

University of Idaho Budget Justification:

A. Senior Personnel: \$23,510

1. Faculty member Elowyn M. Yager will receive support from this project for 160 hours (rate of \$72.74/hr in year one) in years one and two to assist the MS student and conduct field measurements with the entire project team. A 2% salary rate increase occurs in year two. The University of Idaho determines the salary year for senior personnel based on the calendar year.

B. Other Personnel: \$59,340

One MS student will be funded as a research assistant in years one and two. The salary rate for the MS student (\$27,000/yr in year one) will increase 2% in year two. Funding is requested for two University of Idaho undergraduate students to assist with K-12 streamtable outreach events. Each student will work 30 hours (\$15/hr) on preparing and helping with the events in years one and two. Salary (\$1500/year) is requested for one University of Hawaii undergraduate researcher who will participate in field work in years one and two. The University of Idaho can hire undergraduate student employees from other universities.

C. Fringe Benefits: \$9,457

The fringe benefit rate for the faculty member is 30.1%, 3.6% for the MS student and 8.7% for the undergraduate students.

D. Equipment

N/A

E. Travel: \$24,790

1. Travel funds are requested for PI Yager and the MS student in years one and two to attend AGU. These travel expenses include airfare (\$400/person), per diem (\$55/day/person for 4 days), and hotel costs (\$170/person for 4 days). Funding is also requested for the University of Hawaii undergraduate student to the AGU fall meeting in year two to present their research for which we have budgeted: airfare (\$800), per diem (\$55/day for 4 days), and hotel costs (\$170/night for 4 days). Total conference travel expenses are \$2600 in year one and \$4300 in year two.
2. Travel support is requested for the PI and MS student to conduct field work in Hawaii in years one and two. University of Idaho expenses include an extra (to ASU's) rental car and gas for when all team participants are present, airfare, camping fees, and per diem. We anticipate one trip per year, lasting approximately 35 days. Expenses include airfare to Hawaii from Boise (\$800/yr/person=\$1600/yr), one inter-

island flight because we will visit 2 islands every year (\$250/yr/person=\$500/yr), rental car (\$115/day for 14 days), camping for 80% of nights (\$25/person/day), rental car fuel (\$15/day), per diem (\$20/day/person), and \$150/person/yr for miscellaneous expenses including excess baggage charges. Additional travel expenses are requested for one University of Hawaii undergraduate researcher to participate in field work in years one and two. Undergraduate researcher expenses each year include 3 inter-island flights (one to each of two field locations and one return flight home) (\$375/yr), per diem (\$20/day), the costs for camping for a third person, and miscellaneous expenses including excess baggage charges (\$150). All other undergraduate field expenses will be covered by the UI travel costs listed above. Field expenses total \$8945/yr in years one and two.

F. Participant Support Costs

N/A

G. Other Direct Costs: \$30,034

3. Materials and Supplies

Total year one = \$1,800 for:

- \$1500 for 1 computer for the MS student because the University of Idaho does not provide computers for students and a fast computer is needed to perform the shear stress and critical shear stress modeling
- \$300 for tapes, notebooks for fieldwork and rulers for flume outreach

4. Publication Costs/Documentation

Total year two = \$1500

5. Other

- Registration fees of \$585/yr PI; \$295/yr grad student; \$165 UH undergrad student to attend the Fall AGU meeting are requested for the PI (years 1-2), MS student (years 1-2) and UH undergraduate student (year 2).
- Graduate tuition/fees for the MS student are \$11,814 in year one, and \$12,995 in year two with a 10% increase in year two for tuition. These fees include tuition and student health insurance each year. No F&A is charged on these fees.

H. Total Direct Costs (A through G): \$147,131

I. Indirect Costs: \$61,161

The University of Idaho assesses indirect costs at 50% The base for applying the indirect cost rate is Modified Total Direct Costs (MTDC) which includes Senior Personnel, Other Personnel, Fringe Benefits, Materials and Supplies, and Travel less Other (Other =Participant costs and tuition/fees for the graduate student RA). These rates have been negotiated with the US Department of Health and Human Services.

J. Total Direct Costs and Indirect Costs \$208,292