Plan relating to fish passage or species listed under the ESA, subject to Section 15.14 below. The Licensees shall finalize the M&E Plan and submit it to the Commission for approval within 90 days after the close of the ACC comment period. The Licensees shall implement the M&E Plan upon approval by the Commission. For the purposes of this Section 9, Cowlitz PUD shall prepare elements of the M&E Plan to be performed within the boundaries of Swift No. 2 and shall implement such elements. PacifiCorp shall prepare and implement all other elements of the M&E Plan. PacifiCorp and Cowlitz PUD shall cooperate to prepare a single M&E Plan and a single annual report to the Commission, but if that is not successful, each shall submit its own plan and annual report as required under this Section 9.

The Licensees shall provide to the ACC the results of the monitoring and evaluations under the M&E Plan as part of the Licensees' annual report required in Section 14.2.6. The Licensees shall also include in such annual report a description of the monitoring and evaluation tasks to be completed during the following year. The Licensees shall Consult with the ACC as necessary, but no less often than every five years, to determine if modifications to the M&E Plan are warranted. As a result of such Consultation, the Licensees shall propose changes to the M&E Plan to improve the effectiveness of monitoring and evaluation. The Services shall have final approval of changes to the M&E Plan with respect to fish passage or species listed under the ESA. The Licensees shall implement any changes to the M&E Plan as soon as they have been approved by the Commission.

The Licensees shall amend the M&E Plan in Consultation with the ACC, to incorporate newly constructed facilities and other aquatic PM&E Measures to be implemented during the terms of the New Licenses. The Licensees shall provide a draft revised M&E Plan relating to facilities to be constructed in the future, and other aquatic PM&E Measures to be implemented in the future, to the ACC not less than two years before completing construction of such facilities or implementation of such measures. The Licensees shall allow the ACC a period of 90 days to provide comments on the draft revised M&E Plan as part of such Consultation. The Services shall have final approval authority over elements of the revised M&E Plan relating to fish passage or species listed under the ESA, subject to Section 15.14 below. Licensees shall finalize the revised M&E Plan and submit it to the Commission for approval within 90 days after the close of the ACC comment period. The Licensees shall implement any amendments to the M&E Plan as soon as they have been approved by the Commission.

Sections 9.2 through 9.8 below provide guidance regarding elements to be included in the original M&E Plan, and in subsequent amendments to the M&E Plan, relating to specific passage

facilities and other PM&E Measures. The monitoring and evaluation tasks described in Sections 9.2 through 9.8 shall be incorporated into and made part of the M&E Plan. The Licensees may revise and adapt the monitoring and evaluation tasks described in Sections 9.2 through 9.8 below, in Consultation with the ACC and with the approval of the Services. The Licensees shall allow the ACC a period of 90 days to provide comments on revisions to the draft M&E Plan as part of such Consultation. The Services shall have final approval authority for the revisions to the M&E Plan relating to fish passage or species listed under the ESA, subject to Section 15.14 below. The Licensees shall finalize any revisions to the M&E Plan and submit them to the Commission for approval within 90 days after the close of the ACC comment period. The Licensees shall implement the revised M&E Plan upon approval by the Commission.

The Licensees shall include in the M&E Plan elements to determine whether the Reintroduction Outcome Goals have been achieved, provided that for such purposes the Licensees shall be required to monitor and evaluate only elements that are under the control of the Licensees (such as the functioning of fish passage facilities) and that are affected by the Projects. Except as expressly agreed in writing, the Licensees shall not be required to conduct monitoring that is the obligation of a third party under applicable law or permits (including, but not limited to, marine harvest).

9.2 <u>Monitoring and Evaluation Related to Fish Passage</u>.

- 9.2.1 <u>Monitoring and Evaluation of Upstream and Downstream Passage Facilities</u>. PacifiCorp, with respect to Merwin, Yale, and Swift No. 1, and PacifiCorp and Cowlitz PUD, with respect to Swift No. 2, shall include in the M&E Plan the following monitoring and evaluation elements with respect to each downstream and upstream fish passage facility, for Chinook, steelhead, coho, bull trout, and sea-run cutthroat:
- a. Juvenile migration timing and the estimated number of juveniles entering Swift Reservoir, Yale Lake, and Lake Merwin;
- b. Reservoir Survival of juvenile fish migrating through Swift Reservoir, Yale Lake, and Lake Merwin, determined by monitoring a statistically valid sample of fish entering each reservoir;
- c. Collection Efficiency and Collection Survival for each downstream fish passage facility;
- d. Injury to and mortality of juvenile fish collected at each downstream facility, and mortality measured at Release Ponds;
- e. Survival of, Injury to, and mortality of kelts, bull trout, and adult sea-run cutthroat collected at each downstream facility;
- f. Turbine Entrainment, i.e., the percentage of juvenile anadromous fish of each of the species designated in Section 4.1.7 that are available for collection and that (i) are not collected by the downstream passage facility, and (ii) enter the turbines;
 - g. Turbine Survival, i.e., the percentage of juvenile anadromous fish of each of the

species designated in Section 4.1.7 that are entrained in turbines and that survive through the turbines; provided that such monitoring shall only be performed if and when fish passing through Project turbines may contribute materially to ODS; provided further that prior to performing Turbine Survival studies, the Licensees shall assume Turbine Survival equals zero;

- h. UPS;
- i. The ATE at each upstream fish transport facility;
- j. The number, by species, of juvenile and adult fish being collected at the Projects; and
- k. Hydraulic performance, such as attraction flows and water velocities, to verify that each facility is operating according to its approved design.
- 9.2.2 <u>Adult Migration/Spawning Assessment</u>. The Licensees shall identify the spawning timing, distribution, and abundance for Transported Anadromous Species passed upstream by monitoring a statistically valid sample of each stock. The primary purpose is to identify preferred spawning areas in order to (i) inform revisions to the Hatchery and Supplementation Plan and the Upstream Transport Plan and (ii) inform the decisions of the ACC in determining how to expend funds from the Aquatics Fund, but such identification shall not otherwise create or increase obligations of the Licensees except as expressly set forth in this Agreement.
- 9.2.3 <u>Tagging Program</u>. PacifiCorp shall provide for tagging of a subsample of anadromous fish collected and transported from each downstream passage facility, to assist in the determination of Ocean Recruits under Section 8.1, which in turn assists in evaluation of adult return survival. This tagging program shall continue for the term of each New License.
- 9.2.4 <u>Response to Fish Passage Monitoring Results</u>. To the extent not set forth specifically in this Section 9.2, the Licensees' obligations based on the results of monitoring related to fish passage facilities are set forth in Section 4 above.
- 9.2.5 <u>Adjustment in Monitoring Frequency</u>. Once any fish passage standard has been achieved, as set forth in Section 4.1.4 and as determined in Section 4.1.5 above, future monitoring of that standard would be limited to periodic checks to determine continued compliance with the standard.
- 9.3 <u>Wild Fall Chinook and Chum.</u> PacifiCorp shall include in the M&E Plan monitoring of the wild fall Chinook spawner population and distribution, including juvenile tagging, below Merwin Dam as described generally in Schedule 9.3. PacifiCorp shall also monitor chum spawner population and distribution in a similar manner below Merwin Dam, provided that juvenile tagging shall not be required for chum until technological improvements make such tagging practicable. This information may be used by the ACC to monitor the effects of PM&E Measures on these populations and to prioritize expenditures from the Aquatics Fund, but shall not otherwise create obligations for the Licensees except as expressly set forth in this Agreement.

- 9.4 <u>Water Quality Monitoring</u>. The Licensees shall include in the M&E Plan elements to assess compliance with water quality and quantity standards as required by their respective 401 Certifications. In addition, the Licensees shall fund water quality monitoring necessary to comply with the National Pollution Discharge Elimination System Permits at the Hatchery Facilities.
- 9.5 Monitoring of Hatchery and Supplementation Program. The Licensees shall include in the M&E Plan all elements required to monitor the effectiveness of the Hatchery and Supplementation Plan in meeting the goals set out in Section 8.1 above, including, without limitation, the items listed in this Section 9.5. The Licensees shall periodically assess the effectiveness of the anadromous hatchery program by comparing numbers of hatchery releases to numbers of hatchery Ocean Recruits. The Licensees shall also conduct pre-release screening of fish health in the Hatchery Facilities. The Licensees shall determine the contribution of hatchery production and natural production to Ocean Recruits. The Licensees shall monitor the effects of hatchery fish on reintroduced anadromous salmonids.
- 9.6 Bull Trout Monitoring. Until the M&E Plan is implemented, the Licensees shall monitor and evaluate Cougar Creek and Swift Reservoir bull trout populations following the Threatened and Endangered Species Annual Plan (May 2004) filed with the Commission as of the Effective Date. The M&E Plan shall include monitoring and evaluation measures for bull trout as described in this Section 9.6. Licensees may adaptively modify or supplement the monitoring and evaluation elements listed in this Section 9.6 with the approval of USFWS. The Licensees will conduct the bull trout monitoring elements of the M&E Plan for the duration of the New Licenses. In the event that bull trout are delisted in the Lewis River Basin under the ESA, or in the event bull trout populations are found by USFWS through a recovery plan to no longer warrant protection under the ESA, then the Licensees and USFWS will reevaluate the need to continue the bull trout monitoring program at the same level and the ACC will be informed of the results of the reevaluation. USFWS shall have final approval of all elements of the M&E Plan relating to bull trout, subject to Section 15.14. The information obtained through bull trout monitoring may be used by the ACC to prioritize expenditures from the Aquatics Fund, but shall not otherwise create obligations for the Licensees except as expressly set forth in this Agreement.
- 9.6.1 Monitoring of Interim Bull Trout Collection. The Licensees shall include monitoring and evaluation elements in the M&E Plan for the interim bull trout collection and testing of alternate passage facilities conducted by PacifiCorp and Cowlitz PUD under Section 4.9, and in connection with bull trout passage in the absence of anadromous fish facilities as provided in Section 4.10. The monitoring and evaluation elements shall include (1) survival of adult bull trout collected and transported to an upstream or downstream release site; and (2) effectiveness of bull trout collection methods.
- 9.6.2 <u>Monitoring of Other Bull Trout PM&E Measures</u>. The Licensees shall include in the M&E Plan elements to monitor and evaluate PM&E Measures relating to bull trout, including specific methods and measures to be used in monitoring bull trout populations, including, but not limited to, tagging and snorkel surveys.
- 9.7 <u>Resident Fish Assessment.</u> PacifiCorp shall include in the M&E Plan elements to monitor the following with respect to resident fish: (1) the interaction between reintroduced

anadromous salmonids and resident fish species; and (2) kokanee spawner population size in Yale Lake in the fall of each year. The results of such monitoring may inform adaptive management of the operation of the passage facilities but shall not require any physical changes to fish passage facilities or Project operations.

Monitoring of Flows. PacifiCorp shall include in the M&E Plan elements to monitor flows and Ramping rates below Merwin Dam using the Ariel gage. PacifiCorp shall pay the cost of operation, maintenance, and replacement of the Ariel gage for the terms of the New Licenses. PacifiCorp shall also include in the M&E Plan a requirement for PacifiCorp to keep records of flow contributions (in cfs) to the Bypass Reach, based on calibrated flow settings at the Upper Release Point and the Canal Drain. Such records, including records of any Force Majeure or scheduled maintenance event that interrupts flows, shall be included in the Licensees' annual report under Section 14.2.6. PacifiCorp shall periodically confirm the accuracy of calibration of the Upper Release Point and the Canal Drain and shall include the results of calibrations in the annual report. PacifiCorp shall send a notice by electronic mail to the ACC members within 48 hours after each adjustment or change to the flows in the Bypass Reach, unless the Parties agree upon an alternate method of notification. PacifiCorp shall notify the ACC of the occurrence, duration, and magnitude of any spill within 10 business days after a spill from Swift No. 1 or the Swift No. 2 canal.

SECTION 10: TERRESTRIAL

- 10.1 Yale Land Acquisition and Habitat Protection Fund. PacifiCorp shall establish and maintain a fund in a Tracking Account for acquisition of interests in land to protect wildlife habitat (which may include, without limitation, fee interests and conservation easements) ("Interests in Land") in the vicinity of the Yale Project (the "Yale Fund"). The TCC described in Section 14.2 will select Interests in Land for acquisition and approve the final terms of proposed acquisitions to be made with the Yale Fund. Once Interests in Land are selected for acquisition, PacifiCorp shall execute approved transactions and the Interests in Land acquired will be owned by PacifiCorp, unless otherwise agreed by PacifiCorp and the TCC. PacifiCorp shall contribute a total of \$2.5 million to the Yale Fund. The following goals serve as guidelines for the selection of Interests in Land to be acquired with the Yale Fund:
 - a. Provide movement corridors for elk through the Yale Project area between highand low-elevation winter range;
 - b. Protect approximately 660 acres of low-elevation winter range in the vicinity of the Yale Project nearby or adjacent to PacifiCorp-owned lands;
 - c. Provide approximately 100 acres of land on which forage for elk may be maintained or cultivated in the vicinity of the Yale Project.
- 10.1.1 Funding Amount, Timing, and Schedule of Funding. PacifiCorp shall provide \$1.5 million to the Yale Fund by the first day of PacifiCorp's first fiscal year following the Effective Date of this Agreement. PacifiCorp shall contribute an additional \$1 million to the Yale Fund on the first day of PacifiCorp's second fiscal year following the Effective Date of this Agreement. PacifiCorp's contributions shall be made in 2003 dollars, Adjusted for Inflation. PacifiCorp's current fiscal year begins on April 1.
- 10.1.2 <u>Matching Funds</u>. The TCC may elect, in its discretion, to direct the use of all or part of the Yale Fund to match the cash contributions made by local, state, and federal agencies, and other persons or organizations, for acquisition of Interests in Land in the vicinity of the Yale Project. Any Party may propose a source of matching funds under this subsection.
- 10.1.3 <u>Use of Funds Beyond the Vicinity of Yale</u>. If suitable Interests in Land are not available or are only available at unreasonable prices in the vicinity of the Yale Project within ten years after the Effective Date, the TCC may direct that such funds be used to accomplish similar goals in other areas of the Lewis River Basin.
- 10.2 <u>Swift No. 1 and Swift No. 2 Land Acquisition and Habitat Protection Fund</u>. The Licensees shall establish and maintain a fund in a Tracking Account for the purpose of acquiring Interests in Land to protect wildlife habitat, in order to meet the objectives of the Wildlife Habitat Management Plan as described in Section 10.8 below, on lands within five miles of the Swift No. 1 and Swift No. 2 Project Boundaries (laterally and upstream, but not downstream) or lands managed by the Licensees associated with Swift No. 1 and Swift No. 2 (laterally and upstream, but not downstream) (the "Swift Fund"). The TCC will select Interests in Land for acquisition and will approve the final terms of proposed acquisitions to be made using the Swift

- Fund. The Licensees have agreed that PacifiCorp shall make all cash contributions to the Swift Fund, shall execute transactions made with such funds, and shall own the Interests in Lands so acquired. However, for the purpose of credit for wildlife habitat protection during the terms of the New Licenses for the Swift No. 1 and Swift No. 2 Projects, Cowlitz PUD shall be credited with the resource benefits accruing from Interests in Land purchased with the Swift Fund as if it had contributed \$1.82 million toward such purchases.
- 10.2.1 <u>Funding Amount, Timing, and Schedule.</u> PacifiCorp shall contribute a total of \$7.5 million to the Swift Fund according to the following payment schedule: make available \$3.22 million within 9 months after Issuance of the New License for the Swift No. 1 Project; make available \$780,000 within 18 months after Issuance of the New License for the Swift No. 1 Project; and make available \$500,000 six months after each of the 3rd, 4th, 5th, 6th, 7th, 8th, and 9th anniversaries of the Issuance of the New License for the Swift No. 1 Project. PacifiCorp's contributions shall be made in 2003 dollars, Adjusted for Inflation.
- 10.2.2 <u>Matching Funds</u>. The TCC may elect, in its discretion, to use all or part of the Swift Fund to match the cash contributions made by local, state, and federal agencies, and other persons or organizations, for acquisition of Interests in Land in the vicinity of the Swift Projects. Any Party may propose a source of matching funds under this subsection.
- 10.3 Lewis River Land Acquisition and Habitat Enhancement Fund. PacifiCorp shall establish and maintain a fund in a Tracking Account to acquire or enhance wildlife habitat anywhere in the Lewis River Basin in the vicinity of the Projects (the "Lewis River Fund") in order to meet the objectives of its Wildlife Habitat Management Plan as described in Section 10.8 below. Enhancement projects may be carried out on lands owned by third parties. The TCC will select Interests in Land for acquisition or enhancement and approve final restoration or enhancement measures implemented with the Lewis River Fund. PacifiCorp shall execute approved transactions and implement approved measures. Interests in Land acquired will be owned by PacifiCorp, unless otherwise agreed by PacifiCorp. PacifiCorp shall contribute a total of \$2.2 million to the Lewis River Fund.
- 10.3.1 Funding Amount, Timing, and Schedule. PacifiCorp shall initially contribute \$550,000 to the Lewis River Fund by six months after the fourth anniversary of the Issuance of the New License for the Yale Project, and \$550,000 to the Lewis River Fund by six months after the fourth anniversary of the Issuance of the New License for the Swift No. 1 Project. PacifiCorp shall contribute an additional \$550,000 to the Lewis River Fund by six months after the sixth anniversary of the Issuance of the New License for the Yale Project, and \$550,000 to the Lewis River Fund by six months after the sixth anniversary of the Issuance of the New License for the Swift No. 1 Project. PacifiCorp's contributions shall be made in 2003 dollars, Adjusted for Inflation.
- 10.3.2 <u>Matching Funds</u>. The TCC may elect, in its discretion, to use all or part of the Lewis River Fund to match the cash contributions made by local, state, and federal agencies, and other persons or organizations, for acquisitions of Interests in Land or for implementation of habitat enhancement measures in the Lewis River Basin. Any Party may propose a source of matching funds under this subsection.

- 10.3.3 Contribution of Additional Matching Funds. In addition to the contributions made under Section 10.3.1, beginning 18 months after Issuance of the New License for the Yale Project or Swift No. 1 Project, whichever is earlier, PacifiCorp shall match the contributions of local, state, and federal agencies, and other persons or organizations, made for the purposes of this Section 10.3, in an amount not to exceed \$100,000 per year, and not to exceed \$500,000 in any ten consecutive years. Any Party may propose a source of matching funds under this subsection. If and only if a commitment of funds is made by a party other than PacifiCorp, for acquisitions of Interests in Land or for implementation of habitat enhancement projects approved by the TCC, PacifiCorp shall provide matching funds within the limits set forth above at closing of the real estate transaction; no fund will be created. The TCC will identify Interests in Land for acquisitions or identify habitat enhancement projects to be funded with matching funds, and PacifiCorp shall execute approved acquisitions and implement approved enhancement measures.
- Transaction Costs. The Parties agree that certain transaction costs associated with acquisitions of Interests in Land under Sections 10.1, 10.2, and 10.3 above and habitat enhancement measures under Section 10.3 will be covered by the funds established in those Sections. Covered transaction costs include, but are not limited to, the costs associated with land acquisition, such as completion of appropriate site assessments for hazardous materials; land surveys, including timber cruise if needed; appraisals; habitat surveys; filing fees; excise taxes; title searches, reports, fees, and insurance; closing costs; preparation of land acquisition agreements; and any required governmental approvals. Transaction costs that are not covered by the funds established under Sections 10.1 through 10.3 include internal personnel and administrative costs of the parties associated with land acquisitions, such as staff salaries and benefits; attorney fees and other legal expenses incurred by PacifiCorp or any other party; and fees paid by PacifiCorp to third parties for administrative costs associated with a third party's' acquisition of Interests in Land on behalf of PacifiCorp. During the execution of any transaction, PacifiCorp shall notify the TCC if it appears that transaction costs will be significantly higher than expected, and the TCC may determine not to proceed with that transaction.
- Management of Funds. Funds provided by PacifiCorp, as described in Sections 10.1, 10.2, and 10.3 above, shall be held by PacifiCorp in a Tracking Account until acquisitions of Interests in Land are executed or habitat enhancement measures under Section 10.3 are implemented. PacifiCorp shall accrue interest on Fund monies held by PacifiCorp from the date the monies are due to be placed into the Fund at the prime interest rate printed in the *Wall Street Journal* for the weekday nearest to April 1 of each year. If such rate ceases to be published in the *Wall Street Journal*, the Parties shall meet and agree upon an alternate source for the prime interest rate. Interest shall be computed, compounded, and added to the Fund once annually as of that date. PacifiCorp shall use monies in the Funds to pay the purchase price for Interests in Land and for covered transaction and implementation costs as they are incurred. Funds not expended in any given year shall be carried over to a subsequent year. PacifiCorp shall provide annual reports to the TCC regarding Fund expenditures under Sections 10.1, 10.2 and 10.3 above. Such annual reports may be included as part of the detailed annual reports of the TCC activities required by Section 14.2.6.

10.6 <u>Completed Implementation; Advance Purchases.</u>

10.6.1 <u>Cowlitz PUD</u>. In 2001, Cowlitz PUD purchased, for \$950,000, 283.7 acres of wildlife habitat on the north side of Swift Reservoir, known as the Devil's Backbone. Cowlitz

PUD has since managed those lands for the long-term benefit of a broad range of fish, wildlife, and native plants and shall manage such lands under its Wildlife Habitat Management Plan as described in Section 10.8 below. Those lands include an 87.6-acre conservation covenant which Cowlitz PUD shall manage in perpetuity for the protection of bull trout rearing areas in the Swift Creek Arm of Swift Reservoir, which was dedicated for mitigation of ongoing operations under the existing licenses for the Projects ("Devil's Backbone Conservation Covenant"). The Parties agree and acknowledge that the costs and resource benefits associated with the purchase of Cowlitz PUD's Devil's Backbone property, as well as Cowlitz PUD's commitment to maintain such lands under this Agreement, are included in this Settlement Agreement as partial fulfillment of Cowlitz PUD's mitigation obligations, but the cost of purchasing such lands shall not be credited toward the funding commitments in Section 10.2 above.

- 10.6.2 PacifiCorp. In 2000, PacifiCorp purchased, for \$450,000, 156 acres of wildlife habitat on the south-facing slope of Swift Reservoir, known as Swift Parcel 2. In 2000, PacifiCorp purchased, for \$1.85 million, 770 acres of wildlife habitat near Cougar and Panamaker Creeks. Those lands include a 213-acre conservation covenant in perpetuity for the protection of bull trout (the "Cougar Creek Conservation Covenant"). In addition, a 34-acre conservation covenant in perpetuity is provided on PacifiCorp land on the Devil's Backbone of Swift Reservoir. Both conservation covenants were dedicated for mitigation of ongoing operations under the existing licenses for the Projects. PacifiCorp has since managed those lands for the long-term benefit of a broad range of fish, wildlife, and native plants and shall manage such lands under its Wildlife Habitat Management Plan as described in Section 10.8 below. The Parties agree and acknowledge that the costs and resource benefits associated with the purchase of such lands, as well as PacifiCorp's commitment to maintain such lands under this Agreement, are included in this Settlement Agreement as partial fulfillment of PacifiCorp's mitigation obligations, but the cost of purchasing such lands shall not be credited toward the funding commitments in Sections 10.1 through 10.3 above.
- 10.6.3 Advance Purchases. From time to time after the Effective Date, one or more of the Parties may become aware of a short-term opportunity to purchase Interests in Land that may serve the purposes of the Funds created under Sections 10.1 through 10.3 at a favorable price and may communicate that opportunity to PacifiCorp. PacifiCorp may, at its sole risk and expense, but shall not be obligated to, purchase such Interests in Land believing that the TCC may desire the same. Within 30 days of acquiring such Interests in Land, PacifiCorp shall offer such Interests in Land to the TCC to serve the purposes of Sections 10.1 through 10.3 above. The TCC shall have 45 days after receiving such offer in which to determine whether to accept such Interests in Land under one of those Sections at the purchase price paid by PacifiCorp. If accepted, the monies expended by PacifiCorp to acquire such Interests in Land shall be credited toward the next contributions due from PacifiCorp and such lands shall be managed under PacifiCorp's Wildlife Habitat Management Plan. If the Interests in Land are not accepted by the TCC within such 45-day period, PacifiCorp shall be free to use or dispose of such Interests in Land under its Wildlife Habitat Management Plan.
- 10.7 <u>Conservation Easements</u>. The Parties recognize the value of pursuing conservation easements, since it is possible that more acres of land may be protected for wildlife habitat through conservation easements as compared to the fee-simple acquisition of lands. The Parties do not intend to be limited to statutory conservation easements but may pursue other similar

Interests in Land. The following are guidelines for the selection and acquisition of conservation easements to be purchased with the Funds described in Sections 10.1 through 10.3:

- a. Easement areas should be selected that will protect wildlife habitat from further development;
- b. Easement areas should be selected that will allow the CIT and Yakama Nation reasonable access for cultural activities on lands acquired under this Section 10.7;
- c. Easement areas should be selected that will allow reasonable public access for recreation, including hunting on lands acquired under this Section 10.7; and
- d. When feasible, easements should be selected in areas where the property owner is agreeable to easement terms providing for the management of the lands encumbered by the easement to provide for enhanced habitat management, such as modified timber harvest practices, that will result in greater protection of habitat areas.

The TCC may select easements that satisfy fewer than all of the above guidelines.

10.8 <u>Wildlife Habitat Management Plans</u>. Beginning on the Effective Date and prior to the Issuance of the New Licenses, PacifiCorp and Cowlitz PUD, in Consultation with the TCC, shall develop Wildlife Habitat Management Plans ("WHMPs") for their respective lands designated in Section 10.8.5 below in order to accomplish the wildlife objectives referenced in the attached Schedule 10.8. The purpose of the WHMPs shall be to benefit a broad range of fish, wildlife, and native plant species, including, but not limited to, large and small game, amphibians, bats, forest raptors, neo-tropical birds, and culturally significant native plants. PacifiCorp and Cowlitz PUD may collaborate to produce a single WHMP.

10.8.1 Development of WHMPs. Beginning on the Effective Date, the Licensees, in Consultation with the TCC, shall develop specific standards and guidelines based upon on the objectives identified in Schedule 10.8. PacifiCorp and Cowlitz PUD shall then prepare their respective draft WHMPs that achieve the objectives and the specific standards and guidelines. The WHMPs shall provide for monitoring of the WHMPs' effectiveness and progress toward meeting their objectives. Each WHMP shall identify those WHMP-managed lands for which wildlife habitat is a secondary use, and shall describe how such lands will be managed under the WHMP. After PacifiCorp and Cowlitz PUD have prepared the draft WHMPs, they will submit them to the TCC for review, comment, and approval. After the TCC has approved the WHMPs, PacifiCorp and Cowlitz PUD shall finalize the WHMPs and submit them to the Commission. Any disputes regarding provisions of the final WHMPs shall be resolved under Section 15.10 below. Within six months after Issuance of each New License, the Licensees shall implement their respective WHMPs for lands associated with that Project (as shown in Exhibit A for PacifiCorp and Exhibit B for Cowlitz PUD) up to the limits of the funding provided in Section 10.8.2, except as expressly provided in Section 10.8.3 below. From the Effective Date until six months after Issuance of the New License for the Merwin Project, PacifiCorp shall continue to manage lands associated with the Merwin Project pursuant to Article 48 of the existing Merwin license.

- 10.8.2 <u>Funding</u>. PacifiCorp and Cowlitz PUD shall provide annual funding for the implementation of the WHMPs on their respective lands identified in Section 10.8.5 as follows:
 - 10.8.2.1 <u>PacifiCorp.</u> PacifiCorp's level of funding will be tied to the Interests in Land that PacifiCorp owns or controls, as follows: (i) PacifiCorp shall fund \$27 (in 2003 dollars, Adjusted for Inflation) per acre for lands it owns in fee simple that are managed under its WHMP as of that date; and (ii) PacifiCorp shall fund \$13.50 (in 2003 dollars, Adjusted for Inflation) per acre for other Interests in Land, including, without limitation, conservation easements and similar Interests in Land that are managed under its WHMP as of that date.
 - 10.8.2.2 <u>Cowlitz PUD</u>. Cowlitz PUD shall fund \$27 per acre (in 2003 dollars, Adjusted for Inflation) for lands it owns in fee simple that are managed under its WHMP as of that date.
 - Management of Funds. Funds provided by Licensees under this 10.8.2.3 Section 10.8.2 shall be made available for lands associated with each Project (as shown in Exhibit A for PacifiCorp and Exhibit B for Cowlitz PUD) six months after the relevant Project's New License is Issued and annually thereafter. Such funds shall be held in a Tracking Account and shall be expended by the Licensees on their respective lands as their WHMPs are implemented under Section 10.8. The Licensees shall accrue interest on Fund monies held by the Licensees from the date the monies are due to be placed into the Fund, at the prime interest rate printed in the Wall Street Journal for the weekday nearest to April 1 of each year. If such rate ceases to be published in the Wall Street Journal, the Parties shall meet and agree upon an alternate source for the prime interest rate. Interest shall be computed, compounded, and added to the Fund once annually as of that date. PacifiCorp's total funding (but not the amount per acre) will increase as additional acres of Interests in Land are acquired to be managed under its WHMP. However, except as provided in Section 10.8.5 below, the funding provided in this Section 10.8.2 shall completely fulfill and satisfy the Licensees' respective obligations to fund implementation, modification, and monitoring of the Interests in Land subject to their respective WHMPs. No provision of the WHMPs, nor any action of the Parties under this Agreement, shall increase the monetary obligations of the Licensees with respect to their WHMPs without the express written consent of the affected Licensee. Funds that are not spent in a given year will be carried over to be used for future implementation of the respective WHMP. Any funds derived from management of lands subject to the WHMPs, including compensation for timber removed pursuant to the WHMPs, shall be retained by the Licensees for their respective properties.
- 10.8.3 Management of Plan. Subject to the oversight of the TCC, PacifiCorp and Cowlitz PUD shall implement their respective WHMPs. The Licensees shall submit to the TCC annually a written plan (the "Annual Plan") to use the funds available to implement the WHMPs on their respective lands. The Annual Plan may be included as part of the detailed annual reports of the TCC activities required by Section 14.2.6. Once the TCC has approved such Annual Plans, they shall be implemented by the Licensees using the funds made available for that purpose under Section 10.8.2. The funds shall be used to reimburse Licensees for use of their employees and contractors to manage, implement, and monitor actions taken under the WHMPs as provided in the Annual Plan. Further, the WHMPs shall not prevent either of the Licensees

from carrying out any other legal requirement with respect to or upon its respective lands in any lawful manner, including, without limitation, in compliance with the conditions of the New Licenses, subject to Section 10.8.5.5 below. If the TCC believes that another party can implement the WHMPs more cost effectively, the respective Licensee shall, at the request of the TCC, seek bids from third party contractors to implement their respective WHMP for some period during the term of the applicable New License(s). If the bidding process identifies third party contractors who can do the work more cost effectively, the respective Licensee shall engage such contractors, provided that they are acceptable to the Licensee, in its reasonable discretion, considering policies, contracting requirements, and procedures and qualifications normally applied by the Licensees when engaging other contractors to work on their respective properties, and subject to dismissal if any contractor's performance violates such policies and requirements. If contractors are retained at the recommendation of the TCC, such contractors shall have full responsibility, during the period of their engagement, for implementation of the respective WHMPs as provided under this Section 10.8, including preparation of Annual Plans and any required reporting to the TCC. During the period such third party is retained, the Licensees' obligations for implementation of their respective WHMPs shall be fulfilled in their entirety by providing the funds as required under Section 10.8.2. In no event shall Licensees be required to fund implementation of their respective WHMPs in excess of the amounts provided for in Section 10.8.2.

- 10.8.4 <u>Habitat Evaluation Procedures</u>. The Licensees shall update and repeat the Habitat Evaluation Procedure (Final Lewis River Technical Report TER 2 (Cowlitz PUD and PacifiCorp 2004) (the "HEP") as provided in this Section 10.8.4, and the costs of such actions shall be in addition to the funding provided under Section 10.8.2.
 - 10.8.4.1 <u>Updating Existing Information</u>. As PacifiCorp expends Fund assets to acquire lands that will be managed under its WHMP, PacifiCorp shall update the existing HEP data. This will require mapping and cover-typing the newly acquired lands, but assumes that Habitat Suitability Index ("HSI") values from the current HEP are applicable. If new or different habitat types are encountered, new HSI values will be determined.
 - New Licenses, PacifiCorp shall repeat the HEP for all WHMP lands that it manages, and Cowlitz PUD shall repeat the HEP for all WHMP lands that it manages, using essentially the same sample density that was used to develop the existing HEP, with a focus on measuring any changes in habitat value of these lands compared with the baseline HEP data, and determining whether the original HEP projections regarding habitat values (based on the objectives in the WHMPs) have been met. If the original HEP projections have not been met, each Licensee shall modify its respective WHMP to achieve its WHMP objectives, subject to the review and approval of the TCC, but shall not be obligated to increase in any way its funding obligations under Section 10.8.2. The Licensees shall base any modifications on the results of the HEP, although the Licensees may include species model updates and new management priorities as appropriate. The TCC must approve modifications before they are filed with the Commission and implemented by PacifiCorp and Cowlitz PUD.

10.8.5 <u>WHMP Lands</u>. The following lands shall be managed under the respective WHMPs. The maps and tables attached as Exhibit A for PacifiCorp and Exhibit B for Cowlitz PUD more fully describe lands that shall be managed under the respective WHMPs, as well as those lands that will not be managed under the WHMPs, and identifies which lands are associated with which Projects. Exhibits A and B shall be updated by PacifiCorp and Cowlitz PUD, respectively, as new lands are acquired as provided below.

10.8.5.1 Lands Owned or Controlled by PacifiCorp as of the Effective Date.

- 10.8.5.1.1 156 acres on the south-facing slope of Swift Reservoir, known as the Swift Parcel 2, purchased by PacifiCorp in 2000;
- 10.8.5.1.2 770 acres near Cougar and Panamaker Creeks purchased by PacifiCorp in 2000;
- 10.8.5.1.3 The 129 acres associated with the Yale Project that were acquired by PacifiCorp in 2002;
- 10.8.5.1.4 The 5,600 acres that are currently managed as part of the existing Merwin Wildlife Habitat Management Plan;
- 10.8.5.1.5 The lands proposed to be managed under the Yale application filed with the Commission in 1999; and
- 10.8.5.1.6 All other PacifiCorp-owned lands adjacent to the Projects as of the Effective Date, except as provided in attached Exhibit A.

10.8.5.2 Lands Owned or Controlled by Cowlitz PUD as of the Effective Date.

- 10.8.5.2.1 283 acres on the south-facing slope of Swift Reservoir, known as the Devil's Backbone, purchased by Cowlitz PUD in 2001; and
- 10.8.5.2.2 All other Cowlitz PUD-owned lands within the Swift No. 2 Project Boundary and related to the operation of the Swift No. 2 Project as of the Effective Date, except as provided in attached Exhibit B.
- 10.8.5.3 <u>Interests in Land Acquired with the Yale Fund and the Lewis River Fund</u>. PacifiCorp shall manage Interests in Land acquired by the Yale Fund and the Lewis River Fund under its WHMP, subject to Section 10.8.3, provided that such Interests in Land are within five miles of the Project reservoirs or other lands managed by PacifiCorp under its WHMP. PacifiCorp shall not develop or use lands acquired beyond such five-mile radius in a manner inconsistent with the objectives of its WHMP, and such lands shall not be subject to active management under its WHMP.
- 10.8.5.4 <u>Interests in Land Acquired with the Swift Fund</u>. PacifiCorp shall manage Interests in Land acquired with the Swift Fund that it owns under its WHMP, subject to Section 10.8.3.

10.8.5.5 <u>Mitigation for Impacts on Wildlife Habitat</u>. If PacifiCorp proposes to take action on its Interests in Land that are managed under its WHMP, other than those actions specifically prescribed under this Agreement, and that action makes those lands no longer available for wildlife habitat, PacifiCorp shall consult with the TCC to determine if any mitigation is necessary. If Cowlitz PUD proposes to take action on its Interests in Land managed under its WHMP, other than those actions specifically prescribed under this Agreement, and that action makes those lands no longer available for wildlife habitat, Cowlitz PUD shall consult with the TCC to determine if any mitigation is necessary. If the TCC determines that mitigation is necessary, then whichever Licensee is responsible in the specific case shall implement that mitigation. Mitigation shall not be required for land parcels specifically identified in the WHMPs as having wildlife habitat as the secondary use.

SECTION 11: RECREATION

- 11.1 <u>Recreation Resource Management Plan</u>. PacifiCorp has submitted a draft Recreation Resource Management Plan ("RRMP") to the Commission in its Final Application for New License Volume III of III. The RRMP includes the measures set forth in Section 11.2. PacifiCorp shall finalize the RRMP as directed by the Commission.
- 11.2 PacifiCorp Recreation Measures. PacifiCorp shall implement the recreation measures set forth in Sections 11.2.1 through 11.2.17. Where the provisions below state that a recreation measure is to begin upon or after Issuance of a New License, PacifiCorp shall implement the measure after all administrative and judicial rehearings, reviews. and appeals relating to that New License have been finally adjudicated or dismissed. Where the provisions below state that a recreation measure is to begin or be completed a stated number of years after Issuance of a New License, PacifiCorp shall implement or complete, as appropriate, the measure the stated number of years after all administrative and judicial rehearings, reviews, and appeals relating to that New License have been finally adjudicated or dismissed. If there is any conflict between the provisions of Sections 11.2.1 through 11.2.17 and the RRMP, the provisions of Sections 11.2.1 through 11.2.17 shall control.

11.2.1 Swift Reservoir.

- 11.2.1.1 Swift Dispersed Shoreline Use Sites. PacifiCorp shall maintain shoreline camping and day use sites on lands owned by PacifiCorp and on National Forest System lands within the Swift No. 1 Project Boundary in a manner consistent with the Recreation Dispersed Shoreline Use Program ("RDSUP") that is incorporated into the RRMP. For lands other than National Forest System lands and PacifiCorp lands, with the landowner's consent, PacifiCorp shall maintain, at its expense, shoreline sites on such lands in a manner consistent with the RDSUP that is incorporated into the RRMP, provided that PacifiCorp has entered into a maintenance agreement with such landowners containing terms acceptable to PacifiCorp. During the first year of the New License for the Swift No. 1 Project, PacifiCorp shall reassess all existing dispersed shoreline sites to determine suitability for hardened camp sites, day use sites, or closure. During the 2nd and 3rd years of the New License for the Swift No. 1 Project, PacifiCorp shall: (1) conduct a human waste disposal management program assessment as described in the RDSUP; (2) harden, as appropriate, suitable shoreline sites for camping; (3) sign as closed inappropriate sites; and (4) sign appropriate hardened camping and day use sites. Upon completion of the waste disposal management program assessment, PacifiCorp shall either implement an appropriate method identified through the assessment or continue assessing alternative methods for addressing waste disposal management until an appropriate method is identified and implemented.
- 11.2.1.2 <u>Eagle Cliff Trail</u>. Subject to obtaining acceptable minimal cost easements, PacifiCorp shall develop a trail connection between Eagle Cliff Park and the USDA-FS boundary. Trail facilities shall include the engineered trail, signage, and resource protection as appropriate. PacifiCorp shall conduct a detailed trail routing study in the first year of the New License for the Swift No. 1 Project. Criteria to be used in this study include locating a safe, economical, and buildable trail route and avoiding potential

impacts on bull trout, to the extent practicable, by locating the trail away from sensitive habitat areas. PacifiCorp shall coordinate with and obtain the approval of USFWS on the final designs and location of the trail to ensure that impacts on bull trout are acceptable. PacifiCorp shall engineer, design, and permit the trail as soon as practicable following completion of the trail routing study. Subject to obtaining necessary easements, Permits, and USFWS approval, construction will commence on the 4th anniversary of Issuance of the New License for the Swift No. 1 Project. If necessary easements and Permits are not obtained by the 4th anniversary of Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall make reasonable efforts to obtain such easements and Permits, and shall commence construction after obtaining such easements and Permits.

- 11.2.1.3 <u>Control of Swift Forest Campground</u>. By the first anniversary of the Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall use best reasonable efforts to either (1) negotiate a management agreement for the Swift Forest Campground with WDNR for the term of the New License for the Swift No. 1 Project, or (2) acquire ownership of the Swift Forest Campground from WDNR. PacifiCorp's obligations under this Agreement with respect to the Swift Forest Campground are contingent on PacifiCorp's either (a) entering into a management agreement with WDNR for the term of the New License for the Swift No. 1 Project, or (b) acquiring ownership of the Swift Forest Campground from WDNR, in either case on terms acceptable to both PacifiCorp and WDNR.
- 11.2.1.4 <u>Swift ADA Accessibility Improvements</u>. Upon Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall conduct an evaluation of Americans with Disabilities Act ("ADA") accessibility needs at Swift Reservoir using the Americans with Disabilities Act Accessibility Guidelines, as amended ("ADAAG"). PacifiCorp shall renovate existing facilities not otherwise planned for renovation at Swift Reservoir, between the first and seventh anniversaries of the Issuance of the New License for the Swift No. 1 Project, to comply with the ADA and ADAAG.

11.2.1.5 Swift Day Use Facilities.

- 11.2.1.5.1 <u>Picnic Shelter</u>. By the fifth anniversary of Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall provide a new day-use group picnic shelter in the day use area of the Swift Forest Campground. PacifiCorp shall make this shelter available for reservations.
- 11.2.1.5.2 <u>Double Vault Toilet</u>. By the eleventh anniversary of Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall: (1) install a double vault toilet at Eagle Cliff Park; (2) create a small picnic area at the north (upstream) end of the Eagle Cliff Park parking area; and (3) abandon and remove facilities in the old Eagle Cliff day-use area south of the roadway.
- 11.2.1.6 <u>Swift Forest Campground and Group Camp Expansion</u>. After Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall expand camping facility capacity at the Swift Forest Campground, when needed, based on

monitoring trigger thresholds described in Exhibit E of the RRMP. PacifiCorp shall, to the extent practicable, expand the facilities to provide either: (1) 27 new RV/tent campsites and 2 group campsites; or (2) 40 new RV/tent campsites. Water faucets, gray water sumps, and restrooms will be shared between campsites. Redesign and relocation of the boat launch parking and access may be necessary. PacifiCorp shall provide an adequate buffer distance between facilities.

11.2.1.7 <u>Swift Operations and Maintenance</u>.

- 11.2.1.7.1 <u>Swift Annual Recreation Facility O&M</u>. Beginning upon Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall maintain its existing recreation facilities within the Swift No. 1 Project Boundary (e.g., Eagle Cliff Park and Swift Forest Campground, boat launch, and day use area) and all new recreation facilities created at Swift Reservoir, as required by this Agreement, pursuant to maintenance standards and frequencies set forth in Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.
- 11.2.1.7.2 <u>Swift Campground Schedules</u>. PacifiCorp shall continue the current management practice of keeping Swift Forest Campground open through mid-November for hunter camping.
- 11.2.1.7.3 <u>Swift Shoreline Use Sites O&M</u>. Beginning upon Issuance of the New License for the Swift No. 1 Project, PacifiCorp shall maintain shoreline use sites within the Swift No. 1 Project Boundary pursuant to maintenance standards and frequencies set forth in Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.
- 11.2.1.8 Swift Boat Launch. If during the term of the New License for the Swift No. 1 Project, any Party obtains funding for and constructs a new boat launch to allow boat launches when the Swift Reservoir is at the lower range of its normal operating levels, and associated parking lot and restrooms, then PacifiCorp shall maintain such boat launch and associated parking lot and restrooms after they are constructed for the remaining term of the New License for the Swift No. 1 Project, provided that if such boat launch, parking lot, or restrooms are destroyed by vandalism or natural processes, PacifiCorp shall not be required to replace such facilities. The Party that constructs the new boat launch shall consult with PacifiCorp regarding the site selection and design of the boat launch.

11.2.2 Yale Lake.

11.2.2.1 <u>Yale Dispersed Shoreline Use Sites</u>. PacifiCorp shall maintain shoreline camping and day use sites on lands owned by PacifiCorp in a manner consistent with the RDSUP. With the landowner's consent, PacifiCorp shall maintain, at its expense, shoreline sites on lands owned by others in a manner consistent with the RDSUP, provided that PacifiCorp has entered into a maintenance agreement with such landowners containing terms acceptable to PacifiCorp. During the first year of the New

License for the Yale Project, PacifiCorp shall reassess all existing dispersed shoreline sites to determine suitability for hardened camp sites, day use sites, or closure. During the 2nd and 3rd years of the New License for the Yale Project, PacifiCorp shall: (1) conduct a human-waste disposal management program assessment as described in the RDSUP; (2) harden, as appropriate, suitable shoreline sites for camping; (3) sign as closed inappropriate sites; and (4) sign appropriate hardened camping and day use sites. Upon completion of the waste disposal management program assessment, PacifiCorp shall either implement an appropriate method identified through the assessment or continue assessing alternative methods for addressing waste disposal management until an appropriate method is identified and implemented.

- 11.2.2.2 <u>Yale/IP Road Phase One</u>. PacifiCorp shall use best reasonable efforts after Issuance of the New License for the Yale Project to secure, at the lowest cost possible, non-motorized multi-use recreational access on the existing Yale/IP Road from the bridge over the Lewis River at the eastern terminus to Healy Road to the west. If a continuous trail is not achievable in the near term, PacifiCorp shall pursue an out-and-back trail. PacifiCorp shall secure access, complete bridge safety evaluations, rock-fall hazard assessments, design for bridge safety retrofit, engineering, and permitting by the fourth anniversary of Issuance of the New License for the Yale Project, at a cost not to exceed \$500,000. If efforts to secure access are not achieved by the fourth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall make reasonable efforts to secure such access. Should these efforts cost less than \$500,000, PacifiCorp shall add the remaining funds to the budget required under Section 11.2.2.3. The measures required by this Section 11.2.2.2 comprise "Phase One" of the Yale/IP Road measures.
- 11.2.2.3 <u>Yale/IP Road Phase Two</u>. When Phase One described in Section 11.2.2.2 is complete and all necessary access has been secured, PacifiCorp shall: (1) clean the trail surface and repair potholes; (2) establish 1 trailhead if only an out-and-back trail is possible, or 2 trailheads if the complete trail is possible (each to include 15-20 parking stalls, 1 vault toilet and 2 picnic tables); (3) if the complete trail is possible, develop a mid-point trailhead (to include a single-hole vault toilet and 2 picnic tables); and (4) provide appropriate reservoir access, trail and other signage, necessary gates, and bridge safety railing retrofits ("Phase Two"). PacifiCorp shall provide up to \$596,000 toward the cost of these actions.
- 11.2.2.4 <u>Yale/IP Road Phase Three</u>. PacifiCorp shall resurface 12 miles of 10-foot-wide, 2-inch-thick asphalt paving along the Yale/IP Road trail corridor ("Phase Three"). PacifiCorp shall implement this requirement at the later of the two following dates: between the fifteenth and sixteenth anniversaries of the Issuance of New License for the Yale Project, or when Yale/IP Road Phases One and Two are complete.
- 11.2.2.5 <u>Yale Trails</u>. By the fifth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall complete the following capital improvements at Yale Lake:
 - a. PacifiCorp shall promote existing and new non-motorized, multi-use trails in the Yale Project area with signs and brochures.

- b. PacifiCorp shall develop a non-motorized, multi-use, natural-surface trail between Saddle Dam Park parking lot and the existing Saddle Dam Trail at the northern end of Saddle Dam.
- c. PacifiCorp shall improve parking outside of the gate at Saddle Dam Park to accommodate 5 to 10 vehicles with horse trailers and to provide one horse tie-up rail.
- d. PacifiCorp and WDFW shall work cooperatively to develop a mutually agreeable strategy to evaluate the potential impacts of equestrian use on elk during the elk wintering season at Saddle Dam Farm and to minimize any impacts through signage and education, vegetation buffers, or relocating trails. If these methods are not feasible or successful and if equestrian use warrants, PacifiCorp shall, at the direction of WDFW, seasonally close the trail(s) via appropriate signage and gates.
- e. PacifiCorp shall provide a new non-motorized, multi-use, natural-surface trail between Cougar Campground and Beaver Bay Campground, approximately 2 miles long.
- f. PacifiCorp shall provide a 0.5-mile, non-motorized, multi-use, gravel surface trail loop from the public restroom at the town of Cougar to a reservoir overlook area and back.
- 11.2.2.6 <u>Yale ADA Accessibility Improvements</u>. Upon Issuance of the New License for the Yale Project, PacifiCorp shall conduct an evaluation of ADA accessibility needs using the ADAAG. PacifiCorp shall renovate existing facilities not otherwise planned for renovation at Yale Lake, between the first and seventh anniversaries of Issuance of the New License for the Yale Project, to comply with the ADA and ADAAG.
- 11.2.2.7 <u>Yale Park Boat Launch</u>. By the fourth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall complete the following at Yale Park: (1) extend one concrete boat ramp lane approximately 10 to 20 feet horizontally and 1.5 to 3 feet vertically, depending on topography; and (2) replace the existing floating boat docks.
- 11.2.2.8 <u>Beaver Bay Boat Launch</u>. By the fourth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall complete the following at Beaver Bay boat launch: (1) replace the floating dock; and (2) repair the eroded side banks next to the boat ramp.
- 11.2.2.9 <u>Beaver Bay Day Use Parking</u>. By the fourth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall improve the separation between the boat launch parking area and the adjacent wetland at Beaver Bay boat launch by providing a new earth berm, drainage ditch, and fence. PacifiCorp shall acquire all necessary Permits to implement these actions. The new earth berm shall be located 10 to

15 feet from the existing berm on the reservoir side or other location acceptable to both WDFW and PacifiCorp.

- 11.2.2.10 <u>Yale Lake Day Use Facilities</u>. By the seventh anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall complete the following at Yale Park: (1) better define and expand the parking lot; and (2) provide a new day use group picnic shelter in the day use picnic area at Yale Park, Cougar Park, or Beaver Bay. The shelter must be placed where users can access the shoreline to beach boats. Upon completion, PacifiCorp shall make the new group picnic shelter available on a reservation system.
- 11.2.2.11 <u>Cougar Day Use Restroom</u>. By the sixth anniversary of the Issuance of the New License for the Yale Project, PacifiCorp shall replace or renovate the day-use restroom at Cougar Day-Use Park to meet ADAAG standards.
- 11.2.2.12 <u>Beaver Bay Campground and Group Camps</u>. By the thirteenth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall redesign the Beaver Bay Campground, including access routes, to: (1) provide for a total of approximately 43 renovated RV/tent campsites or 4 group camps (providing approximately 60 campsites), depending on demand; (2) provide for 1 renovated group camp accommodating approximately 15 RVs; (3) remove approximately 20 campsites and the roadway adjacent to the wetland complex; and (4) replace the two older, existing restrooms.
- 11.2.2.13 <u>Cougar Campground</u>. By the fourteenth anniversary of Issuance of the New License for the Yale Project, PacifiCorp shall renovate the existing tent-only campground sites at Cougar Campground and relocate the shoreline sites farther back from the shoreline while retaining approximately 45 campsites.
- 11.2.2.14 <u>Cougar Campground and Group Camp Expansion</u>. After Issuance of the New License for the Yale Project, when needed based on monitoring trigger thresholds described in Exhibit E of the RRMP, PacifiCorp shall expand camping capacity at Cougar Campground by developing either approximately 78 new RV/tent campsites and a new group site, or 90 new RV/tent campsites, based on demand. The new sites shall be located in an undeveloped area between Cougar Campground and Lewis River Road, and potentially in the existing Cougar Campground boat launch area, which may be closed to allow increased campground capacity. PacifiCorp shall provide adequate buffer distance between Cougar Creek and Lewis River Road and the new campground expansion area. PacifiCorp shall coordinate site expansion with USFWS to ensure protection of the Cougar Creek Conservation Covenant.

11.2.2.15 Yale Operations and Maintenance.

11.2.2.15.1 <u>Yale Annual Recreation Facility O&M</u>. Beginning upon Issuance of the New License for the Yale Project, PacifiCorp shall maintain its existing recreation facilities within the Yale Project Boundary, and all new recreation facilities created at Yale Lake, as required by this Agreement, pursuant to maintenance standards and frequencies set forth in

- Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.
- 11.2.2.15.2 <u>Yale Shoreline Use Sites O&M</u>. Beginning upon Issuance of the New License for the Yale Project, PacifiCorp shall maintain its shoreline use sites pursuant to maintenance standards and frequencies set forth in Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.

11.2.3 Lake Merwin.

- 11.2.3.1 Merwin Dispersed Shoreline Use Sites. PacifiCorp shall maintain shoreline day use sites on lands owned by PacifiCorp in a manner consistent with the RDSUP. With the landowner's consent, PacifiCorp shall maintain, at its expense, shoreline sites on lands owned by others in a manner consistent with the RDSUP, provided that PacifiCorp has entered into a maintenance agreement with such landowners containing terms acceptable to PacifiCorp. By the first anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall inventory existing campsites and day-use sites and identify appropriate sites for continued day-use recreation. By the fourth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall post these sites that are on PacifiCorp-owned land to indicate that "pack it in/pack it out" refuse removal is required by site users and that "camping is not allowed."
- 11.2.3.2 <u>Merwin Trails</u>. By the fifth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall promote existing and new non-motorized, multi-use trails in the Merwin Project area with signs and brochures at Merwin Park and Cresap Bay Campground.
- 11.2.3.3 <u>Marble Creek Trail</u>. By the fourth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall: (1) improve the existing half-mile Marble Creek non-motorized, multi-use trail to ADAAG standards; (2) remove the existing viewing platform; (3) evaluate the need for safety fencing at the trail terminus; (4) provide a bench or picnic table at the trail end; and (5) provide information about Marble Creek and the falls at the trail end.
- 11.2.3.4 <u>South Shore Merwin Trail Access</u>. After Issuance of the New License for the Merwin Project, PacifiCorp and Clark County shall evaluate the feasibility of establishing an easement over PacifiCorp's lands to connect a proposed Clark County regional park on the south side of Lake Merwin and the reservoir shoreline, terminating at a naturally appearing, low development shoreline site. The purpose of this easement is to allow pedestrian access to the shoreline, supported by Clark County parking and other facilities farther up the hill on Boncombe Hollow Road on land not owned by PacifiCorp. Under the terms of this Agreement, PacifiCorp would provide the easement and Clark County would develop and operate the site.
- 11.2.3.5 <u>Merwin ADA Accessibility Improvements</u>. Upon Issuance of the New License for the Merwin Project, PacifiCorp shall conduct an evaluation of ADA accessibility needs using the ADAAG. PacifiCorp shall renovate existing facilities not

otherwise planned for renovation at Lake Merwin, between the first and seventh anniversaries of Issuance of the New License for the Merwin Project to comply with the ADA and ADAAG.

- 11.2.3.6 <u>Boat Launches</u>. By November 30, 2004, PacifiCorp shall extend the boat launch ramp at Speelyai Bay Park by extending the existing concrete ramp approximately 6 feet vertical and 45 feet horizontal, and shall replace the boarding floats.
- 11.2.3.7 <u>Yale Bridge (Merwin) Non-Motorized Boating Access</u>. By the sixth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall: (1) provide an improved river access site at the Yale Bridge area for small, non-motorized watercraft launching and take-out; (2) install new steps and railings along the hillside slope from the gravel parking area next to the bridge to the reservoir shoreline; and (3) provide appropriate signage. PacifiCorp shall not be responsible for litter control in this area, which will be designated "pack it in/pack it out."
- 11.2.3.8 <u>Merwin Park Day Use Facilities</u>. By the fourth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall provide 2 new volleyball courts, 1 new children's play structure, and four new horseshoe pits at Merwin Park. The children's play structure shall cost no more than \$150,000.
- 11.2.3.9 <u>Merwin Park Picnic Shelters</u>. By the fourth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall: (1) provide 2 new day use group picnic shelters at Merwin Park; and (2) remove the existing fixed picnic tables on the hillside at Merwin Park and replace them in the level grass area with a suitable number of portable tables.
- 11.2.3.10 <u>Speelyai Bay Park Restroom</u>. By the sixth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall upgrade the existing restroom building at Speelyai Bay Park to meet ADAAG standards within the existing building envelope. If this is not possible because of building size limitations and use needs, PacifiCorp shall replace it with a new building that meets ADAAG standards.
- 11.2.3.11 <u>Day Use Parking</u>. By the twelfth anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall improve parking in the quarry area at Speelyai Bay Park by providing gravel and marking parking spaces and shall evaluate the feasibility of providing additional parking under the nearby Project transmission lines with trail access to the boat launch.

11.2.3.12 Merwin Operations and Maintenance.

11.2.3.12.1 <u>Annual Recreation Facility O&M</u>. Beginning upon Issuance of the New License for the Merwin Project, PacifiCorp shall maintain its existing recreation facilities within the Merwin Project Boundary and all new recreation facilities created at Lake Merwin, as required by this Agreement, pursuant to maintenance standards and frequencies set forth in Exhibit J – Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.

- 11.2.3.12.2 <u>Cresap Bay Campground Schedule</u>. Beginning upon Issuance of the New License for the Merwin Project, PacifiCorp shall keep Cresap Bay Campground and Day Use Area open through the month of September, and shall close such areas from October 1 at least through May 1.
- 11.2.3.12.3 <u>Merwin Shoreline Use Sites O&M</u>. Beginning upon Issuance of the New License for the Merwin Project, PacifiCorp shall maintain shoreline day use sites at Lake Merwin pursuant to maintenance standards and frequencies set forth in Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.

11.2.4 Lower Lewis River (Below Merwin Dam).

- 11.2.4.1 <u>Lower Lewis River Vault Toilets</u>. By the first anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall provide new, ADA-accessible, concrete double vault toilets similar to the type at the Cowlitz River Barrier Dam facility at (1) the Cedar Creek River Access Site; and (2) the Lewis River Hatchery River Access Site. By the same date, PacifiCorp shall provide vault toilets (CXT brand or its equivalent) as follows: (a) one single-vault toilet at the Merwin Hatchery River Access Site; and (b) one single-vault toilet at the Johnson Creek River Access Site.
 - 11.2.4.1.1 <u>Island River Access Toilet</u>. By April 30, 2007, PacifiCorp shall provide one new, ADA-accessible, concrete double-vault toilet similar to the type at the Cowlitz River Barrier Dam facility at the Island River Access Site.
- 11.2.4.2 <u>Lower Lewis River Day Use Improvements</u>. By the eleventh anniversary of Issuance of the New License for the Merwin Project, PacifiCorp shall provide 2 to 3 picnic tables at each of the Lower Lewis River Access Sites as space and site conditions allow.

11.2.4.3 Lower Lewis River Operations and Maintenance.

- 11.2.4.3.1 <u>Annual PacifiCorp Recreation Facility O&M</u>. Beginning upon Issuance of the New License for the Merwin Project, PacifiCorp shall maintain its existing developed recreation facilities at the Merwin Hatchery River Access and Johnson Creek River Access sites, and at the new facilities provided for under Sections 11.2.4.1 and 11.2.4.2, pursuant to maintenance standards and frequencies set forth in Exhibit J Recreation Facility and Site Maintenance Standards/Frequency in the RRMP.
- 11.2.4.3.2 <u>Annual WDFW Recreation Facility O&M</u>. Beginning upon the Issuance of the New License for the Merwin Project, PacifiCorp shall maintain the Island River Access, Cedar Creek River Access, and Lewis River Hatchery River Access sites, which are owned by WDFW,

pursuant to maintenance standards and frequencies set forth in Exhibit J – Recreation Facility and Site Maintenance Standards/Frequency in the RRMP; provided that PacifiCorp and WDFW reach maintenance agreements acceptable to both parties and WDFW does not terminate any of the maintenance agreements prior to expiration of the New License for the Merwin Project. PacifiCorp shall replace such facilities at the end of their useful life or when destroyed or substantially damaged by vandalism or natural processes such as flood or fire, but shall not be required to replace any such facility more frequently than once every 10 years.

- 11.2.5 Interpretation and Education Program. To the extent feasible, PacifiCorp shall collaborate with Cowlitz PUD to produce a single Interpretation and Education Program ("I&E Program"). PacifiCorp shall develop, in consultation with Cowlitz PUD, a balanced and focused I&E Program for recreation opportunities on the lands within the Project Boundaries of its three Projects and the Lower Lewis River Access Sites by the first anniversary of the Issuance of the first of the New Licenses for its three Projects. In developing the I&E Program, PacifiCorp shall request comments from the Parties. PacifiCorp shall be required to spend no more than \$90,000 on I&E Program development. The I&E Program shall include a watchable wildlife component and may include educational efforts publicizing the locations of good fishing sites and what kinds of fish can be found at them. The I&E Program shall: (1) include sufficient details, specifications, and artwork for follow-on printing, production, constructing, and installation of I&E Program-identified materials (signs, kiosks, etc.) during the implementation phase; (2) focus on recreation resources, hydro power generation, natural resources, and cultural resources; and (3) provide for the continuation and expansion of the weekend campfire programs to roughly double the effort as of the Effective Date to make campfire programs available at all PacifiCorp campgrounds at least one weekend night per week during July and August. Once the I&E Program is developed, PacifiCorp shall implement the I&E Program over a four-year period, starting for each Project on the first anniversary after Issuance of the New License for that Project. PacifiCorp shall not be required to spend more than \$20,000 per year to implement the I&E Program. Thereafter PacifiCorp shall maintain and upgrade signs, brochures, and other media, but shall not be required to spend more than \$7,500 per year on such maintenance and upgrades.
- 11.2.6 <u>Visitor Management Control</u>. For each Project, beginning upon Issuance of the New License for that Project, PacifiCorp shall implement additional visitor management controls, such as signs, barriers, and enforcement, to provide a high quality recreation experience and to enhance public safety.
- 11.2.7 <u>Communications on Recreation Facility Availability</u>. For each Project, beginning upon Issuance of the New License for that Project, PacifiCorp shall provide notice to the public when day use facilities and campsites are full or approaching capacity. Such notice shall be provided at the Woodland Visitors Center and, with appropriate approvals from Washington State Department of Transportation ("WSDOT") and USDA-FS, through signage placed in strategic locations on access roads to the facilities. PacifiCorp shall address this issue in the I&E Program when fully developed and implemented.
- 11.2.8 <u>Recreational Access to Project Lands</u>. For each Project, beginning upon Issuance of the New License for that Project, PacifiCorp shall allow appropriate non-motorized, public

day use access to all existing and future PacifiCorp-owned lands and, when possible, conservation easements, for wildlife viewing, angling, hunting, and other recreational purposes, subject to capacity restrictions, third party property rights, and PacifiCorp's right to charge fees; provided that such access will be consistent with Commission requirements and will be allowed except where unsafe conditions exist, Project security needs require exclusion of the public, or public access may harm protected environmental or cultural resources. PacifiCorp shall address these public access provisions in the I&E Program. Such public access shall not require PacifiCorp to construct or maintain facilities or to provide personnel for supervision of such access, except to the extent expressly provided for in this Agreement. Nothing in this Section 11.2.8 is intended to modify PacifiCorp's commitments under the agreements described in Section 11.2.17.

- 11.2.9 <u>Land Ownership Retention for Recreation Purposes (Switchback Property)</u>. Beginning upon Issuance of the New License for the Merwin Project, PacifiCorp shall maintain ownership of lands along the south shoreline of the Lewis River below Merwin Dam that are owned by PacifiCorp as of the Effective Date. PacifiCorp shall develop this site in a manner similar to the Johnson Creek River Access Site when use at the Lower Lewis River Access Sites managed by PacifiCorp on the Lewis River are at capacity during their peak use seasons (spring and fall).
- 11.2.10 Overnight Parking and Dispersed Shoreline Use at Yale Lake and Swift Reservoir. For each of the Yale and Swift No. 1 Projects, beginning upon Issuance of the New License for that Project, PacifiCorp shall permit overnight parking at the Project boat launch parking areas at Yale Lake and Swift Reservoir for visitors who are using the shoreline for dispersed camping.
- 11.2.11 <u>Campground Gate Access and Scheduling</u>. For each Project, beginning upon Issuance of the New License for that Project, PacifiCorp shall close but not lock gates to the entrance of campgrounds at night, but shall continue to lock gates at Project day use sites and boat launches at night.
- 11.2.12 <u>Dispersed Camping Management Funding to USDA-FS</u>. Beginning upon the Issuance of first of the New Licenses for its three Projects, PacifiCorp shall provide \$5,220 in 2004 dollars annually (Adjusted for Inflation) to USDA-FS to manage Project-related dispersed camping on National Forest System lands.
- 11.2.13 <u>Vehicular Access and Use Control</u>. For each Project, beginning upon Issuance of the New License for that Project, PacifiCorp shall: (1) discourage dispersed upland (non-shoreline) camping and motorized use, by keeping Project roads gated and maintained as necessary; and (2) continue to work with adjacent private landowners and agency resource managers to restrict access from their non-Project lands onto PacifiCorp-owned lands where undesirable motorized access is gained, such as to the Yale/IP Road corridor.
- 11.2.14 <u>ADA-Accessible Fishing Sites</u>. Beginning upon the seventh anniversary of Issuance of the first of the New Licenses for its three Projects, PacifiCorp shall conduct a feasibility study to identify the most feasible location for one ADA-accessible bank fishing access site in the following areas: the Lewis River between Merwin Dam and the Island River Access, Swift Reservoir, Yale Lake, and Lake Merwin. By the tenth anniversary of Issuance of

the first of the New Licenses for its three Projects, PacifiCorp shall construct an ADA-accessible bank fishing facility at that site, but shall not be required to spend more than \$250,000 for design, permitting, and construction.

- 11.2.15 <u>Public Use of Project RV Dump Stations</u>. For each Project, beginning upon Issuance of the New License for that Project, subject to existing capacity, PacifiCorp shall allow the public to use existing RV sanitation dump stations within PacifiCorp-owned campgrounds at Swift Forest Campground, Beaver Bay Campground, Cougar Campground, and Cresap Bay Campground for a fee established and updated annually by PacifiCorp. PacifiCorp shall coordinate with USDA-FS (on FR 90) and WSDOT (on SR 503 and SR 503 Spur) to place signs indicating the universal symbol for an RV holding tank dump station on the advance direction signs leading to PacifiCorp-managed campgrounds.
- 11.2.16 <u>Communication with the Parties</u>. Upon Issuance of the first of the New Licenses for its three Projects, PacifiCorp shall create a Lewis River Recreation Advisory Committee ("LRC") to provide information to interested Parties from time to time, but at least once per year, concerning implementation of the recreation measures on the lands within the Project Boundaries of PacifiCorp's Projects. The members of the LRC may provide comments to PacifiCorp concerning implementation of the recreation measures; however, the LRC shall not have the authority to alter implementation plans without PacifiCorp's written agreement.
- 11.2.17 <u>Day Use Facilities and Undeveloped Lands</u>. The matter of fees at PacifiCorp's Lewis River Day Use recreation facilities that existed as of August 1, 2002 will be governed by the "Agreement Concerning the Charging of Fees at PacifiCorp's Lewis River Recreation Facilities" between PacifiCorp, John Clapp, Noel Johnson, Lewis River Community Council, City of Woodland, Woodland Chamber of Commerce, Emergency Medical Services and Fire Districts (Represented by Cowlitz-Skamania Fire District #7), Cowlitz County, Clark County, Skamania County, and WDFW executed as of November 22, 2004 ("Fee Agreement"). The Fee Agreement is not intended to be incorporated in this Agreement or enforceable pursuant to this Agreement. During the term of the Fee Agreement, PacifiCorp shall not be obligated under this Agreement to take actions inconsistent with the terms of the Fee Agreement.

The matter of fees at PacifiCorp's undeveloped lands associated with the Projects as of November 2, 2004 will be governed by the "Letter Agreement Concerning Charging of Fees at PacifiCorp's Undeveloped Lands Associated with the Merwin, Yale and Swift No. 1 Projects" between PacifiCorp, John Clapp, Noel Johnson, Lewis River Community Council, City of Woodland, Woodland Chamber of Commerce, Emergency Medical Services and Fire Districts (Represented by Cowlitz-Skamania Fire District #7), Cowlitz County, Clark County, Skamania County, WDFW and IAC executed as of November 22, 2004 ("Undeveloped Lands Agreement"). The Undeveloped Lands Agreement is not intended to be incorporated in this Agreement or enforceable pursuant to this Agreement. During the term of the Undeveloped Lands Agreement, PacifiCorp shall not be obligated under this Agreement to take actions inconsistent with the terms of the Undeveloped Lands Agreement.

11.3 <u>Cowlitz PUD Recreation Measures</u>. Cowlitz PUD shall implement the Cowlitz PUD-related measures in Sections 11.3.1 through 11.3.5. Where the provisions below state that a recreation measure is to begin upon or after Issuance of the New License for the Swift No. 2 Project, Cowlitz PUD shall implement the measure after all administrative and judicial

rehearings, reviews, and appeals relating to that New License have been finally adjudicated or dismissed.

- 11.3.1 Swift No. 2 Power Canal Bank Fishing Facility. By September 30, 2005, Cowlitz PUD shall provide an ADA-compliant bank fishing facility at the Swift No. 2 canal bridge, which shall include a parking area to accommodate approximately 13 vehicles and at least one and possibly two (depending on available space and use) portable toilets or their equivalent on the last weekend of April (opening weekend of fishing) and between Memorial Day and Labor Day.
- 11.3.2 Operations and Maintenance. Commencing upon September 30, 2005, Cowlitz PUD shall be responsible for operations, maintenance, and replacement, as needed, of the facilities discussed in Section 11.3.1.
- 11.3.3 <u>Interpretation and Education Program</u>. To the extent feasible, Cowlitz PUD shall collaborate with PacifiCorp to produce a single I&E Program. Commencing after Issuance of the New License for the Swift No. 2 Project, Cowlitz PUD shall develop and implement or cause to be developed and implemented, in consultation with PacifiCorp, an I&E Program for recreation opportunities (including, at a minimum, a watchable wildlife component) on the lands within the Swift No. 2 Project Boundary. In developing the I&E Program, Cowlitz PUD shall request comments from the Parties.
- 11.3.4 Recreational Access to Project Lands. Beginning upon Issuance of the New License for the Swift No. 2 Project, Cowlitz PUD shall allow non-motorized public access to lands within the Swift No. 2 Project Boundary for wildlife viewing, angling, hunting, and other recreational purposes, subject to capacity restrictions, restrictions for security of its Project, restrictions to protect environmental and cultural resources, Cowlitz PUD's right to charge fees (provided that Cowlitz PUD shall not charge fees for use of the Swift No. 2 Power Canal Bank Fishing Facility), and restrictions for public safety, as determined by Cowlitz PUD in its reasonable discretion, subject to third party property rights, and consistent with Commission requirements. Such public access shall not require Cowlitz PUD to construct or maintain facilities or to provide personnel for supervision of such access, except to the extent expressly provided for in this Agreement. Boating, swimming, any other in-water activity, and overnight camping shall not be permitted within the Swift No. 2 Project Boundary.
- 11.3.5 <u>Dispersed Camping Management Funding to USDA-FS</u>. Beginning upon Issuance of the New License for the Swift No. 2 Project, Cowlitz PUD shall provide, or cause to be provided, \$780 in 2004 dollars annually (Adjusted for Inflation) to the USDA-FS to manage Project-related dispersed camping on National Forest System lands.

SECTION 12: FLOOD MANAGEMENT

- 12.1 <u>Purpose</u>. The Parties acknowledge that the Projects provide important flood management for the local communities below Merwin Dam. The intent of the parties is to alter PacifiCorp's High Runoff Procedure to improve the level of protection during the time period in which high-flow events are likely to occur, while continuing to provide necessary operating flexibility to PacifiCorp. The Parties also intend to provide assistance to the Agencies that are charged with providing emergency notification of high-flow events on the Lewis River.
- 12.2. The FEMA Agreement. The Parties recognize that PacifiCorp is subject to an agreement with the Federal Emergency Management Agency ("FEMA") dated August 18, 1983 (the "FEMA Agreement") under which PacifiCorp covenants to follow its existing Standard Operating Procedure Manual (Lewis River Projects High Runoff Operation) ("Manual") in operating PacifiCorp's Projects, and to include such procedures in any New License application. To the extent that the provisions of this Section 12 conflict with any provisions of the FEMA Agreement, PacifiCorp shall consult with FEMA and seek appropriate amendments to the FEMA Agreement, and shall make corresponding changes to PacifiCorp's existing Manual to reflect the forecast-based high runoff procedures described in this Section 12. If the FEMA Agreement, so amended, remains inconsistent with this Section 12, PacifiCorp shall advise the Parties and such inconsistency shall be resolved in accordance with Section 15.10.
- 12.3 Future Development of the Lewis River Flood Plain. The Parties do not desire that FEMA make changes in its Flood Insurance Rate Map to reduce the existing base flood elevations. The Parties do not desire that any governmental organization rely on the flood management provided by PacifiCorp as a basis to allow any additional development in the Lewis River's floodplains. The Agencies and the Other Governmental Entities shall not, to the extent of their control over such issues, alter projected flood potential in the Lewis River Basin based on the additional flood management procedures provided for under this Agreement. PacifiCorp shall convey to FEMA the intent of the Parties in this regard.

12.4 Emergency Notification.

12.4.1 Funding. PacifiCorp shall provide the following funding to Clark County and Cowlitz County for the acquisition, installation, and maintenance of a new emergency telephone notification service for those portions of Clark County and Cowlitz County that are subject to inundation from the Lewis River: at the discretion of Clark and Cowlitz counties, either (a) a one-time payment not to exceed \$25,000, plus half of the annual service maintenance cost (not including additional charges such as per-event usage fees) up to \$4,600 annually beginning after the first year of operation and continuing for the terms of the New Licenses, or (b) \$7,500 annually for the terms of the New Licenses. Clark County and Cowlitz County will be responsible for providing or obtaining any additional funding required in support of such a system. PacifiCorp shall be required to submit its contributions only after (1) Clark County and Cowlitz County have contracted for acquisition of such notification service; (2) any required funding for its installation, maintenance, and operation to serve the areas described on Schedule 12.4.1 has been secured; and (3) Clark County and Cowlitz County have agreed among themselves on whether PacifiCorp shall provide funding under (a) or (b) above, and as to the division of payment from PacifiCorp. PacifiCorp, Clark County, and Cowlitz County shall work

out a mutually agreeable payment schedule after the service has been acquired and installed. PacifiCorp, Clark County, and Cowlitz County intend that identification and acquisition of this emergency telephone notification system or service shall proceed promptly after the Effective Date and that PacifiCorp shall make the above reimbursement whether or not the New Licenses have been Issued.

- 12.4.2 <u>Purpose</u>. Clark County and Cowlitz County recognize that the goal of the notification system is to reach residents of those areas subject to inundation; however, due to current technological limitations, a wider group of residents may be contacted. The Parties have identified areas that will be contacted by portions of the existing telephone system as described more fully on attached Schedule 12.4.1. If feasible, Clark County and Cowlitz County shall use such system or service to automatically notify citizens with potential inundation affecting their property or ingress and egress to their property when flow levels exceed 15,000 cfs below Merwin.
- 12.4.3 <u>Responsibilities</u>. Notwithstanding the contributions made under this Agreement, the acquisition, operation, and maintenance of such an emergency telephone notification system shall be and remain the sole responsibility of Clark County and Cowlitz County.
- 12.5 <u>No Assumption of Liability</u>. PacifiCorp does not intend to assume or incur and, by execution of this Agreement, PacifiCorp does not assume or incur any liability to any Party, or any third party, for flood damages except to the extent that PacifiCorp is liable under the FEMA Agreement. Cowlitz PUD has no obligations for flood management under this Agreement. Cowlitz PUD does not intend to assume or incur and, by execution of this Agreement, Cowlitz PUD does not assume or incur any liability to any Party, or any third party, for flood damage.
- 12.6 NOAA Communications Transmitter. PacifiCorp has entered into an agreement (effective August 23, 2003) with the National Oceanic and Atmospheric Administration ("NOAA") to reimburse NOAA for the installation and maintenance of a weather radio transmitter at Davis Peak. Annual expenses to be reimbursed by PacifiCorp are not to exceed \$9,500 per year without PacifiCorp's express consent. PacifiCorp has received written confirmation from NOAA that, between October and May of each year, NOAA will broadcast the total vacant storage (to the nearest foot) available in the reservoirs at reasonable intervals, the river flow from the Ariel gage, and a tone alert flood warnings whenever the combined outflow from the power plant and the spillway at the Merwin Project exceeds 60,000 cfs, measured according to the procedures in the Manual, and in the event of a dam break. If NOAA elects to discontinue broadcasting such notices, PacifiCorp may, after consultation with Clark Regional Emergency Services Agency and Cowlitz County Department of Emergency Management, terminate the funding agreement with NOAA for mechanical operation and maintenance of the transmitter. The Parties acknowledge that residents of the Lewis River basin will be responsible for purchasing their own radios capable of receiving the NOAA signal.
- 12.7 <u>USGS Flow Information and Funding</u>. PacifiCorp has paid for installation of a conduit and phone line to facilitate transmissions from a United States Geological Survey ("USGS") voice-synthesizer modem intended to speak flow numbers in cfs and the river level or stage when called, to provide real-time flow information from the existing Ariel gage. PacifiCorp shall transfer ownership of the phone line to USGS if it has not done so before the Effective Date. PacifiCorp shall not have responsibility for successful operation of the phone line, the

voice modem, or the Ariel gage. PacifiCorp shall, upon request by USGS, reimburse USGS for the monthly operating cost of the phone line during the terms of the New Licenses.

- 12.8 <u>High Runoff Procedure</u>. By the first anniversary of the Issuance of the New License for the Merwin Project, PacifiCorp shall seek amendment of the FEMA Agreement and the Manual to implement a revised high runoff procedure as follows:
 - a. The "Flood Management Season" during which time PacifiCorp is required to maintain 17 feet of hole, as defined in the Manual, at the Projects for high runoff management shall be redefined from the current period (November 1 through April 1) to shorten the period by two weeks in years with a below average March runoff forecast, as defined in the Manual, so that the Flood Management Season shall be November 1 through March 15 during those years. PacifiCorp may, in its sole discretion, waive this requirement to shorten the Flood Management Season by two weeks.
 - b. The term "Pre-Releases" shall mean water discharged at Merwin in excess of turbine capacity and in anticipation of high runoff when the existing "hole" for high runoff management exceeds 17 feet, as defined in the Manual. In no event shall the total discharge from Merwin during Pre-Releases greater than 25,000 cfs exceed the lesser of the natural inflow or 40,000 cfs.
 - c. PacifiCorp shall obtain 3-day river flow forecasts from a reputable third party forecasting organization (which may include the National Weather Service's River Forecasting Center) for the Lewis River Watershed. This 3-day river flow forecast shall be used by PacifiCorp in its forecast-based high runoff procedure as described below. PacifiCorp shall periodically evaluate the forecasts being used against other commonly available forecasts, with the goal of improving forecasting accuracy for flood management through the use of evolving technology, to the extent practicable.
 - d. During the Flood Management Season, PacifiCorp shall calculate the "Forecasted Flow" for the Lewis River from the 3-day forecast by determining the forecasted flow that has an 85% probability of occurring. In the event that it appears that the Forecasted Flow will result in inflows significant enough to utilize a portion of the 17 feet of hole, as defined in the Manual, reserved for flood management purposes, PacifiCorp shall make a Pre-Release to provide additional capacity to store inflows into the reservoirs during the high-runoff event. Once the total hole is reduced to 17 feet, PacifiCorp shall continue to follow the flow release procedures contained in the Manual as of the Effective Date.
 - e. If and when FEMA has approved the changes described in Section 12.8.a through d, and six months after Issuance of the New License for Merwin, then PacifiCorp shall modify its Manual to reflect the forecast-based high runoff procedure and begin implementing the procedure upon Commission approval. Nothing in this Agreement shall prevent PacifiCorp from updating or refining the forecast-based high runoff procedure in the future, subject to the FEMA Agreement. PacifiCorp shall propose any substantive update to the Parties. If there is no objection and if FEMA agrees to the update, PacifiCorp shall implement the update. If a Party objects to a substantive update, PacifiCorp and interested Parties will meet to discuss any concerns and attempt to reach

agreement. If the Parties cannot reach agreement, the issue will be resolved pursuant to Section 15.10.

12.9 Coordination Among the Parties. PacifiCorp shall convene an annual coordination meeting involving the emergency management officials from the cities and agencies within Clark and Cowlitz counties, including police agencies, fire officials, emergency medical services, and any other parties entitled to notice in connection with the high runoff procedure pursuant to the Manual. PacifiCorp shall provide at least thirty days' advance notice of such meetings. The purpose of the meeting will be to review results of the high runoff procedure for the preceding Flood Management Season, discuss the results of dam safety inspections, coordinate emergency action plans, and public outreach regarding flood management and safety issues. Following the meeting of the above agencies, the participants will schedule a subsequent public workshop in September or October of each year to discuss the same issues as appropriate, subject to homeland security rules or other legal requirements. PacifiCorp shall provide at least thirty days' advance public notice of such workshops.

PacifiCorp shall identify one of PacifiCorp's employees to work with Clark and Cowlitz counties both during emergencies and on an ongoing basis and will provide mail, telephone, fax, and email contact information for such employee. In addition, PacifiCorp shall provide Clark and Cowlitz counties with a telephone number that will be manned 24 hours per day, seven days per week, that can be used in an emergency for Clark and Cowlitz counties to contact a designated employee who will have responsibility for coordinating with Clark and Cowlitz counties during an emergency. Clark and Cowlitz counties shall maintain up-to-date information on their respective contacts, who shall be on duty during emergencies and on an ongoing basis. PacifiCorp shall provide any updated versions of the Manual to Clark County, Cowlitz County, and the City of Woodland.

12.10 <u>Disclaimer</u>. By execution or performance of this Agreement, no Party assumes or incurs any liability to any Party, nor intends to create any liability to any third party, for flood damage.

SECTION 13: CULTURAL RESOURCES AND SOCIO-ECONOMICS

13.1 Cultural Resources.

- 13.1.1 PacifiCorp Obligations as to Cultural Resources. PacifiCorp shall finalize the Historic Properties Management Plan ("HPMP") based on the Draft Historic Properties Management Plan submitted to the Commission in PacifiCorp's Final Application for New License for Major Project, Volume III of III, April 2004. Upon approval by the Commission, PacifiCorp shall implement the HPMP for each of the Merwin, Yale, and Swift No. 1 Projects as the New License for each Project is Issued. The HPMP will guide the treatment of known and yet to be discovered cultural and historic resources through the New License terms and will outline the consultation requirements with the CIT, Yakama Nation, and oversight agencies. Additionally, PacifiCorp has agreed to the following specific protections of cultural resources:
 - (1) Archeological artifacts recovered from the Project area and associated documentation will be curated at the visitor information facility described in Section 13.2.4 or at another Project facility created by PacifiCorp in one of its existing buildings that meets the applicable federal curation guidelines;
 - (2) Changes contemplated to National Register of Historic Places-eligible facilities within the Swift No. 1 Historic District or the Ariel (Merwin) Historic District will be planned in a manner that is compatible with preservation of the districts' historic value;
 - (3) Access by the CIT and Yakama Nation to Project lands for traditional cultural practices will be provided by PacifiCorp except where unsafe conditions exist;
 - (4) A program of monitoring and protection of cultural resources in the draw-down zones;
 - (5) Designation of a cultural resource coordinator for PacifiCorp's Lewis River Projects; and
 - (6) A program for annual training and education of PacifiCorp employees whose work may affect cultural resources in the Project areas.

13.1.2 Cowlitz PUD Obligations as to Cultural Resources.

13.1.2.1 <u>Unanticipated Discovery Plan</u>. Investigations for Swift No. 2 revealed that no historic properties were present within the Project Boundary and no HPMP was needed for relicensing. The Licensee shall follow the Cultural Resources Unanticipated Discovery Plan filed with the Commission as Volume 2 Appendix 3 in the Application for New License for Swift No. 2 in April 2004. During the term of the New License, the Licensee shall evaluate the potential for development actions to affect previously undiscovered archeological sites or traditional cultural properties that could be eligible for listing in the National Register of Historic Places. The Licensee shall consult with the State Historic Preservation Officer, the CIT, and the Yakama Nation about development

actions, land acquisitions, or emergency response activities that would disturb soils in areas exceeding 0.1 acre. If cultural resources are identified, the Licensee shall evaluate their eligibility for National Register listing and will file a plan for mitigation and management of such resources with the Commission, after consultation with the Office of Archeology and Historic Preservation, CIT, and Yakama Nation. The Licensee shall evaluate the National Register eligibility of buildings and structures that could be affected by Project operation and development actions at the time such structures attain 50 years of age.

13.1.2.2 <u>Access</u>. Cowlitz PUD shall allow tribal access to land within the Swift No. 2 Project Boundary for traditional cultural practices except where unsafe conditions exist.

13.2 Socio-Economics.

13.2.1 Law Enforcement.

- 13.2.1.1 Funding. Within 6 months after the Issuance of the first of the New Licenses for the Merwin, Yale, and Swift No. 1 Projects, PacifiCorp shall provide funding for the direct cost of two full-time-equivalent law enforcement officers, including a reasonable cost for vehicle and equipment related to their duties under the contract. This funding will be allocated between the Clark, Cowlitz and Skamania counties at their discretion. PacifiCorp shall also provide funding for the direct cost of one full-time-equivalent law enforcement officer, including a reasonable cost for vehicle and equipment related to his or her duties under the contract, to WDFW. WDFW and the Clark, Cowlitz and Skamania counties will coordinate their activities to provide the most effective law enforcement possible with the available resources.
- 13.2.1.2 Contracts. Within 6 months after the Issuance of the first of the New Licenses for the Merwin, Yale, and Swift No. 1 Projects, PacifiCorp shall enter into a contract or contracts with the appropriate law enforcement agencies to allocate the funding described in Section 13.2.1.1. Such contracts will be to augment land- and marine-based traditional law enforcement activities and patrols in the North Fork Lewis River Basin, provided by state and local government, as part of their responsibilities to protect public health, safety, welfare, and natural resources. Such enforcement activities will be limited to the Project vicinity in the North Fork, provided that some WDFW patrols may be necessary to protect reintroduced species during their migration in the mainstem of the Lewis River. The contracts will be modeled after the contract included in Exhibit C and may be renewed every three years, as necessary. Upon renewal, allocation of funding among the Clark, Cowlitz and Skamania counties for the two full-time-equivalent law enforcement officers (and reasonable costs as discussed in Section 13.2.1.1) may be altered at the discretion of the Clark, Cowlitz and Skamania counties.
- 13.2.1.3 <u>Need for Additional Coverage</u>. PacifiCorp shall, in consultation with local and state law enforcement as part of the contracting process, consider the need for additional law enforcement coverage related to land- and water-based recreation activities reasonably related to PacifiCorp Projects.

13.2.1.4 <u>Annual Coordination Meeting</u>. PacifiCorp shall convene an annual coordination meeting involving the Counties' law enforcement agencies and WDFW to discuss ongoing issues related to the subject of law enforcement within the North Fork Lewis River Basin.

13.2.2 Forest Road 90.

- 13.2.2.1 <u>Maintenance</u>. The Licensees agree to make the following payments to USDA-FS for the maintenance of the section of road between the Skamania-Cowlitz County line and milepost 16.2 near the Northwoods Community ("Forest Road 90"). These payments will terminate at the earlier of the following circumstances: (1) another party accepts ownership and/or maintenance responsibility for Forest Road 90 or (2) the New Licenses and any annual licenses for Swift No.1 and Swift No. 2 expire. Payment will be accomplished through the use of collection agreements or other appropriate means which will clearly restrict the use of funds to Forest Road 90 maintenance and repair activities. Information on the annual expenditures of these funds will be available for review by the Parties at the USDA-FS Gifford Pinchot National Forest Headquarters.
 - a. PacifiCorp shall pay \$7,474, and Cowlitz PUD shall pay or cause to be paid \$2,626, to USDA-FS within 120 days of the Effective Date, for a portion of the estimated repair costs of the Canal Bridge on Forest Road 90.
 - b. PacifiCorp shall pay \$19,980 per year beginning in April 2005 to USDA-FS specifically for the maintenance of Forest Road 90. Cowlitz PUD shall pay or cause to be paid \$7,020 to USDA-FS specifically for the maintenance of Forest Road 90 beginning in April 2005. These amounts are in 2003 dollars Adjusted for Inflation according to the Engineering News Record Construction Cost Index.
 - c. Each Licensee shall pay appropriate use fees to USDA-FS on a case-by-case basis for its respective use of Forest Road 90 to haul heavy loads.

The payments included in (a) through (c) above are intended to cover the Licensees' share of all costs associated with maintaining Forest Road 90, including annual maintenance, periodic maintenance, and unforeseen/catastrophic damage. Annual maintenance includes, but is not limited to, roadway surface maintenance; controlling brush along the road's shoulders; keeping drainage systems free of debris; maintaining traffic signs, striping, and control (investigating and surveying accidents); and maintaining such structures as guardrails and bridges. Periodic maintenance includes, but is not limited to, such items as inspecting, repairing, and painting bridges; paving the road; and replacing major culverts. Unforeseen/catastrophic damages are the result of an act of God or force of nature that makes the road impassable. Heavy hauling consists of occasional hauling of heavy loads, such as logs, heavy equipment, and power plant components by commercial haulers.

13.2.2.2 <u>Access</u>. USDA-FS will make all reasonable efforts to provide access to PacifiCorp and Cowlitz PUD facilities over Forest Road 90 but cannot guarantee access in the event of unforeseen circumstances such as catastrophic damage or weather-related closures, including blockage by snow.

- 13.2.2.3 <u>Annual Meeting</u>. The Licensees and USDA-FS shall meet at least once annually to review the past year's maintenance activities and identify planned activities for the coming year. By mutual agreement of USDA-FS, PacifiCorp, and Cowlitz PUD, these meetings may be held less frequently, on an as-needed basis. At any such time that PacifiCorp or Cowlitz PUD determines that USDA-FS is not making all reasonable efforts to provide access to the Licensee's facilities over Forest Road 90, or if the New Licenses have not been Issued by the end of calendar year 2006, then USDA-FS, PacifiCorp, and Cowlitz PUD shall meet immediately to discuss a course of action.
- 13.2.3 <u>Pine Creek Work Center Communication Link</u>. PacifiCorp shall provide the existing level of support for the USDA-FS radio-telephone link between Swift Dam and the Pine Creek Work Center for the terms of the New Licenses, unless USDA-FS notifies PacifiCorp in writing that it no longer needs the Pine Creek Work Center or the system. This support includes the following:
 - a. PacifiCorp shall continue to provide, at no charge, use of the older concrete block communication building at Swift Dam for the housing of USDA-FS-owned and -maintained radio and telephone interface equipment. USDA-FS will continue to provide for the security of the building.
 - b. PacifiCorp shall continue to provide a wood pole adjacent to the building for the installation of the USDA-FS-owned and -maintained radio antenna.
 - c. PacifiCorp shall continue to provide unmetered (without charge) power for the USDA-FS equipment in the building, and continued backup power to the communications equipment from the Swift spill-gate emergency generator.
 - d. PacifiCorp shall continue to provide twisted-pair, audio-grade copper connectivity to the telephone company point of presence near the old Swift Village site.
 - e. PacifiCorp shall provide keys to the lock on the access road gate allowing access to the site by USDA-FS communication technicians. USDA-FS will call the Hydro Control Center at the Merwin Headquarters to gain clearance before entering the gate at the Swift No. 1 Project.
 - f. USDA-FS will continue to maintain the concrete block building. In the event of loss of the building, PacifiCorp is not obligated to replace the structure but will continue to make the site available to USDA-FS for reconstruction at USDA-FS expense.

13.2.4 <u>Visitor Information Facility</u>.

13.2.4.1 <u>Construction</u>. PacifiCorp shall allow the non-Licensee Parties or their agents to construct a 1,000- to 1,200-square-foot visitor information facility on its property in Cougar, Washington, subject to the approval of the current lessee, the Port of Woodland, and if the non-Licensee Parties can demonstrate that sufficient partnerships

are available for staffing, daily maintenance, providing and maintaining displays, and payment for water and electricity of the visitor information facility. The construction location would be outside of PacifiCorp's Project Boundaries. Construction of the visitor information facility is dependent on the non-Licensee Parties' securing construction funds and commitments from the non-Licensee Parties or other partners for adequate and stable staffing and maintenance of the visitor information facility. The design and use of the structure must be flexible in term of its services and exhibits. The visitor information facility would not include a restroom, instead relying on the adjacent existing facilities. The facility and components must be designed and constructed with a minimum life cycle of forty years.

- 13.2.4.2 <u>Purpose</u>. The purpose of the visitor information facility, if constructed, will be to provide visitor information with a small component of interpretation and education on basin resources and history. A secondary purpose of the building may be to meet the Projects' curation requirements for prehistoric artifacts and provide periodic displays highlighting the culture of local tribes.
- 13.2.4.3 <u>Licensee Contribution</u>. The Licensees shall provide one of the following two options to respond to the uncertain availability of construction funds or participation of partners in the maintenance of the visitor information facility:
 - a. A one-time contribution of \$75,000 (not Adjusted for Inflation) as matching funds for potential grants to design and construct a visitor information facility in Cougar, Washington. PacifiCorp's portion of such contribution would be \$65,250, and Cowlitz PUD's portion would be \$9,750. The non-Licensee Parties may use these matching funds to seek grants and partnerships, and the Licensees shall make this funding available or cause this funding to be available after Issuance of all New Licenses and only at such time as the required grants, partnerships, and management/maintenance responsibilities are secured; or
 - b. Periodic maintenance (painting, exterior window washing, power washing, building repair, etc.) of the 1,000- to 1,200-square-foot visitor information facility for the terms of the New Licenses. The value of the maintenance commitment may be used by non-Licensee Parties as the match for potential grants for design and construction of the visitor information facility. If, during scoping and design, the purpose, size, or use of the building expands, the Licensees and non-Licensee Parties will each be responsible for a share of the maintenance costs of the building corresponding to their respective percentage of the size, purpose, or use. For example, if the building increases in size, purpose, or use by 30%, the Licensees would be responsible for 70% of the maintenance costs and the non-Licensee Parties would be responsible for 30% of the maintenance costs. The mechanism for sharing maintenance costs, if necessary, will be determined at such time as the changes in size, use, or purpose become known. If this option (b) is selected, Cowlitz PUD shall pay or cause to be paid 13% and PacifiCorp shall pay 87% of the Licensees' share of the cost of such maintenance.

- 13.2.4.4 <u>Ownership</u>. PacifiCorp shall own the visitor information facility structure upon its completion.
- 13.2.4.5 <u>Facility Use</u>. PacifiCorp shall allow reasonable public use of the visitor information facility throughout the terms of its New Licenses. The Parties anticipate that the visitor information facility, if constructed, will be staffed approximately five months of the year (from late spring through early fall).
- 13.2.4.6 <u>Initial Meeting</u>. USDA-FS will convene and facilitate an initial meeting of all interested stakeholders to solicit ideas about the purpose, design, and use of the visitor information facility, and what kinds of displays and rotating exhibits could be featured. One of the objectives for this meeting will be to identify potential partnerships for the construction, operation, and maintenance of the visitor information facility.

SECTION 14: COORDINATION AND DECISION MAKING

- 14.1 <u>Coordination and Decision Making</u>. The provisions of this Section 14 describe the processes for coordination and decision making among the Parties for the implementation of the terrestrial and aquatic PM&E Measures provided for in this Agreement. As provided for in Section 14.2 below, the Licensees shall convene a Terrestrial Coordination Committee ("TCC") to coordinate implementation of the terrestrial PM&E Measures described in Section 10 (including any exhibits, schedules, and appendices related to Section 10), and shall accomplish the purposes set forth in Section 14.1.1 below. The Licensees shall convene an Aquatics Coordination Committee ("ACC") to coordinate implementation of the aquatics PM&E Measures described in Sections 3 through 9 (including any exhibits, schedules, and appendices related to those Sections), referred to below as terrestrial and aquatic PM&E Measures.
- 14.1.1 <u>Purposes of the TCC</u>. The TCC is intended to accomplish the purposes set forth below:
 - a. Provide a forum for coordination between the Licensees and the other Parties on terrestrial resources PM&E Measure implementation.
 - b. Oversee the development by the Licensees of an objective-oriented WHMP prior to the Issuance of the New Licenses.
 - c. Monitor implementation of that WHMP.
 - d. Oversee the HEP study in the 17th year after Issuance of the New Licenses, and modify the WHMP if necessary based on the HEP's results.
 - e. Oversee and make decisions regarding the: (1) Yale Fund; (2) the Swift Fund; and (3) the Lewis River Fund.
 - f. Oversee the annual budget for the WHMP.
- 14.2 <u>Coordination Committees</u>. Within 60 days after the Effective Date, PacifiCorp and Cowlitz PUD shall convene the TCC and the ACC.
- 14.2.1 Committee Coordinators. Within 30 days after the Effective Date, PacifiCorp and Cowlitz PUD each shall designate one Committee Coordinator for the TCC and one Committee Coordinator for the ACC. PacifiCorp and Cowlitz PUD shall make their designations by notice to the Parties in accordance with the notice provisions in Section 16.6. The PacifiCorp Committee Coordinator(s) shall be employed or retained by PacifiCorp and may represent PacifiCorp on the TCC and the ACC. The Cowlitz Committee Coordinator(s) shall be employed or retained by Cowlitz PUD and may represent Cowlitz PUD on the TCC and the ACC. The PacifiCorp Committee Coordinator(s) shall, as their primary responsibilities, oversee the coordination and implementation of the terrestrial and aquatics PM&E Measures that are the responsibility of PacifiCorp as provided in this Agreement. The Cowlitz PUD Committee Coordinator(s) shall oversee the coordination and implementation of the terrestrial and aquatics PM&E Measures that are the responsibility of Cowlitz PUD as provided in this Agreement.

PacifiCorp and Cowlitz PUD Committee Coordinators together shall oversee the coordination and implementation of terrestrial and aquatics PM&E Measures for which PacifiCorp and Cowlitz PUD have joint responsibility as provided in this Agreement.

14.2.2 TCC and ACC Membership. Within 30 days after the Effective Date, or at any time thereafter with 30 days' notice to the Licensees, each Party, at its own discretion and cost, may designate one representative for membership on the TCC and may designate one representative for membership on the ACC and may designate one or more alternates. The Party shall make its designation(s) by notice to the Parties in accordance with Section 16.6. A Party not participating on the TCC, the ACC, or both may request, by notice to the Parties in accordance with Section 16.6, to be placed on a contact list to receive notices of committee meetings and releases of information, including annual reports and other interim reports, that the TCC or the ACC may issue.

14.2.3 TCC and ACC Functions. The TCC and the ACC will:

- a. Coordinate and Consult on development of plans by the Licensees as provided in this Agreement;
- b. Review information and oversee, guide, and make comments and recommendations on implementation and monitoring of the terrestrial and aquatic PM&E Measures, including plans;
- c. Consult with the Licensees on their respective reports prepared under this Agreement regarding implementation of the terrestrial and aquatic PM&E Measures as referred to in Section 14.2.6 below;
- d. Make decisions, grant approvals, and undertake any additional duties and responsibilities expressly given to the TCC or the ACC with respect to the terrestrial and aquatic PM&E Measures;
- e. Establish, among other things, (i) procedures and protocols for conducting committee meetings and deliberations to ensure efficient participation and decision making; (ii) rules for quorum and decision making in the absence of any member; (iii) alternative meeting formats as desired, including phone or teleconference; and (iv) the methods and procedures for updating committee members on interim progress of development and implementation of the terrestrial and aquatic PM&E Measures;
- f. As deemed necessary and appropriate by the TCC or the ACC, establish subcommittees to carry out specified committee functions and responsibilities described in this Section 14.2.3, and establish the size of, membership of, and procedures for any such subcommittees; and
- g. Discuss the protocols and the content of public information releases; provided that each Party retains the right to release information to the public at any time without such discussion.

- 14.2.4 <u>TCC and ACC Decision-Making Process and Limitations</u>. The TCC and the ACC shall make comments, recommendations, and decisions in a timely manner as provided below:
 - a. Each Party represented on the TCC and the ACC will have the authority to participate in all committee discussions relating to, and to provide input and advice on, decisions regarding implementation of the terrestrial or aquatics PM&E Measures;
 - b. The TCC and the ACC shall strive to operate by Consensus. Whether or not the TCC or the ACC has final authority over decisions on terrestrial and aquatic PM&E Measures, the Licensees and other Parties may proceed with actions necessary to implement the New Licenses or this Agreement, even though Consensus is not achieved; provided that in such cases the responsible Licensee or Licensees shall notify the Commission of the comments of the ACC or TCC members and the areas of disagreement. If the TCC or ACC does not reach Consensus, then any member of the TCC or ACC, respectively, may initiate the ADR Procedures as provided in Section 15 below.
 - c. Where one or more Parties have approval authority under this Agreement, Licensees shall notify the Commission of any approvals that were not obtained, include the relevant comments of the Parties with approval authority, describe the impact of the lack of approval on the schedule for implementation of PM&E Measures, and describe proposed steps to be taken to gain the approval, including dispute resolution.
 - d. In no event shall the TCC or the ACC increase or decrease the monetary, resource, or other commitments made by PacifiCorp and Cowlitz PUD in this Agreement; override any other limitations set forth in this Agreement; or otherwise require PacifiCorp to modify its three Projects' facilities without PacifiCorp's prior written consent or require Cowlitz PUD to modify its Project's facilities without Cowlitz PUD's prior written consent, which consent may be withheld in the applicable Licensee's discretion.
 - e. At any juncture where discussion or other contact with the ACC or TCC is required by this Agreement, when requested by the Services or as required by the Agreement, the ACC or TCC Committee Coordinator, respectively, shall schedule an opportunity to discuss the relevant issue with the ACC or TCC. This event shall consist of either a conference call, in-person meeting, or other appropriate forum to enable full consideration of the issue.
- 14.2.5 TCC and ACC Meetings. Commencing in the first year after the Effective Date and each year thereafter for the terms of the New Licenses, the TCC and ACC Committee Coordinators shall arrange and provide an agenda for an annual meeting of their respective committees. The TCC and ACC Committee Coordinators also shall arrange and provide an agenda for any additional meetings deemed necessary by either coordinator for a committee or at the request of any two Parties on that committee, which request shall be sent simultaneously to all members of that committee. Members of the TCC and the ACC shall be given a minimum of

30 days' notice prior to any meeting, unless otherwise agreed to by the members of the applicable committee.

14.2.6 TCC and ACC Reports. The Committee Coordinators for the TCC and the Committee Coordinators for the ACC shall prepare and file with the Commission detailed annual reports on the TCC and ACC activities, monitoring and evaluations under the M&E Plan, and implementation of the terrestrial and aquatics PM&E Measures occurring during the prior year, as well as plans for the coming year as required in this Agreement. The annual reports may also include plans and reports required pursuant to Sections 4.9.1, 7.7.1, 8.2.3, 8.2.4, 10.5, and 10.8.3. Copies of such reports will be made available to each Party. The annual reports shall be prepared in Consultation with the TCC and ACC committee members and shall be submitted to the committees for review each year, commencing after the Effective Date. Committee members shall have a minimum of 30 days to review and provide comment on a draft report before a final report is prepared and filed with the Commission. The Licensees shall submit the final report to the Commission not later than 30 days after the close of the ACC and TCC comment periods. To the extent that comments are not incorporated into the final report, an explanation will be provided in writing, and such explanation shall be included in the report.

SECTION 15: IMPLEMENTATION OF THIS AGREEMENT

- 15.1 Parties Bound. The Parties shall be bound by this Agreement, unless this Agreement is terminated as provided in Section 15.12, except that if a Party withdraws as allowed by Section15.11, that Party shall not be bound following such withdrawal, nor shall any other Party be bound by its covenants with respect to the withdrawing Party. Section 1.2 shall survive any such termination or withdrawal. Except as provided in Section15.3.2, if any Party proposes Inconsistent terms, conditions, or articles to the New Licenses or seeks to have Inconsistent terms and conditions imposed on the Licensees with respect to the Projects in any other governmental or judicial forum, then any other Party may initiate the ADR Procedures under Section 15.10. If dispute resolution is unsuccessful, the Party opposed to such Inconsistent terms, conditions, or articles may withdraw from this Agreement.
- Resolution of Disputes Before New License Issuance. If, following the Effective Date and prior to the Commission's issuance of a New License, any 401 Certification, final ESA biological opinion and incidental take statement, or other Permit is denied or is issued with terms or conditions Inconsistent with this Agreement, then any Party may initiate the ADR Procedures under Section 15.10. If dispute resolution is unsuccessful, the Party opposed to such Inconsistent terms, conditions, or articles may withdraw from this Agreement.

If no Party initiates ADR Procedures within 30 days after it has actual knowledge of the final, non-appealable denial or issuance of an Inconsistent 401 Certification, final ESA biological opinion and incidental take statement, or other Permit, this Agreement shall be deemed modified to include such terms and conditions.

15.3 <u>Resolution of Disputes After New Licenses Issue.</u>

- 15.3.1 New Licenses Inconsistent with This Agreement. If a New License, either as initially issued by the Commission or following conclusion of any Appeal, is Inconsistent with the measures set forth in this Agreement, this Agreement shall be deemed modified to conform to the Inconsistency, unless a Party provides notice to the other Parties that it objects to the Inconsistency and initiates the ADR Procedures within 30 days after the date of Commission issuance of the New License or the conclusion of all Appeals, as appropriate. The disputing Party or Parties may, in addition, initiate the rehearing procedure described in Section 15.3.5, and such Party's rehearing request shall constitute notice to the other Parties of the dispute. If the New License, as initially approved by the Commission and after any Appeals or after the Parties abandon or withdraw further Appeals, remains Inconsistent with this Agreement, then a Party who objected to the Inconsistency may withdraw from this Agreement.
- 15.3.2 <u>Reopeners and Modification</u>. During the terms of the New Licenses, except as provided in the Final Terms and Conditions and this Agreement (including, without limitation, Section 3.5.2.b), the Parties may not seek to modify or add to the PM&E Measures, the commitments under this Agreement, or other obligations of PacifiCorp or Cowlitz PUD, or seek to amend the New Licenses pursuant to standard Commission reopener provisions, except: (a) as provided pursuant to Sections 1.1.5 and 1.1.6; (b) as required by statutes enacted or amended after Issuance of the New Licenses; or (c) if significant new information not reasonably known or understood as of the Effective Date reasonably demonstrates that the Agreement does not

continue to satisfy PacifiCorp's and Cowlitz PUD's obligations under the laws addressed in Section 1, or any subsequently enacted or amended statute. If a Party seeks to modify, amend, or add to the New Licenses or any other Permit pursuant to this Section 15.3.2, the acting Party shall provide PacifiCorp and Cowlitz PUD with at least 90 days' notice to consider the Party's position. An Agency shall not be required to comply with this 90-day-notice provision if it reasonably believes an emergency situation exists, or if providing such notice would prevent it from meeting its responsibilities under statutes or regulations enacted or amended after the Issuance of the New Licenses. If a Party modifies or adds to the PM&E Measures or other obligations or commitments under this Agreement, or other obligations of PacifiCorp or Cowlitz PUD, or succeeds in amending the New Licenses in a manner Inconsistent with this Agreement, the other Parties may object and respond in accordance with Section 15.3.3.

- 15.3.3 <u>Changes in Measures Caused by Non-Parties After New Licenses Issue</u>. If, after the Commission issues New Licenses, any non-Party action, including action by the Commission, another agency, or a court, results in the imposition of any measure that any Party believes is Inconsistent with this Agreement, then that Party may give notice and may initiate the ADR Procedures and, if applicable, may seek Appeal of such action as provided in Section 15.3.5. If, after conclusion of the ADR Procedures and after completion or abandonment of any Appeal, the measure complained of remains imposed, or as modified remains Inconsistent with this Agreement, and the Parties cannot reach agreement on a resolution to the Inconsistency, the Party providing notice may withdraw from this Agreement.
- 15.3.4 Review of Commission Actions. Any Party may initiate an Appeal of any Commission act or omission, on or after the Issuance of the New Licenses, that is Inconsistent with this Agreement. The ADR Procedures do not preclude any Party from timely filing for and pursuing rehearing under 18 C.F.R. § 385.713, or judicial review, of the Inconsistent action. However, the Parties shall follow the ADR Procedures to the extent reasonably practicable while such Appeal of an Inconsistency is pursued. If a Party initiates an Appeal of any Inconsistent action and the Parties participating in the Appeal withdraw the Appeal, then this Agreement shall be deemed modified to conform to the Inconsistent action or omission.
- 15.3.5 Review of Other Agency Actions. To the extent provided by applicable law, any Party may pursue an Appeal of any action by any agency that is Inconsistent with this Agreement. The ADR Procedures do not preclude any Party from timely filing and pursuing an Appeal under the respective agencies' applicable statutes and rules, or from seeking judicial review, of any such action that is Inconsistent with this Agreement. However, the Parties shall follow ADR Procedures to the extent reasonably practicable while any such Appeal of an Inconsistency is pursued. If a Party has initiated an Appeal of any Inconsistent action and the Parties participating in the Appeal withdraw the Appeal, then this Agreement shall be deemed modified to conform to the Inconsistent action or omission.
- 15.3.6 PacifiCorp or Cowlitz PUD Fails to Perform License Terms. If PacifiCorp fails to perform any of the provisions of this Agreement relating to its three Projects and included in the New Licenses for its Projects and is not otherwise excused from such performance as provided in Section 16.3, or if Cowlitz PUD fails to perform any of the provisions of this Agreement relating to its Project, and included in the New License for its Project and is not otherwise excused from such performance as provided in Section 16.3, a Party may give the Party that failed to perform notice and an opportunity to cure within 90 days of such notice. If the Party that failed to

perform fails to cure the problem within that period, or if such failure is not curable within 90 days and the Party that failed to perform has not commenced a cure within that period and diligently completed such cure, any Party who objects to such failure to perform may (a) give notice to the other Parties and commence the ADR Procedures and, (b) whether or not the ADR Procedures are commenced, may petition the Commission to enforce such provision and, if unsuccessful, initiate an Appeal or, if and as appropriate, seek the remedies of mandamus or specific performance. The Parties reserve any remedies under applicable law to enforce the PM&E Measures contained in this Agreement but not enforced by the Commission. If, after all Appeals regarding Commission action or after the Parties have abandoned or withdrawn such Appeals, the Commission does not enforce the provision and PacifiCorp or Cowlitz PUD fails to perform the provision, the Party that sought performance may withdraw from this Agreement. A failure to perform by one Licensee shall not give the other Licensee the right to withdraw from this Agreement.

- 15.3.7 PacifiCorp or Cowlitz PUD Fails to Perform Obligations in This Agreement Not <u>Included in the New Licenses</u>. If PacifiCorp fails to perform any of its obligations under this Agreement relating to its three Projects that are not included in the New Licenses for its Projects and is not otherwise excused under Section 16.3 from such performance, or if Cowlitz PUD fails to perform any of its obligations under this Agreement relating to its Project that is not included in the New License for its Project and is not otherwise excused under Section 16.3 from such performance, any Party may give the Party that failed to perform notice of the failure and an opportunity to cure within 90 days of such notice. If the Party that failed to perform fails to cure the problem within that period, or if such failure is not curable within 90 days and the Party that failed to perform has not commenced a cure within that period and diligently completed such cure, the Party seeking performance may (a) give notice to the other Parties and commence the ADR Procedures and, (b) whether or not the ADR Procedures are commenced, may seek specific performance of this Agreement. If PacifiCorp's or Cowlitz PUD's performance of the obligation is not obtained and if PacifiCorp's or Cowlitz PUD's failure is Inconsistent with the terms of this Agreement, the Party that provided notice may withdraw from this Agreement. The Parties reserve any remedies under applicable law to enforce the PM&E Measures and any other commitments contained in this Agreement. A failure to perform by one Licensee shall not give the other Licensee the right to withdraw from this Agreement.
- 15.3.8 New ESA Listings or Critical Habitat Designations. If any species or critical habitat that may be affected by operation of the Projects under the New Licenses is listed or designated during the terms of the New Licenses, and if consultation under ESA section 7 is required and results in the imposition of measures which are Inconsistent with the terms of this Agreement, any Party that objects to such Inconsistent measures may (a) initiate the ADR Procedures and, (b) whether or not the ADR Procedures are initiated, may initiate an Appeal or judicial review of the Inconsistent measures. If the Parties complete the ADR Procedures and complete, abandon, or withdraw any Appeal, and one or more of the additional measures remains Inconsistent with this Agreement, the Party or Parties that objected to the imposition of the Inconsistent measures may, within 60 days after completion of the ADR Procedures and completion, abandonment, or withdrawal of any Appeal, withdraw from this Agreement.
- 15.4 <u>Cooperation Among Parties</u>. The Parties shall cooperate in the performance of this Agreement. Among other things, the Parties shall cooperate in implementing the PM&E Measures and any other commitments contained in this Agreement, and in conducting all other

activities related to the implementation of this Agreement.

- 15.5 <u>Responsibility for Costs.</u> Except as may be required by section 10(e) of the FPA, by this Agreement, or by agreements between PacifiCorp and Cowlitz PUD, PacifiCorp and Cowlitz PUD shall have no obligation to reimburse or otherwise pay any other Party for its assistance, participation, or cooperation in any activities pursuant to this Agreement.
- 15.6 <u>Responsibility for Operation of Projects</u>. By entering into this Agreement, none of the Parties, except for PacifiCorp and Cowlitz PUD, has accepted any legal liability or responsibility for operating the Projects.
- 15.7 Responsibility for PM&E Measures and Other Commitments. PacifiCorp is not responsible for implementing or funding PM&E Measures or other commitments under this Agreement that Cowlitz PUD is required to fund and to implement under its New License or this Agreement, and Cowlitz PUD is not responsible for implementing or funding PM&E Measures or other commitments under this Agreement that PacifiCorp is required to fund and to implement under its New Licenses or this Agreement. Where this Agreement provides that the Licensees promise to complete a PM&E Measure, the other Parties may enforce such provision against either Licensee or both Licensees. This Section 15.7 is not intended to supersede the "Settlement Cost Memorandum of Understanding Between PacifiCorp and Public Utility District No. 1 of Cowlitz County, Washington for Allocating Settlement Costs for Merwin, Yale, Swift No. 1 and Swift No. 2 Hydroelectric Projects on the Lewis River" between Cowlitz PUD and PacifiCorp effective August 25, 2004.
- 15.8 <u>Availability of Funds</u>. Implementation of this Agreement by a Party that is a federal agency is subject to the requirements of the Anti-Deficiency Act, 31 U.S.C. §§ 1341-1519, and the availability of appropriated funds. Nothing in this Agreement is intended or shall be construed to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The Parties acknowledge that the Agencies that are federal agencies shall not be required under this Agreement to expend any federal agency's appropriated funds unless and until an authorized official of each such agency affirmatively acts to commit such expenditures, as evidenced in writing.

Implementation of this Agreement by Agencies that are state agencies is subject to the availability of appropriated funds. Nothing in this Agreement is intended or shall be construed to require the obligation, appropriation, or expenditure of any money from the Treasury of the State of Washington. The Parties acknowledge that the Agencies that are state agencies shall not be required under this Agreement to expend any appropriated funds unless and until an authorized official of each such agency affirmatively acts to commit such expenditures, as evidenced in writing.

15.9 <u>Amendment of Agreement</u>. This Agreement may be amended at any time with the agreement of all Parties still in existence. Any amendment of this Agreement shall be in writing and executed by all Parties still in existence, or their successors and assigns, if applicable. As appropriate, the Parties will submit the amendment, together with a statement in support of the amendment, to the Commission. The statement in support of the amendment shall include a record of efforts made to contact all Parties. In connection with proposed amendments to this Agreement, the Licensees shall provide written notice to the other Parties, by certified mail,

return receipt requested, describing the proposed amendment and setting a date, not less than 90 days after the date of the notice, for a meeting of the Parties to discuss the proposed amendment. If the return receipt indicates that any Party did not receive the mailed notice, the Licensees shall attempt to deliver notice by telephone, facsimile, or electronic mail. If any Party other than the Agencies, CIT, Yakama Nation, or Licensees fails to (a) attend the meeting, (b) provide a written notice objecting to the amendment, or (c) give a proxy to another Party that does attend the meeting, the Agreement may be amended by written agreement among all of the remaining Parties.

15.10 <u>Alternative Dispute Resolution</u>.

15.10.1 General. The Parties intend that disputes under this Agreement be resolved as expeditiously and informally as possible, and that issues within the scope of the TCC and the ACC be discussed in those committees before being referred to the ADR Procedures. All remaining disputes among the Parties regarding the obligations of the Parties under this Agreement shall, at the request of any Party, be the subject of nonbinding ADR Procedures among the disputing Parties. Each Party shall cooperate in good faith promptly to schedule, attend, and participate in the ADR Procedures. The Parties agree to devote such time, resources, and attention to the ADR Procedures as are needed to attempt to resolve the dispute at the earliest time possible. Each Party shall implement promptly all final agreements reached through the ADR Procedures, consistent with the Party's applicable statutory and regulatory responsibilities. Nothing in Sections 15.10.1 through 15.10.2 is intended or shall be construed to affect or limit the authority of the Commission, the Agencies, or any other agency with jurisdiction over the Projects to resolve a dispute brought before it in accordance with its own authorities and procedures, or to alter the statute of limitations or other requirements for Appeal of any action.

ADR Procedures. A Party claiming a dispute shall give notice of the dispute within 60 days of the Party's actual knowledge of a dispute, event, or omission that gives rise to the dispute, unless this Agreement provides otherwise. If a Party communicates with another Party informally and believes that the dispute is being resolved, the time for notice will not commence until it has been determined that such informal efforts have failed to resolve the dispute. Notification under Section 16.6 shall constitute actual knowledge. At a minimum, in any dispute subject to the ADR Procedures, the Parties shall hold two informal meetings within 30 days after notice, to attempt to resolve the disputed issue or issues. If, within 15 days after the second meeting or any meeting thereafter, a Party notifies the other Parties that such informal meetings failed to resolve the dispute, the Parties may agree to attempt to resolve the dispute using a neutral mediator. The agreement to use a neutral mediator will address allocation of costs and the scope of the dispute. The neutral mediator will be selected by the Parties participating in the mediation. Upon selection, the mediator will mediate the dispute for 60 days. Any of these time periods may be reasonably extended or shortened by agreement of the Parties, or as necessary to conform to the procedure of an agency or court with jurisdiction over the dispute. Unless otherwise agreed among the Parties, each Party shall bear its costs for its own participation in the ADR Procedures. Pending resolution of any dispute under the ADR procedures, and subject to the authority of the Commission or other agency with jurisdiction to order otherwise, PacifiCorp and Cowlitz PUD may continue operating their respective Projects in the manner of their operation prior to the point at which the dispute arose.

15.10.3 Enforcement of Agreement After ADR Procedures. Any Party may seek specific performance of this Agreement by any other Party at the Commission or in a court of competent jurisdiction after compliance with the ADR Procedures, where required, and, to the extent allowed by applicable law, may seek to recover its costs and fees associated with bringing such action. No Party shall be liable in damages for any breach of this Agreement, except that a Party may seek monetary penalties under applicable law. Nothing in Sections 15.10.1 through 15.10.3 is intended or shall be construed to affect or limit the jurisdiction of any agency or court as established under applicable law.

15.11 Withdrawal from Agreement.

- 15.11.1 <u>Withdrawal of a Party from Agreement</u>. A Party may withdraw from this Agreement only as expressly provided in this Agreement and after providing 60 days' advance notice to all other Parties. In addition, when a Party ceases to exist and has no successors or assigns, it will be deemed to have withdrawn from this Agreement, but such withdrawal shall not give any other Party the right to withdraw.
- 15.11.2 Continuity After Withdrawal. The withdrawal of a Party other than PacifiCorp, Cowlitz PUD, or one of the Agencies having authority under FPA sections 4(e), 10(j), or 18 does not terminate this Agreement for the remaining Parties or give any other Party the right to withdraw. If either PacifiCorp or Cowlitz PUD withdraws, this Agreement will continue as to the remaining Licensee and its obligations for PM&E Measures relating to its own Project(s). However, if any Agency having authority under FPA sections 4(e), 10(j), or 18 withdraws from this Agreement, any other Party may elect to withdraw without further ADR Procedures, after providing notice within 60 days of the withdrawal of the Agency. If a Party withdraws from this Agreement, the withdrawing Party shall not be bound by any term contained in this Agreement except as provided in Section 1.2, and shall no longer be a member of the ACC or the TCC.
- 15.12 <u>Termination of Agreement</u>. This Agreement may be terminated by unanimous written agreement of the Parties, or by withdrawal of all Parties as set forth in Section 15.11. In addition, the withdrawal of both PacifiCorp and Cowlitz PUD pursuant to Section 15.11 will terminate this Agreement. Upon termination of this Agreement, the TCC and ACC shall cease to exist.
- 15.13 Consultation After Withdrawal or Termination. The Licensees shall not have an obligation to Consult with Parties that have withdrawn from this Agreement, or with any Party if this Agreement is terminated, provided that where this Agreement requires the Licensees to Consult with the Services, WDFW, or the ACC with respect to performance of an aquatic PM&E Measure, the Licensees shall consult with Parties having authority under FPA sections 4(e), 10(j), or 18 with respect to such performance; and provided further that where this Agreement requires the Licensees to Consult with USFWS, WDFW, or the TCC with respect to performance of a terrestrial PM&E Measure, the Licensees shall consult with Parties having authority under FPA sections 4(e) or 10(j) with respect to such performance. Any Party that has withdrawn from this Agreement, or any Party after termination of this Agreement, may petition the Commission for an order requiring that the Licensees consult with such Party on one or more issues.

- 15.14 <u>Submissions to the Commission</u>. Any provision of this Agreement which requires a Licensee to obtain the approval of a Service or the Services by a date certain and prior to submitting information to the Commission shall be interpreted to mean that the appropriate Licensee(s) and Service(s) shall make all reasonable efforts to achieve such approval prior to making the required submission to the Commission. However, if the appropriate Licensee(s) and Service(s) are unable to achieve such approval prior to the date when the Licensee is required to make a submission to the Commission, the Licensee shall proceed with submitting information to the Commission as required, along with an explanation as to why approval was not achieved. In such instance, the Service whose approval was required may submit its own explanation as to why approval was not achieved, along with any other appropriate information. Once the matter has been submitted to the Commission, the Commission shall resolve such matter unless the appropriate Licensee(s) and Service(s) mutually agree otherwise and such agreement is accepted by the Commission.
- 15.15 <u>Reservation of Authority</u>. The Services may reserve their authority pursuant to section 18 of the FPA. In the event that a Service includes a reservation of authority under section 18 of the FPA in its modified or final conditions and prescriptions that it submits to the Commission, and the reservation of authority is included as a condition of a New License or New Licenses, the inclusion of such reservation shall not be considered Inconsistent with this Agreement; provided that a Service shall not exercise such reserved section 18 authority while a Party to this Agreement, except as allowed by Section 15.3.2.

To the extent that any other governmental Party has the right to reserve authority, and the reservation of authority is included as a condition of a New License or New Licenses, the inclusion of such reservation shall not be considered Inconsistent with this Agreement; provided that the Party shall not exercise such reserved authority except as allowed by Section 15.3.2.

- 15.16 Requests for Stay or Extension of Implementation. The Parties support this Agreement and acknowledge that the operations of the Projects as provided for in this Agreement are important to the Licensees' ability to fund the implementation of the PM&E Measures to ensure the resource benefits provided for in this Agreement. The Parties recognize there may be challenges to the New Licenses. As a result of such challenge, either Licensee may at its discretion request from the Commission or a court a stay or extension of implementation of any measure, action, or activity for so long as any New License is subject to administrative or judicial review. The other Parties will endeavor to support the Licensees' request to the Commission for a stay or extension. If a Party cannot support the request for a stay or extension, that Party may oppose the request for a stay or extension only if:
- (1) The challenge, if successful, (a) would not result in an Inconsistency between this Agreement and the conditions of any New License with respect to any material provision of such New License or; (b) would not add material requirements to any New License; or
- (2) The scope of the request for stay or extension is not reasonably justified by the nature of the challenge. The scope of the request would be deemed reasonably justified if the magnitude of the request for stay or extension were comparable to the magnitude of the risk posed by the challenge, and either (a) the stay or extension relates to the challenge or to measures physically or biologically linked to the challenge, or (b) the requested stay or extension of time

relates to measures that would result in material capital cost to the Licensees or that would materially affect Project generation, operations, or economics; or

(3) The stay or extension is inconsistent with that Party's responsibility under law or regulation.

If either Licensee intends to seek a stay or extension, that Licensee shall contact the other Parties and make reasonable efforts to meet with the other Parties to explain and discuss the scope and extent of any such request for stay or extension. If any Party opposes a request for a stay or extension, that Party shall contact the other Parties and make reasonable efforts to meet with the other Parties to explain and discuss the scope and extent of any opposition. The Parties agree to discuss ways to preserve this Agreement with one another in good faith, and to make reasonable efforts to have such discussions prior to any stay or extension being requested or opposed.

SECTION 16: GENERAL PROVISIONS

- 16.1 <u>No Third Party Beneficiaries</u>. Without limiting the applicability of rights granted to the public pursuant to applicable law, this Agreement shall not create any right or interest in the public, or any member of the public, as a third-party beneficiary of this Agreement and shall not authorize any non-Party to maintain a suit at law or in equity pursuant to this Agreement. The duties, obligations, and responsibilities of the Parties with respect to third parties shall remain as imposed under applicable law.
- Successors and Assigns. This Agreement shall apply to and be binding on the Parties and their successors and assigns. Upon completion of a succession or assignment, the initial Party shall no longer be a Party to this Agreement, but shall remain bound by the terms of this Agreement and be secondarily liable for the performance of its successor or assignee. No change in ownership of the Projects or transfer of the existing or New Licenses by PacifiCorp or Cowlitz PUD shall in any way modify or otherwise affect any other Party's interests, rights, responsibilities, or obligations under this Agreement. Unless prohibited by applicable law, PacifiCorp or Cowlitz PUD (as the case may be) shall provide, in any transaction for a change in ownership of a Project or transfer of an existing or New License, that such new owner or owners shall be bound by and shall assume the rights and obligations of this Agreement upon completion of the change of ownership and approval by the Commission of the transfer or transfers. Upon completion of the transfer, PacifiCorp or Cowlitz (as the case may be) will be released from this Agreement only upon written agreement of all of the Parties then in existence. A transferring or assigning Party shall provide notice to the other Parties at least 60 days prior to completing such transfer or assignment. Signatories other than the Licensees, the Agencies, the Other Governmental Entities, the Conservation Groups, CIT, and Yakama Nation shall not have the right to assign, delegate, or otherwise transfer their rights of participation to any other person or entity.
- Failure to Perform Due to Force Majeure. No Party shall be liable to any other Party for 16.3 breach of this Agreement as a result of a failure to perform or for a delay in performance of any provision of this Agreement if such performance is prevented or delayed by Force Majeure. The term "Force Majeure" means any cause reasonably beyond the affected Party's control, whether unforeseen, foreseen, foreseeable, or unforeseeable, and without the fault or negligence of the affected Party. Increased cost for the performance of any PM&E Measure or a change in market conditions for the sale of electricity shall not be deemed to constitute Force Majeure. The Party whose performance is affected by Force Majeure shall notify the other Parties in writing within seven days after becoming aware of any event that such affected Party contends constitutes Force Majeure. Such notice will identify the event causing the delay or anticipated delay, estimate the anticipated length of delay, state the actions taken or to be taken to minimize the delay, and estimate the timetable for implementation of the actions. The affected Party shall make best reasonable efforts to resume performance of this Agreement promptly and, when able, to resume performance of its obligations and give the other Parties written notice to that effect. If an event of Force Majeure prevents performance of one or more PM&E Measures for a prolonged period, the Parties recognize that reinitiation of consultation under the ESA may be required. In addition, if such delay in performance of one or more PM&E Measures materially reduces the benefit of this Agreement, a Party may initiate the ADR Procedures and, if unsuccessful in

agreeing upon alternative actions or courses of performance, then such Party may withdraw from this Agreement.

- 16.4 <u>Elected Officials Not to Benefit</u>. No member of or delegate to Congress shall be entitled to any share or part of this Agreement or to any benefit that may arise from it.
- 16.5 <u>No Partnership</u>. Except as otherwise expressly set forth herein, this Agreement does not, and shall not be deemed to, make any Party the agent for or partner of any other Party.
- 16.6 Notice. Except as otherwise provided in this Section 16.6, any notice required by this Agreement shall be written. It shall be sent by first-class mail or comparable method of distribution to all Parties still in existence and shall be filed with the Commission. For the purposes of this Agreement, a notice shall be effective seven days after the date on which it is mailed or otherwise distributed. When this Agreement requires notice in less than seven days, notice shall be provided by telephone, facsimile, or electronic mail to all Parties and shall be effective when provided, so long as such alternative notice is followed within 7 days by written notice sent by first-class mail or comparable distribution. For the purpose of notice, the list of authorized representatives of the Parties as of the Effective Date and their respective contact information is attached as Appendix A. The Parties shall provide notice of any change in the authorized representatives designated in Appendix A, including changes in contact information, and the Licensees shall maintain the current distribution list of and contact information for such representatives.
- 16.7 <u>Paragraph Titles for Convenience Only</u>. The titles for the paragraphs of this Agreement are used only for convenience of reference and organization, and shall not be used to modify, explain, or interpret any of the provisions of this Agreement or the intentions of the Parties.
- 16.8 <u>Entire Agreement</u>. Subject to Section 1.1.4 above, this Agreement sets forth the entire agreement of the Parties relating to the relicensing of the Projects, with the exception of agreements between the Licensees. To the extent that prior agreements that either Licensee or both Licensees have entered into with any other Party relating to the Projects, whether written or oral, are inconsistent with this Agreement, this Agreement shall control.

SECTION 17: EXECUTION OF THIS AGREEMENT

- 17.1 <u>Signatory Authority</u>. Each signatory to this Agreement certifies that he or she is authorized to execute this Agreement and to legally bind the Party he or she represents, and that such Party shall be fully bound by the terms hereof upon such signature without any further act, approval, or authorization by such Party.
- 17.2 <u>Signing in Counterparts</u>. This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument as if all the signatory Parties to all of the counterparts had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures, and may be attached to another counterpart of this Agreement identical in form having attached to it one or more signature pages.
- 17.3 <u>Additional Parties</u>. One or more of the following entities may become signatories to this Agreement and be considered Parties as of the Effective Date, provided (a) any such entity has executed a signature page on or before December 31, 2004, and (b) such entity has not taken any action Inconsistent with this Agreement between the Effective Date and the date of execution:

Clark County Clark Skamania Fishers Cowlitz Indian Tribe Federation of Fly Fishers The Lower Columbia River Fish Recovery Board Skamania County Washington State Department of Natural Resources

If CIT has not executed this Agreement on or before December 31, 2004, then all references to CIT shall be of no effect and shall be stricken from the offer of settlement presented to the Commission.

The Parties agree that the Licensees may prepare and submit a version of this Agreement to the Commission after December 31, 2004, restated to show the final inclusion or exclusion of various provisions as provided in this Section 17.3, with a copy to all Parties.

The Parties execute this Agreement as of November 30, 2004.

PacifiCorp

By: Judi Johansen

Chief Executive Officer

Public Utility District No. 1 of Cowlitz County, Washington

By:

Dennis P. Robinson

General Manager

National Marine Fisheries Service

By:

D. Robert Lohn

Regional Administrator

United States Bureau of Land Management

By: James

mes G. Kenna

Associate State Director

USDA Forest Service

By:

Linda Goodman

Regional Forester, Pacific Northwest Region

Confederated Tribes and Bands of the Yakama Nation

By:

Jerry Meninick

Chairman, Tribal Council

Washington Department of Fish and Wildlife

Ву:

Jeff Koenings

Executive Director

Cowlitz County

By:

J. Bill Lehning

Board of County Commissioner

Attest

of the Board

LUMOS

Signature Page - 2

Cowlitz-Skamania Fire District No. 7

By: Ilene L. Black

Commissioner

North Country Emergency Medical Service

By: Ilene L. Black

Board Chairman

City of Woodland

By: Douglas Monge

Mayor

Woodland Chamber of Commerce

By: Darlene G. Johnson,

Lewis River Community Council

By: Mariah Stoll-Smith Reese

President

Lewis River Citizens at-Large

By: John Clapp

Noel Johnson

American Rivers

By: Rebecca R. Wodder

President

Fish First

By: Gary Koomis

President

Rocky Mountain Elk Foundation, Inc.

Bob Nelson

Hydropower Coordinator

The Native Fish Society

By: Bill Bakke

Executive Director

United States Fish and Wildlife Service

Ry: David B. Allen

For Regional Director

National Park Service

By: Jonathan B, Jarvis

Regional Director, Pacific West Region

Washington Interagency Committee for Outdoor Recreation

By: Laura Johnson

Director

Trout Unlimited

Jeff Curtis
Western Conservation Director

Washington Interagency Committee for Outdoor Recreation

By: Laura Johnse

Director

Trout Unlimited

Johr Curtis Western Conservation Director

Cowlitz Indian Tribe

By: John Barnett, Chairman

By: Doug Sutherland

Commissioner of Public Lands

Clark County

Betty Sue Morris
Chair, Board of County Commissioners

Attest: <u>Heum Richards</u>
Clerk of the Board

November 30, 2004

SKAMANIA COUNTY WASHINGTON

Skamania County

By:

Al McKee

Chairman of Board of County Commissioners

Attest: Yarnela Johnson

Clerk of the Board

The Lower Columbia River Fish Recovery Board

By: Jeff/Breckel

, December 10, 200₄

By: Jeff Breckel

Clark Skamania Fishers
By:

Federation	of Fly Fishe	ers		
By:				

APPENDIX A: AUTHORIZED REPRESENTATIVES

Party	Authorized	Contact Information
	Representatives	
American Rivers	Brett Swift	320 SW Stark Street, Suite 418
	Deputy Regional Director	Portland, OR 97204-2634
		Telephone: 503-827-8648
		Fax: 503-327-8654
		E-Mail: bswift@amrivers.org
City of Woodland	Robert VanderZanden	100 Davidson, Box 9
		Woodland, WA 98674
		Telephone: 360-225-7999
		Fax: 360-225-7336
		E-Mail:
		vanderzandenr@ci.woodland.wa.us
Confederated Tribes and	Clifford Casseseka	P.O. Box 151
Bands of the Yakama		Toppenish, WA 98948
Nation		Telephone: 509-865-5121
		Fax: 509-865-4664
		E-Mail: cwashines@yakama.com
Cowlitz County	Ryan Lopossa	207 4th Ave North
_	Cowlitz County	Kelso, WA 98626
	Department of Public	Telephone: 360-577-3030
	Works	Fax: 360-636-0845
		E-Mail: lopossar@co.cowlitz.wa.us
Cowlitz-Skamania Fire	Ilene L. Black	227 Frasier Rd.
District No. 7	Commissioner	Amboy, WA 98601
		Telephone: 360-247-5966
		Fax: 360-247-6966 (call first)
		E-Mail: wblack@wa-net.com
Fish First	James Malinowski	P.O. Box 127
		Amboy, WA 98601
		Telephone: 360-247-6404 (home)
		Telephone: 360-992-2974 (work)
		Fax: 360-247-6405
		E-Mail: j.malinowski@ieee.org
Lewis River Citizens at-	John Clapp	9315 NE Etna Road
Large		Woodland, WA 98674
		Telephone: 360-225-8479
		Fax:
		E-Mail: jmclapp@juno.com

Party	Authorized	Contact Information
	Representatives	
Lewis River Community	Mariah Stoll-Smith Reese	14900 Lewis River Rd.
Council	President	Ariel, WA 98603
		Telephone: 360-225-7416
		Fax: 360-231-4437
		E-Mail: Mariah_reese@excite.com
National Marine Fisheries	Michelle Day	525 NW Oregon Street, Suite 500
Service		Portland, OR 97232
		Telephone: 503-736-4734
		Fax: 503-231-2318
		E-Mail: michelle.day@noaa.gov
National Park Service	Susan Rosebrough	909 First Avenue
		Seattle, WA 98104-1060
		Telephone: 206-220-4121
		Fax: 206-220-4161
		E-Mail: Susan_Rosebrough@nps.gov
North Country Emergency	Ilene L. Black	227 Frasier Rd.
Medical Service	Board Chairman	Amboy, WA 98601
		Telephone: 360-247-5966
		Fax: 360-247-6966 (call first)
		E-Mail: wblack@wa-net.com
PacifiCorp	Todd Olson	825 NE Multnomah, Ste. 1500
		Portland, OR 97217
		Telephone: 503-813-6657
		Fax: 503-813-6633
		E-Mail: todd.olson@pacificorp.com
Public Utility District No. 1	Diana M. Gritten-	P.O. Box 3007
of Cowlitz County,	MacDonald	Longview, WA 98632-0307
Washington	Relicensing Project	Telephone: 360-577-7585
	Manager	Fax: 360-577-7559
2 1 16 2 2		E-Mail: dmacdonald@cowlitzpud.org
Rocky Mountain Elk	Bob Nelson	24320 122 nd Ave. East
Foundation, Inc.	Hydropower Coordinator	Graham, WA 98338
		Telephone: 360-893-1275
		Fax: 360-893-8747
m N. P. L.	D'ILM D II	E-Mail: nelson338@aol.com
The Native Fish Society	Bill M. Bakke	P.O. Box 19570
	Executive Director	Portland, OR 97280
		Telephone: 503-977-0287
		Fax: 503-977-0026
		E-Mail:
		bmbakke@nativefishsociety.org

Trout Unlimited	Kaitlin Lovell	213 SW Ash, Suite 205
		Portland, OR 97204
		Telephone: 503-827-5700
		Fax: 503-827-5672
		E-Mail: klovell@tu.org
USDA Forest Service	Claire Lavendel	10600 NE 51st Circle
	Forest Supervisor	Vancouver, WA 98682
	Gifford Pinchot National	Telephone: 360-891-5100
	Forest	Fax: 360-891-5145
		E-Mail: clavendel@fs.fed.us
United States Bureau of	Jim Fisher	915 Walla Walla Ave
Land Management		Wenatchee, WA 98801
		Telephone: 509-665-2100
		Fax: 509-665-2121
		E-Mail: jim_fisher@or.blm.gov
United States Fish and	Ken S. Berg	510 Desmond Drive SE, Ste. 102
Wildlife Service	Manager, USFWS	Lacey, WA 98503-1263
	Western Washington Fish	Telephone: 360-753-6039
	and Wildlife Offices	Fax: 360-753-9405
		E-Mail: ken.berg@fws.gov
Washington Department of	Curt Leigh	600 Capitol Way North
Fish and Wildlife		Olympia, WA 98501
		Telephone: 360-902-2946
		Fax: 360-902-2946
		E-Mail: leighcsl@dfw.wa.gov
Washington Interagency	Jim Eychaner	P.O. Box 40917
Committee for Outdoor		Olympia, WA 98504-0917
Recreation		Telephone: 360-902-3011
		Fax: 360-902-3026
		E-Mail: jime@iac.wa.gov
Woodland Chamber of	Darlene G. Johnson	P.O. Box 1808
Commerce		Woodland, WA 98674
		Telephone: 360-225-9433
		Fax: 360-225-9434
		E-Mail: woot@teleport.com

Lewis River Hydroelectric Projects Settlement Agreement			
EXHIBIT A: PACIFICORP'S WILDLIFE HABITAT MANAGEMENT PLAN LANDS			

See separate file on this CD "Exhibit A" to view PacifiCorp's Wildlife Habitat Management Lands.

Lewis River Hydroelectric Projects Settlement Agreement			
EXHIBIT B: COWLITZ PUD'S WILDLIFE HABITAT MANAGEMENT PLAN LANDS			
EARIBIT B: COWLITZ PUD S WILDLIFE HABITAT MANAGEMENT PLAN LANDS			

See separate file on this CD Lands.	"Exhibit B"	' to view Cowlitz I	PUD's Wildlife Hab	itat Management

Lewis River Hydroelectric Projects Settlement Agreement
EXHIBIT C+ LAW ENFORCEMENT CONTRACT EXAMPLE
EXHIBIT C: LAW ENFORCEMENT CONTRACT EXAMPLE

AGENDA SUMMARY

To: Board of County Commissioners

From: Undersheriff Duane Engler

Dept. of Origin: Sheriff

Date Submitted:

04-01-02

For Agenda of:

04-09-02

RECEIVE

Expenditure Required: \$

Amount Budgeted: \$Sufficient

Re: Contract between U S Forest Service

and Cowlitz County Sheriff's Office to Provide Law Enforcement Service

in the Gifford Pinchot Forest

Budget Action Required:

Clearance of Other Concerned

Departments:

Office of Fiscal Management

Chief Civil Prosecutor

Staff Attending:

Undersheriff Engler

Approved for Agenda:

List of Exhibits:

Agreement Number 02-LE-11020603-001 between the U S Forest Service and the Cowlitz County Sheriff's Office.

Summary Statement and Department Recommendation:

The contract provides continued patrol coverage on Forest Service lands associated with the Mt. St. Helens National Monument. Cowlitz County has provided such service since 1993. The contract period is October 1, 2001 through September 30, 2002.

Under the provisions of this contract, the Forest Service will reimburse the Sheriff's Office for full-time services of one deputy, to a maximum of:

Wages and Benefits: 59,207.00 Overtime 2,209.00 Vehicle 8,256.00 Equipment 500.00

Total:

70,172.00

The Sheriff's Office recommends approval of the contract.

COOPERATIVE LAW ENFORCEMENT AGREEMENT between the COWLITZ COUNTY SHERIFF'S DEPARTMENT and the U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE GIFFORD PINCHOT NATIONAL FOREST

This Cooperative Law Enforcement Agreement (agreement) is entered into by and between the Cowlitz County Sheriff's Department, hereinafter referred to as the Cooperator, and the United States Department of Agriculture, Forest Service, Gifford Pinchot National Forest, hereinafter referred to as Forest Service, under the provisions of the Cooperative Law Enforcement Act of August 10, 1971, P.L. 92-82. 16 U.S.C. 551a.

<u>Background:</u> The parties to this agreement recognize that public use of National Forest System lands (NFS lands) is usually located in areas that are remote or sparsely populated. The parties also recognize that the enforcement of State and local law is related to the administration and regulation of NFS lands and the Cooperator has a limited amount of financing to meet their responsibility of enforcing these laws.

I. PURPOSE:

The purpose of this agreement is to document a cooperative effort between the parties to enhance State and local law enforcement in connection with activities on NFS lands and provide for reimbursement to the Cooperator for the intensified portion of this effort.

In consideration of the above premises, the parties agree as follows:

II. THE COOPERATOR SHALL:

A. Perform in accordance with the approved and hereby incorporated annual Financial and Operating Plan (Operating Plan) attached as Exhibit A. See related Provision IV-D.

B Comply with all Federal statutes relating to nondiscrimination and all applicable requirements of all other Federal laws, executive orders, regulations, and policies. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (40 U.S.C. 2000), which prohibits discrimination on the basis of race, color, handicap, or national origin; (b) Title IX of the Education amendments of 1972, as amended (20 U.S.C. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; and Section 504 of the Rehabilitation Act of 1973 as amended (29 USC 794) which prohibits descrimination on the basis of disabilities. The nondiscrimination statement which follows shall be posted in primary and secondary Cooperator offices, at the public service delivery contact roint and included, in full, on all materials regarding such Cooperators' programs that are produced by the Cooperator for public information, public education, or public distribution:

"In accordance with Federal law and U. S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (not all prohibited base apply to all programs.)

To file a complaint of discrimination, wwrite USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer."

If the material is too small to permit the full statement to be included, the material will at minimum include the statement, in print size no small than the text, that "This institution is an equal opportunity provider."

- C. Ensure that the officers/agents of the Cooperator performing law enforcement activities under this agreement meet the same standards of training required of the officers/agents in their jurisdiction, or the State Peace Officers Standards of Training where they exist.
- D. Provide uniformed officers/agents with marked vehicles to perform all activities unless agreed to otherwise in the Operating Plan.
- E. Advise the Forest Service Principal Contact, listed in Provision IV-B, of any suspected criminal activities in connection with activities on NFS land.
- F. Upon the request of the Forest Service, dispatch additional deputies within manpower capabilities during extraordinary situations as described in Provision IV-I.
- G. Monitor the Forest Service radio during the Cooperator's normal work schedule and to cover extended hours of operation as needed. Address any concerns or notify/request assistance from the Forest Service, as required, in the judgement of the Cooperator.
- H. Shall furnish their tax identification number upon execution of this agreement pursuant to the Debt Collection Improvement Act of 1996, as amended by Public Law 104-134. The Cooperator also agrees that notice of the Forest Service's intent to use such number for purposes of collecting and reporting on any delinquent amounts arising out of such Cooperator's relationship with the Government, has hereby been given.
- I. Bill the Forest Service for the Cooperator's actual costs incurred to date, displayed by separate cost elements, excluding any previous Forest Service payment(s) made to the date of the invoice, not to exceed the dollar amount(s) shown, in accordance with the Operating Plan. Billing frequency will be as specified in the Operating Plan. See related Provisions III-B, IV-H and IV-O.
- J. Complete and furnish the Forest Service with Form FS-5300-5, Cooperative Law Enforcement Activity Report, identifying the number of crimes occurring on NFS lands. The report shall follow the FBI Uniform Crime Reporting groupings, Part I and Part II offenses. Offenses and arrest information shall be combined and reported for each crime. This report shall separate the crimes handled under this agreement from those handled by the Cooperator during regular duties.
- K. Give the Forest Service or Comptroller General, through any authorized representative, access to and the right to examine all records related to this agreement. As used in this provision, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

L. Provide the Forest Service Principal Contact, listed in Provision IV-B, with case reports and timely information relating to incidents/crimes in connection with activities on NFS lands.

III. THE FOREST SERVICE SHALL:

- A. Perform in accordance with the Operating Plan attached as Exhibit A.
- B. Reimburse the Cooperator for actual expenses incurred, not to exceed the amount shown in the Operating Plan. The Forest Service will make payment for project costs upon receipt of an invoice. Each correct invoice shall display the Cooperator's actual expenditures to date of the invoice, displayed by separate cost elements as documented in the Operating Plan, less any previous Forest Service payments. See related Provision II-I and IV-H. The invoice should be forwarded as follows:
 - 1. Send the original to:

2. Send a photo copy to:

Christine Lynch Patrol Captain, SWWZ Gifford Pinchot National Forest 10600 NE 51" Circle Vancouver, WA 98682 (360) 891-5135

Sally Matarrese Accounting Technician Gifford Pinchot National Forest 10600 NE 51" Circle Vancouver, WA 98682 (360) 891-5055

IV. IT IS MUTUALLY UNDERSTOOD AND AGREED UPON BY AND BETWEEN THE PARTIES THAT:

- A. The parties will make themselves available, when necessary (1) to provide for continuing consultation, exchange of information, aid in training, and mutual support; (2) to discuss the conditions covered by this agreement; and (3) to agree to actions essential to fulfill its purposes.
- B. The principal contacts for this agreement are:

Duane Engler Undersheriff Cowlitz County Sheriff's Office 207 4th Avenue N. Kelso, WA 98626 (360) 577-3092 X 2342 Christine Lynch Patrol Captain, SWWZ Gifford Pinchot National Forest 10600 NE 51" Circle Vancouver, WA 98682 360-891-5135

- C. This agreement has no effect upon the Cooperator's right to exercise civil and criminal jurisdiction, on NFS lands nor does this agreement have any effect upon the responsibility of the Forest Service for the enforcement of federal laws and regulations relative to NFS lands.
- D. Any Operating Plan added to this agreement will be jointly prepared and agreed to by the parties. The Operating Plan shall at a minimum contain:

- 1. Specific language stating that the Operating Plan is being added to this agreement thereby subjecting it to the terms of this agreement.
- 2. Specific beginning and ending dates.
- 3. Bilateral execution prior to any purchase or the performance of any work for which reimbursement is to be made.
- 4. Specify any training, equipment purchases, and enforcement activities to be provided and agreed rates for reimbursement including the maximum total amount(s) for reimbursement.
- 5. An estimate of the useful life of any equipment purchased under this agreement as required by Provision IV-J.
- 6. Billing frequency requirement(s). See related Provisions II-I and III-B.
- 7. Designation of specific individuals and alternate(s) to make or receive requests for enforcement activities under this agreement.
- 8. A review and signature of a Forest Service Agreements Coordinator.
- E. Nothing in this agreement obligates either party to accept or offer any Operating Plan under this agreement.
- F. The officers/agents of the Cooperator performing law enforcement activities under this agreement are, and shall remain, under the supervision, authority, and responsibility of the Cooperator. Law enforcement provided by the Cooperator and its employees shall not be considered as coming within the scope of federal employment and none of the benefits of federal employment shall be conferred under this agreement.
- G. Federal Communication Commission procedures will be followed when operating radio(s) on either party's frequency.
- H. Reimbursable Cooperator enforcement expenses must be: listed in an approved Operating Plan; expended in connection with activities on NFS lands; and expenses beyond those which the Cooperator is normally able to provide.
- I. During extraordinary situations such as, but not limited to: fire emergency, drug enforcement activities, or certain group gatherings, the Forest Service may request the Cooperator to provide additional special enforcement activities. The Forest Service will reimburse the Cooperator for only the additional activities requested and not for activities that are regularly performed by the Cooperator.
- J. Reimbursement may include the costs incurred by the Cooperator in equipping or training its officers/agents to perform the additional law enforcement activities authorized by this agreement. Unless specified otherwise in the Operating Plan, reimbursement for equipment and training will be limited to a pro rata share based on the percentage of time an officer/agent spends or equipment is used under this agreement.

When reimbursement for items such as radios, radar equipment, and boats is being contemplated, reimbursement for leasing of such equipment should be considered. If Cooperator or Forest Service equipment purchases are approved in the Operating Plan, an estimate of the useful life of such equipment shall be included. When purchased, equipment use rates shall include only operation and maintenance costs and will exclude depreciation and replacement costs. Whether the Cooperator is reimbursed for lease/purchase costs, or the Forest Service purchases and transfers the equipment, the total cost for the equipment cannot exceed the major portion of the total cost of the Operating Plan unless approved by all parties in the agreement and shown in the Operating Plan.

When the Forest Service provides equipment, the transfer shall be documented on an approved property transfer form (AD-107) or equivalent. Title shall remain with the Forest Service, however, the Cooperator shall ensure adequate safeguards and controls exist to protect loss or theft. The Cooperator shall be financially responsible for any loss at original acquisition cost less depreciation at the termination of the agreement. The Cooperator is responsible for all operating and maintenance costs for equipment that the Forest Service has reimbursed the Cooperator for and/or transferred to the Cooperator under the AD-107 process or equivalent

K. Equipment and supplies approved for purchase under this agreement are available only for use as authorized. The Forest Service reserves the right to transfer title to the Forest Service of equipment and supplies, with a current per-unit fair market value in excess of \$5,000.00, purchased by the Cooperator using any Federal funding. Upon expiration of this agreement, the Cooperator shall forward an equipment and supply inventory to the Forest Service, listing all equipment purchased throughout the life of the project and unused supplies. The Forest Service will issue disposition instructions within 120 calendar days.

(Disposition of equipment shall be in accordance with regulations contained in 7CFR 3016.32 - Equipment.)

- L. When no equipment or supplies are approved for purchase under an Operating Plan, Forest Service funding under this agreement is not available for reimbursement of Cooperator purchase of equipment or supplies.
- M. When State Conservation Agencies have the responsibility for public protection in addition to their normal enforcement responsibility, their public protection enforcement activities may be included in Operating Plans and are then eligible for reimbursement. Reimbursement is not authorized to State Conservation Agencies for enforcement of fish and game laws in connection with activities on NFS lands.
- N. Pursuant to 31 U.S.C. 3716 and 7 CFR, Part 3, Subpart B, any funds paid to the Cooperator in excess of the amount to which the Cooperator is finally determined to be entitled under the terms and conditions of the award consistute a debt to the Federal Government. If not paid within a reasonable period after the demand for payment, the Federal awarding agency may reduce the debt by:
 - 1. Making an administrive offset against other requests for reimbursement.
 - 2. Withholding advance payment otherwise due the Cooperator.
 - 3. Taking other action permitted by statue.

Except as otherwise provided by law, the Federal awarding agency shall charge interest on an overdue debt in accordance with 4 CFR, Chapter II "Federal Claims Collection Standards" and 31 U.S.C., Chapter 37.

- O. The Cooperator shall designate a financial institution or an authorized payment agent through which a Federal payment may be made in accordance with U.S. Treasury Regulations, Money and Finance at 31 CFR 208, which requires that Federal payments are to be made by electronic funds transfer (EFT) to the maximum extent possible. A waiver may be requested and payment received by check by certifying in writing that one of the following situations apply:
 - 1. The Cooperator does not have an account at a financial institution.
 - 2. EFT creates a financial hardship because direct deposit will cost the Cooperator more than receiving a check.
 - 3. The Cooperator has a physical or mental disability, or a geographic, language, or literacy barrier.

To initiate receiving your payment(s) by electronic transfer, contact the National Finance Center (NFC) on the worldwide web at www.nfc.usda.gov, or call the NFC at 1-800-421-0323, or (504) 255-4647. Upon enrollment in the program you may begin to receive payment by electronic funds transfer directly into your account

- P. Modifications within the scope of the agreement shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by both parties, prior to any changes being performed. The Forest Service is not obligated to fund any changes not properly approved in advance.
- Q. Either party, in writing, may terminate this agreement in whole, or in part, at any time before the date of expiration. Neither party shall incur any new obligations for the terminated portion of this agreement after the effective date and shall cancel as many obligations as is possible. Full credit shall be allowed for each party's expenses and all noncancellable obligations properly incurred up to the effective date of termination.
- R. This agreement in no way restricts the Forest Service or the Cooperator from participating in similar activities with other public or private agencies, organizations, and individuals.
- S. Any information furnished to the Forest Serive under this agreement is subject to the Freedom of Information Act (5 U.S.C. 552).

T. This agreement is executed as of the last date showr which time it will be subject to review, renewal, or exp.	n below and expires, September 30, 2006 at iration.
The authority and format of this agreement have been	en reviewed and approved for signature.
/s/	10/01/01
LYLA SORENSON, Agreements Coordinator	Date
In witness whereof, the parties hereto have executed thi	s agreement as of the last date written below.
1	
BILL MAHONEY, Sheriff	032702
BILL MAHONEY, Sheriff Cowlitz County	Date
Cowniz County	
1 BOF	. 1)
~ (Well)	4/26/2002
CLAIRE LAVENDEL, Forest Supervisor Gifford Pinchot National Forest	Date
Gillord I inchor Harional Polest	
Evol Hansen for	
Errol Hansen for	1/29/07
THOMAS J. LYONS, Special Agent in Charge	Date
USDA, Forest Service	
Pacific Northwest Region	

EXHIBIT "A"

FINANCIAL AND OPERATING PLAN

This Annual Financial and Operating Plan (Operating Plan), is hereby made and entered into by and between the Cowlitz County Sheriff's Department, hereinafter referred to as the Cooperator, and the United States Department of Agriculture, Gifford Pinchot National Forest, hereinafter referred to as Forest Service, under the provisions of Cooperative Law Enforcement Agreement #02-LE-11020603-001 executed on October 1, 2001. This Operating Plan is made and agreed to as of the last date signed below and is for the period beginning October 1, 2001 and ending September 30, 2002.

I. GENERAL:

A. The following individuals shall be the designated and alternate representative(s) of each party, so designated, to make or receive requests for special enforcement activities:

Designated Representatives:

Duane Engler
Undersheriff
Cowlitz County Sheriff's Office
207 4th Avenue N.
Kelso, WA 98626
(360) 577-3092 x2342

Christine Lynch Patrol Captain, SWWZ Gifford Pinchot National Forest 10600 NE 51" Circle Vancouver, WA 98682 (360) 891-5135

Alternate Representatives:

Dave Smith Sergeant Cowlitz County Sheriff's Office 207 4th Avenue N. Kelso, WA 98626 (360) 577-3092 Alfons M. Knorr Law Enforcement Officer Gifford Pinchot National Forest 3029 Spirit Lake Hwy. Castle Rock, WA 98611 (360) 274-2133

- B. Reimbursement for all types of enforcement activities shall be at the following rates unless specifically stated otherwise:
 - 1. Cooperator provided full-time Deputy including wages and benefits not to exceed \$59,207.
 - 2. Overtime incurred by Cooperator at prevailing rates not to exceed \$2,209.
 - 3. Vehicle costs including mileage for Deputy not to exceed \$8,256.
 - 4. Equipment and supplies not to exceed \$500 total.

Due to potential cost increases for salary and benefits, Cowlitz County Sheriff's Office may need to reduce services at the end of the operating season to offset the difference. This would not require a 30-day prior schedule change notification

II. PATROLS PROVIDED BY COWLITZ COUNTY SHERIFF'S OFFICE:

- A. 1. Patrol schedules will be flexible to allow for emergencies, other priorities, and day-to-day needs of both the Cooperator and the Forest Service. Cooperator will provide one full-time Deputy whose primary asignment to the Coldwater/Johnston complex with primary patrols to service administered recreation sites, buildings and launching facilities from October 1, 2001 to September 30, 2002.
 - 2. Specific workdays and core hours on the ground will be determined by the Cooperator with concurrence by the Forest Service. This schedule will be provided to the Forest Service at least 30 days prior to the schedule taking effect.
 - 3. Within staffing capabilities, additional Deputies shall be dispatched to unforeseen situations upon request of the Forest Service.
 - 4. A suitable vehicle shall be provided for the Deputy assigned to this contract under clause II-D.
 - 5. Ample time will be spent in each area to make residents and visitors aware that law enforcement officers are in the vicinity. Timely reports and/or information relating to incidents or crimes that have occurred on NFS lands should be provided to the Forest Service as soon as possible.
 - 5. Any known or reported incidents including contacts, investigations, citations, custodies, searches, etc. occurring on National Forest lands shall be documented on USDA Forest Service Form FS-5300-1, *Incident Report*. The Forest Serice will supply the Cooperator with these Incident Forms which will be forwarded weekly to the attention of Patrol Captain Christine Lynch at Forest Headquarters in Vancouver, WA.
 - 7. A completed Form FS 5300-5, Cooperative Law Enforcement Activity Report, shall be furnished to the Forest Service on a monthly basis, identifying the number of crimes occurring on National Forest System Lands. See Provision II-J.

The report shall follow the FBI Uniform Crime Reporting Groupings, Part I and II Offenses. Offense and arrest information shall be combined and reported for each crime. The report shall separate the crimes handled under the cooperative agreement from those handled by the County during regular duties. See Provision II-J.

- 8. A copy of each motor vehicle crash report occurring on National Forest Lands and Systems Roads, including photos of the accident site depicting all vehicles involved, any property damage, the road conditions and applicable road signs shall be provided to the Forest Service. All motor vehicle crashes shall be reported by phone to the Forest Service at 360-891-5155 as soon as possible.
- 9. Cooperator shall notify the Forest Service as soon as possible of all search and rescues occurring on National Forest Lands. Cooperative Deputy assigned to this agreement can participate in a preliminary search and rescue. If the Cooperative Deputy becomes engaged in a specific SAR mission that extends duties into the following day, Cooperator shall furnish another Deputy to complete the assigned patrol.

B. Areas to patrol in order of priority are:

- 1. The Coldwater/Johnston complex, including housing/warehouse areas and lake facilities.
- 2. SR 504 and spur roads that access the National Volcanic Monument, including the Green River drainage.
- 3. Search and rescue mission, including Coldwater Lake.
- 4. Areas within adjoining counties, readily accessed from the Coldwater/Johnston area.
- 5. Backcounty emergency response, not routine patrol.

C. Enforcement priorities are (1=high; 3=low):

- 1 Personal safety of visitors.
- 1 Personal safety of Forest Service employees.
- 1 Personal safety of concessionaire employees.
- 1 Building/facility security/protection.
- 2 Vandalism/Theft prevention.
- 2 Vehicle accidents.
- 2 Unauthorized entry into administrative closures.
- 2 Litter/sanitation violations.
- 2 Drug/alcohol violations.
- 2 Protection of resources/lakeshore.
- 2 Protection of Forest Service and concessionare funds.
- 3 Hunting/fishing violations.
- 3 Private property protection/investigation
- 3 Information and guidance.

D. Deputies' time/presence on the ground, listed by priority are:

- 1. Holidays
- 2. Weekends
- 3. Fridays
- 4. Mondays
- 5. Graduation/special high school events
- 6. Special events on the National Volcanic Monument
- 7. Thursdays

Total reimbursement for this category shall not exceed the amount of:

<u>\$69,672</u>

III. EQUIPMENT:

- 1. The Forest Service agrees to reimburse the Cooperator for equipment and supplies in an amount not to exceed \$500. Documentation of such purchases shall become part of the Cooperative Agreements' official file.
- 2. The Forest Service can loan Cooperator equipment as needed when mutually agreed. While in possession of the Cooperator, maintenance of this equipment shall be the responsibility of the Cooperator and shall be teturned in same condition as time of transfer. See Cooperative Agreement Provisions IV-J, IV-K and IV-L for additional information.

Total reimbursement for this category shall not exceed the amount of:

\$500

IV. BILLING FREQUENCY:

Pacific Northwest Region

See Cooperative Agreement Provisions II-HI and III-B for additional information.

The Cooperator shall furnish the Forest Service an itemized monthly statement for the expenditures. This statement shall be stent ATTN: Patrol Captain Christine Lynch, Gifford Pinchot National Forest 10600 NE 51" Circle, Vancouver WA 98682.

This statement shall be in sufficient detail to allow the Forest Service to tie these expenditures back to the reimbursable expenses and the rate schedule contained above, and shall be certified by the Sheriff or his designee as being current and proper.

The authority and format of this Operating Plan have been reviewed and approved for signature.

	and approved for signature.
<u>/s/</u>	12/17/2001
LYLA SORENSON, Agreements Coordinator	Date
In witness whereof, the parties hereto have executed t below.	his Operating Plan as of the last date written
BILL MAHONEY, Sheriff Cowlitz County	
CLAIRE LAVENDEL, Forest Supervisor Gifford Pinchot National Forest	4/26/2002 Date
THOMAS J. LYONS, Special Agent in Charge USDA, Forest Service	Date

ACCEPTANCE OF U S FOREST SERVICE CONTRACT

DATED: 4 2002	
COWLITZ COUNTY:	BOARD OF COUNTY COMMISSIONERS OF COWLITZ COUNTY, WASHINGTON JEFF M. RASMUSSEN, CHAIRMAN GEORGE RAITER, COMMISSIONER J. BILL LEHNING, COMMISSIONER
ATTEST:	DATE CLERK OF THE BOARD DATE SHINGTON
APPROVED AS TO FORM:	RONALD S. MARSHALL CHIEF CIVIL DEPUTY PROSECUTOR

SCHEDULE 4.1.4: JUVENILE DOWNSTREAM SURVIVAL EQUATIONS

The Licensees shall use the following equations for calculating ODS from a compilation of monitoring and experimental data unless and until the equations are modified by the Licensees in Consultation with the ACC and with the approval of the Services.

The equations below are separated into the three principal production areas in the upper Lewis River: Swift, Yale and Merwin. For all equations, the subscript denotes the applicable project (i.e., *s*, *s*2, *y*, *m*) as described in the table below. References in the table below to Section numbers are references to the Section numbers of the body of the Settlement Agreement.

Terminology for Equations

Terms:		
S	Subscript that refers to the Swift No. 1 facility or the Swift Creek Reservoir	
	area, as appropriate	
s2	Subscript that refers to the Swift No. 2 facility or the Swift No. 2 Power	
	Canal, as appropriate	
y	Subscript that refers to Yale Lake or the Yale facility, as appropriate	
m	Subscript that refers to Lake Merwin or the Merwin facility, as appropriate	
IN_x	Total number of juvenile anadromous fish of the species defined in Section	
	4.1.7 entering reservoir from tributaries.	
RS_x	Reservoir Survival as defined in Section 9.2.1.	
CE_x	Collection Efficiency as defined in Section 4.1.4, Table 4.1.4.	
CS_x	Collection Survival as defined in section 4.1.4, Table 4.1.4.	
TE_x	Turbine Entrainment as defined in Section 9.2.1.	
TS_x	Turbine Survival as defined in Section 9.2.1.	
R_{x}	Remainder Rate. The proportion of those juvenile anadromous fish of each of	
	the species designated in Section 4.1.7 that reach the dam (<u>i.e.</u> , are available	
	for collection) that fail to enter the collector <u>or</u> to enter turbines, and remain	
	in the reservoir. For purposes of these equations, the Remainder Rate can	
	only be calculated by inference from estimated values of TE and CE i.e.,	
	CE+TE+R=1.0.	
OUT_x	Number of juvenile anadromous fish of each of the species designated in	
	Section 4.1.7 that survive to the Lewis River below Merwin Dam.	
ODS_x	Overall Downstream Survival as defined in Section 4.1.4, Table 4.1.4. The	
	subscript (s, y, m) refers to the reservoir area in question, <u>e.g.</u> , ODSs refers to	
	the ODS for Swift-origin juveniles. $ODS_x = OUT_x / IN_x$	
Notes:		

For Swift juveniles, prior to the construction of Yale and/or Merwin downstream collectors, set the appropriate downstream CE (i.e., CE_y or CE_m) to zero to use same equation. As part of monitoring plan it may be necessary to assess whether TE is different when no collector is present.

Swift Juvenile Equations

$$OUT_{s} = IN_{s} * RS_{s} * \left[(CE_{s} * CS_{s}) + (TE_{s} * TS_{s} * RS_{s2} * TE_{s2} * TS_{s2} * RS_{y}) * \left[(CE_{y} * CS_{y}) + (TE_{y} * TS_{y} * RS_{m}) * \left[(CE_{m} * CS_{m}) + (TE_{m} * TS_{m}) \right] \right]$$

$$ODS_{s} = \frac{OUT_{s}}{IN_{s}} = RS_{s} * \left[\frac{(CE_{s} * CS_{s}) + (TE_{s} * TS_{s} * RS_{s2} * TE_{s2} * TS_{s2} * RS_{y}) *}{[(CE_{y} * CS_{y}) + (TE_{y} * TS_{y} * RS_{m}) * [(CE_{m} * CS_{m}) + (TE_{m} * TS_{m})]]} \right]$$

Yale Juvenile Equations

$$OUT_{y} = IN_{y} * RS_{y} * [(CE_{y} * CS_{y}) + (TE_{y} * TS_{y} * RS_{m}) * [(CE_{m} * CS_{m}) + (TE_{m} * TS_{m})]]$$

$$ODS_{y} = \frac{OUT_{y}}{IN_{y}} = RS_{y} * [(CE_{y} * CS_{y}) + (TE_{y} * TS_{y} * RS_{m}) * [(CE_{m} * CS_{m}) + (TE_{m} * TS_{m})]]$$

Merwin Juvenile Equations

$$OUT_{m} = IN_{m} * RS_{m} * [(CE_{m} * CS_{m}) + (TE_{m} * TS_{m})]$$

$$ODS_{m} = \frac{OUT_{m}}{IN_{m}} = RS_{m} * [(CE_{m} * CS_{m}) + (TE_{m} * TS_{m})]$$

Combined ODS Equation

The calculation of an overall ODS (i.e., combining all production areas) can be done in more than one way. The simplest method is to combine the terms into a single ratio:

$$ODS_{tot} = \frac{(OUT_s + OUT_y + OUT_m)}{(IN_s + IN_y + IN_m)}$$

This may or may not be the best method to calculate total ODS, and this method should be reviewed after ground-truthing.

SCHEDULE 4.9.1: COLLECT AND HAUL PROGRAM

SCHEDULE 4.9.1: COLLECT AND HAUL PROGRAM

PacifiCorp for Yale, and Licensees for Swift No. 2, implement an annual bull trout collection and transport program. Currently, PacifiCorp contracts with WDFW for portions of this program, but PacifiCorp and Licensees have the obligation for the program, as described in this schedule.

Bull trout are captured from the Yale and Swift No. 2 tailwaters using variable mesh gill nets (0.75 – 3 inch stretch). Collection activities begin in June to allow captured bull trout time to acclimate to their release sites and possibly provide better representation in the Cougar Creek counts. Collection typically occurs between the hours of 0800 and 1200 depending on operational constraints. During collection, the Yale powerhouse generators are taken off-line to enable deployment of the nets. Swift No. 2 does not need to be offline for collection due to the configuration of the tailrace. The duration of collection depends on the number of bull trout captured and time of year. Initially, collection occurs once-a week. As time nears the bull trout spawning period, collection frequency increases to twice per week. If bull trout are not captured in 2 successive trapping sessions, collection will be delayed for at least one week, but not more than 2 weeks. Collection attempts continue until September 30. To reduce the chance of injuring spawning bull trout, no collection will occur past this date.

The method for setting gill nets in the tailrace is as follows: The number of nets (or sets) deployed will be no more than 3 per boat. This is necessary to reduce the amount of time a bull trout may be entangled in the net. Nets are tied to the powerhouse wall and then stretched across the tailrace area using a powerboat. The nets are then allowed to sink to the bottom. Depending on conditions or capture rate, the nets are held by hand on one end or allowed to fish unattended. The maximum time nets are allowed to 'fish' unattended is less than 10 minutes. Upon capture of a bull trout, the fish is immediately freed of the net and placed in a live well. Once biological information is gathered (such as length and sometimes weight) and a Floy Tag TM is inserted, the bull trout are placed in a water-filled, soft sided hypalon fabric tube with a metal ring at the top to hold it open. A rope is tied to the tube, which allows hatchery crews on the work platform to hoist the bull trout out of the tailrace area and into hatchery trucks. The entire process, from capture to hatchery truck, takes only a few minutes. Bull trout placed into hatchery trucks are transported to Yale reservoir and released either at Cougar or Yale Park. Swift No. 2 fish are taken to Cougar unless otherwise directed by the USFWS. If necessary, the tank water will be tempered if a significant temperature difference (> 2 deg. C) exists between tank and reservoir water. Reservoir water temperature will be compared to transport tank water each time fish are released.

SCHEDULE 6.1.3: SWIFT BYPASS HABITAT CHANNEL RECONNAISSANCE STUDY

Transmittal Letter

northwest hydraulic consultants inc.

16300 Christensen Blvd., Suite 350 Seattle, WA 98188-3418 Phone: 206-241-6000

Fax: 206-439-2420

Date:	5 December 2003	Job No. 21247			
From:	Ed Zapel				
To:	Frank Shrier				
Company:	PacifiCorp				
	Lloyd Center Tower				
	Suite 1500				
	825 NE Multnomah Street				
	Portland, Oregon 97232				
Regarding:					
This is	\boxtimes as requested		for approval		
	for review and comment	returned to you	for your records		

AMOUNT	DATE	COMMENTS
1	5 December 2003	Reconnaissance Report – Swift Bypass Habitat Channel
		Reconnaissance Study

COMMENTS: Frank, please find the attached reconnaissance report for the Swift bypass reach habitat channel conceptual feasibility study. A bound hard copy has been mailed and should arrive by Monday morning.

Thanks,

Edwin J. Sapel

SWIFT BYPASS HABITAT CHANNEL **RECONNAISSANCE STUDY**





Prepared by: Northwest Hydraulic Consultants, Inc.

—nhc

Lewis River Relicensing Swift Bypass Habitat Channel Reconnaissance Study

Prepared by: Northwest Hydraulic Consultants, Inc.

1 Scope and Purpose

The purpose of this study is to evaluate the biological, engineering, and economic feasibility of a constructed channel. This work was initiated by the participants in the Lewis River relicensing process. One of the aquatic issues associated with the relicensing agreement is the flow regime for the Swift bypass reach. The discharge for this flow regime will be provided by an existing canal drain and by a new source located at the top of the canal. As a part of this flow regime issue, the participants agreed to investigate the feasibility of constructing a habitat channel in the Swift bypass reach.

Northwest Hydraulic Consultants (**nhc**) was retained to perform the following tasks:

- 1. Conduct a site visit with PacifiCorp, Cowlitz PUD, and the relicensing participants to determine approximate location of the constructed channel/s.
- 2. Review anticipated operating regimes for the bypass reach including flows and spills and determine feasibility of constructing and maintaining the channel over a 50-year period.
- 3. Provide a short report describing the feasibility of the channel, and if determined to be feasible, provide response to the following:
 - Can this be done?
 - What are risks? (Specifically, is it possible to construct a channel that can be sufficiently protected from spill events?)
 - Briefly describe qualitatively the potential benefits to fish and a few selected other resources in terms of observed benefits from other similar constructed projects.
 - Provide conceptual drawing(s) of the constructed channel and/or typical potential improvements.
 - What is a general, conceptual level estimate of the range in costs (construction/O&M) typically associated with such a project?

2 Site Visit

Mr. Jim Lencioni and Mr. Bruce Walsh, both of NHC, attended the site visit on November 12, 2003, and subsequently produced a brief memorandum for that visit, which is included in Appendix 1. A few salient observations made during the site visit regarding the proposed Site 1 and Site 2 habitat channel locations and pertinent issues are summarized below.

The potential Site 1 habitat channel appeared to have a high potential for habitat improvements. Adding gravel to the channel and concentrating flow in wide sections of the channel to provide more effective habitat characteristics are two fairly simple improvements that could be made. Although overflow from the main channel of the river has not been associated with excessive velocities through the Site 1 channel alignment, some concern with very large future spill releases was voiced by the site visit participants. One feasible solution might be the addition of a simple levee to protect the habitat channel from the main channel. This added feature would be helpful in stabilizing the geometry and alignment of the Site 1 channel, and would provide added protection for large woody debris used to enhance habitat complexity throughout the reach.

The potential Site 2 habitat reach did not appear to have as much potential, primarily because it is not protected from high flows in the main river channel. Aerial photos and topography indicate that the Site 2 channel may in fact be an historic thalweg of the main channel in danger of becoming captured once again by the main river flow if the current main channel alignment is destabilized. There is evidence of sediment deposition and scour from past high flows entering this site. Therefore, improvements within this reach would be susceptible to high operation, maintenance, and repair costs arising from flood events. In addition, hydraulic connectivity at low flows through the Site 2 reach and upstream to the Site 1 reach would be difficult to achieve without extensive channel modification, construction of control structures in the main channel, and/or construction of an intake structure on the main channel. All of these measures would be expected to be relatively high in first cost, and require considerable maintenance over the life of the project. Currently, low flows do not pass across the extensive crossing bar structure into the Site 2 thalweg, rather they pass down the main channel in a wide, very shallow cross section that is largely unsuitable for fish passage under low flow conditions. The risks associated with improving the habitat channel and maintaining effective features along Site 2 reach were considered higher than the potential benefits. Hydraulic connectivity from the Yale Lake reservoir up to the Site 1 reach for fish passage purposes may, however, require some channel control structures to ensure low flow depth and velocity passage criteria are met.

3 Anticipated Operating Regimes for the Bypass Reach

The Swift bypass reach hydrology is highly modified by operation of the Swift Dam hydropower project. All releases from Swift Dam, other than spill, are passed through the bypass canal to the Swift No. 2 powerplant at the head of the Yale Lake reservoir. Although the Swift No. 2 powerhouse was destroyed in a canal failure several years ago, it is currently being reconstructed and is proposed for restart in 2005. In the interim, Swift project outflows are currently passed into a short section of the downstream bypass power canal, thence into the bypass reach main channel via an overflow spillway. In the future, all flows except spill and the minimum flows passed from the canal into the Site 1 habitat channel reach will once again be passed through the canal to the Swift No. 2 plant. Spillway flows are highly variable, and generally only occur during the winter and spring months when inflows to Swift reservoir are in excess of storage capacity and powerhouse capacity. A full and complete record of these spillway flows over the period

of existing record was not available to us during this study, and so is not presented in this report. Spill typically occurs several times each year, with flows in excess of about 20,000 cfs having occurred at least 6 times since the Swift Dam was constructed. Spills in excess of 50,000 cfs have occurred at least once in that same period. Prior to developing a feasibility level design for the habitat channel in both Site 1 and Site 2, a hydrologic analysis will be required to define the frequency of flows in the bypass reach. In addition, a hydraulic model will be needed to determine expected water surface elevations and flow velocities through the bypass reach. These data are necessary to define potential impacts from high and low flows on any constructed features in these habitat channel reaches.

The flow regime for fish habitat and passage maintenance in the bypass reach (including the Site 1 and Site 2 habitat channel sections) was conceptually established by participants in the Lewis River relicensing process in October 2003. These flows were discussed and determined as part of the conceptual agreement on aquatics issues related to developing terms for new licenses. As part of the conceptual agreement, a flow regime was proposed and accepted that followed the pattern below:

January	100 cfs
February	75 cfs
March	75 cfs
April	75 cfs
May	75 cfs
June	75 cfs
July	60 cfs
August	60 cfs
September	60 cfs
October	60 cfs
November	100 cfs
December	100 cfs.

This water is to be provided through one or both of two sources: an existing canal drain (1 mile downstream of Swift No. 1) that can provide up to 47 cfs; and a new structure at the top of the canal that can provide up to 100 cfs. In addition, participants agreed to pursue potential construction of a channel in the bypass reach. Specific language in the conceptual agreement is as follows:

"...evaluation of the biological and engineering feasibility as soon as possible within 45 days by an expert who has experience with constructed channels. The consultant should evaluate what type of benefits can be achieved through a constructed channel that would fluctuate from 10 to 47 cfs, prepare a conceptual design, and provide credible, albeit rough, cost estimates for construction costs and anticipated O&M costs."

4 Habitat Channel Feasibility

4.1 Site 1

Reconnaissance level evaluation of the Site 1 habitat channel reach suggest that it should be feasible to construct habitat features within the alignment identified during the site visit and on maps and figures provided as background for this report. There are risks associated with construction of particular features within this area, although generally they are relatively low. These risks include potential damage from high flows in the main river channel, long-term main channel migration into the area occupied by the proposed Site 1 habitat channel, damage to the habitat channel outlet caused by high flows in the main channel, loss of flow resulting from failure of the drainage culvert that currently functions to provide flow to this area, and potential loss of fish passage connectivity with the main channel as a result of bar development, debris deposits, or channel migration.

Assessment of potential benefits to fish and other selected aquatic resources associated with construction of the proposed Site 1 project is difficult. There are also some potential complications with such an assessment, including the availability of passage flow connectivity with the Yale reservoir. Although a very effective habitat enhancement channel may be feasible in the Site 1 area, it is possible that actual use may be limited by fish passage barriers from the Yale reservoir in the connecting reach of the main channel. Assuming barriers are not an issue, we can approximate the benefits of the Site 1 reach habitat channel construction by comparing to an existing habitat channel enhancement project of similar scale, such as the Machmell River on the central coast of British Columbia. Photographs and site construction and fisheries design criteria for the Machmell River project are provided in Appendix 2. Monitoring of the Machmell project following construction has confirmed the presence of juvenile sockeye in relatively large numbers (the primary target species) within the constructed channel. In addition, monitoring efforts have also shown that utilization of the constructed habitat by various other species of juvenile salmonids is extensive.

These results suggest that the proposed Site 1 reach project would be beneficial for enhancement of juvenile and possibly adult salmonid populations. The benefits of construction of the Site 1 habitat channel include the potential to provide rearing and spawning habitat that is currently not available. In addition to fisheries resources, habitat enhancements would provide additional areas for water fowl and wildlife.

The Machmell River project site included re-opening a historical link between the Machmell River and a wetland on the Machmell River delta on Owikeno Lake that was blocked by a dike. The total length of constructed habitat was over 10,000 ft long. Due to the poor groundwater quality, a complex intake structure was used to draw surface water from the river to improve water quality. Typically, only one of the two inlet gates is used to provide a base flow of approximately 17 cfs, however, a maximum design discharge of 212 cfs can be furnished to the channel with two inlet gates open. The channel design includes hydraulic features like glides, riffles, and pools. Habitat complexity was improved by adding single logs, root wads, and complex jam structures to provide in-stream habitat, cover, and hydraulic diversity within the channel.

Conceptual design of the proposed Site 1 reach would include addition of gravels to those areas of the constructed channel thalweg currently comprised of sand size substrates, placement of large woody debris and boulder features to increase velocity and depth in currently very wide sections of the channel, and boulder riffle structures to provide for grade elevation drop stability under increased flows resulting from high main channel overflows. Appendix 2 for the Machmell River project shows more detailed sketches of typical habitat features that would be appropriate for use in the Site 1 reach. A typical Site 1 reach cross section and plan are shown in Figures 1 and 2, respectively following the text of this report. An approximate profile of the Site 1 reach channel alignment in Figure 3 shows locations where grade control structures such as boulder riffles might be necessary. Additional improvements such as gravel importation are not shown on these conceptual sketches. The need for gravel addition and other specific features would be determined in future feasibility design of the Site 1 reach.

A conservative estimate for constructing a habitat channel at the Site 1 reach is between \$300,000 and \$500,000. The annual operation and maintenance costs are estimated to range from \$10,000 to \$20,000, depending on potential damages due to high flow events.

4.2 Site 2

Reconnaissance level evaluation of the Site 2 habitat channel reach suggest that it likely is not feasible to construct habitat features within the alignment identified during the site visit. This reach appears to be a historic thalweg of the main river channel, and currently experiences high flows from the main channel and significant sediment deposition during spill events. Constructed features would not be likely to survive large spill events through this reach. Risks to constructed features would include destruction during large spill events by high velocity flows, scouring, debris impact, and sediment deposition. As discussed in the site visit memorandum, there exists some potential for the main river channel to recapture the Site 2 channel during a future large spill event. For example, a channel cut along this reach could potentially cause the river to migrate toward the canal and re-occupy the historic thalweg within Site 2. This reach appears to be much more vulnerable to major changes in the channel bed as evidenced by the scour and deposition observed through this reach.

Assessment of potential benefits to fish and other selected aquatic resources associated with construction of the proposed Site 2 project was not made in this report, as constructed habitat features are not expected to be feasible. However, the Site 2 reach is important to the Site 1 reach to provide fish passage connectivity with Yale Lake. A thalweg of adequate depth and velocity through the Site 2 reach and up into the main channel at the confluence of the Site 1 reach with the main channel is necessary to ensure movement of fish to and from the Yale Lake reservoir and Site 1. Currently, the crossing bar separating the main channel from the Site 2 reach is inadequate at low flows, and the main channel beyond this crossing bar is also undesirable for passage at low flows. A more concentrated thalweg is required to meet the se passage criteria.

A structural modification to the main channel to connect the more desirable Site 2 channel may be feasible, and may include some kind of diversion structure. Construction of a low flow channel cut through the crossing bar is not recommended, because of the high potential for avulsion of the main channel into such an excavation. A more appropriate approach may be to construct a massive rock weir system to control flow diversion near the head of the crossing bar, such that low flows are entirely diverted into the Site 2 reach, while large spill flows are forced to remain within the main channel to the south. This alternative would also require rock grade control structures extending from the massive rock weir in the main channel to the Site 2 reach thalweg to ensure against headcutting and destruction of the main control weir. Alternately, a culvert with intake structure could be used to maintain low flow connectivity between the main channel and Yale Lake reservoir through the Site 2 reach. This culvert would require a slope and structure sufficient to ensure successful passage of all life stages of fish that might utilize it. Conceptual design of such a flow control structure or low flow diversion system was not accomplished in this study, as insufficient data are available on which to base design selection.

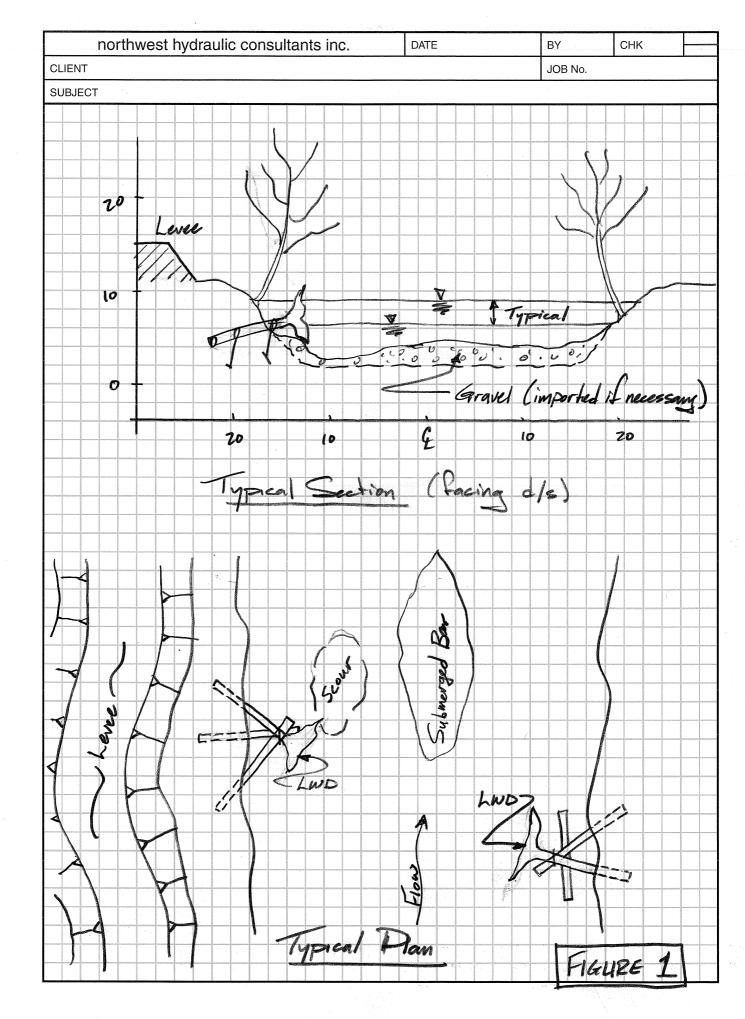
5 Summary and Recommendations

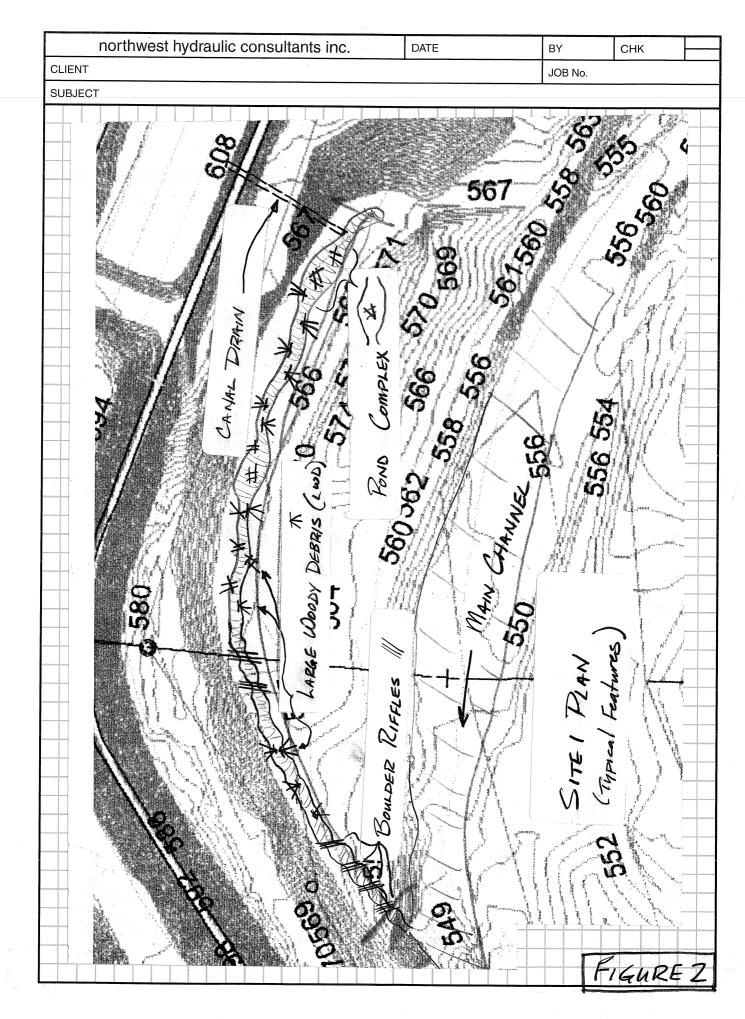
In summary, **nhc** was tasked to provide input on the feasibility of habitat channel enhancements at two reaches of the Lewis River below the Swift dam. Both of the sites were visited by **nhc** personnel. Preliminary concepts were developed and examples of a constructed habitat channel were provided. As discussed in Section 3 above, Site 1 appears to be a feasible site for habitat channel enhancements. Site 2 did not appear to be as desirable for a habitat channel; however, it could be modified to provide fish passage connectivity between Yale Lake and Site 1 without adding habitat features.

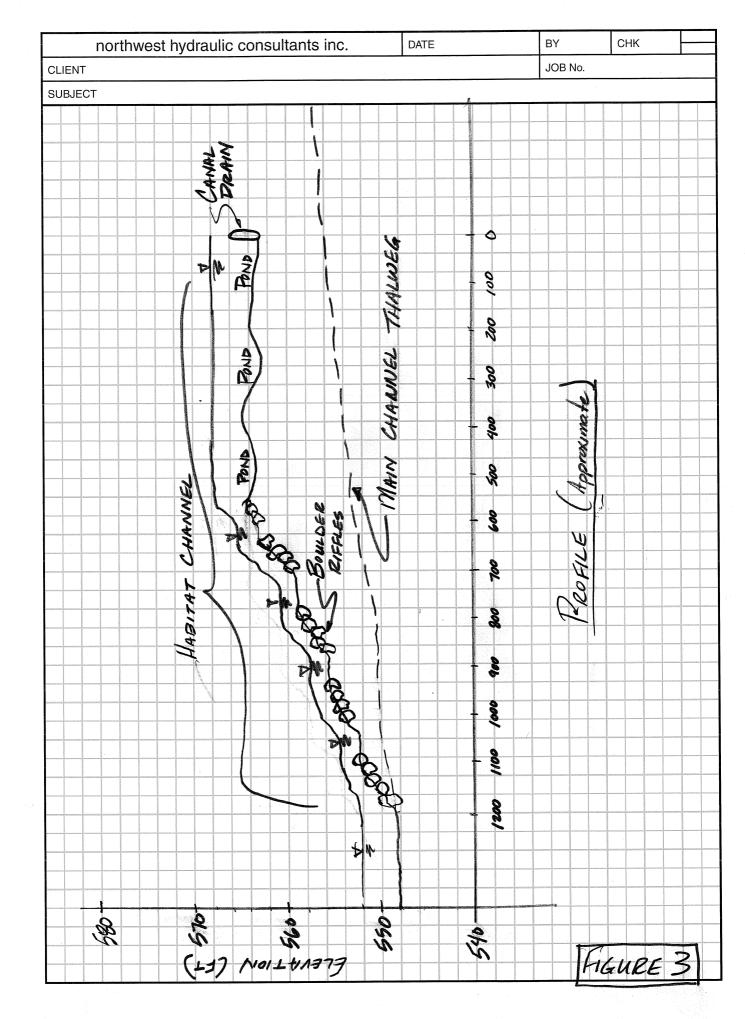
Figure 1 – Typical Cross Section Site 1

Figure 2 – Typical Plan Site 1

Figure 3 – Profile through Site 1

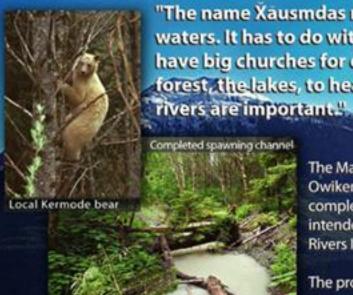






MACHMELL RIVER WATERSHED XAUSMDAS SOCKEYE SPAWNING CHANNEL

(pronounced ho-sum-das)



"The name Xausmdas means to wash your face in the waters. It has to do with healing and cleansing. We didn't have big churches for our religion. People went to the forest, the lakes, to heal themselves. To our people, these rivers are important."

Oweekene Elder Evelyn Windser

The Machmell River, a major tributary to Owikeno Lake, is the site of a recently completed salmon habitat restoration project intended to address the continued decline of Rivers Inlet sockeye salmon stocks.

The project represents not only a significant accomplishment in terms of sheer size and logistical difficulties of working in such a remote area, but a notable cooperative

achievement between forest companies, First Nations and government agencies.

At over three kilometers in length, the channel restores valuable habitat for spawning and rearing fish. Use of the channel by sockeye and other species confirms the role of this project in the revitalization of salmon stocks in the region.



Monitoring for fish use





Opening ceremony



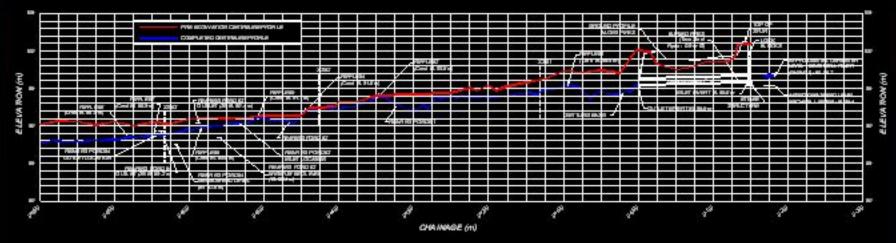




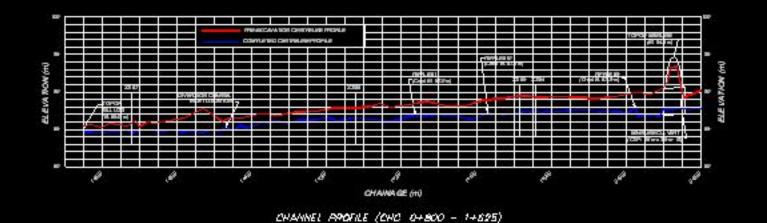
Project Layout



Project Layout



CHANNEL PROFILE (CHG 0-150 - 04800)



Intake and Piping

- Located on right bank at constriction in channel
 - Stable site
 - Deep water along bank during lower flow periods ensured supply
- Constructed off-site, barged and reassembled
 - Gated twin 900 mm inlets
 - 140 m twinned 900 mm steel pipe
- Maximum discharge ~ 6 m³/s
- Generally use only one gate to maintain base flow of about 0.5 m³/s





Channel

- Worked closely with biologist
- Dependent on intake capacity (Qmax ~ 6 m³/s)
- Channel geometry based on Preferential Sockeye Habitat Criteria
 - Min. flow depth 0.15 m
 - Velocity 0.21 to 1.07 m/s
 - Substrate 13 to 102 mm
 - Mean Redd area 1.8 m²
 - Area/spawning pair 6.7 m²
- Resort available gravels at flow between 3 to 4 m³/s
- Generally 4-5 m wide with 1.5H:1V side slopes
 - Slope upstream section 0.014
 - Slope downstream section 0.004

LWD

- Used to complex the channel
- Material sourced from onsite
 - Primarily from shoreline
- Constructed mostly simple 3-4 log structures
 - No need to anchor due to large wood and low velocities



Riffles

- Designed to be stable for flow of 6 m³/s
- Provide grade control
- Spawning areas created upstream of each riffle
- Constructed of min. 300 mm diameter rock.
 - 10 structures
 - Each 5 to 6 m wide, 6 to 8 m long
 - Keyed up to 1 m or so bed and banks













Project Stats

- Lineal meters of channel
- Area of new habitat
- Volume of fill removed
- Volume of rirpap rock used
- Volume of LWD used
- Designed flow rate
- Man-days of employment
- COST

- 3,260 m
- 28,410 m²
- 30,240 m³
- 1,250 m³
- 1,000 m³ (another 1500 m³ has since been added)
- $4 \text{ m}^3/\text{s}$
- 753 PD
- \$ 725,000

Lewis River Hydroelectric Projects Settlement Agreement

SCHEDULE 7.1: LARGE WOODY DEBRIS LETTER AGREEMENT WITH THE STATE OF WASHINGTON

Washington Department of FISH and WILDLIFE

RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington Department of Fish and Wildlife Habitat Program 600 Capitol Way North, MS 3155 Olympia, Washington 98501-1091

Cowlitz

DATE OF ISSUE: July 15, 2004

LOG NUMBER: ST-G3203-01

Note: This Hydraulic Project Approval (HPA) supersedes all previous HPAs issued for this project (00-A1089-01, -02, -03, and -04).

PERMITTEE

AUTHORIZED AGENT OR CONTRACTOR

PacifiCorp

ATTENTION: Bill C. Fields, Hydro North Production

Manager

310 Merwin Village Road

Aerial, WA 98603

(360) 225-4414

CBS Real Estate Management ATTENTION: Anna S. King 825 NE Multnomah, Ste. 1000

Portland, OR 97232 (503) 319-7210

Fax: (503) 813-6214

PROJECT DESCRIPTION: Reservoir Maintenance Activities (WDFW Database Description: Maintenance, Repair, Replace, Reposition; Temporary and Permanent; Combination; Boat Access; Habitat, LargeWoody Material; Water Crossing Structures, Culvert, Fish Passage/Not Fish Passable; Fresh Water)

PROJECT LOCATION:

Yale, Swift and Merwin Reservoirs

#	WRIA	WATER BODY	TRIBUTARY TO	<u>1/4</u> <u>SEC.</u>	SEC.	TOWNSHIP	RANGE	COUNTY
1	27.0168	North Fork Lewis River	Columbia River			6 North 7 North	2, 3, 4, 5 East 4, 5, 6 East	Clark, Skamania,

NOTES: This Hydraulic Project Approval pertains only to the provisions of the Washington State Fisheries and Wildlife Codes. It is the permittee's responsibility to apply for and obtain any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

Activities authorized under this permit are limited to: large woody material removal; boom maintenance; intake screen cleaning; culvert cleaning; and maintenance of existing boat ramps and other in-water and over-water structures. Work outside of these specific activities, or which is not categorically exempt from the State Environmental Policy Act (SEPA) requirements, will require application for a separate HPA.

PROVISIONS

- 1. <u>TIMING LIMITATIONS:</u> The project may begin **July 15, 2004** and shall be completed by **December 31, 2006**, provided:
 - a. Maintenance of boat launches and other shoreline structures with mechanized equipment shall only occur when the work area is dry;
 - b. Culvert maintenance activities involving work within the wetted perimeter shall only occur between July 1 and September 30.
 - c. Large woody material salvage operations may occur during any time of year.



RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington Department of Fish and Wildlife Habitat Program 600 Capitol Way North, MS 3155 Olympia, Washington 98501-1091

LOG NUMBER: ST-G3203-01

DATE OF ISSUE: July 15, 2004

- 2. NOTIFICATION REQUIREMENT: The permittee or contractor shall notify the Area Habitat Biologist (AHB) listed below of the project start date. Notification shall be received by the AHB at least three working days prior to the start of construction activities. In situations where three-day advanced notice is not possible due to emergency conditions or other factors, the applicant shall notify WDFW as soon as possible of the anticipated or actual start date. The notification shall include the permittee's name, project location, starting date for work, and the control number for this Hydraulic Project Approval (HPA).
- 3. Erosion control methods shall be used to prevent silt-laden water from entering watercourses. These may include, but are not limited to, straw bales, filter fabric, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas.
- 4. Equipment used for this project shall be free of external petroleum-based products while working around the stream. Accumulation of soils or debris shall be removed from the drive mechanisms (wheels, tires, tracks, etc.) and undercarriage of equipment prior to its working below the ordinary high water line. Equipment shall be checked daily for leaks and any necessary repairs shall be completed prior to commencing work activities along the stream.
- 5. All waste material such as construction debris, silt, excess dirt or overburden resulting from this project shall be deposited above the limits of flood water in an approved upland disposal site.
- 6. Rock fill associated with shoreline maintenance activities shall be clean and sized to withstand the 100-year peak flows. The use of rock shall be kept to an absolute minimum, and shall not exceed 50 cubic yards.
 - 7. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.
 - 8. All treated wood shall be professionally treated and completely cured prior to installation below the ordinary high water line to minimize leaching into the water or substrate. The use of wood treated with creosote or pentachlorophenol is not authorized.
 - 9. Concrete planks associated with boat launches may be repaired and/or replaced as necessary to maintain safe access.
 - 10. Boat launches and associated water access areas may be regraded and rerocked as long as material does not enter the wetted perimeter.
 - 11. If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), operations shall cease and the Washington Department of Ecology at (360) 753-2353 shall be contacted immediately.
 - 12. Large woody material removed from Yale, Swift and Merwin Reservoirs shall be made available and accessible for WDFW-approved fish habitat restoration projects in accordance with the following provisions:
 - a. Large woody material located partially or wholly above the ordinary high water line shall not be removed unless it represents a safety hazard.



RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington Department of Fish and Wildlife Habitat Program 600 Capitol Way North, MS 3155 Olympia, Washington 98501-1091

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- b. Pieces of large woody material made available for fish habitat restoration projects shall have a minimum diameter of 12 inches, and a minimum length of 15 feet, with rootwads attached. Pieces not meeting these specifications will not be provided unless specifically requested by WDFW or affiliated fish habitat restoration groups.
- c. Large woody material shall be made available during and immediately after salvage operations based on coordination with the designated PacifiCorp representative.
- d. PacifiCorp will contact WDFW or it's designated representative at least two weeks prior to availability of habitat-appropriate large woody material. (Note: Fish habitat restoration groups shall will contact PacifiCorp Hydro North Production Manager at least one week prior to desired pick-up date to coordinate schedules, and all necessary information regarding material, safety, and check-in procedures will be discussed on-site and through the initial contact).
- e. Large woody material provided by PacifiCorp shall only be used for habitat restoration projects within the Lewis River watershed.
- f. Large woody material removal shall be accomplished in a manner which avoids damage to the bed, banks and shoreline vegetation.
- 13. Provision numbers 12, and 12a through 12f shall become null and void upon the completion of a long-term large woody material management plan as required by the Lewis River FERC relicensing process.
- 14. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to construct the project. Within seven calender days of project completion, all disturbed areas shall be protected from erosion using vegetation or other means. Within one year of project completion, the banks, including riprap areas, shall be revegetated to preproject conditions with native or other approved woody species. Vegetative cuttings shall be planted at a maximum interval of three feet (on center) and maintained as necessary for three years to ensure 80 percent survival.

SEPA: Exempt, no other non-exempt permits

APPLICATION ACCEPTED: June 9, 2004

ENFORCEMENT OFFICER: Hart 163 [P3]

Steve Manlow (360) 906-6731 Regional Habitat Program Manager Steve Manlow

for Director WDFW

cc: Lisa Renan, WDFW
Danette Guy, WDFW
Carl Dugger, WDFW
Donna Hale, WDFW
Curt Leigh, WDFW
Craig Burley, WDFW
Jeff Breckel, LCFRB

Washington Department of PISH and WILDLIFE

RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington Department of Fish and Wildlife Habitat Program 600 Capitol Way North, MS 3155 Olympia, Washington 98501-1091

DATE OF ISSUE: July 15, 2004

LOG NUMBER: ST-G3203-01

GENERAL PROVISIONS

This Hydraulic Project Approval (HPA) pertains only to the provisions of the Fisheries Code (RCW 77.55 - formerly RCW 75.20). Additional authorization from other public agencies may be necessary for this project.

This HPA shall be available on the job site at all times and all its provisions followed by the permittee and operator(s) performing the work.

This HPA does not authorize trespass.

The person(s) to whom this HPA is issued may be held liable for any loss or damage to fish life or fish habitat which results from failure to comply with the provisions of this HPA.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All HPAs issued pursuant to RCW 77.55.100 or 77.55.200 are subject to additional restrictions, conditions or revocation if the Department of Fish and Wildlife determines that new biological or physical information indicates the need for such action. The permittee has the right pursuant to Chapter 34.04 RCW to appeal such decisions. All HPAs issued pursuant to RCW 77.55.110 may be modified by the Department of Fish and Wildlife due to changed conditions after consultation with the permittee: PROVIDED HOWEVER, that such modifications shall be subject to appeal to the Hydraulic Appeals Board established in RCW 77.55.170.

APPEALS - GENERAL INFORMATION

IF YOU WISH TO APPEAL A DENIAL OF OR CONDITIONS PROVIDED IN A HYDRAULIC PROJECT APPROVAL, THERE ARE INFORMAL AND FORMAL APPEAL PROCESSES AVAILABLE.

- A. INFORMAL APPEALS (WAC 220-110-340) OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.100, 77.55.110, 77.55.140, 77.55.190, 77.55.200, and 77.55.290:
 - A person who is aggrieved or adversely affected by the following Department actions may request an informal review of:
 - (A) The denial or issuance of a HPA, or the conditions or provisions made part of a HPA; or
 - (B) An order imposing civil penalties.

It is recommended that an aggrieved party contact the Area Habitat Biologist and discuss the concerns. Most problems are resolved at this level, but if not, you may elevate your concerns to his/her supervisor. A request for an INFORMAL REVIEW shall be in WRITING to the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091 and shall be RECEIVED by the Department within 30-days of the denial or issuance of a HPA or receipt of an order imposing civil penalties. The 30-day time requirement may be stayed by the Department if negotiations are occurring between the aggrieved party and the Area Habitat Biologist and/or his/her supervisor. The Habitat Protection Services Division Manager or his/her designee shall conduct a review and recommend a decision to the Director or its designee. If you are not satisfied with the results of this informal appeal, a formal appeal may be filed.

B. FORMAL APPEALS (WAC 220-110-350) OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.100 OR 77.55.140:

A person who is aggrieved or adversely affected by the following Department actions may request an formal review of:



RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington Department of Fish and Wildlife Habitat Program 600 Capitol Way North, MS 3155 Olympia, Washington 98501-1091

DATE OF ISSUE: July 15, 2004

LOG NUMBER: ST-G3203-01

- (A) The denial or issuance of a HPA, or the conditions or provisions made part of a HPA;
- (B) An order imposing civil penalties; or
- (C) Any other "agency action" for which an adjudicative proceeding is required under the Administrative Procedure Act, Chapter 34.05 RCW.

A request for a FORMAL APPEAL shall be in WRITING to the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091, shall be plainly labeled as "REQUEST FOR FORMAL APPEAL" and shall be RECEIVED DURING OFFICE HOURS by the Department within 30-days of the Department action that is being challenged. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, the deadline for requesting a formal appeal shall be within 30-days of the date of the Department's written decision in response to the informal appeal.

C. FORMAL APPEALS OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.110, 77.55.200, 77.55.230, or 77.55.290:

A person who is aggrieved or adversely affected by the denial or issuance of a HPA, or the conditions or provisions made part of a HPA may request a formal appeal. The request for FORMAL APPEAL shall be in WRITING to the Hydraulic Appeals Board per WAC 259-04 at Environmental Hearings Office, 4224 Sixth Avenue SE, Building Two-Rowe Six, Lacey, Washington 98504; telephone 360/459-6327.

- D. FORMAL APPEALS OF DEPARTMENT ACTIONS TAKEN PURSUANT TO CHAPTER 393, LAWS OF 2003: A person who is aggrieved or adversely affected by the denial or issuance of a HPA, or the conditions or provisions made part of a HPA may request a formal appeal. The FORMAL APPEAL shall be in accordance with the provisions of Chapter 393. The request for FORMAL APPEAL shall be in WRITING to the Environmental and Land Use Hearings Board.
- E. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS RESULTS IN FORFEITURE OF ALL APPEAL RIGHTS. IF THERE IS NO TIMELY REQUEST FOR AN APPEAL, THE DEPARTMENT ACTION SHALL BE FINAL AND UNAPPEALABLE.

Lewis River Hydroelectric Projects Settlement Agreement
SCHEDULE 7.1.2: SCOPE OF LARGE WOODY DEBRIS STUDY
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SCHEDULE 7.1.2: SCOPE OF LARGE WOODY DEBRIS STUDY

Study Objective: Identify and assess the potential benefits of LWD projects below Merwin Dam and provide conceptual approaches for supplementing available supply and promoting retention of LWD in the river below Merwin Dam to promote aquatic habitat complexity.

Task 1 — Reference Conditions. Estimate how much LWD would have been expected to pass through the system historically and how much LWD would have been expected to be retained in the Lewis River below Merwin Dam. Possible methods include: 1) historical research on the characteristics of LWD of the Lewis River (e.g. records of snagging/wood removal operations, or early maps or narrative descriptions); 2) analysis of existing assessments of historical LWD conditions from other basins/streams of similar size and power; or 3) use models to estimate historical wood dynamics in the Lewis River.

Task 2 – <u>Current and Projected Conditions</u>. Estimate how much LWD would be expected to pass through the system under current conditions (if the LWD was allowed to pass through the reservoirs) and how much LWD would be expected to be retained in the Lewis River below Merwin Dam, including identifying current and projected effects caused by other land management factors (i.e., logging [affecting wood dimension and input supply], construction of dikes and streamside development [affecting wood retention]). Possible methods to determine volumes and retention of LWD inputs would be: 1) analyze PacifiCorp data or observations by PacifiCorp staff on wood removal from reservoirs; 2) have PacifiCorp staff monitor wood input into the reservoirs over the next two years, ideally after a large flood; and/or 3) review USFS watershed analyses of the upper basin to allow projections of future wood dimension and input volumes.

Task 3 – Identify possible natural and artificial solutions to promote retention of LWD in the lower Lewis River below Merwin Dam that would accrue ecological benefits to fish and other aquatics species, and evaluate their relative feasibility. This would be done at the conceptual level and would include assumptions, rationale and assessments of confidence in the conclusions. Potential solutions should not exceed the equivalent of reference conditions. Specifically assess any resulting risk to public safety associated with such proposed actions to further LWD retention.

Task 4 – Based on the results of Task 1, 2, and 3, identify and assess the benefits to fish (potentially a quantitative assessment for salmonids) and other aquatic organisms (a qualitative assessment based on literature review) that would (1) accrue with LWD retained (relatively stable, long-term LWD accumulations or jams) in the Lewis River downstream of Merwin dam or (2) accrue with LWD temporarily retained or moving through the system. Compare the benefits of the LWD loading that would have occurred under reference conditions (as estimated in task 1) with the benefits of using natural or artificial solutions under the current and projected amounts of LWD (as identified in task 2). Use this comparison to inform recommendations for LWD restoration projects in the Lewis River below Merwin Dam.

Lewis River Hydroelectric Projects Settlement Agreement

Reporting

Study plan development and implementation schedule to be set forth in Settlement Agreement. A draft report will be sent out to parties for review. Prepare a final report, incorporating comments from interested parties.

Lewis River Hydroelectric Projects Settlement Agreement
SCHEDULE 7. 2: SCOPE OF SPAWNING GRAVEL STUDY

SCHEDULE 7.6.2: PRELIMINARY LIST OF POTENTIAL ENHANCEMENT PROJECTS

The following list of projects and priorities is provided to illustrate, without limitation as to scope or type, some projects that qualify as mitigation measures under the In Lieu Fund (Section 7.6) based on conditions as of the Effective Date of the Settlement Agreement. These specific projects may or may not be undertaken with the In Lieu Fund. Some measures identified may already have been completed by the time the In Lieu Funds becomes applicable. The following information is listed in a similar format as that used by the Lower Columbia Fish Recovery Board, utilizing limiting factors, the priority of the limiting factor, and specific projects for restoration or protection.

Prioritization of Limiting Factors and Identification of						
Potential Restoration and Preservation Needs*						
Limiting Factor Priority Rating	Potential Restoration	Preservation				
	Actions	Actions				
Fish Passage High: Dams block approximately 113 miles (80%) of the historic anadromous habitat in the subbasin. Culverts block another 7.6 miles of habitat in streams below the dams. Culverts likely block access to some stream reaches in the upper basin above Swift reservoir as well.	 Provide both upstream and downstream passage through the dams on the main stem Lewis. Assess and repair the highest priority culvert passage problems on Ross, Johnson, Colvin, Cedar, Beaver, John, Brush Creeks and an unnamed tributary to 	None				

	Tt'ala	Creek including sediments, repair damage from slide and restore habitat. • Replace culverts preventing anadromous fish passage on tributaries above Swift Dam. Partial inventory completed with estimated numbers as follows: Tributaries to Swift Reservoir – 7; Upper Lewis River – 10; Muddy River tribs - 10	Dunganya
Floodplain Conditions	High: Very limited floodplain habitat available with numerous modifications. Low-Moderate: Floodplain conditions less limiting in upper basin – more related to Riparian and Channel conditions	 Reconnect and enhance off-channel and floodplain habitats along the lower reaches of the mainstem Lewis River where diking and development have eliminated most historic floodplain habitat. Enhance floodplain and side channel habitat around Eagle Island for rearing fall chinook juveniles and other salmonids. Enhance floodplain and side channel habitats found in the North Fork Lewis and tributaries above Swift Reservoir. 	Preserve off- channel and side channel habitat and associated wetlands wherever they occur in the lower Lewis River. Side channel and off channel habitat near Eagle Island are critical habitat for juvenile wild fall chinook rearing. Wetland complexes in the lower 2 miles of the South Fork Chelatchie Creek provide important low gradient rearing habitat in the Cedar Creek watershed.
Sediment	Low/High: Spawning gravels are in generally good condition in the mainstem Lewis below the dams (Low Priority). Substrate fines in the	• Identify and repair roads that are contributing excessive fine sediments to streams in the sub basin, especially within the Cedar Creek watershed where spawning sediments are often embedded with fines.	Protect existing quality riparian corridors from additional development along all anadromous streams within the sub basin.

Cedar Creek system were rated "poor" and considered a major limiting factor by TAG members (High Priority).

High:

Spawning gravels in some stream reaches above Swift Reservoir have excess levels of fine sediment Under Forest and Fish rules, the WDNR and forest landowners are identifying roads that need either repair or decommissioning.

- Assess and, if possible, stabilize mass wasting and bank erosion problems along Colvin Creek, and Cedar Creek from RM 9.3 to just above Amboy.
- Restore degraded riparian conditions along the tributaries to the lower Lewis River, especially along Robinson, Johnson, and Ross Creeks, and on Cedar Creek between RM 9 to RM 11.2 and in the lower reaches of South Fork Chelatchie Creek.
- Exclude livestock from streams and riparian zones, focusing first along the middle reaches of Cedar Creek (RM 4.4 to RM 11.2) and lower South Fork Chelatchie Creek.
- Continue to monitor sediment conditions below the dams on the Lewis River.
- Identify sources and reduce inputs of fine sediments found in the Cedar Creek watershed.
- Restore the following stream reaches in the upper basin where fine sediment has been identified a

Protect critical spawning habitat for wild fall chinook in the mainstem between Cedar Creek and Merwin Dam.

Protect all backwater sloughs above the Lewis River Fish Hatchery that provide limited spawning habitat for the few remaining chum that return to the Lewis.

Protect and enhance quality spawning sites in the Cedar Creek watershed.

Protect and enhance all streams within the upper watershed that support bull trout including Pine, Rush, and Cougar Creeks.

		limiting factors	
		limiting factor:	
		Muddy River 1 – 4.4 mi. Muddy River 2 – 1.5 mi. Muddy River 3 – 3.5 mi. Pine Creek 1 – 1.8 mi. Pine Creek 25 mi. Pine Creek 3 - 1 mi. Pine Creek 4 – 1 mi. Trib. P8 – 4.0 mi.	
		• Decommission unneeded roads or correct/repair drainage on roads that contribute sediment to anadromous streams above Swift Dam.	
Channel/LWD Conditions	Medium: LWD supplies and quality pool habitat are very limited in the sub basin. Medium: LWD is limited in numerous reaches in the watershed above Swift Reservoir.	 Increase functional LWD structures, or similar natural structures, in appropriate stream reaches through LWD placement projects and/or through recruitment (though LWD recruitment potential is very limited in most streams). The dams on the Lewis River stop all LWD recruitment from upstream areas. LWD that is collected at the dams could be used to supplement LWD in areas downstream of the dams. Speed recruitment of conifers within degraded riparian corridors to provide a future supply of LWD. Enhance pool habitat and instream complexity, focusing first on the Cedar Creek watershed. 	Protect existing mature riparian vegetation wherever found within the sub basin for LWD recruitment. Maintain current appropriate pieces of LWD, and other natural structures, through increased education and enforcement.

		Place LWD in stream	
		reaches above Swift Reservoir where LWD is a	
		limiting factor:	
		Rush Creek 1 – 2.5 mi.	
		Muddy River 1 – 4.4 mi. Muddy River 2 – 1.5 mi.	
		Muddy River 3 – 3.5 mi.	
		Pine Cr.1-6, trib P8 – 12.1	
		mi.	
		Smith Creek 1 – 5.7 mi. Clear Cr. 1 – 2.5 mi.	
		Lower Clear Cr. – 6.2 mi.	
		NF Lewis – 12 mi.	
Riparian	High:	Target riparian	Preserve healthy
	Riparian conditions	restoration efforts along the	riparian corridors in
	are "poor" almost throughout the lower	most productive and/or degraded streams including	the headwaters of all the sub basin's
	basin.	the anadromous reaches of	tributaries, focusing
		all tributaries to the lower	first on productive
	Moderate-High:	Lewis River.	anadromous areas
	Riparian conditions		like Cedar Creek
	range from poor to	• Fence livestock away	and its tributaries.
	good in the upper basin.	from streams and restore riparian vegetation. Areas	
	ousin.	to focus on first include	
		Cedar Creek between Pup	
		and Chelatchie Creeks.	
		Develop alternatives to	
		the elimination of riparian	
		vegetation along dikes in the	
		lower Lewis River.	
		Restore native riparian	
		vegetation along Eagle	
		Island and its floodplain	
		wetlands.	
		Restore and enhance	
		Johnson Creek to eliminate	
		passage problems and	
		restore stream channel.	
		Remove dam on Colvin	

Creek including sediments, repair damage from slide and restore habitat.

- Repair or replace tributary culverts that pose barriers to access.
- Enhance or create margin and side channel habitat on Eagle Island to provide rearing for wild fall Chinook and potential spawning and rearing for wild chum.
- Repair slide upstream of Lewis River hatchery that buried chum spawning habitat in the flood of 1996.
- Remove culverts, enhance streamside vegetation and stabilize.
- Control farm runoff control and construct bio-filtration swales.
- Improve spawning habitat including gravel placement.
- Speed recruitment of large conifers by thinning in riparian corridors above Swift Reservoir in the following stream reaches:
- Restore riparian conditions through planting in the following stream reaches:

Muddy Riv. 1-3-9.6 mi. Clearwater Creek 1-5.2 mi.

		Clear Cr. – 2.5 mi.	
		Lower Clear Cr. – 6.2 mi.	
		Smith Cr. -5.7 mi.	
		Pine Cr. 1-6, trib P8 – 12.1	
		mi.	
		Drift Creek – 1.6 mi.	
		NF Lewis – 12 mi.	
Water Quality	Low/High:	Restore degraded	Protect riparian
	Low Priority in the	riparian cover for all streams	corridors in all
	mainstem where	within the sub basin,	headwater areas to
	water quality is	especially along degraded	maintain the supply
	generally "good".	reaches of Cedar Creek and	of cool, clean water
	High priority in	its tributaries.	to critical
	Cedar Creek where		downstream
	elevated water	Restore and enhance	spawning and
	temperatures present	wetlands, springs, and seeps	rearing areas.
	significant problems.	in the sub basin.	
	Data gaps in other		Protect and
	streams.	Reduce direct runoff	enhance wetlands
		from roads to streams,	and spring fed
		especially from heavily	sources of cool
		traveled gravel roads in the	water, focusing first
		upper Cedar Creek	on wetland
		watershed.	complexes in the
			upper reaches of
		Enhance pool habitat to	the North Fork Chelatchie Creek.
		provide thermal refuge for	Chefatchie Creek.
		salmonids rearing or holding	
		in the watersheds.	
		F 1 1 1 1 4 1 6	
		Exclude livestock from	
		streams and riparian areas	
		along Cedar Creek and its tributaries.	
Water Quantity	Medium:		Protect fully
water Quantity	Both elevated peak	• Reduce impervious surfaces, road densities, and	forested and
	and low flows	the direct connections	unroaded areas in
	present problems in	between road drainage	the upper Cedar
	the sub-basin. Dams	ditches and streams to	Creek watershed
	have altered the	reduce peak flows, promote	from further
	hydrology of the	groundwater recharge, and	development to
	Lewis River basin.	potentially enhance low	reduce peak flows
		summer flows.	to downstream
			habitats, and to
		Identify contributing	provide refuges for
		causes and develop potential	salmonids from
	l	tauses and develop potential	

		solutions to low summer	elevated stream
		flows in Cedar Creek and	
			temperatures.
		other tributaries. Low flows	
		limit juvenile rearing	Preserve floodplain
		capacity from June to	connections and
		October (Caldwell et al,	associated wetlands
		1999).	to provide off-
		,	channel refuge
		 Identify and remove 	from high flows
		unauthorized diversions in	and additional
		the Cedar Creek basin that	flood capacity.
		may affect streamflow.	
Biological	Medium:	• Assess the need to	Maintain native
Processes	Escapement is well	increase the contribution of	vegetation along
	below historic levels	marine-derived nutrients	stream corridors
	and a lack of	through increased use of	and wetlands.
	nutrients may be	carcasses.	
	limiting production.		
	81	Along riparian corridors	
		and wetlands, remove	
		invasive, non-native	
		vegetation and replace it	
		with native species.	

^{*} Restoration and Preservation Actions by Limiting Factor were prioritized based upon the Limiting Factors Report or professional judgment.

[&]quot;Poor", "Fair" and "Good" comments refer to habitat criteria developed by the Conservation Commission for the Habitat Limiting Factors Analysis Reports or professional judgment.

Limiting Factor	Priority Rating	tion Needs Potential Restoration	Preservation Actions
Limming Factor	1 norwy Rumig	Actions	Trescription Actions
Fish Passage	High: 16.5% of the historic habitat in the subbasin is blocked (22.8 miles).	 A culvert near the mouth of Brezee Creek blocks 5.7 miles of potentially productive habitat for winter steelhead, cutthroat, coho. Other barriers on Brezee include a dam 500 feet upstream of the first culvert, another culvert at 359th St., and another culvert on a major tributary, which blocks 1.8 miles of habitat. A partial to total 	None
		culvert passage barrier on McCormick Creek blocks 2.3 of potential habitat for steelhead, coho, and cutthroat. • A series of culverts need assessment and likely repair on Mason Creek.	
		 A private culvert near the mouth of Dean Creek is likely a passage barrier with 2.2 miles of potential habitat upstream. Restore and enhance upper EF spawning and rearing habitat. 	

		 Create funding partnership to restore Stordahl pits and create chum spawning channels, streamside vegetation and stabilization. Fund EF Lewis River fish monitoring 	
		programs.	
Floodplain Conditions	High: Very limited floodplain habitat available with numerous modifications.	 Reconnect and enhance off-channel and floodplain habitats along the lower 10 miles of the East Fork to help increase rearing habitat for juvenile salmonids. Reconnect and enhance side channels and areas with upwelling that could provide chum spawning sites in the lower East Fork. 	Preserve off-channel and side channel habitat and associated wetlands wherever they occur in the East Fork and its tributaries. The lower reaches of the East Fork from RM 2 to RM 10 are especially important.
Sediment	Medium: Data is lacking for many areas in the subbasin. Sediment fines rated "poor" to "fair" in the LFA for most streams in the subbasin.	• Increase functional LWD structures, or similar natural structures, in appropriate stream reaches through LWD placement projects and/or through recruitment (though recruitment potential is low for most streams). Areas to focus include appropriate sites within the upper East Fork, in lower and upper Rock Creeks,	Protect existing mature riparian vegetation for LWD recruitment, especially along the upper reaches of the mainstem East Fork, and Breeze, Rock, Cedar, Riley, Mason, and Dean Creeks. Maintain current appropriate pieces of LWD, and other natural structures, through increased education and

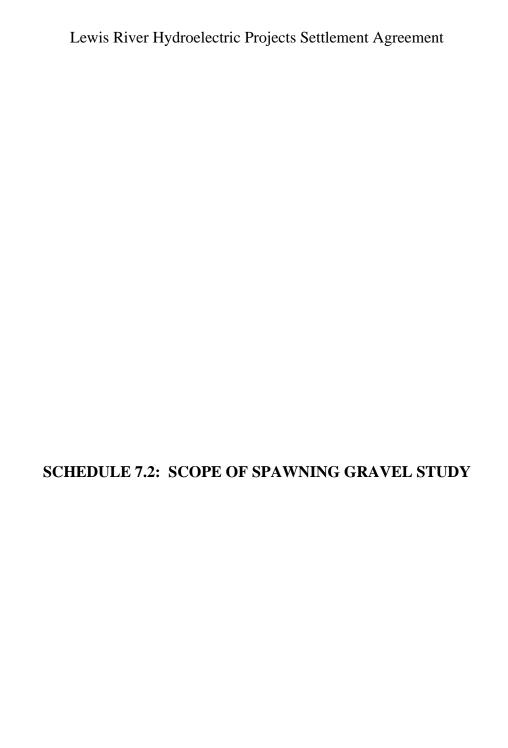
		and in Cedar Creek.	enforcement.
Riparian	Medium: Riparian conditions are "poor" almost throughout the sub- basin.	 Target riparian restoration efforts along the most productive and/or degraded streams including the lower reaches of the mainstem East Fork, and Upper Rock Creek. Continue efforts to restore riparian corridors and forested wetlands along Clark County's open space lands along the lower East Fork Lewis. 	Preserve healthy riparian corridors in the headwaters of all the sub-basin's tributaries, focusing first on productive areas like Upper Rock Creek and the upper reaches of the East Fork Lewis.
Water Quality	High: Water quality is a significant problem, especially in the lower reaches and tributaries of the East Fork.	 Restore riparian cover for all streams within the sub-basin, especially along degraded reaches of tributaries to the lower East Fork. Reduce livestock access to streams, notably in McCormick, Lockwood, Dean, Lower Rock Creek, and Yacolt Creeks. Restore and enhance wetlands, springs, and seeps in the subbasin. Reduce direct runoff from roads to streams, especially from heavily traveled gravel roads in the upper watershed. 	Protect riparian corridors in all headwaters areas to maintain the supply of cool, clean water to critical downstream spawning and rearing areas. Protect and enhance wetlands and spring fed sources of cool water wherever encountered in the subbasin.

		• Enhance pool habitat to provide thermal refuge for salmonids rearing or holding in the watersheds.	
		• Assess and identify actions to reduce the impacts of farming activities on water quality in Lower Rock and Yacolt Creeks.	
		• Reduce water quality impacts from gravel processing activities on Dean Creek and the lower East Fork.	
		• Assess and identify actions to reduce the impacts to water quality (temperature) from the avulsion of the East Fork into the Ridgefield Pits (RM	
		8).	
Water Quantity	Medium: Both elevated peak and low flows present problems in the sub- basin.	• Reduce impervious surfaces, road densities, and the direct connections between road drainage ditches and streams to reduce peak flows, promote groundwater recharge, and potentially enhance low summer flows.	Protect fully forested and unroaded areas in the upper watershed from further development to reduce peak flows to downstream habitats and provide refuge for salmonids from elevated stream temperatures.
		• Identify unauthorized private	Preserve floodplain connections and

		diversions and/or	associated wetlands to
		withdrawals within	provide off-channel
		the subbasin and work	refuge from high
		with landowners on	flows and additional
		alternative water	flood capacity.
		sources.	J. S. S. T. S.
Biological Processes	Medium:	Increase	Preserve existing
	Escapement is well	contribution of	natural vegetation
	below historic levels	marine-derived	along riparian
	and a lack of nutrients	nutrients through	corridors and within
	may be limiting.	increased use of	wetlands.
	Invasive species	carcasses.	
	reduce riparian		
	functions.	Along riparian	
		corridors and	
		wetlands, remove	
		invasive, non-native	
		vegetation and replace	
		it with native species.	
		The floodplains in the	
		lower reaches of the	
		East Fork and	
		tributaries have some	
		of the most significant	
		problems with	
		invasive species.	
		Assess and	
		identify possible	
		remedies to predation	
		in the Ridgefield Pits	
		and lower East Fork.	
		and lower Last Folk.	

^{*} Restoration and Preservation Actions by Limiting Factor were prioritized based upon the Limiting Factors Report and professional judgment.

[&]quot;Poor", "Fair" and "Good" comments refer to habitat criteria developed by the Conservation Commission for the Habitat Limiting Factors Analysis Reports or professional judgment.



SCHEDULE 7.2: SCOPE OF SPAWNING GRAVEL STUDY

Study Objective: (1) Provide a monitoring program to provide a reliable basis to judge present conditions and changes over time in spawning habitat area in the Lewis River below Merwin Dam, and (2) Provide a means to determine when spawning gravel supplementation efforts to preserve or expand such areas is warranted.

An independent consultant will perform the following tasks:

Task 1 – Develop a long-term monitoring program to assess the retention of gravel of suitable size for salmon spawning in areas downstream of Merwin Dam. This assessment should evaluate present spawning areas and areas that may be used once salmon populations are recovered. The spatial extent of the assessment will be based on a geomorphic analysis of how far downstream the effects of reduced gravel supply on spawning habitat might extend. The goal is to find a methodology that (1) quantifies the amount of suitable gravel, (2) indicates where there is a change, and (3) is repeatable. Assessments would occur annually for the first 3 years. Follow-up assessments would occur following flood events. The consultant will determine the recurrence interval of floods necessary to trigger an assessment.

Task 2 – Develop a scheme (stating assumptions and rationale) to determine when gravel augmentation would need to occur. In developing this scheme, the consultant should consider the habitat requirements of a recovered population rather than the current population, subject to the limitations in Section 7.2 (d) of the Settlement Agreement.

Task 3 – Propose a gravel augmentation program that addresses the quality of gravel to be augmented, the timing of the augmentation, and the methods to be used. The program shall be flexible enough to allow for incorporation of new technology or knowledge into the means by which gravel augmentation could occur.

Reporting

Study plan development and implementation schedule to be set forth in Settlement Agreement. A draft report will be sent out to parties for review. Prepare a final report, incorporating comments from interested parties.

Lewis River Hydroelectric Projects Settlement Agreement
COHEDINE 97. HATCHEDY AND CUDDIEMENTATION EACH ITY LIDED ADES
SCHEDULE 8.7: HATCHERY AND SUPPLEMENTATION FACILITY UPGRADES AND MAINTENANCE

SCHEDULE 8.7: HATCHERY AND SUPPLEMENTATION FACILITY UPGRADES AND MAINTENANCE

Specific details will be developed with engineering input as part of the development of the Hatchery and Supplementation Plan.

In the schedule below, the notation "LY" refers to the number of anniversaries after the Issuance of the New License(s) for the Merwin Project or the Swift Projects, whichever occurs earlier.

Lewis River Hatchery

A. Adult pond modifications

Rebuild of the current adult pond (pond # 15), to accommodate adult collection processes and provide the ability to safely collect, handle (electro-anesthetic or acceptable alternative), sort (by species), and crowd by automation (e.g. Minter Creek Hatchery, Cole M. Rivers Hatchery).

• Complete on the same schedule as the Merwin Trap Upgrade identified in Section 4.2(c) of the Settlement Agreement.

B. Rearing pond raceways

Rebuild all asphalt ponds into concrete raceways to provide rearing versatility and increase water exchange rate to maximize smolt to adult survival. Conversion of these three ponds shall be staged as follows:

- Pond 16 by LY 1
- Pond 13 by LY2
- Pond 14 by LY 2

C. Downstream water intake repair

Replace the two existing submersible pumps with turbine motors, replace common header to handle additional flow, stabilize current structure, and bring into compliance with NOAA Fisheries standards by replacing intake screens.

• Complete by end of calendar year 2008. Will require coordination with rebuild of pond 16.

D. Upstream intake and pond pipe maintenance

Test and repair intake and conveyance pipe.

• Complete by end of calendar year 2006.

Repair or replace pumps as needed for as long as the hatchery is being used to meet Licensees' hatchery obligations. Conduct appropriate preventative maintenance to assure pump reliability.

Merwin Hatchery

A. Ozone treatment upgrade

Upgrade and replace the existing system with current technology, and add a small backup system for incubation.

• Complete by LY 2

B. Rearing pond flow increase

Replace risers in the ponds, with screened up wells and larger valves, to improve flow patterns and exchange rates.

• Complete by LY 2

C. Modify release ponds to accommodate adult steelhead

Plumb new inflow into the ponds and extend the pond wall and screen heights in order to accommodate quantity of adult summer steelhead needed for broodstock.

• Complete by LY 2

D. Fish Hauling Trucks

Purchase two additional fish hauling trucks designed to handle juveniles and adults for hatchery, supplementation and reintroduction purposes. Given that there are two existing trucks, these additions will bring total to four hauling trucks.

- Purchase first additional truck by LY 1
- Purchase second additional one truck by LY 3

Speelyai Hatchery

A. Rearing pond 14 raceways

Convert pond 14 into raceways for rearing versatility

Complete by LY 4

B. Raceway and pond maintenance

Convert existing Burrow's Ponds into two raceways and modify the raceways to provide flexibility to segregate fish into three sections. Make necessary repairs to stop leaking between raceways.

- Repair first bank of raceways by LY 1
- Repair second bank of raceways by LY 2

C. Water intake structure repair

Replace existing dam with new intake diversion adjacent to the hatchery stabilize intake location and replace valves.

• Completed by LY 3

D. Adult fertilization area

Increase covered area by extending existing roof and pouring a larger concrete apron. Increase the capacity of the kill bins.

• Completed by LY 2

E. Kokanee Trap

Construct adult kokanee trap to allow kokanee broodstock collection.

• Completed by LY 3

F. Incubation area expansion

Expand incubation building to cover existing intermediate troughs and incorporate new early rearing vessels to provide capacity for multiple species and, Add early rearing vessels.

• Completed by September of LY 1

Net Pens

Install net pens with capacity not to exceed 20,000 pounds, either in Swift Reservoir or in the Swift No. 2 canal. Investigate which location is better for net pens and install net pens in the single most appropriate location.

- Siting and permitting by LY 1
- Complete by LY 2

SCHEDULE 9.3: MONITORING FOR WILD FALL CHINOOK

The following is a description of the annual fall Chinook monitoring program in the lower Lewis River. Fall Chinook monitoring efforts are directed at both adults and juveniles and will be undertaken as provided in A, B and C below. These measures will be included in the Monitoring and Evaluation Plan identified in Section 9.1.

PacifiCorp will meet the juvenile collection of fall Chinook monitoring obligation either by (i) fully reimbursing WDFW to conduct the activities identified in A, below, or (ii) providing at least one biologist with an adequate boat for 5 days and reimbursing WDFW half of the cost to conduct the activities identified in A, below. PacifiCorp will fund 100% of the juvenile tagging program as described in B below. Finally, PacifiCorp shall fulfill their obligations regarding monitoring of adult fall Chinook by providing a boat with an operator for at least five survey days and reimbursing WDFW for approximately half of the effort identified in C below.

- A. Annually, beginning in late May or early June, WDFW staff collect fall Chinook young-of-the-year (YOY) from rearing areas in the Lewis River using stick seines. Overall, WDFW seines from just above Colvin Creek (RM 16.5) to upstream of the county road bridge in Woodland (RM 6.6). Normally WDFW assigns 1 or 2 crews of 3 persons each to seine and collect Chinook fingerlings on approximately twenty-one days; seining is generally completed before July 4. WDFW attempts to collect and tag 110,000 YOY to ensure meeting the annual tagging goal of 100,000 YOY fall Chinook.
- B. WDFW transports collected YOY to a tagging trailer located at Lewis River Hatchery. WDFW staff inserts a coded wire tag (CWT) into the snouts of fall Chinook YOY that are greater than 47 mm in length and clip the adipose fin of the tagged fish so that they can easily be identified as adults. WDFW releases tagged fish into the Lewis River. WDFW also releases into the Lewis River, without a tag or mark, collected YOY fall Chinook which are shorter than 47 mm. Fall Chinook which are shorter than 47 mm, are released back into the Lewis River, without a tag or mark. The annual goal is to tag 100,000 YOY fall Chinook greater than 47mm.
- C. Annually, beginning in mid-September and ending in January, WDFW undertakes weekly spawning and carcass recovery surveys for fall Chinook on the lower Lewis River from just below Merwin dam to just downstream of Eagle Island. WDFW conducts the spawning and carcass recovery surveys in five designated survey sections. The upper most four survey sections are each approximately a mile in length. Section 1 begins just below Merwin dam and section 4 ends at the Lewis River Hatchery ladder. Section 5 includes the remaining 4 plus miles. Section 5 is primarily used for carcass recovery. WDFW survey staff keeps survey data separate by section. PacifiCorp assists in the spawning and carcass recovery surveys by reducing river flow from Merwin to approximately 1200 cfs during November in order to accommodate the visual counts. On a weekly basis, WDFW assigns from one to four crews, which each consist of a boat driver and 2 samplers/counters conduct the surveys/counts. Each crew group is responsible for counting carcasses and taking biological samples (length, sex, scales, and snout (if marked)). Once a carcass is sampled, a crew member cuts off the tail to avoid recounting. In addition, 2 crews are charged with making live counts and counting active redds in sections 1-4

at least twice during mid-November. Sampling effort is intended to accomplish a 50-60% sample rate. A mark recapture study using carcasses is performed every 5 years to verify sample rates and escapement estimates. The mark recapture study is not funded by PacifiCorp.

WDFW provides an annual report that indicates the estimated run size and the population demographics. The tagging information is provided to the Pacific States Marine Fisheries Commission. WDFW uses tag returns to estimate juvenile abundance that provided for that return year.

In the event that WDFW is unable to undertake the annual fall Chinook monitoring program, or WDFW reduces its level of participation compared to the above level of monitoring, PacifiCorp's obligation will not increase, but will continue to be implemented at the same level identified above as PacifiCorp's obligation.

SCHEDULE 10.8: WILDLIFE OBJECTIVES

SCHEDULE 10.8: WILDLIFE OBJECTIVES

1 Introduction

The purpose of the Lewis River Wildlife Habitat Management Plan (WHMP, or the Plan) is to offset habitat impacts and associated wildlife losses resulting from continued operation of the Lewis River Projects by protecting (including from further development), mitigating and enhancing existing wildlife habitat on the Licensees' owned and/or controlled lands that are associated with the Projects.

This document presents broad objectives that will be used by the Terrestrial Coordinating Committee and the Licensees in developing more specific objectives, standards and guidelines, standard operating procedures and specific management actions for the Plan. While the broad objectives provide direction and guidance for developing the Plan, the standards and guidelines and specific management actions will govern the Plan's implementation. They will offer the clarity and specificity about intent and desired outcomes that will ensure that the Plan is being implemented in a way that achieves the broad objectives. It is the intent of the parties to develop the plan by the time the current licenses expire.

These wildlife objectives reflect current thinking, information and management practices. Over time, current thinking may change. In that event, the objectives may need to change, too. Any changes to the objectives must be consistent with the Settlement Agreement and agreed upon by the members of the TCC before they are finalized.

These objectives take into consideration culturally significant species. The Plan must also be developed with the preservation and protection of culturally significant species in mind.

Any proceeds that may occur from the implementation of the Plan may be used to offset costs incurred from implementing the Plan.

2 OVERALL OBJECTIVES

2.1 Old-Growth Habitat Management

- Provide habitat for wildlife species associated with old-growth habitats as well as
 habitat components preferred by these species (e.g. snags, down wood, "wolf" trees,
 and multistoried stands).
- Identify designated old-growth areas as being managed towards one of three categories:

2.1.1 Category I

Old Growth designation includes forested lands that may exhibit few, if any, old-growth characteristics (e.g., large snags, down wood, multistoried canopies).

Management may include intensive forestry actions intended to accelerate succession and create optimal cover for big game while also providing benefits for old-growth associated species. Optimal big game cover provides both forage and cover for deer and elk. Optimal cover is further defined as a coniferous forest stand with overstory trees that exceed twenty-

one inches in diameter, have a canopy cover of at least seventy percent with scattered small openings, and at least four canopy layers including an herbaceous ground cover.

2.1.2 Category II

This Old Growth designation includes forested lands that are primarily young to mature conifer cover types, but lack many characteristics of functional old-growth habitat (e.g., large snags, down wood, uneven-aged multistoried canopies). Management may include low-intensity forestry actions (i.e., no clearcuts) intended to enhance old-growth structure (e.g., create limby "wolf" trees, topping mature trees to produce snags, thinning sub-dominant trees). The objective is to provide both large diameter trees and snags for denning and nesting habitat and trees with large branches for roosting, perching, and foraging habitat in an association that will benefit old growth and mature forest dependent species.

2.1.3 Category III

Old Growth designation includes forest lands that largely exhibit old-growth characteristics and functions (e.g., large snags, down wood, multistoried canopies). Management is conducted only when monitoring indicates need targeted toward increasing habitat diversity and promoting old-growth associated species.

2.2 Snags and Coarse Woody Debris Management

- Provide nesting, perching, and foraging habitat for a variety of wildlife species associated with these habitat components across all appropriate areas covered by the Plan.
- In general, do not compromise management for snags or coarse woody by forest management.
- Conduct actions for snags and coarse woody debris in all management areas, with timber harvest planned to accomplish snag and coarse woody debris objectives.
- Emphasize retention of hollow trees, snags and logs, retention of western red cedar snags and coarse woody debris and manage snags in clumps and groups where appropriate, and when safety is not an issue.
- Provide random isolated snags where possible to reduce territorial conflicts for some species.

2.3 Shrub-land Habitat Management

- Provide winter browse for deer and elk, habitat for upland game and non-game birds, and habitat diversity.
- Manage vegetation to perpetuate and enhance shrub-lands. In managing shrub-lands, consider the variation between shrub-land sites and apply management options that take advantage of desirable attributes for the specific site to optimize benefits for desired groups of wildlife species.
- Retain a limited number of large cedar trees or other conifers to provide perch trees
 and future snags where they will not preclude specific shrub-land management
 objectives.
- Designate and manage shrub-lands to meet the objectives of one of the three following categories:

2.3.1 Big Game

Maintain or improve the current structure (i.e., thick hiding cover in some areas and travel lanes), especially in the central portion of the shrubland. Produce available browse (i.e., within reach of animals) and encourage palatable species by pruning and/or reducing competition from less desirable species.

2.3.2 Birds/Wildlife Diversity

Encourage desired fruit or soft mast bearing species native to the site and maintain structural diversity.

2.3.3 Unique Areas

Maintain unique character and promote regeneration of unique species. Minimum management is preferred.

2.4 Farmland and Meadow Management

Provide and maintain quality forage and browse conditions for elk and deer from 1
November through 30 April (including reducing disturbance) while also creating or
maintaining screening, cover, and structure between fields or along edges of
meadows to encourage use by other wildlife species.

2.4.1 Farmland

Consistent with the Merwin Wildlife Habitat Management Plan, manage to provide high quality forage benefits for wildlife, as well as reduce disturbance during the elk use period, and maintain screening, cover and structure between fields.

2.4.2 Meadow

Consistent with the Merwin Wildlife Habitat Management Plan, manage to improve and maintain permanent forage and browse areas for elk and deer while maintaining irregular shaped meadow areas and existing shrub islands and hedgerows for diversity and screening. "Natural" meadows acquired in the future will be evaluated as to whether active management is appropriate, as little or no management may provide the greatest benefits for the majority of wildlife species.

2.5 Right-of Way (ROW) Management

 As currently practiced at Merwin, maintain desirable shrub species for browse, enhance grass-forbs for forage, and reduce disturbance to wildlife using the ROW. The ROW should continue to provide a travel corridor with abundant forage for big game and other wildlife species and the diversity of habitats should be maintained.

2.6 Wetland Management

 Within existing wetlands, provide wetland areas with diverse aquatic and riparian vegetation to promote diversity for waterfowl, shorebirds, amphibians and other wildlife species.

2.7 Orchard Management

• Provide a food source (fruit and buds) for big game and upland game birds, provide food and nesting cover for non-game birds, and increase habitat diversity.

2.8 Raptor Management

- Provide habitat for and minimize disturbance to raptors, including northern bald eagles, ospreys, accipiters, and owls.
- A secondary objective related to raptor management is to conduct inventories and monitoring surveys for identified species and at appropriate intervals.

2.9 Forest Management

• Improve big game (i.e., deer and elk) wintering areas by developing high quality forage opportunities using timber management, while maintaining an appropriate ratio of cover to forage in the forest management zone to provide habitat diversity.

2.10 Oak Tree/Habitat Management

Maintain or enhance the composition of oak in areas it occupies. If ecologically
feasible, active management should be accomplished to maintain and enhance stands
of oak, including selecting against conifer encroachment.

2.11 Noxious and Invasive Weed Species Prevention and Control

 Prevent or minimize the establishment and spread of noxious and invasive weed species on Licensee-owned and/or controlled lands and to control known noxious and invasive weed species on said lands to meet State and local objectives and requirements. Inventory and monitoring are key aspects for a successful integrated weed management program on these lands.

2.12 Riparian Zone Management

 Maintain or restore native plant species assemblages and vegetation structures that benefit riparian-associated wildlife species. Management will primarily entail protecting riparian habitats (i.e., buffer zones) from impacts due to forestry or recreational activities.

• Emphasize preserving multiple canopies in riparian zones, where present (including a dense over-story component where appropriate), maximizing ground cover and managing to restore the ecological processes associated with riparian zones.

2.13 Access Management

• Allow reasonable public access (not necessarily vehicular) for recreation, including hunting, subject to restrictions related to capacity, safety, security, and to protect environmental and cultural resources, as long as that level of access does not hinder meeting other objectives of the WHMP or the protection and enhancement of wildlife habitat. Access management may include gating roads, controlling disturbance of sensitive areas (e.g., nest sites, cultural resources), temporal restrictions (e.g., Saddle Dam farm), and requirements related to implementation of state and federal law.

2.14 Bull Trout Conservation

The management objective for Devil's Backbone and Cougar Creek Conservation Covenant areas is to benefit bull trout conservation. The intent is to have no management within these zones with the exceptions of noxious plant treatment and actions needed to protect the objectives of protecting bull trout habitat, consistent with the recorded conservation covenant.

2.15 Swift Reservoir and Yale Valley Management Zone

Due to the undefined nature of these potential zones, management objectives and procedures will be developed when management rights are obtained and/or land acquisition is complete. Management of these lands will be consistent with the already described objectives for habitat types that are ultimately included in the management zone.

3 MONITORING AND HABITAT EVALUATION PROCEDURES (HEP)

3.1 The Monitoring Component

The Lewis River Wildlife Habitat Management Plan shall include a monitoring component that sufficiently documents plan implementation, assesses effectiveness of the management activities, and documents progress toward meeting the WHMP's objectives. The HEP study is part of the assessment of progress toward meeting the Plan's objectives. More specifically, the assessment shall include: baseline evaluation and update to include all wildlife lands; mid-course HEP evaluation at year 17; and use of HEP results to fine-tune the management plan.

Lewis River Hydroelectric Projects Settlement Agreement
SCHEDULE 12.4.1: EMERGENCY TELEPHONE NOTIFICATION SYSTEM AREA

