

The State of the One Water Field: A Preliminary Measurement Framework DRAFT – April 2022

One Water Field-Building

Building a One Water future requires building a healthy, effective One Water field of practice and eventually converting the field of practice into the dominant paradigm for water management in the United States.

This endeavor requires intention. With the support of our One Water Council, the US Water Alliance aims to investigate the current health of the One Water movement, areas of strength, and areas of opportunity. Doing so requires creating the first-ever framework to assess the state of the One Water field.

This project seeks to harness our ability to see and track the growth of the One Water movement so that we may collectively strategize for the widespread adoption and normalization of integrated, inclusive, equitable, and sustainable water management. Building from the indicators described in the US Water Alliance’s [Three-Year Strategic Framework: 2020-2023](#), this report defines baseline information and metrics needed to track the growth of the One Water movement (the critical mass of people, places, and practices involved) over time. It discusses barriers to advancing One Water at local, regional, and national scales, as well as opportunities to overcome them.

Elements of a Field

Achieving complex goals and bold aspirations almost always requires strong fields of practice—organizations and individuals working together in critical mass.ⁱ Fields evolve and mature over time, and healthy fields create the conditions for innovations and change to emerge.ⁱⁱ Understanding the elements of a field and being able to assess them for areas of strength, weakness, and possibility can support those in a field working for social, economic, or political change.

The One Water movement is a field of practice. Like any field, it contains the following elements to help structure our efforts in advancing the field’s health, evolution, and maturation:

- Identity: belonging within boundaries of the field and its content
- Frameworks: ways to organize field knowledge
- Practice innovations: new ways of doing things, including practices, services, processes, products and technologies, etc.
- Standards: best practices, credentials, certifications, etc.
- Reward systems: incentives through public, private, social, or political mechanisms
- Networks: ways to connect and align those in the field
- Research and development: investments in innovations

One Water

One Water is both a way of thinking and a way of doing. The One Water approach envisions managing all water in an integrated, inclusive, and sustainable manner to secure a bright, prosperous future for our children, our communities, and our country. One Water is a transformative approach to how we view, value, and manage water—from local communities to the national scale.

The hallmarks of a One Water approach are:

- The mindset that all water has value
- A focus on achieving multiple benefits
- Approaching decisions with a systems mindset
- Utilizing watershed-scale thinking and action
- Intervening with right-sized solutions
- Relying on partnerships and inclusion

Explore the following resources to learn more:

- [US Water Alliance's Three-Year Strategic Framework: 2020-2023](#)
- [One Water Roadmap: Sustainable Management of Life's Most Essential Resource](#)
- [Blueprint for One Water](#)
- [Ensuring One Water Delivers for Healthy Waterways](#)

The State of One Water: Indicators and Preliminary Metrics

One Water is evolving. As people from more disciplines align with the One Water approach, the boundaries of One Water expand. This creates a dynamic tension with the field's need to adopt standards and mature. This measurement framework needs to be adaptive and subject to refinements over time to account for these trends.

No perfect, practical metrics exist to measure each indicator. However, the metrics chosen and presented in this section can practically be measured and would produce insights and vital signs aligned with each indicator. Key metrics represent higher relevance to the indicators, whereas ancillary metrics are intended to capture insights the key metrics may miss but are still relevant to understanding progress against the indicator. This section also discusses hypotheses about what lagging indicators may emerge with significant growth in key metrics and some consideration of metrics at different scales. This framework is not meant to be comprehensive but is offered as a starting place and meaningful step towards assessing and tracking the state of One Water on a national scale.

Indicator 1

People: A National Network of One Water Changemakers Exists in America

People make movements. Healthy fields of practice require networks of people with a shared identity.ⁱⁱⁱ When made explicit, shared content of interest becomes a uniting, identity-building force among groups of people. A field first starts to take shape when people with shared identities form networks to connect, align, and produce.

This indicator is critical because only with a national network of One Water changemakers will the One Water movement grow and develop into a healthy, innovation-producing field.

Primary field-building elements in this indicator: identity and networks

Preliminary metrics

The One Water Council proposes tracking the following key and ancillary metrics to gauge a growing One Water identity and network:

- **Key metric:**
 - The number of people attending One Water events in the US at local, regional, and national levels both in-person and virtually, given the impact the pandemic is having on attendance.
- **Ancillary metrics:**
 - The number of people with “One Water” and adjacent terms such as “Integrated Water” in their job titles and/or job descriptions.
 - A survey question could be: “One or more employees are formally responsible for projects/policies falling under the One Water umbrella.”
 - Diversity represented in the field, including racial and ethnic diversity, sector diversity, and diversity in disciplines represented.
 - The prevalence and success of One Water workforce development and recruiting efforts.

Lagging indicator hypothesis

If growth is seen in the leading metrics above, more formal signifiers of the people who comprise the One Water field and growing movement may emerge, such as a One Water professional credential and/or training program. As the movement grows, we may also see frontline communities demand a One Water approach for their government's water investments.

Insights across scales

Tracking these metrics and comparing trends across geographies would provide insights about regions where more intentional network building is needed, and which disciplines and demographics need to be cultivated to ensure diversity of thought and representation within the One Water field.

Indicator 2

Place: Cities, Regions, and Watersheds Across America are Institutionalizing One Water.

One Water comes to life at the local scale and can realize compounded benefits at a regional scale. Fields grow as innovations and standards of practice spread. Understanding the growing number of places undertaking One Water is critical to tracking the spread of the One Water field.

What it means to institutionalize One Water in a place is still an evolving concept. Yet, as a preliminary step to assessing the state of One Water, getting an idea of the cities, regions, and watersheds on their way—with explicit plans and intentions for institutionalizing One Water—remains important. Utilities are major One Water actors in any given place. The sector is best positioned to understand what the One Water field needs by understanding where utilities are in their journey to learn about and implement One Water. That is why, in addition to key and ancillary metrics, an additional rubric for utilities would be meaningful to assess this indicator.

Primary field-building elements in this indicator: innovations and standards of practice

Preliminary metrics

- ***Key metric:***
 - The number of US utilities, cities, and/or regions with One Water plans or ongoing planning efforts.
- ***Ancillary metric (utility-centric):***
 - Results from the *One Water Implementation Rubric for Utilities* (see page 5) for utilities on their knowledge and ability to deliver on One Water.
- ***Ancillary metric:***
 - The number of non-utility organizations that report playing an active role in One Water.

Lagging indicator hypothesis

If growth is seen in the leading metrics and the rubric above, more uniform, common standards for elements and considerations in One Water plans and processes may emerge. More intentional, standard interplay between plans at an institutional, city, and regional level may also emerge. Utilities may also restructure themselves to optimize implementation of the One Water rubric.

Insights across scales

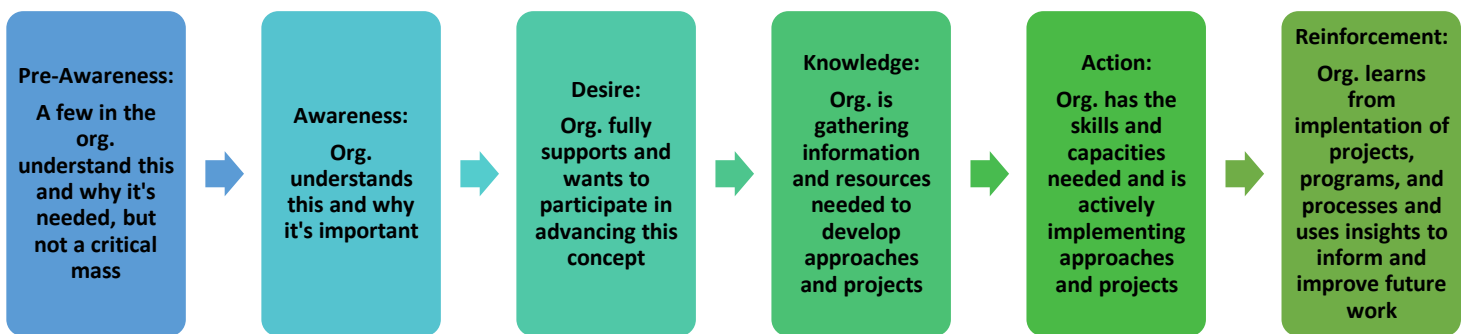
Tracking the growth in these metrics at a utility or institutional level, a city level, and a regional level would generate insights about the roles of various stakeholders working to institutionalize One Water. It may also provide insights into partnerships and collaboration characteristics that best support One Water planning and implementation.

One Water Implementation Rubric for Utilities

The *One Water Implementation Rubric for Utilities* helps utilities self-assess how One Water elements can be incorporated into their work. There are two components of this rubric: first, a list of One Water elements, and second, the stages of learning related to each element that a utility might fall under.

Utilities can assess the elements listed in this rubric along these learning stages to understand the degree to which the organization has each element in place. Elements of One Water can exist at multiple levels of a utility’s identity and functioning. This allows for utilities in a range of places with One Water management to see themselves as part of the One Water movement. The list of One Water elements in this rubric is not meant to be exhaustive, and the list will likely evolve.

Learning Stages



| Common Elements of One Water | Learning Stage |
|---|----------------|
| One Water is defined and centered in the organization’s mission, vision, values, and/or policies. | |
| Equity is defined and centered in the organization’s mission, vision, values, and/or policies. | |
| Project and program development is community-determined and community-led with proactive and consistent public engagement incorporated into priorities, planning, and delivery. | |
| Planning, budgeting, and coordination are integrated and collaborative across the water cycle with other utilities, departments, and/or local institutions from other sectors. | |
| Issues and opportunities are addressed as close to the source and as far upstream as possible. Examples include programs and projects that engage upstream and downstream watershed partnerships like agriculture-municipal partnerships and pollution prevention and source water protection partnerships. | |
| Customers’ needs are evaluated holistically and drive utility partnerships and efforts to provide services to customers for and beyond water services (e.g., housing, energy, and food relief). | |
| Financing and implementation approaches balance multiple benefits and community goals. Approaches may include community-based public-private partnerships (CBP3s), public-private partnerships (P3s), improvement districts, | |

| | |
|---|--|
| aggregation programs, trading programs, pay for success agreements, and mitigation banking. | |
| Procurement and purchasing processes require inclusion of minority- and/or women-owned businesses and small business enterprises in contracts. This data is tracked throughout the contract life cycle and made publicly available. | |
| Affordability is approached from multiple dimensions, including providing assistance programs, creative financing and revenue solutions, and mitigating short and long-term costs. | |
| Capital projects and programs seek to address legacy community challenges and achieve multiple benefits (e.g., environmental, social, and economic benefits). | |
| Capital projects and programs prioritize climate action (mitigation, resilience, and/or adaptation). | |
| Projects and programs incorporate water reuse. | |
| Projects and programs recharge groundwater and benefit ecosystem health. | |
| Projects and programs restore natural systems and use natural systems to achieve water management goals (e.g., green infrastructure). | |
| Projects and programs maximize energy efficiency and recovery. | |
| Projects and programs incorporate renewable energy projects. | |
| Projects and programs recover nutrients and other recyclable resources. | |
| Projects and programs prioritize water efficiency and demand management at the same level as new supply development. | |

Indicator 3

Practice: One Water is Maturing and Shifting the Water Landscape Towards Integration, Sustainability, and Equity.

Water challenges and opportunities are nuanced and highly dependent on regional and local circumstances. To become a dominant operating paradigm, the practice of One Water needs to be well understood across regions, clearly established, and translatable to the many contexts it can bring value to. Practitioners need One Water frameworks and knowledge to help them apply One Water approaches in the places where they work.

How One Water advances in specific places is an evolving, maturing body of knowledge. To understand the health of the One Water field, it is important to monitor the development of our knowledge base and the frameworks of practice that equip people and places to shift water management towards integration, sustainability, and equity. The development of the knowledge base and frameworks of practice feed directly into the standards and innovations that will emerge in the places working to institutionalize One Water, as described in the discussion of Indicator 2.

Primary field-building elements in this indicator: frameworks, research, and development

Preliminary metrics

- **Key metric:**
 - The number of One Water guidance documents available, including frameworks, standards, reports, and tools.
- **Ancillary metrics:**

- The growth in practices that are often aligned with One Water approaches, such as green infrastructure, utility partnerships and regionalization, integrated climate action planning, resilience planning, etc.
- The growth in available holistic data sets that can better inform One Water decision making, such as those that comprehensively lay out watershed health, community health/prosperity, and water stress data.

Lagging indicator hypothesis

If growth is seen in the leading metrics above, state policies and state administration practices that unlock or catalyze and support One Water may emerge as the practices of One Water and their benefits manifest. One Water management may also become a recognized approach and a requirement for state and local growth management plans.

Insights across scales

Tracking the growth in these frameworks by author orientation (e.g., academics, utilities, and nonprofits), scale of reference (e.g., institutional, municipal, and regional), and One Water approaches employed would generate insights about who is contributing to the practice of One Water and for whom. This level of tracking may also reveal gaps where more research is needed.

Barriers and Opportunities

Focusing on growth in metrics alone would be insufficient given the multitude of known barriers that impede progress towards a One Water future. Naming known barriers is important to identify and pursue opportunities to overcome them. As the sector navigates barriers and capitalizes on opportunities, the One Water field should see more growth in the three key indicators described in this report.

Stakeholders in the US Water Alliance network identified the lack of guidance, standards, and real-world examples of One Water implementation as some of the most significant barriers to advancing the One Water movement. Other barriers include the lack of a clear and consistent vision for One Water management, the inertia of the status quo, siloed approach to water management between departments and institutions, regulatory and resource constraints, scant education and outreach to grow the network of One Water champions, and low levels of diversity among those champions and engaged partners.

Opportunities to address these barriers emerge at local, regional, and national scales. Looking at each known core barrier, one dominant opportunity and several themes in opportunities emerged. To address the significant barrier of the lack of guidance, standards, and examples, the sector must do more to showcase the people and places successfully using the One Water approach and build more guidance and resources. Other core opportunities included increasing awareness of the One Water approach and projects, the need to be specific on outreach and recruitment by focusing on the needs of key audiences, building public and political will, and crafting the business case for One Water.

| Common Barriers | Examples of Opportunities by Scale | | |
|--|--|---|--|
| | Local Level | State/Regional Level | National Level |
| Lack of One Water guidance, standards, and real-world examples | <ul style="list-style-type: none"> Model local ordinances on standards in line with state and national guidelines | <ul style="list-style-type: none"> Leadership from state agencies that focus on water management | <ul style="list-style-type: none"> One Water resource bank, organized by topic and region |
| Traditional siloed approach to water management | <ul style="list-style-type: none"> Guide on inter-departmental collaboration for One Water | <ul style="list-style-type: none"> Roadmaps for state and inter-state coordination Guides on institutional and regional One Water plans | |
| Regulatory and legislative constraints | <ul style="list-style-type: none"> Efforts to help local officials understand and affect these constraints | <ul style="list-style-type: none"> Research how regulations inhibit One Water and state-level proposals to address specific state-by-state barriers | <ul style="list-style-type: none"> Audit of federal regulations that inhibit One Water with proposed solutions Dispel state misconceptions about eligible SRF projects Use EPA's performance improvement plan system to guide states on better use of SRFs for One Water outcomes |
| Resource constraints (funding, staff capacity, etc.) | <ul style="list-style-type: none"> Explore new local revenue models Adopt funding and financing models that advance One Water outcomes Case studies on the business case for One Water Advance development and/or capacity of organizations able to aggregate funding streams and deliver on multi-benefit projects and programs | <ul style="list-style-type: none"> Examples of how SRF, WIFIA, FEMA, etc. funds are being used for One Water and "non-traditional" projects; explore opportunities to influence scoring criteria Adopt funding and financing models that advance One Water outcomes Examine how opportunities for TIPs and other regional capital improvement processes can advance One Water outcomes | <ul style="list-style-type: none"> Coordinate federal funding sources and agencies for multi-benefit projects |
| Lack of education and outreach to grow a network of One Water Champions | <ul style="list-style-type: none"> One Water mentorship and education for leaders, rising professionals, and stewards Community member education K-12 and community college programming and outreach | <ul style="list-style-type: none"> Foster regional One Water coalitions Multi-disciplinary academic focus on One Water and coursework for future water workers | <ul style="list-style-type: none"> More media, recognition, and awards efforts Support national events and avenues for One Water champions to come together and meet with/learn from peers. |
| Diversity among One Water Champions and partners (racial, ethnic, gender, expertise, etc.) | <ul style="list-style-type: none"> Programs and reforms to help people of diverse backgrounds access water jobs Effective language and approaches to draw new people to One Water | <ul style="list-style-type: none"> Resources and recognition efforts that support and elevate diverse One Water leaders Fund and build partnership and education infrastructure | <ul style="list-style-type: none"> Concerted proactive recruitment, outreach, and invitations to underrepresented communities in the water sector |

Moving Together Towards One Water Transformation

As the Alliance sets out to assess the state of the One Water field, we know we cannot succeed alone. Many in the sector play roles in lighting the pathway toward One Water transformation in the United States. We must collectively commit to using the information we gather and advancing the field strategically, relying on our unique strengths.

Utilities and other on-the-ground One Water NGOs and advocates can lead the implementation charge, and the Alliance hopes that the *One Water Implementation Rubric for Utilities* presented here can catalyze self-assessment and conversations within utilities seeking to realize their own One Water futures. Utilities are uniquely positioned to put One Water principles into practice via policies, projects, programs, partnerships, and advocacy. Utilities and local advocates for One Water can also advance the One Water movement by supporting staff development to grow skill sets related to One Water management, including community outreach and engagement, committing to One Water planning at the utility and regional scales, forging partnerships with other agencies and funders, and implementing and incorporating One Water terminology and practices into day-to-day operations. In this unique moment, communities can leverage funding from the Bipartisan Infrastructure Law to accelerate their progress toward One Water and accelerate progress in the field by sharing expertise, information, and case studies with peers and partners.

Other water sector stakeholders also play important roles in our country's One Water transformation. Private engineering and consulting firms are developing business lines committed to One Water to make sustainable practices and innovations a more integral part of their projects and services. Philanthropic organizations can provide resources and connections among nonprofits, communities, and practitioners to work together to bring about multi-benefit, equitable, and resilient water projects and programs for their communities and use the results from One Water assessments to guide their investments. Researchers and academic communities can make sure their work is aligned with practitioner priorities and gaps in knowledge, and they can also incorporate One Water into their coursework for the next generation of the water workforce. Policymakers should participate in One Water conversations to enact enabling policies and lower the barriers to One Water management.

As a convener of diverse One Water stakeholders, the US Water Alliance must also play a role in guiding the sector towards integrated, inclusive, equitable, and sustainable water management. The Alliance commits to cultivating a diverse field of One Water practitioners and providing them a forum across the water sector to have important conversations and learn from their peers. We will seek to develop One Water implementation guidance and real-world examples on local, regional, and national scales. Using this knowledge, we will contribute professional development and training opportunities to grow One Water knowledge and leadership capacities. The Alliance can also advocate for One Water and the policies and practices that unlock the movement. And finally, we commit to tracking the state of the One Water field and sharing what we learn so we can continue to forge progress—together.

Acknowledgments

The One Water Council, convened by the US Water Alliance, is a collaborative, cross-sector platform that brings together utility managers, sustainability directors, planners, community leaders, advocates, business leaders, and others driving the One Water movement. As a strategic ideas resource for the US Water Alliance, One Water Council members are trusted experts and advisors to the Alliance and those pursuing One Water on the ground.

When the Alliance came to realize the need to unlock our ability to track the growth of One Water and anticipate needs to support strategic decision-making, we knew we needed the One Water Council's brainpower. This work would not have been possible without the brainpower and commitment of One Water Council members who formed an ad hoc group and answered the call to guide this effort:

- Ty Bereskie, Senior Planner, Denver Water
- April Bingham, Deputy Director, Customer Service Department of Public Utilities, City of Richmond, VA
- Wendy Broley, Vice President and Executive Director of California Urban Water Agencies, Brown & Caldwell
- Paula Conolly, Director, Green Infrastructure Leadership Exchange
- Joseph Danyluk, Global Lead for One Water, Jacobs
- Sam Paske, Assistant General Manager, Metropolitan Council of Environmental Services, MN
- Jennifer Walker, Deputy Director, Texas Coast and Water Program, National Wildlife Federation
- Leslie Webster, Drainage and Wastewater Planning Manager, Seattle Public Utilities, WA
- Kirk Westphal, Water Resources Leader, Brown & Caldwell
- Inge Wiersema, Vice President, National One Water Director & Water Resources Practice Lead, Carollo

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About the US Water Alliance

The US Water Alliance advances policies and programs to secure a sustainable water future for all. Our membership includes water providers, public officials, business leaders, agricultural interests, environmental organizations, community leaders, policy organizations, and more. A nationally recognized nonprofit organization, the US Water Alliance brings together diverse interests to identify and advance common-ground, achievable solutions to our nation's most pressing water challenges. We:

Educate the nation about the true value of water and the need for investment in water systems. Our innovative approaches to building public and political will, best-in-class communications tools, high-impact events, media coverage, and publications are educating and inspiring the nation about how water is essential and in need of investment.

Accelerate the adoption of One Water policies and programs that effectively manage water resources and advance a better quality of life for all. As an honest broker and action catalyst, we convene diverse interests to identify and advance practical, achievable solutions to our nation's most pressing water challenges. We do this through our strategic initiatives and One Water Hub, which offer high-quality opportunities for knowledge building and peer exchange. We develop forward-looking and inclusive water policies and programs, and we build coalitions that will change the face of water management for decades to come.

Celebrate what works in innovative water management. We shine a light on groundbreaking work through storytelling, analysis of successful approaches, and special recognition programs that demonstrate how water leaders are building stronger communities and a stronger America.

Notes

ⁱ The Bridgespan Group, "The Strong Field Framework: A Guide and Toolkit for Funders and Nonprofits Committed to Large-Scale Impact" (The Bridgespan Group, 2009), <https://www.bridgespan.org/insights/library/philanthropy/the-strong-field-framework-a-guide-and-toolkit-for>.

ⁱⁱ Pete Plastrik and John Cleveland, "Fields, Innovations and Places: Three Different Strategies for Social Innovators" (presentation, Innovation Network for Communities, January 23, 2019).

ⁱⁱⁱ Pete Plastrik and John Cleveland, "Fields, Innovations and Places: Three Different Strategies for Social Innovators" (presentation, Innovation Network for Communities, January 23, 2019).