

# Alaskan Rural Water and Sanitation Working Group Update



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3<sup>RD</sup> Annual Water and Sanitation Workshop  
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- 1) Water and Sanitation Working Group background
- 2) Update on Water and Sanitation Retrospective



Photo: B. Lefferts

- Alaska is last in US for in-home water services
- Status quo increasingly unaffordable
- Sufficient amounts of clean in-home water improves health, *especially in infants*
- Current funding inadequate to bring remaining unserved homes up to standard
- ***New technologies and strategies*** are needed



# Who is the AK Rural Water & Sanitation Working Group?

Alaska Department of Conservation  
Alaska Native Tribal Health Consortium  
Alaska Pacific University  
Alaska Public Health Association  
Centers for Disease Control and Prevention  
Denali Commission  
Environmental Protection Agency  
Indian Health Service  
US Arctic Research Commission  
University of Alaska Anchorage  
University of Alaska Fairbanks  
Village Safe Water (AK DEC)  
Yukon-Kuskokwim Health Corporation

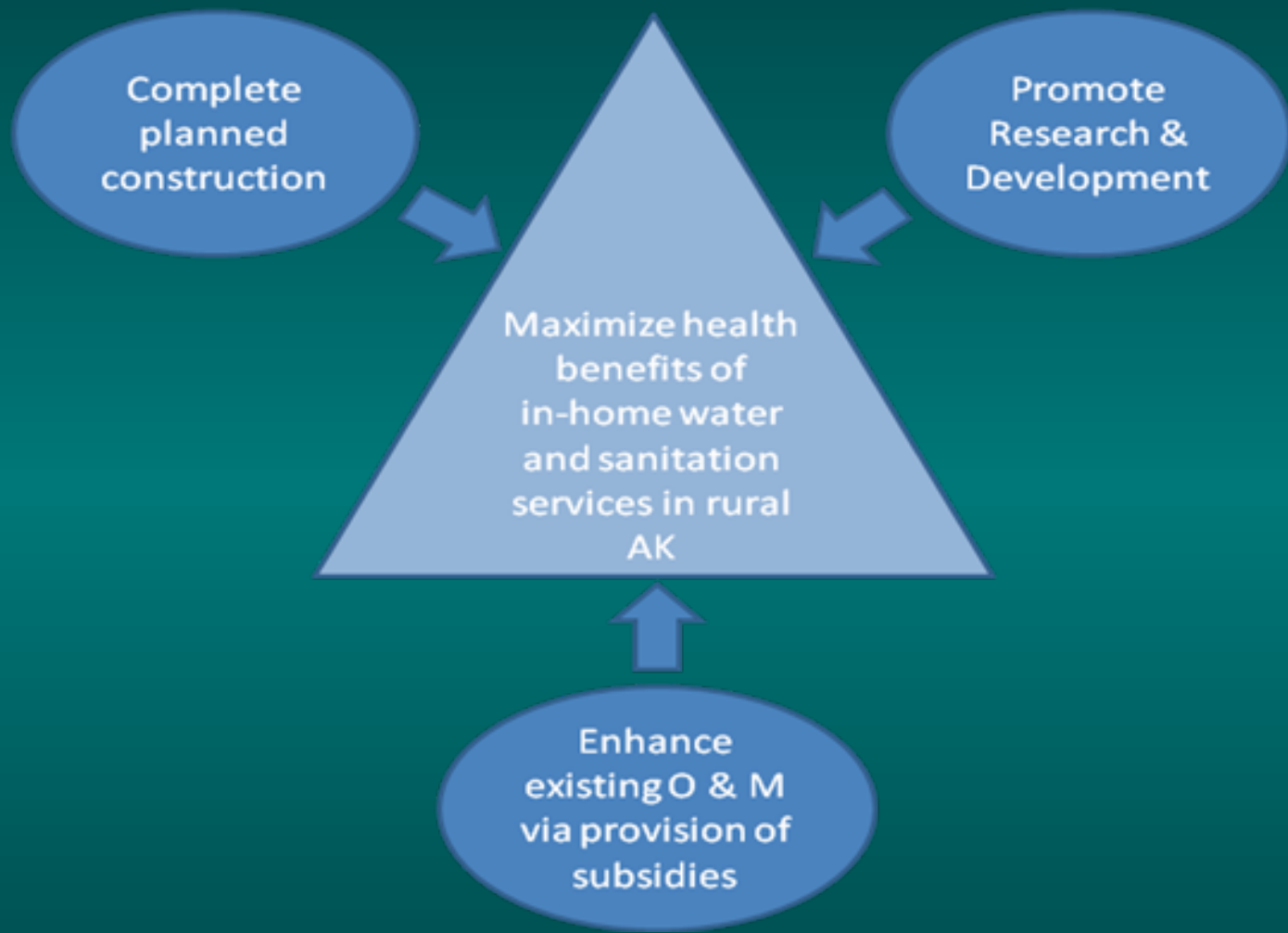


# Why were we created?

Because there was a need...

A group like this did not exist prior to 2011.





## Rural Alaska Water and Sanitation Retrospective

### Purpose:

To compile a historical account of rural Alaskan water and sanitation research and development efforts in decentralized settings that will serve to inform future efforts in this field. These efforts have often consisted of pilot testing new alternatives in select homes in a specific community.

### Scope:

The investigation will focus on technologies applied from 1990 through the present, with material from pre-1990 included at the author's discretion.



Four parts to the document:

- 1) A compilation of descriptions of water and sanitation technologies that have been applied
  - a summary of each technology's intended use and applications
  - information on its attributes/deficiencies.
- 2) A collection of case studies that examine historical technology applications
- 3) A final chapter on the future of water and sanitation R&D.
- 4) A separate USARC white paper that will summarize our findings.







26 Rural Water and Sanitation Experts interviewed

Standard format interview (example questions):

Name pilot program(s) that you have been involved in.

Provide an overview of the individual project.

Benefits conferred by the system (check all that apply):

In-home efficient water/wastewater management

In-home water treatment

In-home hygiene

In-home laundry facilities

Reduced contact with human waste

Other

Deficiencies and limitations identified during pilot testing (check all that apply):

Could not be left in an unheated house and then resume operations

Operational requirements exceeded local knowledge

Operational costs were prohibitive

Other

Were community needs considered in the inception of this project?

Did you receive community feedback on the effectiveness of the project?

Was energy efficiency considered in the inception of this project?

Was the project successful?

Yes. Why?

No. Why did it fail?



## Preliminary Results:

- Multi-faceted problem
- Health Standard has evolved (improved)
- No real silver bullet

\*\* Almost all interviewees pointed to O&M issues





*“The more successful plans clearly have more interest and involvement from local people, and the less successful plans do not. If you look down across the failures, one of the element in every case is a lack of interest in planning.”*

- Regional Health  
Corporation Engineer

