

# Video: Michael Regan, EPA Administrator and Howard Carter, City of Saco

<https://www.wmtw.com/article/epa-administrator-visits-maine-to-promote-funding-to-protect-critical-infrastructure/39081543>





**Tighe&Bond**



# **How to Pass a Successful Infrastructure Bond Measure by Incorporating Your Community's Values into a Successful Triple Bottom Line Project Analysis!**

**NEWEA Spring Conference  
May 25, 2022**





**Tighe&Bond**



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Director,  
Saco Water Resource  
Recovery Department



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# Saco, Maine Water Resource Recovery Project

May 25, 2022

New England Water Environment Association (NEWEA)

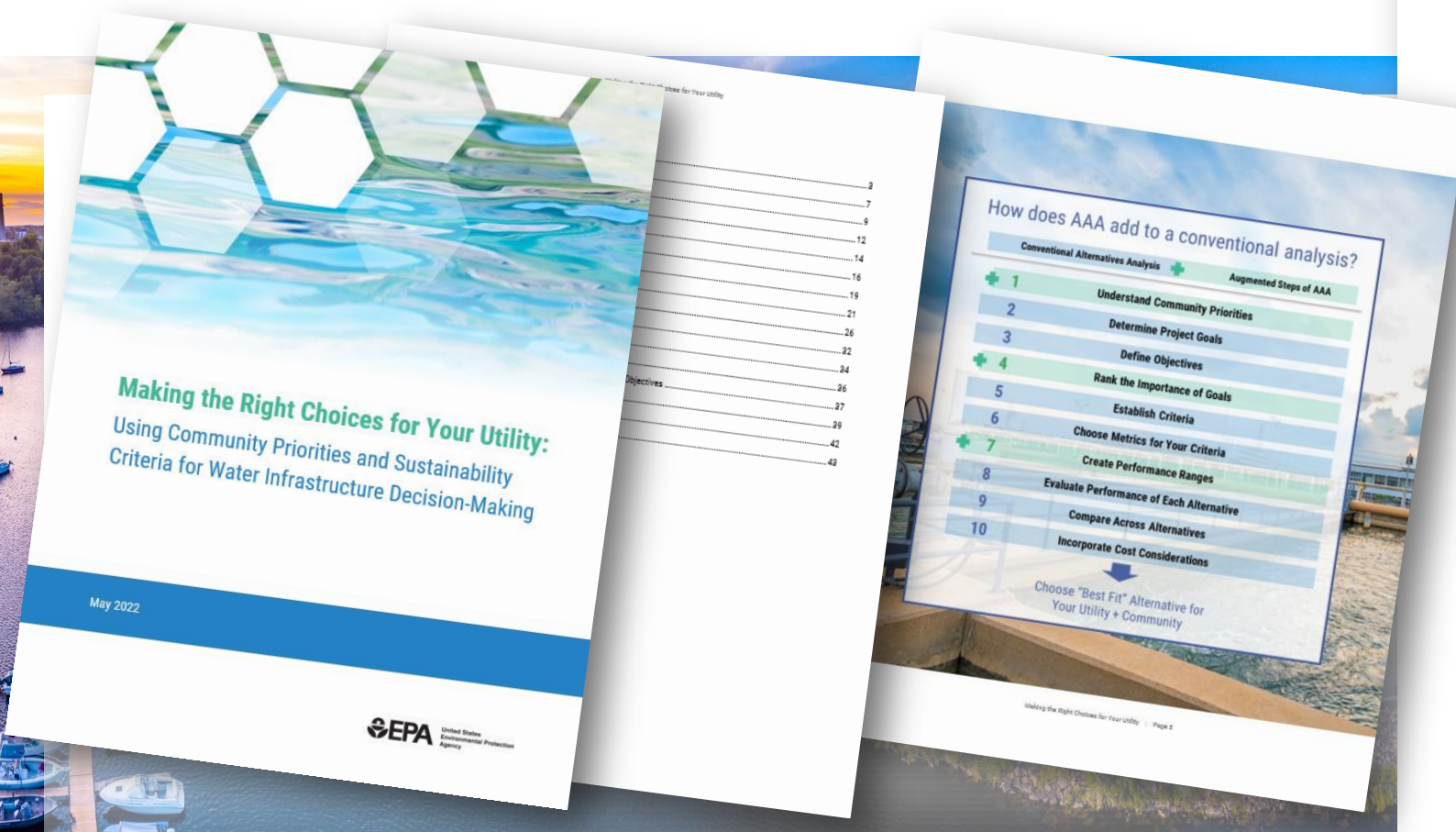
# Howard Carter, Water Resource Recovery Director



# Jodi MacPhail, Deputy Mayor, City of Saco, Maine



# Leslie Corcelli, USEPA



## Testimonials from Real World Users



"The EPA's AAA tool was extremely helpful to me and my team while I was at the Camden County (NJ) Municipal Utilities Authority. It enabled us to identify the best alternative, from a triple bottom line basis, for a combined sewer overflow abatement project that we were evaluating. As the clean water utilities of the future strive to be environmental champions and anchor institutions in the communities that they serve, EPA's AAA roadmap will be an invaluable tool to optimize triple bottom line benefits for any new project they undertake." – [Andy Krizan](#), *oversaw the use of the AAA method for the Camden County Municipal Utilities Authority Combined Sewer Long-Term Control Plan (LTCP) as Executive Director and Chief Engineer. To read more visit the [case study](#).*

"The EPA's AAA process has provided the High Line Canal Conservancy the opportunity, along with our partners, to really think about and understand the true potential for the High Line Canal as it transitions from an irrigation delivery system to green stormwater infrastructure. Each step of the AAA process systematically built upon the previous one and allowed for important input from a wide base of stakeholders including the Stormwater Transformation and Enhancement Program leadership team, community members and local leaders, which then ensured a robust alternatives analysis. Guided by the expertise of EPA and grounded in a sustainable approach, the Conservancy and our partners are now able to seamlessly adapt the AAA process to respond to and meet varying needs and conditions. We're so excited to implement this impactful tool and to showcase the benefits of green infrastructure." – [Cathy McCague](#), *Program Manager, oversaw the use of the AAA method for the High Line Canal Conservancy's the Stormwater Transformation and Enhancement Program (STEP). To read more about STEP, visit the [case study](#).*



"The EPA's Augmented Alternative Analysis process provided our community with an organized framework on which to build priorities and goals with measurable metrics. The EPA team partnered with us to align our city goals and community priorities with our project needs to inform our future utility investment decisions. This evaluation was a critical planning step toward a more resilient and sustainable water resource recovery future here in Saco." – [Howard Carter](#), *oversaw the use of the AAA method for the Long Term Resiliency Plan as Director of the Water Resource Recovery Department at City of Saco, Maine. To learn more, visit the [case study](#).*

# NEW! EPA AAA Guide – Revised May 2022

## How does AAA add to a conventional analysis?

Conventional Alternatives Analysis



Augmented Steps of AAA



1

Understand Community Priorities

2

Determine Project Goals

3

Define Objectives



4

Rank the Importance of Goals

5

Establish Criteria

6

Choose Metrics for Your Criteria



7

Create Performance Ranges

8

Evaluate Performance of Each Alternative

9

Compare Across Alternatives

10

Incorporate Cost Considerations



Choose "Best Fit" Alternative for  
Your Utility + Community



# Additional EPA Resources

- Integrated Municipal Stormwater and Wastewater Planning Approach Framework
- Making the Right Choices for Your Utility & Community – Guidebook & Case Studies <https://www.epa.gov/system/files/documents/2022-05/right-choices-utility-planning-process.pdf>
- Water Utilities as Anchor Institutions

# Michelle Madeley, USEPA

## Step 1

### Engage Your Community!

- Establish a Workgroup
- Get Informal Input on Community Priorities
- Communicate the Results



# WRRD's Long-Term Resiliency Plan Goals



## Improve System Resiliency to Enhance Environmental Health

Ensure water resource recovery facility is resilient to effects of increasing extreme weather events and flooding by planning, maintaining, and operating Saco's water resource recovery infrastructure using sustainable methods that enhance ecological and environmental health.



## Ensure Financial Sustainability

Maintain balance of funding needs by making smart investments that consider the long-term health of Saco's water resource recovery infrastructure.



## Support Economic and Community Development to Bolster Saco's Livability

Encourage enhanced public access and greenspace use along river frontage near water resource recovery facility and plan for long-term use of the facility to support local community and economic development.



## Increase Public Awareness and Appreciation of the Value of Water Services

Communicate the value of Saco's underground assets and water resource recovery facility as it relates to public health, the ecosystem, and community development through collaboration with Saco schools and engagement within the community.

# Dan Bisson, Tighe & Bond



## Alternative Two: Full Plant Upgrade Aerobic Granular Sludge

- Incorporate **Innovative Aerobic Granular Sludge Technology**
- **Increase treatment capacity to 12 MGD** and accommodate growth within the community
- **Nutrient removal**
- **Restoration of land** for open green space
- Could accommodate **solar arrays**, with **enhanced Riverwalk space** and **public amenities**
- **Raise Front Street**
- **Relocate critical systems to protect against flooding**
- Remove older buildings and structures susceptible to flooding and **construct newer, more resilient buildings and structures**
- **Repurpose existing tankage for CSO Storage and Influent pump station and CCT**
- Allow for future expansion



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# **Panel and Audience Q&A**

**How did the City of Saco successfully pass an infrastructure bond measure by incorporating its Community's values into a successful triple bottom line project analysis?**



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Thank you!

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