Title
JT Teaching Faculty 1
University of Colorado Boulder

#### **BUDGET JUSTIFICATION**

### **PERSONNEL**

Salaries for all named personnel are based upon current University of Colorado Boulder (CU Boulder) academic and staff salary scales and estimated in accordance with institutional base salary policy. All personnel budget calculations include salary range adjustments and merit increases as applicable for each year of support in accordance with University policy.

100% effort of 1 month of summer salary is requested for the Principal Investigator, JT Teaching Faculty 1, for each year of the project. The PI will be responsible for the overall coordination of the project and the supervision of the other project personnel. The PI will (Please describe PI's duties here).

Salary for 1 summer month is requested for the Co-Principal Investigator, MW Teaching Faculty 2, in each year of the project. The Co-PI will (Please describe Co-PI XXXX's duties here).

Salary funds are requested for a (TBD) CIRES Research Scientist I, a CU Research Associate, for 12 months of effort in each year of the project. The University of Colorado Research Associate will (Please describe the Research Associate's duties here).

Salary funds are requested for a (TBD) CIRES Associate Scientist I GIS Analyst, a CU Professional Research Assistant, for 12 months of effort in each year of the project. The University of Colorado Professional Research Assistant will (Please describe the Professional Research Assistant's duties here).

Salary funds are requested for a (TBD) Post Doctoral Associate for 12 months of effort in each year of the project. The University of Colorado Post Doctoral Associate will (Please describe the Post Doctoral Associate's duties here).

Support is requested for an Administrative Support Specialists at 2% effort of 12 months for each year of the project. This effort will provide direct support for grant finance, budget, payroll, hiring, HR duties, and IT system administration duties specifically for this project. For the budget a best estimate is used, after award these costs will only be assigned for specific direct effort in support of the project.

Salary for a Graduate Research Assistant (GRA) is requested for 9 months at 50% time for the AY, and 3 months at 100% time for the summer, for each year of the project. GRA salary is based on the current University rate. Insert description of GRA role/function here.

An undergraduate student will work 1040 hours at the rate of \$20 per hour, each year of the project. Insert description of Undergraduate role/ function here.

CU Boulder's definition of a year is based on the calendar year, January 1 through December 31.

#### FRINGE BENEFITS

Fringe benefits are calculated on requested salary per the University's federally negotiated Rate Agreement with the Department of Health and Human Services (DHHS) dated 7/23/2024. The Fixed rates for the period 7/1/2024-6/30/2025 are 31% of salary for regular faculty; 40% of salary for full time professional & research personnel; 11.4% for graduate research assistants; and 1.8% for hourly employees.

Fringe Benefit rates are Fixed for the period 7/1/2024-6/30/2025 and Provisional thereafter until new rates are established. As rates are renegotiated yearly, an inflation rate of 2.6% has been included in the fringe benefit cost estimation to account for inevitable rate fluctuations that will occur throughout the project period. Inflation is included to provide an accurate estimate of potential fringe benefit costs, just as inflation is estimated for other direct costs. When salary is charged to the project, the actual Fixed or Provisional rate at that time will be applied.

## **EQUIPMENT**

Equipment funds are requested to purchase:

List all capital equipment to be purchased or fabricated for use on the project, specify how item will be used to support the proposed research activity and/or specify if it is a deliverable, and include in what year it will be purchased. Provide the cost for each individual piece of equipment or distinct components if item is being fabricated and how you arrived at the figure, e.g., "The cost of XX equipment was estimated taking the average cost of XX as provided by three independent vendor quotes. All other equipment costs were estimated using catalog prices."

Big Computer Server: \$100,000

## **TRAVEL**

## **Domestic**

Travel funds are requested for two members of the project personnel to attend AGU in San Francisco, CA in year 1. Conference attendance will support the dissemination of this project's research results. The cost of travel is calculated for 5 days and includes airfare, lodging, per diem, and ground transportation. The cost of airfare and ground transportation is based on estimated costs. Lodging and per diem costs are based on rates as established by the GSA for the planned destination San Francisco, CA. in December. A 2.3% yearly inflation is included.

Travel funds are requested for two members of the project personnel to attend AGU in San Diego, CA in project year 3. Conference attendance will support the dissemination of this

project's research results. The cost of travel is calculated for 5 days and includes airfare, lodging, per diem, and ground transportation. The cost of airfare and ground transportation is based on estimated costs. Lodging and per diem costs are based on rates as established by the GSA for the planned destination San Francisco, CA. in December. A 2.3% yearly inflation is included.

Domestic	Cost/ Person	# Days	Year 1	Year 2	Year 3	Total	
Conference - Two members of the project personnel to attend the annual AGU conference in Dec 2026 in San Francisco, in year 1 of the project							
Airfare	\$500		\$1,000	\$0	\$0	\$1,000	
Lodging	\$272	5	\$2,720	\$0	\$0	\$2,720	
Per Diem	\$92	5	\$920	\$0	\$0	\$920	
Ground Transportation	\$50	5	\$500	\$0	\$0	\$500	
Conference - Two members of the project personnel to attend the annual AGU conference in Dec 2028 in San Diego, in year 3 of the project							
Airfare	\$500		\$0	\$0	\$1,047	\$1,047	
Lodging	\$199	5	\$0	\$0	\$2,083	\$2,083	
Per Diem	\$86	5	\$0	\$0	\$900	\$900	
Ground Transportation	\$50	5	\$0	\$0	\$523	\$523	
Subtotal Domestic	Subtotal Domestic Travel			\$0	\$4,553	\$9,693	

#### **International**

The cost of airfare and ground transportation is based on estimated costs. Lodging and per diem costs are based on rates as established by the Department of State for the planned destination.

Travel funds are requested for the 2 members of the project personnel to conduct fieldwork in year 2 of the project. The cost of travel is calculated for 10 days and includes airfare, lodging, per diem, and ground transportation. The cost of airfare and ground transportation is based on estimated costs. Lodging and per diem costs are based on U.S. Department of State lodging and per diem rates for TBD town Iceland. A 2.3% yearly inflation is included.

International	Cost/ Person	# Days	Year 1	Year 2	Year 3	Total	
Field Work - Two members of the project personnel to travel to Iceland for field work in year 2 of the project							
Airfare	\$1,800		\$0	\$3,683	\$0	\$3,683	
Lodging	\$258	10	\$0	\$5,279	\$0	\$5,279	
Per Diem	\$179	10	\$0	\$3,662	\$0	\$3,662	

Ground Transportation	\$50	10	\$0	\$1,023	\$0	\$1,023
Subtotal International Travel			\$0	\$13,647	\$0	\$13,647

### PARTICIPANT SUPPORT COSTS

Funds are requested to support participant costs to bring 10 participants to a training workshop in each year of the project. (Please explain why this training workshop is needed, why it supports this project, and how does it provide a training experience or benefit for the participants). To attend the workshop we anticipate that 5 participants will be supported via stipend and 5 will be supported by a travel reimbursement. We request the flexibility to provide a stipend as some participants may lack resources such that it would create a hardship to wait for the reimbursement. The stipends will be the same amount as the planned and budgeted travel reimbursements. The planned travel reimbursements are calculated for 5 days and includes airfare, lodging, per diem, and ground transportation. The cost of airfare and ground transportation is based on estimated costs. Lodging and per diem costs are based on rates established by the GSA for the planned destination of Boulder CO in June.

	Rate	Year 1	Year 2	Year 3	Total
10 Participants		10	10	10	30
5 Stipends/year	\$2065/each	\$10,325	\$10,562	\$10,805	\$31,692
5 Travel					
Reimbursements/					
year	\$2065/each	\$10,325	\$10,562	\$10,805	\$31,692

## OTHER DIRECT COSTS

### **Materials and Supplies:**

Funds are requested for IT Supplies, data storage devices, and software necessary for the research work in the amount of \$500 per year plus inflations for a total of \$1,536.

# **Publication Costs:**

Publication costs for article processing page charges of \$2,500 are included for dissemination of the research results in a refereed scientific journal. For the publication, we request an additional \$3,000 to cover the Open Access surcharge.

Funds are requested to cover the cost of the AGU Abstract Publications for the conferences (\$70/abstract). The abstract publication costs will support dissemination of this project's research results at the conferences.

### **Computer Services:**

Other direct costs are included for Computer Services (at \$250/year plus inflation for a total of \$768) for computer system support, data storage costs, computer and data maintenance services, and computer repair services.

#### **Subawards:**

A subaward in the amount of \$500,000 per year is given to University of Utah to...

Year 1 \$500,000 Year 2 \$500,000 Year 3 \$500,000 Total \$150,000

### **Other Costs:**

Funds are requested to cover AGU Conference Registration Fees at (\$775/person/conference). Conference attendance will be to present this project's research results.

Funds are requested to cover relocation costs for the (TBD) new hires for the project. We anticipate 3 new hires. \$4,000 relocation amount requested for the (TBD) Research Associate, \$4,000 for the Professional Research Assistant, and \$3,000 is requested for the Post Doctoral Associate.

### **Tuition and Fees:**

Graduate student tuition and mandatory fees are requested in accordance with University policy. The rate used for GRA tuition remission is the current resident tuition rate and includes a 3% annual increase throughout the project. The annual increase occurs in August.

# FACILITIES AND ADMINISTRATION (F&A) COSTS

Facilities and administration (F&A) costs are charged according to the University's federally negotiated rate agreement. The F&A cost rate for on-campus research is 56.5% of Modified Total Direct Cost (MTDC), predetermined for the period 7/1/2021 - 6/30/2023; provisional thereafter per HHS agreement dated 7/23/2024. MTDC consists of all salaries and wages, benefits, materials, supplies, travel, and up to the first \$25,000 of subcontracts. MTDC shall exclude tuition, capital equipment, participant support costs, and the portion of subcontracts that exceed \$25,000.

F&A has been calculated by applying the 56.5% rate described above to an MTDC base of \$1,335,549. Totaling F&A costs for the project period of \$754,585.

#### **INFLATION RATES**

The University of Colorado's current budget planning parameters include an annual inflation factor of 3.2% for salaries of investigators, post-doctoral researchers, graduate research assistants and other professionals, and 3% for hourly wages. Fringe Benefits are estimated to increase at 2.6% per year. Tuition and student fees are estimated to increase 3% per year and other direct costs such as travel, can be inflated at 2.3% per year.