



Achieving Climate Resilient & Equitable Water Systems

Just Water: A Daylong Conference on Building Faith-based Approaches to Storm Water Runoff

**Hartford Memorial Baptist Church
Saturday, April 21, 2018**

April 20, 2018



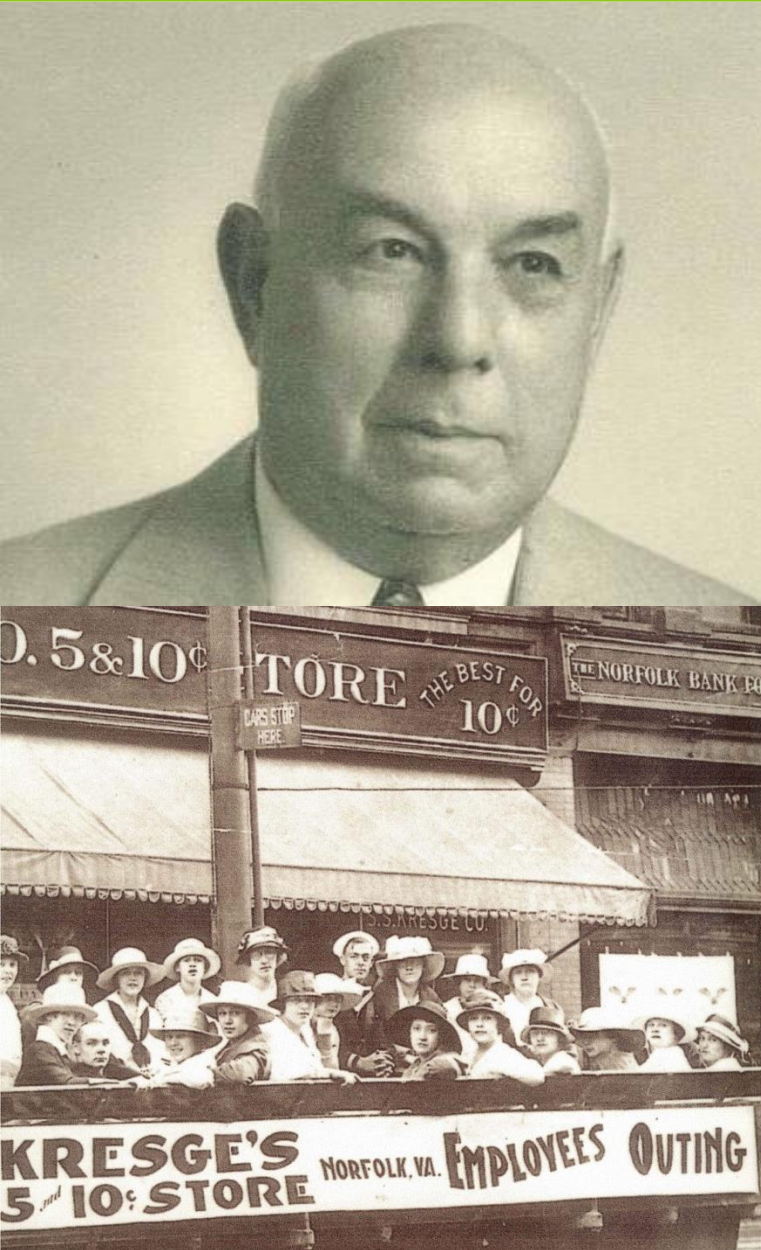
Introduction to Kresge

Challenges and Opportunities

Our strategy

Project Examples

Closing Thoughts



- Established in Detroit in 1924 by Sebastian S. Kresge.
- Founder of the S.S. Kresge Company, which began as a single five and dime store.
- The revolutionary retail concept expanded nationally, eventually becoming Kmart Corporation.
- Until his death at age 99 in 1966, Mr. Kresge served on the board and contributed \$60.5 million to the foundation.



- National private foundation
- Goal: Expanding opportunities in America's cities
- \$3.6 billion endowment
- Funded through grants and social investments
- Six program areas and two practices

God shows us the significance of stewardship through water

- Man's first job: taking care of the earth (replenish, subdue, work the ground)
- God speaks of the river of Eden become 4 heads: Pison, Gihon, Hiddekel, Euphrates (Genesis 2:9-14)
- Headwaters can start out small, be a combination of small trickles or streams, or start from an underground spring
- What happens in the headwaters is very important to the health of the whole river



The lesson in the Water



- Water is life, gives life to all living things – No fingerprints!
- When we take care of the source, we take care of others
- *We are ALL headwaters*
 - *How we do our work will effect others*

CLIMATE THREATS	Storms	Sea-Level Rise	Drought
CLIMATE RISKS	Flooding and Water Pollution (Runoff, Saltwater Intrusion)		Lack of Water Availability
WATER SYSTEM IMPACT	Damaged buildings and infrastructure, contaminated wastewater and drinking water systems		Rate pressure from higher cost of water procurement and treatment, lower revenues from water efficiency measures
INVESTABLE SOLUTIONS	Green Infrastructure Natural, distributed and adaptive stormwater systems	Distributed Treatment Community, building, or residential scale systems	Distributed Supply Desalination, wastewater reuse, rainwater harvesting
	Water Efficiency Lower demand from end users, less waste by utilities		
	Planning & Preparedness - Adaptive design software, crisis response, climate tools and services		
	Water Monitoring - Sensors, data, and analytics on leaks, floods, water usage and quality		
LOW-INCOME COMMUNITY VULNERABILITIES	Energy Efficiency - Lower direct costs and green house gas (GHG) emissions for water utilities and end users		
	<ul style="list-style-type: none"> Families lack savings or insurance as financial buffer to rebound after shocks Low-income neighborhoods are generally more vulnerable to climate threats and receive lower quality assistance following disasters Poorer cities generally have less resilience planning and access to finance 		
COMMUNITY IMPACT	POTENTIAL HARMS		SOLUTION CO-BENEFITS
	Health	Waterborne disease, respiratory illness, mental health, direct flood harm	Clean air, reduced heat island effect
	Economics	Home/building damage, water rate increases, small business threats	Green jobs, lower water rates, property value
	Social Cohesion	Families dislocated from homes and employment options	Participatory decisions, recreation

Challenges & Opportunities

- Across America's cities, climate change is causing more intense storms, and failing water infrastructure exacerbates local flooding and the generation of storm water.
- The voices of people of color and low-income communities have been largely absent from water management decision-making processes.
- Green Stormwater Infrastructure can be a more cost-effective solution than traditional "gray infrastructure" and provide a variety of co-benefits.
- Urban flooding exacerbates the existing challenges that come with dilapidated water infrastructure: impaired surface water quality, and continual threats on the public health

CREWS

Climate Resilient & Equitable Water Systems

Vision: Attributes of Climate Resilient & Equitable Water Systems

- Integrated, nimble and responsive to climate change
- Manages storm water and wastewater in an equitable way so everyone benefits
- Engages low-income and other marginalized communities in storm water and waste water planning
- Provides multiple benefits to water users - economic, social, and health-related
- Processes storm water and waste water in an energy-efficient manner
- Embeds climate change considerations into the capital planning processes for storm water and waste water
- Encourage practices that get people thinking across the silos

CREWS Overview

Transform urban storm water and waste water systems so they provide reliable, equitable, and innovative services to communities despite the uncertainties introduced by climate change.



- Support and nurture a new cadre of **water leaders** to amplify marginalized voices and strengthen climate-vulnerable regions and water systems
- **Build the case** and enabling environment for equitable water system transformation
- **Advance non-traditional approaches** to financing, operations, and community participation that produce multiple community benefits

Building a new cadre of water leaders: *Environmental/Social Justice leaders, utility leaders & municipal leaders*



US Water Alliance Water Equity Work



National Climate and Water Equity Caucus

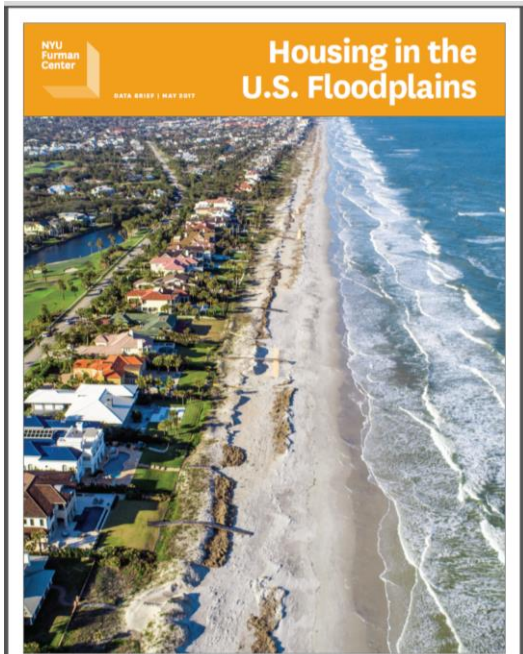


Groundworks USA and River Network Urban Flooding Cohort

Building the Case & Enabling Environment

EARTH ECONOMICS

Evaluating the social benefits
of nature-based solutions



**CLEAN
WATER
FOR ALL**

Federal & State Policy Advocacy and Defense

Advancing Non-Traditional Approaches



Leading a 'communo-versity' model to create a climate-water justice plan for historically marginalized communities



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure



Innovative financing to advance green infrastructure and other climate resilient solutions in urban, underinvested cities with severe flooding concerns.



National partners serving as intermediaries to provide technical assistance & collaboration



American Rivers
Rivers Connect Us®

Capacity and Physical Infrastructure Investments in Detroit

DETROIT
FUTURE
CITY



Land + Water WORKS Ambassador Program



Other projects: Green Alleys in Midtown, Eastside Community Network rain garden, Mack Avenue Green T project.

The Erb Foundation has been a great leader & partner in many of these programs

Closing Thoughts



- Water is Life
- Acknowledge the structural and institutional racism that we must address to advance water equity
- We need everyone's voice and expertise to co-create solutions that provide benefits for ALL
- We must be creative and innovative in how we finance more resilient water infrastructure
- Kresge's Detroit Team (place-based) and Environment Team (National) are intentional about enhancing collaboration and achieving CREWS vision

Expanding opportunities in America's cities

Dr. Jalonne L. White-Newsome
Environment, Senior Program Officer
Jlwhite-newsome@kresge.org

3125 W. Big Beaver Road
Troy, Mich. 48084
248-643-9630
kresge.org

CREWS Grantee Partners

** national partners with a Detroit connection*

Build Urban Leadership

Municipal/Utility Peer Learning

- Carpe Diem West
- Green Infrastructure Exchange
- U.S. Water Alliance*

CBO/NGO Peer Learning

- American Rivers*
- Anthropocene Alliance
- PolicyLink*
- River Network/Groundwork

Build Case/Forge Path

Applied Research

- Fair Share Housing Center
- One Voice

Evidence Base

- Earth Economics

Policy

- Freshwater Future*
- Green Latinos
- Hip Hop Caucus
- National Wildlife Federation*

Non-traditional Approaches

Financing Models

- Chesapeake Bay Foundation
- Fresh Coast Capital
- The Nature Conservancy/Eastern Market*
- Pacific Forest Trust

Training / TA – Other Models

- American Rivers
- Deep South Center for Environmental Justice
- Re:Focus Partners
- Trust for Public Land

Place-based Exemplars

- None to date