SKAGIT RIVER HYDROELECTRIC PROJECT

No. 553

SETTLEMENT AGREEMENT

CONCERNING

EROSION CONTROL

BETWEEN

THE CITY OF SEATTLE

AND THE

U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE

APRIL 1991

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UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

SETTLEMENT AGREEMENT

CONCERNING EROSION CONTROL, INCORPORATING THE EROSION CONTROL PLAN

1.0 PARTIES

This Settlement Agreement Concerning Erosion Control (Agreement), incorporating the Skagit River Hydroelectric Project Erosion Control Plan (Erosion Control Plan), is entered into this 24th day of April, 1991, by and between the City of Seattle, City Light Department (the City) and the U.S. Department of the Interior, National Park Service. Together the City and the National Park Service are referred to as the "Parties". The Skagit River Hydroelectric Project is referred to as the "Project".

2.0 GENERAL PROVISIONS

This Agreement establishes the City's obligations relating to soils and slope stability affected by the Skagit Project, as currently constructed. It also establishes the National Park Service's obligations to support this Agreement, and to submit it to the Federal Energy Regulatory Commission (FERC) as its recommendations relating to said soils resources under any applicable provisions of the Federal Power Act (including without limitation Sections 10(a), 10(j), and 4(e) thereof). The U.S. Forest Service agrees that this Agreement constitutes its preferred recommendation under Section 7(a) of the Wild and Scenic Rivers Act.

This Agreement resolves all issues related to the effects on soils and slope stability of the Project, as currently constructed, except for those erosion control requirements identified in the archaeological portion of the Settlement Agreement Concerning Cultural Resources (Archaeological and Historic Resources), for the period October 28, 1977, through the duration of this Agreement. This includes resolution of the effects of the absence of flows in the Gorge bypass reach. It shall be submitted to the FERC for incorporation into the new license for the Project and

shall be enforceable as an article thereof. The Parties agree that incorporation and enforcement as a license condition is a material provision of this Agreement.

The Parties stipulate that this Agreement constitutes adequate soils protection and compensation for the erosion impacts of the Project, as currently constructed, for the period October 28, 1977, through the duration of this Agreement.

For the period October 28, 1977, through the duration of this Agreement, the National Park Service, its successors and assigns hereby releases, waives, and discharges the City, its successors, and assigns from any and all claims, demands, actions and causes of action of any kind (claims) arising during that period from the effects of the Project, as currently constructed, on soils and slope stability, so long as the City performs its obligations under this Agreement. This release does not waive claims that may arise from the negligent or intentional misconduct of the City in the operation of the Project.

Nothing in this Agreement precludes the City or the National Park Service from complying with their obligations under the National Environmental Policy Act (NEPA), the Endangered Species Act, the Federal Power Act, the Wild and Scenic Rivers Act, or any other laws applicable to the Project. This Agreement shall not affect the rights of either Party except as expressly covered in this Agreement.

Nothing in this Agreement or in the plans, memoranda, procedures or other actions taken to further the purposes of this Agreement shall reduce or otherwise impair access to and exercise of implied or explicit Indian rights, including hunting, fishing and gathering rights; nor shall anything in this Agreement be construed as limiting, waiving or otherwise impairing whatever money damages claims the Tribes may have arising out of the construction and operation of the current Project outside the term of this Agreement.

All previous communications between the Parties, either verbal or written, with reference to the subject matter of this Agreement are superseded by the terms and provisions of this Agreement, and, once executed, this Agreement and its companion documents constitute the entire agreement between the Parties.

This Agreement shall be binding on and inure to the benefit of the Parties and their successors and assigns.

Each Party to this Agreement represents and acknowledges that it has the full legal authority to execute this Agreement and shall be fully bound by its terms.

2.2.1.1 Compliance and Submittal

By entering into this Agreement, the City agrees to comply with all of the terms of this Agreement, including the payment of monies and the funding of activities specified herein. The City further agrees to submit this Agreement, including the Erosion Control Plan, to the FERC as its proposed measures relating to the soil resources affected by the Project as required by applicable provisions of federal and state law, including without limitation the Federal Power Act.

2.2.1.2 Additional Staffing

The City shall assign adequate professional environmental staff to implement this Agreement. This shall include establishment of two new environmental staff positions with expertise in fisheries, wildlife, recreation, visual quality, cultural resources, and erosion control. One staff position shall be dedicated primarily to implementation of the Anadromous Fish Flow Plan and the Anadromous and Resident Fish Non-Flow Plan. The second staff position shall be dedicated primarily to implementation of the wildlife, recreation/aesthetics, and cultural resource agreements and this Agreement.

2.2.2.1 Support for Project Relicense

The National Park Service agrees to support the expeditious issuance of a new license to the City for the Project, as currently constructed, which is consistent with the provisions of this Agreement and which includes the Agreement as an article. This support shall include reasonable effort to expedite the NEPA process. The Parties shall file comments on any draft EA or EIS developed by the FERC in the relicensing proceedings for this Project and shall support the measures defined by this Agreement as the preferred action. The Parties shall exchange drafts of their respective comments prior to submittal to the FERC and consult with each other to ensure that the comments are consistent with this Agreement.

2.2.2.2 Erosion Control Recommendations

The National Park Service shall submit this Agreement to the FERC as its recommendations for control of erosion impacts of the Project under any applicable provision of the Federal Power Act (including without limitation Sections 10(a), 10(j), and 4(e) thereof). The U.S. Forest Service agrees that this Agreement constitutes its preferred recommendation under Section 7(a) of the Wild and Scenic Rivers Act.

2.2.2.3 Gorge Bypass Reach

The National Park Service agrees that this Agreement incorporating the Erosion Control Plan obviates any need for flow releases in the Gorge bypass reach for erosion control purposes. The National Park Service shall support all efforts by the City to either retain its existing water quality certificate issued by the State of Washington, Department of Ecology (WDOE) on October 27, 1977, or, in the alternative, to obtain a new water quality certificate consistent with the terms and conditions of this Agreement, including the absence of flows in the Gorge bypass reach. In the event efforts are made to reclassify the Gorge bypass reach from a Class AA water to another Class water under WDOE regulations, the National Park Service shall not oppose this action and shall, at a minimum, provide written comments not opposing this action to the WDOE. Should the City be required to release flows in the Gorge bypass reach at any time before the issuance of a new FERC license and for any reason, this Agreement shall be voidable at the option of the City. Should the City be required to release flows in the Gorge bypass reach at any time after the issuance of a new FERC license and for any reason, this Agreement shall give rise to an immediate right of the City to petition the FERC to reconsider or reopen applicable license provisions to reconsider all resource provisions including those for soils in light of such requirement. Under such circumstances, the City's efforts to initiate a proceeding before the FERC to reconsider or reopen shall not be opposed by the National Park Service; the Parties may, however, differ in their respective positions in such a proceeding.

2.2.3.1 Cooperation Between Parties

The Parties shall cooperate in conducting and participating in studies and other actions provided for in this Agreement and shall provide assistance in obtaining any approvals or permits that may be required for implementation of this Agreement.

2.2.3.2 Support of Agreement

The Parties agree to join in the filing of an Offer of Settlement with the FERC based upon this Agreement and to request that the FERC issue appropriate orders approving this Agreement. Both Parties shall refrain from seeking judicial review of the FERC's approval of this Agreement. It is expressly agreed by the Parties that this Agreement shall be submitted to the FERC as a unit and that any material modification of its terms, approval of less than the entire Agreement, or addition of material terms by the FERC shall make the Agreement voidable at the option of any Party.

This Agreement shall take effect upon the effective date of a license issued by the FERC consistent with this Agreement, provided that Sections 2.5.2 and 6.1.1 obligate the City to specific monetary commitments prior to the effective date; these early obligations take effect upon the submittal to the FERC by the Parties of an Offer of Settlement pursuant to Section 2.2.3.2. If the FERC issues a new license inconsistent with this Agreement and if either Party appeals, the Agreement shall not go into effect. The Parties retain the right to appeal the issuance of a license in whole or in part if unacceptable provisions are added, including stay of any provision.

This Agreement, together with any subsequent modifications, shall remain in effect for the term of the new FERC license period for the Project, which includes the term(s) of any annual license(s) that may be issued after the foregoing new license has expired. This includes ongoing operations and maintenance expenses that shall continue to be funded for the duration of this Agreement.

It is understood and agreed by the Parties that similar settlement agreements are being executed between the City, the National Park Service, and other intervenors (not party to this Settlement Agreement) in the Project relicensing proceedings concerning other resources affected by continuing Project operations. These other settlement agreements and mitigation and enhancement plans include:

- Fisheries—Fisheries Settlement Agreement, incorporating the Anadromous Fish Flow Plan and the Anadromous and Resident Fish Non-Flow Plan;
- Wildlife—Settlement Agreement Concerning Wildlife, incorporating the Wildlife Habitat Protection and Management Plan;
- **Recreation and Aesthetics**—Settlement Agreement on Recreation and Aesthetics (including the Recreation Plan and the Visual Quality Mitigation Plan);
- Cultural Resources—Settlement Agreement Concerning Cultural Resources (Archaeological and Historic Resources), incorporating the Cultural Resources Mitigation and Management Plan, which includes the historic and archaeological resources mitigation and management plans;
- **Traditional Cultural Resources**—Settlement Agreement Concerning Traditional Cultural Properties, incorporating the Traditional Cultural Properties Mitigation Plan.

The City shall host an annual meeting of the Intervenors to facilitate coordination of implementation of the various settlement agreements. The National Park Service agrees to cooperate in across forum coordination as necessary and appropriate to further effective program implementation.

All dollar amounts listed in this Agreement are defined as 1990 dollars and shall be adjusted annually for inflation or deflation by using the revised Consumer Price Index (CPI-U) for All Urban Consumers as published by the United States Department of Labor for the Seattle Metropolitan area. The indices used shall be those published for the last half of 1990, and for subsequent years, the last half of the calendar year preceding that in which a payment

or expenditure is to be made. Indexing of items in this Agreement shall continue until the year of actual payment, unless otherwise provided in this Agreement. The percentage of change from the earlier index to the later index shall be multiplied by the amount specified in this Agreement and the result added to or subtracted from that amount to arrive at the total payment or expenditure. Should the CPI-U index not be available, the Parties agree to negotiate another statistical basis for determining annual changes in the City's monetary commitments.

Payments and obligations by the City for this Agreement shall be made and met on a license-year basis. License years are based on the date of the FERC order issuing a new license for the Project; however, unless specifically provided otherwise in this Agreement, the City's monetary obligations do not become payable until the license becomes effective (see Section 2.3). The City shall make the 1991 interim payment to the National Park Service as provided in Section 6.1.1 of this Agreement as soon as practicable after the Parties submit this Agreement to the FERC pursuant to Section 2.2.3.2. The City shall make the 1992 and 1993 interim payments to the National Park Service as provided in Section 6.1.1 of this Agreement. The City shall make monies due in license year one available at the time they are needed as soon as possible after the license becomes effective. In subsequent license years, the City shall make payments to the National Park Service for non-project specific purposes shall be paid on the last day of each license year. If the license becomes effective during a season critical for implementation, it may be impossible to implement a particular program element that year. Therefore, the Parties agree that implementation of such elements may not occur until the license year following its stated schedule in this Agreement and the Erosion Control Plan. Agreed upon rescheduling of projects solely as a result of seasonal considerations shall not be considered a license compliance violation.

The City shall not be liable or responsible for failure to perform or for delay in performance because of any cause or event or circumstance of Force Majeure. For purposes of this Agreement, Force Majeure is any cause or event beyond the City's reasonable control. This may include, but is not limited to, fire, flood, mechanical failure or accidents that could not reasonably have been avoided by the City, strike or other labor disruption, act of God, act of any governmental authority or of the Parties, embargo, fuel or energy unavailability (ancillary to, but not including, basic power generation), wrecks or unavoidable delays in transportation, and inability to obtain necessary labor, materials or manufacturing facilities from generally recognized sources in the applicable industry, or communications systems breakdowns, or for any other reason beyond the City's control. The City shall make all reasonable efforts to resume performance promptly once the Force Majeure is eliminated.

For purposes of implementing this Agreement, the Parties agree that the following individuals shall be designated by each to be the primary contact persons. The initial contact person for the City is:

Superintendent Seattle City Light 1015 Third Avenue Seattle, WA 98104-1198 (206) 684-3200

and the initial contact person for the National Park Service is:

Superintendent North Cascades National Park Service Complex 2105 Highway 20 Sedro Woolley, WA 98284 (206) 856-5700

Notification of a change in a contact person must be made in writing and delivered to the other contact person.

All written notices to be given pursuant to this Agreement shall be mailed by first class mail or overnight express service, postage prepaid, to each Party at the addresses listed above or such subsequent address as a Party shall identify by written notice to the other Party. Notices shall be deemed to be given five (5) working days after the date of mailing.

Notwithstanding any other provision of this Agreement, either Party may at any time invoke or rely on any reopener clause(s) in the license for the Project in order to request the imposition by the FERC of different or modified measures for erosion control. Any provision of this Agreement that might be read to limit or preclude either Party from raising any relevant material issue of fact or law in reopening or to otherwise conflict with reopening (e.g., Sections 2.1, 2.1.1, 2.1.2, 2.1.3, 2.1.4, and 2.2.2.2) shall be inoperative to the extent of any such limitation, preclusion or conflict.

Before invoking any reopener clause under Section 2.8.1, a Party shall request the other Party to commence negotiations for a period of up to 90 days to modify the terms and conditions of this Agreement in whole or in part. Any such modification shall be subject to FERC approval, except that the Parties may agree to implement on an interim basis, pending FERC approval, any measure not requiring prior FERC approval.

In any action under Section 2.8, the petitioning Party shall have the burden of proof.

The Parties shall continue to implement this Agreement pending final resolution of any modification sought from the FERC, or until the relief sought becomes effective by operation of law, or unless otherwise agreed. At the time of petitioning the FERC under Section 2.8.1, nothing shall prevent either Party from requesting the imposition of different or modified measures, from bringing any cause of action in any appropriate forum, or from taking other actions relating to any issue or matter addressed by this Agreement.

This Agreement applies to the Project excluding High Ross or any modified High Ross construction. It does not address mitigation for the effects of raising Ross Dam. In the event the City decides to consider raising Ross Dam, separate provision will be made for additional mitigation. The Parties shall initiate discussions regarding mitigation of erosion impacts according to the following procedures.

The City shall notify the National Park Service of its decision to consider raising Ross Dam at least thirty months before construction would commence.

At the same time, the City shall commence consultation on necessary soils studies and possible erosion control measures.

At least 180 days before construction would commence, the City shall either agree with the National Park Service on modifications to this Agreement, or remaining disputes over erosion control measures may proceed as described in Section 3.0 at the option of either Party.

2.9.5 Mitigation Criteria

Mitigation for the effects on soils, if any, of raising Ross Dam shall be based on criteria developed through any necessary soils studies that are conducted at the time that the City decides to consider raising Ross Dam.

Nothing in this Agreement shall preclude the National Park Service from challenging the construction of High Ross, including disputed mitigation, in any proceeding. The mitigation procedures set out in this Section are not exclusive and need not be commenced or exhausted prior to such challenges.

3.0 DISPUTE RESOLUTION

Any dispute between the Parties solely concerning asserted non-compliance with the terms of this Agreement shall be referred to technical representatives of the contact persons identified in Section 2.7. The technical representatives shall meet as soon as possible after written notification of a dispute by either Party. Decisions of the technical representatives must be unanimous. In the event that the technical representatives cannot resolve the dispute within thirty (30) days after first meeting on said dispute, the City shall give notice of such failure to the National Park Service.

The Parties may, at their option prior to elevating an issue to the FERC, convene an in-person or telephone conference of policy-level administrators should technical level representatives fail to resolve a dispute under Section 3.1. Either Party through its designated contact in Section 2.7 may invoke optional policy review by contacting the other Party's designated contact and arranging a suitable conference. Decisions by unanimous consent shall bind both Parties. The policy-level representatives may by unanimous consent agree to binding arbitration or mediation subject to rules as they determine appropriate. In the event that the policy-level representatives cannot resolve the dispute within fifteen (15) days, the matter may be taken to the next level.

In the event that disputes are not resolved at the first two levels of dispute resolution, either party may refer the matter to the FERC for resolution pursuant to the FERC's Rules of Practice and Procedure.

Notwithstanding any other provision of this Agreement, either Party may seek relief arising solely from noncompliance with this Agreement by the other Party.

4.0 ROSS LAKE OPERATIONS

The City shall fill Ross Lake as early and as full as possible after April 15 each year, subject to adequate runoff, anadromous fisheries protection flows (specified in the Skagit River Anadromous Fish Flow Plan), flood protection, minimized spill, and firm power generation needs. Subject to the above constraints and hydrologic conditions permitting, the City shall achieve full pool by July 31 each year.

The City shall hold Ross Lake as close to full pool as possible through Labor Day weekend, subject to adequate runoff, anadromous fisheries protection flows (specified in the Skagit River Anadromous Fish Flow Plan), flood protection, minimized spill, and firm power generation needs.

In any overdraft year (i.e., in those years in which Ross Lake is drafted below the energy content curve), the City shall bring the Ross Lake level up to the Variable Energy Content Curve (VECC) no later than March 31, subject to adequate runoff, anadromous fisheries protection flows (specified in the Skagit River Anadromous Fish Flow Plan), flood protection, minimized spill, and firm power generation needs.

5.0 EROSION CONTROL RESPONSIBILITIES OF THE CITY

As the licensee for the Project, the City shall oversee the implementation of this Agreement, providing funding for its implementation, and bear final responsibility for the implementation of the Erosion Control Plan. The City shall construct greenhouse facilities and institute a plant propagation program for the primary purpose of supplying plant stock for erosion control sites. The goal of the City shall be to complete the greenhouse facilities and have the plant propagation program fully operational by the end of the third year of the new license. As much as practical, the City shall use the guidelines listed in Section 2.5 of the Erosion Control Plan in the design, maintenance, and rehabilitation of Project roads. The City shall also implement the additional erosion control measures as specified in Section 2.6 of the Erosion Control Plan.

The City shall be the lead for all erosion control work other than biotechnical slope protection measures at the Project road sites specified in the Erosion Control Plan in accordance with the schedule set forth in Table 5-1 and at new Project road sites identified in accordance with Section 11.0 of this Agreement. Project road sites are identified in Table 5-1 by location number prefaced by the letter "R." In doing erosion control work at new Project road sites, the City shall follow the guidelines in Section 2.5 of the Erosion Control Plan. The City's responsibilities at Project road sites shall include grading and site preparation for vegetation work that will be done by the National Park Service.

6.0 FUNDING RESPONSIBILITIES OF THE CITY

The City shall provide funding for the purpose of implementing all of the erosion control activities pursuant to this Agreement (see Figure 6-1). The City shall provide a maximum of \$845,000 to the National Park Service for work during the pre-license years and the first nine license years at the sites identified in the Erosion Control Plan as described below (see Sections 6.1, 6.1.1, and 6.1.2). The City shall provide a maximum of \$500,000 to the National Park Service for maintenance of erosion control measures, installation of erosion control measures at new sites, and, if necessary, completion of work at the sites in the Erosion Control Plan as described below (see Section 6.2). The City shall separately fund and implement construction of greenhouse facilities and institution of a plant propagation program to supply stock for erosion sites as described below (see Section 6.3).

Project Year (City's Obligations) ^{1/}	Site Name ^{2/}	Site Priority	Comments
Year 1	One-time equipment purchase ^{3/}		
(\$124,676)	One-month backhoe (lease) ^{4/}		
	W-124 (\$6,868) ^{5/}	Н	
	R-17 (\$21,128)	Н	Road site
Year 2	2 months backhoe (lease) $^{4/}$		
(\$122,364)	Monitoring set-up ^{6/}	Н	
	E-56 (\$11,841)	н	Blg site; popular camp; old trees
	E-134A+B (\$5,213)	Н	Potential loss of dock bulkhead
	E-70A5 (\$33,493)	Н	East Bank Trail
	R-8A, R-8B, R-8C, R-11, R-15 (\$22,457)	Н	Road sites
Year 3	2 months backhoe (lease) $4/$		
(\$72,013)	E-116 (\$6,737)	н	N. Lightning Cr. Trail
(+))	E-70A3 (First half) (\$40,290)	Н	East Bank Trail; Big Beaver Trail
	E-70A1 (\$8,370)	Н	East Bank Trail; Big Beaver Trail
	R-1, R-5 (\$7,256)	Н	Road sites
Year 4	2 months backhoe (lease) $^{4/}$		
(\$73,820)	W-34 (\$18,588)	Н	
	W-36A, W-36B (\$5,582)	M ^{7/}	
	E-70A3 (Second half) (\$40,290)	н	East Bank Trail; Big Beaver Trail
Year 5	2 months backhoe (lease) ^{4/}		
(\$74,307)	E-9 (\$9,908), E-64 (\$23,460),	н	
(\$11,001)	E-68 (\$6,911)		
	R-2, R-4, R-9, R-10, R-12, R-16	Н	Road sites
	(\$24,668)		
Year 6	2 months backhoe (lease) ^{4/}		
(\$71,516)	D-11 (\$5,661)	Н	Large site; potential loss of land
	D-8 (\$34,943), D-43 (\$5,558)	Н	
	D-40 (\$7,544)	М	
	R-14 (\$8,450)	L	Road site

 Table 5-1.
 Site protection priority and schedule.

Table 5-1. (Continued).

Project Year (City's Obligations) ^{1/}	Site Name ^{2/}	Site Priority	Comments
Year 7	2 months backhoe (lease) ^{4/}		
(\$76,326)	E-70A4 (\$33,615)	Н	East Bank Trail; Big Beaver Trail
	R-3, R-7, R-13 (\$9,924)	L	Road sites
	E-47 (\$4,073), E-80B (\$5,284), E-92 (\$3,287), E-100 (\$4,987)	Μ	
	E-70A6 (\$3,293)	М	East Bank Trail; Big Beaver Trail
	E-40 (\$2,503)	L	-
Year 8	2 months backhoe (lease) ^{4/}		
(\$66,036)	E-95 (\$18,936), E-112 (\$5,275), E-118A (\$3,929), E-118B (\$5,661)	Μ	
	(\$3,001) E-87 (\$2,869), E-117 (\$3,267) Maintenance of interim & other sites (\$16,739)	L	
Year 9 (\$64,942)	2 months backhoe (lease) ^{4/} W135 (\$38,799) Maintenance of previously-placed structures (\$16,783)	H	Class I site

- 1/ These are the City's obligations for each of the first nine license years as set forth in Section 6.1 of this Agreement; the nine-year total is \$746,000. The City's total obligation for erosion control work during pre-license years is a maximum of \$99,000 pursuant to Section 6.1.1 of this Agreement.
- 2/ See Section 3 of the Erosion Control Plan for details about each site. Sites are numbered and prefaced with the letters "R," "D," "E," or "W": "R"=road site; "D"=Diablo Lake site; "E"=site on east shoreline of Ross Lake; "W"=site on west shoreline of Ross Lake.
- 3/ First license year purchase of equipment by the National Park Service with City funds under this Agreement. Equipment to include boat, barges, barge rake, rock drill/hammer and compressor, hand tools, chain saw, electric winch, and generator at a total estimated cost of \$92,000.
- 4/ Lease of backhoe by the National Park Service with City funds under this Agreement. Estimated lease cost is \$4,680 per month.
- 5/ In parentheses after each site is the cost estimate for erosion control work to be done at that site. These estimates were used to derive the City's annual license year obligations. In the cases where erosion control work is planned at several road sites during a year, an estimate is given for the combined road sites.
- 6/ Annual monitoring program for recreation and Project facility sites where active erosion control measures have been installed, selected Class I, II, and III sites, road sites in Section 3.5 of the Plan, and new sites identified in accordance with Section 11.0 of this Agreement.

7/ Work at several medium priority sites has been scheduled for the same year as work at adjacent high priority sites for efficiency.

Figure 1 goes here

The license year obligations of the City and the National Park Service specified in this Section shall not begin until the license becomes effective and in no case shall begin earlier than 1993. Within sixty (60) days of the date the license becomes effective, the National Park Service shall notify the City in writing of the year it will begin the work scheduled for license year one as specified in Table 5-1. The City's license year obligations shall begin in the following year if notification is received after the month of March in the year of the issuance of the license. The year in which the actual work begins shall be "license year one" for the purposes of this Agreement. Payment of monies due under this Section shall be pursuant to Section 2.5.2 of this Agreement. The City's funding obligations to the National Park Service for erosion control work during the pre-license years are specified in Section 6.1.1 below.

A maximum amount of \$845,000 shall be provided by the City for erosion control work at the sites as identified and specified in Table 5-1 and described in the Erosion Control Plan. Additional amounts may be made available pursuant to Section 6.2. The sites in Table 5-1 are numbered and prefaced with the letters "R," "D," "E," and "W" to indicate location. From this amount the City shall provide the National Park Service with annual funding during the first nine license years as follows:

LICENSE YEAR	CITY'S OBLIGATION
1	\$124,676
2	\$122,364
3	\$ 72,013
4	\$ 73,820
5	\$ 74,307
6	\$ 71,516
7	\$ 76,326
8	\$ 66,036
9	<u>\$ 64,942</u>
Total	\$746,000

Cost estimates for the erosion control work at each of the sites in Table 5-1 and in the Erosion Control Plan have been developed and agreed to by the Parties. These estimates were used to derive the City's annual license year obligations listed above. These estimates represent the monies that shall be spent for erosion control work at each site except as mutually agreed otherwise by the Parties pursuant to Section 9.0. Total expenditures for the license year shall not exceed the total annual amounts listed above, except that these totals may be adjusted pursuant to Sections 6.2 and 6.5.1.

If, in accordance with Section 8.0 of this Agreement, the National Park Service declines to do the erosion control work at a site, and the City takes responsibility for that work, then the amount of funds remaining from the total of the \$845,000 available for allocation to the National Park Service shall be reduced by the amount the City spends for work on that site.

The City shall provide the National Park Service with up to a maximum of \$33,000 in 1991, \$33,000 in 1992, and \$33,000 in 1993 for implementation of erosion control work at high-priority reservoir shoreline camp and trail sites as identified in the Erosion Control Plan and detailed in work plans developed by the National Park Service for these three years and as agreed between the Parties. Upon written request for a specific 1991 amount from the National Park Service, the City shall make the 1991 funds available as soon as practicable after the Parties have submitted this Agreement to the FERC pursuant to Section 2.2.3.2 of this Agreement. The National Park Service shall notify the City as early as possible in 1991 (after submittal of this Agreement to the FERC) and 1992, respectively, of the amount of funding necessary to perform erosion control work in 1992 and 1993.

The City's license year funding obligations shall not begin until 1993 at the earliest pursuant to Section 6.1 above. If license year one as defined pursuant to Section 6.1 begins in 1993, then the City shall withhold or deduct the 1993 pre-license erosion control monies (a maximum of \$33,000) from the amount of its annual funding obligation for license year one. In the tenth license year, the City shall make these unexpended monies (a maximum of \$33,000) available to the National Park Service for erosion control work as provided in this Agreement.

The monies expended by the City for erosion control work done by the City at each Project road site pursuant to Section 5.0 of this Agreement shall be deducted from the City's annual obligations to the National Park Service under Section 6.1 of this Agreement during the license year for which work at that site has been scheduled in Table 5-1 of this Agreement. The monies expended for erosion control work at Project road sites shall be allocated by mutual agreement between the National Park Service and the City pursuant to the preparation of the work plans required in Section 9.0 of this Agreement.

The City shall provide the National Park Service the maximum amount of \$500,000 for the purposes of maintaining installed erosion control measures, implementing erosion control at new sites during the license term, and completing the erosion control work at the sites specified in the Erosion Control Plan if work under Section 8.0 remains uncompleted (except for ongoing monitoring) after expenditure of all funds available in Section 6.1. The City shall make the \$500,000 available to the National Park Service in license years 3 through 30 in the following scheduled amounts:

License Years 3-10:	\$100,000
License Years 11-15:	\$100,000
License Years 16-20:	\$100,000
License Years 21-25:	\$100,000
License Years 26-30:	\$100,000

If both Parties agree that completion of the work at the sites specified in Section 8.0 and in the Erosion Control Plan requires more than the funds specified in Section 6.1 (\$845,000), then the City shall make available, beginning in

license year 10 at the earliest which shall be in addition to the \$100,000 budgeted for license years 11-15, an amount up to a maximum of \$100,000 for this purpose. At the end of license year 15, the remaining amount of the \$500,000 shall be divided into three equal amounts which the City shall make available to the National Park Service over the three remaining 5-year license periods identified above.

The City shall fund construction of a greenhouse and implementation of a plant propagation program. This work shall be performed by the City. Construction of the greenhouse facilities by the City shall be scheduled for the first three years of the new license term. The City shall budget over the 30-year term of the new license for plant propagation supplies and for a full-time staff position that the City shall assign to the plant propagation program. The City shall also make annual payments of \$4,500 to the National Park Service during the term of the license (for a total of \$135,000 over a 30-year period) and during any subsequent annual licenses to provide financial assistance to the National Park Service in the hiring of seasonal help and in purchasing supplies. Details of the City's obligations with regard to the plant propagation program are included in Section 6.0 of the Skagit Project Wildlife Habitat Protection and Management Plan. The site plan for the greenhouse facilities is Figure 4-2 of the Settlement Agreement on Recreation and Aesthetics.

The National Park Service shall annually provide the City with an accounting report indicating what portions of the work plans prepared pursuant to Section 9.0 of this Agreement have been completed to date, how the funds the City has given to the National Park Service under this Agreement have been expended to date, and what funds have been carried over. The City shall review the accounting report and, on the basis of it, make an annual payment to the National Park Service in accordance with Section 2.5.2.

If, in accordance with Section 8.0, the National Park Service chooses to defer from one year to the next year work at one or more of the sites for which it has lead responsibility, then the portion of the \$845,000 that would otherwise have been used for that work shall be carried over to the next year and shall be indexed as provided in Section 2.5.1 until the year of actual payment. This carrying-over of funds shall be done upon notice of deferral of work from the National Park Service to the City.

If, in accordance with Section 9.0, the Parties agree that work at a site in the Erosion Control Plan is unnecessary, or should not or cannot be done at all, then the portion of the \$845,000 available under Section 6.1 that would otherwise have been used for that work shall be credited to the \$500,000 available under Section 6.2 for work at new sites and maintenance. All such unused funds shall be indexed as provided in Section 2.5.1 until the year of actual payment. This crediting shall be done upon agreement between the Parties for modification or deletion of work at a site in accordance with Section 9.0.

If work at the sites specified in the Erosion Control Plan is completed for less than the maximum of \$845,000 available under Section 6.1, then the unused portion shall be credited to the \$500,000 available under Section 6.2 for work at new sites and maintenance. All such unused funds shall be indexed as provided in Section 2.5.1 until the year of actual payment. This crediting shall be done when work at the sites specified in the Erosion Control Plan has been completed (except for ongoing monitoring).

Unused amounts of the monies that are available at the end of each of the first four time periods described in Section 6.2 shall be divided equally and credited to the funds available in the remaining time periods. All such unused funds shall be indexed as provided in Section 2.5.1 until the year of actual payment. This crediting of funds shall be done at the end of each time period.

At the end of the new license term and during subsequent annual licenses, the City shall make available to the National Park Service any unused portion of the \$500,000 available in Section 6.2 for erosion control work to be done by the National Park Service during the years preceding issuance of the next license (i.e., post-license interim years), if any, as follows. During the post-license interim years, the City shall provide \$25,000 annually for maintenance of installed erosion control measures and for work at new sites. The first funds to be used for this purpose shall be the unused portion of the \$500,000. The City shall make up the difference, if any, between these monies and the required \$25,000 annual payment.

All unused portions of the \$845,000 and \$500,000 available for erosion control work in Sections 6.1 and 6.2 shall be carried over to subsequent pre-license and license years as specified in Sections 6.5.1 through 6.5.3 of this Agreement. All such unused funds shall be indexed as provided in Section 2.5.1 until the year of actual payment.

The National Park Service shall be authorized to draw upon the unused portions of these monies in its annual funding requests to the City for erosion control work to be done during post-license years. However, upon issuance of the next license, the City's obligations under this Agreement shall terminate, and any unused portions shall remain permanently with the City.

None of the monies specified for the implementation of this Agreement may be used for the purpose of clearing State Highway Route 20 or any other roads in the Project area of slides or other debris.

7.0 EROSION CONTROL RESPONSIBILITIES OF THE NATIONAL PARK SERVICE

The National Park Service shall have the lead role in all erosion control work under this Agreement except at Project road sites as noted in Section 5.0. As lead, the National Park Service shall be responsible for all aspects of erosion control work, including planning, design, engineering, permitting, site preparation, materials, labor, contracting, construction, vegetative planting, and operation and maintenance. All work shall be done in accordance with the general guidelines in Section 2.0 of the Erosion Control Plan.

Work for which the National Park Service has lead responsibility shall be as follows. The National Park Service shall do all of the erosion control work during the pre-license years and the term of the new license at the sites listed in Table 5-1 in accordance with the site-specific guidelines in Section 3.0 of the Erosion Control Plan except at the Project road sites as noted in Section 5.0 above and in the next paragraph of this Section. Erosion control sites are listed in Table 5-1 by location number prefaced with the letter "R," "D," "E," or "W." In addition, the National Park Service shall do all monitoring at erosion control sites as provided in Section 10.0 below. In addition, the National Park Service shall do erosion control work at new sites during the license term as identified and agreed to in accordance with the stipulations in this Agreement. In doing work at new sites, the National Park Service shall follow the general guidelines in Section 2.0 of the Erosion Control Plan. The National Park Service shall also implement additional erosion control measures as specified in Section 2.6 of the Erosion Control Plan. The National Park Service may use erosion control funding under this Agreement for operation and maintenance of equipment purchased or leased with erosion control funding under this Agreement, provided that said equipment is used exclusively for the purposes of implementing this Agreement and the Erosion Control Plan.

The National Park Service shall also be the lead for biotechnical slope protection measures (vegetation measures, including seeding) at the Project road sites identified in the Erosion Control Plan and at any new Project road sites identified in accordance with Section 11.0 of this Agreement. The National Park Service shall provide technical assistance to the City in erosion control work at Project road sites for which the City has responsibility (see Section 5.0).

The use by the National Park Service of City facilities and equipment at the Project to implement erosion control measures for which it is the lead is not included under this Agreement but may be arranged by mutual agreement between the City and the National Park Service. Installation of erosion control measures at shoreline sites must be timed around lake levels; the City is not obligated to modify lake levels to accommodate such installation. Portions of the erosion control work under this Agreement may require drawdowns of Gorge and Diablo reservoirs. The

National Park Service shall coordinate with the City to schedule the least disruptive time for the work. The City retains the right to defer necessary drawdowns until they are required for other Project maintenance activities. The City shall provide assistance, through mutually agreed scheduling of the City's barges, in the implementation of erosion control work at sites D-8, D-11, D-40, and D-43 on Diablo Lake as identified in Section 3.2 of the Erosion Control Plan.

8.0 SCHEDULE FOR WORK AT THE SITES SPECIFIED IN THE EROSION CONTROL PLAN

The goal of the Parties shall be to complete the erosion control work at the sites specified in the Erosion Control Plan during the pre-license years and the first nine license years in accordance with the schedule set forth in Table 5-1. The National Park Service shall do all of the erosion control work at the numbered site locations in Table 5-1 prefaced with the letters "D," "E," or "W" (e.g., W-34) except at Project road sites, which have location numbers prefaced with the letter "R" (e.g., R-8A). Sections 5.0 and 7.0 above describe the responsibilities of the City and the National Park Service at Project road sites. The dollar amounts in Table 5-1 are the City's funding obligations to the National Park Service for each of the nine license years, as described in Section 6.1 above; the City's funding obligations to the National Park Service for erosion control work during the pre-license years are specified in Section 6.1.1. The National Park Service may use these monies to purchase or lease equipment; anticipated purchases and leases of equipment are shown in Table 5-1.

The implementation schedule shall be subject to modification through the mutual agreement of the Parties. The National Park Service shall have the option of delaying any of the work at the sites for which it has lead responsibility to the following license year and shall inform the City of such rescheduling of work. The National Park Service can reschedule the work at a site four times. The City shall become the lead on implementation of the erosion control work at a site if such work has not begun within five years after the original scheduled year for work, unless both Parties agree to waive this provision on a case-by-case basis.

9.0 EVALUATIONS AND WORK PLANS

The Parties shall have joint responsibility for preparing, on an annual basis for pre-license years and the first nine license years, and on a biennial basis for the remaining license years, an evaluation of previous erosion control work and a work plan for the following two years. Work plans shall follow the schedule set forth in Table 5-1 unless modified by agreement of the Parties. Work plans shall be consistent with the general and site-specific guidelines for erosion control measures specified in Sections 2.0 and 3.0 of the Erosion Control Plan and shall include final design drawings and specifications prepared by the National Park Service and approved by the City. Except for Project road sites, if site-specific designs significantly differ from those provided in the Erosion Control Plan, the National Park Service shall provide new design drawings and specifications for approval by the City. For Project road sites, new design drawings and specifications shall be prepared by the City, in consultation with the National Park Service. All work plans must be approved by the City.

Erosion control work at a site specified in Table 5-1 may be rescheduled at the discretion of the National Park Service as provided in Section 8.0, or the work may be modified or deleted from the Plan through the joint agreement of the Parties. Decisions to reschedule, modify, or eliminate erosion control work at a particular site shall be based upon, but not limited to, the following: seasonality, feasibility, changed erosion conditions, the completion of high-priority work, either Party's budget, or equipment and staff availability. Such decisions shall be documented in the evaluations and work plans.

10.0 EROSION MONITORING

The National Park Service shall monitor erosion at sites where both active and passive mitigation measures have been installed in accordance with this Agreement. Monitoring is the only measure proposed for erosion control at selected Class I, II, and III sites (see Table 1-1 of the Erosion Control Plan for definitions) and at critical wildlife habitat areas adjacent to eroding shorelines. The National Park Service shall begin monitoring at these sites as scheduled in Table 5-1. After consultation with and agreement from the City, the National Park Service may institute more active erosion mitigation measures at these sites as conditions change and as more is learned about the processes and rates of erosion at these sites.

The National Park Service shall undertake monitoring at sites where active erosion control measures are first installed within one year of the date of their installation in order to determine which active measures work best at the sites protected first (i.e., high-priority sites). In consultation with the City, the National Park Service shall use this information to modify erosion control measures proposed for sites assigned medium or low priority.

Monitoring shall include initial cross section surveys, placement of rebar stakes, photographic documentation, and periodic and intermittent resurveys based on first-year information. The National Park Service shall monitor erosion at critical wildlife habitat sites yearly. Along both the transmission line corridor, especially where access roads cross steep landslide deposits, and steep slopes cut by State Highway Route 20, the National Park Service shall survey erosion annually. The National Park Service shall also monitor erosion at the Project road sites identified in Section 3.5 of the Erosion Control Plan.

The National Park Service shall monitor erosion at all new sites that are identified and for which site-specific erosion control plans are implemented in accordance with Section 11.0 below.

11.0 EROSION CONTROL WORK AT NEW SITES

New sites for erosion control work shall be identified jointly by the City and the National Park Service as follows. In conjunction with ongoing monitoring of erosion and inspection of erosion control measures at the reservoir shoreline sites identified in Section 3.0 of the Erosion Control Plan, the National Park Service shall identify any new shoreline area where erosion is such as to raise concern about the need for protection during the term of this Agreement. The National Park Service shall consult with the City to determine whether there are recreational facilities (trails, campgrounds, etc.), Project facilities (utility poles, etc.), or critical biological habitat within 300 feet of the eroding shoreline at full pool. If there are none, no further action shall be taken. If such sensitive areas (i.e., recreational facilities, Project facilities, or critical biological habitat) exist within 300 feet of the eroding shoreline,

then the National Park Service shall arrange for the determination of the local shoreline erosion rate based on either known past shoreline positions, or, if these data are not available, the back-slope angle method described in Appendix A of the Erosion Control Plan.

The National Park Service shall also identify any new sensitive areas (recreational or project facilities, or critical biological habitat) where there is concern over whether the nearby shoreline area needs to be protected against erosion. If the newly identified sensitive area is within 300 feet of an eroding shoreline, then the National Park Service shall arrange for the determination of the local shoreline erosion rate based on either known past shoreline positions, or, if these data are not available, the back-slope angle method described in Appendix A of the Erosion Control Plan. If the newly identified sensitive area is more than 300 feet but less than 900 feet from the shoreline at full pool, the National Park Service shall initiate erosion monitoring. If the newly identified sensitive area is more than 900 feet from the shoreline at full pool, no further action shall be taken.

The observed bank recession rate or the erosion rate as determined by the back-slope angle method in Appendix A of the Erosion Control Plan shall be used by the National Park Service and the City jointly to determine whether sensitive areas are likely to be adversely affected by erosion over the license period plus 25 years. If both Parties agree these estimates indicate the possibility of an impact on sensitive areas from erosion, then the National Park Service shall prepare and implement a site-specific erosion control plan in consultation with the City.

Respectfully submitted.

Dated: April _____, 1991

THE CITY OF SEATTLE

By: _____

Randall W. Hardy Superintendent of City Light

Address for Notice:

Seattle City Light 1015 Third Avenue Seattle, WA 98104 Dated: April _____, 1991

U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE

By: ____

John Earnst Superintendent

Address for Notice:

North Cascades Park Service Complex Pacific Northwest Region, National Park Service U.S. Department of the Interior North Cascades National Park Service Complex 2105 Highway 20 Sedro Woolley, WA 98284

The National Park Service and the City shall identify new erosion sites that occur along Project area roads. By mutual agreement and in accordance with Sections 5.0, 7.0, 9.0, and 10.0 above, the City and the National Park Service shall prepare and implement site-specific erosion control plans at these new sites.

12.0 SIGNATURES

IN WITNESS WHEREOF, the City has caused this Settlement Agreement to be executed by its Superintendent of Light pursuant to Ordinance No. 106741 and the Intervenors have executed same pursuant to applicable legal authority.