



YRITWC



VOLUME 24 ISSUE 1

# E-Currents

One People - One River





### Executive Directors Letter

Happy Summer Watershed!  
We hope that everyone had a safe spring breakup, and we are excited to tell you what we've been up to these past months. Recently I attended a National (Climate) Adaptation Forum and a FEMA Tribal Gathering conference which covered Tribal Hazard Mitigation planning. If tribes have a hazard mitigation plan, they can declare Emergency disasters. This provides opportunities for tribes to public and individual assistance to address disasters in there and seek out other funding opportunities. YRITWC will be surveying to see how many of our members have these plans or need to update their plans. The information gathered will be used to obtain future funding to provide technical assistance to member tribes. For upcoming project. The Environmental Protection Agency has a competitive Community Change funding opportunity available in which YRITWC have started the process to seek out and will be reaching out to few of our members tribes that qualify to work an application for. If you feel you may qualify or want additional information, please reach out to us so that we can determine that this will be a fit for your community. As always, Our doors, phonedlines and emails are always open to visits, calls or contacts, please visit, call or email us. We love to hear from you.

# Table of Contents

- I. TAT Training Announcement 2

---

- II. Plant Operator Training Flyer 3

---

- III. Brownfields TRP 4

---

- IV. Brownfields Community Wide 5

---

- V. IGAP Assistant Update 6

---

- VI. Science General Updates 7

---

- VII. Science Update Cont. 8

---

- VIII. Science Update Cont. 9

---

- IX. Science BIA Youth 10

---

- X. Executive Board 11

---

- XI. Ambler Road 12

---

- XII. Staff Directory 13

---

- XIII. Youth Activity Sheet 14

---

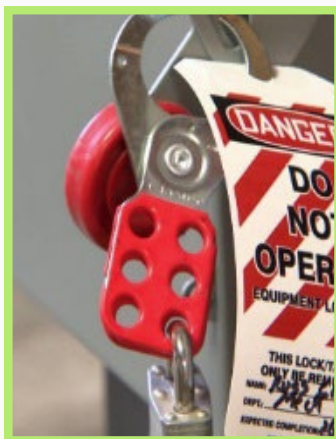
# TAT

Upcoming Training  
By Janet Angaiak

2

## Water / Wastewater Utility Plant Operator Safety Certification

Hi, my name is Janet Angaiak, and I am the TAT Coordinator. I am currently needing 5 more Water Plant Operators to register for the upcoming Safety Training set for July and we have Training USA from Florida come up to host the training. And I was working on a Model Ordinance for Source Water Protection that is currently being edited. I am excited for the Safety Training, and I hope to get more Water Plant Operators to register. This training is a great opportunity to stay certified for free and will help increase your best practice (BP) score. On a side note I will be sending out Prescription Drug take back initiative booklets to all our signatory tribes.



# Water / Wastewater Utility Plant Operator Safety Certification

July 16–18, 2024

Anchorage/Fairbanks

**Target Audience:** This three-day training course is specifically for water utility employees and covers Lockout Tagout, Permit-Required Confined Space Entry, Fall Prevention, and Basic Electrical and Hazardous Chemical safety elements. The course also includes Storm & Flood Water Fundamentals & Inspection.

Water / wastewater utility employees should attend to sharpen safety awareness and hone maintenance skills. This course is taught through a series of half-day modules, with each section providing opportunities for group discussion around practical examples and real-world scenarios.

**The course is also recommended for** emergency backup personnel who may be called on in special circumstances such as after a natural disaster or any other reason where typical staff are not available or need extra support. Other recommended participants are crew leaders, division supervisors, agency safety officers, department safety coordinators, general safety trainers and/or risk management personnel.

**All graduates will receive** a certificate of completion, a take-home packet with applicable checklists and safety guidelines, and 12 months of technical support via phone and/or Zoom video conferencing on any water or wastewater utility safety-related matter.

Please email Janet Angaiak at [jangaiak@yritwc.org](mailto:jangaiak@yritwc.org) or call (907)258-3337 for a registration form!



# Brownfields

Tribal Response Program  
By Benjamin Brandeberry

4

## Tribal Response Program Updates

Happy Spring Watershed!

We have been very busy over here at the Brownfields Department. From building staff capacity, conducting site specific work, and pursuing environmental justice funding, this winter has been a busy one. Here's what we have been able to get accomplished these last couple months. YRITWC brownfields have applied for 3 DBAC applications in St. Marys, Grayling, and Russian mission, applied and awarded a TBA for Chevak, and submitted eligibility for a Phase I this summer in Scammon Bay. The Brownfields team is always willing and wanting to learn more in order to do our best to help clean up our communities. Here are some staff capacity activities we have partaken in: STRP Workshop, ANCSA workshop, ADEC solid waste bootcamp, and Backhaul and HazMat regulations training. YRITWC also just hosted a Qualified Environmental Sampler training in Anchorage for TETs, others within the Yukon River Watershed, and YRITWC Staff. If you or any one from your community is interested in trainings like this please reach out so we can do more!

## Summer Travel

YRITWC Brownfields is ramping up for a busy summer. Currently we have 13 village trips planned and have assessments being conducted in 5 difference communities. If you need help conducting an inventory of your brownfield sites, or would like us to visit your village please reach out to Ben or Jordan at (907) 258 3337 or bbrandeberry@yritwc.org or jfinney@yritwc.org. Thank you and we wish everyone gets to have plenty of time in the sun this summer!



# Brownfields

Community Wide Assessment  
By Anna Godduhn

5

## Action Planning

Brownfield Action Planning is underway! All four brownfield planning communities had scheduled assessments last year and YRITWC has received and shared the technical reports. Huslia and Alakanuk hosted planning meetings this spring where we talked about the findings in the report and community visions for reuse; we also planned next steps toward final (Phase II) assessment and finding funding for clean-up. Meanwhile, Russian Mission requested Capital Budget funding for a new city building, and Grayling hopes to finally get their old gas tanks pulled out of the ground this summer to fully assess the situation. We'll be working with each community to complete their action plan this summer.



### **We can help with federal or state services**

If you are looking for help assessing or even cleaning up a brownfield, and we are already full for assessments, YRITWC can also help you put your application together for the State of Alaska's DBAC program or the EPA's TBA.

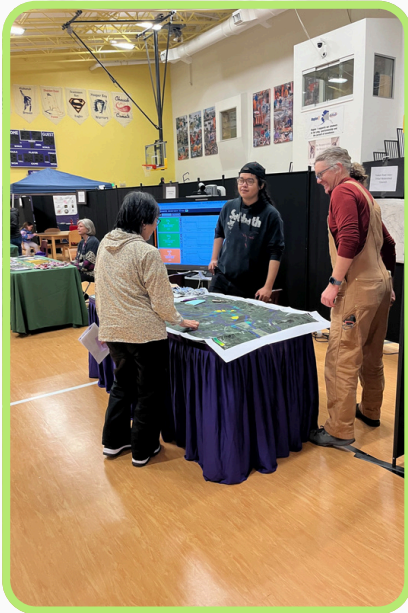
# IGAP

Assistant Update

By Theodore Hamilton Jr

6

## Current and Upcoming Plans



Hello Watershed, this is Theo here, quite a bit has happened since the last newsletter. I have been very busy learning and working on water quality testing under our Head of Science, Edda Mutter. The main water quality testing I have been learning has been about turbidity and alkalinity testing. I also hosted my first webinar about solid waste, and currently have working on another focusing on plastics. I have also been able to attend a handful of both in-person and virtual trainings where I was able to build my own capabilities and connect with people all across the watershed and Alaska

## Alakanuk's 2nd Annual Job Fair

This year was Alakanuks Second Annual Job Fair. This a great way for students and community members alike to connect with potential employers and maybe find a job. Edda and I were happy to travel to Alakanuk to advertise for YRITWC and share what we do. First we and other vendors introduced ourselves to the Students there and then, for the next 2 days, we held a booth at the job fair, the first day for the community then the next for the students. I would like to thank the Alakanuk School for inviting us and paying for my airfare and food.





# Science

General Updates  
By Edda Mutter

7

## Science Update

It has been a busy spring with attending conferences and workshops such as the Forum of the Environment, Alaska Conference on Environment Management, the State Wide Watershed Workshop, the Navigating the New Arctic Community, Alaska Chapter of American Water Resources Association, and lastly RTOC Tribal Environmental Leaders Summit. At all these conferences, I had the opportunity and great pleasure to present on the Indigenous Observation Network and to highlight your incredible work on taking action with environmental monitoring to steward our waters. Besides, presenting and networking, I have been hosting virtual water quality training and data management sessions and preparing project reports. In particular, for our Bureau Indian Affairs funded project titled "Creating a Climate Change Adaptation and Action Plan for the Yukon River Watershed" I am hoping we can provide essential information for your local climate adaptation planning efforts.

This report summarizes several components such as: Traditional Ecological Knowledge to provide a historical timeframe of environmental changes; generated regional climate projections from data available through the University of Alaska SNAP to present context for current and projected impacts to water resources; spatial and temporal water quality trend analysis using the Indigenous Observation Network data records to assess current and past water quality conditions; and all the findings generated from regional workshops (Yupik, Athabascan, Koyukon and Gwich'in region) that have been hosted by the science team last year.

Thanks to all the participant insights, I was able to identify common themes of water threats, priorities and strategies to either mitigate, preserve or conserve in order to address water vulnerability. I am in the process to finalize the first report draft and will send it out for your feedback and recommendations next month.



# Science Update Cont.

By Edda Mutter

8

We also made great progress with our River Erosion project. The California Institute of Technology (Caltech) PhD student Emily Geyman has developed a methodology to measure bank erosion from satellite imagery for our Alakanuk, Beaver and Huslia partnering communities. Currently, she is also comparing the satellite observations with data collected in the field (including data about the presence or absence of permafrost along the riverbank, the composition of the riverbank material (e.g., gravel vs. mud), and the temperature and flow speed of the river) in order to build better physical models for riverbank erosion. Emily's amazing work is illustrated in the picture to the right.



Joshua Anadu is also Caltech PhD student is developing a model to predict river emissions of carbon dioxide and methane, which involves synthesizing numerous physical, chemical, and biological data products. In order to predict emissions, we will need to understand organic carbon inputs (from bank erosion, groundwater, and in-river biological production), biological carbon oxidation in the river, and river chemistry shifts in the inorganic carbon cycle. Taken an integrated physical, chemical, and biological he hopes to predict the river's role in the carbon cycle. Along with Caltech Research Scientist Dr. John Magyar, Joshua has been collecting methane and carbon dioxide flux data along the Yukon and Koyukuk rivers, along with associated microbial, soil, and water samples, to inform the development of these models.

# Science Update Cont.

By Edda Mutter

9

Isabel Smith a University of Southern California PhD student is studying how mercury from permafrost banks is potentially impacting water quality. She recently analyzed over 400 sediment samples for total mercury and wrote a mercury stock paper looking at how river migration and erosion rates changes the amount of mercury that is being released. She is currently working to finish analyzing water samples collected during 2022 and 2023 for total mercury and methylmercury to understand how mercury from these sediments is being transferred to the rivers and how it may affect the fish that live in the rivers and the people who drink the water



The preliminary project results have been presented to the Alakanuk, Huslia, and Beaver Tribal members and the project team (the University of Anchorage, the University of Southern California, and the California Institute of Technology) this spring and we are working closely with the Tribal Erosion Advisory group to ensure project results are addressing communities needs.

Lastly, we are gearing up again for another Indigenous Observation Network water monitoring season and excited to host two summer interns funded by Alaska Conservation Foundation, Deagan Carey and Anna Lee Bishop, funded by the Institute for Tribal Environmental Professional

## BIA Youth Integrated Environmental Educational Booklets

The YRITWC Science Department is working on two youth activity booklets that will each become a pair of booklets. We are drafting two booklets, one for “youngers” and one for “olders.” Soon, we hope teachers will take them over – to add Native language, knowledge, and thinking to make an Athabaskan pair and a Yupik pair of engaging and educational booklets for independent kiddos across the Yukon River Watershed. The first book is about water and watersheds – how water works and why it is so amazing and important. The second book is about weather and ecology, including seasons and change over time. The self-guided booklets (will) have coloring pages, word games, and activities. Many of the activities will focus on “ask an elder” or “follow an elder” to prompt and support intergenerational conversations about the natural world and the seasonal rounds of life. If you are interested in helping to bring real life to these booklets, please contact Anna at [agodduhn@yritwc.org](mailto:agodduhn@yritwc.org)!

Water pushes and carries rocks of all sizes

**boulders, cobbles, gravel, sand, silt**

### There are rules:

Water moves fastest over steep ground:  
fast water bashes rocks against each other;  
fast water carries a *lot* of mud.

Water moves smaller rocks farther:  
boulders get pushed very slowly;  
gravel gets lifted and pushed;  
silt can get carried for miles.

The Yukon River carries glacial silt (flour)  
*thousands of miles,*  
and that's what makes the water grey.



Ask an Elder: how are cutbanks and point bars related??



# Executive Board

By Theresa Clark

11

## Executive Board Retreat

To follow up the 2023 YRITWC summit held in Nenana last July, the board took the information provided by the tribes' attendees and participants in subject (climate change, development and mining in our watershed, food security and sovereignty, water policy and rights, and youth) and regional breakouts and completed and updated a strategic plan for the organization. A complete report will be submitted to the member tribes in the near future.



These photos do not include all YRITWC board members



# Ambler Road

By Theresa Clark

12

## Ambler Road



The Bureau of Land Management recently made the determination in its Ambler Road Supplemental Environmental Impact Statement process to select the "No Action: alternative for this road. Within the next two months, it made the Record of Decision to this determination. Back in 2019, a resolution to support the No Action alternative was brought before YRITWC to support this alternative. The public comment period for this recommendation closed in December 2024. A big thank you to YRITWC Executive Committee member Kathleen Peters Zuray (pictured above) who testified at BLM's public hearing in Fairbanks in December. As Executive Director, I also provided both public and written testimony to encourage BLM to select the No Action alternative. In addition to this process, BLM opened public participation process for "opening D-1 lands to development." As ANCSA corporations and the State of Alaska has selected and received 95% of its entitlements from the federal government, it wanted to hear from the public to open of over 29 million acres of its land to development. I have also provided public and written testimony, to keep these lands closed to development as one EIS process for five different areas of these 29 million acres is not sufficient and should be completed on an individual basis for opening up development.

## Board Members

### **Yukon Flats:**

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### **Upcoming Holidays:**

Memorial Day :May 27th  
Juneteeth: June 19th  
Independence Day: July 4th

## Staff Directory

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Blooming  
Flood  
Flowers  
Forget Me Not

Fortitude  
May  
Wilderness  
Melting

Ice Breakup  
Nature  
Spring  
Watershed

