EWEB Board Consent Calendar Request

For Contract Awards, Renewals, and Increases

The Board is being asked to approve additional funds for **enhancing carbon sequestration and fire resilience in water and energy production systems research** with the **University of Oregon**.

Board Meeting Date:	12/7/21
Project Name/Contract #:	Carbon Sequestration / Intergovernmental Agreement 20-104-IGA
Primary Contact:	Karen Kelley Ext. 7153

Contract Amount:

Original Contract Amount:	$140,000
Additional $ Previously Approved:	$0
Invoices over last approval:	$0
Percentage over last approval:	0%
Amount this Request:	$200,000
Resulting Cumulative Total:	**$340,000**

Contracting Method:

Method of Solicitation:	Direct Negotiation
If applicable, basis for exemption:	ORS 190.010
Term of Agreement:	5 years
Option to Renew?	No
Approval for purchases *"as needed"* for the life of the Contract:	Yes☐ No☒
Proposals/Bids Received (Range):	NA
Selection Basis:	NA - Direct Negotiation

Narrative:

Operational Requirement and Alignment with Strategic Plan

The board is being asked to approve an expanded scope of the existing UO-EWEB collaboration. As part of the post-Holiday Farm Fire watershed restoration efforts, EWEB is working with partners to implement large scale floodplain restoration projects to buffer impacts from burned landscapes on water quality and increase fish and wildlife habitat. The UO-EWEB collaboration will scale up the carbon sequestration measurement and modeling efforts beyond the research site at High Banks Road to include large-scale floodplain restoration project areas. The science shows that floodplain depositional environments are likely high quality carbon sinks able to absorb carbon dioxide from the atmosphere. UO scientists, professional research staff, and graduate students have the opportunity at Quartz Creek and Finn Rock Reach (Phase 2) restoration areas to measure existing carbon sequestration rates prior to conducting large floodplain restoration work in 2023 and then begin to measure the carbon sequestration trajectory once the valley is restored to large floodplain depositional environments. This research will be expanded to include other floodplain restoration projects already completed (Deer Creek and South Fork McKenzie) and compare it to traditional restoration work.

The increased scope of the UO research will inform future restoration designs and carbon sequestration projects that support the strategic direction EWEB is pursuing to develop effective ways to mitigate greenhouse gas emissions, increase resiliency to climate change impacts, and establish customer facing programs that promote climate solutions while providing co-benefits to water quality and watershed health. Research will be led by UO scientists, professional research staff, and graduate students with assistance from undergraduate students for training of the next generation of solution-oriented environmental scientists.

To this end, an amendment to the current IGA is requested to add $200,000 over 4 years (2021-2024) to be allocated as follows:

- Equipment and supplies for fieldwork and laboratory experiments for periodic measurements and quantitative spatiotemporal projections of plant and soil carbon dynamics **$50,000**
- Part-time technician (salary and benefits) or postdoctoral fellow with experience in data-enabled modeling, carbon markets, and ecosystem restoration **$80,000**
- Graduate students (salary and benefits) to lead field crews, generate and analyze data, and model carbon benefits at local to landscape scales **$60,000**
- Undergraduate student summer support for field and laboratory training in environmental sciences aimed at workforce development **$10,000**

Project Deliverables

- Baseline carbon surveys
- Carbon measurement/verification plan/process development
- Literature review and projection of carbon gain above and below ground
- Quantification of fire effects on carbon stocks in stand-replacing and prescribed burns
- Baseline description of plant and tree species composition and survival rates of introduced species
- Dozens of students exposed to scientific methods including field and laboratory surveys
- New research proposals to federal agencies using this project as proof-of-concept for Landscape Carbon Sequestration and Atmospheric Recovery

Purchasing Process

This was a direct negotiated Intergovernmental Agreement with authority granted under ORS 190.010 allowing governmental bodies to enter into agreements for the performance of any or all functions and activities that the Parties to the Agreement, their officers, or agents have the authority to perform. This Agreement is a unilateral effort of governmental entities, both working to serve the public good.

Prior Contract Activities

EWEB Contract	Project Name (Description)	Board Approval Date	Project Duration (Notice to proceed to close out).	Original Contract Amount	Final Contract Amount
20-104	Carbon Sequestration	NA	06/08/2020 to 04/30/2025	140,000	140,000

ACTION REQUESTED:

Management requests the Board approve an increase to the Intergovernmental Agreement with U of O for enhanced carbon sequestration and fire resilience field surveys and research. Approximately $350,000 was planned for these goods and services in the Holiday Farm Fire Restoration 2021 budget of $3.9 million and 2022 proposed budget of $4.25 million. Variances will be managed within the budget process and Board policy.