

Education and Behavior Change Efforts to Maximize the Health Benefits and Sustainability of Water and Sanitation

AJ Salkoski, Sr. Program Manager

John Nichols, P.E. - Manager of
Utility Operations, ANTHC



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Alaska Tribal Health System

Regional Health Consortia

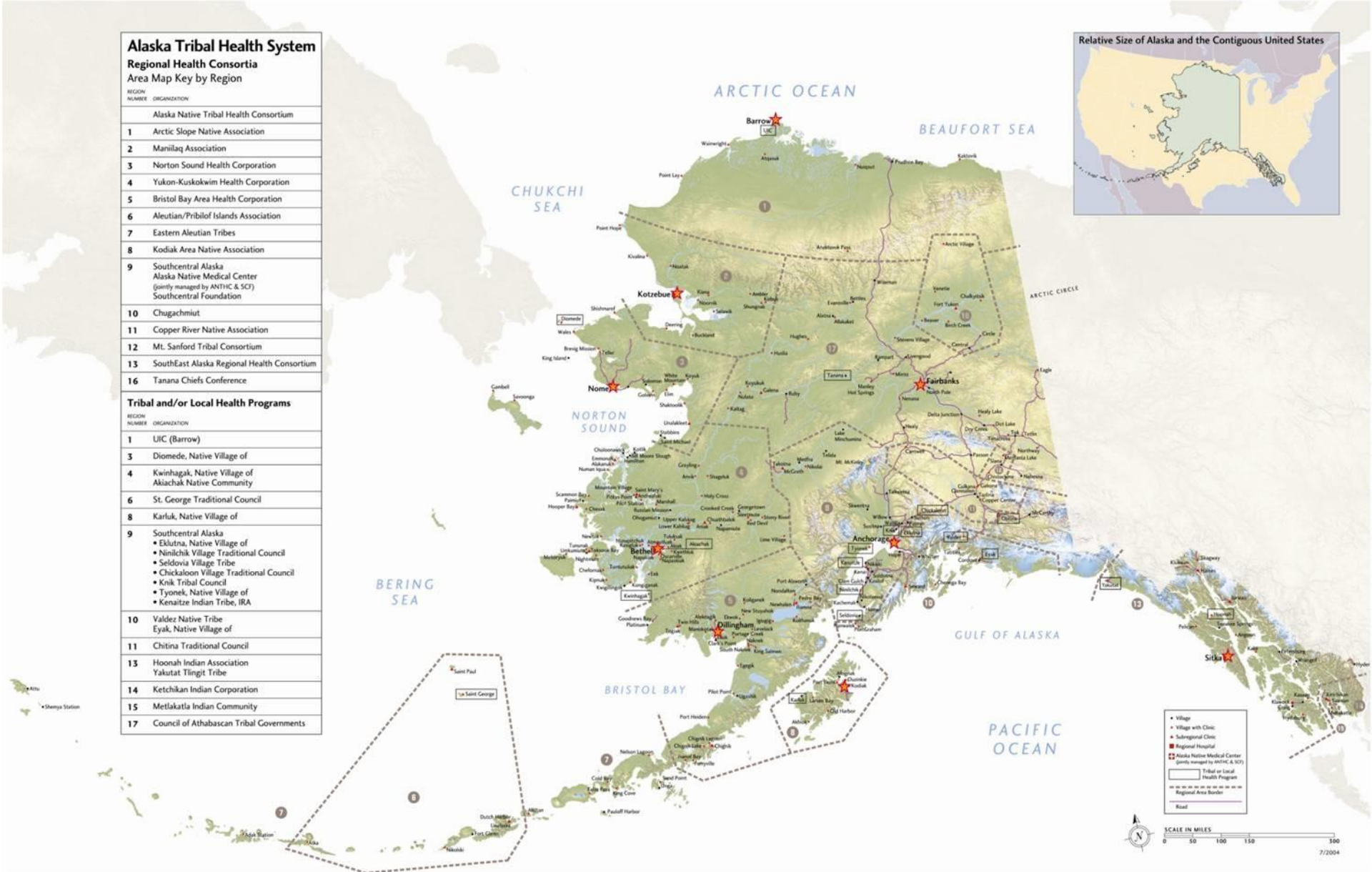
Area Map Key by Region

REGION NUMBER	ORGANIZATION
	Alaska Native Tribal Health Consortium
1	Arctic Slope Native Association
2	Manilaq Association
3	Norton Sound Health Corporation
4	Yukon-Kuskokwim Health Corporation
5	Bristol Bay Area Health Corporation
6	Aleutian/Pribilof Islands Association
7	Eastern Aleutian Tribes
8	Kodiak Area Native Association
9	Southcentral Alaska Alaska Native Medical Center (jointly managed by ANTHC & SCR) Southcentral Foundation
10	Chugachmiut
11	Copper River Native Association
12	Mt. Sanford Tribal Consortium
13	SouthEast Alaska Regional Health Consortium
16	Tanana Chiefs Conference

Tribal and/or Local Health Programs

REGION NUMBER	ORGANIZATION
1	UIC (Barrow)
3	Diomed, Native Village of
4	Kwinhagak, Native Village of Akiachak Native Community
6	St. George Traditional Council
8	Karluk, Native Village of
9	Southcentral Alaska • Eklutna, Native Village of • Niniichik Village Traditional Council • Seldovia Village Tribe • Chickaloon Village Traditional Council • Knik Tribal Council • Tyonek, Native Village of • Kenaitze Indian Tribe, IRA
10	Valdez Native Tribe Eyak, Native Village of
11	Chitina Traditional Council
13	Hoonah Indian Association Yakutat Tlingit Tribe
14	Ketchikan Indian Corporation
15	Metlakatla Indian Community
17	Council of Athabaskan Tribal Governments

Relative Size of Alaska and the Contiguous United States



- Village
- Village with Clinic
- Subregional Clinic
- Regional Hospital
- Alaska Native Medical Center (jointly managed by ANTHC & SCR)
- Tribal or Local Health Program
- Regional Area Border
- Road

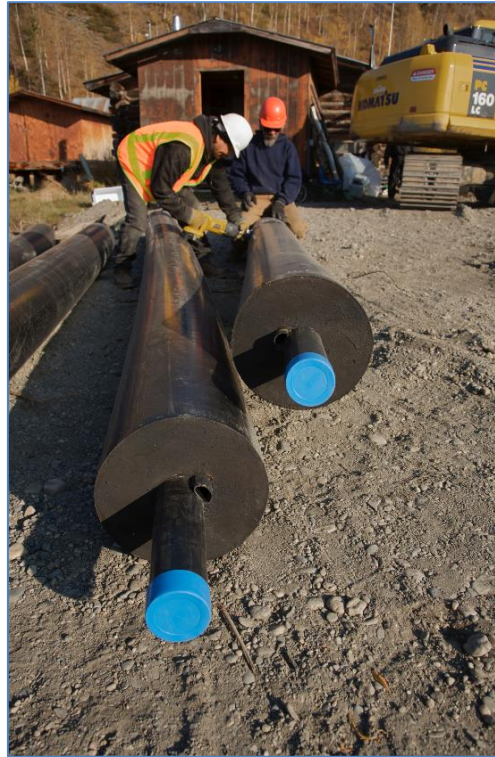


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Alaska Native Tribal Health Consortium



Alaska Native
Medical Center



Environmental Health
and Engineering



Community Health
Services



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**OUR VISION: Alaska Native
people are the healthiest
people in the world.**



Welcome to the Real World!

- From engineering school to Public Works Director, City of Dillingham, Alaska.
- Balance water utility budget without rate increase.
- Collecting from non-paying customers =
 - Balanced budget, no rate increase, and....
 - Social and political uproar
- Must proactively connect with customers and community leaders
 - No engineering guidance on this topic



Project Meq-Egtaq ("Nice Water" – Yupik)

Provision of infrastructure
complemented with education
activities to have greatest impact



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Promotion Program

- Formative research informed program design.
- Developed to improve uptake of modern water services for human consumption and hygiene practices.
- Individual and community-level interventions.
- Key messages:
 - Chlorine safety and reasons for use.
 - Strategies to minimize chlorine taste.
 - Free and liberal use of treated.



Results

- Significant increases in drinking treated water.
- Average daily per capita water use increased from a level of “very high health concern” to one of “very low health concern” at project’s end.
 - 1 gpcd to 25.3 gpcd



Project Meq-Egtaq



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National Tribal Water Center

Mission: to serve as a culturally appropriate resource to maximize the health and wellbeing of AIAN people through water and sanitation.

Background: established to fill gaps in the traditional IHS service delivery model; complement and enhance existing services, not replace



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NTWC



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Example Projects

- “Our Water” Toolkit
 - Resources for education and action planning; aims to connect and support tribes in their efforts to ensure sustainable access to safe water and maximize the benefits of healthy water practices.
 - Draft to be completed September 30th.
- Water Is Life
 - Education and awareness campaign that aims to increase community pride in ownership of water and sanitation systems.
 - Pilot stage – has had positive results (Russian Mission, red to black)
- Project Coyote Water
 - Identification of unregulated water use data and water-issues of greatest concern to tribes.
 - Report sent to Tribes in July; Will provide information to Tribes and agencies to guide future monitoring or funding opportunities.



NTWC



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Portable Alternative Sanitation System (PASS)

Pilot Project – Kivalina, AK
User Education



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Training Methods

- Onsite orientation.
 - Best trainer was onsite plumber!
- Comprehensive user manual.
- Training video.
- Regular check-in calls.



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Kivalina-Related Pics



PASS (PORTABLE ARCTIC SANITATION SYSTEM)

MANUAL

..... VERSION 2015



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Cold Climate Housing and Research Center,
LifeWater Engineering Company, CampWater Industries LLC.,
and the National Tribal Water Center.



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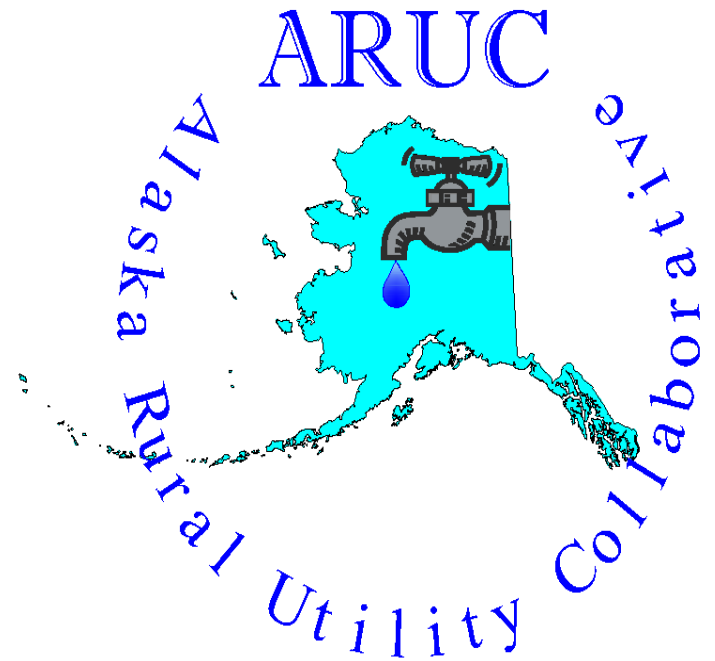
Lessons Learned

- Onsite training is the most valuable.
 - When asked what could be improved for training, one person said, “Nothing really. [You are] doing good about flying out here. You're not somewhere in your office.”
 - Another said that they had no problems or concerns, they felt “indoctrinated” by the time the trainers left.
- Training needs to be mandatory for residents.
- Simple is best.
- Repetition and follow-up are key.
- Connect community members.
- Good training requires good investment.



Alaska Rural Utility Collaborative

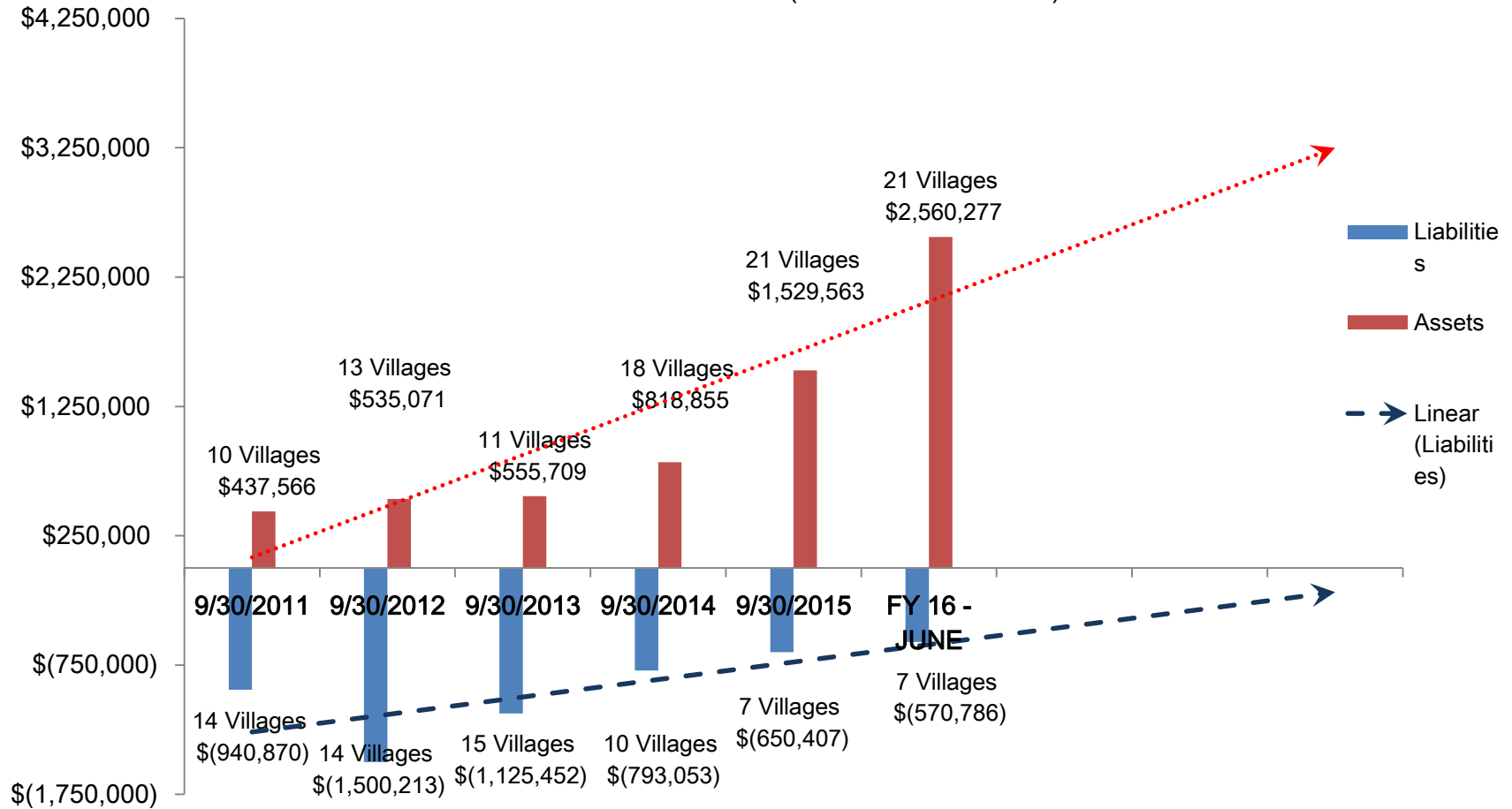
- Began managing ARUC in 2008.
- Full service management service
- 27 member communities
- Rates rise & fall with expenses independently in each community.
- Dillingham experience valuable



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Result of Connecting with Customers: Improved Financial Sustainability

ARUC PROGRAM COMBINED ASSETS (LOCAL RESERVES) AND LIABILITIES



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Disciplines for Successful Utility Design:

- Civil engineering
- Mechanical engineering
- Electrical engineering
- Structural engineering



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Disciplines for Sustainable Utility Design:

- Civil engineering
- Mechanical engineering
- Electrical engineering
- Structural engineering
- **Social engineering**



If it is worth building, it is worth building to last.



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Thank You!



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