

# A Method to Incorporate Community Needs and Priorities into Decision-Making

## Overview

Every day in America, water utilities are on the front lines of communities safeguarding public health, protecting the environment, and sustaining critical water infrastructure investments. To provide these services, water utilities are regularly faced with the need to make large investments, such as long-term control plans, comprehensive master plans, and major facility upgrades.

Increasingly, utilities anticipating these large capital investments are looking to address both traditional drivers (e.g., environmental regulations, aging infrastructure, operational optimization, or increased resiliency/reliability), as well as to harness the opportunity these investments provide to positively impact the social, economic, and environmental conditions in their communities.

Given this complexity, utilities often struggle to select the optimal infrastructure project(s) that provides the highest benefit to cost ratio, due to the challenge of comparing across otherwise dissimilar performance characteristics of project alternatives. Utilities may also be looking to engage their community in the decision-making process but may be unsure of an effective method to incorporate community feedback into the process.

EPA's decision-making method, referred to as **AAA**, was developed to address these needs in decision-making. The AAA method distills the experiences utilities have had with incorporating this method into their process to provide you with a basic, sound, and easily-explainable (and transparent) way to incorporate community values and best meet utility needs as you evaluate and select infrastructure investments.

## How does AAA add to conventional alternatives analysis?



# AAA & Conventional Alternative Analysis

In conventional alternatives analysis, utilities typically base their decision-making criteria on technical performance (e.g., whether the alternative supports meeting a regulatory endpoint such as a technology or water quality discharge standard) and the cost of doing so (e.g., the present value of the full life-cycle costs of the alternative), along with other important technical and operational criteria such as reliability, maintainability, and accessibility. AAA does not discount the importance of these criteria, but rather augments the core concepts of alternatives analysis in a few key ways:

## Community Engagement

AAA provides a clear, meaningful process to engage the community, effectively communicate with non-technical audiences, and incorporate specific community feedback into decision-making criteria.

## Consideration of a Broad Range of Performance Characteristics

In AAA, both quantitative and qualitative metrics are built out onto common numerical scales to measure performance across otherwise dissimilar criteria (e.g., comparing net energy consumption and community livability).

These attributes of AAA may also help utilities looking to satisfy the requirements of EPA's Integrated Planning Guidance, which stresses the importance of stakeholder engagement, the evaluation of community impacts, and the evaluation of a broader range of approaches and practices with an emphasis on sustainable solutions.

## AAA & Stormwater in The High Line Canal

The High Line Canal Conservancy, along with Denver Water, Mile High Flood District and local jurisdictions are working together to transition the High Line Canal with The Stormwater Transformation and Enhancement Program (STEP). This innovative program will bring a new life to the High Line Canal as a green infrastructure system that provides for stormwater management. Check out this [informational video](#) on the history of the Canal and the Conservancy's efforts.

The Conservancy has been working with EPA to apply the AAA method to combine community priorities with technical evaluations to find affordable and effective One Water solutions through STEP. As of Summer 2020, The Conservancy and EPA have gathered community input on priorities and is using those priorities to determine goals and objectives for STEP. The completion of the analysis is targeted for Winter 2021 with a case study to be developed and shared publicly in Spring 2021.



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For more information on AAA as well as past and future pilot efforts, please contact:

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