

Envision® for the Water Sector

EXECUTIVE BRIEF

Envision | THE BLUEPRINT FOR SUSTAINABLE INFRASTRUCTURE



The Institute for Sustainable Infrastructure is an education and research nonprofit (a 501c3) based in Washington DC. It was established in 2010 by the American Public Works Association (APWA), the American Society of Civil Engineers (ASCE), and the American Council of Engineering Companies (ACEC). Responding to the need for a comprehensive sustainability framework and rating system suitable for use in civil infrastructure development, ISI collaborated with the then Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design to develop Envision.

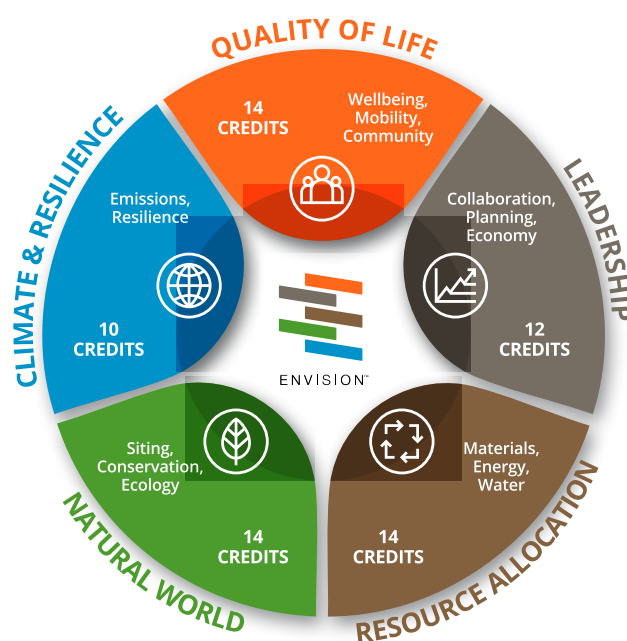
What is Envision?

ENVISION IS A HOLISTIC SUSTAINABILITY FRAMEWORK AND RATING SYSTEM THAT GUIDES AND ASSESSES THE SUSTAINABILITY AND RESILIENCE OF ALL TYPES OF INFRASTRUCTURE, INCLUDING WATER PROJECTS.

It is a comprehensive tool created to assist agencies, municipalities, consultants, contractors, and operators, in co-creating and delivering reliable and resilient water infrastructure that can account for climate change, prioritize public health and safety, promote healthy watersheds, and cultivate environmental justice, while emphasizing collaboration and spurring economic benefits. Envision is your organization's playbook to achieve these outcomes via a peer-reviewed scorecard to assess your infrastructure project's impacts and benefits across 64 sustainability indicators organized within five categories of impact.

Envision Helps Address Water Sector Issues

- ✓ Aging Infrastructure
- ✓ Climate Change/Resiliency
- ✓ Community Expectations
- ✓ Water Availability/Access to Water
- ✓ Emergency Preparedness
- ✓ Water Reuse
- ✓ Increasing Regulations
- ✓ Water/Energy Nexus
- ✓ Social Justice & Equity



The Water Sector is a Strong Community of Envision Users

55

Water-related public agencies are
ISI members —municipal, county, state

36%

of projects in the verification program are
water & wastewater

\$38 BILLION

of water projects in the verification
program—verified, in review & registered

Feb 2025 data

Envision Application Examples



NYC Department of Environmental Protection

Water Sector RFP: "The Design Engineer shall prepare the application and supporting documents to obtain an Envision™ rating, level 'gold' from the Institute for Sustainable Infrastructure."



Hampton Roads Sanitation District, Virginia Beach, VA

Design & Construction Standards: Firms "shall utilize the Institute for Sustainable Infrastructure Envision (ISI) Envision checklist when evaluating and designing projects."



California Department of Water Resources

Strategic Plan Goals & Actions specific to Envision: Example language from Objective 3 - Implement Sustainability Best Practices: "By 2026, conduct a complete Envision evaluation of all new infrastructure projects that require an Environmental Impact Report."



Port Authority of New York and New Jersey

Design & Construction Standards: The port authority's Sustainable Infrastructure Guidelines specifically call for use of Envision.

Examples of Water Organizations Using Envision

- ✓ California Department of Water Resources
- ✓ City of Atlanta - Department of Watershed Management
- ✓ District of Columbia Water and Sewer Authority
- ✓ East Bay Municipal Utilities District
- ✓ Gainesville Regional Utilities, Inc.
- ✓ Hampton Roads Sanitation District
- ✓ Kansas City Water
- ✓ King County Wastewater Treatment Division
- ✓ Los Angeles Department of Water and Power
- ✓ Madison Metropolitan Sewerage District
- ✓ Metropolitan Water District of Southern California
- ✓ New York City Department of Environmental Protection
- ✓ Ontario Clean Water Agency
- ✓ Passaic Valley Sewerage Commission
- ✓ Puerto Rico Aqueduct and Sewer Authority
- ✓ Tarrant Regional Water District
- ✓ The Philadelphia Water Department
- ✓ Western Virginia Water Authority

The Value of Envision

Envision provides **enhanced transparency and credibility** for your projects and their sustainability outcomes through third-party auditing and verification.

Envision **demonstrates good governance that instills confidence** in voters, taxpayers, and/or ratepayers that project funds are being spent in their best interest while contributing to local, regional, and global sustainability.

Envision provides a **holistic approach** for addressing a wide range of social, economic, and environmental indicators to promote community well-being and cohesion.

From inception of Denver Water's **Northwater Treatment Plant (NTP)**, sustainability was a primary objective, along with modularity, quality, safety, and ease of maintenance, among others. Pursuing Envision verification was one of the means set out by the project's executive sponsors and project management team to validate the project's sustainability achievement.



"The Envision guidance provided by our design and sustainability consultant, AECOM, combined with a talented team of engineers and architects from multiple local firms, really pushed our team to make smart decisions and enhance the project's sustainability in impressive ways."

JILL CROCKETT, PROJECT MANAGER, JACOBS

Broad and comprehensive community engagement was a top priority for the **Huntington Levee** design team. Working closely with the community helped the design team reach consensus with the community on key design features, alleviated concerns, and led to additional improvements, such as improvements at neighboring Farrington Park. The County overwhelmingly voted to fund the project with 70% in favor of a bond referendum.



"Envision asks not only are you doing the project 'right', but also, are you doing the right project. The Huntington Levee will protect 160 homes in an affordable neighborhood with easy access to mass transit. The project includes saving trees, building a playground, and adding trails to enhance community amenities. The Huntington community will be safer and more resilient, with improved facilities. This is what Envision and sustainable development is all about."

JAMES PATTESON, DIRECTOR, DEPT. OF PUBLIC WORKS AND ENVIRONMENTAL SERVICE, FAIRFAX COUNTY, VA

The **City of Santa Monica Sustainable Water Infrastructure Project (SWIP)** will have a direct impact on the community's quality of life through locally-produced recycled water and improved beach water quality. This also positively impacts the tourism industry, which generates \$700 million annually for the local economy. The project reduces traditional reliance on costly imported freshwater resources by creating new, local water supplies.



"Santa Monica has introduced a world-class, first-of-its-kind water reuse project with SWIP. This Project exemplifies the City's leadership and commitment to the protection of natural resources, climate resiliency and innovation."

SELIM EREN, PE, PRINCIPAL CIVIL ENGINEER, CITY OF SANTA MONICA, CALIFORNIA

Is Envision Right for your Organization?



Does your organization have strategic sustainability or resilience goals?



Do key issues facing your organization include increasing regulations, climate action and resilience, water availability and reliability, emergency preparedness, and aging infrastructure?



Do your stakeholders have expectations about sustainability, diversity, and social and environmental justice?

Interested in learning more?

Visit sustainableinfrastructure.org/next-steps or scan the QR Code for more information and ways to engage.

- ✓ Learn about ISI membership benefits
- ✓ Explore training opportunities
- ✓ Find information on making projects more sustainable and resilient

