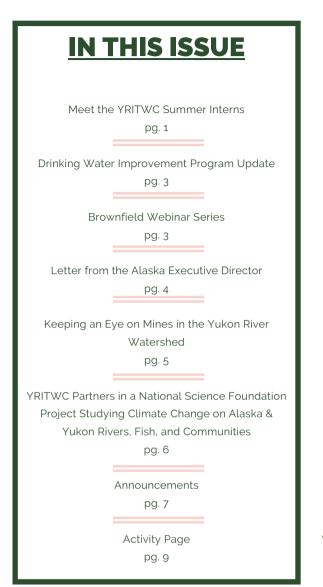


# **E-CURRENTS**

Summer | June 2020 | Issue 20 | Volume 4





## Have News to Share?

If you have an announcement, newsworthy story, or would just like to update everyone on your recent projects, please consider submitting content to our next newsletter! If interested, please contact Tasha Mockta at (907)258-3337 or by email tmockta@yritwc.org

## COVID-19 TIPS FROM CDC How to Protect Yourself & Others

Information Gathered from the CDC Website

#### Know How it Spreads



#### Everyone Should: Wash Hands Often

Avoid Close Contact Cover Your Mouth and Nose with Cloth Face Cover when Around Others Cover Coughs and Sneezes Clean and Disinfect Monitor Your Health



https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/prevention.html

# WELCOME OUR SUMMER INTERNS

My name is Temyka Qerrataralria Ayuluk. I'm from Chefornak, a rural village located along the west-coast of Alaska. I'm currently attending University of Alaska Anchorage majoring in mechanical engineering with an expected graduation date in fall 2022. I interned with the United States Geological Survey and Southcentral Foundation for the first two years of my schooling. I then worked with the Alaska Native Science and Engineering Program as a Youth Peer Mentor from 2018 - 2019. During the school year of 2018-2019 I was part of an all-girls rocketry group where we attended the The Space Grant Midwest High-Power "Efficient Supersonic" Rocket Competition in Minneapolis, Minnesota. This past semester I was part of the robotics club at UAA. Next year we will be attending the University Rover Challenge. I am excited to intern with the Yukon River Inter-Tribal Watershed Council in the Science and Drinking Water Improvement Program (DWIP) department - with the help of ANSEP - to learn more about my indigenous peoples' land and how it is rapidly changing where I then can apply the gained knowledge when I jumpstart my career. I look forward to working with communities within the watershed!

# TEMYKA AYULUK



# ELIZA PERKINS



Hi everyone, my name is Eliza Perkins and I'm from Monterey, California. I'm so excited to contribute to the work performed by all of the staff at Yukon River Inter-Tribal WatershedCouncil this summer as the Science Intern with the Alaska Conservation Foundation. I recently graduated from Vassar College and hold a degree in Earth Science and Geography with minors in Sustainability and German studies. I've conducted geologic and hydrologic field research in the Hudson Valley and in the Adirondacks in New York as well as in Death Valley and Owens Valley in California.

My interest in Alaska was borne between by junior and senior years in college, when I worked on the Alaska Center's Pebble Mine campaign doing canvassing and policy research, and it has been sustained since then throughout my last academic year in college when I wrote my thesis on the intersection of land rights, ecosystem health, and environmental governance in Alaska. I'm looking forward to refining my data analysis, environmental entry, and scientific writing skills during my time here and to working with the YRITWC team to help the organization reach its immediate and long term goals - both in and out of the office! I live in Eagle River and enjoy hiking, biking, and gardening in my free time. Looking forward to a great summer!

# ELISE LOWE



Hi, my name is Elise Lowe. I was born and raised in Anchorage, Alaska (traditionally Dena'ina land) and I am an Alaska Conservation Foundation summer intern for the Yukon River Inter-Tribal Watershed Council. During the school year, I attend the University of Hawai'i at Mānoa where I am studying political science and psychology. During my free time I enjoy hiking, biking, holding my two adorable rabbits, and making jewelry out of broken shells and shards of sea glass. I am unsure as to what the future holds, but I hope to continue to be involved in conservation-based work and will strive to do my share for the environment. I look forward to working with and learning from everyone at the YRITWC this summer and being a part of what I can already tell is a place overflowing with kindness and compassion.

## From the Drinking Water Improvement Program (DWIP) Department

by Thomas and Katherine Brower

This 3rd quarter has been tough for everyone in the world due to the Corona Virus/ Covid-19 disease. The Nation locked international travel, in Alaska most or all the villages got into lockdown /block out any community members and outsiders to travel in or out of the village unless it is essential due to the historical knowledge of the Great Flu and TB that killed off most communities.

The Drinking Water Improvement Program got aluminum signs for villages within the Yukon River Watershed, "This River is our home, help keep it clean." Those signs were translated into Yup'ik, Koyukun, Athabascan, and Gwich'in languages. These posters are to be hung up on riverbank boat launch areas or other prominent public places so that people arriving and leaving can see the messages. If you would like to have YRITWC mail out your community's signs please let us know and they will be sent out, otherwise, there are some communities that if staff are entering or going near that community they will be dropped off.

Medicine Take-Back program: Boxes are being ordered and waiting to be received. They will be sent out to the villages with a few posters to be posted in the clinic and other public notice bulletin boards.

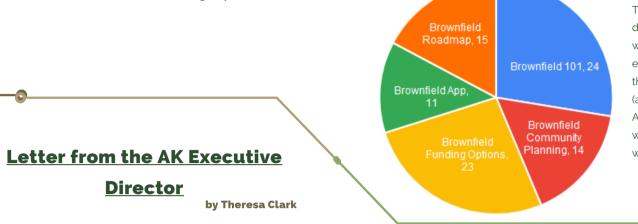
There were \$3,500 Wastewater Enhancement mini-grants available, so far only four communities have applied and received them. If your village lagoon needs help like cutting brush around it, other maintenance unmet needs please apply. Most community's landfills and sewage lagoons are owned by the municipality. That is fine, the Tribe or the village can apply for the mini-grant.

## The Brownfield Webinar Series

by Birgit Hagedorn and Tasha Mockta

At the beginning of May, the Brownfield department started a Webinar series with a specific theme every week. The webinars were repeated on Tuesdays and Thursdays to give everybody the chance to dial in and listen. At the end of these webinars, a discussion took place either via speaker or chat room. It was great to hear everybody's questions and experiences. The series kicked off with Brownfield 101, giving a brief introduction to what Brownfield sites are, how they can be identified, and how to enter them into the YRITWC's database. The second webinar was about community planning and making a resume plan for a site. This is a critical step on the Brownfield Roadmap because it influences the project from beginning to end. The third Webinar was about our Brownfield App, explaining how to use it on your phone. This App makes it easy to get new sites into our Database. The fourth Webinar was about funding options explaining different cleanup grants. The series finished with the Brownfield Roadmap. Below is a brief description of each webinar and what was discussed. The webinar series is available on the Yukon River Inter-Tribal Watershed Councils YouTube channel.

Everything that is happening with COVID-19, the Brownfield Staff, would like to keep you up-to-date with all that is going on. We will be having more series of webinars further down the line! We make posts on our Facebook page regarding the time, along with the information to join online! If you would like to stay in the loop, feel free to contact Tasha Mockta at tmockta@yritwc.org or Birgit Hagedorn at bhagedorn@yritwc.org to let her know that you would be interested in attending any of our webinars!



The pie chart shows the different Brownfield webinars, and the size of each pie piece indicates the number of attendees (also shown in numbers). A total of 87 listeners were documented in our webinar series.

As I sit down, here at my desk to write, I look back at the six months that I have been here at the Yukon River Inter-Tribal Watershed Council. I think about the river that I grew up on and the important work that the Council is doing to meet the mission of the organization of "being able to drink water directly from this river." The Watershed Council has an excellent staff that is dedicated to conducting science and data gathering, provide technical assistance with community drinking water and sewage lagoons, addressing contaminants along the river ad providing environmental education and trainings. Covid-19 has delayed a lot of the work and science that the Watershed conducts and provides. This pandemic has also shut down the major air service operator, which also affected not only travel to and from our communities but has also affected all residents and governments negatively. The current lack of salmon entering our rivers is also proving to have negative impacts. We continue to do our best in carrying out the work as best we can as I know the communities and residents are also doing so in their jobs as well. We will be asking our funders for no-cost extensions to complete our work as we also continue to submit grants proposals for future work. Some road travel is possible, and the staff has been on the road doing as much work as they possibly can. Staff are also conducting training and meetings utilizing "Zoom," which is proving to be the new way of conducting business meetings, trainings, and conferences. Thanks to those individuals who taken up this new way of doing business by attending our trainings and meetings we have been able to hold through this IT resource.

On a positive note, the Watershed collaborating with the Mayor and City of Nenana were able to clean up the remaining debris left by the Watershed on previous years' back haul projects. Watershed staff and Executive Council member Karen Kriska, Native Village of Nenana Tribal administrator Jessica Shaw and Council member Jeri Knabe and City of Nenana Mayor Josh Verhagen completed a final inspection June 1st to close out and end another chapter of work completed by the Watershed.

Watershed science department members Edda Mutter and Maryann Fidel and myself have been meeting with the Yukon River Fisheries Drainage Executive Director Serena Fitka and staff. We have committed to work together to gather information and missing and more data along the Yukon and its tributaries. We are seeking out financial resources to conduct additional research and data affecting salmon on our rivers.



May the rest of summer treat us well. Regards to all.

## **Update from an Intern!**

#### by Temyka Ayuluk

I started working for YRITWC in May of 2020. I've learned about the importance of brownfield and how to assess and make a redevelopment plan to lessen the waste and toxins that may be excreting from the brownfield sites. I looked at the communities YRITWC has worked with in the past and who we are currently working with. I was impressed and stunned by the amount of brownfield sites there are in rural Alaska; impressed because of the progress the communities have made and stunned to find out how much of the land is being affected by the carelessness of miners, businessmen, and the general public. Though it's not an easy field to work in, in hindsight, it seems to be very rewarding to complete a project that helps not only the tribe/community but also the land and its fruits.



I also did some water and soil sampling to get an accurate reading of the elements the general public is exposed to, whether they are boating on the Yukon River and its tributaries or enjoying a day out on tundra floors. It's a thorough process, but one you can enjoy. You also work with scientists; a local is at the University of Alaska Fairbanks and an out of state stationed in Colorado.

My next project I'll be doing is setting up a weather station. I'm excited to get familiar with the sensors and to piece every part together by hand. I will get to know how each part works, what sets the sensors off, and how it will be placed in a community. It's a bit of an engineering project that I'm more than happy to work on!

This nonprofit organization may be small in numbers in its employees, but they have every desire to help and protect what the indigenous people live and thrive off: the importance of water that brings plenty of life, including its surrounding environment. I'm ecstatic to be working with these people; who include my seniors, supervisors, other interns, my fellow interns, IGAP coordinators, chiefs, and others within watershed who are working behind the scenes. I'm happy to have had the opportunity to be working here and I look forward to completing my internship.

\*classes are taught by Birgit (my instructor) and Edda. I worked with Maryann in the field to apply the lessons I've learned \*thanks to Edda who gave me the weather station project!

## Keeping an Eye on Mines in the Yukon River Watershed

#### by Maryann Fidel

Both the Federal Government and the State of Alaska are going to be lenient on polluters this summer season. This March, the EPA announced that it would be lenient on enforcement and fines for companies amid the COVID - 19 pandemic. The State of Alaska followed with their announcement, 'to let the regulated community know, to let Alaskan businesses know, that we are going to be lenient (on air and water quality enforcement),' said AK Department of Environmental Conservation (DEC), Commissioner. This summer DEC will rely mainly on self-reporting at mines. During this COVID-19 health crisis, we still need clean water and air for health and well-being, which is why YRITWC, with the support of the Lannan Foundation, is increasing water and soil testing at mining districts.

Last week Temyka and I traveled to the Circle Mining District. We took soil and water samples, and flew the drone to look for abandoned mining junk. We traveled the lovely Birch Creek by canoe. The results of these samples and pictures will be shared with DEC, and sample results will be posted on our Interactive Mining Map,

http://yritwc.maps.arcgis.com/apps/InteractiveFilter/index.html?appid=55a0f096da3345c9a0b1da0756e8a116. These efforts will help hold polluters accountable

We know that many miners are careful and clean operators, but if no one is watching, operators may be tempted to cut corners. Alaska Native Tribes of the Yukon River care about clean water and are actively involved in protecting it even when the regulatory system fails. Let your local miners know that we are out there testing the waters!

Left Picture: Abandoned drums at Portage Creek Mine, near Circle. Reclamation laws require the responsible party to clean these up.

Right Picture: Temyka with water samples at Birch Creek.



## <u>YRITWC partners in a National Science Foundation project studying</u> <u>climate change on Alaska and Yukon Rivers, Fish, and Communities</u>

#### by Nicole Herman-Mercer, Karen Cozzetto, and Keith Musselman

The Yukon River Inter-Tribal Watershed Council (YRITWC) is a key partner in a new National Science Foundation Navigating the New Arctic project, The climate impacts on Alaskan and Yukon rivers, fish, and communities as told through co-produced scenarios.

YRITWC worked with researchers to inform the overarching project question:

How will societally important fish habitat and river-ice transportation corridors along Arctic rivers be impacted by hydrologic response to climate change including permafrost degradation, transformed groundwater dynamics, shifts in streamflow, and altered river temperatures?

The project aims to answer this question by weaving together Indigenous knowledges, community monitoring, and climate, river, and fish modeling with the ultimate goal of improving our understanding of how Arctic rivers, fish, and Indigenous communities might be impacted by and adapt to climate change. Additional key goals include protecting Indigenous Knowledges throughout the project and ensuring the equitable co-production of knowledge. The five year project runs from Jan. 1, 2020 through Dec. 31, 2024.

#### Project partners and geographic scope

The lead organization for the project is the University of Colorado-Boulder (CU). In addition to YRITWC and CU, other partners include the National Center for Atmospheric Research, the U.S. Geological Survey, the Institute for Tribal Environmental Professionals, the University of Saskatchewan, and the University of Waterloo. The project is in the process of reviewing applications for an 11-member Native Advisory Council was formed will to help researchers evaluate input from the broader community and to make decisions about model design, output, and more. The Council will also lead the design of an Arctic Rivers Summit (more on this, below). The Council will consist of members of Alaska Native Tribes, Yukon First Nations, and tribal organizations who serve these communities. Climate data will be produced for the entire state of Alaska and the Yukon territory in Canada. River flow, river ice, and fish modeling data will be generated for the Yukon River watershed in Alaska and Canada and for the watersheds in Alaska north to the Arctic Ocean.

#### Some ways to participate

There are numbers of ways to learn about and/or become involved in the project

- Join the Arctic Rivers email listserv: Receive project updates, request input on project decisions, and learn about upcoming webinars and outreach events. To join please click on this link.
- Participate in engagement webinars: The project team will host 3-5 webinars per year to provide project updates and a space for people to provide input on modeling decisions, output, analysis and more. The first webinar was held on May 27th and was attended by more than 85 people. It introduced the project, provided an overview of ways to engage, and provided information on the Native Advisory Council structure and application process. A recording of the webinar is available at this link; Navigate to May 2020: Alaskan and Yukon Webinar Series.
- Join the Indigenous Observation Network: The Indigenous Observation Network is a community-based water quality monitoring network managed by YRITWC and the USGS. Please contact Edda Mutter at emutter@yritwc.org or 866-730-3337 to learn more.
- Participate in an Arctic Rivers Summit during Winter 2021-22: This two-day Summit is scheduled to take place in Anchorage will bring together Tribal and First Nation managers and knowledge holders, western science researchers, federal, state, and provincial agency representatives, non-profit groups, and others to exchange knowledge about the current and potential future states of Arctic rivers and fish and explore ways to adapt. Special attention will be paid to the protection of Indigenous Knowledges.
- Reach out: If you have ideas, input, and/or questions about the project, please email the Arctic Rivers project team at arcticrivers@colorado.edu or contact Karen at 928-523-6758.

---Thank you!

## <u>Announcements</u>

### Water Quality Training

July 6th from 9:00 -11:30 am (AKST), YRITWC will be hosting a Virtual Water Quality Training over Zoom. This training will cover water quality parameters and sampling protocol. Please contact Kari with any questions at kyoung@yritwc.org.Zoom

Access Link: https://zoom.us/j/97095962215 pwd=SVVNMmhXWmdWcHhzU2ZrVjh6MTk3QT09 Meeting ID: 970 9596 2215 Password: 546047

### Dates Staff will be Out of the Office

July 3rd - Independence day September 7th - Labor Day

## Science Update : ION is Up and Running!

#### by Edda Mutter



#### Hi,



I hope you are all doing well and are enjoying to being out on the river. I have to admit that it is nice to finally be out of the office again to take measurements and collect water quality samples. Over the past couple of weeks we also have been busy with sending out water quality equipment and supplies, hosting online water quality training sessions, and thanks to the Tanana Chief Councils, we successfully completed an in-person water quality training in Fairbanks the beginning of June. I am also very excited to inform you that with your support and help, we have already collected 64 water guality samples across the watershed this spring! This is great news as your monitoring efforts will help us to achieve a better understanding on how water quality is changing over the past years. We are all concerned about the water temperature and fish population; through the Indigenous Observation Network (ION) you can directly participate in taking water temperature measurements to study and protect your water resources. Please contact the Science Team if you are interested in joining ION. We are here and ready to assist you with any water quality sampling questions, concerns, or equipment support needs for this summer.









Find the words from the list below in the grid. Words may appear horizontally, vertically, or diagonally and may be forwards or backwards. Enjoy!

R	R	S	Т	Ι	F	V	Е	М	Т	R	Е	Ν	С	S
I	Е	В	R	Q	X	Ι	0	Х	Н	С	R	D	Т	J
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Т	Т	I	U	С	L	Н	E	K	K	E	S	R	Ι	W

## Word List: ALASKA, BASIN, HEADWATERS, INDIGENOUS, LIFE, MOUTH, RESOURCE, RIVER, STEWARDSHIP, TRIBUTARIES, WATERSHED, YUKON

# Did you know?

That the Yukon River Watershed is the fourth largest drainage basin in North America.

This image displays the magnitude of the Yukon River Watershed by comparing the size of the watershed to the contiguous United States. Based on the image, where would you be living in the Lower 48?



# watershed

A watershed is an area of land that drains into a specific body of water such as a river, stream, or lake. The area of a watershed includes the land, plants, animals, communities, and people, along with their stories.

## How to

Pick.Click.Give.

# Pick.Click.Give.

## To the Yukon River Inter- Tribal Watershed Council

## Its Easy!

Just log in to apply to your PFD. Once you answered all the appropriate personal info, you will be asking if you want to participate in Pick.Click. Give. The just find YRITWC and select your donation amount.

## Would you like to contribute a portion of your dividend to charities across the state? Yes, I want to Pick.Click.Give. No, I do not want to Pick.Click.Give. Previous Next 🔰 Home 1 • Applicant's Information 2 Application 3 A Payment Method 4 X Voluntary Options 5 Summary 6 Signature Pick.Click.Give. Search By: × Yukon River Inter Tribal Watershed Council Click anywhere in the boxes below to add more filters. Location: Cause Type: Organization Type: Location Cause Type Organization Type Yukon River Drainage Fisheries Association Add Pledge Yukon River Inter Tribal Watershed Council Add Pledge



TURN IN YOUR UNUSED OR EXPIRED MEDICATION FOR SAFE DISPOSAL AT YOUR LOCAL CLINIC. PROPER DISPOSAL HELPS OUR ENVIRONMENT SO THAT TOXIC CHEMICALS WILL NOT ENTER OUR DRINKING WATER OR FRAGILE ECOSYSTEM



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