Sustainable Water Management Profile

The Water Foundation developed the Sustainable Water Management Profile (SWM Profile) to drive improvement in regional water supply stewardship. Inland Empire Utilities Agency (IEUA) pioneered use of the SWM Profile as a pilot project.

IEUA Ranks Gold

Given the gap between current and sustainable water management, very few water agencies are expected to achieve a Gold or Platinum rating. IEUA earned a truly exceptional Gold rating because they provide leadership and support for the planning, implementation, and collaboration needed for sustainable water supply management—for their member agencies, regional partners, and the people who share dependence on common water supplies. These efforts, especially in recycled water, groundwater cleanup and recharge, and water efficiency, have achieved more stable and sufficient local water supplies and improved water quality.

How do you get to sustainable water management?

About the SWM Profile

Sustainable water management requires water managers to look beyond jurisdictional boundaries and their immediate supply operations and to manage water collaboratively with regional solutions. The SWM Profile assesses a water supply agency, the areas it relies on for water supply, and areas where it supplies water. Using simple metrics, the SWM Profile assesses water supply vulnerability to key stressors (i.e., risks or threats) in the themes of Environment, Supply, Demand, and Finance and evaluates management responses by the agency and region to those stressors. Using objective criteria, the SWM Profile determines which step on the path to sustainability—from Initial Steps to Leading Practice—the agency and the larger region currently occupy. The water supply agency and its region are assigned a rating (Not Rated, Bronze, Silver, Gold, or Platinum) based on points earned for the management response to stress.

About IEUA

IEUA is a regional water and wastewater utility in western San Bernardino County, California. It distributes imported water, produces and distributes recycled water, collects and treats sewage, treats municipal biosolids, and disposes of industrial wastewater and brine. IEUA's member agencies derive a majority of their local water from groundwater, primarily the Chino Basin. IEUA is a founding member of the Santa Ana Watershed Project Authority (SAWPA), which strives for a sustainable Santa Ana River watershed. IEUA is also a member of the Metropolitan Water District of Southern California (MWD), which distributes imported water; the Chino Desalter Authority, which pumps and treats saline groundwater; and the Chino Basin Watermaster, which oversees sustainable management of the Chino Basin.

IEUA member agencies:

- Chino
- Chino Hills
- Cucamonga Valley Water District
- Fontana
- Fontana Water Company
- Montclair
- Monte Vista Water District
- Ontario
- Upland

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Findings

Vulnerabilities

- "High" stress is measured in most stressors (evaluated within the themes of Environment, Supply, Demand, and Finance), as is expected within an urban region of California.
- Land development as well as current and legacy pollution negatively impact groundwater basins.
- Distant watersheds that provide water are at risk from natural hazards, and are home to endangered and threatened species.
- A warming climate is reducing snowpack storage and is projected to bring more frequent and intense droughts, both regionally and statewide.

Accomplishments

- IEUA understands that long-term sustainability of water supplies requires engagement and collaboration beyond its service area, particularly within the Santa Ana River watershed (e.g., SAWPA activities), and has achieved or is in the process of achieving Leading Practice in most arenas.
- IEUA and its member agencies' continuing focus on the sustainable management of their groundwater basins—their primary supply source—has improved water quality and provides a buffer against the impacts of climate change, prolonged droughts, and future growth. An outcome of this effort has been the remarkable achievement of maintaining storage in the Chino groundwater basin during a prolonged drought (2013-2016).
- IEUA and its partners in the Santa Ana River watershed are succeeding in reducing reliance on vulnerable imported supplies through integrated management of their multiple sources of local supply and improved water use efficiency.

Opportunities to Do More

- The cumulative effect of the many efforts to recover freshwater-dependent species, restore bodies of water with water quality issues, and reduce hardscaping that limits infiltration is not yet sufficient to attain sustainable watershed health, either within the local or more distant watersheds that affect IEUA.
- Expanded collaboration on natural hazards mitigation for water supply would enhance resilience within the region.
- Although many existing plans at the local and regional levels analyze cost-effectiveness, they do not assess comprehensive benefit-cost tradeoffs that extend beyond water supply benefits alone, which could support greater investment in sustainable water management.

For more information, see the Technical Report at http://waterfdn.org/resources/swmprofile

The IEUA region is underlain by large groundwater basins that can retain rain and runoff as well as recycled water. Development limits natural recharge, but constructed recharge basins help to offset those losses.

Source: Courtesy of Chino Basin Watermaster.

Recommendations

IEUA's demonstrated commitment to share responsibility and accountability for local and regional supply reliability, watershed health, and overall resilience is highly commendable. Yet their ongoing efforts need to expand across the broader region that they and their wholesale supplier, MWD, rely on for water supply to confront vulnerabilities to water supply caused by population growth, climate change, decreased reliability of imports, and drought, and to reverse ongoing harm to water-dependent species and habitats. Therefore, IEUA and its regional partners need to deepen and broaden their network of influence to achieve sustainable water management.

- **Deepen Collaboration and Broaden Engagement**
  By pooling resources, developing shared knowledge, and creating consistent policies IEUA and its partners will continue to drive greater integration and opportunities for multi-benefit solutions. Expanding the portfolio of participants and partners will increase access to diverse authorities and funding. Specific opportunities include:
  - Working with local land use authorities, stormwater agencies, and developers to create programs and requirements to increase retention of rain and runoff in groundwater basins and improve water efficiency through low impact development, sustainable landscaping, and green infrastructure.
  - Promoting and supporting decisions on local and regional land use that align with sustainable water management, species recovery, watershed health, and water quality goals.
- **Support Watershed Health and Species Recovery**
  IEUA should further its support for state and federal agencies, whose mandates relate to fisheries, forests, water quality, streamflow, and species recovery, so that they effectively protect water, quality of life, and the environment in watersheds relevant to IEUA. For example, IEUA should support initiatives such as habitat conservation planning (e.g., at locations beyond its current contribution to the Santa Ana River Habitat Conservation Plan, such as the Bay-Delta) and stormwater capture.
- **Improve Data Sharing**
  To address continuing challenges with water management data, IEUA and its member agencies should develop best practices for sharing and managing public data and further invest in data clearinghouse initiatives. Such efforts will also broaden and deepen their engagement within the broader region.