

KING COUNTY

1200 King County Courthouse 516 Third Avenue Seattle, WA 98104

Signature Report

August 7, 2000

Motion 10988

Proposed No. 2000-0385.1 **Sponsors** Phillips and Irons 1 A MOTION authorizing an interlocal agreement between 2 King County and the Washington State Department of Fish 3 and Wildlife for the purpose of cooperatively designing, 4 constructing, and operating a greenhouse aquatic system, 5 and an on-site wastewater treatment facility, at the Issaquah 6 Salmon Hatchery. 7 8 9 WHEREAS, the Washington State Department of Fish and Wildlife (WDFW) 10 currently owns and operates the Issaquah Salmon Hatchery (the hatchery), located on 11 Issaquah creek, which flows into the southern end of Lake Sammamish, and 12 WHEREAS, treated wastewater from the hatchery entering Issaquah creek is one 13 of two remaining National Pollutant Discharge Elimination System-permitted 14 phosphorous point sources to Lake Sammamish, and 15 WHEREAS, the 1995 Lake Sammamish Initiative, a cooperative effort to develop 16 a management plan for improving the lake's water quality, calls for reductions in

17 phosphorous input to Lake Sammamish and, specifically, treatment of wastewater from 18 the hatchery, and 19 WHEREAS, King County and WDFW, with input from the city of Issaquah and 20 Friends of Issaquah Salmon Hatchery, have been working since 1997 to evaluate options 21 to enhance existing wastewater treatment at the hatchery and have identified a 22 greenhouse aquatic system, a series of plant and microbe-filled tanks within an enclosed 23 greenhouse, as the most viable option, and 24 WHEREAS, King County, which operates a regional wastewater treatment utility, 25 has determined that it is in the public interest to evaluate alternative wastewater treatment 26 technologies, and the greenhouse aquatic system will serve as a model to test and 27 demonstrate new technology for secondary wastewater treatment and water reuse, and 28 WHEREAS, the greenhouse aquatic system will have a design goal of removing 29 at least fifty percent of the phosphorous load from hatchery pollution abatement pond 30 discharges before they are released into Issaquah creek and the Lake Sammamish system, 31 and 32 WHEREAS, King County and WDFW wish to develop plans for constructing the 33 greenhouse aquatic system on the hatchery grounds and, after an operational transition 34 period of one year after construction, operation of the system by WDFW, and 35 WHEREAS, the Issaquah Salmon Hatchery is the most frequently visited fish 36 hatchery in the Washington hatcheries system and provides fish and water quality-related 37 educational opportunities to over three hundred thousand visitors annually, and 38 WHEREAS, the greenhouse aquatic system will provide visitors to the hatchery, 39 managers of other hatcheries, and community representatives with the opportunity to

40	learn innovative techniques for wastewater treatment, water reuse and natural resource
41	education, and
42	WHEREAS, through cooperative action on the greenhouse aquatic system, King
43	County and WDFW will seek to improve water quality in Issaquah creek and Lake
1 4	Sammamish and will contribute to a healthy ecosystem for humans, fish and other
45	wildlife, and
46	WHEREAS, under chapter 39.34 RCW, the Interlocal Cooperation Act, the
47	parties are each authorized to enter into an agreement for cooperative action;
4 8	NOW, THEREFORE, BE IT MOVED by the Council of King County:
49	The county executive is hereby authorized to enter into an interlocal agreement
50	with the Washington State Department of Fish and Wildlife, in substantially the same
51	form attached, for the purpose of cooperatively designing, building and operating a

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greenhouse aquatic system at the Issaquah Salmon Hatchery.

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Motion 10988 was introduced on 6/26/00 and passed by the Metropolitan King County Council on 8/7/00, by the following vote:

Yes: 13 - Mr. von Reichbauer, Ms. Miller, Ms. Fimia, Mr. Phillips, Mr. Pelz, Mr. McKenna, Ms. Sullivan, Mr. Nickels, Mr. Pullen, Mr. Gossett, Ms.

Hague, Mr. Vance and Mr. Irons

No: 0

Excused: 0

KING COUNTY COUNCIL

Pete von Reichbauer, Chair

ATTEST:

Anne Noris, Clerk of the Council

Attachments

A. Interlocal Agreement Between King County and the State of Washington Department of Fish and Wildlife for the Issaquah Salmon Hatchery Greenhouse Aquatic System

An Interlocal Agreement Between King County and The State of Washington Department of Fish and Wildlife for the Issaquah Salmon Hatchery Greenhouse Aquatic System

This agreement is entered into by King County, Washington, acting through the Wastewater Treatment Division, and the State of Washington, acting through the Department of Fish and Wildlife, collectively referred to as the "Parties," for the purpose of cooperatively designing, constructing, and operating a Greenhouse Aquatic System (a constructed indoor wetland system) to provide secondary treatment for pollution abatement pond effluent from the Issaquah Salmon Hatchery, and to provide an educational opportunity on water quality and reuse.

Recitals:

WHEREAS, the Washington State Department of Fish and Wildlife (WDFW) currently owns and operates the Issaquah Salmon Hatchery (the Hatchery), which has been in operation since 1936, and

WHEREAS, the Hatchery is located on Issaquah Creek, which flows into the southern end of Lake Sammamish, and

WHEREAS, treated wastewater from the Hatchery entering Issaquah Creek is one of two remaining NPDES permitted phosphorous point sources to Lake Sammamish, and

WHEREAS, the 1995 Lake Sammamish Initiative, a cooperative effort to develop a management plan for improving the lake's water quality, calls for reductions in phosphorous input to Lake Sammamish and, specifically, treatment of wastewater from the Hatchery, and

WHEREAS, the Parties, with input from the City of Issaquah and Friends of Issaquah Salmon hatchery, have been working since 1997 to evaluate options to enhance existing wastewater treatment at the Hatchery and have identified a Greenhouse Aquatic System, a series of plant and microbe-filled tanks within an enclosed greenhouse, as the most viable option, and

WHEREAS, King County, which owns and operates a regional wastewater treatment utility, has determined that it is in the best public interest to evaluate alternative wastewater treatment technologies, and

WHEREAS, the Greenhouse Aquatic System will serve as a model to test and demonstrate new technology for secondary wastewater treatment and water reuse, and

WHEREAS, the goal of the Greenhouse Aquatic System is to remove at least fifty percent of the phosphorous load from Hatchery pollution abatement pond discharges before they are released into Issaquah Creek and the Lake Sammamish system, and

WHEREAS, the Parties wish to develop plans for constructing the Greenhouse Aquatic System on the Hatchery grounds and, after an operational transition period of one year post construction, operation of the system by WDFW, and

WHEREAS, the Issaquah Salmon Hatchery is the most frequently visited fish hatchery in the Washington hatcheries system and provides fish and water-quality-related educational opportunities to over 300,000 visitors annually, and

WHEREAS, the Greenhouse Aquatic System will provide visitors to the Hatchery, managers of other hatcheries, and community representatives with the opportunity to learn innovative techniques for wastewater treatment, water reuse, and natural resource education, and

WHEREAS, through cooperative action on the Greenhouse Aquatic System, the Parties will seek to improve water quality in Issaquah Creek and Lake Sammamish and will contribute to a healthy ecosystem for humans, fish, and other wildlife, and

WHEREAS, pursuant to RCW 39.34, the Interlocal Cooperation Act, the Parties are each authorized to enter into an agreement for cooperative action;

NOW THEREFORE, the Parties mutually agree to the following:

I) Purpose

This agreement allows the Parties to cooperatively design and construct a secondary wastewater treatment and reuse facility, known as the Greenhouse Aquatic System, at the Issaquah Salmon Hatchery. This agreement also establishes arrangements for joint King County/WDFW operation of the facility during a limited transition period and operation of the facility by WDFW once the transition period is concluded.

II) Background and Project Description

A) Background

The Issaquah Salmon Hatchery, in operation since 1936, takes five to six million eggs annually from adult salmon returning to spawn. Approximately half of these eggs are raised into juvenile fish at the Hatchery and are released into Issaquah Creek, where they migrate through Lake Sammamish and Lake Washington to Puget Sound, and eventually into the Pacific Ocean. The remainder of the eggs go to schools and other cooperative projects.

The Hatchery produces an estimated average of six to seven thousand gallons of wastewater per day from its fish-rearing process. Currently, this wastewater is treated in pollution abatement (settling) ponds at the Hatchery. After settling for approximately twenty-four hours, the treated wastewater is released into Issaquah Creek and eventually flows into Lake Sammamish. Lake Sammamish's biological integrity has suffered recently from excessive nutrient-rich surface water runoff. By reducing the phosphorous and nutrient levels from the Hatchery's discharge,

the Parties' actions to construct a secondary wastewater treatment facility will seek to improve the quality of Lake Sammamish for humans, fish, and other wildlife.

B) Project Description

To treat and reuse the effluent from the Hatchery pollution abatement pond, the Parties will design, construct, and operate a Greenhouse Aquatic System on the grounds of the Hatchery. The Greenhouse Aquatic System, consisting of a series of vegetation-filled tanks within an enclosed greenhouse structure, will seek to remove sediment from and reduce the concentration of nutrients, including phosphorous, of the Hatchery pollution abatement pond discharge. Effluent from the Hatchery pond will be pumped into the greenhouse and through the series of tanks. Plants and microbes within the tanks will provide secondary treatment and polishing, or continued cleansing and purifying, of the pollution abatement pond effluent. After this treatment, a portion of the Hatchery discharge will be reused onsite and eventually released back into the Lake Sammamish Watershed, while the balance will be returned directly to Issaquah Creek.

C) Project Construction and Transition

The King County Wastewater Treatment Division (WTD) will design and construct the project in collaboration with WDFW. Construction is scheduled to be completed in the fall of 2001 or early winter of 2002, at which time the County will place the facility into operation. The parties agree that the Greenhouse Aquatic System will be constructed on WDFW property and that the facility will be operated by WDFW after the transition period.

Transition of the project from King County to WDFW will occur over approximately three years and will consist of two stages. An initial transition period of approximately one year will commence once the County has placed the project into operation, during which time King County will be responsible for project operations. The goal of the initial transition period is to provide for the successful transfer of day-to-day operational responsibility of the project to WDFW. During this time, King County will perform the following tasks:

- 1. Perform initial start-up of the facility;
- 2. Verify and demonstrate that the facility is functioning at and can maintain specified performance levels within the design criteria as given in the project Request for Proposal;
- 3. Test and refine operational procedures;
- 4. Prepare an operations and maintenance manual for the project and provide the manual to WDFW staff; and
- 5. Conduct other activities necessary to adequately instruct WDFW Issaquah Hatchery representatives in project operation.

Based upon the current construction schedule, the above tasks will be completed and King County will formally transfer operational responsibility for the Greenhouse Aquatic System to WDFW on or around January 1st, 2003, dependent

upon completion of construction and the above-outlined tasks. Once the initial transition period tasks have been completed and the Parties agree to an official date for transfer of facility responsibility from King County to WDFW, they will execute a Letter of Understanding documenting that date.

After the conclusion of the initial transition period and transfer of the project to WDFW responsibility, the final transition period will commence, during which King County will provide project operation technical support on an as needed basis for two years. After the conclusion of the final transition period, WDFW will have the sole responsibility to operate, maintain, repair, and replace the Greenhouse Aquatic System and its appurtenances. The Greenhouse Aquatic System will continue to be owned by King County until July 1st, 2036, at which point ownership of the project will devolve to the State of Washington.

WDFW will provide to King County such access to the facility and its operational records and data as the County may request for its continued evaluation of the Greenhouse Aquatic System.

III) Project Management

A) The project shall be managed by a Project Management Team (PMT) composed of the following representatives from WDFW and King County, or other representatives as designated by WDFW and King County, as appropriate to each party: (*denotes each party's point of contact) WDFW:

Ron Warren* - Hatcheries Operations Manager

Doug Nelson - Project Engineer

Catie Mains - Fish and Wildlife Biologist

Doug Hatfield - Complex Manager - Cascade Complex

King County:

Pat Borchers* - Project Manager, WTD Lorraine Lai - Civil Engineer, WTD

John Smyth - Project Manager, Reuse Program, WTD

Mason Bowles- Senior Ecologist, Water and Land Resources Division

(WLRD)

Kristi Silver - Water Quality Planner, WLRD

- B) The PMT shall meet as needed, and at least quarterly during all project phases, to:
 - 1) Disseminate and discuss general project information;
 - 2) Review and agree on a final project design;
 - 3) Monitor and review ongoing construction issues and activities, including selection of a construction contractor;
 - 4) Develop and implement provisions for transitioning the project to WDFW responsibility; and
 - 5) Monitor and review project budget and scoping decisions.

As appropriate to project needs and phases, staff in addition to PMT members may be invited to attend PMT meetings.

C) The PMT shall reach its decisions by consensus. In the event that consensus cannot be reached, the issue in question shall be referred to the Manager of WTD or his/her designee and the Regional Director of WDFW. In the event that the dispute cannot be resolved by the WTD Manager and the Regional Director of WDFW, it will be forwarded to the Director of the King County Department of Natural Resources or his/her designee, and the Director of WDFW or his/her designee for resolution.

IV) Responsibilities

- A) King County shall:
 - 1) Provide representatives for the PMT;
 - 2) Provide a Project Manager to work with WDFW representatives on a day-today basis on arising project issues and information and to avoid interruptions to ongoing hatchery operations;
 - 3) Acquire all necessary project construction permits and easements, including building, construction, grading, and land use permits; SEPA, water rights, SAO and shorelines review; and Biological Assessment and review;
 - 4) Provide WDFW a specific timeframe for opportunity to review the Preliminary Design drawings at 30% completion; Intermediate Design drawings at 60% Completion; and Final Design drawings at 90% and 100% completion.
 - 5) Design and construct the project, including providing construction management;
 - 6) Once project construction is completed, operate the project until the conclusion of the initial transition period;
 - 7) During the initial one-year transition period:
 - (i) Perform initial start-up of the facility;
 - (ii) Verify and demonstrate that the facility is functioning at and can maintain specified performance levels within the design criteria for the Request for Proposal;
 - (iii) Test and refine operational procedures;
 - (iv) Prepare an operations and maintenance manual; and
 - (v) Conduct other activities necessary to adequately instruct WDFW Issaquah Hatchery representatives in project operation;
 - 8) At the conclusion of the initial transition period, work with WDFW to execute a Letter of Understanding documenting the date of transfer of operational responsibility for the project to WDFW.
 - 9) During the secondary two-year transition period, provide project operation and technical support to WDFW on an as-needed basis.

B) WDFW shall:

1) Provide representatives for the PMT;

- Work with King County representatives on a day-to-day basis on arising project issues and information and to avoid interruptions to ongoing hatchery operations;
- 3) Review and approve the project design in a timely manner;
- 4) Provide the project site on the grounds of the Issaquah Hatchery, including a temporary construction easement or use permit with adequate ingress/egress for project construction and operation by King County;
- 5) Modify the Hatchery's existing and future NPDES permit(s) if necessary to accommodate project operations;
- 6) During the initial one-year transition period, provide adequate staff to work with King County to become proficient in project operations; and
- 7) At the conclusion of the initial transition period, work with King County to execute a Letter of Understanding documenting the date of transfer of the project to WDFW responsibility.
- 8) Operate and maintain the project once the initial one-year transition period is concluded and until at least July 1st, 2036;
- 9) Provide King County with the opportunity to perform future sampling, experimentation, and demonstrations at the project for educational purposes.

V) Costs

- A) The costs of the project include project management, design, construction, preparation of an operations and maintenance manual, and training for WDFW Issaquah Hatchery staff. The estimated range for design and construction costs for the Greenhouse Aquatic System is from \$640,000 to \$740,000. Project costs will be paid by King County. WDFW will provide the land for the project site and project operation until at least July 1st, 2036 as its contribution to the project, subject to termination provisions outlined in Agreement section VI. King County and WDFW will each pay its own staff costs to provide for project management and coordination and training on project operations.
- B) The Parties represent that funds for this project have been appropriated and are available. To the extent that this project requires future appropriations beyond current appropriation authority, the Parties' obligations are contingent upon the appropriation of sufficient funds to complete the activities described herein. If no such appropriation is made, this agreement will terminate.

VI) Effectiveness, Duration, Termination and Amendment

- A) This agreement is effective upon signature by the Parties and will remain in effect until July 1st, 2036, at which point ownership of the project will devolve to the State of Washington.
- B) This agreement may be terminated upon 30 days written notice subject to the following conditions, dependent upon the project stage during which termination occurs:
 - 1) Termination during the construction period:
 - (i) If the Agreement is to be terminated at the request of WDFW during construction, WDFW will reimburse King County for an amount agreed upon by the Parties to cover King County's project costs. WDFW will pay

- King County to return the site to a pre-construction condition, or to a condition agreed upon by the Parties.
- (ii) If the Agreement is to be terminated at the request of King County during construction, King County will return the site to a pre-construction condition, or to a condition agreed upon by the Parties, and will pay all associated costs.
- 2) Termination during the initial one-year transition period:
 - (i) If the Agreement is to be terminated at the request of WDFW during the transition period, WDFW will reimburse King County for an amount agreed upon by the Parties to cover King County's project costs, and will provide King County with the option to operate the facility.
 - (ii) If the Agreement is to be terminated at the request of King County during the transition period, King County will pay to WDFW an amount agreed to by the Parties to cover agreed upon costs of completion of the transition period activities, which will then be performed by WDFW. WDFW will then operate the project until at least July 1st, 2036, notwithstanding termination of this Agreement, or the Parties will agree on an alternative project operator.
- 3) Termination after transition to WDFW operation: (after the initial one-year transition period)
 - (i) Should WDFW wish to relinquish responsibility for operation of the project to King County, such transfer of responsibility will be accomplished through written agreement between WDFW and King County.
 - (ii) If the Hatchery property is surplused or if the use of the Hatchery grounds changes, King County will retain the right to operation of the project as follows:
 - (a) If The State of Washington surpluses and/or sells the Hatchery grounds, King County reserves the right of first offer to purchase the land on which the project is located and to operate the facility. If the project is sold to a third party, King County and The State of Washington will agree on a value for the project and the State of Washington will reimburse King County for that value.
 - (b) If WDFW proposes to change the use of the Hatchery grounds, King County reserves the right to continue operating the project as a wastewater treatment and water reuse demonstration facility if such use is feasible. If such use is not feasible, King County and WDFW will agree on a value for the project, incorporating a professional appraisal if applicable, and WDFW will reimburse King County for that value.
- C) This Agreement may be amended, altered, clarified, or extended only with the written agreement of the Parties.
- D) This Agreement is not assignable by either Party, either in whole or in part.
- E) This agreement is the complete expression of the terms hereto and any oral or written representations or understandings not incorporated herein are excluded. The Parties recognize that time is of the essence in the performance of the

provisions of this agreement. Waiver of any default shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the agreement unless stated to be such through written approval by the Parties which shall be attached to the original agreement.

VII) Counterparts

This Agreement may be executed in counterparts.

VIII) Indemnification and Hold Harmless

- A) The Parties agree to the following for the time period beginning with the initiation of design of the Project and ending with the transfer of operational responsibility to WDFW:
 - 1) To the extent allowed by law, the County shall protect, defend, indemnify and hold harmless WDFW, its elected officials, employees and agents from and against any and all suits, claims, actions, losses, costs, expenses of litigation, attorney's fees in the event of litigation, penalties, and damages of any kind or nature whatsoever arising out of, in connection with or incident to an act or omission caused or resulting form (1) the sole negligence of the County, its officials, employees, or agents, and in performance of the County's obligations under this Agreement or (2) the concurrent negligence of the County, its officials, employees, or agents, but only to the extent of the County's negligence. The County waives its Title 51 RCW industrial insurance immunity but only to the extent necessary for WDFW to enforce any rights of indemnity or contribution against the County.
 - 2) To the extent allowed by law, WDFW shall defend, indemnify and hold harmless the County, its elected officials, employees and agents from and against any and all suits, claims, actions, losses, costs, expenses of litigation, attorney's fees in the event of litigation, penalties, and damages of any kind or nature whatsoever arising out of, in connection with or incident to an act or omission caused or resulting from (1) the sole negligence of WDFW, its officials, employees, or agents in the performance of WDFW's obligations under this Agreement or (2) the concurrent negligence of WDFW, its officials, employees, or agents but only to the extent of WDFW's negligence. WDFW waives its Title 51 RCW industrial insurance immunity but only to the extent necessary for the County to enforce any rights of indemnity or contribution against WDFW.
- B) The Parties agree to the following for the time period beginning with the transfer of operational responsibility to WDFW and continuing throughout the duration of the Agreement:

To the extent allowed by law, WDFW shall protect, defend, indemnify and hold harmless the County, its elected officials, employees and agents from and against any and all suits, claims, actions, losses, cost, expenses of litigation, attorney's fees in the event of litigation, penalties, and damages of any kind or

nature whatsoever arising out of, in connection with or incident to an act or omission resulting from (1) the presence of the Greenhouse Aquatic System that is the subject of this Agreement on WDFW's real property, (2) the sole negligence of WDFW, its officials, employees, or agents in the performance of WDFW's obligations under this Agreement or (3) the concurrent negligence of WDFW, its officials, employees or agents but only to the extent of WDFW's negligence. WDFW waives its Title 51 RCW industrial insurance immunity but only to the extent necessary for the County to enforce any rights of indemnity or contribution against WDFW.

C) The County and WDFW acknowledge that the waiver of Title 51 RCW industrial insurance immunity in this Section VII was specifically negotiated. In the event of litigation between the County and WDFW to enforce rights under this Section VII, reasonable attorney's fees based on the use of attorneys that are employees of the prevailing party shall be allowed to the prevailing party.

day of, 20	es hereto have executed this agreement on the 1000.
Approved as to Form	KING COUNTY:
By: Title: Deputy Prosecuting Attorne	By: y Title: King County Executive
Approved as to Form	WDFW:
By:	By:
Title:	Title: