

Announcement of Opportunity (21-Jan-2020)
Freshwater Collaborative of Wisconsin (FCW)

Amended 2 April 2020 **

**** COVID-19 contingencies:** Given the recent outbreak and the potential significant impacts on research, collaboration, and planning, please detail impact and plans for dealing with the COVID-19 restrictions, adaptation and contingencies for the project proposed, including: possible delay in starting date, schedule, collaborations, student involvement, etc. under a separate heading and section in the proposal.

The Freshwater Collaborative of Wisconsin (FCW) was launched in 2019 to leverage Wisconsin's competitive advantage to be a global leader in freshwater science, technology, entrepreneurship and economic growth by fully utilizing UW System's broad expertise, world class faculty, research acumen and commitment to undergraduate and graduate student training.

A key component to the FCW is fostering collaborative research and initiatives across the 13 campuses, private sector and state institutions to address the water challenges of the 21st century. In so doing, it will grow Wisconsin's next generation of water expertise to fuel the water-based economy and meet the need for a knowledgeable and multi-talented workforce in wide ranging water related disciplines.

In July of 2019 the Wisconsin Economic Development Corporation (WEDC) awarded a Targeted Industry Project grant to the University of Wisconsin System to lay the groundwork for a successful, long-term Freshwater Collaborative of Wisconsin. The initial programming goals included in this project are designed to both build the initiative's brand and to provide initial research, student and workforce development support. FCW will lay the foundation for a new era of inter-campus, state agency, and private sector collaboration and partnership, trigger Wisconsin's lead in water sector innovation, and advance a unique platform for linking economic and workforce development with higher education.

The funds provided by WEDC are supplemented by a \$1.4 million funding commitment from the UW System for the Freshwater Collaborative Research Network and additional in-kind support from all UW campuses.

Tackling these contemporary water challenges requires a wide variety of solutions. The FCW, if fully implemented, will address 10 Grand Water Challenges, which is proposed to be phased in at campuses across the UW-System over the next three biennial budgets. This initiative will encompass both research and education with educational offerings spanning undergraduate and graduate degree programs, continuing professional education, specialized training opportunities, and general public awareness.

10 Grand Water Challenges for Wisconsin (see appendix)

1. Agricultural Water Management
2. Industrial Water Engineering and Technology
3. Water Quality Safety and Emerging Contaminants
4. Great Lakes Management and Restoration
5. Water Infrastructure: Collection, Distribution, Treatment
6. Water Business and Finance
7. Watershed Management and Restoration
8. Water Security, Protection and Resilience
9. Healthy Recreational and Transportation Water Use
10. Aquaculture/Aquaponics/Water Food Systems

Solutions to each challenge will be underpinned by five cross-cutting themes:

1. Fundamental Research on Water Systems;
2. Driving Technology Innovation;
3. Workforce Development;
4. Resource for Science Driven Water Policy and Law; and
5. Informing Sustainable Management of Water Resources

The Freshwater Research Collaborative (Pilot phase of FCW).

The goal of the Research Collaborative is to enable UW System investigators to develop and coordinate their research, training and educational activities across disciplines, organizational, geographic and international boundaries to address the 10 Grand Water Challenges of the FCW's Implementation Plan with *emphasis in this pilot phase on the first four challenges*. The program will provide opportunities to foster new collaborations across system campuses, including external partnerships, and will address interdisciplinary topics.

Tracks/ Approximate Total Funding Available

- Track 1: Research Collaboration Summits/Working groups: ~\$60,000
- Track 2: Strategic Research: ~\$680,000
- Track 3: Undergraduate FCW Interdisciplinary curriculum, training & course development and design: ~\$60,000
- Track 4: Freshwater Research Experience for Undergraduate Awards: ~\$160,000
- Track 5: Inter-Institutional Undergraduate Training Programs: ~\$100,000

Total Funding: ~ \$1M

The Freshwater Research Collaborative (Pilot phase of FCW)
Announcement of Opportunity
21 January 2020

Program Description:

Anticipated Type of Awards:

There are several types of awards available as identified by the five Tracks described below.

Estimated Number of Awards:

The actual number of awards varies across Tracks.

Anticipated Funding Amount:

\$1.1M in total, varies across programs and Tracks.

Eligibility Information

Who May Submit Proposals:

Any institution within the University of Wisconsin System, all 4-year, 2-year campuses, research institutions and centers

Who May Serve as PI:

Faculty and staff at a UW System institution .

Limit on Number of Proposals per Organization:

There are no restrictions or limits.

Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.

Proposal Preparation Instructions: *NB (new 2 April 2020 clarification): proposals should be packaged and submitted as a single pdf file, including all sections.

See descriptions for individual Tracks. Proposals should clearly identify at the beginning of the title which Track is being proposed, e.g. *"Track 2 Strategic Research: . . ."*

Uniform Proposal Format Requirements:

Cover Page:

- Title beginning with "Track X ..."
- Principal Investigators, contact information (including email)
- Proposing Institution and Institutional Contact for Award (including email)
- Time frame of award
- Amount of FCW funding requested
- Cost sharing proposed

Executive Summary (one page):

- Summarize proposed effort and its relevance to the themes of the FCW
- Identify Impact on furthering the goals and objectives of the FCW

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Budget Narrative: See requirements for individual Tracks (below).

Budgetary Information:

Cost Sharing:

Inclusion of cost sharing if required or optional

Indirect Cost (F&A) Limitations:

F&A costs are excluded. Budgets are for direct costs and cost sharing only.

Other Budgetary Limitations:

Other budgetary limitations apply depending upon award type. Please see the full text of this solicitation for further information.

Lead Institution (amended 4-2-20):

Please identify the Lead Institution to whom the award will be given, and the subwards to be dispersed by the Lead Institution to the collaborating institutions. A single award will be made for each project.

Due dates:

Submission deadlines and targets vary by Track. Proposals should be submitted to a particular Track according to the program's submission dates.

****Proposal submission:** Proposals should be approved by the appropriate Office of Sponsored Research or its equivalent prior to submission.

Proposal review: Proposals will be reviewed by the Freshwater Research collaboration steering committee with representatives from all 13 UW System universities (as defined in the WEDC application), or a subset of this group authorized by the Steering committee to conduct reviews. Recommendations for funding will be approved by the full committee. External reviewers may be solicited for specific technical or scientific expertise.

Review criteria: Proposals will be assessed based upon their strength in implementing the goals and objectives of the FCW and in capturing the widest possible participation across UW System campuses and programs. In addition, proposals will be judged based upon:

1. Whether the proposed program meets a high standard of Intellectual Merit and Scholarship necessary to advance knowledge and expand the capacity of the State to address the Grand Water Challenges enumerated above;
2. Whether the proposed program(s) accomplish one or more of the following broader impacts including the achievement of societally relevant outcomes:
 - New water-centric training programs focused on undergraduates
 - Amplified marketing and recruiting relating to UW System's position as a destination for students in freshwater education and training

- Enhanced workforce development programming, including research experiences, training institutes and graduate research
 - Increased partnerships between academia, industry and others;
 - Expanded public engagement and literacy on water challenges within the state of Wisconsin;
 - Improved water security and safety; management, protection and preservation of water resources for the State of Wisconsin;
 - Increased economic competitiveness of Wisconsin
3. **NEW Criteria (2 April 2020):** COVID-19 pandemic adaptations – what contingencies are proposed for dealing with potential restrictions imposed by the COVID-19 pandemic, to the extent known and anticipated at the time of submission.

How to submit:

Submissions should be electronically by email to:
Freshwater Research Collaborative Announcement of Opportunity 2020, Office of the Director
 (Pro tempore), c/o School of Freshwater Sciences, freshwater-collaborative-AO@uwm.edu

Please note “Submission to Track X” in the subject line. Receipt of submission will be acknowledged by reply email.

Summary of Proposed FCW Awards by Track (see below):

Track		Max.per award	# anticipated	Total max. funding anticipated	Target Submission Dates	Target Award date
1	Research Collaboration Network Summits & Workshops	\$ 10,000	4-8	\$ 60,000	anytime	~ 1 mo. post submission
2	Strategic Research support			\$ 680,000	4/15/20, 8/15/20	~ 2-3 mo. post submission
2.1	Research/PI Support: Maximum per PI	\$30,000/PI	20	\$ 600,000		
2.2	Required Supplemental Undergraduate research stipends	\$ 4,000	20	\$ 80,000		
3	UG FCW Interdisciplinary training & course development	\$ 12,000	5	\$ 60,000	4/1/20 or anytime thereafter	~ 2 mo. post submission
4	Research Experience for Undergraduates Fellowships					
	summer fellowships	\$ 10,000	8	\$ 80,000	1 Mar	1-Apr
	Academic Fall semester fellowships	\$ 5,000	8	\$ 40,000	15 Jun	1-Jul
	Academic Spring semester fellowships	\$ 5,000	8	\$ 40,000	15 Sep	1-Nov
5	Inter-institutional Undergraduate Training Initiatives	\$ 24,000	4	\$ 96,000	anytime up to 10/15/20	~ 1 mo. post submission