

USGS/NIWR FY2022 National Grants Programs

Proposal Preparation for Great Lakes Region Investigators

March 18, 2022



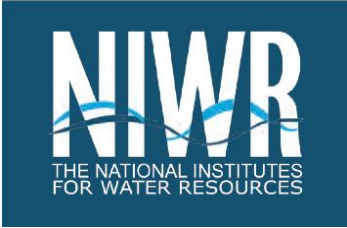
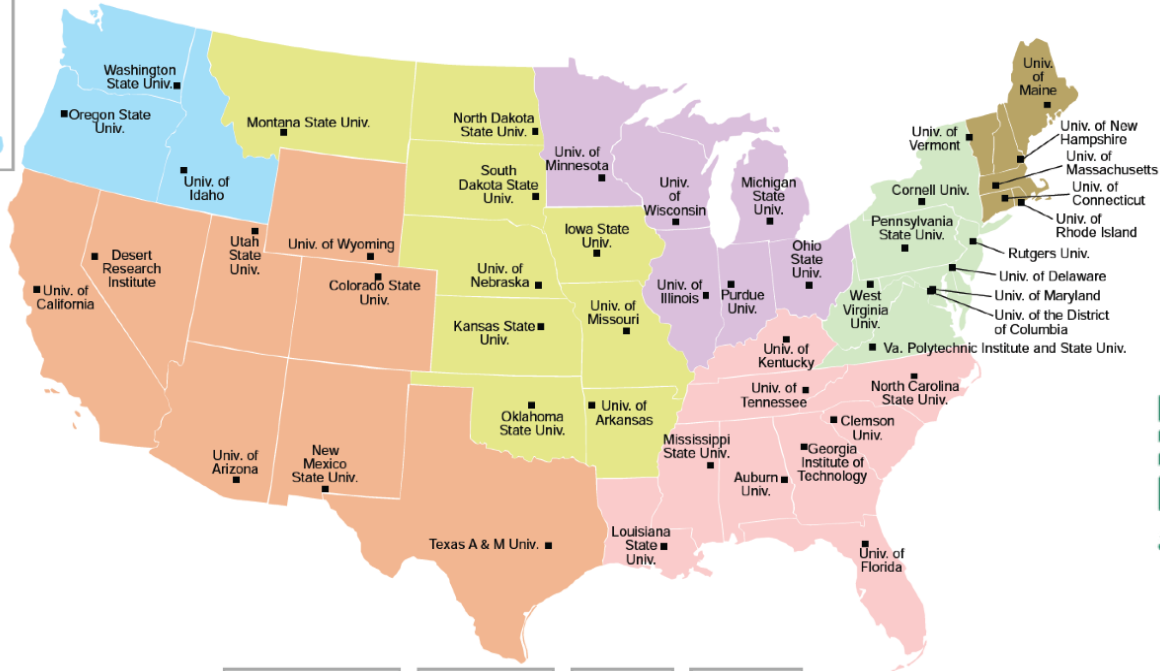
Institute of Water Research
MICHIGAN STATE UNIVERSITY

Water Resources Center
UNIVERSITY OF MINNESOTA



Today's webinar:

- Introduction to NIWR and state water centers/institutes
- 2022 104g, AIS and PFAS grants – including research priorities and eligibility
- Overview of RFPs with emphasis on budget issues
- USGS collaboration
- How to apply
- Self selecting breakout rooms for each program (104g, PFAS, AIS)



2022 National Programs

- Annual Competitive Grants (104g)
- Aquatic Invasive Species
- Per- and polyfluoroalkyl substances (PFAS) Grants

Annual National Competitive Grants (104g)

- Research on significant national and regional water-resources issues to:
 - Improve and enhance water supply and availability
 - Explore new ideas that address or expand our understanding of water problems
- Substantial collaboration between the USGS and the applicant is strongly encouraged
 - If you need help finding a USGS research scientist, we can help
 - Internal USGS funds for modest support of USGS scientists exist (not available for AIS or PFAS programs)

Annual National Competitive Grants (104g) Priorities

- Abundance, locations, and persistence of legacy nutrients
 - Mechanisms, location, “new” vs “old”, related, short-and long-term water quality
- Trends of integrated processes
 - How do changes in one aspect of water quantity and availability affect other long-term aspects?
- Risks of water conflict
 - Drivers, thresholds, sector/community balance, stakeholder actions, agent-based modeling, relevant laws and regulations, and adaptive management

Aquatic Invasive Species (AIS) Research needed to:

- Better identify and understand AIS interactions and effects on water quality, water quantity, and aquatic ecosystems
- Guide management decisions to help improve invasive species management and reduce AIS effects on water resources and aquatic ecosystems at local, regional, and national scales

Aquatic Invasive Species Grants (AIS) Priorities

Focus on water, not the invasive species (think about this)

- Impact of AIS on lakes and rivers and associated tributaries in the Upper Mississippi River basin (UMRB)
 - Improve understanding of AIS effects on lakes, rivers, and associated tributaries in the UMRB, including changes to water quality, water quantity, and ecosystem dynamics
- Lake and river characteristics affecting AIS dynamics in the UMRB
 - Identify physical, biological, and chemical characteristics of waterbodies that infer resistance and resilience to distribution, establishment, and impacts of AIS in the UMRB
- Management of AIS
 - Assessment of AIS spread, detection, impacts, solutions, and management in the UMRB and connections to human dimensions both socially and economically

Per- and polyfluoroalkyl substances (PFAS) research needed to:

- Better understand the interaction and impact of this group of human-made substances on water quality interactions
- Guide management decisions that will improve water resources at the regional scale or national scale

Per- and polyfluoroalkyl substances (PFAS) Priorities

- Novel proxies for PFAS detection and quantification capabilities
- Atmospheric transport and deposition of PFAS that could result in delivery to the hydrologic system
- Process-oriented research of PFAS fate, transport, and effects with emphasis on molecular-level understanding of PFAS precursor transformation, sorption dynamics, or mechanisms of bioaccumulation and(or) effects.

Eligibility

- Any investigator at an accredited institution of higher learning
- Investigators in each state must submit through the Water Resources Research center or institute in that state



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Federal collaboration

- Collaboration with USGS or other federal scientists is encouraged
- Federal employees may not be a PI but can be a co-PI
- Federal agencies may not receive funds from these grants
 - **For Annual Competitive (104g) Grants ONLY:** USGS scientists can obtain internal research funds to support their activities.
- Contact your state WRRRI for assistance in identifying USGS collaborators

USGS Perspectives



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Budget requirements

- Maximum of \$250,000 in federal funds may be requested, duration of 1-3 years
- 1:1 match requirement for project as a whole and each 12-month budget period
- Facilities and Administrative (F&A or 'indirect costs') cannot be paid from federal funds
- Foregone F&A on both federal and non-federal direct costs are counted toward the 1:1 match requirement

Example budget summary

Item	Federal	Non-federal	Total
A: Direct costs	250,000	76,581	322,581
B1: F&A on federal portion (55% of A:Fed)		137,500	137,500
B2: F&A on non-federal portion (55% of A:Nonfed)		39,919	39,919
C: Total (A + B1 + B2)	250,000	250,000	500,000

NOTE: F&A will differ for each state. Please check with your state WRRRI contact.

How to apply:

- Work with your state WRRRI contact
 - IL – Amy Weckle
 - IN – Laura Esman
 - MI – Jeremiah Asher
 - MN – Jeff Peterson
 - OH – Zuzana Bohrerova
 - WI – Jennifer Hauxwell
- Application requirements may differ in each state
 - Be aware of submission deadlines
 - Note that some states provide submission guidance documents

Timeline

March 16

USGS released RFP

Late April/early May

Proposal submission deadline to WRRRI

May 10

WRRRI proposal submission deadline to grants.gov **by your State Institute**

~September

USGS announces funding decisions

~December 1

Funded projects begin (delays always possible)

Other deadlines may include (state dependent):

Notice of Intent (NOI) submitted to WRRRI

Submission of budgets and budget justifications

Free advice for making proposals competitive

- Connect with other teams who are applying to the same RFP
 - Very low chance of USGS funding two proposals that are similar
 - Differentiating proposals will improve everyone's chances

 - Diversity, equity, inclusion, and justice
 - Student involvement
 - Regionally or nationally important (doesn't mean you need people spread throughout the region, but that the research needs to be regionally relevant)

 - Make sure you READ the review criteria from the RFP as you write your proposal