

NATIONAL WATER REUSE ACTION PLAN

COMPLETED ACTION

Action 11.1: Facilitate U.S.-Israel Collaboration on Technology, Science, and Policy of Water Reuse



Background

Israel is one of the most water-stressed countries in the world—a reality that drives Israel’s extensive water reuse initiatives. After infrastructure, regulatory, and institutional reform, Israel has become a global leader in water reuse. Today, nearly 90 percent of Israel’s treated municipal wastewater is used for irrigation purposes. Although the U.S. reuses a much smaller fraction of the nation’s wastewater, water reuse tools and strategies are of interest to the U.S water sector.

In 2018, EPA and the Israeli MoEP renewed their Memorandum of Understanding (MOU) to collaborate on technical and environmental management issues. Building from the MOU, this action offered various informational exchanges on science, technology, and policy that introduced U.S. regulators and practitioners to innovative water reuse technologies, equipment, and new collaborative partners.

Accomplishments/Impact

- Conducted a U.S. delegation mission to Israel to observe science, technology, and policy in fall 2022. Thirty-nine representatives from the U.S. water sector attended, including utility leaders, state regulators, researchers, federal agencies, and private sector water experts.
- Developed a 2022 delegation summary report to benefit those who couldn’t attend, titled [From Water Stressed to Water Secure: U.S. Lessons from Israel’s Water Reuse Approach](#). The report also includes the Israel delegation agenda.
- Held a [webinar](#) on U.S. lessons from Israel’s water reuse approach where Israeli hosts and members from the U.S. delegation discussed the innovative approaches Israel is taking to ensure adequate and resilient water supplies in their country and how others may apply these lessons in their communities.
- Held a three-part [Israel Water Reuse Virtual Tour](#), as part of a knowledge sharing partnership between the U.S. and Israel, which was open to the public and attended by over 760 participants. The webinars covered Israel’s water reuse regulatory approaches, case studies, technology, and agricultural irrigation applications, as well as insights from the U.S., and is available online.
- Held a virtual session at the 2020 WaterReuse Symposium titled “Israel’s Unique Experience with Water Reuse: Policy, Regulation, and Financing” and an in-person session at the 2023 WaterReuse Symposium titled “Lessons Learned: Israel-U.S. Delegation.”

Action Team

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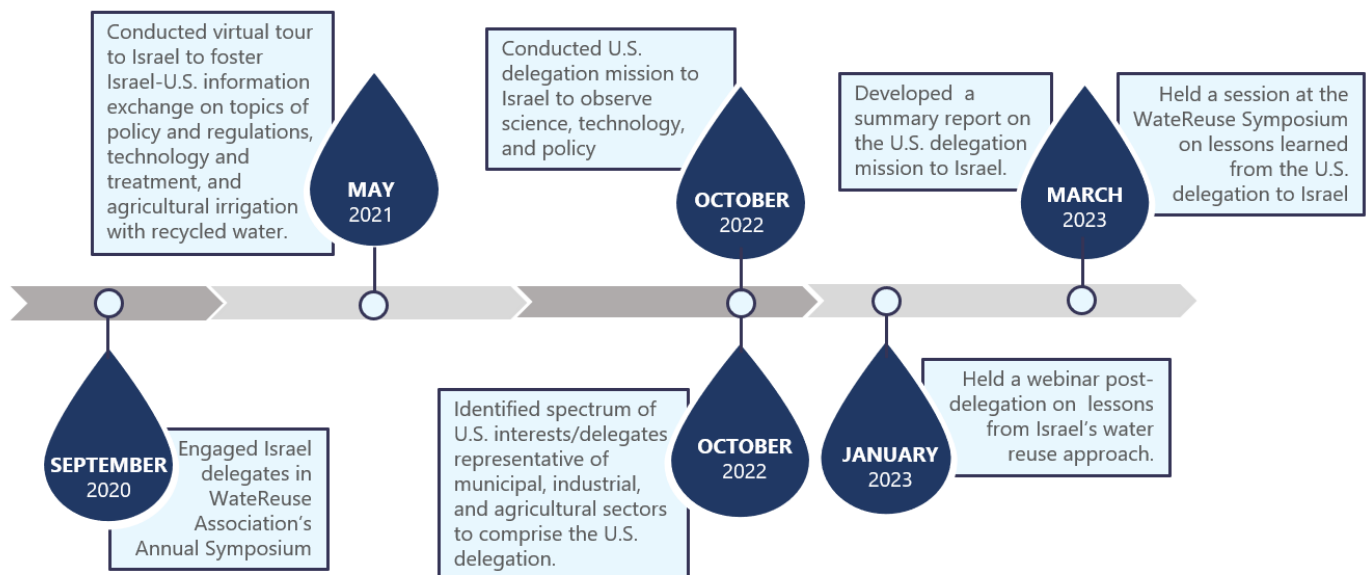
Lessons Learned

Key lessons and insights from the U.S. delegation mission to Israel include the following:

- Israel has a coordinated national approach to water management with less fragmentation among regulatory agencies than the U.S.
- Unlike the part of the western U.S., water rights in Israel are not assigned to individuals. In Israel, no one person or entity can possess private ownership over water.
- Many farms and other agricultural lands in Israel are proximate to urban centers, which is less typical in the U.S.
- There is both farmer and public acceptance for the use of recycled water for food crop irrigation. Additionally, using recycled water for irrigation is cheaper than conventional supplies, and is abundant enough to ensure a full growing season.
- The level of collaboration between the water sector in Israel is high, including the national water company, water utilities and providers, regulators, municipalities, water technology providers, and agricultural producers.



Action Implementation Process



Potential Future Activity

- Israel and the U.S. are proposing a regional mission on water reuse as part the Negev Forum Working Group on Food and Water Security.
- An active online network of delegates and Israeli experts is now in use to continue conversations and build partnerships.
- Delegates shared ideas for potential future collaborations, such as the following:
 - Several U.S. utilities invited Israeli experts to visit them and advise on ways to increase agricultural reuse in their regions.

- Israel expressed interest in evaluating potable reuse opportunities and in sending a delegation to the United States as more domestic experience is established.
- Data generated from Israel's long-term use of treated wastewater for agricultural applications provides potentially useful information that could help inform future risk assessments.
- State delegates were interested in how Israel integrated emergency water supply planning and equipment to better prepare for and respond to a water supply disruption.

Additional Resources

- [Water Recycling in Israel: U.S. Lessons from Israel's Water Reuse Approach webinar](#)
- [From Water Stressed to Water Secure: Lessons from Israel's Water Reuse Approach](#)
- [Israel Water Reuse Virtual Tour](#)

