Budget Narrative and Justification

a. PERSONNEL

Elizabeth Elmstrom: Graduate Student Fellow

Nine months of graduate student stipend is requested for Year 1 for a total of \$24,235. Any additional effort provided by the Student Fellow in Year 1 will be supported internally, as needed. In Year 2, we are requesting nine months of graduate student stipend for a total \$24,720. This includes an anticipated 2% increase in student stipend rates in each year starting with a monthly base of \$2,640. Any additional effort provided by the Student Fellow in Year 2 will be supported internally, as needed. Elizabeth Elmstrom, is a current Master's student in the University of Washington School of Aquatic and Fishery Sciences (UW SAFS) and is on track to bypass in the PhD program in academic year 2019-20. The activities proposed herein will constitute a significant part of her PhD dissertation. Total stipend support requested in both years is \$48,955.

b. FRINGE BENEFITS

Fringe benefit rates for the University of Washington FY2021 include 26.7% for graduate student fellows. Fringe benefits in Year 1 are \$6,471 and \$6,699 in Year 2 for a total request of \$13,170. As the University's benefit rates are determined late Spring/early Summer of each fiscal year (July – June), the rates for Year 2 are unknown, but subject to change (https://finance.uw.edu/fr/sites/default/files/fy20-load-rates%20on%20the%20web.pdf)

c. TRAVEL

In year one, a total of \$2,586 of domestic travel funds (\$1,326 vehicle travel, \$1,260 lodging) are requested to support student travel. This includes an estimate of 6 weeks of field work and lodging at the Padilla Bay NERR. Vehicle rental from the UW motor pool is included at a rate of \$31.57 per day, which covers vehicle use, fuel and maintenance. Guest house fees at Padilla Bay are included at a rate of \$30 per night. Year 2 travel funds are requested at \$7,000 (\$3,500 airfare, \$1,500 meal per diem, \$2,000 lodging per diem) for a total travel request of \$9,586.

We no longer request funds to cover student attendance to the Annual Fellows Meeting. The NERRS/NERRA Annual meeting is now being held virtually and thus will not require travel support. For year 2, as the specifics for the Fellows meetings and Professional Conferences are not yet known, the estimates of cost are based on historical like travel for such meetings and conferences. As the specifics of the travel become known, any additional travel costs necessary will be supported internally, as needed.

d. EQUIPMENT

None

e. SUPPLIES

\$4,590 is requested for field and laboratory supplies and a computer in Year 1, corresponding to the proposed field, lab, and modeling work. This includes the purchase of two additional PME miniDOT Dissolved Oxygen Loggers at \$995 per unit, \$100 for miscellaneous field supplies (e.g. batteries, sample bottles, rebar and clamps to deploy sensors, replacement hardware), and \$2,500 for a computer.

f. CONTRACTUAL

In Year 1, we request \$5,432 in support of sample analyses. \$3,600 is requested for the UW oxygen isotope sample analyses and fees during the fall quarter of Year 1. This includes 288 oxygen isotope samples at a cost of \$12.50 per sample to cover the seasonal diel oxygen sampling at each of the three sites. An additional \$1,832 is requested to measure riverine inputs of dissolved organic carbon. For these analyses, we anticipate 69-70 samples at a rate of \$26.40 per sample.

g. CONSTRUCTION

None

h. OTHER

Graduate Operating Fees: Graduate Operating Fees are requested in support of the Student Fellow in both years for a total request of \$30,103. Rates are based on the current 2019-20 fee schedule of \$5,266 per Fall, Winter, Spring and \$1,549.79 for Summer. A 5% escalation is projected in each year and future tuition rates have not yet been established.

Year 1: With the 5% escalation, the Year 1 cost requested is \$5,529.30 (Fall, Winter) and \$1,627 (Summer) for a total Year 1 request of \$12,686 (\$11,059: Fall, Winter and \$1,627: Summer).

Year 2: With the 5% escalation from Year 1, the Year 2 cost requested is \$5,805.77 (Fall, Winter, Spring) for a total Year 2 request of \$17,417 (Fall, Winter, Spring).

i. TOTAL DIRECT CHARGES

Year 1 Total Direct Costs: \$56,000 Year 2 Total Direct Costs: \$55,836

Total Directs Costs for All Years: \$111,836

j. INDIRECT CHARGES

Per the University of Washington's current DHHS Negotiated Rate Agreement dated July 21, 2017, the applicable rate for this activity is 0.00% in both Years 1 and 2. The cost base is Modified Total Direct Costs (MTDC) which excludes Fellowships from indirect charges. A copy of the University of Washington's federally negotiated rate agreement is appended.

k. TOTALS (direct and indirect charges)

Year 1 Total Cost: \$56,000 Year 2 Total Cost: \$55,836 All Years Total Cost: \$111,836