



Appendix I: Methodology

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The EPA facilitated the development of this draft National Water Reuse Action Plan through a collaborative effort. It reflects input from a broad spectrum of expertise and experience from across the water sector/user community. To maximize the potential for water reuse to expand the portfolio of water availability, this draft plan is national in scope, representing input from all levels of stakeholders across the water reuse sector. Ultimately, the actions in the final Action Plan will represent and be informed by various leadership and collaboration roles. Most often, water reuse leadership and collaboration will occur at the state, local, and/or watershed scale.

Water Reuse Discussion Framework

The EPA prepared a document titled *Discussion Framework for Development of a Draft Water Reuse Action Plan* (Appendix A) and shared it across the water sector to ensure that stakeholders understood how water reuse was being described, the intended scope and range of issues, and the extensive nature of the literature and published works and experiences that the draft Action Plan would draw from. On April 18, 2019, the EPA issued a press release, which opened the public docket and provided the Discussion Framework to help inform thinking and comment on the potential content of the draft Action Plan.

Sources Materials for the Draft Action Plan

The draft Action Plan has been informed from five different sources, which are summarized and discussed in separate appendices. These sources include:

- **Analysis and summary of the water reuse literature.** Extensive technical, science, and policy information has been published on water reuse over the past several decades. Over 150 publications were considered, from which hundreds of possible actions were identified (Appendix C). These published resources informed the early work on the Discussion Framework and provided an initial list of actions for consideration in the draft Action Plan.
- **Outreach and dialogue through more than 20 existing forums with an estimated 2,300 participants.** External interest in the development of the draft Action Plan, was considerable; the EPA received many invitations to attend and participate in discussions at a variety of forums established by external groups (e.g., conferences, meetings, webinars). These were an extremely valuable and efficient way to engage large numbers of stakeholders with diverse interests and often resulted in rich conversations. These also helped to generate dialogue and interest among groups and through the public docket process. Since the draft Action Plan's development was announced (February 27), the EPA participated in more than 20 external events and engaged an estimated 2,300 people in varying degrees of conversation. Appendix D contains a list of the external forums and high-level action items identified during these outreach events.
- **Public input submitted to the docket.** The EPA opened a docket for public input on ideas and considerations for development of the draft Action Plan from April 18 to July 1, 2019. The Agency received 55 comments from the public, representing the opinions and ideas from a broad set of organizations and entities. On aggregate, 530 pages of material were shared via the docket. A high-level summary of the comments and proposed actions received through the docket is available in Appendix E. The actual docket and access to all of the raw public input is available at: <https://www.regulations.gov/docket?D=EPA-HQ-OW-2019-0174>.

- **WaterReuse Association expert convenings.** Six water sector/utility organizations (WaterReuse Association, National Association of Clean Water Agencies, Association of Metropolitan Water Agencies, Water Research Foundation, American Water Works Association, and the Water Environment Federation) convened a facilitated expert process to help inform development of the draft Action Plan. This process prioritized input from a diverse group of technical experts. The two workshops in April and May 2019 brought together more than 100 participants around the country and produced a report explicitly intended to inform development of the draft Action Plan. The convening report, which presents recommendations from these two sessions, was submitted as a public comment and is available in its entirety in Appendix F.
- **Review of selected international experiences.** The EPA recognizes the critical and important experiences of international partners in the realm of water reuse, particularly Israel, Singapore, Australia, South Africa, and Namibia. Appendix G summarizes of their efforts, which served to inform development of the draft Action Plan.

The Draft Action Plan’s Organizing Framework

The draft’s structure was largely informed by the early outreach conducted by the EPA and others. It consists of 10 strategic objectives, which can also be viewed as broad outcomes that will advance consideration of water reuse in the United States. The draft Action Plan identifies proposed actions that directly support these strategic objectives. The intent was not to have an exhaustive list of ideas, but to have examples of actions that would help stimulate interest in (and dialogue about) a narrow and specific set of actions to be considered for the final Action Plan, following public comment.

Identification and Framing of Proposed Actions

The proposed actions contained in this draft Action Plan reflect the totality of the sources considered and those that appear to have the greatest value and impact on the consideration of water reuse. Example criteria used to assess the proposed actions and weigh them for inclusion in the draft Action Plan include:

- **Applicability.** The action is related to water reuse.
- **Results-orientation.** The action is clearly articulated, using specific language and offering a tangible outcome.
- **Feasibility.** The action appears to be feasible.
- **Timeliness.** The action can likely be completed within the next five years.
- **Immediacy (“shovel-ready” vs. aspirational).** The action prioritizes an immediately pursuable task, as opposed to an aspirational goal.
- **Broad downstream effects.** The action promotes a range of potential outgrowths; it does not represent a capstone or dead-end activity.
- **Sector consensus.** The action positively contributes to the water sector by capitalizing on areas where there is general consensus.
- **Frequency of suggestion.** The action was suggested multiple times by different sources.
- **Funding.** The action has a potential or likely funding source.
- **Leaders.** The action has a likely champion and collaborating partners.
- **Collaboration.** The action facilitates and promotes local action and watershed-based collaboration.
- **X-factor.** The action serves a source of inspiration, motivation, and continued momentum. It can offer residual impacts over the next 10+ years.

The final Action Plan will strive to present a balanced suite of actions across strategic objectives. Example attributes that will be considered include:

- **Number.** Numerical balance across strategic objectives.
- **Geography.** Geographic distribution and potential impact over the entire Action Plan.
- **Levels of adoption.** Balance across the spectrum of experience levels across the states and localities (i.e., actions should help promote water reuse not only for the pioneers but others that may not be as advanced).
- **Sub-sector balance.** Representation of a cross-section of interests across the water sector and use applications.
- **Transformational quality.** Inclusion of some actions that may be truly transformative.