



COPPER RIVER WATERSHED PROJECT

COPPER RIVER

Runner

SPRING 2021

*"The care of the Earth is our most ancient and most worthy, and after all, our most pleasing responsibility. To cherish what remains of it and to foster its renewal is our only hope."
- Wendell Berry*

COMMUNITY SUPPORT GETS THE KOTSINA DELTA CLEANED UP

BY LISA DOCKEN

For those of you who have ever visited Chitina; whether to operate a fish wheel, dip net, have a summer camping outing or live there, you will have seen the ever-changing landscape of the Kotsina River delta. Beloved by many, this area holds promise of migrating salmon every year that many families rely on to fill their hearts and their freezers. Unfortunately, changes in sediment deposition across the delta means that numerous cars, fish wheels, RVs, cables, concrete blocks, rope, and other debris has been flooded, partially buried, or even swept away over the years.

In Fall 2020, Dave Cruz and Cruz Construction offered services to excavate and remove debris, waste and sources of contamination at this beloved fishing site. Dave and his neighbors are fish wheel users that, like many, love the area. Dave graciously donated his services to the Copper River Watershed Project to clean up the Kotsina delta, and his gesture sparked the outreach and community support that brought hope to a challenging year and a sense of warmth around the power of good.

Five dump truck loads of metal, debris, old car and RV parts, nasty foam and a few freezers later, we thank the watershed community that made this possible. Your Crowdfunded contributions took those huge piles of garbage and got them to the recycler or landfill. You also helped facilitate a volunteer cleanup day where 20 participants hiked on foot or drove on ATVs to clean up any remaining trash on state, Ahtna and Chitina lands in the area. In addition to individual contributions, we received financial support from Chitina Village Corp., Ahtna, Inc., Chitina Native Corp., Alyeska, A/C Value Center (Cordova), and Wrangell Institute for Science and Environment (WISE) partnered with the Bureau of Land Management. The Juneau Community Foundation provided WISE with some follow up funds for local school programming in the area to talk about waste management and help design signs for the site encouraging people to take precautions to avoid losing their equipment or leaving garbage.

Our next step is to connect with the State to discuss how we can prevent this from happening again. I witnessed old car parts, including gas tanks, come right out of the water this year. Gas tanks and vehicle parts that no doubt had oil, gasoline and other contaminants in them when they were taken by the river. Fish wheels contain floats made from Styrofoam which break apart and form microplastics. These assets are not lost on purpose – no one wants to have their car adopted into the delta! So, support salmon and support future fishing in these cherished areas by taking extra measures to be safe. We all wish for safe and fruitful future fishing throughout the Copper River and congratulations to our Copper River watershed community- you made this happen!



LETTER FROM CRWP EXECUTIVE DIRECTOR

Dear CRWP Supporters,

It is with my deepest gratitude that I write to each of you for being with us this past year. No matter the person, in 2020, Covid-19 touched our lives in one way or another. Each person struggled in their own daily lives, each one of us experiencing the world we knew as something foreign and uncharted. I don't know a person, small business or nonprofit that wasn't without worry; worry about health and safety, the economy and being able to survive the year. It was and has been like a heavy dark cloud hanging over each one of us. My first year as ED of the CRWP certainly came with some unique challenges and no reference manual. But this organization has been built on and continues to be supported by some of the most generous, loyal and selfless people and businesses I have been lucky enough to interact with.

We are not going anywhere but forward and up. And what an amazing feeling! This past year we were not in the red- and our board had a huge exhale over that report! (me too, of course). And that is because of YOU. Your donation supported getting an online gift shop to showcase local products that then could be sold anywhere! It supported having our first-ever virtual fundraising event and documentary. It ensured we could have the Kotsina clean-up (see front page). Your donation secured the salmon tank program for kids in school and kids being homeschooled with sidewalk science (see Classroom Currents). We had the baler installed and began baling nets for recycling. Your support assisted with replacing three culverts on the Copper River Highway- one of our largest construction projects to date. We upgraded and



CRWP Online
Local shop



CRWP
Documentary



updated our website to better inform our members of our activities and your donation supported time to develop future projects and plans for habitat restoration across the watershed, paving the way for watershed-scale efforts for the next decade.

I hope you enjoy this Spring issue and all the successes because they are all of ours, together.

Sincerely,

Lisa Docken

CRWP BOARD OF DIRECTORS

Nik Merlino, *Board Chair, McCarthy*
Pete Mickelson, *Vice President, Cordova*
Caitlin McKinstry, *Secretary, Cordova*
Matt Piche, *Treasurer, Cordova*

Joelle Hepler, Glennallen
Sunshine Meitzner, Glennallen
Dave Saiget, Cordova
Kate Wilson, Copper Center

CRWP STAFF

Lisa Docken, *Executive Director*
Kate Morse, *Program Director*
Shae Bowman, *Operations Manager*
Chris Iannazzone, *Greenhouse Initiative Development*
Kirsti Jurica, *Hydrologist*
Daniel Schmalzer, *Invasive Plant Program Manager*
Ashley Taylor, *Website and Communications*



CLASSROOM CURRENTS

ADVERSITY FUELS INNOVATION FOR SALMON EDUCATION

BY KATE MORSE

I had always wondered what it looks like when salmon hatch—All at once? Or one at a time like popcorn? Or is it more subtle than that? Well, no need to keep wondering...our Kenny Lake salmon tank lead teacher, Jennifer Hodges, caught it on camera! Thanks to the generous support of our donors, including everyone who adopted a salmon fry this past December, we were able to purchase cameras for three of our tanks in the watershed, including in the front window of our office.

Now students can tune in to check out their salmon day and night, and you can too! These cameras were purchased after schools closed last spring during the pandemic and students had to learn remotely, with the hope that no future closures would interfere with their chance to witness these delicate stages of the salmon life cycle and sustain their connection to their salmon.

However, this innovation will serve our programs into the future, Covid or not! The cameras provide a whole new level of engagement with the tank, allowing unlimited access to the video stream for anyone interested in checking them out, expanding the reach of this fun and exciting educational program. With the recording feature, we will also continue to capture the amazing life stage transitions that occur, usually hidden from plain sight under ice and snow during the winter months, providing amazing “real world” materials for students (and us!) to work with for school projects and other educational materials. Be sure to check out some of the first footage of hatching salmon collected and compiled by Kenny Lake by visiting our salmon tank education page on copperriver.org, or scanning the QR code here.



BY CHRIS IANNAZZONE

One thing we all have in common is that we all need to eat, it is one of the essentials to human life, alongside fresh air and water. The foods we consume in Alaska from subsistence activities give us nourishment and a sense of appreciation for the natural resources that surround us. Although despite various opportunities for subsistence harvesting, approximately 95% of all food Alaskans consume is imported, making food security one of our state's biggest concerns. With food security becoming a more prominent issue in rural Alaskan communities due to growing concern for disruptions in the supply line, the Greenhouse Initiative is a direct product for positive action.

The Greenhouse Initiatives objective is to increase the amount of nutrient dense produce being grown in the community of Cordova, Alaska. The Initiative aims to address local food security issues by providing the infrastructure and resources which will increase access to more locally grown foods. Situated on the eastern side of the Prince William Sound, Cordova is off the road system, only accessible by boat or plane. Heavily reliant on imported produce by barge or plane, any disruption in our food supply chain would be detrimental to our community's food security.

Alongside efforts to increase local food production, the Greenhouse Initiative seeks to create a sustainable composting program that not only reduces landfill waste, but provides quality, nutrient dense compost for our community. Continuously building relationships with organizations and individuals on a local, state, and national level are crucial to the overall success of this initiative.

New Copper Basin Board Members

SUNSHINE MEITZNER



Former Wildland Fire Dispatcher, Massage Therapist

Living on an active salmon stream on the McCarthy Road introduced me firsthand to the struggles (ie culverts!). Working as a firefighter and logistics coordinator highlighted the importance of knowing where the anadromous stream are and how we can protect these waterways. And residing in the Basin for 11 years has provided me with a deep appreciation for the land and the life it supports. The Copper River and its tributaries comprise the lifeblood of this region. I feel privileged to live in such an abundant ecosystem.

JOELLE HEPLER



ADF&G Assistant Wildlife Biologist

The watershed provides resources to not only the local community but the entire state of Alaska as well as the lower 48. The watershed is home to a huge diversity of fish and wildlife that rely on it year-round to sustain life. With a Masters in Wildlife Management and Conservation I can understand how important this watershed is for people, fish, and wildlife alike.

WELCOME!

NEW to the CRWP TEAM

CHRIS IANNAZZONE



Greenhouse Initiative

I joined the Copper River Watershed Project team in the Fall of 2020 as the Greenhouse Initiative Project Manager. With a background in Environmental Sustainability, and a passion for growing food, I began working on small and medium scale organic farms during University and continued to do so after graduation. Having moved to Cordova, Alaska in January of 2019, I quickly realized the differences between Southeast Alaska and Southeast Florida, where I had grown up. I enjoy exploring the unique wonders of the Copper River delta with my dog Boswell and being an active member in my community through various volunteer opportunities. Each day I spend in Cordova is filled with new experiences and appreciations which I am continuously humbled by. I am very grateful for the opportunity to work with the CRWP on addressing local food security issues in rural Alaska.

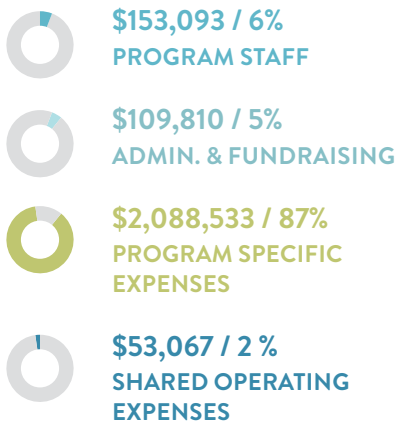
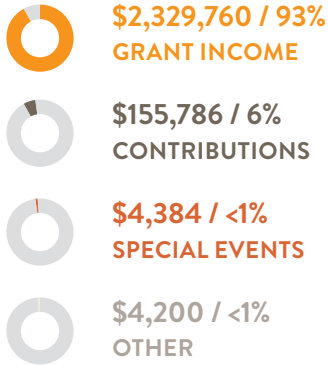
DANIEL SCHMALZER



Invasive Plant Program Manager

I grew up just outside Chicago, Illinois, and attended Carroll University in Waukesha, Wisconsin and graduated with a Degree in Resource Conservation Management in 2011. For the last 10 years, I have been working on recreation projects, terrestrial and aquatic vegetation surveys, and Elodea monitoring as a Recreation Technician and Biological Technician for the US Forest Service in Cordova. In my free time you can often find me boating, hunting, and fishing throughout the Copper River delta and Prince William Sound, with my favorite local food to catch and cook being shrimp. Spring is my favorite time in Cordova, with snow melting, days getting longer, bears awakening and birds migrating through I try to spend every free moment outside.

2020 ANNUAL REPORT



ASSETS

Current Assets	
Checking/Savings	214,247.73
Accounts Receivable	42,750.14
Other Current Assets	18,316.65
Total Current Assets	275,314.52
Fixed Assets	41,886.32
Investment Reserve	65,171.25

TOTAL ASSETS **\$ 382,372.09**

LIABILITIES & EQUITY

Liabilities	
Current Liabilities	
Accounts Payable	691.28
Credit Card	2,303.08
Other Current Liabilities	
Vacation Accrual	18,027.16
Deferred Revenue	7,525.39
Payroll Liabilities	2,592.17
PPP Disbursement	47,358.00
Sales Tax Payable	296.49
Total Liabilities	78,793.57

Equity	
Retained Earnings	141,850.25
TR Net Assets Contributions	64,990.78
Net Income	96,737.49
Total Equity	303,578.52

TOTAL LIABILITIES & EQUITY **\$382,372.09**

2020 FUNDERS

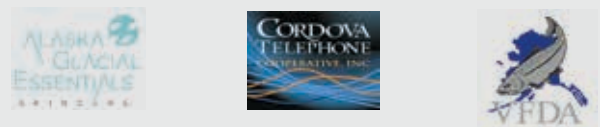
- Alyeska Pipeline
- Ahtna Intertribal Resource Commission
- Bureau of Land Management
- Copper Valley Electric Association Community Foundation
- Exxon Valdez Oil Spill Trustee Council
- Eyak Corporation
- Prince William Sound Regional Citizens Advisory Council
- National Fish & Wildlife Foundation
- National Oceanic & Atmospheric Administration (NOAA)
- Rasmuson Foundation
- U.S.D.A. Cordova Ranger District
- U.S.D.A. Forest Service
- U.S.D.A. Secure Rural Schools
- U.S.D.A. State and Private Forestry
- U.S. Fish & Wildlife Service
- Western Native Trout Association
- Wild Salmon Center
- Wrangell Institute for Science & Education

We'd like to recognize the following businesses who generously supported CRWP events and educational programs with significant gifts in 2020. We hope you can support these businesses that contribute to sustainable economic development in the Copper River region.

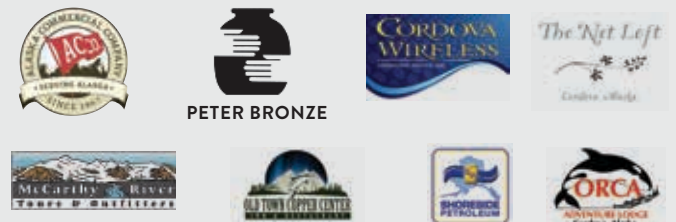
ANCESTORS' LEGACY, \$1000+



WATERSHED STEWARDS, \$500+



TRIBUTARIES, \$250 - 499



2020 - 2021

CRWP

PROJECTS

Gakona Brownfield Task Force ③

Copper Basin & Cordova Invasive Plants ④

Little Tonsina Fish Passage Restoration ⑤

⑦ Kotsina River Cleanup

⑥ Town Lake Restoration Project

Eyak Lake Weir Study ①

② Copper River Delta Fish Passage Restoration



1

Eyak Lake Weir Study

Eyak Lake and its tributaries provide highly productive habitat for sockeye and coho salmon, supporting important subsistence, sport, and commercial fisheries. In order to maintain the lake level after the earthquake, in 1972 a metal sheet pile and stone weir was installed at the lake outlet. Almost 50 years later, the weir is deteriorating, no longer maintaining water levels, and reducing upstream passage of adult and juvenile salmon. CRWP is working with partners to develop concept designs and cost estimates for improving the weir and reducing its impact on fish passage and habitat in Eyak Lake and River.

PARTNERS

U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (USFS), Alaska Department of Transportation & Public Facilities (ADOT&PF), Alaska Department of Fish & Game (ADF&G), National Oceanic and Atmospheric Administration (NOAA), Eyak Corporation

4

Copper Basin & Cordova Invasive Plants

In 2020, 92 acres of orange hawkweed, reed canarygrass, butter & eggs, and white sweetclover were treated in the Copper Basin and Cordova with 190 total acres surveyed. Treatment and monitoring of these known infestations will continue in 2021. Report invasive plant infestations to our Invasive Plant Reporter on Anecdota.org.

PARTNERS
USFS, BLM, NPS

5

Little Tonsina Fish Passage Restoration

This project will remove a dual culvert structure near the lower section of the river. Currently the culverts restrict juvenile king and coho salmon movement up and downstream and are a partial barrier to migrating adult salmon. The two adjacent undersized culverts will be replaced with a 2-lane bridge, restoring critical connectivity to an estimated 74 miles of upstream habitat.

PARTNERS
ADF&G, ADOT&PF, Alaska Sustainable Salmon Fund, Bureau of Land Management, Denali Commission, Chugach Alaska Corporation, NOAA, USFWS

6

Town Lake Restoration Project

The Native Village of Chitina Elders have expressed a desire to restore the salmon in the Town Lake system. Ahtna Intertribal Resource Commission, with the help of CRWP, are currently assessing the current fish habitat conditions and developing a restoration plan.

PARTNERS
Ahtna Intertribal Resource Commission, Native Village of Chitina

7

Kotsina River Cleanup

In the fall of 2020, 5 dump truck loads of old fish wheels, RVs, metal debris and foam were removed from anadromous waters of the Kotsina River. Heavy equipment was used and followed up by a great volunteer cleanup day with the community.

PARTNERS
Cruz Construction, Chitina Village Council, Community Donors, WISE, Eyak Corporation, Ahtna Inc., Alyeska, Alaska Commercial Co., Juneau Community Foundation

2

Copper River Delta Fish Passage Restoration

EVOSTC awarded funding to restore fish passage at multiple sites on the Copper River delta for coho and sockeye salmon and coastal cutthroat trout. In 2020, three culverts were replaced on the 25-mile system, and three more are slated to be replaced at 18-mile in 2021. Design is also underway for an additional five stream-simulation culverts, where the culvert is designed to convey the stream in more natural conditions under the roadway.

PARTNERS

Exxon Valdez Oil Spill Trustee Council (EVOSTC), USFWS, USFS, ADFG, NOAA, ADOT&PF, Eyak Corporation

3

Gakona Brownfield Task Force

The Brownfield Task Force project in Gakona began in 2020 and is an ongoing partnered collaboration to locate and fund brownfield site clean-ups throughout the Copper Basin. This effort is led by Native Village of Gakona EPA and assisted by Native Village of Tazlina and Copper River Native Association.

PARTNERS

Native Village of Gakona EPA, Native Village of Tazlina, Copper River Native Association



THANK YOU, MEMBERS

ANCESTORS' LEGACY, \$1000+

Alaska Marine Lines
Bill & Marion Alexander
William Beattie &
Evonette Aponte-Beattie
BioFish LLC
Allison & Chris Bovard
Chitina Native Corporation
Diane & Mark Coleran
Copper River Prince William
Sound Marketing Association
Cordova Community Foundation
Cruz Construction
Eyak Corporation
John Garner & Liz Cardwell
Drifters Fish
H.B. Alexander Foundation, Inc.
Dan Hull & Nancy Pease
Jim & Martha Hutchison
Peter Mjos
Riki Ott
Ruud-Mjos Tributaries
Alaska Family Fund
SenaSea Seafood
Joan Smith
Cece Stack & Britt Pedicord
Ridgeline Aviation
Bert Stammerjohan & Liz Senear
Jim Staszewski
The Triton Foundation
Charles Wilson
Wilson Construction

WATERSHED

STEWARDS, \$500-999

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Jonathan Bigley
Phil & Rich Blumstein-Ervin
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Danny & Kristin Carpenter
Cordova Telephone Cooperative
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Ian Lindsay
Lynn Loacker
Donna McBain Evans & Sam Evans
Pamela Moe
Mary Jane & Alan Morse
Arlene and Danny Rosenkrans
Valdez Fisheries Development
Association

TRIBUTARIES, \$250-499

A/C Value Center
Rich & Shannon Alloway
Alan & Diann Bailey
Jeremiah & Kristie Beckett
Katie & Ben Bobowski
Toni & John Bocci
Peter Brondz
Dr. Rob Campbell
Debbie & Dino Ciabattoni
Cordova Wireless Communications
Greg DeRango
Marnie Graham &
Douglas Vollman
Janet & Donald Groschel

Deirdre Henderson
Anne & John Herschleb
Dr. Phil Hess
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R.J. & Barclay Kopchak
Bill Leighty & Nancy Waterman
Bert Lewis & River Gates
Sue Kesti & Dan Logan
McCarthy River Tours
and Outfitters
Cliff Eames & Ruth McHenry
Diane & Greg Morgan
Kate & Andy Morse
Howard Mozen &
Elizabeth Schafer
Native Village of Eyak
Old Town Copper Center Inn
& Restaurant
Orca Adventure Lodge
Pam Ore
Dr. Oliver & Eve Osborn
Matt & Nicole Piche
Margaret Rader
Scott Ramming & Diana Godfrey
Rich Rogers
Hugh Rose
Clair & Steffan Scribner
Cathy & Dixon Sherman
Shoreside Petroleum
Sandra & Rich Staples
Brad & Denise Stern
Karen & Paul Swartzbart
Theresa Tanner
The Net Loft
Cliff Ward
Eric & Janice Warga
Katherine Wilson

WRANGELL PEAKS

CIRCLE, \$100-249

Samuel Adams
Luca & Chantel Adelfio
Thomasina Andersen
Dave & Laura Beam
Elinor Beck
Karl Becker & Nancy Bird
Bob & Joanie Behrends
Thea & Will Bemben
Laurie Berger & John Jenkins
Dan Bilderback & Christine Sager
Mary Anne & Nancy Bishop
Brittany Blain-Roth & Brett Roth
Gavin Blood
David Blount
John & Patty Bodner
Keith Boruff
Alys Bowman
Russell Bowman
Shae Bowman & Joe Hamm
Tyler Boyes & Brita Mjos
Stan Bradshaw
Jenny Brandt
Mimi & Tim Briggs
Laura Brooks
Wade Buscher
Angela & Brian Butler
Blackburn Cabins
Sarah Cameron
Chitina Traditional Indian
Village Council
Yoke-sim Choong
Becky Clausen & Dirk Lang
Susan Clausen
Bill & Diane Cobb
Erin Cole
Alexis Cooper
Copper Valley IGA
Andy Craig & Seawan Gehlbach
Frederick Dure
St. Elias Alpine Guides
G. Warren & Donna Elliott
Jamie Esler
Lynne M Esler
Ken Fay
John Ferguson
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Steve Moffitt
Sarah Morrow
Eric Manzer & Molly Mulvaney
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Paul & Mary Newcome
New North Consulting, LLC
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Barb Petersen
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Eli Potter
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Riverside Inn & Childs Glacier Tours
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Rebekah Robinson
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Beth & Rich Schluter
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Copper Oar Rafting
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RAVEN'S CLAN, \$50-99

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Ronald Andersen

Kelsey Appleton Hayden
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Sam Aslan
Auklet Charter Services
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Babic Fisheries
April & Robert Beedle
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Taylor Brown
Robyn Butler
Bruce & Karen Butters
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Barbara Cellarius
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Chinook Auto Rentals
John Cholith III
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Cordova Realty
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Sam Cox
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Maya Heubner
Mary Higgins
Arthur Hodgins
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Christopher Iannazzone
Oskar Johansson-Theis
Melissa J Robinson
Kendra's Kreations
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Ethan Moorhead
Peggy Morsch
Erik Mundahl
David Noriega
Northern Nights Inn
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Beth Poole
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Sharon Shallow
Maria Shell
Jonathan Shurtz
Dave Siegal
Dana & Anita Smyke
Douglas Solomon
Specialized Bicycle
Aline Stevenson
Ashley Taylor
Lynne D Taylor
Rick Van De Poll
Kenneth Van Gilder
Danielle Verna
Linda & Henry Wall
Gay & David Wellman
Tara Wheatland

Amanda & James Wiese
Carrie Wittmer

KINGFISHERS, \$25-49

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Signe & Jim Fritsch
Doug Fulton
Margo Ghia
Brandi Gibbs
Kristen Gorman
Tracy Hansen
Dr. Richard Harper
Heidi Hatcher
Kris Hegland
Brian Hodges
John Patrick Hudson
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Kathleen & Chris Jones
Tom McGann & Sue Laird
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Dennis Lavey
Amy LeBlanc Gloe
Kristin Link
Mike Mahoney
Michelle McAfee
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Kate McLaughlin
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Galen Meyer
Belle Mickelson
Stanton Moll
Andrew Morin
Gary Nygren
Martin Parsons
Tony Perelli & Becky King
Amanda P Hulst
Dorothee Pruessner
Laura Prugh
Ivy Rae Patton
Frederic Reid
Cathy & Micah Renfeldt
Wendy Robbins
Jeremy A Robida
Ann Robinson
Aaron Sandone
Russell Scribner
Melissa & Derek Sikes
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Jessica Speed
Spirit Mountain Art Works
Wily Splain
Norma & Doyle Traw
Glenn & Diane Ujioka
Mae Vansant
David Hartley & Helen Weagraff
Ann Welshko
XOAK
Kendra Zamzow

SUBSISTENCE LIVING, \$10-24

Rebecca Calfina & Jimmy Paley
Joshua Gold
Jenny Harrell
Joyce Levine
Bryan & Breanna Mills
Jocelyn Moffitt
Mimi & Steve Rothchild
Anne Schaefer
Zachary Schroeder
John Stack & Barbara Solomon
Jordan Stover
The Patinka Family
Darren Thorne



MAXIMIZING SALMONS'

ABILITY TO ADAPT

BY KATE MORSE

“Smaller body sizes”, “more parasites”, and “softer flesh”. These are some of the observations shared by Copper River salmon harvesters in recent years. While there is no one answer to explain these observations, many agree that the water conditions are changing. Recent summers have been warmer and drier, while winter snowpack is changing. Glaciers are retreating, storms are increasing in duration and intensity, and the ocean is more acidic. The best way to help salmon adapt to these changing conditions is to maximize the habitat available to salmon and sustain the genetic diversity within salmon species.

This is where the Copper River Watershed Project has focused our resources—to help provide an intact, and barrier free watershed to allow salmon unimpeded access to a diversity of habitats. For over a decade, CRWP has been working with our partners to prioritize and replace failing and undersized culverts with crossings that mimic natural systems.

Juvenile salmon will live multiple years in freshwater before migrating out to the ocean. During this time, they need to be able to escape unsuitable conditions, such as warm water and low flow conditions, and find more favorable habitats. To maximize the number of fish migrating out of the watershed, we need to maximize their access to quality habitat.

As for the return migration, everyone eagerly awaits the return of Copper River Sockeye. Did you know there are an estimated 156 spawning sites for Sockeye in this watershed, representing an estimated eight genetically distinct populations? This genetic diversity within the species is crucial to support the adaptations of salmon to the changing habitat conditions they are facing.

By working towards reinstating a barrier free watershed by replacing undersized culverts, CRWP is hopeful we can help salmon effectively mitigate the changes they face, maintain genetic diversity and support the future of salmon.



The undersized culvert in the foreground was replaced with the larger culvert to allow the stream, and aquatic organisms like salmon, to pass under the highway unimpeded.
Photo: USFS

MORE INFORMATION
on our fish passage and other
programs available at
copperriver.org.

BROWNFIELD TASK FORCE

The Copper Valley Brownfield Task Force will be a multi-disciplinary group of people with a vested interest in the cleanup and redevelopment of a community's brownfield sites. Its members will bring multiple perspectives and resources to the table.

Brownfields are abandoned, unused, or underused properties that are hindered from desired reuse or redevelopment by real or perceived environmental contamination. A brownfield can be anything from a 200-acre industrial property, to an abandoned building, or an old illegal dump site. Due to changes in technologies, economic forces, local priorities, among other localized forces, brownfields can be found in many corners of Alaska, in both urban and rural communities alike.

Communities can realize many environmental, social, and economic benefits through brownfield reuse and redevelopment, including: preserving open space that would otherwise be developed or used as a greenspace. It is important to remember that brownfields are not only an urban problem, and reuse doesn't have to mean new construction projects. Thus, recycling brownfields may have benefits to a community that are unique to it and important to its identity, but not easily quantifiable.

The four direct objectives of the C.V.B.T.F. will be:

- Learning to identify potential brownfields.
- Reporting potential brownfields.
- Monitor brownfield sites to ensure presence and visibility of Institutional controls.
- Educating the public on brownfields.

These actions will directly help in the planning of the clean-up and redevelopment of the community's brownfield sites. The actions and planning efforts of the brownfield Task Force will be beneficial in obtaining funding, community engagement, and ultimately the clean-up of Brownfield sites.

An example of a successful brownfield project can be seen from the Native Village of Gakona in their short video on the clean-up of the "Heinz" site.

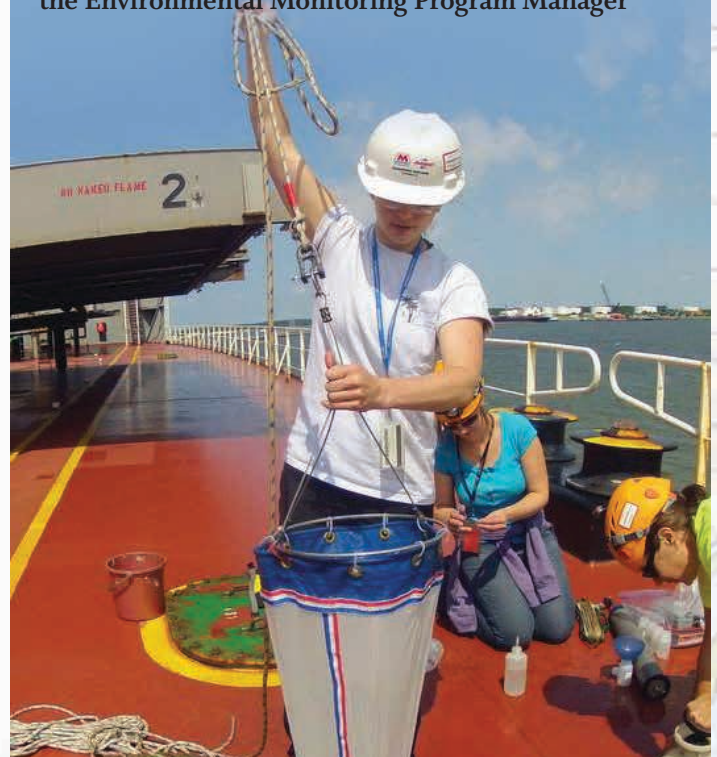
via. YouTube channel - "Native Village of Gakona"
https://youtu.be/j_KzGqXvvaE

Benjamin Frank
Native Village of Gakona, Environmental Assistant



IS THERE A DOCTOR IN THE ROOM?

Former CRWP Invasive plant program coordinator, Danielle Verna, recently completed her Ph.D. in Environmental Science and Management from Portland State University. Her dissertation research was focused on marine invasive species. Since maritime shipping is a leading vector of invasive species to coastal ecosystems globally, she looked at how international trade drives commercial shipping patterns and how certain commodities can influence the volume and location of ballast water discharge by ships. **Congratulations Danielle, and we wish you well as you join Prince William Sound Regional Citizens Advisory Council as the Environmental Monitoring Program Manager**



Danielle collects plankton samples from the ballast tank of a commercial ship.

ND THE WATERSHED



Photos by Derrick Sinyon, Native Village of Gakona

DEVELOPMENT OF CLIMATE CHANGE ADAPTATION PLAN UNDERWAY

The Copper River Native Association received funding from the BIA Tribal Resilience Program to create and implement the Copper River Climate Change Adaptation Plan. Climate change has had a big effect on Alaska, and rural communities are struggling to plan and adapt to the changing environment. This project will allow the communities of the Copper River Valley region to collaborate to identify, assess, plan for, and adapt to extreme climate events and harmful environmental trends that impact local and regional resources. This is an important effort to anticipate and plan for future changes in the climate to ensure the protection of environmental health and human health and safety. **For more information, and to find out about upcoming opportunities to participate in the development of the plan, contact Sarah Sherwood at SSherwood@crnative.org or 907-822-8846.**

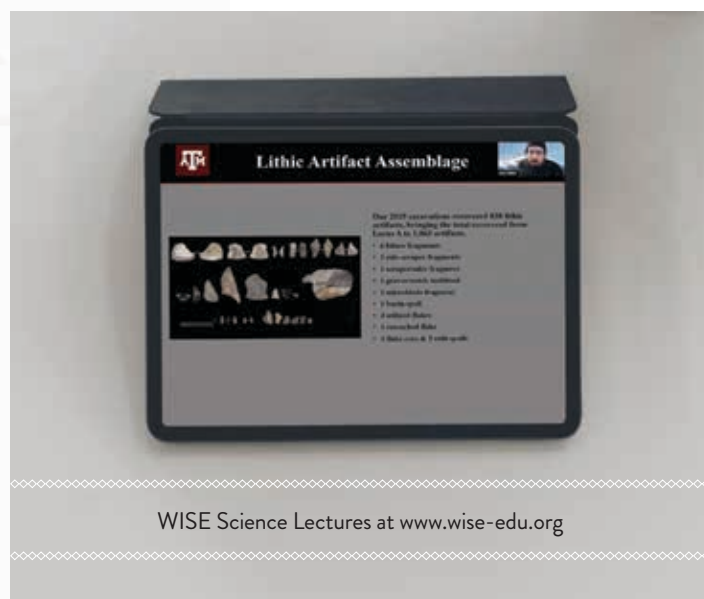
WISE SCIENCE LECTURE SERIES

For 18 years the WISE Science Lecture Series has connected the people of the Copper River basin with current science and research. This winter they went virtual, gathering speakers and learners around glowing computer screens instead of in meeting halls. Although we certainly missed the camaraderie of gathering to learn and share, there were some silver linings. Geographical barriers melted away as WISE gathered diverse audiences from not only around the region, but around the world. Robin Mayo, ED of WISE has been delighted to welcome speakers from far away who didn't need plane tickets and four wheel drive to come share their stories and expertise.

Topics this year have included the Nelchina Caribou Herd, Avian Research in Alaska's National Parks, and several talks exploring exciting new archaeological finds in Wrangell-St. Elias National Park. The first "brownbag" lunchtime lecture featured Kate Morse with CRWP's fish passage and culvert replacement projects, drawing an audience of professionals as well as interested locals and far-away friends and family.

This spring watch for two talks on migratory birds, one scientific and the other aimed at aspiring birders looking to build skills and get inspired. Program partner Prince William Sound College is exploring getting the lectures to online audiences even when we are able to once again gather in crowded rooms, knocking the snow off our boots and greeting friends.

Find the schedule of upcoming events and recordings of recent WISE Science Lectures at www.wise-edu.org.



WISE Science Lectures at www.wise-edu.org

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COPPER RIVER
WATERSHED PROJECT



Newsletter

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TO



CRWP MISSION

The Copper River Watershed Project promotes a salmon-rich, intact watershed and culturally diverse communities by forming partnerships for watershed-scale planning and projects.



WHY SUPPORT CRWP?

Cassidy Austin-Merlino is an 18 year old from McCarthy, Alaska on the traditional unceded hunting grounds of the Ahtna Athabascan people, who is currently living in Bellingham, Washington working as an intern whitewater raft guide for a local company. In recent years, she has worked closely with the Climate Strike Movement, the Copper River Stewardship Program, the fight against Pebble Mine, and much more. Cassi also recently attended the 2021 Alaska Forum on the Environment as a keynote speaker, addressing the connection between environmental and social justice, along with how outdoor recreation workers can influence activism and stewardship in their communities. Honored to have received the Copper River Watershed Project scholarship and the Alaska Conservation Foundation Denny Wilcher Award in 2020, Cassi plans to attend Western Washington University this fall to further her education on environmental policy and outdoor inclusion to advocate for a more sustainable future. We are so proud of you Cassi!

Cassidy Austin-Merlino