Budget Narrative

A total of \$2,435,509 is requested for the University of Idaho as the lead institution for this 4-year NSF EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations (RII Track-2 FEC) proposal. The collaborating jurisdictional institutions are University of Nevada, Reno, and University of South Carolina.

A. Senior Personnel salaries

PI Dr. Lilian Alessa (base salary \$124,051.20; 2.5% increase per year) is requesting 2.0 mos. Salary per year for leading the interjurisdictional project including project and personnel management.

Total Request: \$114,471; Year 1, \$27,567; Year 2, \$28,256; Year 3, \$28,962; Year 4, \$29,686.

Co-PI Research Scientist Erich Seamon (base salary \$79,435.20 for FY23; 2.5% increase per year) is requesting 3.0 mos. summer salary for leading the model integration, climate toolbox and climate data projections, convergence/divergence mapping, and supporting the P delta I analysis. Total Request: \$109,951 Year 1, \$26,478; Year 2, \$27,140; Year 3, \$27,819; Year 4 \$28,514.

Co-PI Alistair Smith (base salary \$126,140 for FY23; 2.5% increase per year) is requesting 1.0 mos. salary per fiscal year for coordinating the Idaho activities and the wildfire testbed of the project. Total request: \$58,200; Year 1, \$14,016; Year 2, \$14,366; Year 3, \$14,725; Year 4, \$15,093.

Senior Personnel Professor Andrew Kliskey (base salary \$140,478 for FY23; 2.5% increase per year) is requesting 0.25 mos. salary per year for co-leading the perception, values, and knowledge work and supporting the P Delta I and SES hotspots mapping work. Across all projects Kliskey would be funded up to a maximum of 2 months summer salary for regular award/faculty effort in the summer for Kliskey in addition to his 0.50 FTE academic year role as Idaho EPSCoR project director. The current and pending NSF awards that are part of Kliskey's regular faculty workload are distinctly different, though complimentary, to the current NSF EPSCoR RII Track-2 cooperative agreement.

Total Request: \$16,205; Year 1, \$3,902; Year 2, \$4,000; Year 3, \$4,100; Year 4, \$4,203.

Senior Personnel Professor Erin Brooks (base salary \$105,690 for FY23; 2.5% increase per year) is requesting 1.0 mo. per year for Years 1-2, and 0.75 mos. per year for Years 3-4 for leading the WEPP model application and supporting the drought and wildfire testbeds. Total Request: \$40,147 Year 1, \$11,743; Year 2, \$12,037; Year 3, \$9,254; Year 4, \$7,114.

Senior Personnel Professor Roger Lew (base salary \$72,555.60 for FY23; 2.5% increase per year) is requesting 0.5 mos. per year for programming the WEPP model and other modeling tools, and for supporting data visualization. Total Request: \$16,739; Year 1, \$4,031; Year 2, \$4,132; Year 3, \$4,235; Year 4 \$4,341.

The University of Idaho has determined the salary year for senior personnel to be based on the calendar year.

Total request for project duration is \$355,713.

B. Other Personnel salaries

Program Coordinator Kinsey Walt (base salary \$35,880 for FY23; 2.5% increase per year) is requesting 3.0 mo. salary per year for project-wide coordination and communication. Total Request: \$37,248; Year 1, \$8,970, Year 2, \$9,194; Year 3, \$9,424; Year 4, \$9,660.

Postdoctoral scientist (to be hired) (base salary \$60,000 for FY23; 2.5% increase per year) is requesting 12.0 mo. salary per year to co-lead community engagement, QED training and workshops, focus groups and interviews, and social data (PVK) collection, analysis, and integration. Total Request: \$249,152; Year 1, \$60,000; Year 2, \$61,500; Year 3, \$63,038; Year 4, \$64,614.

Graduate student support of 780 hours per academic year, and 520 hours per summer is requested for two PhD students (base rate \$25/hour) for Years 1 – 4 to support social and biophysical data analysis and modeling, P delta I analysis, and climate projections. Total Request: \$269,912 for 4 years.

Total request for project duration is \$556,312.

C. Fringe Benefits

Faculty are calculated at the rate of 30.1% per year.

Staff are calculated at 42% per year. Graduate students are calculated at 3.6 %.

Total request for project duration is \$154,484.

D. Equipment

Total request for project duration is \$0

E. Travel

Domestic travel of \$2,640 per person is requested for 2 UI personnel to attend meetings at NSF in Alexandria, VA workshops for 4 days each per year in Years 1 and 4. 2 days to travel to and from workstation in Moscow, ID and two days for NSF meetings (2 personnel x \$2,640). The cost of travel is estimated as follows: coach-fare ticket (approx. \$1,550 round-trip per person); ground transportation (ground transportation \$55 x 4 days); federal lodging rate (approx. \$258 for three nights per person); state per diem rates. (approx. \$79 for four days per person).

Domestic travel of \$523 per person is requested for 4 UI personnel to attend meetings in Coeur d'Alene for 3 days each in Year 1. 2 days travel to and from workstation in Moscow, ID and one day for meetings (4 personnel x \$523). The cost of travel is estimated as follows: ground transportation (car rental \$100 x 2 rental cars); federal lodging rate (approx. \$179 for 2 nights per person); state per diem rates (approx. \$55 for 3 days per person).

Domestic travel of \$165 per person is requested for 4 UI personnel to attend meetings in Coeur d'Alene for 1 day each in Year 1 (4 personnel x \$165). The cost of travel is estimated as follows: ground transportation (car rental \$100 x 2 days); state per diem rates (approx. \$55 for 3 days per person).

Domestic travel of \$1,403 per person is requested for 9 UI personnel to attend All-Hands meeting in Reno, NV for 4 days each per year in Years 2 and 4. 2 days to travel to and from workstation in Moscow, ID and two days for All-Hands meetings (9 personnel x \$1,403). The cost of travel is estimated as follows: coach-fare ticket (approx. \$785 round-trip per person); ground transportation (car rental \$100 x 4 days); federal lodging rate (approx. \$114 for 3 nights per person); state per diem rates (approx. \$69 for 4 days per person).

Domestic travel of \$330 per person is requested for 4 UI personnel to attend meetings in Coeur d'Alene for 6 days each in Year 2 (4 personnel x \$330). The cost of travel is estimated as follows: ground transportation (car rental \$100 x 6 days); state per diem rates (approx. \$55 for 6 days per person).

Domestic travel of \$2,640 per person is requested for 3 UI personnel to attend National EPSCoR meetings for 4 days each per year in Years 2 and 3. 2 days to travel to and from workstation in Moscow, ID and two days for NSF meetings (\$2,640). The cost of travel is estimated as follows: coach-fare ticket (approx. \$1,550 round-trip per person); ground transportation (ground transportation \$55 x 4 days); federal lodging rate (approx. \$258 for three nights per person); state per diem rates. (approx. \$79 for four days per person).

Domestic travel of \$2,008 per person is requested for 9 UI personnel to attend All-Hands meeting in Columbia, SC for 4 days in Year 3. 2 days to travel to and from workstation in Moscow, ID and two days for All-Hands meetings (9 personnel x \$2,008). The cost of travel is estimated as follows: coach-fare ticket (approx. \$1,416 round-trip per person); ground transportation (car rental \$100 x 2 days); federal lodging rate (approx. \$112 for 3 nights per person); state per diem rates (approx. \$64 for 4 days per person).

A cost increase of 5% in travel rates is applied to each subsequent year of travel

Total domestic travel request is \$80,789; Year 1, \$9,863; Year 2, \$23,858; Year 3, \$26,027; Year 4, \$21,041.

F. Participant Support

Undergraduate student stipends: Stipends of \$5,000 per student per summer is requested for 2 students per year to undertake research experiences for undergraduates (REU) projects with the communities, stakeholders, or research personnel. A cost increase of 2.5% per year is applied.

Rural High School Student Summer Experience Program: Travel (\$75), subsistence (\$55 per day), and lodging (\$30 per night for on-campus housing) per student per 1 week summer research experience is requested for 10 students per summer to undertake training for high school graduates from rural underserved communities. A cost increase of 2.5% per year is applied.

Total request for project duration is \$62,288.

G. Other Direct Costs

Materials and Supplies: Three desktop computers and peripherals are requested in Year 1 for full-time research personnel (1 postdoc and 2 doctoral students) undertaking data collation and analysis, computational modeling, visualization, and presentation. A community sensor network comprising integrated air temperature, air quality, humidity sensors (e.g., deployable sensors): 50 sensors for community deployment in Idaho. \$250 per sensor for 50 sensors; 40 sensors deployed in Year 1 and 10 sensors deployed in Year 3. One laptop to support community engagement, QED, and sensor deployment. Commodities and software to support QED workshops. Year 1: \$29,000; Year 2: \$6,500; Year 3: \$3,500; Year 4: \$1,000.

Publications: Journal publication fees of \$1600 in Year 3 and \$3500 in Year 4 are requested.

Sub-awards: None

Total request for project duration is \$0

Professional service contracts/Consultant: External evaluation and assessment services of \$50,000 per year for implementation, guidance, and reporting of the project-wide evaluation and assessment plan, including annual travel to the project all-hands meeting.

Computer Services: Data management services of \$8,000 in Years 1 and 2, and \$5,000 per year in Years 3 and 4 for cross-institution data sharing, archiving, and interoperability is requested, including system development in Years 1 and 2.

Stakeholder support: Honorarium, per diem, travel for community representatives, rightsholders, or stakeholders is requested: 15 people per year for 3 events per year (of up to 1 day in length). Honorarium (\$400 per person per event); per diem (\$55 per person per day); travel (\$50 per person per event).

Other direct costs: Video production costs to support broader impacts of \$1,800 per year in Years 3 and 4.

Total other direct costs request for project duration is \$365,600

Student Fees & Insurance: Graduate student tuition fees of \$4,984 per semester per student and health insurance of \$1041 per semester per student for the 2 graduate students is requested in Years 1-4. As cost increase of 5% per year is applied.

Total request for project duration is \$103,873.

Indirect Costs

Total Indirect Costs \$756,449 based on the UI Federally Negotiated Indirect Rate for on-campus research activity of 50.0% MTDC. MTDC excludes tuition, equipment over \$5,000, participant support, and subaward amounts in excess of \$25,000 per subaward.

Total Project Request: \$2,435,509