

Budget Justification: University of Idaho

Idaho EPSCoR RII-Track 1: Idaho Community-engaged Resilience for Energy-Water Systems (I-CREWS)

A. Senior Personnel: Faculty positions are calculated with a 3% salary increase for Yrs 2-5. Per Chapter II.C.2.g(i)(a), of the FY2022 PAPPG (Senior Personnel Salaries & Wages Policy), the Regents of the University of Idaho have determined the definition of salary year to be based on the calendar year.

- Funds are provided for a .28 FTE for Idaho EPSCoR Project Director, A. Kliskey, plus .5 month summer salary, (base salary \$144,692). **Total: \$258,232**
- Funds are provided for a Co-PI/Site Lead, A. Smith (base salary \$127,387), for two months faculty salary for all five years. **Total: \$150,289.**
- Funds are provided for a Co-Site lead, B. Johnson (base salary \$151,700), for one month faculty salary for all five years. **Total: \$89,487.**
- Funds are provided for six component lead's summer salary support one at 1.35 months for the Alternative Futures Lead, D. Cronan (base salary \$66,518), and five at one-two weeks each, L. Alessa (base salary \$124,051) /R. Borrelli (base salary \$109,871)/ D. Hedden-Nicely (base salary \$116,610)/T. Soule (base salary \$140,899)/T. Link (base salary \$110,620) for all five years. **Total: \$185,819.**
- Funds are provided for one ASSERT co-lead, B. Smentkowski (base salary \$146,141), at .82 months of summer salary all five years. **Total: \$53,091.**
- Education/WFD lead, K. Eitel (base salary \$101,478), has 1.4 months summer salary support and will help with VIP/CIP coordination all five years. **Total: \$83,952**
- Funds are provided for .5 FTE for EPSCoR Project Administrator, R. Schumaker (base salary \$119,203). **Total: \$316,432**
- Funds are provided for .5 FTE salary for an EPSCoR Diversity and Communication Coordinator, S. Penney (base salary \$74,341). **Total: \$197,344**
- Funds are provided for .50 FTE Tribal Scholar/Liaison, S. Spang Gion, in Yr 1. **Total: \$23,644**

B.1. Postdoctoral researchers: Postdoc base salary is \$60,000/yr and calculated at a 3% salary increase for Yrs 2-5. Funds are provided for two postdoctoral researchers for two years each, for a total of four years of postdoctoral support in Yrs 2-5. The postdocs will work with multiple investigators across disciplines and across the state to address project objectives; they will have strengths in characterizing historical perturbations associated with resilience, machine learning, developing models, expanding the WEPPCloud modeling suite, and advancing alternative futures scenarios on M3. **Total: \$258,549**

B.2. Other professionals: Base salaries depend on position and include a 3% salary increase years 2-5.

- Funds are provided for a .25 FTE Data Technician for all five years. **Total: \$65,780**
- Funds are requested for .5 FTE for EPSCoR Internal Evaluation Director, A. Bogar; .5 FTE for EPSCoR Finance Director, T. Noble; .5 FTE for Finance Technician, TBD. **Total: \$530,555**

B.3. Graduate Students: Graduate student base salary is \$28,000/yr for PhD students and \$24,000/yr for MS students to enable recruitment of high-caliber students, calculated with a 3% salary increase for Yrs 2-5. Two PhD students in Yrs 2-5 will help in the future scenario integration activities and development of ML models to support M4; four MS students in Yrs 2-5 with two in each year to focus on C1 and C2; and four Statewide grad students for one year each for EE&SC program. **Total: \$568,804**

B.6. Other:

- Funds are provided for three new faculty hires for one year of salary-Environmental

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Historian; Power and Water Systems Modeler; Tribal Water Resource Scientist, (base salary \$85,000) in Year 2. **Total: \$255,000**

- Funds are provided for Equity Advocate co-lead salary support, TBD, in Yrs 1-4 and funding support for Equity Advocate participants, TBD, two each in Yrs 1-4. **Total: \$44,919**

C. Fringe Benefits:

Fringe benefits are calculated at University of Idaho fringe benefit rates with a 3% increase for Yrs 2-5 at 30.1% for faculty, 42% exempt and classified, and 3.6% for students. **Total: \$1,010,299**

E. Travel:

- In-state travel is necessary to conduct activities associated C1 and C2 characterization activities for the collection of historic and current data on E-W systems and resilience indicators. Specific activities are inclusive of for all five years. **Total: \$24,000**
- Out-of-state travel is necessary to disseminate results, interact with scientific community, present data at national meetings and gather feedback for products for all five years. **Total: \$50,000**
- Funding allocated to data technician to ensure statewide coordination for all five years. **Total: \$7,500**
- Travel to foster partnerships and collaborations for all five years. **Total: \$15,000**
- Statewide Collaboration Initiation travel and meetings within Idaho in Yrs 2&4. **Total: \$10,000**
- Collaboration Initiation travel and meetings within Idaho in Yrs 1&3. **Total: \$8,000**
- Travel within Idaho for UI participants to attend the Idaho EPSCoR Annual Meeting to encourage collaboration and share progress in Yrs 1,2&4. **Total: \$25,000**
- Travel for the EE&SC students to interact with VIP/CIP and other project members statewide in Yrs 2-5. **Total: \$4,000**
- Statewide travel for the VIP/CIP program's in-community activities in Yrs 2-5. **Total: \$20,000**
- Co-PI/Site Leads will be supported with four in-state trips per year for project-wide management plan coordination for all five years. **Total: \$16,000**
- Statewide TNRN travel for all five years to foster network development. **Total: \$10,000**

F. Participant costs:

- WE-STEM summer research program supports five undergraduates in paid research experiences at UI at \$5,000 each for Yrs 2-5. **Total: \$100,000**
- WE-STEM summer research program supports four undergraduates in paid research experiences at Tribal Partners TBD at \$5,000 each for Yrs 2-5. **Total: \$80,000**
- WE-STEM summer research program supports 12 undergraduates in paid research experiences at PUIs at \$5,000 each for Yrs 2-5. **Total: \$240,000**

G.6. Other Direct Costs:

G.6.1 Materials and Supplies:

- Materials and supplies for the collection of biophysical and social science data in the characterization objectives at \$14,000 per year over all five years. **Total \$70,000**
- Funds are requested for high performance computers, peripherals, and software licenses for postdoctoral researchers and graduate students. These computers will be for dedicated use for collating data sets, characterization of data, ML model development, preparing and running ML cases using the Falcon supercomputer, and performing futures studies all five years. **Total \$50,000**
- Research supplies to support 16 Tribal, 20 UI and 48 PUI WE-STEM summer undergraduates at \$500 each. **Total: \$42,000**

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- Funds are requested for ASSERT materials and supplies in all five years. **Total: \$5,000**

G6.2 Publication Costs/Documentation/Dissemination:

- Funds are requested to support costs of dissemination and publication of research findings in Yrs 3-5. **Total: \$12,500**
- Videography service to create video content for sharing the project in Yrs 2&4. **Total: \$10,000**

G6.5 Subawards

Boise State University: Total \$5,039,233

Idaho State University: Total \$4,365,729

Coeur d'Alene Tribe: Total \$127,397

Shoshone Bannock Tribe: Total \$144,109

G6.6 Other

- Statewide funding is requested for 13 VIP/CIP programs to be award at implementation sties TBD during the project. Funding for community engagement in all five years (three in Yr1; two in Yrs 2,3&4; four in Yr3). **Total: \$130,000**
- Funding is requested for three VIP/CIP programs at UI in Yrs 2-4. **Total: \$30,000**
- Statewide funding is requested for VIP/CIP Community Engagement in Yrs 2-5. **Total: \$30,000**
- Statewide funding is requested for three VIP/CIP programs at PUIs. **Total: \$30,000**
- Statewide Seed Funding will provide up to nine small Seed awards and five large Seed awards over all five years. **Total \$1,315,617**
- New faculty startup funds of \$33K each will be used to establish the research labs for the three new hires in Yr 2. Specifically, funds will be used for a suite of activities associated with the proposed research including purchasing consumables for analytical water testing and water quality measurements, data collection related to biophysical and social science datasets, and consumables related to energy and power research. **Total: \$99,000**
- Funding is provided for statewide multi-institutional ASSERT Workshop in Yr 3. **Total: \$40,000**
- Statewide Community of E-W Practice PUI support and travel in Yrs 1-4. **Total: \$76,097**
- Statewide TNRN partnership and collaboration program funding to support development of TNRN with Native American Tribes in Idaho, including those yet to be participants. **Total \$120,000**
- Graduate student fees and insurance, at base of \$13,896 with a 5% increase per year associated with 2 PhD and 4 MS student positions. Base for the EE&SC program is \$23,455 with a 5% increase per year **Total: \$340,667**

H. Total Direct Costs: \$16,779,045

I. Indirect Costs: calculated at University of Idaho's modified total direct cost rate of 50%. **Total: \$3,220,955**

J. Total Direct and Indirect Costs: \$20,000,000

M. Cost Share: University of Idaho will provide \$3,372,051, Boise State University will provide \$285,101, and Idaho State University will provide \$342,848. Cost share will provide for Idaho EPSCoR leadership and staff support, postdoctoral support, leadership/staff travel, and materials and supplies. This includes travel funding to the Strategic Planning meeting, national EPSCoR conferences, EPSCoR PI meetings, Reverse Site Visits, Site Visits and other events identified in the program announcement as well as contract costs for Strategic Planning facilitation and External Evaluator. All cost share is provided through the Idaho Higher Education Research Council in direct support of this project.

Total: \$4,000,000