PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement (this "Agreement") is made and entered into effective on June 14, 2022 (the "Effective Date") between City of John Day ("City"), an Oregon municipal corporation, whose address is 450 E Main Street, John Day, Oregon 97845, and Inter-Fluve Engineering, LLC ("Consultant"), an Oregon limited liability company, whose address is 501 Portway Avenue, Suite 101, Hood River, Oregon 97031.

RECITAL:

City desires to retain Consultant to perform certain on-call river restoration, monitoring services and related services. Subject to the terms and conditions contained in this Agreement, Consultant will perform the Services (as defined below) for and on behalf of City.

AGREEMENT:

NOW, THEREFORE, in consideration of the parties' mutual obligations contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. <u>River Restoration, Monitoring and Related Services</u>.

1.1 <u>Services; Standards</u>. Subject to the terms and conditions contained in this Agreement, Consultant will perform the following river restoration, monitoring and services for and on behalf of City (collectively, the "Services"): (a) those services and tasks identified in Consultant's "Proposal" dated June 30, 2021 attached hereto as <u>Exhibit A</u> (the "Proposal"); and (b) all other necessary or appropriate services customarily provided by Consultant in connection with its performance of those services reasonably requested by City, (y) communicate all matters and information concerning the Services to the city manager (or his or her designee), and (z) devote such time and attention to performance of the Services as City deems necessary or appropriate.

1.2 <u>On-Call Services</u>. Notwithstanding anything contained in this Agreement to the contrary, City, in City's sole discretion, shall direct Consultant to perform the Services described in the Proposal through written Task Orders. Consultant will not provide the On-Call Services unless and until City provides Consultant written notice that the Services are requested (which notice will identify the specific Services requested, budget with not-to-exceed cost, and schedule for completing the Services). Consultant will timely provide any On-Call Services requested by City subject to and in accordance with this Agreement.

1.3 <u>Coordination; Schedule of Services.</u> Consultant will perform the Services as and when requested by City. Consultant will coordinate its performance of the Services with the city manager (or his or her designee). Consultant and City will routinely consult with each other to ensure effective and efficient provision of the Services.

1.4 <u>Conditions Precedent</u>. Notwithstanding anything contained in this Agreement to the contrary, City's performance of its obligations under this Agreement is conditioned on Consultant's performance of its obligations under this Agreement, including, without limitation, those Consultant obligations identified under Section 4.4.

2. <u>Compensation</u>.

2.1 <u>Compensation</u>. Subject to the terms and conditions contained in this Agreement, in consideration of Consultant's timely and faithful performance of its obligations under this Agreement, City will pay Consultant based on hourly rates defined in Consultant's Proposal. Consultant will submit monthly invoices to City concerning that portion of the Services performed by Consultant during the immediately preceding month (each an "Invoice"). Each Invoice

will contain the following information: (a) a summary of the Services (including any Additional Services, if applicable) performed by Consultant (and by whom); and (b) all other information and documentation City may reasonably request. City will pay the amount due under each Invoice within thirty (30) days after City has reviewed and approved the applicable Invoice. City's payment will be accepted by Consultant as full compensation for performing the Services to which the Invoice relates. No compensation will be paid by City for any portion of the Services not performed. Notwithstanding anything contained in this Agreement to the contrary, total compensation payable by City under this Agreement for performance of the Services will not exceed \$50,000.

2.2 <u>No Benefits; Reimbursement</u>. City will not provide any benefits to Consultant, and Consultant will be solely responsible for obtaining Consultant's own benefits, including, without limitation, insurance, medical reimbursement, and retirement plans. Consultant will provide, at Consultant's cost and expense, all materials, equipment, and supplies necessary or appropriate to perform the Services.

3. <u>Relationship</u>.

3.1 Independent Contractor. Consultant is an independent contractor of City. Consultant is not an employee of City. Consultant will be free from direction and control over the means and manner of performing the Services, subject only to the right of City to specify the desired results. This Agreement does not create an agency relationship between City and Consultant and does not establish a joint venture or partnership between City and Consultant does not have the authority to bind City or represent to any person that Consultant is an agent of City. Consultant has the authority to hire other persons to assist Consultant in performing the Services (and has the authority to fire such persons).

3.2 <u>Taxes; Licenses</u>. City will not withhold any taxes from any payments made to Consultant, and Consultant will be solely responsible for paying all taxes arising out of or resulting from Consultant's performance of the Services, including, without limitation, income, social security, workers' compensation, and employment insurance taxes. Consultant will be solely responsible for obtaining all licenses, approvals, and certificates necessary or appropriate to perform the Services.

4. <u>Representations; Warranties; Covenants</u>.

In addition to any other Consultant representation, warranty, and/or covenant made in this Agreement, Consultant represents, warrants, and covenants to City as follows:

4.1 <u>Authority; Binding Obligation; Conflicts</u>. Consultant is duly organized, validly existing, and in good standing under applicable Oregon law. Consultant has full power and authority to sign and deliver this Agreement and to perform all Consultant's obligations under this Agreement. This Agreement is the legal, valid, and binding obligation of Consultant, enforceable against Consultant in accordance with its terms. The signing and delivery of this Agreement by Consultant and the performance by Consultant of all Consultant's obligations under this Agreement will not (a) breach any agreement to which Consultant is a party, or give any person the right to accelerate any obligation of Consultant, (b) violate any law, judgment, and/or order to which Consultant is subject, and/or (c) require the consent, authorization, and/or approval of any person, including, without limitation, any governmental body. By signing below, Consultant certifies that Consultant (and Consultant's principals) are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in and/or performing the Services under this Agreement.

4.2 <u>Licenses; Quality of Services</u>. Prior to Consultant's execution of this Agreement, Consultant obtained all licenses, approvals, and/or certificates necessary or appropriate to perform the Services. Consultant will perform the Services diligently, in good faith and in a professional manner, consistent with the degree of care and skill ordinarily exercised by the same or similar professional consultants, and consistent with the terms and conditions contained in this Agreement. The Services will be performed subject to and in accordance with the Laws (as defined below). Consultant will be solely responsible for the Services. Consultant will make all decisions

called for promptly and without unreasonable delay. All materials and documents prepared by Consultant will be accurate, complete, unambiguous, prepared properly, and in compliance with the Laws.

4.3 Insurance. During the term of this Agreement, Consultant will obtain and maintain, in addition to any other insurance required under this Agreement, the following minimum levels of insurance: (a) general liability insurance for all losses or claims arising out of or related to Consultant's performance of its obligations under this Agreement (including, without limitation, damages as a result of death or injury to any person or destruction or damage to any property) with limits of no less than \$1,000,000.00 per occurrence, \$2,000,000.00 in the aggregate; (b) comprehensive automobile liability insurance for all owned, non-owned, and hired vehicles (if any) that are or may be used by Consultant in connection with Consultant's performance of the Services with limits of no less than \$1,000,000.00 per occurrence, \$2,000,000.00 in the aggregate; (c) errors and omissions insurance with limits of no less than \$1,000,000.00; and (d) workers' compensation insurance in form and amount sufficient to satisfy the requirements of applicable Oregon law. Each liability insurance policy (except errors and omissions insurance) required under this Agreement will be in form and content satisfactory to City, will list City and each City Representative (as defined below) as an additional insured, and will contain a severability of interest clause; the workers' compensation insurance will contain a waiver of subrogation in favor of City. The insurance Consultant is required to obtain under this Agreement may not be cancelled without ten (10) days' prior written notice to City. Consultant's insurance will be primary and any insurance carried by City will be excess and noncontributing. Consultant will furnish City with appropriate documentation evidencing the insurance coverage (and provisions) and endorsements Consultant is required to obtain under this Agreement upon Consultant's execution of this Agreement and at any other time requested by City. If Consultant fails to maintain insurance as required under this Agreement, City may terminate this Agreement due to Consultant's default and pursue all rights and remedies provided under this Agreement and/or applicable law.

4.4 <u>Compliance with Laws</u>. Consultant will comply and perform the Services in accordance with the Laws. Without otherwise limiting the generality of the immediately preceding sentence, Consultant will comply with each obligation applicable to Consultant and/or this Agreement under ORS 279B.220, 279B.225, 279B.230, and 279B.235, which statutes are incorporated herein by reference. Prior to the Effective Date, Consultant obtained all licenses, approvals, and/or certificates necessary or appropriate to perform the Services. For purposes of this Agreement, the term "Law(s)" means all applicable federal, state, and local laws, regulations, restrictions, orders, codes, rules, and/or ordinances related to or concerning, whether directly or indirectly, Consultant, this Agreement, and/or the Services, including, without limitation, Oregon's prevailing wage rate laws (ORS 279C.800 through 279C.870) if applicable, all applicable City ordinances, resolutions, policies, regulations, orders, restrictions, and guidelines, all as now in force and/or which may hereafter be amended, modified, enacted, or promulgated.

4.5 Indemnification. Consultant will indemnify and hold City and each present and future City employee, officer, and representative (individually and collectively, "City Representative(s)"), harmless for, from, and against all claims, actions, proceedings, damages, liabilities, injuries, losses, and expenses of every kind, whether known or unknown, including, without limitation, attorney fees and costs, resulting from or arising out of the following: (a) damage, injury, and/or death to person or property caused by Consultant's acts and/or omissions (and/or the acts and/or omissions of Consultant's members, managers, directors, officers, shareholders, employees, agents, representatives, consultants, and/or contractors (individually and collectively, "Consultant Representative(s)"); (b) Consultant's failure to pay any tax arising out of or resulting from the performance of the Services; and/or (c) Consultant's breach and/or failure to perform any Consultant representation, warranty, covenant, and/or obligation contained in this Agreement. Consultant's indemnification obligations provided in this Section 4.5 will survive the termination of this Agreement.

4.6 <u>Assignment of Studies and Reports</u>. Consultant will assign all studies, reports, data, documents, and/or materials of any kind produced under this Agreement (individually and collectively, the "Deliverable(s)") to City upon the earlier of City's request or termination of this Agreement. All Deliverables provided to City will become the property of City who may use them without Consultant's permission for any proper purpose relating to the Services, including, without limitation, additions to or completion of the Services. City acknowledges that

City's modification and/or reuse of the Deliverables without Consultant's prior approval will be at City's sole risk. Consultant will defend all suits or claims for infringement of patent, trademark, and/or copyright for which Consultant is responsible (including, without limitation, any claims which may be brought against City), and Consultant will be liable to City for all losses arising therefrom, including costs, expenses, and attorney fees.

4.7 <u>Records</u>. Consultant will maintain complete and accurate records concerning all Services performed, the number of hours each person spent to perform the Services, and all documents produced under this Agreement for a period of five years after the termination of this Agreement. Consultant's records concerning the Services will be maintained in accordance with sound accounting practices and in an acceptable cost account system. Consultant agrees to provide City access to any books, documents, papers, and/or records of Consultant which are directly pertinent to this Agreement and/or the Services, including, without limitation, Consultant's time and billing records, for the purpose of making audit, examination, excerpts and transcriptions. Consultant agrees to maintain all books, records, and/or reports required under this Agreement for a period of no less than five years after final payment is made and all pending matters are closed.

4.8 Confidential Information. During the term of this Agreement, and at all times thereafter, Consultant will maintain all Confidential Information (as defined below) in the strictest confidence and will not directly or indirectly use, communicate, or disclose any Confidential Information to any person, or remove or make reproductions of any Confidential Information, except that Consultant may (a) use Confidential Information to perform the Services to the extent necessary, and (b) communicate or disclose Confidential Information in accordance with a judicial or other governmental order or as required by applicable law, but only if Consultant promptly notifies the city manager of the order and complies with any applicable protective or similar order. Consultant will promptly notify the city manager of any unauthorized use, communication, or disclosure of any Confidential Information and will assist City in every way to retrieve any Confidential Information that was used, communicated, or disclosed by Consultant and will exert Consultant's best efforts to mitigate the harm caused by the unauthorized use, communication, or disclosure of any Confidential Information. Upon the earlier of City's request or termination of this Agreement, Consultant will immediately return to City all documents, instruments, or materials containing any Confidential Information accessed or received by Consultant, together with all copies and summaries of such Confidential Information. If requested by City, Consultant will execute a written certification satisfactory to City pursuant to which Consultant will represent and warrant that Consultant has returned all Confidential Information to City in accordance with the terms of this Agreement. Notwithstanding anything contained in this Agreement to the contrary, the terms of this Agreement do not operate to transfer any ownership or other rights in or to the Confidential Information to Consultant or any other person. For purposes of this Agreement, the term "Confidential Information" means all documentation, information, and/or materials identified by City as confidential and/or any documentation, information, and/or materials relating to or concerning City's future plans, business affairs, employment, legal, and litigation matters that need to be protected from improper disclosure, in whatever form (e.g., hard and electronic copies, etc.), that is received or assessed by Consultant; provided, however, the term "Confidential Information" does not include City's public records which are non-exempt public records under applicable federal, state, and/or local laws.

5. <u>Term; Termination</u>.

5.1 <u>Term of Agreement; Termination</u>. Subject to the terms and conditions contained in this Agreement, the term of this Agreement commenced on the Effective Date and will remain in full force and effect for a period of twelve (12) months thereafter, unless sooner terminated or extended as provided in this Agreement. Notwithstanding anything contained in this Agreement to the contrary, (a) this Agreement may be terminated at any time by the mutual written agreement of City and Consultant, and/or (b) City may terminate this Agreement for convenience and without cause by giving thirty (30) days' prior written notice of such termination to the other party. Upon receipt of the notice of termination, except as explicitly directed by City, Consultant must immediately discontinue performing all Services.

5.2 <u>Immediate Termination</u>. Notwithstanding anything contained in this Agreement to the contrary, City may terminate this Agreement immediately upon notice to Consultant upon the happening of any of the

following events: (a) Consultant engages in any form of dishonesty or conduct involving moral turpitude related to Consultant's independent contractor relationship with City or that otherwise reflects adversely on the reputation or operations of City; (b) Consultant fails to comply with any applicable law related to Consultant's independent contractor relationship with City; (c) problems occur in connection with the performance of the Services; and/or (d) Consultant breaches and/or otherwise fails to perform any Consultant representation, warranty, covenant, and/or obligation contained in this Agreement. The determination as to whether any of the aforementioned events have occurred will be made by City in its sole discretion.

5.3 <u>Consequences of Termination</u>. Upon termination of this Agreement, City will not be obligated to reimburse or pay Consultant for any continuing contractual commitments to others or for penalties or damages arising from the cancellation of such contractual commitments, subject to City's obligations under Section 5.2. Notwithstanding anything contained in this Agreement to the contrary, termination of this Agreement by City will not constitute a waiver or termination of any rights, claims, and/or causes of action City may have against Consultant. Within a reasonable period of time after termination of this Agreement (but in no event later than five days after termination), Consultant will deliver to City all materials and documentation related to or concerning the Services.

5.4 <u>Remedies</u>. If a party breaches and/or otherwise fails to perform any of its representations, warranties, covenants, and/or obligations under this Agreement, the non-defaulting party may, in addition to any other remedy provided to the non-defaulting party under this Agreement, pursue all remedies available to the non-defaulting party at law or in equity. All available remedies are cumulative and may be exercised singularly or concurrently.

6. <u>Miscellaneous</u>.

6.1 <u>Severability: Assignment: Binding Effect</u>. Each provision contained in this Agreement will be treated as a separate and independent provision. The unenforceability of any one provision will in no way impair the enforceability of any other provision contained herein. Any reading of a provision causing unenforceability will yield to a construction permitting enforcement to the maximum extent permitted by applicable law. Consultant will not assign this Agreement to any person without City's prior written consent. Subject to the immediately preceding sentence, this Agreement will be binding on the parties and their respective heirs, personal representatives, successors, and permitted assigns, and will inure to their benefit. This Agreement may be amended only by a written agreement signed by each party.

6.2 <u>Attorney Fees; Dispute Resolution</u>. If any arbitration or litigation is instituted to interpret, enforce, and/or rescind this Agreement, including, without limitation, any proceeding brought under the United States Bankruptcy Code, the prevailing party on a claim will be entitled to recover with respect to the claim, in addition to any other relief awarded, the prevailing party's reasonable attorney fees and other fees, costs, and expenses of every kind, including, without limitation, costs and disbursements specified in ORCP 68 A(2), incurred in connection with the arbitration, the litigation, any appeal or petition for review, the collection of any award, or the enforcement of any order, as determined by the arbitrator or court. If any claim, dispute, or controversy arising out of or related to this Agreement occurs (a "Dispute"), City and Consultant will exert their best efforts to seek a fair and prompt negotiated resolution of the Dispute and will meet at least once to discuss and seek a resolution of the Dispute. If the Dispute is not resolved by negotiated resolution, either party may initiate a suit, action, arbitration, or other proceeding to interpret, enforce, and/or rescind this Agreement.

6.3 <u>Governing Law; Venue</u>. This Agreement is governed by the laws of the State of Oregon, without giving effect to any conflict-of-law principle that would result in the laws of any other jurisdiction governing this Agreement. Any action or proceeding arising out of this Agreement will be litigated in courts located in Grant County, Oregon. Each party consents and submits to the jurisdiction of any local, state, or federal court located in Grant County, Oregon.

6.4 <u>Attachments; Further Assurances; Notices</u>. Any exhibits, schedules, instruments, documents, and other attachments referenced in this Agreement are part of this Agreement; provided, however, if any exhibit, schedule, instrument, document, and/or other attachment conflicts with this Agreement, the terms contained in this Agreement will control. The parties will sign other documents and take other actions reasonably necessary to further effect and evidence this Agreement. Time is of the essence with respect to Consultant's performance of its obligations under this Agreement. All notices or other communications required or permitted by this Agreement must be in writing, must be delivered to the parties at the addresses set forth above, or any other address that a party may designate by notice to the other party, and are considered delivered upon actual receipt if delivered personally, by fax or email transmission (with electronic confirmation of delivery), or by a nationally recognized overnight delivery service, or at the end of the third business day after the date of deposit if deposited in the United States mail, postage pre-paid, certified, return receipt requested.

6.5 <u>Waiver; Entire Agreement</u>. No provision of this Agreement may be modified, waived, or discharged unless such waiver, modification, or discharge is agreed to in writing by City and Consultant. No waiver of either party at any time of the breach of, or lack of compliance with, any conditions or provisions of this Agreement will be deemed a waiver of other provisions or conditions hereof. This Agreement contains the entire agreement and understanding between the parties with respect to the subject matter of this Agreement and contains all the terms and conditions of the parties' agreement and supersedes any other oral or written negotiations, discussions, representations, or agreements. Consultant has not relied on any promises, statements, representations, or warranties except as set forth expressly in this Agreement.

6.6 Person; Interpretation; Execution. For purposes of this Agreement, the term "person" means any natural person, corporation, limited liability company, partnership, joint venture, firm, association, trust, unincorporated organization, government or governmental agency or political subdivision, or any other entity. All pronouns contained herein and any variations thereof will be deemed to refer to the masculine, feminine, or neutral, singular or plural, as the identity of the parties may require. The singular includes the plural and the plural includes the singular. The word "or" is not exclusive. The words "include," "includes," and "including" are not limiting. The titles, captions, or headings of the sections herein are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement. The parties may execute this Agreement in separate counterparts, each of which when executed and delivered will be an original, but all of which together will constitute one and the same instrument. Facsimile or email transmission of any signed original document will be the same as delivery of an original. At the request of either party, the parties will confirm facsimile or email transmitted signatures by signing and delivering an original document.

[end of agreement – signature page immediately follows]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be made effective for all purposes as of the Effective Date.

CITY:

City of John Day, an Oregon municipal corporation **CONSULTANT:** Inter-Fluve Engineering, LLC. an Oregon limited liability company

By: Ron Lundbom, Mayor

By:

Federal Tax Id. No.: 93-6002192

Federal Tax Id. No.: _____

Exhibit A River Restoration, Monitoring Services and Related Services Proposal

[attached]

June 30, 2021



Nicholas Green City Manager, City of John Day 450 E. Main St. John Day, Oregon 97845 email: cityofjohnday@grantcounty-or.gov

Re: City of John Day - Statement of Qualifications for FY22-FY23

Dear Nicholas,

Thank you for the opportunity to submit the enclosed statement of qualifications (SOQ) outlining Inter-Fluve's interest in future professional service contracts that involve providing architectural, engineering, photogrammetric mapping, and/or land surveying services (and related services) to the City of John Day.

This SOQ includes a summary of our qualifications and related experience in river restoration, a list of our services, and several project examples that illustrate our experience working in rural communities, reconnecting floodplains, restoring former mill sites, and designing waterfront trails. The final page of the document is our rate sheet.

We looking forward to continuing to work with the City of John Day. Please do not hesitate to call me if you have any questions about the submitted materials.

Sincere regards,

Lan

Gardner Johnston Senior Hydrologist & Principal gjohnston@interfluve.com Cell: (541) 399-0744

Offices Nationwide 501 Portway Avenue, Suite 101 Hood River, OR 97031 (541) 386-9003 interfluve.com



STATEMENT OF QUALIFICATIONS

From Source to Sea

EST. 1984



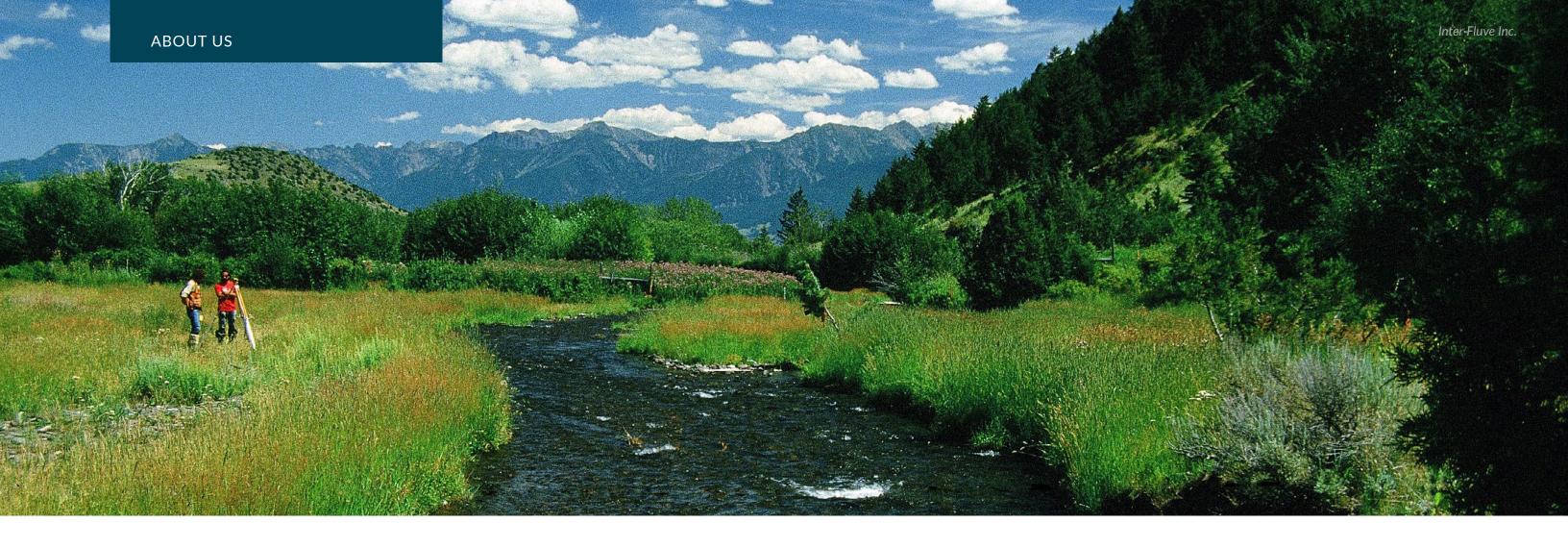


From streams and rivers to wetlands, lakes, and estuaries: freshwater ecosystem restoration is what we do.



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Our Roots

We got our start in 1984 when a few fly-fishing scientists combined their passion for rivers with knowledge of geomorphology, fish biology, and hydrology to return abused trout streams into the Blue Ribbon fisheries they once were. At a time when most restoration work was performed by individuals with specific interests, we took a team approach utilizing an array of disciplines that actively accounted for many interests, including natural processes. Our team took a risk on advancing this new approach. We launched the business with \$4,000, an IBM typewriter, and desks made of old doors and file cabinets.

"It was this new niche at the time. We studied what was happening in nature, and basically followed suit, repeating it. We learned how to accelerate the natural processes. We were time compressors: We did the work that nature does, only faster. When we realized we could do this satisfying work of restoring the environment – and get paid for it, that was the beginning."

– Greg Koonce, Inter-Fluve Founding Principal

We are an employee-owned firm and we annually commit revenue to non-profit organizations focused on aquatic restoration. ABOUT US

Minnehaha Creek, MN

We designed a restoration plan for Arden Park, an 18-acre park located in Edina, Minnesota. The project enhances wildlife habitat and natural vegetation, improves water quality by treating over 100 acres of untreated urban runoff, and provides improved and increased recreation access.





Our Team

Today, Inter-Fluve's team of 50 scientists and engineers maintains expertise in geomorphic assessment and analysis; fish and aquatic biology; surveying; hydraulic modeling; sediment transport modeling, bio-engineering; river and floodplain design; wetland identification; fish passage; endangered and threatened species consulting, biology, population monitoring and restoration; diadromous fish biology; permitting; FERC relicensing; as well as planning and implementation management. Our engineers, scientists, and permitting specialists work together to produce and implement sound engineering designs in challenging and dynamic natural environments.

NATURAL RESOURCES

Stream Ecology & Fisheries Biology

Fluvial Geomorphology & Geology

Greg Koonce, CFP Lon Mikkelsen Marty Melchior, CFP Tim Brush David Coughlan, CFP, CE Mackenzie Butler, CFP, CE Joe Parzych, CFP Cortney Brown Manny da Costa

& Geology Mike Brunfelt, RG Pollyanna Lind, PhD Josh Epstein Nick Nelson, CERP Rebecca Diehl, PhD Luke Swan Maisie Richards Keith Kantack

Sean Morrison

Watershed Hydrology, Ecology & Planning

Caitlin Alcott, CE Gardner Johnston, CFM Emily Alcott, CE, PWS Leonard Cardoza, CEP

ADMINISTRATION

David Reeves, CFO Jordan Sherman Kari Daniels Abby Cole

Following this 2.5-mile-long assessment, we developed recommendations for designs to enhance critically endangered bull trout habitat in the Kachess River.

ENGINEERING

Water Resources Engineering

Jonathon Kusa, PE, CEO Dan Miller, PE Mike McAllister, PE Mike Burke, PE Candice Constantine, PE, PhD Sarah Widing, PE Matt Cox, PE Kristen Coveleski, PE, PhD Maren Hancock, PE John Gaffney, PE Peter Benchetler, PE Mike Rafferty, PE Susan Elliott, EIT Nick Jordan, PE

Sondra Lipshutz, EIT Marcel Young-Scaggs, PE Josh Barza, PE Ken Vigil, PE Zack Sudman, EIT

Digital Data Mgmt -CADD & GIS

Nichole Smith, CE Charlie Phillips David Field Sofia Prokop Dylan Tiss Garrett Shear Stephanie Johnson, EIT

Kristen Godkin Heather Thompson Jonathan Graca Michael Chergosky



What We Offer

Every project we tackle involves integrating science and engineering to solve complex challenges on freshwater systems, from hydroelectric projects to streams and rivers, to wetlands, lakes, and estuaries. Inter-Fluve offers A-Z services for every stage of a FERC relicensing or compliance and restoration projects. Broadly, we categorize our work into four categories: 1) Investigations, 2) Design, 3) Construction, Permitting & Monitoring, 4) Technical and Advisory services.

With a staff of 50 engineers, scientists and support staff, we maintain a 'deep bench' of professionals that can be called upon to meet unexpected challenges. When services are required that don't fall in our wheel-house, we maintain partnerships across the country that can fill the gap.

INVESTIGATIONS

Geomorphic investigations Hydrologic & hydraulic analyses Sediment transport analyses Fisheries & aquatic resources Spawning habitat characterization Wetland delineations Thermal refuge

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DESIGN		
Aquatic & riparian habitat		
Floodplains & wetlands		
River & stream channels		
Fish passage & hydraulic structures		
Bank stabilization & bioengineering		
Facility decommissioning		
Outreach & communications		
Urban restoration		

CONSTRUCTION, PERMITTING, & MONITORING

- FERC relicensing / compliance
- Permitting
- Design-build
- Construction oversight
- Monitoring & adaptive management plans

TECHNICAL & ADVISORY SERVICES

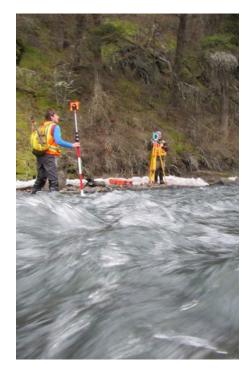
- Technical oversight
- Emergency response
- Feasibility studies & alternatives development
- Design guidelines
- Mitigation planning
- Licensing & compliance strategy development
- Technical studies development & conduct
- Negotiations with stakeholders
- ESA consultation assistance
- Migratory fish biology, restoration, & assessment
- Program management

Coonamessett River, MA

A history of mill construction and cranberry cultivation caused declines in fish populations and aquatic habitat degradation along the Coonamessett River. Following a feasibility study, we completed modeling, designs, permitting, and construction observation for the restoration of approximately 30 acres. Photo credit: Adam Soule

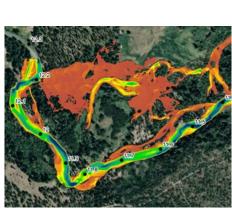


Investigations



Geomorphic investigations

Geomorphic investigations assess the character and health of river systems, develop management and treatment alternatives, and work as the foundation for design projects that work within prevailing processes. They include field assessment, classification and interpretation, analysis of field data, and geospatial data modeling.



Hydrologic & hydraulic analyses

Hydrologic and hydraulic analyses are fundamental in natural channel design. We use 1D and 2D hydraulic models, in combination with geomorphic and ecological analyses, for design of restoration features and to maximize desirable habitat conditions. Our hydrologic analysis includes basic statistics, regression, magnitudefrequency analysis, time series analysis, and computer models.

Sediment transport analyses

Our hydraulic engineers and fluvial geomorphologists specialize in sediment transport in urban and wild rivers, that range from heavily degraded channels to those in equilibrium. The identification of sediment imbalances is critical step in watershed management and planning, and sediment transport calculations are fundamental for river design.



Fisheries & aquatic resources assessments

We design projects that are built to last and integrate the best science to ensure that projects are in the right place, for the right fish, at the right time. We perform fish and habitat surveys, inventories, and assessments for landowners and resource agencies. Studies include standardized and customized assessments including fisheries; habitat mapping and assessments: channel, bank and riparian condition evaluations; in-stream flow assessments; and water quality evaluations.



Wetland delineations

Wetlands are highly functioning habitats that are often found next to rivers and within floodplains. We prioritize wetland function as part of our approach to river restoration. Our wetland scientists delineate existing wetlands and design improvements to these essential habitats.



Thermal refuge

Thermal impairment has become a widespread and common problem in our western rivers. Inter-Fluve has developed novel ways to evaluate site potential for thermal refugia that typically start with an understanding of the natural processes that support these habitats. These also include channel improvements, floodplain reconnection and revegetation, and thermal refuge creation that taps into cool tributary inputs, groundwater resources, and hyporheic flows.

Design







Aquatic & riparian habitat improvements

Streams and rivers are physically dynamic and biologically complex. We improve aquatic habitat for multiple species by working with watershed processes and designing channels and habitat features that support natural channel form and function.

Floodplains & wetlands

A recognition of the importance of floodplains and wetlands in restoration projects has been at the forefront of Inter-Fluve's practice since day one. Today, we're applying the lessons learned to these critical habitats across the country.

River & stream channel

Our designs are developed to work with river processes in highly urbanized watersheds, remote and pristine trout streams, large coastal rivers, and small mountain streams. We are involved in every phase of our projects, from feasibility and design through permitting and construction.



Fish passage & hydraulic structures

Fish species such as salmon, shad, and alewives swim hundreds or thousands of miles to spawn but are often stopped from reaching their destinations by man-made features such as dams or culverts. Fish passage can be enhanced through proper design of naturalized hydraulic structures, for example, constructed riffles and natural cascades and steps. We also design and build more traditionally engineered structures such as diversions, drop structures, fish ladders, screens, siphons, and flumes that control or direct the flow of water.



together.

Facility decommissioning

The US Army Corps of Engineers has documented over 80,000 dams greater than 6 feet tall in the United States. While dams can benefit society, many have had detrimental effects on our rivers or pose increasing risks as the infrastructure ages. Inter-Fluve has performed feasibility studies, design and implementation of over 100 dam removal projects ranging from low head dams in Florida, to the 106-foot tall San Clemente Dam in California. Stakeholder outreach can be the make-it or break-it stage of a project. We work with our clients to develop illustrative materials that encourage discussion not stifle it, educate our audience instead of alienating them with jargon, and inspire people to work Inter•Fluve Inc.



Bank stabilization & bioengineering

Bioengineering is the combination of biological, mechanical, and ecological concepts to control erosion and stabilize soil through the use of vegetation or a combination of vegetation and engineered methods. We develop solutions to address design criteria ranging from protection of infrastructure to providing naturally deforming banks in pristine dynamic environments.



Outreach & communications



Urban restoration

Because people have traditionally settled next to rivers, our cities today are home to small streams and iconic rivers that have been increasingly degraded. Rivers are often valued in urban areas for the multiple environmental, social, and economic benefits they can provide. We work with landscape architects, planners, and our clients to develop unique solutions to improve natural function, health, stability and climate change resiliency of our urban waterways.

Clackamas River, OR

Inter-Fluve developed design plans and oversaw construction for this 240 acre property that included rebuilding riparian-forested wetlands, and restoring 3,500 feet of Goose Creek tributary channel and reconnecting it to the Clackamas River mainstem.

Construction, Permitting, & Monitoring

Design-build

Design-build contracts are a cost-effective option to conduct projects under tight schedules and fixed budgets. Where more traditional project delivery methods are required or appropriate, Inter-Fluve is well versed in providing bidding materials and services to ensure a smooth transition from design to construction.

Construction oversight

Our professional scientists and engineers are experienced in overseeing the construction and implementation of their designs. We provide quality assurance and quality control and work closely with contractors to ensure that projects are constructed as designed, to find creative solutions to unexpected site conditions during construction, and to ensure cost-effective approaches to all construction methods.

Permitting

We assist in securing federal, state, and local permits for projects that we design. Our project managers and engineers facilitate the negotiation of design criteria and sitespecific design issues to simultaneously satisfy permitting requirements and project objectives.

Monitoring plans

How effective is a project in meeting project specific goals and objectives? We plan and implement post-construction monitoring on projects to track performance over time and support adaptive management. This work often includes detailed documentation of as-built conditions, baseline surveys, and long-term monitoring and reporting.

Technical & Advisory Services

Technical oversight

We provide technical peer review and advisory services for municipalities, conservation districts, resource agencies, and numerous other government agencies and quasi-public utilities. These services are used in project concept appraisal and development, public relations and education, on-site construction quality assurance, and technical advisory roles.

Emergency response

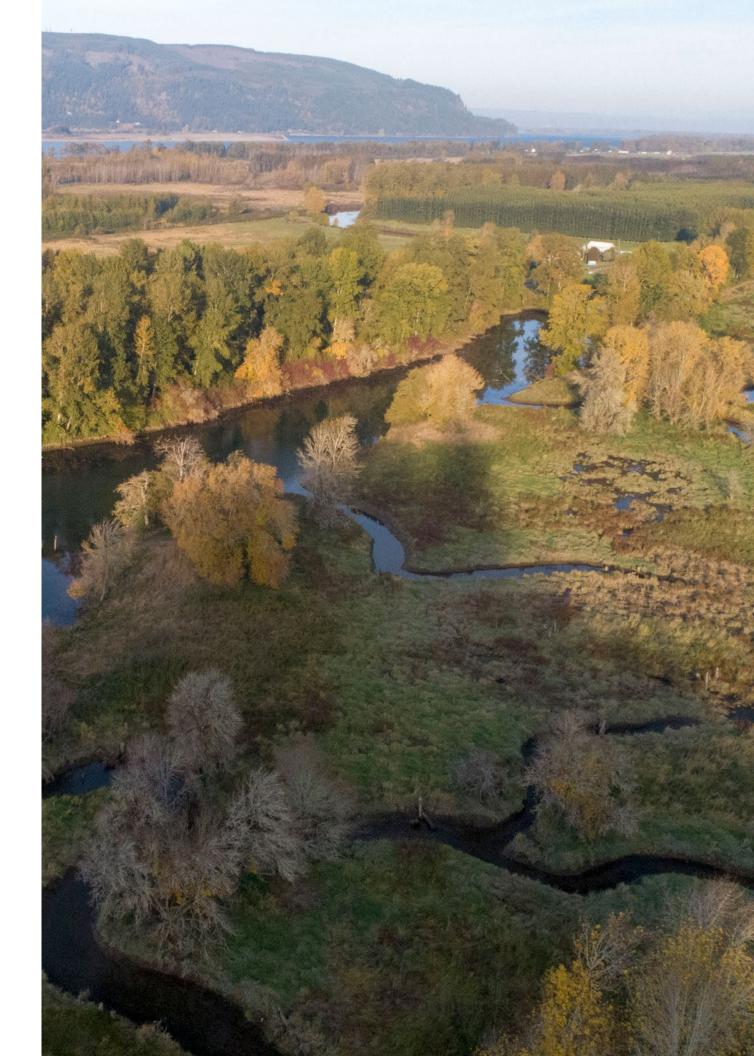
Spills occur that impact river, wetland, and lake environments. We assist with the emergency response planning, design, coordination, and construction of remediation and restoration measures. We are experienced in working with response teams and Joint Restoration Committees. We understand processes, issues, and regulations important to the variety of federal, state, city, tribal, private, and corporate representatives involved in active, changing, and timesensitive emergency environments.

Feasibility studies & alternatives development

Feasibility studies and associated analyses of alternatives require careful attention to project objectives, stakeholder interests, local and regional regulatory requirements, the physical and biological character of the channel, cost, and constructibility. We work with stakeholders and regulators to integrate these elements when developing and prioritizing lists of feasible project alternatives.

Design guidelines

Our staff is actively engaged in the development of industrywide Standards of Practice for ecosystem restoration. For example, we were involved in writing Washington State's Stream Habitat Restoration Guidelines, Washington's Integrated Streambank Protection Guidelines, and NOAA's River Restoration Analysis Tool (RiverRAT).



Columbia River, OR

The Kerry Island Estuary Restoration reconnected a 99-acre parcel that had been leveed and ditched for agricultural use. The Columbia River is visible in the distance.



Our Approach

Inter-Fluve's interdisciplinary team of engineers work in tandem with aquatic biologists, geomorphologists, wetlands scientists, and plant specialists to design projects that are technically sound and that support natural ecosystem functions. This collaborative approach results in highly sustainable, science-based designs that

take into consideration the processes that drive dynamic natural systems.

Inter-Fluve's process-based approach to restoration aims to reestablish underlying physical and biological processes that create and sustain river and floodplain ecosystems.

Processes include dynamic river morphology, sediment transport/ deposition, floodplain interaction, large wood recruitment, and native plant growth and succession. Process-based restoration focuses on correcting anthropogenic disruptions to these processes so that rivers and floodplains can recover with minimal intervention. This approach contrasts

with other approaches that aim to meet perceived "good" habitat qualitiessolutions that often create static (non-dynamic) habitats that control processes rather than restore them.

Minnehaha Creek, MN

nter-Fluve designed this 2,000-foot-long neandering wetland channel and an offine pond. Inter-Fluve's teaming partner lesigned the 2000-foot-long boardwalk. The goal of the project was to integrate the nealing of the natural environment with the nealing of patients at a nearby hospital.

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PROJECT EXPERIENCE

2,300+

projects since 1984

Grounded in Science

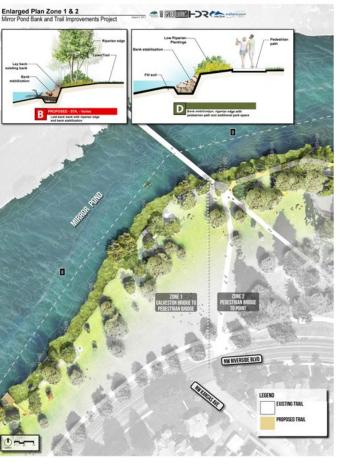
The thread that weaves all our projects together is finding solutions that balance human and environmental needs while emphasizing minimal disturbance and rapid recovery of aesthetics, geomorphic function, and ecologic complexity.

80,000

logs installed







Mirror Pond Bank & Trail Improvements

BEND. OR (2013-2018)

Following the 2013 Visioning Plan for Mirror Pond and downtown Bend, Inter-Fluve as part of the GreenWorks team, was contracted by Bend Park & Recreation District to focus on developing designs for the east bank of Mirror Pond, including Drake Park, downtown, and Pacific Park.

The team provided alternatives analysis of reshaping the banks, and realigning the Deschutes River Trail while also looking to improve habitat and water quality. This alternatives analysis included significant coordination with the District, a public advisory committee, stakeholders, and the public. The team carried the

preferred components for Phase One to final design.

Inter-Fluve completed hydraulic modeling to predict sediment depositional and scour patterns, inform planting plans of native riparian and aquatic plants, and support design of habitat for native fish species. The design included ingress and egress points for recreational users, buffer zones for energy dissipation and water quality improvements of stormwater, and removing rock walls and bank sloping to provide a riparian fringe and habitat features for the pond banks. In public access zones, attention was given to transitions of material and terrain

Red Tail Reach Salmon Habitat Enhancement, Stream & Floodplain Restoration

BELLINGHAM. WA

Red Tail Reach is a 5.7-acre floodplain restoration project, improving floodplain connectivity and function along a segment of Whatcom Creek. Our approach incorporated techniques to improve flood energy dissipation, enhance fish habitat and refuge from flooding and predators, and promote riparian filtering for water quality improvements. In 2009, approximately 30,000 cubic yards of floodplain fill was removed from land encroaching on the creek to create three acres of floodplain and wetlands. The new floodplain surface was contoured to create a series of backwatered oxbows that emulate the appearance and function of remnant channels that had been cut off by the existing creek, and encourage attenuation of excess Nitrogen and Phosphorous. Large pools were excavated in the creek and habitat logs were installed to encourage scour pool formation and provide fish habitat.

Today, adjacent trail users can look upon a scenic and functional stream system, lined by extensive wetland habitat and riparian





Hood River Waterfront

HOOD RIVER, OR (2006)

Inter-Fluve was part of a team that developed the Master Plan for a new waterfront park along the Columbia River, the fourth largest river in the U.S. The 6-acre park lies north of downtown and connects the community to the Columbia River through a family-friendly public gathering space which accommodates a wide spectrum of uses including paddleboarding, kayaking, windsurfing, kiting and fishing. The park design features new beach and swimming access to the Columbia River, innovative children's play facilities and

flexible areas for large community events and festivals. In addition, the Park reclaims eight hundred feet of riverbank, laying back the slope and restoring the river's edge with a wide variety of native riparian plants. Inter-Fluve has also previously completed field investigations and engineering analysis to provide recommendations for the beach design at various beaches along the Columbia River including: Wasco County Park in The Dalles, Rock Creek in Mosier, Koberg Beach State Recreation Site, and Hood River Event Site and

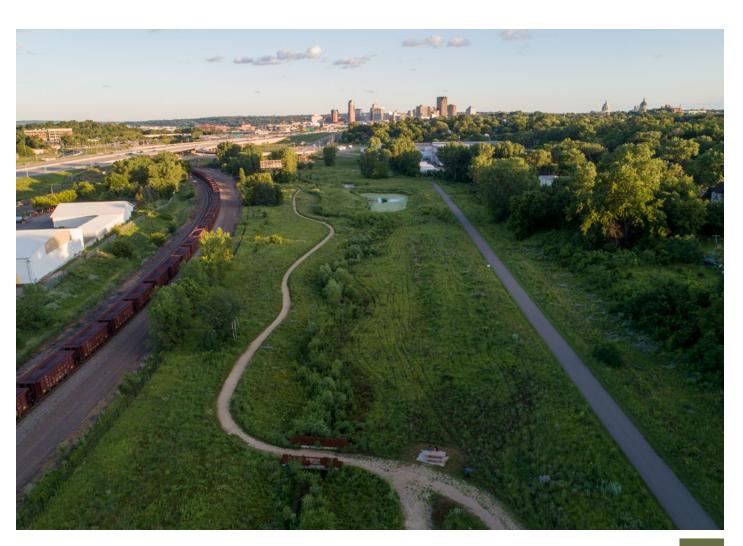


Trout Brook Nature Center: Sanctuary & Stream Daylighting

SAINT PAUL, MN (2014)

The Capitol Region Watershed District (CRWD) selected contaminated soils on the site. The team also assessed Inter-Fluve and HR Green to conduct a feasibility study, the ecological potential of the reconstructed stream and develop concept and final plans, and oversee construction for associated ponds and wetlands, provided concept designs of day-lighting of 3,000 linear-feet of Trout Brook after decades a channel and floodplain that will function under short term of confinement within a storm sewer. The day-lighted reach hydrologic regime as a headwater, but long term as the lower of Trout Brook and floodplain restoration of the abandoned portion of a much larger restored stream. Designs were industrial site will be a key element of a proposed the Trout integrated into regional trails, interpretive overlook areas Brook nature sanctuary. and park artwork. Input from multiple government agencies and stakeholders were incorporated at all stages of the The project included assessing water sources, their quantity analysis. This is the first major restoration project that is part and quality; identifying workable stream and pipe alignments of a larger effort by the CRWD to raise awareness of water resources in the City of St. Paul. Construction was completed

across and through the underground infrastructure of an urban environment; and addressing the existence of



PROJECT EXPERIENCE

Nason Creek Upper White Pine Stream Channel & Floodplain Habitat Enhancement Project

COLES CORNER, WA (2011-2018)

The Nason Creek Upper White Pine Project (Subreach 2) is a stream channel enhancement and floodplain reconnection project between RM 13 and 14 of Nason Creek, a tributary to the Upper Wenatchee River, WA. A legacy of human alteration has heavily impacted aquatic habitat and geomorphic function in this reach. Goals of the project include floodplain reconnection; restoring and enhancing stream channel, riparian, and wetland habitat for ESAlisted salmonids; restoring and enhancing riparian areas; and restoring aquatic habitat.

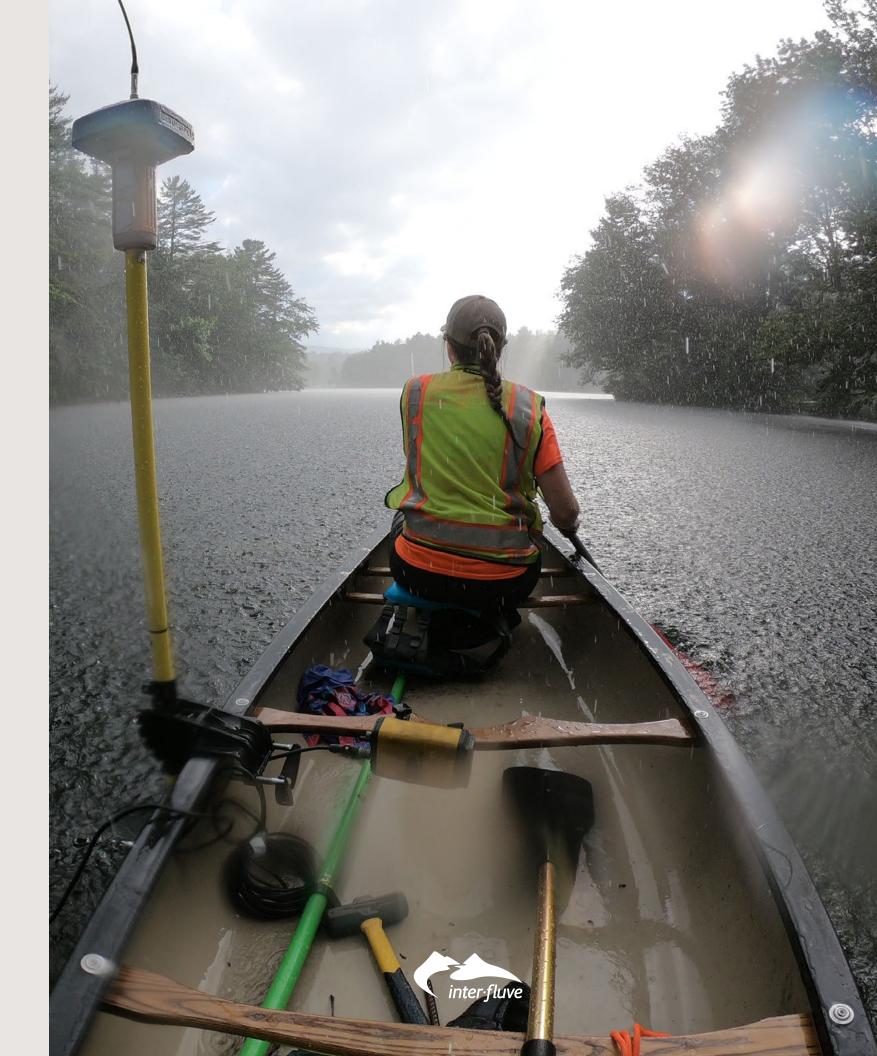
Inter-Fluve performed project design for Reclamation in support of this collaborative effort between Reclamation, Chelan County, and the US Forest Service. Inter-Fluve also provided NEPA, ESA consultation, and other permitting support to the US Forest Service and Chelan County, the project sponsor. This effort has required working closely with multiple entities in a collaborative design process with numerous reviews by landowners, technical teams, permit agency staff, and potential funders. Designs were completed in 2015 and construction was phased from 2016 to 2018. This included re-routing powerlines; realigning approximately 1,500 feet of channel into a new meandering alignment; construction of large wood habitat structures; creating new backwater alcove habitat; removing a levee; and performing riparian and floodplain revegetation.





Nason Creek, WA

Top: Aerial image looking upstream at the project in 2020. Bottom: Snorkel survey immediately following re-construction.



OFFICES

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Northeast

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Atlantic East

220 Concord Avenue, 2nd Floor Cambridge, MA 02138 (617) 714-5537



Inter-Fluve 2021 Schedule of Rates & Fees

Employee Type	Hourly Billing Rate	Type Detail
Principal	\$247	Principal Level Science & Engineering
Senior Staff	\$178	Senior Level Science & Engineering
Staff	\$144	Staff Level Science, Engineering, & CAD
Technical Staff	\$113	Technical Level Science, Engineering, & CAD
Administrative Support	\$78	Billing, Clerical
Project Expenses	Cost plus 10%	Project-related Expenses
Subconsultants	Cost plus 10%	Specialty Services

Our fee schedule is based on hourly rates for Principals, Senior Staff, Staff, Technicians and Administrative Support.

Science Staff In-House Expertise

Fisheries Biology, Aquatic Biology, Fluvial Geomorphology, Hydrology, Riparian and Floodplain Ecology, Wetland Ecology

Engineering Staff In-House Expertise

Hydraulic, Civil and Water Resources Engineering

Project Expenses

Reimbursement for project-related direct costs, including: travel, lodging, meals, printing, shipping, expendable materials (field, survey, safety) and specialty equipment rental.

Invoicing is done at the end of every month or as appropriate. Payment is due within 30 days.