

**Interlocal Agreement**

**Between**

**University of Washington Tacoma  
Center for Urban Waters/Puget Sound Institute**

**And**

**CITY OF TACOMA**

**And**

**Participating Agencies by Addendum**

*(Modelling Center and Program)*

This Interlocal Agreement (**Agreement**) is made and entered into by and between the City of Tacoma, a municipal corporation operating under the laws of the state of Washington, through the City of Tacoma Environmental Services Department, (**City**), and the University of Washington and its branch campus, University of Washington Tacoma, a public institution of higher education and an agency of the state of Washington, (**UW-T**), by and through the Center for Urban Waters' Puget Sound Institute (**Institute**), and the authorized Participating Agencies, hereafter collectively referred to as the "**Parties**", in order for the Institute to provide specific research and services to refine the Parties' understanding of nutrient dynamics in Puget Sound.

**WHEREAS** the City owns, operates and administers two publicly owned treatment works (POTW) under the Environmental Services Department that discharges treated wastewater to the Puget Sound through the City's Central Treatment plant and through the Northend Treatment plant, two of more than 65 municipal wastewater treatment plants discharging treated wastewater to the Puget Sound, and

**WHEREAS** each participating agency is a city, county or utility district that owns, operates and administers a POTW that discharges treated wastewater to the Puget Sound or freshwater body, and

**WHEREAS** in 2010 UW-T pursuant to a cooperative agreement with the United States Environmental Protection Agency, created the Puget Sound Institute operating at the Center for Urban Waters, for the purpose of enhancing the integration of science into the restoration and preservation of the Puget Sound ecosystem, and

**WHEREAS** each of the Parties have the authority to enter into this Agreement pursuant to Chapter 39.34 RCW, Interlocal Cooperation Act, where the legislature has

authorized governmental units to make the most efficient use of their individual powers by enabling them to cooperate on a basis of mutual advantage for public benefit, and

**WHEREAS** Nutrient dynamics in Puget Sound may be playing a part in lower dissolved oxygen levels in parts of the sound and the Puget Sound Institute is uniquely qualified to refine the Salish Sea model and run scenarios that will provide insights into effects of various sources of nutrients on dissolved oxygen levels in Puget Sound, and

**WHEREAS** the City and UW-T desire to enter into this Agreement, and to authorize Participating Agencies to join this Agreement, for the purposes set forth herein;

**NOW THEREFORE**, under authority of Chapter 39.34 RCW, Interlocal Cooperation Act, and in consideration of the mutual benefits to be received by each of the Parties as set forth herein, the Parties enter into the following Agreement:

## **AGREEMENT**

### **I. Purpose**

The purpose of this Agreement is to establish a modelling center and sustainable program of work at the UW-T Puget Sound Institute, Center for Urban Waters, that addresses regional modelling needs on access, stakeholder engagement, and model applications (**Modelling Center and Program**). Through this Agreement the Institute will establish a modelling center and program at the Center for Urban Waters with initial goals to: a) establish core computing and human resources; b) define a business model engaging in partnership with the Participating Agencies, wider government and non-governmental stakeholders, and collaborators that will ensure sustainable operation of the Institute, and c) advance the Salish Sea Model, and associated regional modelling capacity and application by the wider community. Accordingly, this Agreement will enable the City, Participating Agencies, government and non-government stakeholders and collaborators to have increased model access; to support confidence in model results and capacity to undertake runs of interest in a timely fashion pursuant to the initial scope of work contained in Exhibit 1 (Initial Scope of Work) and Budget contained in Exhibit 2, and such additional scopes of work established through approved Work Order Agreements. It is further anticipated that additional resources will be needed to sustain the modelling center and program. Accordingly, this Agreement is also intended to support collaborative efforts among and between the Institute, the City, the Participating Agencies, and other stakeholders to develop amendments to this Agreement, or a supplemental agreement, that will provide a framework for sustainable funding for the modelling center and program.

**II. Participating Agencies.** This Agreement establishes access to the Modelling center and Program to counties, cities and utility districts that own, operate and manage a POTW that discharges wastewater to the Puget Sound or a freshwater body. Access requires that each entity qualifying as a Participating Agencies join

this Agreement by addendum as a Participating Agency for the purposes set forth herein. Such addendum shall be in substantially the form of Exhibit 3 (Form of Addendum) attached hereto and approved by the governing body of the Participating Agency and representatives of UW-T, the Institute and the City. A Participating Agency may enter into one or more **Work Order Agreements** with the Institute, in the form of Exhibit 4 (Form of Work Order Agreement) attached hereto, to utilize the services of the Institute through the Modelling center and Program.

It is anticipated that as the Initial Scope of Work progresses, the Institute will, in collaboration with the City, Participating Agencies, wider governmental and non-governmental stakeholders, and collaborators, develop proposed amendments to this Agreement, or a supplemental agreement, that will define a business model and partnerships that will ensure sustainable operation of the Modelling Center and Program and develop external contracting/funding. A part of this funding will be achieved through approved work order agreements with participating agencies. Additional funding will be necessary to ensure the sustainable operation of the Modelling Center and Program beyond the initial term of this Agreement.

### **III. Project Management; Dispute Resolution**

- a. Institute. The activities performed under this Agreement by the Institute shall be managed by Joel Baker of the Institute, or his successor.
- b. City. The Initial Scope of Work, and any amendments thereto, shall be managed by Dan Thompson of the City, or his identified successors.
- c. Participating Agencies. Approved Work Order Agreements for Participating Agencies shall be managed by the project manager for the Participating Agency identified in the Approved Work Order Agreement.
- d. Dispute Resolution. In the event of a dispute under this Agreement, the dispute shall be resolved by the appropriate UW-T official, and the Director of Tacoma Environmental Services if the dispute involves the Initial Scope of Work, as may be amended, or the designated official of the Participating Agency if the dispute involves a Work Order Agreement. If the dispute cannot be resolved at this level, then the dispute will be forwarded for resolution to the Executive Vice Chancellor for Academic Affairs, and, for a dispute involving the City, the City Manager or designee, and for a dispute involving a Participating Agency, to the Chief Executive officer for the Participating Agency, or designee.

### **IV. Responsibilities**

- a. The Institute shall:
  - i. Perform the work identified in the Initial Scope of Work and Budget, attached to this agreement as Exhibit 1 (Initial Scope of

Work) and Exhibit 2 (Budget), and any amendments thereto. Such work shall be prioritized over work performed pursuant to a Work Order Agreement with a Participating Agency.

- ii. Perform the work identified in each approved Work Order Agreement and the budget set forth in each approved Work Order Agreement.
  - iii. Limit the use of any equipment purchased pursuant to this Agreement to activities related to the Initial Scope of Work, and any amendments thereto, and the scope of work in approved Work Order Agreements. Upon completion of the initial scope of work, as may be amended, and all work order agreements, the equipment purchased pursuant to this agreement shall, for its useful life be used by UW-T for modeling and studying the health of Puget Sound unless otherwise expressly approved by the City.
- b. The City shall:
- i. Review all deliverables under the Initial Scope of Work, and any amendments thereto, and provide comments in a timely manner if the City deems that such comments would be useful to the project(s) identified in the Initial Scope of Work, or amendments thereto.
  - ii. Provide appropriate access to City facilities, documents, data and other resources determined useful during the course of this Agreement.
  - iii. Provide timely payment to the Institute for services performed.
  - iv. Support and cooperate with the Institute in its efforts to define a business model and partnerships with the utilities, wider government and non-governmental stakeholders, and collaborators to ensure sustainable operation of the modelling center and its program of work as described in this Agreement.
- c. Each Participating Agency shall:
- 1. Review all deliverables under the approved Work Order Agreement and provide comments in a timely manner if the Participating Agency deems that such comments would be useful to the project described in the Work Order Agreement.
  - 2. Provide appropriate access to Participating Agency's facilities, documents, data and other resources determined useful to the completion of the project described in the Work Order Agreement.

3. Provide timely payment to the Institute for services performed in accordance with the approved budget set forth in the Work Order Agreement.
4. Support and cooperate with the Institute in its efforts to define a business model and partnerships with the utilities, wider government and non-governmental stakeholders, and collaborators to ensure sustainable operation of the modelling center and its program of work as described in this Agreement.

**V. Costs, Billing, and Payment**

- a. The City shall pay for the technical services and equipment, as outlined in the attached Initial Scope of Work and Budget. Technology fees paid by Participating Agencies are intended to off-set the City's one-time capital investment for the UW HYAK computer cluster and shall be paid directly to the City of Tacoma.
- b. The Institute shall provide all deliverables set forth in the scope of work in Exhibit 1
- c. The Institute shall bill the City monthly for services provided pursuant to the Initial Scope of Work, as may be amended, on itemized invoices and provide acceptable narrative progress reports for work performed.
- d. The Institute shall bill the Participating Agencies monthly for services provided pursuant to each Work Order Agreement on itemized invoices and provide acceptable narrative progress reports for work performed.
- e. All invoices shall be paid within 60 days of receipt for all approved expenses shown on itemized invoices.
- f. The Parties represent that funds for services provided under this Agreement have been appropriated and are available. To the extent that such service provision requires future appropriation beyond current appropriation authority, the Parties' obligations are contingent upon the appropriation of sufficient funds to complete the activities. If no such appropriation is made, this Agreement will terminate.
- g. Any mutually agreed upon revisions to the cost arrangement as described in Exhibit 1 and Exhibit 2 shall be accomplished by a written amendment per agreement section VI.(C). Amendments to the Initial Scope of Work, shall be effective upon the approval of the Institute and the City.

**VI. Duration, Termination, and Amendment**

- a. The effective date of this agreement is June 1, 2020 (**Effective Date**) and shall become effective upon signature by the City and UW-T and any required approval of their governing bodies. In the event that this Agreement is executed on or after the Effective Date, the Parties acknowledge and agree that the terms and conditions of this agreement shall be interpreted and applied as if this agreement was executed on or before the Effective Date. This Agreement shall remain in effect until May 30, 2022 (Initial Term) unless extended by written agreement of the

City and the Institute. In the absence of an extension of this Agreement, Work Order Agreements that are not completed prior to May 30, 2022, shall remain in full force and effect until the scope of work set forth in the Work Order Agreement(s) is complete, unless otherwise agreed to by and between the Institute and Participating Agency.

- b. The City or UW-T may, upon 30 days written notice, terminate this Agreement. In the event of termination, the City will make payment for work performed by the Institute under the Initial Scope of Work, to the date of termination. Any Work Order Agreement in progress, shall also be terminated, with the Participating Agency to pay the Institute for any work performed up to the date of termination; provided that, the Participating Agency and the Institute may agree that any Work Order Agreement that is not completed by the termination date shall remain in full force and effect until the scope of work set forth in the Work Order Agreement is completed.
- c. This Agreement may be amended, altered, clarified, or extended only by the written agreement of the Institute and the City and by addendum authorized pursuant to Section VII of this Agreement; provided that, amendments or extension to a Work Order Agreement require approval of the Institute and the Participating Agency that is a party to the Work Order Agreement, and do not require approval of the City or other Participating Agencies.
- d. This Agreement is not assignable by either Party, either in whole or in part.
- e. This Agreement and any amendments and Addendums thereto, together with approved Work Order Agreements are the complete expression of the terms hereto and any oral or written representations or understandings not incorporated herein are excluded.
- f. All exhibits hereto are incorporated into this Agreement as though fully set forth herein.
- g. 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 of 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. Admission of Participating Agencies.** Any city, county or utility district authorized to enter into interlocal agreements pursuant to Chapter 39.34 RCW, Interlocal Cooperation Act, and meeting the following requirements may join this Agreement as a participating agency (**Participating Agency**);

- a. The city, county or utility district must own, manage and operate a publicly owned treatment works discharging wastewater to marine waters or a freshwater body; and

- b. The city, county or utility district must pay a one-time non-refundable technology fee (**Technology Fee**) to the City in the amount of \$ 6,000 to offset the City's one-time capital investment in the UW HYAK computer cluster for use by the Institute to carry out the Modelling and Program activities as described in this Agreement; and
- c. The city, county or utility district must obtain approval of its governing body of an addendum to this Agreement in substantially the form of Exhibit 3 (Form of Addendum) and submit a fully executed addendum to the City and Institute for approval together with payment of the Technology Fee; and
- d. The addendum shall not be effective unless and until last date approved by the project manager for the Institute and project manager for the City.

Participating Agencies are authorized to enter into work order agreements with the Institute in substantially the form of Exhibit 4 (**Work Order Agreement**), upon such terms and conditions as are set forth in the Work Order Agreement. Each Work Order Agreement shall incorporate by reference the terms and conditions of this Agreement. The Work Order Agreement identify the project manager for the Participating Agency and shall set forth the scope of work, schedule and budget for each individual project consistent with the scope and purpose of this Agreement.

Participating Agencies may withdraw from this Agreement by giving written notice of intent to withdraw to the project managers for the Institute and the City no less than 30 days prior to the date of Withdrawal. The withdrawing Participating Agency shall pay the Institute for all work performed by the Institute, under a Work Order Agreement with the Participating Agency, up to the date of withdrawal.

#### **VIII. Indemnification and Hold Harmless**

Each Party shall protect, defend, indemnify, and serve harmless the other Party, its officers, officials, employees, and agents, while acting within the scope of its employment as such, from any and all costs, claims, judgments, and/or awards of damages, arising out of or in any way resulting from the indemnifying Party's own negligent acts or omissions. Each Party agrees that its obligations under this subparagraph extend to any claim, demand, and/or cause of action brought by, or on behalf of, any of its employees or agents. In the event that either Party incurs any judgment, award, and/or cost arising therefrom, including attorneys' fees, to enforce the provisions of the Article, all such fees, expenses, and costs shall be recoverable from the responsible Party to the extent of that Party's culpability.

#### **IX. Miscellaneous**

- a. Public Disclosure. This Agreement and documents provided to the City or a Participating Agency by Institute hereunder are deemed public records subject to disclosure under the Washington State Public Records Act,

Chapter 42.56 RCW (Public Records Act). Thus, the City or Participating Agency may be required, upon request, to disclose this Agreement and documents related to it unless an exemption under the Public Records Act or other laws applies.

- b. Nondiscrimination. The Institute agrees to take all steps necessary to comply with all federal, state, and City laws and policies regarding non-discrimination and equal employment opportunities. The Institute shall not discriminate in any employment action because of race, religion, creed, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, veteran or military status, the presence of any sensory, mental or physical disability or the use of a trained dog guide or service animal by a disabled person. In the event of non-compliance by the Institute with any of the non-discrimination provisions of this Agreement, the CITY shall be deemed to have cause to terminate this Agreement, in whole or in part. Participating Agencies may include nondiscrimination provisions in the Work Order Agreements that are consistent with local laws or regulations applicable to those Participating Agencies.
- c. Taxes. Institute is responsible for the payment of all charges and taxes applicable to the services performed under this Agreement, and Institute agrees to comply with all applicable laws regarding the reporting of income, maintenance of records, and all other requirements and obligations imposed pursuant to applicable law. If the City or a Participating Agency is assessed, made liable, or responsible in any manner for such charges or taxes, the Institute holds City and the Participating Agencies harmless from such costs, including attorney's fees.
- d. Right to Audit. Upon City's or Participating Agency's request, Institute shall make available all accounts, records and documents related to the performance of this Agreement for inspection, auditing or evaluation during normal business hours as reasonably needed by City or Participating Agency to assess performance, compliance and quality assurance under this Agreement or in satisfaction of City's or Public Agency's public disclosure obligation, as applicable.
- e. Independent Contractor Status. The services and deliverables shall be furnished by the Institute as an independent contractor, and nothing herein contained shall be construed to create an employer and employee relationship. The Institute shall provide at its sole expense all materials, office space, and other necessities to perform its duties under this Agreement, unless stated otherwise in this Agreement. No payroll or employment taxes of any kind shall be withheld or paid by the City or Participating Agency with respect to payments to the Institute. The payroll or employment taxes that are the subject of this paragraph include, but are not limited to, FICA, FUTA, federal income tax, state personal income

tax, state disability insurance tax and state unemployment insurance tax. By reason of Institute's status as an independent contractor hereunder, no workers' compensation insurance has been or will be obtained by the City or Participating Agency on account of Services provided by the Institute. The Institute may be required to provide the City or Participating Agency proof of payment of these said taxes and benefits. If the City or Participating Agency is assessed or deemed liable in any manner for those charges or taxes, the Institutes agrees to hold the City and Participating Agencies harmless from those costs, including attorney's fees.

- f. Joint Board; Property. No joint board will be created pursuant to this Agreement. Property acquired pursuant to this Agreement will become the sole and exclusive property of the Institute, subject to the requirements of this Agreement.
- g. No Separate Legal Entity. It is not the intention of the City or the Institute, nor shall this Agreement be interpreted, to create a separate legal entity for the performance of this Agreement. The City shall remain responsible for administering its obligations under this Agreement, the Institute shall be responsible for administering its obligations under this Agreement, and Participating Agencies shall be responsible for administering their obligations under this Agreement and the individual Work Order Agreements. The Parties shall have no obligation to provide any labor, services, equipment or materials in connection with this Agreement except as expressly provided herein.
- h. Filing. By their signatures below, the City and the Institute confirm that they approve of and are authorized to enter into this Agreement pursuant to RCW Chapter 39.34. A copy of this Agreement shall be listed by subject on the City and the Institute's web site or other electronically retrievable public source. Each Participating Agency, by its signature to an Addendum, confirms that it approves of and is authorized to enter into this Agreement pursuant to RCW Chapter 39.34. A copy of this Agreement shall be listed by subject on each of the Participating Agencies' web sites or other electronically retrievable public source.
- i. Governing Law and Venue. Washington law shall govern the interpretation of this Agreement. Pierce County shall be the venue of any mediation, arbitration, or litigation arising out of this Agreement.
- j. Execution in counterparts. This Agreement, and addendums thereto may be executed in counterparts, each of which shall constitute an original, but all of which together constitute a single agreement.

**IN WITNESS WHEREOF**, the City and Institute have executed this Agreement effective on the Effective Date.

**Approved as to Form:**

**CITY OF TACOMA**

By: \_\_\_\_\_  
Chris Bacha  
Chief Deputy City Attorney

By: \_\_\_\_\_  
Elizabeth A. Pauli,  
City Manager  
Date: \_\_\_\_\_

**Attest By:**

**ENVIRONMENTAL SERVICES**

\_\_\_\_\_  
City Clerk

By: \_\_\_\_\_  
Michael P. Slevin, III, P.E.,  
Director Environmental Services

**UNIVERSITY OF WASHINGTON  
TACOMA**

By: \_\_\_\_\_  
Richard S. Sewell,  
Grant and Contract Analyst, Office  
of Sponsored Programs

Date: 08/20/2020

CENTER FOR URBAN  
WATERS / PUGET SOUND  
INSTITUTE

Read and Understood by:

  
Joel Baker, Director

**Approved as to Form:**

\_\_\_\_\_  
Assistant Attorney General

## **Exhibit 1**

### **INITIAL SCOPE OF WORK**

#### **1. Introduction and Activities**

Nutrient dynamics in Puget Sound may be playing a part in lower dissolved oxygen levels in parts of the sound. Puget Sound Institute is uniquely qualified to refine models and run scenarios that will provide insights into effects of various sources of nutrients on dissolved oxygen levels in Puget Sound. Expertise currently exists at Puget Sound Institute to run and refine the Salish Sea model.

The overall objective of this agreement is to establish a modelling center and sustainable program of work at the Puget Sound Institute, Center for Urban Waters, that addresses regional modelling needs on access, stakeholder engagement, and model applications. This will first focus on supporting the advancement of the Salish Sea Model (SSM) across each of these key areas. A phased approach is proposed in year 1 and 2, addressing the following outputs

- a) establish core computing and human resources;
- b) define a business model and partnerships with the utilities, wider government and non-governmental stakeholders, and collaborators that will ensure sustainable operation, and
- c) through the center, advance the Salish Sea Model (SSM) and associated regional modelling capacity and application.

A phased approach to activities is proposed, led through Dr. Tarang Khangaonkar's time and expertise as Modeling Center director (0.2 FTE<sup>1</sup>), planning and managing the activities of the center:

1. initial activities (through 1 Oct 2020):
  - i. secure computing hardware to allow access to the SSM through UW Hyak computing cluster.<sup>2</sup>
  - ii. establish the business model and develop external contracting/funding mechanisms with the end-user community of the SSM (ideally with one entity that represents all interested parties, but with direct MOUs and contracting as needed), including state, federal, and tribal agencies

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<sup>1</sup> approximately \$7,900/month fully loaded, through support from the City of Tacoma (CoT) in process

<sup>2</sup> \$236,500 one-time capital investment to 'buy-in' to UW HYAK computer cluster also secured through the CoT

- iii. complete the scope and workplan for the Modelling Center and proposed SSM runs and development, including:<sup>3</sup>
    - 1. identified uncertainties through the Marine Water Quality Implementation Strategy<sup>4</sup>
    - 2. scenario runs of priority to the participating interested parties.
2. Second phase goals (1 Oct 2020 – 30 Sept 2021)
- i. undertake prioritized modelling in the workplan
  - ii. maintain SSM modeling computational capacity through system maintenance, upgrades, and documentation<sup>5</sup>
  - iii. develop external grant/contract funding for further model development
  - iv. quarterly collaborator and user-community engagement to identify SSM runs of common interest, including workshops<sup>6</sup>
  - v. expand the number of technical staff capable of applying the SSM, both through engage university training programs and directly through the center
  - vi. provide guidance and technical staff for end-users to commission specific SSM runs<sup>7</sup>
  - vii. advise and facilitate regional modeling interoperability, access and collaboration (e.g. interfacing watershed models with SSM<sup>4</sup>), providing strategic guidance to expand the impact of the modelling center and address regional modelling forums priorities.

## 2. Budget

The initial source of funding will be the Tacoma Environmental Services wastewater utility. It is expected that other entities (wastewater utilities and other interested entities) will contribute funding as the research expands and progresses. The duration of the initial phase of the project will be two years and funding will be as outlined in the budget below.

The budget shall include funding for the creation of the computer resources to effectively run and refine the Salish Sea model and resources to operate and maintain the equipment.

## 3 Deliverables

The following deliverables will be required from the Institute to the City:

- Monthly narrative progress reports to support invoices.
- Annual review meeting including project presentations.

<sup>3</sup> use PSI core budget funds for staff support; need to complete scope with available resources

<sup>4</sup> in collaboration with USEPA/ORD and Ecology

<sup>5</sup> estimated \$58K/year to maintain computer hardware and software licenses

<sup>6</sup> T. Khangaonkar leads

<sup>7</sup> the number and scope of these depends on the demand and resources of the user community

- Secure computing hardware to allow access to the SSM through UW Hyak computing cluster.
- Install, compile and test the parallelization performance of the Salish Sea Model on the UW Hyak supercomputer.
- Organize a technical workshop to reach consensus on how to conduct a model uncertainty analysis. ~~Report identifying uncertainties in model outputs~~
- Minimum of 3 scenario runs identified and described by the City of Tacoma as part of the larger consortium-led effort
- Annual summary of research program progress and accomplishments.

## Exhibit 2

### Budget:

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University of Washington Tacoma

Proposal to create the computer resources required to support the operational Salish Sea Model at UWT/CUW/PSI

#### Initial Capital Costs

Workstations with software (4)	26,000
UW Hyak Linux Cluster	157,860
<b>Total Initial Capital Costs</b>	<b>183,860</b>

#### Annual Operating Costs

Director salary (0.2 FTE)	50,400
Director benefits (0.2 FTE)	15,624
Hyak cluster renewal (partial)	19,733
Software licenses (partial)	2,500
Indirect costs (total minus Hyak)	17,816
<b>Annual Operating Costs</b>	<b>106,073</b>
2020 Budget	289,933
2021 Budget	106,073
<b>Total for all Deliverables</b>	<b>396,005</b>

**EXHIBIT 3**  
**FORM OF ADDENDUM**

**EXHIBIT 4**  
**FORM OF WORK ORDER AGREEMENT**