

The Working Group's mission is to maximize the health benefits of in-home water and sanitation services in rural Alaska.

## <u>Membership</u>

Cheryl Rosa & Caitlin Tuberville, USARC

Michael Bruce & Maya Ramaswamy, CDC

Robert Chambers, USDA

Dennis Wagner, USEPA

Tom Wolf, Denali Commission

Chris Fehrman, IHS

Carrie Bohan, ADEC

Sarah Yoder, ADHSS

Brian Lefferts, YKHC

John Warren & Jacqualine Schaeffer, ANTHC

Aaron Dotson, University of Alaska Anchorage

Federal

State

Tribal Health

University

Promote research and development of innovative approaches to water and waste-water services

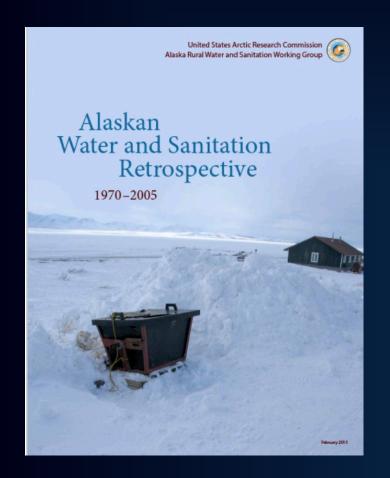
### **ARWSWG Approach**

Improve village level capacity (technical, financial, managerial) and enhance existing O&M via the provision of subsidies and technical assistance programs

Maximize the health benefits of in-home water and sanitation services in rural Alaska

Develop innovative strategies for the allocation of capital funds through community-level engagement

Support research on the connections between climate, water and human/ environmental health



The purpose of this retrospective was to inform the water and sanitation industry and the general public about technologies deployed in rural Alaskan villages between ~1970 and 2005 and why the majority failed on a technical level or failed to provide adequate water on an as-used basis to improve health outcomes.

https://www.arctic.gov/uploads/assets/watersan\_retrospective\_v2.pdf

## **ARSWG Recent/Upcoming/Ongoing Projects and Activities**

- 1) Alaska Water and Sewer Challenge (initiated in 2012)
- 2) Engineering Atlas supporter
  - Coordinating partners, expect small planning workshop
- 3) Development of communication strategy for public & legislature
- 4) ALPHA Conference Annual Post-Conference Session Organizer

# Alaska Water and Sewer Challenge

- Focused on decentralized water and wastewater treatment, recycling, and water use efficiency
- The primary goal is to significantly reduce the capital and operating costs of in-home running water and sewer in rural Alaska homes
- Project is in Phase 4 Field System Development and Testing



#### CONFERENCE

WATER INNOVATIONS FOR HEALTHY ARCTIC HOMES

ADDRESSING THE CHALLENGES OF PROVIDING SAFE AND AFFORDABLE ACCESS TO HOUSEHOLD RUNNING WATER AND SANITATION IN REMOTE ARCTIC AND SUB-ARCTIC COMMUNITIES



#### **CONFERENCE THEMES**

THE IMPACT OF HOUSEHOLD WATER AND SANITATION ON ARCTIC HUMAN HEALTH

CLIMATE CHANGE IMPACTS ON WATER AND SANITATION INFRASTRUCTURE IN THE ARCTIC

INNOVATIVE ENGINEERING APPROACHES TO INCREASE ACCESS TO WATER OF ADEQUATE QUALITY AND QUANTITY, INCLUDING WATER REUSE

METHODS OF OWNERSHIP, OPERATIONS AND MAINTENANCE TO MAXIMIZE USEFUL LIFE OF WATER AND SEWER SYSTEMS IN THE ARCTIC

REGULATIONS AND POLICIES AFFECTING ACCESS TO AND THE COST OF PROVIDING ADEQUATE QUANTITIES OF WATER IN THE HOME

ANCHORAGE HILTON ANCHORAGE, ALASKA SEPTEMBER 18-21, 2016 International weeklong workshop held in conjunction with the US Chairmanship of the Arctic Council

# Annual Water and Sanitation Innovations for the Arctic Workshop: *ALPHA Sessions*

- 2011 State of Water/Wastewater Affairs
- 2012 Exploring Innovative Ideas
- 2013 Update on AK R&D & Assessing Metrics
- 2014 Future of Washeterias
- 2015 –Wastewater Treatment and Disposal
- 2016 Education & Outreach in Rural Water and Sanitation
- 2017 Climate Change, Water, and Health
- 2018 Investigating impacts of inadequate water provision in rural Alaskan households
- 2019 Alternative Approaches, Focus on Gray Water Recycling Technologies
- 2020 Prioritizing Water and Sanitation Capacity Needs
- 2021 Tracing the Pandemic in Wastewater