

## **NH Water Works Association – Strategic Plan**

**Drinking Water:** New Hampshire’s residents and visitor rely upon *safe, dependable, and affordable public water service*. The need for water service across the state continues to grow and water utilities face an increasingly complex and challenging future in meeting this demand. NHWWA’s core mission of supporting New Hampshire’s water utilities, including especially those providing water service at the municipal level (collectively, our “customers”), explicitly targets this need and is more vital and timely than ever before.

To that end, NHWWA announces the adoption of this new Strategic Plan. The goal is to position NHWWA to be the most knowledgeable, trusted, and widely referenced source for training, ideas and information on water services and supportive policies and programs in New Hampshire. This will enable NHWWA to aid and guide New Hampshire’s communities, water utilities and elected leaders as they seek to ensure sustainable public water services far into the future.

NHWWA embarked on a scenario-based strategic planning process in April 2020. Interviews with water utility professionals, including NHWWA Directors, operators, consultants, suppliers, regulators, legislators, and policy advocates, revealed an extraordinary level of pride and professionalism in the work of protecting public health by providing safe, dependable, and affordable water service. However, due to a host of factors, water works professionals are often more reactive than proactive, and are confronting many long-standing and competing demands for their time, attention and funding. These challenges continue to multiply in the face of many changing circumstances. The more we listened, the more apparent it became that we needed to step back and see what the whole world of water looks like, how the pieces fit together, and how NHWWA can best meet its mission. This Strategic Plan is the result of this extensive effort.

### **Strategic Plan Roadmap:**

- The Plan consists of four strategic priorities, each aligned to address the needs of today while simultaneously positioning NHWWA to help public water utilities adapt to the challenges of a future forever replete with uncertainties.
- Because culture is the lens through which an organization perceives and acts, key attitudes and behaviors were identified that support each strategic priority.
- Scenario Storylines describe current and likely challenges and highlight strategic implications and actions. Actions are the sub-strategies that apply to each challenge.
- Living Phases are potential tactics that will be refined, prioritized and sequenced over time and will form the basis of specific work plans that contain more details as to scope, schedule and budget.

The Strategic Plan will be used continually to set goals, measure and report progress, and communicate with Directors, members and the public. It will formally be reviewed at least annually so that NHWWA can best help our customers adapt to current and future conditions. Documents used to develop and

expand on the Plan are included as appendices to the Plan (including, e.g., June 18, 2020 memo, interview summaries, presentations to the Board, and supporting work products).

Some common terms are used throughout this document and are defined as follows:

- “Water Service” means the delivery of safe, reliable and affordable water when and where end users (water consumers) need it.
- “Water System” means the pumps, pipes, tanks and all other physical materials and equipment that moves and treats water between sources and end users. (A water system is a type of infrastructure or physical assets.)
- “Water Rates” means the fees, charges, etc. that end users pay for water service.
- “Water Utility” means the organization that provides water service and the people who work for it.

In addition, the cultural attitudes and behaviors that we will foster in our customers and are referenced here are defined as follows:

Adaptive, Nimble, Resilient: Prepared to anticipate, minimize, quickly adapt to, recover from, and continuously provide service in the face of disruptive events, including natural and manmade disasters, dislocations, or other changes (whether immediate or slow-moving) in the surrounding world.

Assets-Attentive: Possessing a complete, up-to-date inventory of system assets and following a plan that ensures the long-term integrity of all system components to ensure uninterrupted, dependable, reliable, cost-effective water services.

Collaborative: Motivated by a value system that prizes teamwork and seeks to find solutions not just from within but also by working hand-in-hand with other organizations or individuals who have the same or similar goals, whereby all parties benefit from the sharing of time, talent and resources, including through symbiotic, complementary, or aggregated capabilities.

Digital- and Data-Driven: Deploying up-to-date information technology (IT) capabilities to monitor, operate and manage all aspects of water supply services, and using data and analytics to guide short-term and long-term decision-making.

Financially-Flush and Flexible: Having sufficient funding on hand and access to sufficient capital to be able to meet all day-to-day operational cash-flow needs, to plan for and undertake capital equipment and infrastructure renovations or replacements on a schedule that avoids unbudgeted emergency expenditures, and to have the flexibility to adjust priorities in response to changing conditions.

Future-Focused: Having sufficient confidence in current operations so that time and resources can be devoted to scanning the horizon to identify dots on the horizon (new drivers, forces or trends) that could affect future operations, and developing strategies that would ensure continued confidence and success were the anticipated impacts to occur.

Leaders, Unifiers & Trust Builders: Being respected and influential voices for the water supply industry through efforts that bring together allied interests and instill confidence and trust in positions and approaches that are fair and to the benefit of all affected parties.

Masters of Messaging & Risk Communications: Able to tell the story to individuals and the public in a way that evinces trust, respect and confidence in the listener and motivates behavior or shapes opinion about risk or other concerns in a manner consistent with or supportive of the goals and operations of water suppliers.

Multigenerational: Able to attract and retain a diverse workforce from across the generations in a manner that celebrates and preserves institutional knowledge while simultaneously engaging and deploying new approaches, technologies, and ways of thinking and problem-solving through a commitment to continuous improvement.

Policy-Engaged: Actively shaping regulatory and legislative policy developments at the state and federal levels, and marshalling allied interests, to support the needs of water suppliers, recognizing that a combination of federal and state funding provides the major source of non-ratepayer financial support for water utilities.

Regionally-Receptive: Open to, supportive of, and willing to participate in efforts to improve or ensure the cost-effective delivery of water supplies through regional initiatives and projects that may redefine or create new roles and responsibilities for existing or new organizations and cross the lines of existing political jurisdictions.

Science-Savvy: Possessing deep understanding of the science underlying the chemistry of water and the toxicology and human health impacts of contaminants, and the ability to effectively marshal respected expert voices to help guide science- and principles-based regulatory and legislative decisions.

Skills-Intensive: Embracing and empowering a workforce that is constantly updated and cross-trained in the broad range of technical, technological, operational, managerial and leadership skills and expertise needed to ensure that water service commitments are met with professionalism and without fail.

**Strategic Priority No. 1 People Powered: Recruiting, Retaining, Educating, and Advancing the Water Workforce**

*Strategy's Cultural Attitudes and Behaviors*: Multigenerational; Skills-Intensive; Collaborative; Masters of Messaging; Assets-Attentive; Digital- and Data-Driven; Leaders, Unifiers & Trust Builders; Policy-Engaged.

Roughly 90% of the 400 licensed water works operators in NH will retire or leave their jobs by 2030 (NH Employment Security, 2020; GAO, 2018) Their replacement is hampered by low public awareness of water utility employment opportunities, and the increasing technical complexity of water utility jobs. Recruiting and retaining qualified and skilled people will be required to continue to operate and maintain the water systems needed to provide safe, dependable, and affordable water service.

**Scenario Storylines:**

- Challenge - Aging: An aging workforce is thinning the ranks of seasoned operators and leaders, causing loss of experience and institutional knowledge.

- Implications: Water utilities could face poorer performance (e.g., service disruptions or poor water quality) unless competent workers are recruited, trained and retained.
- Actions: NHWWA partners with schools, universities, state employment agencies, regional partners, and others to enhance and implement programs that will build and maintain a resilient recruiting, retention and development system for water utility workforces, while simultaneously touting the benefits of a career working for water utilities, including job security, professional development, a can-do culture, camaraderie, and serving the public good.
- Challenge - Complexity: Water systems are becoming increasingly complex (e.g., technology, science, financial management, rate structures, communications)
  - Implications: Robust technical, management and communications training programs are needed more than ever to support the development and career advancements of new and current water utility professionals. On-the-job training is a significant educational pathway. Targeted curricula are required to support professional development and career growth opportunities.
  - Action: NHWWA provides dependable, flexible and best-in-class technical training with a robust pool of respected instructors and an effective mix of delivery platforms (e.g. in-person, remote, hybrid, intern, mentor-protégé), including in collaboration with other entities when interests and needs align.
- Challenge - Capacity: Educational institutions (high schools with technical specialties, community colleges, 4-year colleges and universities) are not optimized to identify and train people for career opportunities offered by water utilities. Moreover, the costs of higher education and uncertain post-graduation employment prospects are fueling declining enrollment at 4-year schools.
  - Implications: 4-year and other schools are reducing their course offerings due to enrollment declines, causing loss of educational and training capacity, and many students are not aware of career opportunities offered by water utilities.
  - Actions: NHWWA coordinates a State-wide effort to build educational partnerships and resources that increase the State's ability to meet current and future workforce needs.
- Challenge - Coordination: Workforce development programs that address the needs of water utilities exist but are scattered and uncoordinated.
  - Implications: There is an inefficient use of educational and recruitment resources and lack of clear educational and career paths for water utilities.
  - Action: NHWWA identifies and assesses existing programs and creates a united and coordinated network for professional development at a State-wide and potentially regional scale.

**Living Phases:**

- Phase I. Assess existing and projected workforce needs and NHWWA's capacity to meet them; build respected, dependable and affordable Instructor pool; create and deploy Career Panels with NHWWA Young Professionals; establish partnerships across sector to be informed and responsive to workforce needs; recruit, train and retain at least 50 new Operators per year through 2030, based on currently reported retirement and attrition rates.

- Phase II. Coordinate with regional partners (NHDES, NHES, NEWWA, GSRWA, AWWA, and EPA) to increase effectiveness and efficiency, and to position NHWWA for outside funding (e.g., NHDES contract, private foundations, program sponsors); comprehensive offerings of in-person, online and other modalities of training materials for water utilities’ needs; explore internship and mentor/protégé opportunities to enhance recruitment appeal and transfer institutional knowledge; raise awareness of workforce opportunities.
- Phase III. Targeted and sustained program in colleges and technical schools to attract, train and mentor new workers for water supply field; training program that builds deep bench of engaged, knowledgeable and committed corps of future leaders; evaluate OneWater! (combined drinking, clean and storm water) approach as a possible tool.
- Phase IV. Advocate for a regional/national center for workforce training and development; link drinking water industry with initiatives focused on enhancing NH’s quality of life, such as the Work-Stay-Play program (focused on an early-career demographic), State-wide sustainability efforts, and clean energy programs.

**Strategic Priority No. 2 – Dollars for Water: Adequate and Assured Funding for Water Services**

*Strategy’s Cultural Attitudes and Behaviors:* Financially Flush & Flexible; Policy-Engaged; Masters of Messaging; Collaborative

Water systems, including their equipment and infrastructure, are aging and often there are insufficient funds available at the community, state and national levels to maintain reliable service. In many communities, the current funding structures (including water rates paid by users, as well as the limited availability of governmental or other grant and loan programs), limited public understanding and engagement, and under-resourced utilities threaten the long-term viability of the state’s public water supplies.

**Scenario Storylines:**

- Challenge – Systems Failure: Water Utilities typically have long-standing and chronic needs for the financial resources to support both capital improvements and routine operations and maintenance. Many water utilities are particularly challenged by long-term maintenance loads. And when needs do arise, there often is a shortage of qualified contractors, thus pushing costs higher.
  - Implications: System failures can have dire consequences, including service disruptions, degradation of water quality and high repair costs.
  - Action: NHWWA is a respected and effective voice and advocate at the local, state and federal levels for adequate and assured financial resources for operations, maintenance, improvements and modernization of water systems. Locally-focused efforts are always led by our customers, the water utilities, whose capabilities are enhanced by the training and services that we provide to help them be effective leaders and advocates.
- Challenge – Water Rates: Some water utilities depend upon local governing and legislative body approvals to fund operations, maintenance and capital projects. Such approvals often are rejected because voters don’t connect the value of water service to the necessary cost.

- Implications: The setting of water rates can be a contentious and volatile issue in many towns, and water utility managers can always be better equipped to articulate compelling and understandable water rate and funding proposals. In many communities there are not enough water service advocates to serve as champions for and engage on behalf of their drinking water supply.
- Action: NHWWA provides members with training on developing budgets, water rate and funding strategies and tactics to articulate the need and justification for water rates.
- Challenge – Limited Staffing Impedes Grant Applications: Many water utilities have so few staff members that it is difficult for them to find the time and gain the knowledge to prepare successful applications for grants or loans. Implications: Smaller water utilities have difficulty applying and competing for needed resources, including those that might benefit multiple or all water utilities.
- Action: NHWWA provides information about these resources, including direct links to sources and listings of members that provide these services.

**Living Phases:**

- Phase I.
  - Building upon existing efforts, including those of NHDES, determine the desired goals for achieving an adequate and assured supply of funding for water utilities over the upcoming 10 years;
  - Identify existing documents that can provide fact-based support for individual funding requests, including, e.g., Emergency Response Plans (a regulatory requirement), Sanitary Survey reports and Asset Management Plans;
  - Identify ways to leverage existing communications (e.g., Day Without Water / Value of Water (AWWA and WEF campaigns), to raise public awareness of water system funding needs.
  - Compile, maintain and broadcast a regularly-updated list of water system funding sources.
- Phase II.
  - Design and participate in multi-stakeholder initiatives to build public and legislative support for rate structures and funding mechanisms that will ensure clean, affordable and dependable water systems;
  - Support water system financial models that assess and prepare both for routine operations and maintenance needs as well as climate-related impacts (e.g., droughts, floods, population growth, energy and communications disruptions, etc.). Effectively advocate at the state and federal levels to increase State Revolving Fund (SRF) and other program funding to meet actual and projected demand.
- Phase III.
  - Provide grant-writing training, support, technical assistance and a shared service option to help water utilities develop sustainable rate structures and successful budget requests.

**Strategic Priority No. 3 – The Story of Water: Influential Communications, Public Engagement and Legislative Advocacy**

*Strategy's Cultural Attitudes and Behaviors:* Masters of Messaging; Collaborative; Leaders, Unifiers & Trust Builders; Science-Savvy; Policy-Engaged

The work of water utilities is largely unseen, for this is a “hidden industry” with buried infrastructure and a low-profile workforce. Raising the public’s awareness and understanding of, and appreciation for, water utilities and the essential services they provide will be helpful to efforts to address systemic problems such as workforce development and infrastructure investment, to engage end-users in supporting their local water utilities, and to enlist legislative support for all aspects of water service.

**Scenario Storylines:**

- Challenge – Where Water Comes From: Because its infrastructure (e.g., pipes, pumps, storage) is largely hidden from view and uninterrupted service is taken for granted, most people are unaware of most aspects of their public water supply, including its sources, treatment, distribution, uses, health implications, economic value and costs.
  - Implications: Absent significant understanding among water users of what it takes to maintain the essential services of their water utilities, it is difficult for these utilities to secure meaningful public support, including for both routine maintenance and capital expenditures.
  - Action: NHWWA produces and distributes clear, compelling, and coordinated messages that have broad appeal and are shared widely to increase public understanding, advocacy, and support for water utilities.
- Challenge – Underinformed Leaders: Local and state officials represent the public and need to be well-informed about and supportive of the state’s water utilities.
  - Implications: Officials face competing interests and may lack the information and commitment required to make effective funding and policy decisions.
  - Action: NHWWA (i) provides current, critical and compelling information that demonstrates the many benefits of water services and creates public support for investment in and support of water systems, including their infrastructure and operations, and (ii) advocates for policies, programs and outcomes that are in the best interests of water utilities and their users.
- Challenge – New Partners: The NHWWA needs strong ties to businesses and other organizations most dependent on water to fund special projects that benefit the entire sector (e.g. infrastructure assessment, workforce development programs, and system communications infrastructure).
  - Implications: Critical consumers of water (beverage, manufacturing, health care, education, municipalities) could more actively support the industry’s needs by sponsoring state-wide initiatives led by NHWWA.
  - Action: NHWWA identifies key stakeholders, including but not limited to large quantity users (whether or not served by water utilities), Chambers of Commerce, and other

interested parties that have shared goals and interests and are critically dependent on reliable, high-quality water supplies and builds strong, mutually-beneficial relationships that may also result in those entities providing financial support to NHWWA. It is critical to choose partners and projects carefully so as to avoid any possibility or appearance of a conflict of interest.

- Challenge – Sound Science: Sound science and appropriate risk assessment must be at the center of discussions and decisions about drinking water.
  - Implications: Ignorance and fear may drive excess costs, create unintended consequences, and increase challenges.
  - Action: NHWWA secures and provides access to expert scientific and technical guidance to raise local and statewide awareness, engagement, and support for sustainable water service investments.
  
- Challenge – Voice of Water: Various organizations in the state, including individual water utilities, NHWWA, other trade groups and nonprofit organizations, regulatory agencies and municipalities periodically release public messages about the challenges facing the state’s public water supply. There has not been a leading voice on this topic, and there is only limited coordination among the various voices.
  - Implications: Water users, the general public, elected municipal officials, legislators, and the press do not receive consistent, coordinated and focused messaging and information about the importance, challenges and needs of the state’s public water supply sector.
  - Action: NHWWA develops its communications resources so that it is seen as a credible, effective, data-driven and valued partner that builds consensus around public messaging on water supply issues.

**Living Phases:**

1. Phase I.
  - Fund and implement priority Communications and Marketing Plan recommendations, including: consistent messaging across all NHWWA communication platforms;
  - Upgrade website (including, e.g., look, ease of use, security, search engine optimization (SEO), device compatibility, course offerings, registration function, automated membership and appeal communications, social media interconnection);  
Amplify impact by providing talking points and templates to water utilities; conduct market research to establish baseline knowledge in partnership with NHDES and water utilities.
  
- Phase II.
  - Collaborate on engagement and advocacy in public forums, industry groups, and legislative and regulatory bodies;
  - Build relationships and reputation with key target audiences;
  - Offer social media and public speaking / media training for NHWWA members.



- Phase III. Develop science advisory group to inform and guide policy positions and operational decisions.
- Phase IV. Engage in ongoing learning and collaboration, while sharing best practices and successes within New Hampshire and the New England region.

**Strategic Priority No. 4 – NH’s Water Future: Always Prepared for Major, State-wide Forces of Change**

*Strategy’s Cultural Attitudes and Behaviors:* Adaptive, Nimble & Resilient; Future-Focused; Collaborative; Regional-Receptive; Science-Savvy; Masters of Messaging; Financially-Flush & Flexible; Leaders, Unifiers & Trust Builders; Digital- and Data-Driven.

Priority No. 4 includes both internal (NHWWA-focused) and external challenges and actions. This priority will strengthen NHWWA’s resources and ability to fulfill its mission as well as address significant long-term challenges such as climate change.

**Scenario Storylines:**

- Challenge – Financial Security: NHWWA needs to be fiscally sound and sustainable, with excellent volunteer and staff, effective governance and a robust and resilient plan to deliver its services.
  - Implications: Our ability to deliver on our mission is directly tied to our health and sustainability as an association. Being an effective, credible and trusted partner will attract the support required to maintain professional staff and deliver on our promises.
  - Action: Identify and secure new or expanded, sustainable funding sources to increase and diversify our revenue stream, maintain laser focus on mission and priorities, execute with excellence, and communicate results.
- Challenge – Customers’ Limited Resources: NH’s public water utilities serve 55% of the state’s residents, but individually those utilities have only limited resources with which to meet current and future challenges.
  - Implications: Many water works managers can focus only on the near term. Levels of need vary greatly among NH’s water utilities. Opportunities to create collaborative solutions often cannot attract and sustain broad community or water supply industry support.
  - Action: NHWWA strengthens and expands its capabilities as a dependable and highly effective partner that supports water utilities on all matters pertaining to delivering safe, dependable and affordable drinking water, including as an advocate.
- Challenge – Climate Change: Climate change is causing different temperature and precipitation patterns which impact ongoing trends in population growth, economic conditions, development patterns, water supply availability, and demands for water.
  - Implications: Climate change may degrade water quantity and quality for some water utilities. Individual water suppliers may be unprepared or under-prepared for the broad range of system upsets, disruptions and challenges coming their way.

- Action: NHWWA uses data-driven, scenario-based planning and management systems to identify climate-related trends for which its members may need to be prepared and identifies potential shared responsive strategies such as mutual aid compacts and regional collaboration or interconnections (e.g., convene an industry workgroup to identify, assess and address risks and threats).
- Challenge – Increasing Complexity: The water industry is faced with significant numbers of complex policies, regulations, laws, technical changes, and impacts from contaminants of emerging concern, workforce development and education, infrastructure investment, and climate change. And the list of new trends that could affect water suppliers continues to grow.
  - Implications: Individual members do not, working individually, have the capacity to track, respond to, and exert substantial and meaningful influence over the many major, state-wide forces of change.
  - Action: NHWWA gathers and tracks data on critical trends, convenes knowledgeable industry resources, shares general information and current industry knowledge and tactics, and develops expertise and alliances to help members adapt, build, respond to, and advocate for their current and future needs.

**Living Phases:**

- Phase I.
  - Refresh NHWWA’s mission statement, including clarifying identities of its principal customers and beneficiaries. Consider adding Principles and Vision statements;
  - Review and revise governance documents (bylaws; Director and staff roles and responsibilities; recruitment, retention and removal policies; State and federal requirements) to align with Mission and Strategic Plan;
  - Identify state-wide data sets and resources critical to visioning, planning and communicating (data tracking and analysis may include working in partnership with other organizations such as the NH Community Development Finance Authority (NHCDFA) and the New Hampshire Fiscal Policy Institute;
  - Formalize and incorporate governance and management systems;
- Phase II.
  - Strengthen relationships and partnerships with water supply sector leaders and advocates to ensure better understanding of water utility needs, and to gain visibility and credibility;
  - Engage at State level with climate change experts and policy makers to raise awareness and build consensus around preparation and mitigation scenarios and actions;
  - Advocate for and support collaborative emergency preparedness initiatives as warranted at utility- and state-wide scales (e.g., regionalization).
- Phase III.
  - Engage at local and State level with planning boards, commissions, State agencies and partners (e.g., Forest Society, Nature Conservancy, NHBIA) to build consensus around land-use policies that help to ensure sustainable water usage practices and water supply protections;

- Apply and share scenario planning expertise to identify and address near- and long-term threats (e.g., drought, population changes, power outages, workforce shortages, failed infrastructure, contamination, technology, etc.);
- Initiate development of and contribute to a state-wide water sustainability plan.
- Phase IV.
  - Develop and maintain reputation as a trusted source of information and counsel for water service-related issues;
  - Become recognized as a desired partner or source of members or expertise for state- and regional-level technical boards and commissions that address water service issues.

### **A New Trend Monitoring and Strategy Formulation Process for NHWWA**

Based on its experience with this scenario planning process, NHWWA seeks to transform itself into a future-ready, knowledge-driven organization. To achieve this ambition, NHWWA will find it helpful to integrate a continual learning system into its annual Board and Staff work plan and cycle. As depicted in the figure below, a continual learning cycle consists of a number of steps that largely mirror the process and skills that the organization experienced and practiced in its initial imagineering efforts. Those steps and the suggested timeframes are reflected in the recommended steps below:

