NAWI National Alliance for Water Innovation

NAWI 2026-2027
Annual Guidance Memo

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U.S. DEPARTMENT of ENERGY | Office of Critical Minerals and Energy Innovation

Purpose: This memo documents NAWI leadership's intended activities and priorities for 2026 and 2027. It is meant to inform the development of the 2027 Statement of Project Objectives (SOPO) and Request for Proposals (RFP), and to identify course corrections from the NAWI 2.0 proposal. We intend to produce and share similar memos each year. Your input is very welcome and will be considered to improve planning in future years.

1. NAWI 2026–2027 Priorities

NAWI identified the following priorities for 2026–2027:

a. Advance and Evolve NAWI 2.0 Program

In 2026, NAWI expects to conclude most of the NAWI 1.0 awarded projects. NAWI intends to continue and evolve its directed research for NAWI 2.0 in the three topic areas of Devices, Treatment Trains, and Regional Water Systems (RWS). We expect to award competitive research projects from the industrial water reuse RFP that closed in September 2026.

In 2027, with DOE approval, NAWI plans to conduct two more competitive RFPs focusing on brackish water treatment and RWS. To further advance the application of NAWI research, NAWI will identify opportunities to integrate social science into its research portfolio.

An important opportunity is to match RWS challenges with specific technologies in the technological topic areas (Devices, Treatment Trains) through competed projects. A tentative RFP (CY28 or later) will focus on technologies for decentralized and distributed treatment systems at building or similar scale. Current plans are to focus on fast-tracking promising technologies to commercial adoption.

NAWI will recruit a new research director (RD) in late 2026/early 2027 at Lawrence Berkeley National Laboratory (LBNL) to better align authority and responsibility. By positioning the RD at LBNL, the RD will be able to represent LBNL and NAWI to the broader scientific community. Importantly, the new RD recruitment will emphasize research and leadership acumen equally to create better opportunities to add value through integration across the NAWI portfolio. Along these lines, the RD-directed research portfolio will be reset to focus on integration of the NAWI portfolio to maximize impact. We will also recruit a new RWS Topic Area Lead in 2027.

After the new RD is onboarded in 2027, we will assess our research portfolio and propose revisions that align with the opportunities we see and the skill sets of our Executive Team.

b. Communication and Engagement Strategy

In late 2025, NAWI identified building out communication and engagement strategy at the program level as an opportunity to be more effective and strategic in applying NAWI-funded research in industry and utilities. This is meant to complement rather

than replace communication and engagement capabilities at the project level. To this end, NAWI developed a communication and engagement strategy and vetted that strategy with our partners in DOE, other national labs, and elsewhere. We intend to continue executing this strategy with our communications team in 2026–2027. This includes:

- Maintaining NAWI's website (https://www.nawihub.org/) to disseminate all Hub-related information, including press releases, notices of funding opportunity, online articles highlighting NAWI's impacts and research results, and more.
- Organizing recurring webinars that encourage real-time knowledge sharing across the NAWI Research Consortium and NAWI community, and working with NAWI topic area leads on engagement activities with industry and the greater research community.
- Developing project-specific fact sheets outlining high-level information for NAWI-funded work, including primary points of contact, purpose, goals, research results, publications, etc.
- Attending and presenting on panels and invited sessions at relevant industry-facing conferences and events (e.g., WEFTEC, WateReuse Symposium).
- Hosting specialized, member-focused events (e.g., technology demonstrations, pilot tours, in-person quarterly review meetings, etc.) to further disseminate NAWI's research efforts across the industry.
- Publishing a monthly newsletter documenting NAWI's successes and impacts and promoting upcoming events and opportunities.
- Developing plug-and-play templates and branded materials for NAWI Research Consortium members to utilize while participating in external events and presenting on Hub-related research and development activities.
- Building engagement and strengthening messaging on public-facing platforms, including LinkedIn (professional collaboration) and YouTube (educational content).
- Enhancing NAWI organizational effectiveness.

NAWI has developed a capable operations team, change control processes, oversight functions, and leadership team over time. We are committed to continuing to enhance our capabilities. For 2026–2027, this includes increasing our leadership effectiveness by developing and adhering to a code of collaboration and establishing leadership norms for the NAWI Executive Team. These were the focus of an October 2026 Executive Team retreat where the Executive Team adopted 12 leadership norms (see Section 3 of this document).

c. Focus on Research Priorities

i. Overall

NAWI's research portfolio in 2026–2027 will advance and deepen the NAWI 2.0 directed research program across its three topic areas (Devices, Treatment Trains, and RWS). This includes kicking off industrial water reuse pilot projects in the Devices/Treatment Trains topic areas; complete the RWS Request for Information (RFI); and initiate competitive award processes targeting brackish water treatment and decentralized and distributed treatment systems (Devices/Treatment Trains), as well as RWS.

A key priority is translating strong NAWI 1.0 project outcomes into high-impact pilots, technology transfer activities, and externalization pathways; NAWI technical leadership will identify three to four projects warranting targeted acceleration and align discretionary spend (especially with respect to directed research and rapid reaction funds) and outreach and engagement manager activities accordingly.

Alongside thematic priorities, NAWI will pursue growth in research dollars through federal and state partnerships, identifying one to two viable opportunities by the end of 2027. Throughout, research investments will be explicitly aligned with congressional priorities as well as priorities of DOE's Industrial Technologies Office (ITO) and Hydropower and Hydrokinetic Office (H2O), including data center cooling, critical minerals, and grid–water resilience, to strengthen NAWI's positioning as DOE's leading water innovation hub entering a period of expanded programmatic investment.

We are also emphasizing enhanced industrial engagement as part of the research priorities. That may include engaging industrial reviewers in our RFP process, helping teams partner with industry, providing support for developing commercialization strategies, and connecting team members across the value chain.

We also plan to strengthen our project review process, provide timely feedback, and offer targeted technical support to project teams. This focused effort will provide the additional support needed to advance high technology readiness level (TRL) research. For example, NAWI may convene groups of subject-matter experts to review pilot plans, advise teams on pilot design and execution, and provide technical insights to support the interpretation of experimental results. Our goal is to proactively address technical challenges and maximize each project's likelihood of success.

We plan to group selected Industrial Water Reuse pilot projects into sector areas, each equipped with a sector-specific project support group (PSG), e.g., food and beverage, cooling, and/or semiconductor. The PSGs will be tasked with providing

constructive criticism, identifying opportunities for the broader adoption and commercialization of the developed technologies, and connecting the technological objectives of the pilot projects with challenges at regional scale. NAWI will review the scope and membership of its Research and Industrial Advisory Committee (RIAC) in 2027 following the appointment of the new RD. We will continue to ask the RIAC for input on the NAWI-directed research annual planning process but will also look for input from the RIAC on the competed research portfolio, including technical reviews for projects and program-level input. We will seek RIAC members who can actively contribute to these areas.

ii. Topic Area: Devices

- **Ensure continued alignment of the Devices portfolio with market-facing research needs and priorities.** Develop and maintain a dynamic, market-informed research strategy that incorporates both competed and directed research pathways. Strengthen alignment with high-TRL needs through device prototyping and piloting efforts that drive down water treatment costs and improve water affordability for industry. Emphasize robust "voice of customer" engagement through industry interactions, participation in relevant conferences, and leveraging RIAC involvement. All work will build on and align with the MEMBRANE initiative and other ITO Centers of Excellence.

- **RFPs – Industrial Water Reuse and Brackish Water.** The Devices topic area will focus on alternate water sources, with industrial water reuse and brackish water treatment as priority application spaces over the next 2–3 years. In 2026, an RFP for industrial water reuse applications was issued. A central aspect of this effort is enabling piloting activities from a device-operation standpoint to accelerate new device technologies that deliver system-level benefits and economic value for industrial end users.

- **Directed research portfolio supporting high-TRL needs.** Develop a targeted directed research portfolio aimed at enabling tools, capabilities, and foundational knowledge needed to support high-TRL priorities aligned with the RFP focus areas. Priority topics include benchmarking device technologies for pre-informed pilots, reducing costs through design and manufacturing innovation, enabling scalable membrane production, and advancing characterization methods that directly address industry-informed challenges.

iii. Topic Area: Treatment Trains

The Treatment Trains topic area has the following goals for CY27:

- Complete the review and selection of Industrial Water Reuse project proposals for kick-off in spring 2027.
- Prepare a brackish groundwater and brine management RFP for release in summer 2027 and execute the proposal review and selection process.
- Ensure support of industrial water treatment engineering practice by stimulating the adoption of NAWI-generated tools for treatment train design, operation, and management.

Ensure coordination of the above goals with the Devices and RWS topic areas.

iv. Topic Area: Regional Water Systems

- **Seedling projects.** We are working to establish seedling projects that were discussed with DOE in March. These projects will be developed based on discussions with DOE and, more recently, the RIAC. It is expected that two of the seedlings may end up in two separate regions in the United States, and a third may support energy–water market studies supporting the two regions. These seedlings will be completed in 9–12 months.
- **RFI.** The RFI has essentially been completed, and RWS is awaiting final approval from the CMEI pillar deputy assistant secretaries responsible for NAWI. Depending upon the approval and release, every attempt will be made to incorporate information in the RFI into the first RFP.
- **RFP for practitioner-based projects.** The RWS team has begun the task of initiating the RFP for RWS studies to be worked with practitioners and researchers. It will be primarily defined by workshops already held, as well as an analysis of interview information currently being collected through engagement activities, which will then be synthesized to develop the RFP scope of work. Every attempt will be made to incorporate information from the RFI into the RFP if results are obtained in a timely fashion.
- **RFP for tool development projects.** Per our SOPO, we will initiate the second RFP for RWS regarding tool development. That RFP will be mainly defined through the stakeholder mapping and engagement process overlaid by the model assessment and gap analysis. Additionally, the scope of this activity is likely to be scrutinized heavily by DOE. It should be clear that new models will not be developed. It is highly likely that this activity is going to be focused on translation of pertinent models that align with practitioner informational needs to assist in water planning efforts.

d. Operations: Implementing and Sustaining NAWI Priorities

To ensure NAWI achieves its research and programmatic goals for 2026–2027, the Operations Team will focus on enabling effective execution of the Hub's research priorities while maintaining strong governance, operational efficiency, and continued sustainability. Our approach is organized around four interconnected priorities:

i. Governance and Compliance

We will maintain strong governance and program integrity by ensuring compliance with applicable legal, financial, and DOE requirements. This includes complying with the updated Research Consortium Agreement, Conflict of Interest Policy, and other supporting documents. We will also ensure that all Hub activities, partnerships, and research collaborations comply with DOE requirements and established NAWI policies, including the newly adopted Code of Collaboration.

ii. Strategic Execution and Collaboration

We will continue to improve our effective project management processes to support the successful execution of all competitive RFP-funded projects across Devices, Treatment Trains, and RWS. Priorities include streamlining the full RFP life cycle—from solicitation development and proposal review to project selection and initiation—and strengthening milestone tracking, accountability, and reporting to ensure alignment with SOPOs.

We will also convene an annual Hub-wide meeting in the fall of 2027, bringing together project teams, NAWI leadership, and operational staff to share progress, exchange knowledge, identify research synergies, and strengthen collaboration across topic areas. Together, these efforts will accelerate research integration, promote timely delivery of high-quality outcomes, and ensure individual projects advance NAWI’s broader research objectives.

iii. Leadership and Alignment

We will proactively manage organizational capacity, staffing, and leadership development to ensure the Executive Team and Operations Team have the expertise and resources needed to support evolving DOE requirements and NAWI priorities. This includes aligning staffing and leadership responsibilities with program needs, strengthening coordination across executive leadership, operations, and research teams, and maintaining the flexibility to respond to emerging scientific priorities. These efforts will strengthen Hub-wide integration and maximize the impact of available resources.

iv. Fiscal Stewardship and Sustainability

The NAWI Finance Team will continue to maintain strict financial management to ensure responsible stewardship of Hub resources, compliance with partnership agreements, and achievement of the required hub-wide cost-share commitment. Priorities include monitoring cost-share contributions and commitments, forecasting expenditures and funding needs, identifying potential shortfalls, and developing strategies to secure additional funding to sustain NAWI 2.0 research activities.

An important consideration for 2026–2027 is maintaining the required cost-share threshold as the research portfolio transitions between funding cycles. If new RFP-funded projects are not initiated by mid-2027, NAWI risks falling below the 21% hub-wide cost-share requirement. Proactive financial planning, timely project negotiations and kick-off, and identification of alternative funding sources will therefore be essential to maintaining compliance and ensuring the Hub's long-term financial sustainability.

Collectively, these priorities will provide the governance, infrastructure, coordination, and financial stewardship needed for NAWI to advance impactful research, achieve DOE Hub goals, and sustain the Hub's mission over the long term.

e. NextGen Program

- Provide programs focused on career exploration, professional development, and topics relevant to the future workforce.
- Grow participation in the mentorship program to foster meaningful connections across career stages and disciplines.
- Increase emphasis on in-person mixers and networking opportunities at conferences and NAWI events.

2. Context

a. NAWI Program Status

NAWI expects to conclude the majority of its 1.0 program by the end of 2026. We have laid a solid foundation with the NAWI 2.0 program, including key personnel and structure for success in the NAWI 2.0 program.

b. FY26 and FY27 Budget Guidance

Desalination and water–energy nexus were both identified for funding in the FY26 budget process from both the House and the Senate. Senate budget language included the following:

"*Energy and Water Nexus—The Committee provides up to $75,000,000 to address the Nation's challenges related to the nexus of energy and water. The Committee also*

recognizes the vital needs the country faces as water and energy demands increase. The Committee recognizes that the two systems are intricately linked and that addressing them together will help support grid and water resilience while allowing for the continued development of jobs across the United States. Within the funds provided, the Committee directs the Department to provide up to $50,000,000 for projects located in regions experiencing increasing pressure on water and energy resources, including areas facing heightened water and energy demands due to economic development. Furthermore, within the funds provided, the Committee recommends up to $25,000,000 for the Energy-Water Desalination Hub."

The House language included this:

"*Industrial Technologies—The Committee directs the Department to prioritize research and development on new desalination technologies and products that are clean, consume less energy, cost less to construct, have zero toxic waste streams, and are made in America. In addition, the Department is directed to support research and development efforts on desalination projects located in regions experiencing increasing pressure on water and energy resources, including areas facing heightened energy and water demands due to economic development. In addition, the Department is encouraged to collect data on analysis tools that would benefit regional considerations of desalination technologies.*"

And also this:

"*Energy-Water Nexus—The Committee supports the Department's ongoing efforts, including through the Water Security Grand Challenge, on advancing transformational technology and innovation to meet the global need for safe, secure, and affordable energy and water. The Committee recognizes the impact of water security and availability on energy production and reliability and the growing interconnectedness between energy and water systems. The Department is directed to continue programs that provide basic research, technology innovation, modeling and assessment tools, technical support, planning tools to inform financing, and workforce development to focus on the energy-water nexus. The Committee supports the Department's use of a diverse portfolio of prizes; competitions; research, development, and demonstration; and other programs, including interagency coordination through the nexus of energy and water sustainability.*"

As DOE's original desalination research hub and with the addition of H2O as a sponsor of NAWI in addition to ITO, NAWI is well positioned not only to execute the NAWI 2.0 program but also to evolve and expand it in alignment with DOE's other investments and priorities.

c. DOE Policy Context

DOE's sponsors in ITO and H2O have consistently emphasized that NAWI 2.0 should (1) move up the TRL scale by focusing on application to a greater extent than in NAWI

1.0 and (2) support the development of the water–energy nexus pillar within H2O via the new topic area on RWS. The greater emphasis on application should be realized through an intentional inclusion of industry and utility practitioners in project teams.

DOE commissioned a National Academy of Sciences study focusing on the water–energy nexus that issued a report in May 2026. NAWI 2.0 activities, especially in RWS, should support the relevant recommendations in that report.

3. NAWI Leadership Norms

The NAWI executive team adopted the following leadership norms in September 2026:

- **Prepare and Participate With Purpose.** We review materials in advance, come prepared to contribute, and make clear whether an item is intended for information, exploration, consultation, recommendation, decision, or execution.
- **Make Roles and Decision Authority Explicit.** We clarify who owns a matter, who makes the decision, whose input is needed, and where DOE direction ends and NAWI discretion begins.
- **Create Clarity Before Moving Forward.** Before concluding a significant discussion, we confirm what was decided, what remains unresolved, the rationale, next steps, responsible owners, and target dates.
- **Honor Commitments and Close the Loop.** We follow through on agreed-upon actions and communicate promptly when circumstances, risks, or competing priorities may affect a commitment or deadline.
- **Communicate Early and Practice "No Surprises."** We share consequential information, emerging issues, changes, dependencies, and potential decisions early enough for affected team members to understand, contribute, and respond.
- **Bring the Right People Into the Conversation.** We strive to include those whose responsibilities, expertise, or work will be materially affected. When discussions occur outside the Executive Team, we bring relevant outcomes back to the Executive Team.
- **Address Concerns Directly.** We raise concerns with the appropriate person or in the appropriate team forum rather than relying on side conversations, triangulation, or untested assumptions.
- **Challenge Ideas With Curiosity and Respect.** We rigorously examine evidence, assumptions, implications, and risks while treating one another with respect. We seek to understand before judging another person's competence, credibility, or intent.

- **Make It Safe to Speak Candidly.** We create an environment in which people can raise questions, disagree, acknowledge uncertainty, identify risks, and admit mistakes without fear of retaliation or personal judgment.
- **Decide, Align, and Move Forward.** Once a decision is made, we support its implementation and communicate it consistently, even when our preferred approach was not selected. We revisit decisions only when material new information, changed conditions, or an unaddressed risk warrants it.
- **Lead NAWI as a Whole.** We look beyond our individual functions, research areas, responsibilities, and institutions to consider what best advances NAWI's overall mission. We disclose competing interests when they may affect, or appear to affect, our judgment.
- **Coordinate Across Boundaries.** We proactively coordinate timelines, dependencies, priorities, and risks across research and operations; use agreed-upon systems consistently; and work together to remove barriers to one another's success.