

Screening Alternative Water Sources to Secure American Water Supplies

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A comprehensive, generalizable, and transparent tool for alternative water supply screening in the United States

- The growing gap between freshwater supply and demand is forcing public and private stakeholders in the United States to explore alternative water sources.
- The preferred alternative water source depends on highly localized factors like water quality and availability, existing infrastructure, market conditions, and regulatory landscapes.
- Historically, decision making in this space has relied on disparate datasets scattered across numerous sources, making it difficult to compile, align, and apply the data effectively—especially when paired with complex, often opaque integrated assessment models.
- SAWS delivers a centralized, harmonized database of the **political, economic, social, technological, environmental, and legal** (PESTEL) factors that influence non-traditional water supply development.
- Paired with a **user-friendly web application**, it equips stakeholders with actionable insights to support fast, informed decision-making in real-world contexts.

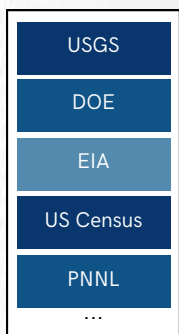
The SAWS Database

- The SAWS Database **integrates and standardizes dozens of datasets** from government agencies and peer-reviewed journals, covering the **full range of PESTEL factors**.¹
- Data is available at **multiple geographic resolutions** (state, county, and watershed), enabling flexible analysis across scales.
- SAWS also synthesizes datasets into **uniform viability metrics**, allowing for consistent, apples-to-apples comparisons across supply types and geographies.

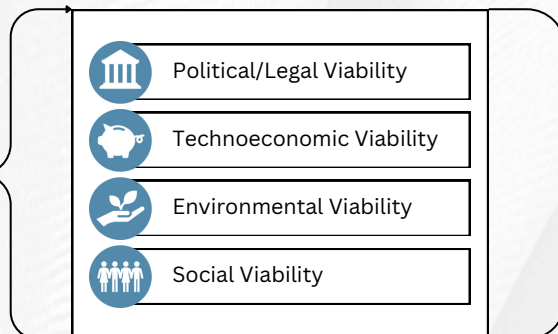
The SAWS Web Application

- The SAWS Web Application serves as an **interactive interface** with the SAWS Database, through which users can...
- **Explore and visualize** underlying datasets under different climate and socioeconomic scenarios
- **Compare the viability** of different water supplies across regions
- Identify **high priority regions** for supply development
- Incorporate their own proprietary datasets to support **custom, context-specific analyses**.

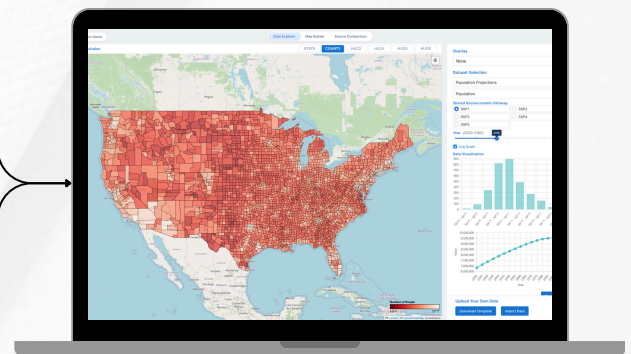
Centralized Access to
50+ Datasets



Transparent Viability Metrics to
Compare Water Supplies



User-Friendly Interface to Streamline Analyses



¹. SAWS also includes several newly generated datasets formed as relevant combinations of existing factors, though these are limited to political/legal, technoeconomic, and environmental viability and do not include any social indicators.



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