Who We Are

MISSION: to serve as a resource to maximize the health and wellbeing of American Indian and Alaska Native people through water and sanitation.

BACKGROUND: established within the Alaska Native Tribal Health Consortium to fill gaps in the traditional water service delivery model; complement and enhance existing services in Alaska and nationwide.
Unregulated Drinking Water  

Education and Outreach  

Engineering and Evaluation
Unregulated Drinking Water

Project Coyote Water

• The Issue
  • Unregulated water sources (UWS) present a potential public health risk to Tribal communities

• The Goal
  • Develop and organize data, information, and knowledge about the current monitoring status, conditions, and use of UWS on Tribal lands

• The Tool
  • Short survey.
  • How many households on Tribal lands rely on unregulated water sources
  • Tribal water quality concerns
  • Tribal private well testing practices

• The Process
  • Convenience sample. Primarily in-person interviews with IHS representatives and tribal environmental workers.
Unregulated Drinking Water

Project Coyote Water - Results

• 95% of participants reported some use of unregulated water for drinking and/or household activities in their Area

• Most commonly consumed sources:
  • Private well water (95%)
  • Water from springs (36%)
  • Surface water (33%)

• Motivations for unregulated water source consumption:
  • Trust or perception of the water quality (57%)
  • Cost (35%)
  • Culture or tradition (35%)
  *multiple answers possible
Project Coyote Water - Results

• 59% reported that communities are “concerned” or “very concerned” about water contamination

• The most commonly identified contaminants include:
  • Bacteria (75%)
  • Natural pollution (66%)
  • Nitrates (66%)
  • Arsenic (61%)
  • Sediment (59%).

Unregulated Drinking Water

Manuscript is currently being prepared for submittal and publication.
Unregulated Drinking Water

Water Monitoring Projects

• Assist communities with identifying specific drinking water quality concerns
• Assist in developing sampling strategy
• Create educational materials
• Assist with write-ups, developing and editing deliverables
• Currently accepting community project proposals for FY19
**WATER is Life** is a collaborative outreach program that centers local culture in the quest to improve sustainable access to safe water.

The program creates an avenue for engaging community members in the conversation on water through art, education and cultural celebration.
Water is Life Project Objectives

- Increase knowledge and behavior that optimizes health benefits of clean water use.
- Improve sustainability of safe, healthy, local drinking water sources (ex: increased customer satisfaction, improved financial planning and/or billing, education and outreach regarding unregulated drinking water sources).
- Preserve and share local water cultural knowledge.
Target Audience

Customers, Water Utilities and Local Leadership in communities who have self-identified a need or desire to improve some component of water system management, operation, access or use.
Overview of Program

Water is Life Program Flow Chart

1. Starts With: A desire to improve something about local water use/quality/access
2. Writing a project proposal, using it to pursue project funding.
3. Identifying key project partners: Lead, Comm. Coordinator, Utility Rep., Artists, etc.
4. Prep work, behind the scenes magic, logistics!

With community support, artists create representation of local water culture.

As artists work, Water Week cultural and educational activities occur.

- Visioning meeting
- Water BINGO
- Elder/Youth Collaboration (video, play, storytelling event, etc.)
- Kid art
- Financial assessment/planning with utility
- Community cultural celebration

Engaged community, concrete plans for next steps
Effective outreach and education starts with community participation.

**Community Approach**

Effective outreach and education starts with community participation.
Community members share thoughts, ideas, stories, photos and visions representing their connection to water. The lead artist uses this input to create a visual representation of local water culture in the form of large scale public art.
Water is Life
Water Week Activities

Tuesday, June 27
- Water Storytelling and Youth Art Project, 1-3 p.m., Boys & Girls Club
- Water Storytelling, for all ages, 6-7:30 p.m., Dull Knife Lawn
- Screen Printing Water is Life T-Shirts, featuring the design shown on this flier. Bring your own T-shirt or fabric to have printed on, 5-7 p.m., Dull Knife Lawn

Wednesday, June 28
- Youth Mural Painting, youth ages 8 years and under, 1-3 p.m., Boys & Girls Club
- Storytelling and Symbolism, create a T-shirt with Tony Prairiebear, for all ages, 1-5 p.m., NCT DEPNR Conference Room
- Spring Clean Up, for 18 and up, 6-7:30 p.m., meet at Dull Knife Lawn

Thursday, June 29
- Youth Mural Painting, youth ages 13 years and up, 10-11:30 a.m., Boys & Girls Club
- Youth Mural Painting, youth ages 9-12 year olds, 1-3 p.m., Boys & Girls Club
- Water source and facility tour, for all ages, 3-4 p.m., NCUC Building

Friday, June 30
- Water Walk, walk to the water tank for the official reveal of the mural, 10-11 a.m., meet at Tribal Office Parking Lot
- Water Culture Celebration and Cookout, 12-1:30 p.m., Tribal Office
- Screen Printing Water is Life T-Shirts, featuring the design shown on this flier. Bring your own T-shirt or fabric to have printed on, 12-1:30 p.m., Tribal Office
With community members as support staff, a professional native artist creates a large scale public artwork representing the community’s vision of their water culture. The Mural is a continual reminder of our great heritage, our connection to water and a source of community pride.
Public Art Project Ft. Belknap

By Andrew Morrison, Brad Shields and Shawn Bell

“I do believe water is life and thru every ones efforts in recognizing a problem and coming up with a solution. It’s been reinvigorating for all of us who are the Fort Belknap Indian Community.”

Mark L. Azure, President
Fort Belknap Community Council
Public Art Project Russian Mission – “A River Flow Through Us” By Linda Infinite Lyons
Public Art Project Deering Alaska
By Andrew Morrison, James Temte, and Bailey Gamble
Public Art Project Lame Deer MT – “Water Protector”
By Bunky Echo-Hawk, James Temte, Javen Looks Behind and Silver Little Eagle
Youth Art Project

Young people work alongside professional artists to create their own representations of local water culture. This gets youth involved in the conversation and opens up opportunity for water and culture-centered education.
Youth Art Project
Russian Mission AK
Youth Art Project
Deering AK
Youth Art Project
Lame Deer MT
Water is Life Project - Fort Belknap

Water Treatment Plant Open House and Dedication

Wednesday, August 12th, 2015 @ 1:00 p.m.
Fort Belknap Water Treatment Plant

OPEN TO PUBLIC!

The National Tribal Water Center invites you to the Ft. Belknap Water Treatment Plant open house and dedication. We will celebrate Fort Belknap's water culture, the traditional values and beliefs surrounding this precious resource. Following the dedication we will be giving tours of the water treatment plant.

Please call James Temte at the National Tribal Water Center (907-729-3600) with any questions.

Celebrate Water
Through the efforts of the Water is Life project and the City of Russian Mission, the Russian Mission’s water and sewer finances are no longer operating at a deficit, and now have a spare parts reserves account balance for the first time since being in the ARUC program. In September 2015, the City of Russian Mission had a negative balance of -$44,084. As of June 30, 2017, their water and sewer net income (revenue minus expenses) had a positive balance of $130,047. Additionally, the City of Russian Mission voted to have $50,000 of sales tax revenue applied as a water and sewer subsidy for residential water and sewer rates to be decreased to $60 a month. This is the lowest rate out of all of the ARUC communities.
Through the efforts of the Water is Life project and the City of Deering, the Deering sewer finances are decreasing debt. In a pre and post assessment the level of satisfaction the community has with their sewage service has rose from 8% to 46%.

"Feeling very proud. This mural that was painted on the water tank in Deering is from a photo of my gramma that my cousin took. They did a beautiful job on the mural! Its great to see art on big spaces."

- Carmen Aqimayuk Sears, Deering community member
Water is Life
Next Steps 2018

• Curriculum currently being reviewed by CDC HSB
• Pilot and evaluate complete curriculum
• Refine and publish curriculum online
• Offer technical support to communities
Engineering and Evaluation
Portable Alternative Sanitation System (PASS)

1. Rain catchment
2. Water storage tank
3. Low-flow sink & waterless urinal
4. Greywater tank
5. Integrated ventilation
6. Separating toilet
7. Water treatment system
Engineering and Evaluation

PASS Pilot Study

In this project, we combine epidemiologic and ethnographic methods to evaluate the impact of the PASS on health and wellbeing, based on both biomedical (Western) health indicator categories and on a holistic (Indigenous) conceptualization of health.

In this evaluation, we will:

1. Investigate the biomedical health outcomes associated with the PASS systems
2. Investigate the effects of the PASS on overall wellbeing, based on self-reported household data
3. Document the sources, consumption rates, and uses of water (both treated and untreated) within the home
4. Examine household experiences using the system, including the effectiveness of education and outreach material and methods developed to maximize the health benefits of the PASS
Engineering and Evaluation
PASS Pilot Study
Long Term Goals

The findings of this study will be used to:

- evaluate the effects of the PASS system on household health
- refine the PASS system design and associated educational materials
- secure funding for the installation of additional systems in order to move households closer to water security, including unserved homes in communities with piped systems.
Engineering and Evaluation

PASS Next Steps

• Conduct a second phase of the pilot with 20 additional units
• Research on how much water is necessary in the home and what can be centrally provided in communities to ensure a low health risk for residents
• Offer modular systems to tailor unit configurations and features to household needs
• Set up local infrastructure for troubleshooting and repairs