1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

KING COUNTY

Signature Report

January 29, 2002

Ordinance 14285

Proposed No. 2002-0047.3 **Sponsors** Pelz, Patterson, Edmonds, Constantine and Phillips

AN ORDINANCE authorizing the executive to enter into an agreement with the United States Army Corps of Engineers to implement Phase I of the preconstruction engineering and design portion of the Green/Duwamish river ecosystem restoration project, and declaring an emergency.

STATEMENT OF FACTS:

The King County council has determined that:

1. The Green/Duwamish river watershed ("watershed") in King County is an invaluable natural resource that is home to many fish and wildlife species, including Chinook salmon and bull trout, recently listed as threatened under the Endangered Species Act. Degradation of the watershed, due to urbanization, physical alterations, and other factors, is of concern to citizens, interest groups and governments sharing jurisdiction in or with a major interest in the watershed.

2. In recent years, governments with jurisdiction or interests in the watershed, with input and participation from other interested parties, have initiated significant cooperative efforts to evaluate habitat restoration needs in the watershed. Of particular note among these efforts is the multiphase Green/Duwamish river ecosystem restoration project ("ERP"), undertaken jointly among the United States Army Corps of Engineers ("USACE"), King County, and other jurisdictions in Water Resource Inventory Area ("WRIA") 9.

3. In 1998, through an interlocal agreement, jurisdictions in the watershed provided the required local sponsorship share for the ERP feasibility study. A primary product of this study, completed in 2000, was the identification of forty-five sites in the watershed with high potential for habitat restoration. An environmental impact statement, completed in 2000, addressed potential effects of implementing the ERP.

4. The USACE, King County, and other WRIA 9 jurisdictions intend to initiate the next phase of the ERP to prepare designs and environmental documents for the restoration sites. This work will be completed through a series of preconstruction, engineering and design ("PED") agreements. The first of these agreements ("PED Phase I agreement"), which includes twenty of the forty-five sites, has been drafted by the USACE working in collaboration with King County and the other WRIA 9 jurisdictions. King County is proposed as the official local sponsor to sign the PED Phase I agreement. The estimated total cost for completing PED Phase I is three

million dollars, of which twenty-five percent or approximately seven hundred fifty thousand dollars must come from local sponsorship.

5. In 2000, through an interlocal agreement, the WRIA 9 jurisdictions formalized their participation in the WRIA 9 forum to jointly undertake and fund watershed planning and protection efforts. The jurisdictions of the WRIA 9 forum wish to share local sponsorship responsibilities, including funding and management, for PED Phase I through the watershed planning interlocal agreement. On November 14, 2001, the WRIA 9 forum passed a resolution memorializing the forum's commitment to undertaking local sponsorship of the PED Phase I agreement.

6. Funding for the local sponsor portion of the PED Phase I agreement will be determined on an annual basis as part of the WRIA 9 forum's budgeting processes. It is envisioned that funding will be allocated from a variety of sources, including local government funds, King Conservation District assessment funding, and other grant funding.

7. PED Phase I is expected to extend into 2005. Construction of restoration sites will be undertaken through separate project cooperation agreements ("PCAs") between the USACE and the jurisdiction in which the restoration is sited. Construction may begin upon completion of design and execution of PCAs; construction of PED Phase I restorations may begin as early as 2003. It is anticipated that additional PED phases to

complete designs on the additional twenty-five sites identified will be undertaken.

8. Undertaking PED Phase I, along with subsequent ERP phases, is envisioned to greatly enhance the natural resources of the Green/Duwamish river watershed through implementation of comprehensively studied, planned and implemented habitat restoration projects throughout the watershed.

9. This ordinance is being adopted by emergency in order to secure federal funding that is believed to be at risk.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. The King County executive is authorized to enter into a design agreement between the Department of the Army and King County substantially in the form of the agreement attached hereto as Attachment A, for the preliminary engineering and design of twenty Green/Duwamish ecosystem restoration projects described more fully in an attachment to the agreement entitled "Project Management Plan Green/Duwamish River Ecosystem Restoration Project" dated November 15, 2001.

SECTION 2. The executive is directed to assure that projects pursued in agricultural areas are consistent with deed restrictions applicable to Farmland Preservation Properties that allow the conversion of not more than 5% of any FPP site to non-farming uses without Council approval.

SECTION 3. For the reasons set forth in finding 9 of this ordinance, the county council finds as a fact and declares that an emergency exists and that this ordinance is necessary for the immediate preservation of public peace, health, or safety or for the support of county government and existing public institutions.

Ordinance 14285 was introduced on 1/22/02 and passed as amended by the Metropolitan King County Council on 1/28/02, by the following vote:

Yes: 12 - Ms. Sullivan, Ms. Edmonds, Mr. von Reichbauer, Ms. Lambert, Mr. Phillips, Mr. Pelz, Mr. McKenna, Mr. Constantine, Mr. Pullen, Mr. Gossett, Mr. Irons and Ms. Patterson
No: 0
Excused: 1 - Ms. Hague

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Cynthia Sullivan, Chair

ATTEST:

Anne Noris, Clerk of the Council

APPROVED this 8 day of February, 2002

Ron Sims, County Executive

Attachments A. Design Agreement Between the Department of the Army and King County for Design of the Green - Duwamish Ecosystem Restoration Project, B. WRIA 9 Forum Resolution No. 2001-2

14285 ATTACHMENT A

DESIGN AGREEMENT
BETWEEN
THE DEPARTMENT OF THE ARMY
AND
KING COUNTY,
FOR DESIGN OF THE
GREEN/DUWAMISH ECOSYSTEM RESTORATION PROJECT

THIS AGREEMENT entered into this _____ day of _____, _____, by and between the Department of the Army (hereinafter the "Government") represented by the District Engineer of the U.S. Army Corps of Engineers, Seattle District and King County (hereinafter the "Non-Federal Sponsor") represented by the County Executive, King County.

WITNESSETH, THAT:

WHEREAS, construction or implementation of the Green Duwamish River Ecosystem Restoration Project at King County, WA. is authorized by Section 101 of the Water Resources Development Act of 2000.

WHEREAS, the Energy and Water Development Appropriations Act for Fiscal year 2001, Public Law 106-377, included funds for the Government to initiate design (as defined in Article I.B. of this Agreement) of the Green Duwamish River Ecosystem Restoration Project (hereinafter the "Project" as defined in Article I.A. of this Agreement) at King County Wa.

WHEREAS, Section 105(c) of Public Law 99-662 (33 U.S.C. Section 2215) [100 Stat 4089] provides that the costs of design of a water resources project shall be cost shared in the same percentage as the purposes of the project;

WHEREAS, the Government and the Non-Federal Sponsor agree that the Non-Federal Sponsor shall contribute 25 percent of the financial obligations for design of the Project;

WHEREAS, the Government and Non-Federal Sponsor have the full authority and capability to perform as hereinafter set forth and intend to cooperate in paying for design in accordance with the terms of this Agreement.

NOW, THEREFORE, the Government and the Non-Federal Sponsor agree as follows:

ARTICLE I - DEFINITIONS AND GENERAL PROVISIONS

For purposes of this Agreement:

A. The term "Project" shall mean the implementation of 20 site specific and programmatic restoration measures, which constitute a portion of 45 site specific and programmatic measures that make up the Green Duwamish River Ecosystem Restoration Project at King County, as generally described in the Chief's Report dated 29 December 2000. The 45 site specific and programmatic measures are projected to be implemented in 3 phases over a 10 year construction period as a result of coordination between King County, cities, local land owners, the Muckleshoot Indian Tribe, and State and private resource agencies. This Agreement covers the first phase of this more extended effort and covers the design effort necessary to prepare construction documentation for the first 20 sites as documented in the attached Project Management Plan, as amended from time to time (PMP). The remaining 25 sites will be included in subsequent design agreements developed throughout the remaining phases of this larger effort.

B. The term "design" shall mean all activities directly related to planning, engineering and design of the Project for which financial obligations are made during the period of design in accordance with the terms of this Agreement; the final accounting in accordance with Article IV.D. of this Agreement; any audit in accordance with Article VII of this Agreement; and the Government's activities conducted as part of negotiating this Agreement. The term shall not include any activities performed as part of reconnaissance or feasibility studies; activities conducted as part of negotiation of a project cooperation agreement for the Project or separable element thereof; or the Non-Federal Sponsor's activities conducted as part of negotiating this Agreement.

C. The term "total design costs" shall mean all costs incurred by the Non-Federal Sponsor and the Government as a consequence of financial obligations for design. The term includes but is not necessarily limited to, the Government's costs of negotiating this Agreement; applicable planning and evaluation; applicable engineering and design; environmental assessment and documentation; the identification, survey, and evaluation of historic properties; participation in the Design Coordination Team in accordance with Article III of this Agreement; costs of the final accounting in accordance with Article IV.D. of this Agreement; and costs of audit in accordance with Article VII of this Agreement. The term does not include any costs related to betterments; any costs of dispute resolution under Article V of this Agreement; any costs incurred as part of reconnaissance studies or feasibility studies; any costs (other than audit) resulting from financial obligations after the period of design; any costs of negotiating a project cooperation agreement for the Project or separable element thereof; or the Non-Federal Sponsor's costs of negotiating this Agreement.

D. The term "period of design" shall mean the time period commencing when Federal General Investigations appropriations for Preconstruction Engineering and Design of the Project

are allocated to the U.S. Army Engineer District, Seattle, and ending when a project cooperation agreement for the Project, or a separable element thereof, is executed between the Government and a non-Federal entity or entities.

E. The term "District Engineer" shall mean the U.S. Army Engineer for the Seattle District.

F. The term "fiscal year" shall mean one fiscal year of the Government. The Government fiscal year begins on October 1 and ends on September 30.

G. The term "betterment" shall mean a change in the design of an element of the Project resulting from the application of standards that the Government determines exceed those that the Government would otherwise apply for accomplishing the design and construction of that element, or the addition of an element of the Project that the Government would not otherwise accomplish.

H. The term "financial obligations for design" shall mean a financial obligation of the Government that results or would result in a cost that is or would be included in total design costs.

I. The term "non-Federal proportionate share" shall mean the ratio of the Non-Federal Sponsor's total cash contribution required in accordance with Article II.B. of this Agreement to total financial obligations for design, as projected by the Government.

ARTICLE II - OBLIGATIONS OF THE GOVERNMENT AND THE NON-FEDERAL SPONSOR

A. The Government, subject to receiving funds appropriated by the Congress and using those funds and funds provided by the Non-Federal Sponsor, shall expeditiously design the Project, applying those procedures usually applied to the engineering and design of Federal projects, pursuant to Federal laws, regulations, and policies.

1. To the maximum extent possible, the Government shall design the Project in accordance with the Project Management Plan for the Project and, if applicable, a Project Study Plan for any reevaluation during design, developed and updated as required by the Government after consultation with the Non-Federal Sponsor.

2. The Government shall afford the Non-Federal Sponsor the opportunity to review and comment on the solicitations for all contracts, including relevant scopes of work, prior to the Government's issuance of such solicitations. To the extent possible, the Government shall afford the Non-Federal Sponsor the opportunity to review and comment on all contracts modifications,

including change orders, prior to the issuance to the contractor of a Notice to Proceed. In any instance where providing the Non-Federal Sponsor with notification of a contract modification or change order is not possible prior to issuance of the Notice to Proceed, the Government shall provide such notification in writing at the earliest date possible. To the extent possible, the Government also shall afford the Non-Federal Sponsor the opportunity to review and comment on all contract claims prior to resolution thereof. The Government shall consider in good faith the comments of the Non-Federal Sponsor, but the contents of solicitations, award of contracts, execution of contract modifications, issuance of change orders, resolution of contract claims, and performance of all design (whether the work is performed under contract or by Government personnel), shall be exclusively within the control of the Government.

B. The Non-Federal Sponsor shall provide, during the period of design a contribution equal to 25 percent of total design costs. If the Government projects that the value of the Non-Federal Sponsor's contributions under Articles III and VII will be less than 25 percent of total design costs, the Non-Federal Sponsor shall provide a contribution, in accordance with Article IV.B. of this Agreement, in the amount necessary to meet its 25 percent share of total design costs.

C. The Government shall perform a final accounting in accordance with Article IV.D. of this Agreement to determine the contributions provided by the Non-Federal Sponsor in accordance with paragraphs B. and E. of this Article and Articles III and VII of this Agreement and to determine whether the Non-Federal Sponsor has met its obligations under paragraphs B. and E. of this Article.

D. The Non-Federal Sponsor shall not use Federal funds to meet the Non-Federal Sponsor's share of total design costs under this Agreement unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute.

E. The Non-Federal Sponsor may request the Government to design betterments. Such requests shall be in writing and shall describe the betterments requested to be designed. If the Government in its sole discretion elects to design the requested betterments or any portion thereof, it shall so notify the Non-Federal Sponsor in a writing that sets forth any applicable terms and conditions, which must be consistent with this Agreement. In the event of conflict between such a writing and this Agreement, this Agreement shall control. The Non-Federal Sponsor shall be solely responsible for all costs due to the requested design of betterments and shall pay all such costs in accordance with Article IV.C. of this Agreement.

F. In accordance with Article IV.E. of this Agreement, the Government shall afford credit, toward the share of total project costs for the Project that is required of the non-Federal entity or entities executing the Project Cooperation Agreement or Agreements for the Project or separable element thereof, for the Non-Federal Sponsor's 25 percent share of total design costs required under paragraph B. of this Article.

G. This Agreement shall not be construed as obligating either party to seek funds for, or to participate in, construction or implementation of the Project or a separable element thereof or as relieving the Non-Federal Sponsor of any future obligation under the terms of any Project Cooperation Agreement.

ARTICLE III - DESIGN COORDINATION TEAM

A. To provide for consistent and effective communication, the Non-Federal Sponsor and the Government, not later than 30 days after the effective date of this Agreement, shall appoint named senior representatives to a Design Coordination Team. Thereafter, the Design Coordination Team shall meet regularly until the end of the period of design. The Government's Project Manager and a counterpart named by the Non-Federal Sponsor shall co-chair the Design Coordination Team.

B. The Government's Project Manager and the Non-Federal Sponsor's counterpart shall keep the Design Coordination Team informed of the progress of the design and of significant pending issues and actions, and shall seek the views of the Design Coordination Team on matters that the Design Coordination Team generally oversees.

C. Until the end of the period of design, the Design Coordination Team shall generally oversee issues related to design, including scheduling of reports and work products; development of plans and specifications; anticipated real property and relocation requirements for construction or implementation of the Project; contract awards and modifications; contract costs; the Government's cost projections; anticipated requirements and needed capabilities for performance of operation, maintenance, repair, replacement and rehabilitation of the Project; and other related matters.

D. The Design Coordination Team may make recommendations that it deems warranted to the District Engineer on matters that the Design Coordination Team generally oversees, including suggestions to avoid potential sources of dispute. The Government in good faith shall consider the recommendations of the Design Coordination Team. The Government, having the legal authority and responsibility for design, has the discretion to accept, reject, or modify the Design Coordination Team's recommendations.

E. The costs of participation in the Design Coordination Team during the period of design shall be included in total design costs and cost shared in accordance with the provisions of this Agreement.

ARTICLE IV - METHOD OF PAYMENT

A. Until the Government furnishes the Non-Federal Sponsor with the results of the final accounting, the Government shall maintain current records of contributions provided by the parties and current projections of total design costs and costs due to additional work under Article II.E. of this Agreement. At least quarterly, the Government shall provide the Non-Federal Sponsor with a report setting forth all contributions provided to date and the current projections of total design costs, of total costs due to additional work under Article II.E. of this Agreement, of each party's share of total design costs, of the non-Federal proportionate share, of the Non-Federal Sponsor's total contributions required in accordance with Articles II.B. and II.E. of this Agreement, and of the funds the Government projects to be required from the Non-Federal Sponsor in accordance with Articles II.B. and II.E. of this Agreement for the upcoming fiscal year. On the effective date of this Agreement, total design costs are projected to be $3,000,000 and the Non-Federal Sponsor's contribution required under Article II.B. of this Agreement is projected to be $750,000. Such amounts are estimates subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsor.

B. The Non-Federal Sponsor shall provide the contribution required under Article II.B. of this Agreement in accordance with the provisions of this paragraph.

1. Not later than 30 calendar days after execution of this Agreement, the Government shall notify the Non-Federal Sponsor in writing of the funds the Government determines to be required from the Non-Federal Sponsor to meet the non-Federal proportionate share of projected financial obligations for design through the first fiscal year of design, including the non-Federal proportionate share of financial obligations for design incurred prior to such payment. Not later than 30 calendar days after such notice the Non-Federal Sponsor shall provide the Government with the full amount of the required funds by delivering a check payable to "FAO, USAED, Seattle" to the District Engineer, or verify to the satisfaction of the Government that the Non-Federal Sponsor has deposited the required funds in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsor, or present the Government with an irrevocable letter of credit acceptable to the Government for the required funds, or provide an Electronic Funds Transfer in accordance with procedures established by the Government.

2. For the second and subsequent fiscal years of design, the Government shall notify the Non-Federal Sponsor in writing, no later than 60 calendar days prior to the beginning of that fiscal year, of the funds the Government determines to be required from the Non-Federal Sponsor to meet the non-Federal proportionate share of projected financial obligations for design for that fiscal year. No later than 30 calendar days prior to the beginning of the fiscal year, the Non-Federal Sponsor shall make the full amount of the required funds for that fiscal year available to the Government through the funding mechanisms specified in paragraph B.1. of this Article.

3. The Government shall draw from the funds provided by the Non-Federal Sponsor such sums as the Government deems necessary to cover: (a) the non-Federal proportionate share of

financial obligations for design incurred prior to the payment made under paragraph B.1 of this Article; and (b) the non-Federal proportionate share of financial obligations for design as they are incurred during the remainder of the period of design.

4. If at any time during the period of design the Government determines that additional funds will be needed from the Non-Federal Sponsor to cover the non-Federal proportionate share of projected financial obligations for design for the current fiscal year, the Government shall notify the Non-Federal Sponsor in writing of the additional funds required together with an explanation of why additional funds are required, and the Non-Federal Sponsor, no later than 30 calendar days from receipt of such notice, shall make the additional required funds available through the payment mechanisms specified in paragraph B.1. of this Article.

C. In advance of the Government incurring any financial obligation associated with additional work under Article II.E. of this Agreement, the Non-Federal Sponsor shall provide the Government with the full amount of the funds required to pay for such additional work by delivering a check payable to "FAO, USAED, Seattle" to the District Engineer, or verify to the satisfaction of the Government that the Non-Federal Sponsor has deposited the full amount of the funds required to pay for such additional work in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsor, or present the Government with an irrevocable letter of credit acceptable to the Government for the required funds, or provide an Electronic Funds Transfer in accordance with procedures established by the Government. The Government shall draw from the funds provided by the Non-Federal Sponsor such sums as the Government deems necessary to cover the Government's financial obligations for such additional work as they are incurred. In the event the Government determines that the Non-Federal Sponsor must provide additional funds to pay for such additional work, the Government shall notify the Non-Federal Sponsor in writing of the additional funds required. Within 30 calendar days thereafter, the Non-Federal Sponsor shall provide the Government with the full amount of the additional required funds through the funding mechanisms specified above.

D. Upon completion of design or termination of this Agreement, and upon resolution of all relevant proceedings, claims and appeals, the Government shall conduct a final accounting and furnish the Non-Federal Sponsor with the results of the final accounting. The final accounting shall determine total design costs, each party's contribution provided thereto, and each parties required share thereof. The final accounting also shall determine total costs due to additional work under Article II.E. of this Agreement and the Non-Federal Sponsor's contribution provided pursuant to Article II.E. of this Agreement.

1. In the event the final accounting shows that the total contribution provided by the Non-Federal Sponsor under Articles II.B., II.E., III and VII of this Agreement is less than its required 25 percent share of total design costs plus costs due to additional work under Article II.E. of this Agreement, the Non-Federal Sponsor shall, no later than 90 calendar days after receipt of written notice, make a payment to the Government of whatever sum is required to meet the Non-Federal Sponsor's required 25 percent share of total design costs plus costs due to

additional work under Article II.E. of this Agreement.

2. In the event the final accounting shows that the total contribution provided by the Non-Federal Sponsor under Articles II.B., II.E., III and VII of this Agreement exceeds its required 25 percent share of total design costs plus costs due to additional work under Article II.E. of this Agreement, the Government shall afford credit to the Non-Federal Sponsor during the construction or implementation of the Project (other than the 5 percent cash share for structural flood control), or the Government shall, subject to the availability of funds, refund the excess to the Non-Federal Sponsor no later than 90 calendar days after the final accounting is complete. In the event existing funds are not available to refund the excess to the Non-Federal Sponsor, the Government shall seek such appropriations as are necessary to make the refund.

E. The Government shall afford credit for the Non-Federal Sponsor's 25 percent share of total design costs required under Article II.B. of this Agreement, in accordance with this paragraph. The Government shall afford such credit only after any payment to the Government or refund to the Non-Federal Sponsor required by paragraph D. of this Article has been made. To afford such credit, the Government shall apply the amount credited toward the share that non-Federal entities are required to provide toward total project costs for the Project. Nothing in this Agreement shall be construed to obligate the Government to repay the Non-Federal Sponsor, in whole or in part, for its 25 percent share of total design costs.

1. If Federal funds are appropriated for construction or implementation of the Project, and if the Government and a non-Federal entity enter into a Project Cooperation Agreement for construction or implementation of the entire Project, then the Government shall afford credit for the entire 25 percent share.

2. If Federal funds are appropriated for construction or implementation of the Project or a separable element thereof, and if the Government and a non-Federal entity enter into a Project Cooperation Agreement for construction or implementation of such separable element, then the Government shall afford credit for such portion of the 25 percent share as is allocable to such separable element.

3. If no Federal funds are appropriated for construction or implementation of the Project or a separable element thereof, or if the Government and a non-Federal entity do not enter into a Project Cooperation Agreement for construction or implementation of the Project or a separable element, then the Government shall not afford any credit for such 25 percent share.

ARTICLE V - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute

through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to both parties. The parties shall each pay 50 percent of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE VI - HOLD AND SAVE

Subject to the provisions of Article XIV The Non-Federal Sponsor shall hold and save the Government free from all damages arising from design for the Project and design for any Project-related betterments, except for damages due to the fault or negligence of the Government or its contractors.

ARTICLE VII - MAINTENANCE OF RECORDS AND AUDIT

A. Not later than 60 calendar days after the effective date of this Agreement, the Government and the Non-Federal Sponsor shall develop procedures for keeping books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to this Agreement. These procedures shall incorporate, and apply as appropriate, the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 C.F.R. Section 33.20. The Government and the Non-Federal Sponsor shall maintain such books, records, documents, or other evidence in accordance with these procedures and for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence were required. To the extent permitted under applicable Federal laws and regulations, the Government and the Non-Federal Sponsor shall each allow the other to inspect such books, documents, records, or other evidence.

B. Pursuant to 32 C.F.R. Section 33.26, the Non-Federal Sponsor is responsible for complying with the Single Audit Act of 1984, 31 U.S.C. Sections 7501-7507, as implemented by Office of Management and Budget (OMB) Circular No. A-133 and Department of Defense Directive 7600.10. Upon request of the Non-Federal Sponsor and to the extent permitted under applicable Federal laws and regulations, the Government shall provide to the Non-Federal Sponsor and independent auditors any information necessary to enable an audit of the Non-Federal Sponsor's activities under this Agreement. The costs of any non-Federal audits performed in accordance with this paragraph before the Government furnishes the Non-Federal Sponsor with the results of the final accounting shall be allocated in accordance with the provisions of OMB Circulars A-87 and A-133, and such costs as are allocated to the Project shall be included in total design costs and cost shared in accordance with the provisions of this

Agreement.

C. In accordance with 31 U.S.C. Section 7503, the Government may conduct audits in addition to any audit that the Non-Federal Sponsor is required to conduct under the Single Audit Act. Any such Government audits shall be conducted in accordance with Government Auditing Standards and the cost principles in OMB Circular No. A-87 and other applicable cost principles and regulations. The costs of Government audits performed in accordance with this paragraph before the Government furnishes the Non-Federal Sponsor with the results of the final accounting shall be included in total design costs and cost shared in accordance with the provisions of this Agreement.

ARTICLE VIII - FEDERAL AND STATE LAWS

In the exercise of their respective rights and obligations under this Agreement, the Non-Federal Sponsor and the Government agree to comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army".

ARTICLE IX - RELATIONSHIP OF PARTIES

A. In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsor each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other.

B. In the exercise of its rights and obligations under this Agreement, neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights such other party may have to seek relief or redress against such contractor either pursuant to any cause of action that such other party may have or for violation of any law.

ARTICLE X - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, nor any resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE XI - TERMINATION OR SUSPENSION

A. If at any time the Non-Federal Sponsor fails to fulfill its obligations under Articles II.B., II.E. or IV of this Agreement, the Assistant Secretary of the Army (Civil Works) shall terminate this Agreement or suspend future performance under this Agreement unless he determines that continuation of work on design of the Project is in the interest of the United States or is necessary in order to satisfy agreements with any other non-Federal interests in connection with the Project.

B. If the Government fails to receive annual appropriations in amounts sufficient to meet its share of scheduled expenditures for design for the then-current or upcoming fiscal year, the Government shall so notify the Non-Federal Sponsor in writing, and 60 calendar days thereafter either party may elect without penalty to terminate this Agreement or to suspend future performance under this Agreement. In the event that either party elects to suspend future performance under this Agreement pursuant to this paragraph, such suspension shall remain in effect until such time as the Government receives sufficient appropriations or until either the Government or the Non-Federal Sponsor elects to terminate this Agreement, whichever occurs first.

C. In the event that either party elects to terminate this Agreement pursuant to this Article, both parties shall conclude their activities relating to design of the Project and proceed to a final accounting in accordance with Article IV.D. of this Agreement.

D. Any termination of this Agreement or suspension of future performance under this Agreement in accordance with this Article shall not relieve the parties of liability for any obligation previously incurred. Any delinquent payment from the Non-Federal Sponsor shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13-week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3-month period if the period of delinquency exceeds 3 months.

ARTICLE XII - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and either delivered personally or by telegram or mailed by first-class, registered, or certified mail, as follows:

If to the Non-Federal Sponsor:

14285

ATTACHMENT A

King County
Dept. Natural Resources
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855

If to the Government:

District Engineer
Department of the Army, Seattle District
PO Box 3755
Seattle, WA 98124-3755

B. A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

C. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at the earlier of such time as it is actually received or seven calendar days after it is mailed.

ARTICLE XIII - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE XIV – OBLIGATIONS OF FUTURE APPROPRIATIONS

A. Nothing herein shall constitute, nor be deemed to constitute, an obligation of future appropriations by King County of the State of Washington, where creating such an obligation would be inconsistent with Article IV of the King County Charter for King County .

B. The Non-Federal Sponsor intends to satisfy its obligations under this Agreement. The Non-Federal Sponsor shall include in its budget request or other wise propose, for each fiscal period, appropriations sufficient to cover the Non-Federal Sponsor's obligations under this Agreement for each year, and will use all reasonable and lawful means to secure the appropriations for that year sufficient to make the payments necessary to fulfill its obligations hereunder. The Non-Federal Sponsor reasonably believes that funds in amounts sufficient to discharge these obligations can and will lawfully be appropriated and made available for this purpose. In the event the budget or other means of appropriations does not provide funds in sufficient amounts to discharge these obligations, the Non-Federal Sponsor shall use its best efforts to satisfy any requirements for payments under this Agreement from any other source of funds legally available for this purpose. Further, if the Non-Federal Sponsor is unable to satisfy its obligations hereunder, the Government may exercise any legal rights it has to protect the Government's interests related to this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by District Engineer of the U.S. Army Corps of Engineers, Seattle District.

DEPARTMENT OF THE ARMY

BY:_____
Ralph H. Graves
Colonel, Corps of Engineers
District Engineer

DATE:_____

KING COUNTY

BY:_____
Ron Sims
County Executive
King County

DATE:_____

ATTACHMENT A

CERTIFICATE OF AUTHORITY

I, _____, do hereby certify that I am the principal legal officer of King County, that King County is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and King County in connection with design of the Green/Duwamish Ecosystem Restoration Project, and that the persons who have executed this Agreement on behalf of King County have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this _____ day of _____.

CERTIFICATION REGARDING LOBBYING

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

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

_____

DATE: _____

Project Management Plan
Green/Duwamish River Ecosystem Restoration Project
U.S. Army Corps of Engineers and King County, WA
Draft 11/15/01

1.0 General Management Strategy

1.1 General Overview of Agreement

This Project Management Plan (PMP) defines the scope of, and documents the process for, conducting Preconstruction Engineering and Design (PED) and studies for Phase 1 of the Green/Duwamish Ecosystem Restoration Project (ERP). The Green/Duwamish River Ecosystem Restoration Feasibility Report (2000), proposed that the construction of all 45 authorized sites identified in the Feasibility Report and authorized by Congress, be accomplished in a 10-year construction period in three phases (see section 2.1 for background information). The PMP is a consensus-driven document that provides a means for all parties involved to formally agree on the scope of the PED effort for the first phase, which involves the engineering and design of twenty projects. Parties involved are King County (the non-federal sponsor and referred to herein as Sponsor), cities participating in the Water Resource Inventory Area (WRIA) 9 Forum, and the U.S. Army Corps of Engineers (USACE) (see sections 1.3 and 4.1.1 for more information on the Forum's function).

The PMP has been developed to plan, define, and control the development and delivery of the products to be completed during PED. The PMP documents the work requirements and the level of detail that will be necessary to initiate construction of those sites selected for Phase 1. With clearly defined work tasks, the PMP will provide a basis for cost and schedule control and minimize communication and review problems. The primary products of this PED phase include all the documents and analysis that will be necessary to construct those projects selected for Phase 1. These documents will be in sufficient detail to provide the basis for the Sponsor, its partnering jurisdictions, and the USACE to construct the selected sites. The PMP addresses the following topics related to the scope of PED:

- Tasks and responsibilities;
- Cost estimate of individual tasks and the total Phase 1 implementation cost;
- USACE and other professional criteria to assess the adequacy of the completed work effort, including references to regulations and other guidance that will be followed in performing and evaluating tasks;
- Schedule of performance and milestones;
- Specific coordination mechanisms between the parties involved;
- Procedures for reviewing and accepting the work of the parties involved in PED;
- Procedures leading up to the acceptance of a Project Cooperation Agreement for each site; and
- Procedures for managing and tracking work progress and budget expenditures.

1.2 Goal of PED

The goal of PED is to successfully complete design and permitting for a group of twenty projects constituting Phase 1 of the Green/Duwamish Ecosystem Restoration Project. Specific objectives

include assuring federal and non-federal support for these projects, and assuring they will be designed to provide critically needed environmental restoration benefits at an affordable cost in a reasonable time frame. The Sponsor and its partnering jurisdictions are located throughout the entire watershed and are very concerned about the progressive degradation of the watershed and its fish and wildlife resources.

1.3 Committee Oversight

To date, the PED effort has concentrated on working with the ERP Technical Committee and the Program Management Committee (PMC) as described in Section 4.0 to develop this document. The PMP was developed with input from the ERP Technical Committee comprising King County, cities within the basin, the City of Tacoma which obtains its municipal and industrial water supply from the basin, the Washington State Department of Fish and Wildlife (WDFW), the Muckleshoot Indian Tribe, Suquamish Indian Tribe, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and local environmental and sportfishing interest groups.

Article III-A of the PED described a Design Coordination Team. In this PMP, this team will be described as the PMC, which will be comprised of staff from the USACE, County, and the cities. The PMC will make ongoing decisions on how this PMP will be implemented. Issues the PMC deems as significant will be presented to the WRIA 9 Forum for direction and/or decision.

While King County is the formal local sponsor for this PED phase, the cities involved in this effort are anticipated to be cost sharing participants through a combination of separate interlocal agreements enabling them to contribute funds to the Sponsor and of a separate regional funding source through the King Conservation District. Therefore, these cities have a particular need to be involved in management and oversight of PED and are referred to herein as partnering jurisdictions.

An Executive Committee comprising the elected officials of the cities of the WRIA 9 Forum and King County has accepted this PMP. The Executive Committee will be referred to herein as the WRIA 9 Forum or simply the Forum. The Forum was established as the governance structure for a planning process for salmon conservation and associated resource protection issues related to the Green/Duwamish Basin and a segment of Puget Sound adjacent to the basin.

2.0 Project Description

2.1 Background

The proposed restoration focuses on improving the overall health of the Green/Duwamish River Basin to enhance and restore fish and wildlife habitat. Of special interest are the habitat needs of the listed endangered species, chinook salmon and bull trout, present in the basin. The ERP was initiated in 1995 when the USACE, County, municipalities, and tribes in the watershed recognized the need to improve the natural resources in the basin. The USACE Ecosystem Restoration Program (Engineering Circular EC1105-2-210, Draft Ecosystem Restoration in the Civil Works Program, June 1, 1995) provided a convenient mechanism to address restoration needs in the basin. In 1997, the USACE completed the Green/Duwamish River Basin General Investigation – Ecosystem Restoration Study Reconnaissance Phase. Both the Green/Duwamish River Ecosystem Restoration Project Feasibility Report authorized under the Water Resource

Development Act of 2000 and Programmatic Environmental Impact Statement (PEIS) were completed in 2000. Potential projects identified in the Feasibility Report and PEIS were proposed and screened by the ERP Technical Committee. Projects were scored according to environmental evaluation criteria and 48 sites were selected. The 48 sites which incorporated varying levels and degrees of restoration were then evaluated in an incremental cost analysis. Based on the results of the cost analysis, 45 sites were identified for construction in three phases over a 10-year period. The ERP Technical Committee then selected 20 sites for Phase 1 construction.

To complement the ecological criteria, local landowners and grass roots organizations provided input through a combination of public workshops and field trips. In these informal settings, the USACE received both verbal and written input to incorporate local needs and direction in the development of site specific restoration criteria supporting local goals. Assessing and incorporating the desires of landowners and local organizations into the restoration plan will continue throughout the PED phases.

Throughout this document, the Howard Hanson Dam Additional Water Storage Project will be mentioned. This project, a cost-shared effort by the USACE and the City of Tacoma, includes many restoration and mitigation sites upstream and downstream of Howard Hanson Dam that complement the ERP to provide an overall ecosystem restoration approach to the entire basin. Additional information on this project is available at the USACE.

2.2 Project Purpose and Description

The purpose of the ERP is to improve ecosystem functions and processes in the Green/Duwamish Watershed and improve the quality, quantity, and connectivity of fish and wildlife habitat. The ERP maximizes site-specific benefits while generating basin-wide ecosystem restoration effects. It includes a multi-species approach to restore ecological resources and processes that would benefit multiple fish and wildlife species. The ERP incorporates programmatic measures aimed specifically at the rural portions of the basin. Here, there is a need to restore the natural physical processes that create habitat. Some examples of this include the introduction of gravel and large woody debris to the mainstem of the Green River, both of which are restricted by Howard Hanson Dam, and levee modification. These measures are intended to allow the river to meander within the floodplain and provide more aquatic habitat opportunities for fish and wildlife. Other site-specific design features include: culvert modifications and removal of stream blockages; restoration of estuarine/tidally influenced marsh habitat; alluvial wetland restoration; side channel modifications/restoration and reconnection; levee and revetment biostabilization, setbacks, and laybacks; tributary restoration; system wide revegetation; landslide rehabilitation; and slope and bank stabilization.

2.2.1 Authority.

The ERP was authorized under the Water Resources Development Act of 2000.

2.2.2 Authorized Project.

The Project, as authorized in 2000, is estimated to cost $112,000,000 (October 1999 price level). Project actions would enhance/restore over 1,900 acres of habitat or migratory corridors through

implementation of restoration features on 45 distinct project sites and several systematic sites. Features would be implemented in 3 phases over a 10-year construction period.

2.2.3 Project Sponsorship.

The Feasibility Study and the PED effort will be sponsored by King County, with financial assistance from specific cities in the Forum.

2.3 Costs

The Phase 1 PED effort is estimated at $3,000,000. Attached to the end of this document are the following tables:

- Table 1 shows the PED costs by year.
- Table 1a shows the breakdown of sites by year and construction costs.
- Table 2 shows the breakdown of costs by construction costs, real estate costs, real estate credit, contract type and project delivery team member cost on each site.
- Table 3 shows a breakdown of these sites by year and federal and non-federal component.

2.4 Project Schedule

Attached to this PMP are Figures 1, 2 and 3. Figure 1 is a schedule for the systematic studies, Figure 2 is a typical site schedule, and Figure 3 is a schedule for the 20 projects recommended in Phase 1.

3.0 Scoping of Preconstruction Engineering and Design

3.1 Current Scope

The following section discusses the Phase 1 project sites, the systematic studies and programmatic initiatives, and project management considerations. The initial list of projects and systematic studies that are represented in this document are described below.

3.1.1 Project Sites

3.1.1.1 Project Selection Criteria

The following is a list of criteria created and used by the ERP Technical Committee to select the 20 sites included in Phase 1:

- Local funding availability;
- Simplicity of permitting;
- Real estate availability;
- Likelihood of significant habitat improvements for threatened species (chinook salmon, bull trout) and high feasibility phase evaluation score;
- Cost saving opportunities (e.g., availability of SeaTac airport 3rd runway project for fill disposal);
- Consistency with WRIA 9 Habitat and Limiting Factors Reconnaissance Assessment Report;
- Potential to serve as a demonstration project to help gain public support;
- Political considerations (e.g., goal of including projects in many of the partnering municipalities, public visibility; public safety issues);

- Geographic location – goal to distribute sites throughout the Green/Duwamish Basin to provide Phase 1 habitat improvements in a variety of ecological settings and landscapes; and
- Potential availability of additional funding sources (e.g., grant opportunities, local funding).

3.1.2.1 Individual Site Proposal Descriptions

The following is a short description of each selected site and elements of interest related to each site. Cost estimates given below are for the PED design phase work only. These cost estimates are approximate and will be subject to modification through the development of site-specific PMPs as described in Section 4.0. The construction schedule is shown in Figure 3.

Burns Creek:
PED Design Cost: $70,800. Burns Creek flows into the Green River at about River Mile (RM) 38 at the upstream end of Lones Levee. Burns Creek is about 2.1 miles long and at one time supported 5 species of anadromous salmon. The major issues associated with this project are the control of sediment from Bell Ravine and obtaining landowners' approval to plant the buffers required for the full restoration of the stream. A final decision to move forward with PED design for this site will be based on the evaluation of landowner willingness and likely Sponsor construction costs. The proposed project calls for reducing sediment delivery from Bell Ravine into Burns Creek. In addition, this project calls for plantings along the toe of the slides in the ravine to help stabilize them, placing wood in the stream, fencing off live stock, control of invasive species, and planting riparian vegetation for the full length of the stream.

Elliott Bay Nearshore:
PED Design Cost: $34,400. This site design calls for placement of rock at the minus 30-foot contour at several locations in Elliott Bay in order to provide more diverse habitat. A demonstration project involving placement of small quantities of rock was implemented during the feasibility phase. Monitoring of these sites has shown a significant increase in marine life in and around these rock locations. The major issue will be coordination of this project with the resource agencies to ensure that the site is acceptable and materials are available before construction.

Gale Creek:
PED Design Cost: $51,750. This site calls for the replacement of an eight by 12-foot box culvert which is perched by two to three feet at its downstream end with a 50-foot bridge that will allow full access of fish to one of the larger stream basins upstream of Howard Hanson Dam. Geotechnical investigations at this site will include the determination of the adequacy of the abutment material for the proposed bridge.

Green River Park:
PED Design Cost: $49,400. This site is located at about RM 24. The proposal calls for the construction of a 600-foot backwater slough into parkland owned by the City of Kent. The slough will provide summer rearing habitat at its mouth and fall and winter flood refuge throughout the entire channel length. One of the primary issues will be finding an appropriate disposal site for the excavated material.

Horsehead Bend:
PED Design Cost: $52,500. This site is located two miles upstream of the Green River Park site at RM 26. This proposal calls for a 1,300-foot side channel excavated along the alignment of an old river channel. This site would also provide summer habitat at its lower end and flood refuge throughout the entire channel. A primary issue will be finding an appropriate disposal site for this excavated material.

Kanaskat North Side Channel:
PED Design Cost: $52,200. This site lies in an old river meander on the north side of the river several miles downstream of the Tacoma Diversion Dam at about RM 58. The proposed plan consists of constructing permanent access between the river and the downstream end of the former channel for fish access during all periods of the year, and tying this channel into a supplemental water source. The channel would be used for both fish and wildlife habitat and as a refuge channel during high flows. The channel is 3,600-feet long and has excellent riparian canopy for the majority of its length. In addition to the typical design and analysis elements described in Section 3.2.2, an appropriate source of ground water or river water to feed this channel must be determined. Two piezometers will be placed at the upstream end of the proposed channel and a groundwater pumpdown test will be performed to determine if a groundwater source is recommended prior to construction.

Lake Meridian Outlet:
PED Design Cost: $85,000. This site is located in the Soos Creek Basin in the City of Kent. The outlet channel from Lake Meridian currently flows through a series of road ditches until it enters Soos Creek. The proposal calls for the construction of a new stream channel on public lands with a 100-foot riparian buffer, stream habitat amenities, and a new connection to Soos Creek. Some of the construction and design issues for this site include determining the subsurface condition of the proposed stream corridor so the stream does not disappear into its new channel, and a conducting a hydraulic design analysis to ensure the stream will provide functioning fish habitat in its new alignment.

Lones Levee:
PED Design Cost: $97,800. The Lones Levee site is one of several training levees on the Middle Green River proposed for removal to allow the river to migrate as much as possible within its former meander bend. The proposal calls for excavating the entire levee and replacing it with a small setback levee constructed well landward of the existing levee with a buried toe to create a hard point to ensure that this proposal will not damage adjacent farmlands and homes. This project also includes the relocation of the lower portion of Burns Creek into its original channel. The major design issues associated with this project include finding a disposal site for the levee material and doing a comprehensive hydraulic and geomorphology study.

Mainstem Maintenance (Boeing and Fenster sites):
PED Design Cost: $43,400. This proposal consists of five sites on the Green River between Auburn and Tukwila. The two sites that are now being proposed for construction in Phase 1 are Boeing and Fenster. Both of the sites consist of several miles of bank improvements in the urban area of the Green River. The project would include the construction of biostabilization alternatives to bank stabilization and relocating the bank landward of its present location where

possible. It will be necessary to determine whether this bioengineering technique will cause an increase in river elevation when compared to the condition of the river without the project.

Meridian Valley Creek:
PED Design Cost: $63,500. This project is located in the City of Kent and consists of removing the creek from its current location in a 1000-foot long concrete flume and restoring it into a reconstructed natural channel connected to Soos Creek. Some of the issues to be considered include ensuring that the new stream bed and underlying geology will support perennial stream flow in the creek, and assessing and minimizing any wetland impacts associated with reconstruction of the stream mouth.

Middle Green Large Woody Debris (LWD) Demonstration Project:
PED Design Cost: $94,350. One of the major limiting factors in the Middle Green River is the lack of large wood within the river channel and its flood plain. Much of the wood that could move down the system is trapped behind Howard Hanson Dam. Because of logging practices, this wood is much smaller than the material that historically moved down the Green River. In the past, large wood helped to hold gravel, trap food-generating debris, cause deep, cool pools to be formed, and generally made the river a great deal more diverse. In this programmatic project, up to 40 large logjams throughout the Middle Green River are proposed over the ten-year life of the project. These jams could be of two different types. One is an "engineered log jam" where large key logs are placed in a jam along with numerous other racking and stacking pieces. The other type of jam places large pieces of wood instream, and lets the river provide the other components. Phase 1 construction will consist of several examples of both types of jams and evaluation of their effectiveness both physically and biologically in the river system. The evaluation will provide insight as to which approaches should be used in subsequent design and construction phases. Design of these jams will be conducted under PED. The major issues associated with this project involve the potential for these jams to cause major changes in the river course and affect neighboring property, as well as the effects these structures could have on boater safety. The first jams will be placed only on public lands and only after close coordination with landowners, local citizens, and boater safety groups.

Middle Green Gravel:
PED Design Cost: $45,400. Since 1954, Howard Hanson Dam has trapped gravel and limited its ability to move downstream into the middle Green River. Such gravel is critical for fish spawning in the main stem and also plays an important role in channel morphology. It is estimated that gravel scarcity is moving downstream at about 800 to 1,000-feet per year so that portions of the river as far downstream as the area around Flaming Geyser State Park are now lacking in gravel. If nothing is done, eventually this will degrade spawning habitat throughout the Middle Green River and further limit the river's ability to flood its floodplain during large flow events. The gravel program proposed under the ERP, along with the Howard Hanson mitigation and restoration projects, will place enough gravel into the system to make up the deficit caused since 1954 and continue to furnish gravel to the system on a yearly basis. In the demonstration project being designed under PED and proposed for construction in Phase 1 of the ERP, up to 5,000 cubic yards of gravel per year would be placed in a location just upstream of Flaming Geyser State Park. The main issue associated with gravel placement is its effects on

flood levels in the Middle and Lower Green River. Careful monitoring and modeling of gravel will determine effects and identify alternatives to alleviate them.

Mill Creek, Goedeke Reach:
PED Design Cost: $66,500. This Mill Creek site is adjacent to Highway 167 just downstream of Peasley Canyon. A straight and shallow stream channel and a lack of riparian vegetation hinder the Geodeke Reach from functioning effectively as rearing habitat and storm refuge. The goal at this site is to create natural habitat for rearing and storm refuge by constructing a stream system with instream wood, riparian plantings and a realigned, contoured channel. Prior to construction, a comprehensive hydrological and sediment analysis is required to ensure that the site will function effectively.

Newaukum Creek:
PED Design Cost: $205,950. The overall project calls for restoring up to 13 miles of Newaukum Creek upstream from its confluence with the Green River. This Phase 1 proposal calls for restoring about one-third of this area. The plan calls for the placement of large wood in the stream and planting native vegetation in the riparian corridor for those areas being restored. Obtaining landowner permission to implement restoration projects on their property will be necessary. The County has been working with local landowners through several outreach meetings to keep them informed of project progress and to encourage participation.

Olson Creek:
PED Design Cost: $55,250. Olson Creek is a tributary of the Green River and is located partially within the City of Auburn and partially within the County. The proposal calls for restoring the lower 1,500-feet of the stream by placing large wood in the stream, planting native vegetation in the lower reaches of the stream, and removing any upstream fish passage barriers. The project may include some modification of the culvert at the lower end of the project site under the Green River Road to assist fish passage.

Riverton Creek Restoration:
PED Design Cost: $86,250. This site is located in the City of Tukwila immediately north and east of the intersection of State Route (SR) 99 and SR 599. The proposal includes restoring the lower section of this stream for year-round fish habitat and flood refuge and improving the access from the creek to the Duwamish River. The proposal includes riparian plantings, placement of large wood in the stream, and removing an existing flap gate where the stream enters the Duwamish River. The major concern on this site is the possible flooding impacts from the Duwamish River upstream when the flap gates are removed. Flood analysis will be conducted before the project is constructed.

Site One Duwamish:
PED Design Cost: $59,100. This site lies adjacent to the Duwamish River just north of South 112th in Tukwila. The proposal calls for the construction of an intertidal marsh. This project has the potential of being very beneficial to downstream migrating salmonids by providing refuge at the upstream end of the salt wedge. The construction will include excavating a significant amount of material from this site to reduce marsh elevations to intertidal levels. Riparian and marsh plantings and the placement of large wood will also take place. Initial tests at this site

indicate the possible presence of hazardous materials on-site. Although their concentration is below current contamination guidelines, special clean-up procedures may be required prior to construction. Further testing may be necessary before making a final determination regarding clean up and construction.

Sunday Creek Revegetation:
PED Design Cost: $37,600. Sunday Creek is located in the Upper Green River Basin approximately 2.5 miles upstream of the historic Lester town site. The length of the project is about three miles in an area where the stream lies under the BPA power line corridor. The practice in the past was for BPA to clear the power line corridors of vegetation under the power lines. In the case of Sunday Creek, this has created an area where the water temperature can increase over 5 degrees Fahrenheit in the three-mile site reach. The proposal calls for coordinating with BPA and the U.S. Forest Service in a joint effort to plant low-growing riparian species under the powerlines and to place large wood in the stream to help provide cover, food source, and shade. This may be included in the Volunteer Revegetation program described below.

Upper and Lower Springbrook Creek/Garrison Creek:
PED Design Cost: $200,400. As part of the overall project, adding riparian plantings, relocating steam segments, and placing large woody debris in these streams will restore many drainages connected to the historic Black River. The downstream segment of this system is Springbrook Creek. Most of the creek lies in the cities of Renton and Kent. The Garrison Creek portion lies completely in the city of Kent. This Phase 1 design cost would include Upper and Lower Springbrook Creek and Garrison Creek. A subsequent PED design cost would include Mill Creek. The major concern is to provide outstanding fish habitat without compromising the ability of the creek to carry floodwaters.

Volunteer Revegetation:
PED Design Cost: $19,200. This program was set up to promote habitat restoration in those areas not covered by the other 44 sites in the overall program. This program will provide up to $300,000 a year for plants, wood, and other materials that will be included in riparian restoration projects throughout the Green/Duwamish Basin. This program will support work done by volunteer organizations and schools, the Sponsor through its basin steward program, and many partnering jurisdictions and other stakeholder groups.

3.1.1.3 Site Design Elements and Project Delivery Disciplines
The following is a list of typical design analyses to be conducted for each site. Each site-specific PMP will outline the required design analyses.

Civil Design:
Site plans will be developed for each PED Phase 1 site, taking into account technical information generated pursuant to the other disciplines defined below. Final plans for the contractual advertisement package will be developed along with an estimate of construction quantities necessary for the development of the Micro Computer Aided Cost Estimating System (MCACES) government cost estimate. It is estimated that at least 6 design sheets per site will be

required. The Civil Design effort will also be used as input to the local permitting process that will be done by the Sponsor.

Geotechnical Exploration:
This analysis will assess the stability of structures that are recommended as part of the restoration plan such as instream large woody debris placement or setback of flood control levees. Exploration will be necessary in restoration projects where a stream is being moved or modified to insure the availability of stable foundation that will support stream relocation in those areas.

Cultural Resources Analysis:
This analysis will determine if there are any significant historical or pre-historical impacts associated with the construction of the individual restoration sites. This effort will also include coordination with State Historic Preservation Officer and the local Indian tribes and cultural resource input to the Environmental Assessment.

Geomorphologic Analysis:
A geomorphologic analysis of the design elements of each restoration site will be conducted. Many of the proposals call for elimination of training levees or modifying river or stream channels. A geomorphologist will determine the effects that these river and stream modifications will have on upstream, downstream, and adjacent floodplain areas and help provide solutions that will be compatible with adjacent land uses and river functions.

Pre-Project Monitoring:
In order to evaluate the success or failure of the proposed projects, it is essential that the proposed sites be monitored prior to project construction. Therefore, it is anticipated that monitoring will be undertaken at each site included in the PMP during the design phase to collect necessary data to ultimately determine the success of the restoration feature. Pre-project monitoring will be site-specific.

Environmental Assessment and Permitting:
As discussed in the PEIS, each site may require its own Environmental Assessment. Additionally, all of the projects will need environmental coordination and specific project permits. The USACE will be responsible for all federal permits including those associated with the Endangered Species Act and the Clean Water Act. The local jurisdiction will be responsible for all state and local permits.

Hazardous, Toxic and Radiological Waste (HTRW) Analysis:
This analysis will determine whether HTRW issues exist at each site. The analysis may be as simple as a literature search and field trip, or may require a more complex approach such as full subsurface exploration and testing of each site. If waste is found, a determination will be made regarding action to be taken.

Hydrology and Hydraulic (H&H) Analysis:
This analysis will determine hydrologic and hydraulic (flooding and erosion) impacts associated with projects involving the placement of material in the stream or river, and for design of river or

stream channel features necessary to avoid, minimize, or mitigate those impacts. Information regarding flow characteristics of the stream or river for a given site will be prepared to assist in the design analysis.

Real Estate Analysis:
This analysis will help ensure that lands, easements, rights of way, relocation, and disposal areas needed for the ERP have been obtained. The analysis will provide input for the Project Cooperation Agreement (PCA) for each site. The PCA identifies the lands, easements, rights of way, relocation, and disposal area responsibilities, and the financial responsibilities of the federal and local sponsors for construction, operation, and maintenance of a given site or sites. The PCA is an agreement between the USACE and the local sponsor that is prepared separately for each restoration site. A product of the PED will be a PCA for each site and no additional costs for development of these PCAs will be required after the PED is completed. The Project Manager for USACE will be responsible for preparing the PCA for each site.

Cost Estimating Analysis:
The cost estimating analysis will use the Microcomputer Aided Cost Estimating System (MCACES) to prepare a cost estimate for each site. This cost estimate will be based on the quantity takeoffs provided by the Civil Design product delivery team. The estimate of construction costs will include contingencies.

Survey:
Each project site will be surveyed using existing USACE data, GIS files, and data from the county and cities to develop a current base map. In general, 1 to 200-scale mapping for both plan views and cross sections will be developed for each site. Some surveys will require field verification, depending on base map adequacy and the complexity of the individual project.

Specifications:
Construction specifications will be developed for each site to ensure that restoration elements will be constructed as designed and to appropriate engineering standards. The specifications will assist the rest of the team in preparing the request for the proposal package that will be going out for bid prior to construction of the projects.

3.1.2 Systematic Studies and Programmatic Initiatives

3.1.2.1 Identification of Necessary Studies and Initiatives

In order to effectively implement the complex set of 20 projects included in this PED, a number of systematic studies have been identified that will each provide information necessary for design, permitting, and eventual construction of multiple sites (these studies are outlined in Table 1; all tables are attached and incorporated herein). Some of these studies were originally identified in the PEIS. In addition, several program-wide initiatives will also be completed to facilitate design and permitting. The systematic studies included in this PMP were identified and discussed in several scoping meetings with the ERP Technical Committee. Criteria for study identification included requirements of the EIS and studies the ERP Technical Committee determined would be necessary before project construction.

For each study and initiative, a project delivery team will be established to formally develop a detailed scope, budget, and deliverables, and to monitor study progress. This team may include appropriate USACE staff as well as representatives from the Sponsor, partnering jurisdictions, and ERP Technical Committee members as appropriate. The specific responsibilities and typical membership of these project delivery teams are described in Section 4.0.

Table 1 shows the cost estimates for the entire PED phase including each systematic study and the breakdown by years in which the studies will be conducted. The first bar chart (Figure 1) shows how this effort will be accomplished over a three-year period starting in FY 2002. The schedule for construction of the different sites took into consideration the prerequisite systematic studies that will need to be accomplished before certain sites can be constructed. Tables 1 and 2 list the studies and design efforts described below and their costs. Table 1a shows the construction costs for the different sites based on the Feasibility Report. Figures 1, 2, and 3 show the work schedule throughout the PED phase.

The following PED Phase 1 studies are the systematic studies and programmatic initiatives recommended by the ERP Technical Committee, endorsed by the Forum, and included herein for cost sharing. These studies will begin upon execution of the PED agreement. The costs shown below are those proposed for coverage under PED and associated cost-sharing agreements.

3.1.2.2 Descriptions of Systematic Studies and Programmatic Initiatives

Hydrologic and Engineering Management Plan (HEMP):
Cost: $300,000. This analysis includes a hydraulic model and geomorphic analysis of the mainstem Green River and key tributaries. This work is necessary before the major components of gravel and LWD placement can be incorporated in the project. This analysis will also include modeling input for specific projects throughout the basin. The HEMP will be jointly funded by the Green/Duwamish Ecosystem Restoration Project under the PED agreement and by the Howard Hanson Dam Additional Water Storage Project, which will also use the results.

Baseline Biological Evaluation:
Cost: $100,000. This evaluation will use data collected by the existing screw trap at approximately RM 34. The study will estimate current fish populations in the Green River to: 1) determine the location and timing of migratory fish on a reach scale; 2) estimate current fish populations to determine if the restoration projects are helpful at a population level; and 3) provide information for individual ESA consultations needed for the LWD and gravel projects. Most of the cost of this evaluation will go toward operating the screw trap. Additional funding may be provided from the Howard Hanson Dam Additional Water Storage Project and WDFW. The USACE is working with WDFW, Muckleshoot Indian Tribe, and other resource agencies to operate the screw trap, collect data, and share information.

Monitoring Plan:
Cost: $35,000. This monitoring plan will establish clear goals, provide sampling protocols for data consistency, help establish a data base, describe how to develop a sampling plan, and provide adaptive management guidance and contingency plans. The PEIS requires that monitoring occur on a site-specific, reach, and basin scale.

Water Quality:
Cost: $30,000. This study will attempt to quantify changes in certain water quality parameters that affect fish resulting from construction of restoration sites (turbidity, suspended solids, dissolved oxygen, and temperature). A two person crew would use a hydrolab and develop transects in the river in the proximity of construction projects. Water quality sampling will take place before construction. This data will be important during ESA consultation. Water quality sampling will occur during and after construction as part of the construction phase of this project.

Juvenile Residency in the Estuary:
Cost: $120,000. This study was adapted from the limiting factors analysis evaluation described in the PEIS. Little is known about how long juvenile salmon (chum, chinook, coho, sea-run cutthroat) reside in the lower Green River and Duwamish estuary. Increased residency time probably relates to increases in ocean survival and greater fish returns. This study will provide information about what habitats and locations are beneficial and whether juvenile fish increase in size and weight during their stay in the Duwamish.

Public Safety and Recreation:
Cost: $25,000. This effort includes dispersing public safety information to the Boating Safety Advisory Committee and other entities on the placement of large wood in the Middle Green River and root wads in the Lower Green River. A safety information web site, signage, and other materials to make the ERP compatible with boaters will be developed.

Real Estate, Landowner Outreach:
Cost: $10,000. Permission will be obtained from the State Department of Natural Resources (DNR) real estate section prior to construction of mainstem Green/Duwamish River. The DNR has jurisdiction over lands beneath rivers in the state. The landowner outreach initiated by the County throughout the basin will be continued, keeping landowners involved in the overall process and obtaining easements.

Maintenance Issues:
Cost: $5,000. Several workshops will be held on invasive species control in areas targeted for revegetation. Systematic methods of controlling invasive species will be developed as well as several test sites. Field trips to sites where successful alternatives have been tried will be conducted. Discussions will also be held on maintenance strategies that will be ultimately be outlined in the PCAs.

Cultural Resources Programmatic Agreement:
Cost: $10,000. In order to comply with the National Historic Preservation Act and honor commitments stipulated in the PEIS, the USACE is required to develop a Programmatic Agreement (PA) for the treatment of cultural resources with King County, affected tribes, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation. The PA will set forth a plan detailing how to address the following for each ERP restoration site: 1) cultural resource inventory survey; 2) site evaluation; 3) tribal, King County, and SHPO consultation; 4) construction monitoring; 5) protocol for inadvertent discoveries; 6) treatment of human remains; and 7) permanent curation of field documents and cultural materials. In addition

to being a requirement, the development of this PA early in the process will be more efficient and cost-effective than attempting to address these issues on a site-by-site basis.

3.1.3 Project Management

This effort will include all activities related to USACE management of the PED process. Activities include: 1) coordinating with local, state, tribal and federal governmental agencies, ports, industry, interest groups, and the general public; 2) oversight management of USACE, Sponsor, and contracted efforts; 3) coordinating the public involvement program; 4) coordinating with the Sponsor; 5) attending meetings and conducting briefings throughout the course of the PED phase; 6) responding to congressional and other inquiries; 7) preparing budgetary documents and upward reporting; 8) programming, managing and tracking PED phase obligations and expenditures; and 9) managing numerous reviews of PED phase products, including reviews by the project delivery teams, technical review team, the USACE Northwestern Division and the PMC.

Detailed quarterly reports on scope, schedule, budget, and accomplishments to date shall be provided to the Sponsor and the PMC for each individual project and/or study, and programmatic initiative.

3.2 Cost Overruns and Scope Changes

The following section describes approaches for dealing with project scope or cost revisions through the use of project contingency funds, or through the USACE's betterments and post-authorization change procedures. The potential use of USACE continuing authority programs for site additions is discussed as well.

3.2.1 Project Contingency

A total of $494,250 has been set aside to deal with cost overruns associated with work specified in this PMP scope. The overall contingency is equal to 20% of the combined cost of all of the site design, systematic study, and programmatic initiative work described in Table 1. Funds will be added to the contingency on an annual. If these funds are not used, they will carry over to the following year. If excess funds still remain at the end of the Design Agreement effort, these funds will be credited in the final accounting to reduce the overall cost of the Design Agreement. Use of the contingency funds must be approved by the USACE and the PMC and must be associated with a specific site, study, or programmatic initiative. If a modification is contemplated that would potentially add a new site or study to the overall PMP scope, associated costs should be proposed as a betterment or post-authorization change as described below.

Prior to using contingency funds, the USACE Project Manager must work with the Project Delivery Team for the site, study, or initiative for which the cost overrun is contemplated, to discuss alternatives or options for completion of the scope. These alternatives or options should be presented to the PMC early enough to allow the PMC to fully review them to decide whether the use of contingency funds is warranted. If possible, these alternatives should be presented when 75% or less of the site- or study-specific budget has been expended.

3.2.2 Site Additions and Major Modifications

During the course of PED design for the projects described above, it is possible that the Sponsor or one of its partnering jurisdictions may wish to add one or more additional sites or to request significant modifications to the scope of a project. Requests such as this will be discussed by the USACE, the Sponsor, and the PMC in order to determine which of the following approaches should be used to accomplish the scope change.

3.2.2.1 Betterment

Under a betterment, the PMC and the USACE would determine that the modification requested by the Sponsor or a partnering jurisdiction is beyond the functional intent and scope of the ERP and therefore is not eligible for cost sharing. For example, if a city wants to add a component to a site not addressed in the ERP such as flood control elements, the city could propose adding this as a betterment. Since a betterment would require 100% funding from the Sponsor and/or its partners, a decision to add a betterment would require approval by the PMC and the Sponsor, and would be dependent on the Sponsor's ability to develop an agreement for provision of the necessary local funding from the city proposing the betterment. Any other similar changes could be made to a site as a betterment and funded 100% by the Sponsor or one of its partnering jurisdictions.

3.2.2.2 Post Authorization Change

If the PMC and the USACE determine that the modification requested by the Sponsor or partnering jurisdiction is consistent with the restoration intent of the program and a priority for inclusion in PED but beyond the current scope of PED, then the USACE may request a post-authorization change. An example would be a request by a city to add a restoration site or sites to the original 45 that were authorized by Congress. Since a post-authorization change would require additional Federal and Sponsor funding, a decision to pursue such a change would require approval by the PMC and the Sponsor and would be dependent on the Sponsor's ability to develop an agreeable cost-sharing arrangement with the city proposing the change. If the PMC determines that the change justifies broad cost sharing among the jurisdictions, it could elect to utilize contingency funds for the change or could recommend to the Forum that the overall project cost (and local share) be increased. Alternatively one or more of the partnering jurisdictions could provide the additional local share required for the change.

If the PMC approves the proposed change and the Sponsor can develop suitable cost-sharing arrangements, then one or more PMC representatives would work with the USACE to prepare a General Reevaluation Report (GRR) which is a concise feasibility report for this site. Depending on the scope and cost of the Post Authorization Change, this report would be sent to the USACE Northwestern Division Office (Portland) for approval or to USACE Headquarters (D.C.). If it is a very large change, it would require approval from Congress. Less than a 20% variation from the original scope may be approved at the Division level.

3.2.2.3 Use of USACE Continuing Authority Programs

The PMC may determine that the most effective way to implement a proposed scope modification from the Sponsor or one of the partnering jurisdictions is to request project funding from the USACE through one of its continuing authority programs such as the Puget Sound Initiative or the programs implemented under Sections 205, 206, and 1135 of the Water

Resources Development Act of (2000). In this case, the project would be pursued independent of the ERP through a separate cost sharing agreement between the USACE and one or more local jurisdictions. In all cases, the Sponsor must make the formal request for a betterment or post-authorization change on behalf of the partnering jurisdictions. A request for continuing authority funding can be made by any of the jurisdictions directly to the USACE.

4.0 Project Management and Coordination

4.1 Project Teams

Although the PED agreement calls only for a Design Coordination Team to oversee the PED Phase 1 portion of the Green River ERP, additional oversight will be required to conduct and manage the complex PED Phase 1 work. The function, membership, operating protocols, and tasks of each entity involved in overseeing PED are described below.

4.1.1 WRIA 9 Forum

Function and Membership

The WRIA 9 Forum acts as the governing body for joint local sponsorship of PED Phase 1. The Forum is comprised of elected representatives from King County and cities having jurisdiction or major interests in the Green/Duwamish and Central Puget Sound Basins. Forum member jurisdictions have entered into an interlocal agreement enabling them to share local sponsorship responsibilities for PED Phase 1.

Operating Protocols

The WRIA 9 Forum meets regularly as needed.

Operating protocols, including decision-making mechanisms, are as outlined in the Interlocal Agreement for the Watershed Basins within Water Resource Inventory Area 9, as originally executed in January 2001.

Tasks

- Review Project information, including progress reports and financial status, as provided by the PMC.
- Address the following issues relating to scope of work and budget:
  - Review PMC recommendations for addressing potential or actual cost overruns on the scope of work as documented in this PMP; decide on an appropriate mechanism (including study rescoping, recommending to partner jurisdictions' legislatures to budget additional cost share amounts).
  - Review and decide on PMC recommendations addressing potential scope of work additions to be cost-shared among partner jurisdictions.
  - Review and decide on PMC recommendations for addressing potential deletions from the scope of work as documented in the PMP.
  - Review and decide on any issues as forwarded for decision by the PMC.

4.1.2 Program Management Committee (Design Coordination Team per the PED Phase 1 Agreement)

Function

The PMC is responsible for ongoing PED Phase 1 oversight, including:

- monitoring work progress and budget and providing progress reports to the WRIA 9 Forum;
- approving scope and/or budget changes within the existing scope of the PED agreement including the contingency;
- forwarding appropriate issues for decision, including recommendations, as appropriate, to the WRIA 9 Forum; and
- where needed, addressing specific issues related to PED Phase 1 work such as design issues, anticipated real property and relocation requirements for implementing individual project sites, and anticipated requirements for operation, maintenance, repair, replacement and rehabilitation of individual project sites.

Membership

The PMC consists of:

- the USACE's and the Sponsor's overall Project Managers;
- other senior representatives as named by the Corps and the Sponsor; and
- one representative for each of the Sponsor's partnering jurisdictions, as named by that jurisdiction.

Operating Protocols

The Program Management Committee will meet monthly or as needed. Meetings will be co-chaired by the USACE's and the Sponsor's overall Project Managers. Except as otherwise specified, the PMC will make decisions by consensus.

Tasks

- Review and approve site-specific and study-specific PMPs. As work progresses, the PMC will ensure that both site-specific and systematic project criteria are being met and will review and approve possible changes to criteria.
- Provide Project information and updates to the WRIA 9 Forum, including progress reports, financial status information, and any information necessary for the Forum to make decisions over which it has authority. The PMC Chairs are responsible for preparing briefing materials for the WRIA 9 Forum; other PMC members will review and assist with materials preparation as appropriate.
- Review status and financial reports provided by the USACE on a quarterly basis and any other time that changes to the budget are contemplated that may require scope of work changes or possible use of contingency funds.
- For PED Phase 1 cost issues:
  - *Review/approve the use of contingency funds to complete site design or study work.* If the USACE proposes to expend contingency funds, it must request approval from the Program Management Committee and concurrently present a review of costs, together with consideration of alternatives to expending contingency funds, including reduction of work or implementing efficiencies. The contingency fund expenditure request must be approved by the Sponsor and by a majority vote of the Program Management Committee (members must be present at the meeting to vote).
  - *Address potential budget overruns.* If it appears likely that the budget will be exceeded for any individual site design or study as delineated in this PMP and the site and study-specific PMPs, the PMC will review alternatives for managing the overrun, including use of contingency funds, scope of work modification, or requesting a budget modification.

The PMC may approve the use of contingency funds as outlined above. If the PMC determines that a budget modification should be requested, it will prepare a specific recommendation, including a cost-sharing plan, for consideration by the WRIA 9 Forum. If the PMC determines that a scope of work modification should be pursued, procedures as outlined below will be followed.

- For PED Phase 1 scope of work changes:
  - Scope of work changes may take the form of revisions to work as set out in this PMP and the approved site- and/or study-specific PMPs, and the addition or deletion of specific sites and/or studies.
  - The PMC may approve scope of work revisions for specific PED Phase 1 site designs or general studies that would not result in that site design's or study's budget being exceeded, or that would be covered through the use of contingency funds.
  - For additions to the scope of work (i.e. the addition of new sites or studies or the addition of components to existing site or study work), the PMC will determine whether the proposed addition should be addressed as a Betterment, Post Authorization Change, USACE continuing authority programs (as addressed in Section 3.2.2), through an additional cost share to be borne by the Sponsor and/or partnering jurisdictions, or some other mechanism. The PMC may approve any addition proposed to be paid for by the jurisdiction in which an individual site would be constructed; if such funding is proposed to be made through this PED Phase 1 Agreement, the addition is subject to the Sponsor's approval and a satisfactory cost payment arrangement.
  - For any additions proposed to be cost-shared among partner jurisdictions, the PMC will prepare specific recommendations and alternatives for the WRIA 9 Forum. Any cost-share proposal not involving all the partner jurisdictions must be approved by those jurisdictions proposed to take part in the cost-share. Any cost share mechanisms that would be implemented through this PED Phase 1 Agreement must be approved by the Sponsor.
  - For deletions from the scope of work (i.e. the deletion of specific sites or studies due to technical or other factors as may be raised by Project Development Teams), the PMC will develop a recommendation for deletion to present to the WRIA 9 Forum, including a proposal for addressing cost decrease issues.
- Forward for decision to the WRIA 9 Forum any decisions that cannot be reached by the PMC.

4.1.3 Project Delivery Teams/Project Co-Managers

Function

A Project Delivery Team (PDT) will be created for each PED site, systematic study, and programmatic initiative.

PDTs are responsible for conducting the PED Phase 1 general studies and preparing the plans and specification documents for the individual site designs.

Co-Managers/PDT Representatives

Each PDT will be led by one Project Co-Manager from the USACE and one Project Co-Manager representing the Sponsor. The Sponsor's Co-Manager may be a representative of the Sponsor or of one of its partnering jurisdictions. The Co-Managers will be selected by the site sponsor . The Co-Managers will select PDT design/engineering/ technical members.

Operating Protocols

- The project Co-Manager designated by the Corps will schedule and lead regular PDT meetings during the study or site design period, to be scheduled according to the timing and sequence of work to be done. The purposes of the meetings are:
  - to review project progress according to the site- or study-specific PMP and address any arising issues, in order to ensure that work is conducted on schedule;
  - to discuss evolving design requirements and changes, stimulate interdisciplinary communication and design compatibility, and serve as a forum to stimulate individual designers to function as an integrated design team and enhance the collective quality of the design package.
- A designated team member will prepare minutes of PDT meetings, which will be provided to each team member. Significant communications will also be confirmed in writing to all team members through e-mail or other appropriate methods.
- As an initial task, each PDT will clearly define team member roles and responsibilities. The Corps Co-Manager will prepare and distribute a roster of PDT members with names, PDT role, and contact information.
- Each PDT will also agree on guidelines for conducting work to be completed, including review of draft documents and responding to requests for information. The schedule for task completion shall provide for adequate time for review by the Sponsor and/or partnering jurisdictions, including time for additional independent reviews if appropriate.
- In the course of completing work, each PDT will agree upon the steps for moving to a subsequent task or construction phase. Criteria for such a transition may include assignment to a successor team, determination of construction methods, establishment of responsibilities, permit requirements, staging, phasing, and safety.
- PDT members agree to be responsive in communicating with each other.

Tasks

- As an initial task, the Project Co-Managers will prepare a site- or study-specific PMP. The PMP will document the specific scope of work and project objectives, study- or site-specific success criteria, timelines for task completion and product delivery, roles/responsibilities of team PDT members, and per-task project budget to be consistent with the overall site and study budgets established in this PMP. Each site- and study-specific PMP will be submitted for review and approval by the PMC.
- PDTs will, according to the agreed-upon PMPs, develop well-integrated and technically sound site designs that meet the local jurisdictions' requirements in accordance with governing criteria and regulations as well as current local, state, and federal permitting requirements.
- PDTs will conduct detailed interdisciplinary coordination reviews subsequent to the specific technical discipline analyses described in Section 3.1.1.3 and prior to submission of the design package. During this review, designers will check for discrepancies, inconsistencies, or conflicts between their work and the work prepared by other PDT members to improve the quality of the plans, specifications and cost estimates.

4.1.4 Technical Committee.

The Technical Committee, composed of representatives from the USACE, the Sponsor and partnering jurisdictions, tribes, resource-related governmental agencies, and nonprofit groups,

worked during the Reconnaissance and Feasibility phases of ERP to select sites and provide technical oversight to the overall effort. During PED Phase 1, the Technical Committee will act as an advisory body to review work products and processes with special focus on permitting and implementation issues. The Technical Committee will meet as needed as determined by the Project Co-Managers with input from the partnering jurisdictions.

4.1.5 Independent Technical Review Team

The USACE requires the District to conduct technical reviews of all site designs and analyses completed as part of a PED cost-sharing agreement. These reviews must be completed prior to development of Project Cooperation Agreements (PCAs) for construction of projects designed under PED; specifically, the review must be completed before PCAs are transferred to the Northwest Division (NWD) of USACE for review or for advertisement. To complete the reviews, an Independent Technical Review Team (ITRT) will be convened primarily from USACE staff not otherwise affiliated with PED Phase 1. Any recommendations for project changes forthcoming from the ITRT will be submitted for consideration to the appropriate design- or study-specific PDT.

4.2 Dispute Resolution

Article V of the PED Phase 1 agreement addresses formal dispute resolution mechanisms for use at a high level by the USACE and the Sponsor. The USACE, the Sponsor and partnering jurisdictions recognize that disputes may arise in the course of conducting PED Phase 1 work that will require resolution at a lower functional level and agree to use the dispute resolution levels outlined below, subject to the provisions in the PED Phase 1 agreement. The USACE, Sponsor and partnering jurisdictions will make every effort to resolve disputes at the lowest level possible. If disputes cannot be resolved at a given level within a reasonable timeframe, the dispute will be referred to the next level.

For site- or study-specific disputes:

- level one: Project Co-Managers for the Project Delivery Teams, unless the dispute involves budget in excess of the site budget, in which case the dispute is referred immediately to level two below.
- level two: Program Management Committee
- level three: WRIA 9 Forum

For general PED Phase 1 disputes:

- level one: Program Management Committee
- level two: WRIA 9 Forum

In the event that disputes cannot be resolved at the functional levels outlined above, they may be submitted for non-binding alternative dispute resolution by a qualified third party, per the terms of the PED agreement.

5.0 Quality Control/Assurance Plan

5.1 Purpose

The purpose of this Quality Control Plan (QCP) is to formally establish and implement USACE Seattle District policy that ensures quality management, services, and products in support of the Project Manager, Program Manager, Project Delivery Team, and the sponsor.

5.2 Elements

The QCP will involve the following elements:

Criteria Review. This is a PDT function to be accomplished early in the design process and throughout the design. Site specific criteria for the project shall be discussed and documented in the site-specific PMP. This information will be provided to the PDT for use in preparation of the project design. During the design process, these criteria may change. The project team will assess the impacts of these changes or clarifications and provide budget and schedule impact assessments to the sponsor. Information relating to criteria review shall be documented in memorandums as appropriate and provided to team members and the sponsor.

Sponsor –USACE Relationship Management, including On-Board reviews.
The PMC will meet monthly or as needed to review project progress, ensure site-specific and systematic project criteria is being met, and review incoming information or possible changes to criteria.

Consultant Quality Control/Quality Assurance. The professional quality, technical accuracy and the coordination of all designs, drawings, specifications, design analyses, cost estimates, bid schedules and other documents and services are the responsibility of any consultant hired by the USACE to complete assigned PMP tasks. Any such consultant shall have a logical and functional quality control program and project specific Quality Control Plan (QCP) to assure errors or deficiencies in all submittals are avoided. Any such consultant shall perform reviews during the design process and just prior to completion of all work. Work shall be reviewed for technical accuracy, coordination and conformance to sponsor requirements. All errors and deficiencies shall be corrected prior to submission for sponsor review. Any such consultant shall submit two copies of its QCP for approval within 15 calendar days after award of the design contract. One copy shall be sent to the USACE Project Manager and the Contracting Officers Representative (PM/COR), and one copy shall be sent to the Chief of the Technical Engineering and Review Section of the USACE. Any such consultant shall revise the QCP as required by the PM. An approved version of the QCP shall be completed prior to the first submittal. QCP requirements are described in Volume 1, Chapter 2, Section 2.1.4, Design Quality Assurance Plan of the Guide for Consultants. At the option of the USACE, USACE representatives may visit any such consultant prior to submittal dates to check the consultant's internal quality control process.

Interdisciplinary Coordination Review. A detailed interdisciplinary coordination review should be conducted by the PDT subsequent to the Specific Discipline Overviews and prior to submission of the total design package to the USACE PM. During this review designers will check for discrepancies, disconnects and interference's within and between their work and the

work prepared by other PDT members. The goal is to eliminate flaws and conflicts within and between the plans, specifications and cost estimates. The PDT will be responsible for developing a well-integrated and technically sound design that meets the sponsor's requirements in accordance with governing criteria and regulations. Minutes of PDT meetings shall be prepared by the PM or the designated team member and provided to each team member. In this way, each team member is aware of decisions made that might affect their portion of the project.

Specific Discipline Peer Checks/Overview. Within each discipline, an independent spot check and review of the designer's assumptions, analyses, and calculations shall be performed throughout the design process on a periodic basis. This effort, which is the standard operating procedure of the Seattle District, will be conducted by senior level personnel within the same technical discipline or section who are not directly involved with the development of the project design being reviewed. The resource manager for the discipline in question is responsible to ensure that tools (e.g., internal quality control plan, checklists) and procedures are in place to ensure that the level of quality negotiated between the USACE PM, the Sponsor, and the PDT is met.

Independent Technical Reviews. Within the USACE, its contractors and the sponsor, an independent review team, composed of specialists in each discipline will perform an independent technical review of the designer's assumptions, analyses and calculations throughout the design process. Senior level personnel will perform the review effort. The resource manager of the discipline in question is responsible to ensure that internal quality control plans, checklists, etc. and procedures are in place to ensure the expected level of quality is met. Review comments in electronic or written format will be submitted by reviewers, annotated with responses by the consultant, back-checked to ensure a complete and timely response by reviewers and collected by the USACE PM. A review meeting will take place between the sponsor, consultant, USACE PM and other interested parties. Every comment will be incorporated or resolved to the satisfaction of the USACE PM. Dr. Checks (computer aided review system) will be incorporate for this review.

Biddability, Constructability, Operability and Environmental (BCOE) Review. The USACE Resident Engineer Office will conduct a BCOE review as required by ER 415-1-11. The Sponsor will also perform a functional, operability, maintainability and environmental review. The Engineering and Construction Division will provide a formal written certification that all appropriate BCOE comments have been considered and as appropriate incorporated in the design documents prior to award of the construction contract. The BCOE review will be conducted in strict accordance with ER 415-1-11 to include a minimum the following checks:

- Accurate depiction of existing conditions at the site to include utility availability, obstructions, drainage, adequacy of storage and working space and general configuration;
- Appropriateness of contract sequencing, contract performance time, contractor quality control requirements and submittal requirements;
- Any special environmental conditions;
- Local availability of special materials and labor skills, if required; and
- Any base/location specific requirements.

Value Engineering (VE). The USACE PM will coordinate with the Seattle District VE Officer and the Sponsor and its partnering jurisdiction to schedule and conduct a VE study for appropriate projects (including those sites with an estimated construction cost of $2,000,000 or greater). When applicable, the PM will insure that a VE study is implemented early in the design process to maximize quality enhancement and cost reduction ideas and minimize impacts on the design schedule and lost design effort.

6.0 Additional Considerations

6.1 Construction Techniques

Construction will not be performed under this PED agreement. However, since construction techniques will be selected, and associated cost estimates and specifications will be developed for each Phase 1 site in the design process, possible construction techniques are described below. Selection of one or more of these techniques for each site will affect implementation costs.

- Equipment Rental. This is a method that has been developed by the Seattle District's Emergency Operations group. District Personnel are used as construction supervisors and equipment and operators are obtained through contracted rental equipment and materials purchased through purchase orders. This system has been found to be very effective for small projects with a potential for significant changes as the project is constructed.
- Lump Sum. This contract would be used for larger projects where the entire project would go out for competitive bid and be constructed by the contractor providing the lowest bid.
- Design/Build. This technique would involve an open-ended contract that would be set up so that each contract would be through a work order. The contract would be set up so that one entity would be responsible for both the design and the construction of an individual site.
- Performance Contract. This contract would be similar to a Lump Sum contract but would include a specification to bid on individual items that may be required above and beyond the scope of the original scope of work. This gives more flexibility than what is available in a normal Lump Sum contract and allows an increase in the contract scope without the need for change orders.

6.2 Real Estate Plan

The real estate process will follow the plan outlined in the Real Estate Appendix of the feasibility report. Phase one sites were selected because the majority of them are in public ownership or will soon be in public ownership. The majority of these lands are held in fee with some of them being obtained with an approved environmental easement.

6.3 Local Sponsorship Financial Plan

The County is the Sponsor of the PED phase. However, the County is relying on cost-sharing contributions from a number of other partnering local jurisdictions that collectively comprise both the WRIA 9 Forum and the PMC. The County anticipates using an existing Inter-Local Agreement (ILA) with these partnering jurisdictions that will outline the financial obligation of each participant in the ILA. Funding may also be augmented through funds from the King Conservation District. This is similar to the financial plan that was used to finance the Feasibility Study. Table 3 shows how this Federal, Sponsor, and partnering jurisdiction funding could be spread over the four-year period of the PED agreement.

6.4 Policy Compliance Memorandum

The *Policy Compliance Memorandum, Green/Duwamish River Ecosystem Restoration Draft Feasibility Report* (2000), a document prepared by Headquarters, USACE, verified that the Feasibility Report is compliant with USACE policy. The USACE Project Manager determined that this PMP is in full compliance with the memorandum.

6.5 Environmental Compliance

The USACE will be responsible for assuring that Phase 1 projects are in compliance with all applicable federal regulations. All state and local regulations will be the responsibility of the jurisdiction where the project is to be constructed. All federal permitting costs are covered under the PED agreement, but state and local permitting costs will be the responsibility of the Sponsor and its partnering jurisdictions and will not be covered under PED cost sharing arrangements.

6.5.1 Federal Environmental Regulations

The National Environmental Policy Act

The NEPA process includes public participation in addition to other process requirements. A Programmatic Environmental Impact Statement (PEIS) was completed for all Phase 1 sites during the Feasibility Phase. However, even with a PEIS, site-specific projects will still require additional environmental review. Section 1 of the programmatic EIS describes in more detail the NEPA process for subsequent environmental documents. This programmatic EIS is intended to accomplish partial NEPA compliance. Project-specific NEPA documents will need to be prepared for each proposed restoration project. The USACE will continue to act as lead agency for the NEPA process.

Section 401 of the Clean Water Act, Water Quality Certification

A Water Quality Certification under the CWA Section 401 is required from the State of Washington for activities requiring a federal license or permit that may result in any discharge into the navigable waters. In order to obtain the required certification, the State of Washington may require a water quality modification

Section 404 of the Clean Water Act, Discharge of Dredge or Fill Material

This permit is required for the discharge of dredged or fill material into water of the United States. Waters of the United States is defined to include wetlands. Site or project-specific compliance under Section 404 will occur prior to any construction.

Coastal Zone Management Act Compliance

The Coastal Zone Management Act encourages and assists with the responsible use and protection of the nation's coastal zones. The National Oceanic and Atmospheric Administration (NOAA) oversees the implementation of the act by assisting state and local shoreline agencies to achieve wise use of land and water resources. The Washington State Department of Ecology leads the effort in implementing the act with assistance from each coastal county's planning departments. An evaluation of coastal zone consistency will be done during the project-specific permit phase and that determination will be provided to the appropriate agencies.

Federal Endangered Species Act
The Endangered Species Act (ESA) requires federal agencies to conserve endangered and threatened species. Consultations with the federal agencies that govern fish and wildlife are required to ensure that federal actions do not jeopardize listed, proposed, or candidate species or destroy their critical habitats.

National Historic Preservation Act: Section 106
The Section 106 process of the National Historic Preservation Act is triggered for projects that are federal undertakings or that require a federal permit, license, or approval and are subject to state or local regulation pursuant to approval by a federal agency. Section 106 requires that a federal agency having direct or indirect authority to issue a license authorizing an undertaking shall take into account the effect of the undertaking on historic properties. The Section 106 process includes research and field investigation in consultation with the Washington State Office of Archaeology and Historic Preservation, the Advisory Council on Historic Preservation, concerned Tribes and local governments.

6.5.2 State and Local Environmental Regulations

State Environmental Policy Act (SEPA), Ch. 43 RCW
As with NEPA, there will be subsequent environmental review to meet SEPA requirements for the specific sites. Site-specific NEPA/SEPA documents will be prepared prior to any construction.

State Hydraulic Code (HPA), Washington Department of Fish and Wildlife (WDFW)
Work that uses, diverts, obstructs, or changes the natural flow or bed of any freshwater or saltwater of the state requires a Hydraulic Project Approval (HPA) from WDFW. The statutory authority for this requirement is contained in Chapter 75.20 RCW and Chapter 220-110 WAC. HPAs may be needed for restoration projects since most would involve some degree of work within the streambed of the Green/Duwamish River or one or more of its tributaries.

Local Permits
These permits include all those required by the jurisdiction in which each site will be constructed. Examples include clearing and grading permits, flood plain ordinances, noise ordinances, etc.

6.6 PED Execution
This PMP identifies the minimum work considered necessary to meet the requirements to execute a Design Agreement and the efforts necessary in the PED phase. Coordination throughout the process will continue between USACE and King County and cities with a view to adjust and revise the PMP, when appropriate, to reflect information developed by the study and the current analysis of potential measures and alternatives. Work identified in this PMP will be accomplished by USACE, King County, city representatives and designated consulting firms. USACE will use Federal and Sponsor funds to accomplish activities as identified in this PMP. King County has used its own funds and obtained funds from other local governments to accomplish work and will continue this practice for future planned work during PED. This PMP identifies the anticipated split between the Federal and Local share.

6.6.1 Additional Work Needed for Project Construction

Other work in advance of project construction includes the preparation and execution of multiple Project Cooperation Agreements (PCA) that identify the responsibilities and contributions of the USACE and the local sponsor. Each restoration site will require a PCA. Funding necessary for the USACE to develop PCAs for each Phase 1 site is included in the Project Management estimate. State and local permitting fees have not yet been secured for this effort and would need to be provided in the future.

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Table 1 Design Agreement (DA) Costs by Year					
Study Item	**FY 2002**	**FY 2003**	**FY2004**	**FY2005**	**Total Sys. Cost**
Systematic Studies					
Hemp	$ 100,000	$ 100,000	$ 100,000		$ 300,000
Baseline Biological Evaluation	$ 40,000	$ 49,000	$ 11,000		$ 100,000
Monitoring Plan	$ 30,000	$ 5,000	$ -		$ 35,000
Water Quality	$ 15,000	$ 15,000	$ -		$ 30,000
Juvenile Residency Study	$ 30,000	$ 50,000	$ 40,000		$ 120,000
Public Safety and Recreation	$ 10,000	$ 15,000	$ -		$ 25,000
Landowner Outreach	$ 5,000	$ 2,500	$ 2,500		$ 10,000
Cult Resource Prog Agreement	$ 10,000	$ -	$ -		$ 10,000
Maintenance Issues	$ 4,000	$ 1,000	$ -		$ 5,000
Project Management	$ 85,000	$ 90,000	$ 75,000		$ 250,000
Total System Costs	$ 329,000	$ 327,500	$ 228,500		**$ 885,000**
Site Costs					
2002 Site Costs					**Total Site Costs**
Green River Park	$ 49,400				$ 49,400
Olson Creek	$ 55,250				$ 55,250
Newaukum Creek	$ 105,950				$ 105,950
Volunteer Revegetation	$ 5,000				$ 5,000
2003 Site Costs					
Elliott Bay Nearshore		$ 34,400			$ 34,400
Lake Meridian Outlet		$ 85,000			$ 85,000
Lones Levee	$ 20,000	$ 77,800			$ 97,800
Newaukum Creek	$ 20,000	$ 80,000			$ 100,000
Riverton Creek Restoration	$ 20,000	$ 66,250			$ 86,250
Mid Green LWD Demo	$ 10,000	$ 40,000			$ 50,000
Middle Green Gravel		$ 25,400			$ 25,400
Volunteer Revegetation		$ 5,000			$ 5,000
Site 1	$ 10,000	$ 49,100			$ 59,100
Mainsteam Mant. (Boeing)		$ 20,000			$ 20,000
Springbrook/Garrison Phase 1	$ 10,000	$ 30,000			$ 40,000

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2004 Site Costs					
Brunner Slough		$ 15,000	$ 37,200		$ 52,200
Springbrook/Garrison Phase 1		$ 25,000	$ 75,400		$ 100,400
Meridian Valley Creek		$ 13,500	$ 50,000		$ 63,500
Mainstem Maintenance (Fenster)			$ 23,400		$ 23,400
Middle Green Gravel			$ 10,000		$ 10,000
Gale Creek		$ 11,750	$ 40,000		$ 51,750
Mill Creek (Geodeke)		$ 16,500	$ 50,000		$ 66,500
Middle Green LWD		$ 5,000	$ 20,000		$ 25,000
Volunteer Revegitation			$ 5,000		$ 5,000
2005 Site Costs					
Springbrook/Garrison Cr. Phase 2			$ 19,000	$ 41,000	$ 60,000
Burns Creek Phase 1			$ 20,800	$ 50,000	$ 70,800
Horsehead Bend			$ 12,500	$ 40,000	$ 52,500
Sunday Creek Vol Revegitation				$ 37,600	$ 37,600
Volunteer Revegiatation				$ 4,200	$ 4,200
Middle Green LWD			$ 4,350	$ 15,000	$ 19,350
Middle Green Gavel				$ 10,000	$ 10,000
	FY2002	**FY2003**	**FY2004**	**FY2005**	**Totals**
Total Yearly Site Costs	$ 305,600	$ 599,700	$ 367,650	$ 197,800	$ 1,470,750
Total Yearly Contingency	$ 150,000	$ 125,000	$ 125,000	$ 94,250	$ 494,250
Total Yearly DA Costs	$ 784,600	$ 1,052,200	$ 721,150	$ 292,050	$ 2,850,000
			DA Costs	**FY 01 Costs**	Total
			$ 2,850,000	$ 150,000	**$ 3,000,000**

NOTE: The funding shown above is only Design Agreement funding and does not include construction costs shown in table 1a.

NOTE: The $150,000 funding shown as FY 01 costs was used to prepare and coordinate this Design Agreement

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Table 1a Construction Cost by Year					
Study Item	**FY 2002**	**FY 2003**	**FY2004**	**fy2005**	
Site Costs					
2002 Construction					
Green River Park	$ 767,000				$ 767,000
Olson Creek	$ 242,000				$ 242,000
Newaukum Creek	$ 350,000				$ 350,000
Volunteer Revegetation	$ 150,000				$ 150,000
	$ 1,509,000				
2003 Construction					
Elliot Bay Nearshore		$ 600,000			$ 600,000
Lake Meridian Outlet		$ 1,300,000			$ 1,300,000
Lones Levee		$ 3,878,000			$ 3,878,000
Newaukum Creek		$ 500,000			$ 500,000
Riverton Creek Restoration		$ 1,065,000			$ 1,065,000
Mid Green LWD Demo		$ 250,000			$ 250,000
Middle Green Gravel		$ 150,000			$ 150,000
Volunteer Revegetation		$ 200,000			$ 200,000
Site 1		$ 2,226,000			$ 2,226,000
Mainsteam Mant. (Boeing)		$ 2,000,000			$ 2,000,000
Springbrook/Garrison Phase 1		$ 500,000			$ 500,000
		$ 12,669,000			
2004 Construction					
Brunner Slough			$ 1,657,000		$ 1,657,000
Springbrook/Garrison Phase 2			$ 4,000,000		$ 4,000,000
Meridian Valley Creek			$ 651,000		$ 651,000
Mainstem Maintenance (Fenster)			$ 1,000,000		$ 1,000,000
Middle Green Gravel			$ 300,000		$ 300,000
Gale Creek			$ 387,000		$ 387,000
Mill Creek (Geodeke)			$ 8,000,000		$ 8,000,000
Middle Green LWD			$ 400,000		$ 400,000
Volunteer Revegitation			$ 250,000		$ 250,000
			$ 16,645,000		
2005 Construction					

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Springbrook/Garrison Cr. Ph 3				$ 4,000,000	$ 4,000,000
Burns Creek Phase 1				$ 350,000	$ 350,000
Horsehead Bend				$ 1,133,000	$ 1,133,000
Sunday Creek Vol Revegitation				$ 350,000	$ 350,000
Volunteer Revegiatation				$ 300,000	$ 300,000
Middle Green LWD				$ 250,000	$ 250,000
Middle Green Gavel				$ 300,000	$ 300,000
				$ 6,683,000	
				Total Constructio	**$ 37,506,000**

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Table 2 Green Duwamish PED Site Costs August 8, 2001

SITE	Location	Total Construction Cost	Real Estate Costs	Local Cash	Local Credit	Contract Type	Civil Design (Naher)	Geo Tec (Kaiser)	Geo Morph (Perkins)	Cult Res (Grant)	Pre Proj Monitoring (Cagney)	Env. Assessment (Cagney)	HTRW (Widle)	H&H (Petroff)	Estimating (Neumiller)
Brunner Sough	Uninc.King County mid green	$ 1,657,000	$ 70,000	$ 510,000		Equipment Rental	$ 9,000	$ 1,000	$ 800	$ 3,000	$ 3,000	$ 13,000	$ 5,000	$ 3,000	$ 1,900
Burns Creek 1/2 in phase one	Uninc.King County mid green	$ 750,000	$ 250,000	$ 12,500		Equipment Rental/Volunteer Reveg	$ 3,500	$ 1,500	$ 4,900	$ 1,500	$ 3,000	$ 10,000	$ 10,000	$ 10,000	$ 1,900
Elliot Bay Nearshore	Seattle , Elliot Bay	$ 600,000	$ 10,000	$ 200,000		Equipment Rental	$ 7,000		$ -	$ 2,000	$ 8,000	$ 10,000	$ -	$ -	$ 1,900
Gale Creek	TPU Upper Basin	$ 387,000	$ 28,000	$ 107,000		Design Build	$ 13,500	$ 6,500	$ -	$ 2,000		$ 9,000	$ 2,000	$ 3,000	$ 1,750
Green River Park	Kent Mid Green	$ 767,000	$ 112,000	$ 156,000		Equipment Rental	$ 7,000	$ 2,500	$ -	$ 2,500	$ 3,000	$ 12,000	$ 7,000	$ 3,000	$ 1,900
Horsehead Bend	Kent Mid Green	$ 1,133,000	$ 144,000	$ 253,000		Equipment Rental	$ 7,000	$ 2,500	$ 600	$ 4,000	$ 4,000	$ 12,000	$ 7,000	$ 3,000	$ 1,900
Lake Meridian Outlet	Auburn, Mid Basin	$ 1,300,000	$ 132,000	$ 323,000		Lump Sum	$ 13,500	$ 3,000	$ 1,400	$ 6,000	$ 10,000	$ 15,000	$ 2,000	$ 12,000	$ 7,100
Lones Levee	Uninc.King County mid green	$ 3,878,000	$ 290,000	$ 1,067,000		Equipment Rental	$ 10,000	$ 1,500	$ 4,900	$ 2,500	$ 3,000	$ 10,000	$ 3,000	$ 50,000	$ 1,900
Mainstream Maintenance (Boeing)	Mid Basin	$ 2,000,000	$ 1,500,000		$ 800,000	Equipment Rental	$ 7,000	$ 1,000	$ -	$ 3,500	$ 3,500	$ 13,000	$ 2,000	$ 3,000	$ 1,900
Meridian Valley Creek	Kent Mid Green	$ 651,000	$ 114,000	$ 114,000		Lump Sum	$ 9,000	$ 2,500	$ 1,900	$ 3,000	$ 6,000	$ 14,000	$ 2,000	$ 3,000	$ 5,600
Mid Green LWD demo	Uninc.King County mid green	$ 1,000,000	$ 100,000	$ 250,000		Design Build	$ 9,000	$ 1,500	$ 7,100	$ 1,000	$ 14,000	$ 15,000	$ 3,000	$ 6,000	$ 1,750
Middle Green Gravel	Uninc.King County mid green	$ 800,000	$ 160,000	$ 120,000		Equipment Rental	$ 7,000	$ 1,000	$ -	$ 1,000	$ 10,000	$ 11,000	$ 2,000	$ 3,000	$ 1,900
Mill Creek, Goedeke	Auburn, Mid Basin	$ 8,000,000	$ 650,000	$ 2,150,000		Lump Sum	$ 12,000	$ 2,500	$ 1,500	$ 2,500	$ 5,000	$ 10,000	$ 5,000	$ 10,000	$ 2,000
Newaukum Creek	Uninc.King County mid green	$ 2,000,000	$ 620,000	$ 80,000		Design Build	$ 22,000	$ 1,000	$ 10,200	$ 4,000	$ 10,000	$ 13,000	$ 10,000	$ 60,000	$ 1,750
Olson Creek	Auburn, Mid Basin	$ 242,000	$ 41,000	$ 44,000		Design Build	$ 11,000	$ 1,000	$ 4,500	$ 4,000		$ 7,000	$ 2,000	$ 6,000	$ 1,750

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Riverton Creek Restoration	Tukwila, lower basin	$ 1,065,000	$ 410,000	$ -	$ 37,000	Design Build	$ 14,000	$ 3,000	$ -	$ 2,500	$ 7,000	$ 9,000	$ 2,000	$ 12,000	$ 1,750
Site 1	Tukwila, lower basin	$ 2,226,000	$ 950,000	$ -	$ 171,000	Equipment Rental	$ 7,200	$ 2,500	$ -	$ 4,000	$ 7,000	$ 15,000	$ 10,000	$ 3,000	$ 1,900
Sunday Creek Revegitation/ Vol Reveg	Forest Service/ BPA	$ 110,000	$ 37,000	$ 1,500		Volunteer Planting	$ 3,000		$ 2,600	$ 3,000	$ 8,000	$ 8,000	$ 2,000	$ 3,000	$ 1,500
Lower Springbrook/ Garrison Cr.	Renton, Lower Basin	$ 9,300,000	$ 3,240,000	$ 15,000		Lump Sum	$ 22,000	$ 2,500	$ -	$ 4,000	$ 15,000	$ 17,000	$ 5,000	$ 60,000	$ 13,900
Volunteer Revegetation	Entire Basin	$ 900,000	n/a	$ 315,000		Equipment Rental	$ 3,600		$ -		$ 3,000	$ 7,000	$ -	$ 1,200	$ 1,900
Total Item Cost		$ 38,766,000	$ 8,538,000	$ 5,195,500	$ 1,008,000		$ 184,800	$ 34,500	$ 34,700	$ 51,500	$ 116,500	$ 207,000	$ 66,000	$ 241,200	$ 54,050

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Specs (Petrone)	Survey (Wong)	Real Estate (Gentry)	**Site Costs**
$ 2,500	$ 2,000	$ 8,000	$ 52,200
$ 1,500	$ 10,000	$ 13,000	$ 70,800
$ 2,500	$ -	$ 3,000	$ 34,400
$ 10,000	$ 1,000	$ 3,000	$ 51,750
$ 2,500	$ 4,000	$ 4,000	$ 49,400
$ 2,500	$ 4,000	$ 4,000	$ 52,500
$ 7,000	$ 4,000	$ 4,000	$ 85,000
	$ 5,000	$ 6,000	$ 97,800
$ 2,500	$ 2,000	$ 4,000	$ 43,400
$ 6,500	$ 5,000	$ 5,000	$ 63,500
$ 20,000	$ 8,000	$ 8,000	$ 94,350
$ 2,500	$ 1,000	$ 5,000	$ 45,400
$ 10,000	$ 3,000	$ 3,000	$ 66,500
$ 25,000		$ 49,000	$ 205,950
$ 10,000	$ 4,000	$ 4,000	$ 55,250

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$ 20,000	$ 8,000	$ 7,000	$ 86,250	
$ 2,500	$ 2,000	$ 4,000	$ 59,100	
$ 1,500	$ 1,000	$ 4,000	$ 37,600	
$ 15,000	$ 2,000	$ 44,000	$ 200,400	
$ 2,500	$ -	$ -	$ 19,200	
$ 142,500	$ 54,000	$ 161,000	Total costs	

$ 1,470,750

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Table 3, Yearly Spread of Design Agreement Costs 28 August 2001

	fy 2001	fy 2002	fy 2003	fy 2004	fy2005	Totals	
Federal	150	581	772	533	214	2250	Total Federal
non Federal		204	280	188	78	750	Total Sponsor
yearly total	150	785	1052	721	292	3000	**Total**

gdpedtable3.xls

WRIA 9 FORUM
RESOLUTION NO. 2001-2

A RESOLUTION memorializing the Water Resource Inventory Area (WRIA) 9 Forum's participation in and cost sharing for local sponsorship for advanced planning as stipulated by the Design Agreement for the Green/Duwamish Ecosystem Restoration Project, to be executed by the U.S. Army Corps of Engineers and King County ("Design Agreement").

WHEREAS the cities of WRIA 9 and King County have organized themselves into a representative organization called the WRIA 9 Forum; and

WHEREAS the cities of WRIA 9 and King County have entered into an Interlocal Agreement, executed on January 9, 2001, for watershed-based planning action as a key component of the local and regional Endangered Species Act (ESA) response and compliance strategy; and

WHEREAS the Interlocal Agreement executed January 9, 2001, has been amended as of October 25, 2001; and
WHEREAS the Interlocal Agreement provides a mechanism for the implementation of habitat, water quality, and flood projects with regional, state, federal and nonprofit funds as they become available; and

WHEREAS advanced planning as described in the Design Agreement provides for pre-construction engineering, design and studies to be completed by 2005 for a total cost estimated at $3 million with a local cost share of 25% of the total amount; and

WHEREAS it is understood that future construction of projects as determined through advanced planning will begin as early as 2002, depending upon the availability of federal funds; and

WHEREAS representatives of the cities of WRIA 9 and King County have agreed through the WRIA 9 Forum to endorse and to financially support the advanced planning work provided for in the Design Agreement; and

WHEREAS representatives of cities participating in the WRIA 9 Forum and King County will transmit to their respective councils for approval financial support of the advanced planning work provided for in the Design Agreement according to cost share formula as designated through the Interlocal Agreement;

NOW, THEREFORE, BE IT RESOLVED;

I. That the WRIA 9 Forum approves and supports the activities provided for in the Design Agreement for advanced planning work for the Green/Duwamish Ecosystem Restoration Project, to be executed by the U.S. Army Corps of Engineers and King County, as meeting one of the objectives for which the WRIA 9 Interlocal Agreement, executed on January 9, 2001, was entered into.

II. That the WRIA 9 Forum supports and approves the designation of King County to act as the fiscal agent for and local sponsor under the Design Agreement.

III. That the WRIA 9 Forum recommends that each council consider the approval of the collection of funds from the jurisdictions represented in the WRIA 9 Forum for the purposes of meeting the financial obligations of the local cost share for advanced planning under the Design Agreement, and distribution of funds to King County, in accordance with the cost shares provided for in the Interlocal Agreement, less KCD or other such funds the Forum designates from grant funding.

IV. The WRIA 9 Forum will annually determine the funding collection based on the attachment A1 of the ILA planning cost share formula, and will consider using regional King Conservation District funds, individual city or county funds, or other contributed funds. Any financial obligations associated with advanced planning will be included in the WRIA 9 Forum budget, and will be administered following Section 7 of the Interlocal Agreement for the Watershed Basins within Water Resource Inventory Area 9.

V. That Steven M. Mullet, WRIA 9 Forum Chairman, is hereby duly authorized to act on behalf of the WRIA 9 Forum indicating its support of the actions described above.

This resolution has been approved by those WRIA 9 Forum members present on the 14th day November, 2001.

/s/

Steven M. Mullet,
WRIA 9 Forum Chairman

Attest:

/s/