

Innovative Financing Options for Water Quality Challenges

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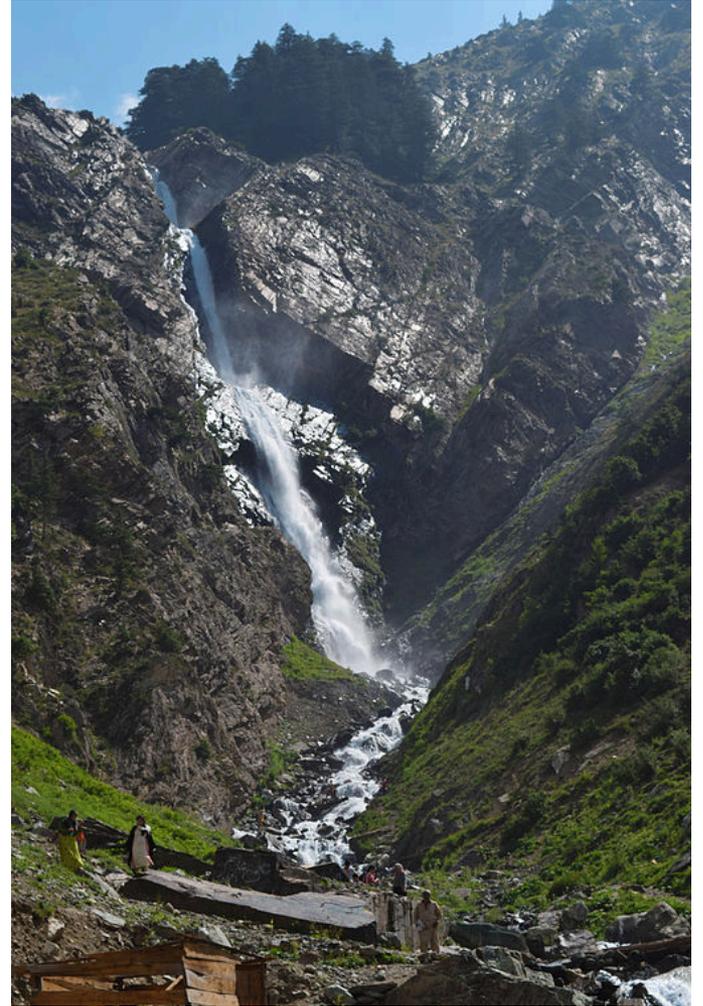
Dedicated to enhancing the ability of governments and other organizations to provide environmental programs and services in fair, effective, and financially sustainable ways through:

- Applied Research
- Teaching and Outreach
- Program Design and Evaluation



How you pay for it matters

Kumuwai



What is watershed management?

“...any program or collection of strategies that positively influence activities and land characteristics within a drainage basin.”

But...what are we really talking about?



Addressing public health risks due to contamination



Complying with Federal Regulations for point source discharges



Updating infrastructure to reduce nonpoint source discharges



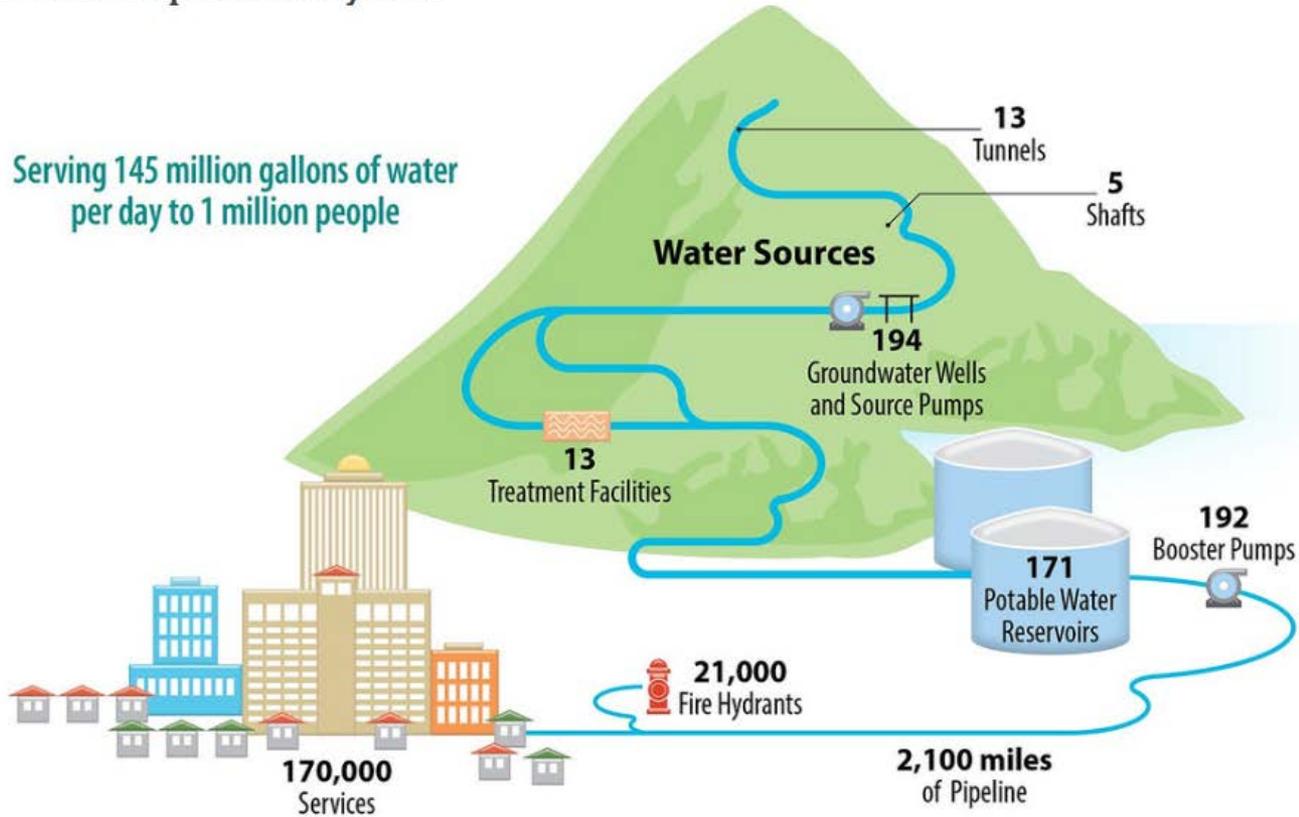
Cesspool
Conversions...

Mitigating negative impacts to natural resources and local economy



Source water protection

Oahu's Municipal Water System



Unique challenges facing small systems in the area of source water protection

- Often rely on other sources of water (purchase)
- Limited technical and financial resources
- Limited ability to impact land use in entire watershed

Steps of source water protection

- Delineate source water protection area
- Inventory known and potential sources of contamination
- Determine the susceptibility of the PWS to contaminant sources
- Notify the public about threats
- Implement management measures to prevent, reduce, or eliminate risks to source water
- Develop contingency planning strategies



How do small systems benefit from watershed management?



Avoided costs

- Water treatment
- Capital improvements
- Violations
- Cost to earn customer trust back



Ancillary benefits

- Recreation
- Social
- Economic
- Public health
- Resiliency



Environmental benefits



**To Help Curb Coral Reef Destruction, Hawaii Wants
to Ban Chemical Sunscreens**



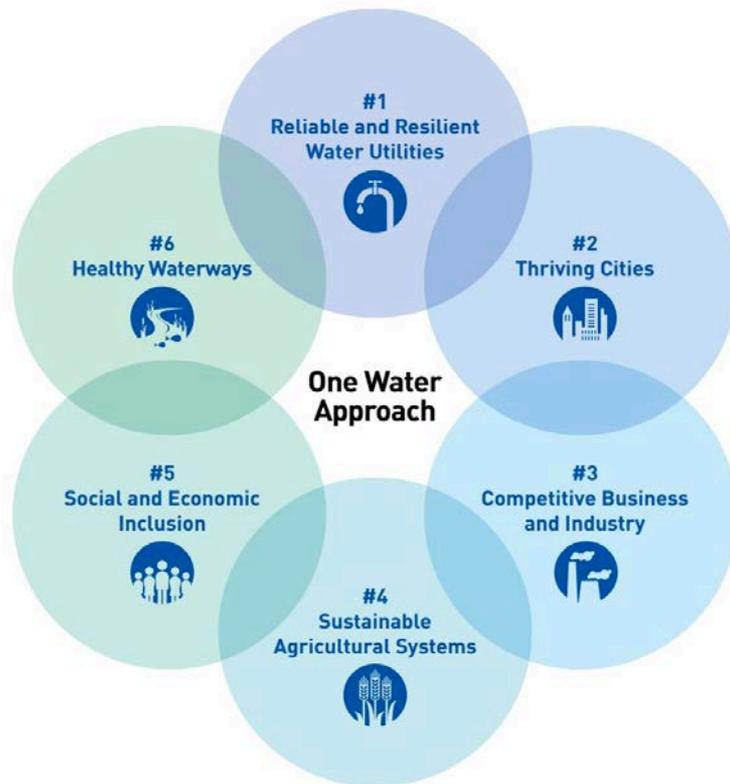
Emergency Response Coordination

- With pre-existing relationships, emergency response is more efficient and effective
- More reliable backup source



“One Water” approach

Water, in all forms, is valuable and should be managed holistically.



**US Water
Alliance**

How can small systems pay for watershed management?



Funding Sources for Watershed Management

- CWSRF
- DWSRF
- 319 Grant Program
- National Water Quality Initiative

2018 Farm Bill

- 10 percent of \$4 billion mandated for conservation programs that protect source water
- Collaboration between private landowners, conservation organizations, and state and local government



**Federal Funding
Opportunities for Source
Water Protection**



RESOURCES



Funding through new revenue sources

- Stormwater Utility Fees
- Special Parcel Tax
- Regionwide watershed fee

NC Stormwater Fees (January 2018)

- 9 out of 10 largest cities have utilities
 - 36 of 50 largest cities
- 66 out of 97 MS4 Permit holders
 - All 6 Phase I municipalities
 - 60 of 91 Phase II municipalities
 - 19 utilities with no MS4 permit
- Total revenue reported for 64 municipal utilities in 2017 was \$208,009,005
 - *Total revenue reported for 56 municipal utilities in 2010 was \$138,949,938*
- Total revenue reported by 3 county utilities in 2017 was \$17,269,729

Source: Analysis prepared by the EFC using self reported information submitted to the Local Government Commission

Raleigh Watershed Protection Fee

- City of Raleigh Public Utilities charges individual water users \$0.15 per 1,000 gallons of water used
- Average of approximately \$0.60 per residential water customer
- With 600,000 customers – raises \$2.25 million in annual revenue
- All of this money is dedicated to the Upper Neuse Clean Water Initiative

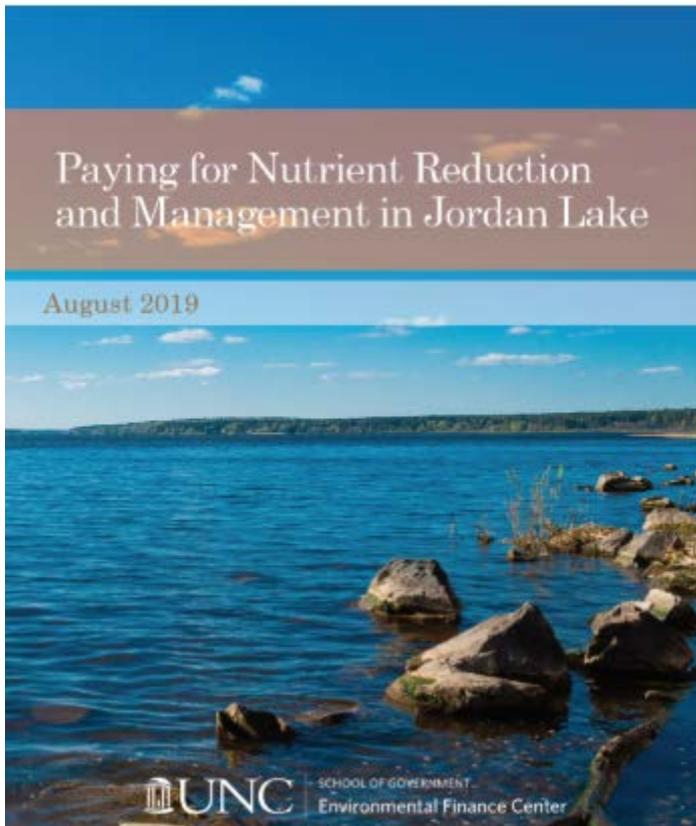
LA County Special Parcel Tax

- In November 2018, voters passed a referendum allowing for the creation of the Safe Clean Water Program funded by a parcel tax of 2.5¢ per square foot of impervious surface
- Estimated to generate \$300 million dollars for stormwater projects in the county
- Has built-in protections for low-income senior citizens and credits for water quality projects

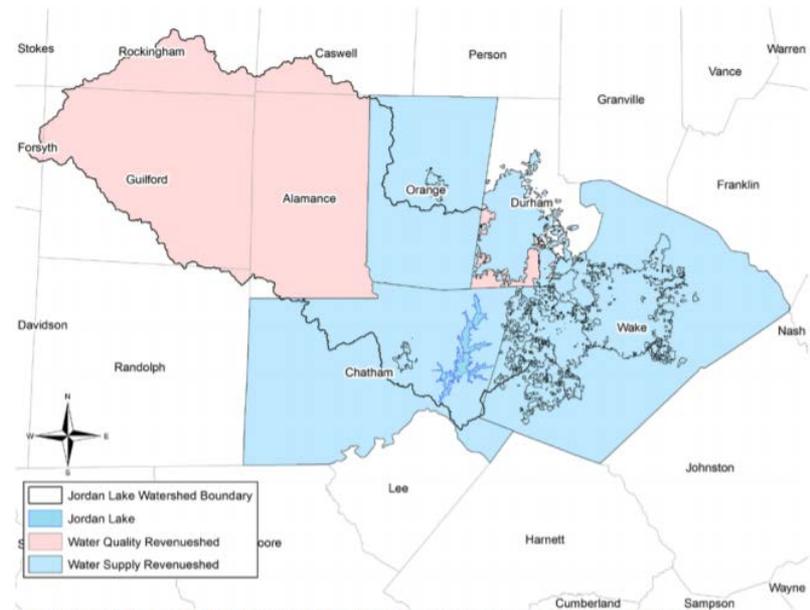
Maryland Bay Restoration Fee

- Flat fee of \$5 per residential user – both for onsite and centralized wastewater
- If a customer can demonstrate that their wastewater does not discharge into the bay, there are exemptions
- Fee exemptions for those with substantial hardship
- Fees from centralized system users generate \$100 million annually and are used to improve/upgrade wastewater treatment facilities
- Other fees for on-site system users go into a fund which targets improving on-site systems in critical areas

Two (or more) pots of money are better than one...

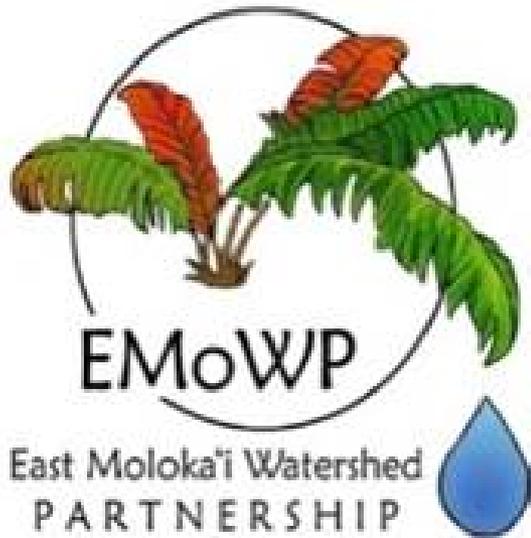


Comprehensive Water Quality Protection Revenued

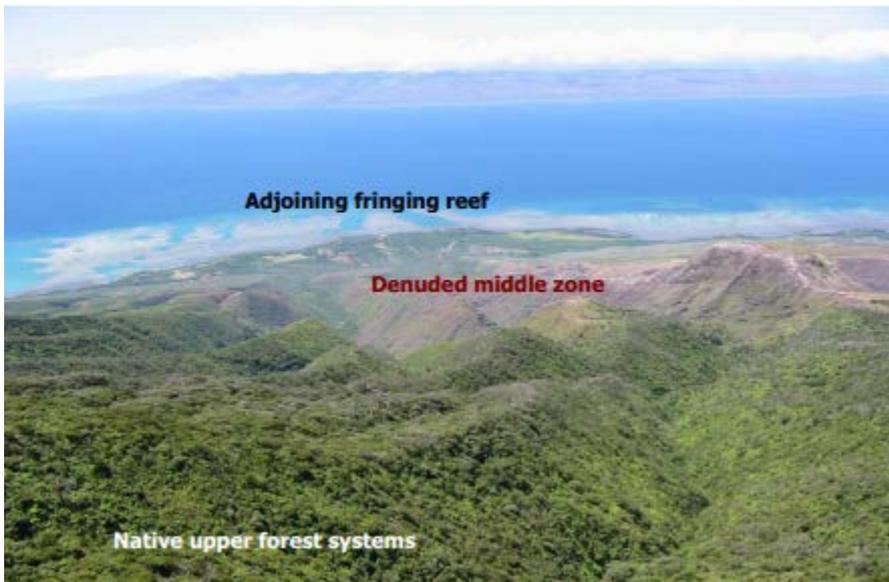


*The total revenued includes both the watershed drainage basin and the water supply revenueds.

A local example...



- Practical on the ground protection efforts
- Monitoring
- Community Outreach
- Fundraising
- Capacity Building
- **One of Many Hawai'i Watershed Partnerships!**



Want to learn more?

- [EPA Source Water Protection](#)
- [Partners you can work with to protect water quality](#)
- [Watershed Management for Potable Water Supply](#)
- [Farm Bill Funds for Water Source Protection](#)



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