Alaska Forum on the Environment
Alaska’s Premier Training Event
February 10th - 14th, 2020

Dena’ina Center, Anchorage, AK
www.akforum.org · info@akforum.org · 907-331-0271
The Alaska Forum on the Environment:

“Alaskans working together to promote a clean, healthy environment through communication and education.”

The Alaska Forum and our programs or projects will not take political or advocacy positions.

The Alaska Forum works to promote a more productive and efficient relationship between government agencies, businesses, organizations, tribes, and the public by:

• developing a more common understanding and educational foundation;

• providing opportunity for the exchange of information and experiences; and

• understanding the diversity of opinions and concerns of others.
Our Organization:
The Alaska Forum, Inc. was initially formed to support the Alaska Forum on the Environment, which celebrates its 22nd year in 2020. The Alaska Forum, Inc. operates as a 501(c)(3) non-profit organization to support this annual educational event and fulfill our mission to promote a healthy environment through communication and education.

Our Funding:
The Alaska Forum on the Environment is a 501(c)(3) non-profit organization. Approximately 10% of our funding is provided in voluntary contributions and sponsorships by members and partners. Our leadership partners are organizations that invest both staff resources and funding in the Alaska Forum on the Environment. Five percent of our funding is invested by leading Alaskan industries and businesses. The remaining 85% of event funding is derived directly from participants through event registration fees. We limit organizational and sponsor contributions to ensure that our funding sources represent the diversity we strive to achieve within the Alaska Forum on the Environment.

Our Commitment:
The Alaska Forum on the Environment actively solicits partners that can provide constructive input in our team approach. We value the individuals and the organizations that work with us in a statewide spirit of cooperation to achieve this premier event. We believe that we can find positive ways to maximize environmental benefits through cooperative approaches, partnerships, and the sharing of information and ideas in a respectful forum. We believe that effective communication can provide the foundation for Alaska’s environmental community. Our mission is to promote a healthy environment through communication and education; and we welcome support from those who share in this goal.

Our Process:
The Alaska Forum on the Environment, resulting from the efforts of a diverse group of organizations that serve as our Planning Committee, seeks to provide an open exchange of ideas and information in a respectful and courteous atmosphere. The structure of the event allows participants the opportunity to reach a greater understanding of the issues and of each other: rural and urban; industry and private; agency and public; students and scholars; and those who are just plain interested in the environment!

The dedicated support of volunteers using a team approach, which is respectful of the diversity of opinions and perspectives of all Alaskans, creates a successful event. We actively seek agenda input throughout the planning process. While most topics are informational, others present more complex issues and challenges facing environmental, corporate, and regulatory agencies in Alaska. We actively seek perspectives and alternative viewpoints. We encourage the opportunity for an informed and respectful dialogue with all of our presenters.

The Alaska Forum on the Environment and other Alaska Forum programs and projects do not take political or advocacy positions. The result is a hugely diverse agenda, with over 130 Breakout Sessions, 200 Presenters and 6 Keynote Events. Topics and the presenters range from Alaska’s communities to federal, state, and tribal government agencies; international organizations and governments; and to those specialized in technical science and the environment. If you are interested in helping shape the agenda of the Alaska Forum on the Environment, please contact us - your support is welcome!
At AFE with the
University of Alaska Fairbanks
Bristol Bay Campus

For information and to sign up for the course visit Booth #3

ENVI F150: Viewpoints in Environmental Studies:
Alaska Forum on the Environment 2020
One college credit for attending AFE

This course promotes discussions and activities that focus on how scientists and research technicians evaluate environmental issues. Specific topics depend on sessions attended at AFE and may include sustainability, resource development, ecosystem management, indigenous viewpoints, building technology, energy applications, and data analysis.

Tuition $60 - course is being offered at a 60% discount exclusively for all registered AFE participants (normally $212).

This course can also be used for Continuing Education Units.

Information and course materials are provided at the UAF Bristol Bay Campus Booth #3, or inquire at the AFE Registration Table.

Contact Todd Radenbaugh at: www.uaf.edu/BBC or visit him at Booth #3 during AFE.
PEOPLE BEHIND THE SCENES

BOARD OF DIRECTORS:

Chairperson:
Doug Mutter,
Department of the Interior (retired)

Officers:
Richard Porter,
(Tlingit/Inupiaq),
Secretary
Knik Tribal Council

Bob Tannahill,
Treasurer
First National Bank Alaska (retired)

Directors:
Larry Bethel,
Environmental Management Inc

Kendra Calhoun,
University of Alaska, Fairbanks

Patricia Cochran,
(Inupiaq)
Alaska Native Science Commission

Victoria Demmert,
(Tlingit)
Yakutat Tribal Council

Kurt A. Eilo,
Alaska Forum

John Halverson,
Alaska Department of Environmental Conservation

Megan Kohler,
Public Representative

Vivian Melde,
Ecology and Environment (retired)

Alan Quesnel,
US Air Force (retired)

Win Westervelt,
JACOBS

STAFF

Kurt A. Eilo,
Executive Director

Jacqui Porter,
Deputy Director,
Finance Director

Amy Tannahill,
Communications and Events Director,
Green Star Program Specialist

Meg Burgett,
Training Program Director

PLANNING COMMITTEE

Laura Achee,
Alaska Department of Environmental Conservation

Jeanette Alas,
Alaska Department of Fish and Game

Erika Ammann,
National Oceanic and Atmospheric Administration

Kate Ayers,
Chugach Electric

Robert Backlund,
US Air Force

David Bell,
US Air Force

Meg Burgett,
Alaska Forum

Kendra Calhoun,
University of Alaska Fairbanks

Jacqueline Chandler,
US Forest Service

Grace Cochon,
US Department of the Interior

Rebecca Colvin,
Alaska Department of Environmental Conservation

Therese Deardorff,
US Defense Logistics Agency

Susan Detwiler,
Environmental Protection Agency

Brandy Dixon,
Alaska Energy Authority

Kurt Eilo,
Alaska Forum

Melina Faw,
Alaska Department of Environmental Conservation

Nancy Fresco,
University of Alaska Fairbanks

Keith Guyer,
Kuna Engineering

Doug Huntman,
Delta Backhaul Company

Megan Kohler,
Alaska Department of Environmental Conservation

Bob Loeffler,
University of Alaska Anchorage

Megan Marie,
Alaska Department of Fish and Game

Ben Martich,
Geosyntec Consultants

Nino Muniz,
Ahtna, Inc.

Peter Murphy,
National Oceanic and Atmospheric Administration

Allison Natcher,
Alaska Department of Health and Social Services

Betsi Oliver,
Prince William Sound Regional Citizens’ Advisory Council

Allison Payne,
AECOM

Jacqui Porter,
Alaska Forum

Todd Radenbaugh,
University of Alaska Fairbanks

Chris Rose,
Renewable Energy Alaska Project

Barb Schrader,
US Forest Service

Kathy Shea,
Alaska Department of Environmental Conservation

Brendan Smith,
North Pacific Research Board

Jamie (James) Spell,
US Air Force

Amy Tannahill,
Alaska Forum

Taylor Tidwell,
US Air Force

Michelle Torres,
Alaska Department of Military and Veterans Affairs

Natalie Travis,
Alaska Department of Environmental Conservation

Katura Willingham,
JACOBS

Win Westervelt,
JACOBS
SPECIAL THANKS

Ahtna, Inc.

Alaska Department of Environmental Conservation

Alaska Department of Fish and Game

Alaska Department of Military and Veteran’s Affairs

Alaska Energy Authority

Alaska Native Science Commission

Chugach Electric

Anchorage Chapter of Citizens’ Climate Lobby

Anchorage School District

Arctic Council Secretariat

Arctic Regulatory Compliance and Technical Oilfield Services Alaska

Arctic Research Consortium of the United States

Arctic Solar Ventures Corporation

Bureau of Land Management

Center for Alaskan Coastal Studies

Central Recycling Services

Chugach Electric

Chugach Regional Resources Commission

Clean Harbors Environmental Services

Clear Energy Technologies, Inc.

Coastal Observation and Seabird Survey Team

Copper River Watershed Project

Craig Tribe

Credit Union 1

Defenders of Wildlife

Denali National Park and Preserve

Donlin Gold

EMI Alaska

Energy Lab

Environment Alaska LLC

EPA Region 10 Tribal Operations Committee

Eurofins/TestAmerica

Farthest North Films

Fire Island Wind

Frontier Fuel Service, LLC

Geosyntec Consultants

Golden Valley Electric Association

GSE

HABRO Technologies

 Homer Electric Association

Idaho National Laboratory

Institute for Tribal Environmental Professionals

Intelligent Energy Systems

Interagency Arctic Research Policy Committee

International Arctic Research Center

International Bird Rescue

JACOBS

JDA Surveys LLC

Kachemak Bay National Estuarine Research Reserve

Kent State University

Kodiak Area Native Association

Kodiak Electric Association, Inc.

Kodiak National Wildlife Refuge

Lamont-Doherty Earth Observatory of Columbia University

Mat-Su Borough Public Works Department

Matanuska Electric Association

Matanuska-Susitna Borough

Midnight Sun Solar

Model Forest Policy Program

Municipality of Anchorage

National Center for Atmospheric Research

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

National Park Service

National Snow and Ice Data Center

National Weather Service

Native Village of Katzebe

Native Village of Unalakleet

Navarro Research & Engineering, Inc.

Nenana

Net Your Problem, LLC

North Pacific Research Board

Northrim Bank

Northwest Boreal Landscape Conservation Cooperative

UAF Cooperative Extension Service

Prince William Sound Regional Citizens’ Advisory Council

Renewable Energy Alaska Project

University of Alaska Anchorage

University of Alaska Fairbanks

US Air Force

US Army Corps of Engineers

US Army Corps of Engineers Alaska District

US Coast Guard

US Department of Agriculture

US Department of Energy

US Department of Energy Combined Heat and Power Technical Assistance Partnership

US Department of Housing and Urban Development

US Department of the Interior

US Dept of Housing and Urban Development

US Environmental Protection Agency

US Federal Aviation Administration

US Fish and Wildlife Service

US Forest Service

US Geologic Survey

US National Marine Fisheries Service

US Navy

Utopiaq

Western Alaska Landscape Conservation Cooperative

Utqiagvik

Witherell Environmental Group

Yukon River Intertribal Watershed Council

Zendar Environmental Health Group
GREAT FOR BUSINESS:
• Benefit from positive recognition for your waste reduction efforts!

GREAT FOR THE COMMUNITY:
• Be part of this local community effort supporting businesses and organizations that achieve environmental standards!

GREAT FOR THE ENVIRONMENT:
• Reduce waste, conserve resources, while saving operational costs!

HOW TO EARN YOUR GREEN STAR®:

#1 Enroll in the Green Star® program.

#2 Complete Program and Partnership Agreement

#3 Complete Self Assessment Form

#4 Participate in Site Assessment

#5 Receive your Green Star® Award.

For more information:
http://www.akforum.org
email: gs@akforum.org
Phone: (907) 331-0271
MONDAY, FEBRUARY 10
7:30 AM - 8:45 AM
• Registration

8:00 AM - 9:00 AM
• Morning Music: Jared Woods
  TIKAITNU BALLROOM

9:00 AM - 10:15 AM
• KEYNOTE EVENT: Joost van Haren, University of Arizona, Biosphere 2.
  TIKAITNU BALLROOM

10:30 AM - 11:45 AM
• How to Choose Diesel Generators for Your Rural Powerhouse
  KAHTNU #1
• Art and Science with the Kodiak Wildlife Refuge Youth Conservation Corp
  TUBUGHNENG' #5
• Community-Based Observations of Environmental Change Across Arctic Alaska coasts
  TIKAITNU C
• 2019 McKinley Fire Disaster Overview, Cleanup Efforts, and Waste Impacts
  TIKAITNU E
• How Can We Work Better Together? Linking Environmental Monitoring Efforts Across the North
  TUBUGHNENG' #3
• Transitioning to Safer Chemicals: Let’s Start with Green Cleaning
  TUBUGHNENG’ #4
• Information Session: EPA’s Guiding Principles for Consulting with Alaska Native Claims Settlement Act (ANCSA) Corporations
  TIKAITNU D

12:00 PM - 1:30 PM
• KEYNOTE EVENT: Jenna Jambeck, National Geographic
  TIKAITNU BALLROOM

2:00 PM - 3:15 PM
• Energy and Engineering Education
  KAHTNU #2
• 2019 Marine Mammal Stranding Reports and the Gray Whale Unusual Mortality Event
  TUBUGHNENG’ #3
• Youth Track Showcase
  TUBUGHNENG’ #5
• Can You Afford a Disaster?
  TIKAITNU E
• Renewable Energy and Rural Alaska Powerhouses
  KAHTNU #1
• Alaska’s Changing Environment
  TIKAITNU C

3:30 PM - 4:45 PM
• Bulk Fuel Tank Farm Updates: Construction, Training, and Regulations
  KAHTNU #1
• Research Needs in the Bering Sea Region: Seeking Input for a Coordinated Scientific Approach
  TUBUGHNENG’ #4
• Ikaaqvik Sikukun: Bridging the Scientific and Indigenous Communities to Study Sea Ice Change
  TIKAITNU C
• The Sun Shines in Alaska: Solar Power Projects on the Railbelt
  KAHTNU #2
• Wildfire and You in a Changing Climate
  TIKAITNU D
• Nature-Based 21st Century Skills: Preparing Students for Life-Long Success
  TUBUGHNENG’ #5
• 2019 Ice Seal Unusual Mortality Event
  TUBUGHNENG’ #3

TUESDAY, FEBRUARY 11
8:00 AM - 9:00 AM
• Morning Music
  TIKAITNU BALLROOM

9:00 AM - 10:15 AM
• KEYNOTE EVENT: Alaska Beyond Oil - Panel Discussions: Kate Troll, Chris Rose, Mouhcine Guettabi with Maria Downey
  TIKAITNU BALLROOM

10:30 AM - 11:45 AM
• Fish Passage at Stream Crossings: Connecting Habitat and Improving Flood Resiliency
  KAHTNU #1
• Environmental Impact of Military Training in Alaska
  TIKAITNU D
• CERCLA Proposed Plan for the Historical Red Devil Mine
  KAHTNU #2
• Anchorage School District Brings Back the Lunch Lady!
  TUBUGHNENG’ #3
• Harvesting Energy from Wood and Waste: Biomass and Landfill Gas Fuels in Alaska
  TUBUGHNENG’ #4
The Anthropocene: Our Conservation Paradigm for the Future
Tikahtnu C

Alaska Youth for Environmental Action (AYEA)
Tubughnenuq’ #5

Moving Electrons Across Alaska’s Railbelt: Electric Grid Reform
Tikahtnu E

Get where you are going: Safe travels off the road system.
K’enakatnu #6

2:00 PM - 3:15 PM

Electric Vehicles
Tikahtnu E

Collaboration Opportunities with USACE on Water Resources Planning and Projects
Kahhtnu #2

Youth as the Agent of Change
Tubughnenuq’ #5

Invasive Species in Alaska - Hot Topics
Kahhtnu #1

Think Twice on Ice: River Ice Safety and Observation
Tubughnenuq’ #3

STAR: Smoldering for Treatment of Petroleum Hydrocarbons and PFAS
Tikahtnu D

Who Are Potential Funders or Service Providers for Your Solid Waste Projects?
Tubughnenuq’ #4

Alaska Ocean Acidification Network: Tribal Ocean Monitoring in Alaska
Tikahtnu C

Film Festival
Tikahtnu Ballroom

3:30 PM - 4:45 PM

Solar Power in Rural Alaska
Tikahtnu E

Fresh Eyes on Ice: Connecting the Arctic through a Revitalized Freshwater Ice Observation Network
Tikahtnu C

Two Sessions on In Situ Remediation
Tikahtnu D

Invasive Species Management in Alaska: What You Need to Know
Kahhtnu #1

Developing School Based Activities to Support Indian General Assistance Program (IGAP) Objectives
Tubughnenuq’ #3

Community-Scale Composting in Rural Alaska - Gustavus Disposal and Recycling Center
Kahhtnu #2

An Open Discussion on Engaging Rural and Alaska Native Youth in Arctic STEM
Tubughnenuq’ #5

Circumpolar Solid Waste Management and Marine Plastics: Global Partnerships
Tubughnenuq’ #4

Alaska Forum Board Meeting (Private)
K’enakatnu #6

Film Festival
Tikahtnu Ballroom

WEDNESDAY, FEBRUARY 12

8:00 AM - 9:00 AM

Morning Music
Tikahtnu Ballroom

8:00 AM - 5:00 PM

Arctic Council Board Meeting (Private)
K’enakatnu #6

9:00 AM - 10:15 AM

Keynote Event: Melissa Farlow, National Geographic Photographer
Tikahtnu Ballroom

10:30 AM - 11:45 AM

Ready, Set, Go: Evacuations and Shelters
Kahhtnu #1

Science, Policy and Political Decision Making: Part I: The Past
Tikahtnu E

The Feasibility and Sustainability of Data Collection Using Unmanned Aircraft in Rural Alaska
Kahhtnu #2

Subsistence Fish Consumption in Rural Alaska
Tikahtnu D

Carbon Pricing
Tubughnenuq’ #4

Environmental Restoration Efforts at Federal Sites in Alaska
Tikahtnu C

Local Environmental Observation (LEO) Year in Review
Tubughnenuq’ #5

Permitting 101: How to Understand Government Permits; How to be an Effective Commenter
Tubughnenuq’ #3
**AGENDA AT A GLANCE**

12:45 PM - 1:45 PM
*KEYNOTE EVENT:* EPA Regional Administrator Chris Hladick and ADEC Commissioner Jason Brune
TIKAHTNU BALLROOM

2:00 PM - 3:15 PM
• PFAS Roundtable Discussion
  TIKAHTNU C

• Science, Policy and Political Decision Making: Part II: The Present
  TIKAHTNU E

• Energy Efficiency – The Low-Hanging Fruit of Energy Savings
  TIKAHTNU D

• The Alaska Trails Initiative
  KAHTNU #1

• Community Concerns and Future Research Efforts in the Bering Sea Region
  KAHTNU #2

• The Experimental Arctic Prediction Initiative
  TUBUGHNENG’ #3

• Rural Worker Health and Safety Training Resources
  TUBUGHNENG’ #4

• Amchitka Underground Nuclear Test Site Monitoring
  TUBUGHNENG’ #5

3:30 PM - 4:45 PM
• R10 Regional Tribal Operations Committee: Advancing Action to Achieve Outcomes for Region 10 Tribes
  TIKAHTNU D

• High-Resolution Climate Modeling for Southeast Alaska
  KAHTNU #1

• Bridging the Boreal: Seven years of conservation in interior Alaska and northwest Canada
  KAHTNU #2

• Science, Policy and Political Decision Making: Part III: The Future
  TIKAHTNU E

• Two Sessions on Remedial Options for PFAS
  TIKAHTNU C

• Remote Arctic Oil Storage Facilities: Management Challenges and Regulations
  TUBUGHNENG’ #3

• Reaching Youth Through the Classroom: How to Develop Environmental Lesson Plans for Your School
  TUBUGHNENG’ #4

• Film Festival
  TIKAHTNU BALLROOM

5:00 PM - 7:00 PM
• Wednesday Night LIVE at Williwaw (609 F. St.)

**THURSDAY, FEBRUARY 13**

8:00 AM - 9:00 AM
• Morning Music
  TIKAHTNU BALLROOM

8:00 AM - 5:00 PM
• Arctic Council Board Meeting (Private)
  K’ENAKATNU # 6

9:00 AM - 10:15 AM
*KEYNOTE EVENT:* Randy Olson, National Geographic Photographer
TIKAHTNU BALLROOM

10:30 AM - 11:45 AM
• New Hydropower Energy for Alaska
  TIKAHTNU E

• Climate Resilience and Managed Retreat in Alaska: Where We Are, and Where We Aren’t
  TIKAHTNU C

• Drips and Drops: Oil Spills and Your Health
  TUBUGHNENG’ #5

• Council on Environmental Quality Update to Regulations Implementing NEPA
  TIKAHTNU D

• Nuclear Reactors and Alaska – History, Evolving Technology, Possible Applications
  KAHTNU #1

• Alaska Harmful Algal Bloom Network: What are Harmful Algal Blooms and how are they impacting Alaska?
  KAHTNU #2

• Past, Present and Future of Fishing Gear Recycling in Alaska
  TUBUGHNENG’ #3

• Blast Track: Three Sessions Focused on Data Gathering and Developing Solutions
  TUBUGHNENG’ #4

12:00 PM - 1:30 PM
*KEYNOTE EVENT:* Paul Hawken, Environmentalist, Entrepreneur, Author and Activist
TIKAHTNU BALLROOM

2:00 PM - 3:15 PM
• Eyes in the Sky and on the Ice: New Oil Spill Response Technologies
  TUBUGHNENG’ #5

• Emerging Issues, Tools, and Efforts in Marine Debris Prevention
  TIKAHTNU D
AGENDA AT A GLANCE

FRIDAY, FEBRUARY 14, 2020

8:00 AM - 5:00 PM
• HAZWOPER Refresher Course
  TIKHAHTNU C

9:00 AM - 12:00 PM
• The Indigenous Observation Network Workshop
  TUBUGHÎNENQ’ #3
• Solar Panels 101: Stop By to See a Real Live Solar Panel – and the People Who Know How to Use Them
  TIKHAHTNU E

9:00 AM - 3:00 PM
• Increasing Capacity for Climate Change Mitigation with Harmful Algal Bloom Baseline Data Collection
  KAHTNU #2

9:00 AM - 4:00 PM
• Household Hazardous Waste Management - Identifying, Handling and Staging
  TUBUGHÎNENQ’ #4
• Mining 101: An Overview of the Mining Industry
  KAHTNU #1
• Marine Debris Summit – Leveraging Our Collective Efforts, Identifying Needs and Moving Forward
  TIKHAHTNU D

10:00 AM - 12:00 PM
• Free Friday Youth Workshop!
  K’ENAKATNU # 6

10:00 AM - 1:00 PM
• Marine Bird Die-Off Alert
  TUBUGHÎNENQ’ #5

1:00 PM - 2:00 PM
• AgrAbility in the Last Frontier
  TIKHAHTNU E

1:00 PM - 4:00 PM
• Essential Emergency Prep Hacks and Facts
  K’ENAKATNU # 6

1:00 PM - 5:00 PM
• CEO Proposed NEPA Regulation - Tribal Consultation
  TIKHAHTNU BALLROOM

1:30 PM - 2:45 PM
• The Making of Doodles
  TUBUGHÎNENQ’ #3

3:00 PM - 5:00 PM
• LIVE! Owls and Eagles at the Forum
  TIKHAHTNU E

• Rooftop Solar in your Alaskan Community
  KAHTNU #1

• Backhaul: Setup, Staging, and Safety
  TIKHAHTNU E

• Capturing the Wind across Alaska: Large Scale Wind Projects in Kodiak, Fairbanks and Anchorage
  KAHTNU #2

• Federal Interagency Arctic Research Plan Development Information Sharing and Receiving
  TUBUGHÎNENQ’ #3

• Investigating Climate Sensitivity in Alaskan and Yukon Rivers, Fish, and Communities
  TIKHAHTNU C

• Film Festival
  TIKHAHTNU BALLROOM

3:30 PM - 4:45 PM
• Place-Based Ecosystem Research: Project Updates and Opportunities for Collaborative Learning
  KAHTNU #1

• Connecting Denali National Park Communities through the Zero-Landfill Initiative (ZL)
  TIKHAHTNU E

• Action Planning! Furthering Your Solid Waste Program
  TUBUGHÎNENQ’ #4

• Fur and Feathers: Wildlife Protection and Rehabilitation During Oil Spill Responses
  KAHTNU #2

• Marine Debris Removal and Research: Projects, Plans, Observations
  TIKHAHTNU D

• Clean Energy Financing
  TUBUGHÎNENQ’ #3

• Impacts of Climate Change on Alaskan Villages
  TIKHAHTNU C

• Film Festival
  TIKHAHTNU BALLROOM
On-site registration is available for all Alaska Forum on the Environment Sessions and Keynotes throughout the event. If you are registering on-site please arrive early to ensure you don’t miss our opening keynote! If you have registered in advance, you may pick up your event materials at the Alaska Forum Registration and Service counter.

### 8:00 AM - 9:00 AM
**MORNING MUSIC: WITH JARED WOODS**  
*Tikahtnu Ballroom*

Whether you’ve enjoyed live music in Anchorage your whole life or you’re a visiting artist looking to hear some tunes before a short stint under the midnight sun, you can’t help but stop to appreciate Jared Woods for a moment. He’s the type of talent Alaskans would proudly show off to friends in the rest of the US but would first consider hoarding for themselves. Anchorage fans often name him and his band (Woodrow) the town’s best in listeners’ choice competitions. “He’s got a big sound for a lone guy with a string instrument.” -Anchorage Daily News

Get things started right with caffeine and some good jams with your morning bagel.

### 9:00 AM - 10:15 AM
**KEYNOTE EVENT: JOOST VAN HAREN, UNIVERSITY OF ARIZONA, BIOSPHERE 2.**  
*Tikahtnu Ballroom*

A broadly trained earth scientist, Joost van Haren has researched topics from 20km deep in the earth’s crust to soil-plant-atmosphere interactions. Joost joined the University of Arizona in 1995 to run the analytical facilities and is an assistant research professor of U of A’s Biosphere 2. He is currently investigating carbon uptake by weathering basalt in the Landscape Evolution Observatory and drought effects on carbon cycling rates in the tropical rainforest.

### 10:30 AM - 11:45 AM
**HOW TO CHOOSE DIESEL GENERATORS FOR YOUR RURAL POWERHOUSE**  
*Kahntnu #1*

Diesel engine technology and regulations have changed dramatically over the past 20 years. These changes have made it challenging to specify generators engines in rural villages. This session is intended for electric utility managers who are responsible for replacing their diesel generators. It will cover engine technology innovations, new Environmental Protection Agency regulations which simplify regulatory compliance in rural Alaska, and heat recovery technology.

**PRESENTERS:**
- Steve Stassel, Gray Strassel Engineering
- Dave Messier, Tanana Chiefs Conference
- Dan Smith, Alaska Native Tribal Health Consortium
- David Van Holde, Washington State University

**MODERATOR:**
- Tim Sandstrom, Alaska Energy Authority

**ART AND SCIENCE WITH THE KODIAK WILDLIFE REFUGE YOUTH CONSERVATION CORP**  
*Tubughnëq’ #5*

The Kodiak Refuge Youth Conservation Corp is a summer job for a crew of Kodiak teens who coordinate with dozens of partners over the summer and travel to remote parts of the island by mail plane to work on research and maintenance within the Kodiak National Wildlife Refuge. In addition to a variety of work projects, the teens are also leaders and educators that create and lead programs and outreach for youth and adults. In this session, the teens will share their environmental projects from the summer and then lead the audience in a fun, nature-inspired art lesson.

**PRESENTERS:**
- Aleena Bravo, Kodiak
- Tyler Rudger, Kodiak
- Ishi Taboy, Kodiak
- Shelly Lawson, Kodiak Wildlife Refuge

**MODERATOR:**
- Kendra Calhoun, University of Alaska Fairbanks

**COMMUNITY-BASED OBSERVATIONS OF ENVIRONMENTAL CHANGE ACROSS ARCTIC ALASKA COASTS**  
*Tikahtnu C*

The Alaska Arctic Observatory and Knowledge Hub (AAOKH) is an ongoing coastal observing network that empowers communities with the tools, resources, and support to share their expertise and knowledge. AAOKH focuses on observations of changing coastal sea ice, ocean, marine wildlife, and impacts at the community scale from Indigenous Knowledge holders in seven coastal Arctic communities. This session will share an overview of AAOKH research from local observers, marine scientists, education specialists, and students at the University of Alaska Fairbanks who are working with these community-based observations.

**PRESENTERS:**
- Elena Bautista Sparrow, University of Alaska Fairbanks
- Donna Hauser, University of Alaska Fairbanks
- Joshua Jones, University of Alaska Fairbanks
- Roberta Tuurraq Glenn, University of Alaska Fairbanks
- Billy Adams, Utqiagvik
- Bobby Schaeffer, Northwest Arctic Borough
- Rick Thoman, Alaska Center for Climate Assessment and Policy

**MODERATOR:**
- Donna Hauser, University of Alaska Fairbanks
The MatSu Borough’s McKinley Fire started August 17, 2019. Three days later, it had destroyed 52 residences, 3 commercial structures, and 84 outbuildings. In addition to the many responders, there were significant efforts from partner organizations. These efforts included preparation, unified command, transfer station capacity and logistics, and homeowners having to manage unanticipated hazardous waste issues. Come learn about the disaster cleanup management and the resulting waste impacts from burned residences and other structures.

PRESENTERS:
- Stephanie Allen, United Way of Mat-Su
- Butch Shapiro, Matanuska Susitna Borough

MODERATOR:
- Reilly Kosinski, Zender Environmental Health and Research Group

10:30 AM - 11:45 AM
INFORMATION SESSION: EPA'S GUIDING PRINCIPLES FOR CONSULTING WITH ALASKA NATIVE CLAIMS SETTLEMENT ACT (ANCSA) CORPORATIONS
TIKAHTNU D
EPA has created the draft Guiding Principles for Consulting with ANCSA Corporations document, which is currently out for consultation with both tribal governments and ANCSA corporations. Since 2004, all federal agencies have been required to consult with ANCSA corporations. While EPA has fulfilled this obligation, the Guiding Principles document seeks to clarify EPA’s process. EPA looks forward to sharing information about this proposed action and receiving input from tribal governments and ANCSA corporations.

PRESENTERS:
- Scott Mason, Environmental Protection Agency
- Tami Fordham, Environmental Protection Agency

MODERATOR:
- Paige Lieberman, Environmental Protection Agency

10:30 AM - 11:45 AM
TRANSITIONING TO SAFER CHEMICALS: LET’S START WITH GREEN CLEANING
TUBUGHNENQ’ #4
Thousands of chemicals are in common use, and many cause cancer and other health effects, are suspected of being harmful or lack sufficient data to identify hazards and risks. A proactive, approach to eliminating chemical hazards at the source is feasible and necessary to protect the environment and workers. Transitioning to safer chemicals can be a complex undertaking, but a variety of existing resources make it easier. This session will look into the elements of a green cleaning program, the type of advanced technology equipment and the best practices that are necessary for the safety of workers, residents and the environment. Participants gain info on additional resources, educational materials and training opportunities for transitioning to safer chemicals.

PRESENTER:
- Nancy Simcox, University of Washington

MODERATOR:
- Doug Huntman, Delta Backhaul Company
Jenna Jambeck is an award-winning explorer, associate professor, and director at the University of Georgia. She has been conducting research on solid waste issues for over 20 years with related projects on marine debris since 2001. She also specializes in global waste management issues and plastic contamination. Her work on plastic waste inputs into the ocean published in Science magazine has been recognized by the global community and translated into policy discussions by the Global Ocean Commission, in testimony to U.S. Congress, in G7 and G20 Declarations, and the United Nations Environment Programme. She conducts public environmental diplomacy as an International Informational Presenter for the U.S., including multiple global programs of speaking events, meetings, presentations to governmental bodies, and media outreach around the world. In 2014, she sailed across the Atlantic Ocean with 13 other women in eXXpedition to sample land and open-ocean plastic and encourage women to enter STEM disciplines. She is co-developer of the mobile app Marine Debris Tracker, a tool that continues to facilitate a growing global citizen science initiative that has documented the location of over 1 million litter and marine debris items removed from our environment throughout the world. Join Jenna in learning more about Jenna’s environmental research on plastic and solid waste.

2:00 PM - 3:15 PM
ENERGY AND ENGINEERING EDUCATION
KAHTNU #2
What are effective ways to teach Engineering principles alongside practical energy concepts to secondary students? Renewable Energy Alaska Project (REAP) has collaborated with Alaska Native Science and Engineering Program (ANSEP) and Alaska Center for Energy and Power (ACEP) for years on activities to teach youth energy engineering, such as energy efficient buildings, wind turbine design, and electricity costs. Each organization has years of experience teaching energy literacy principles to students, collaborating together and on independent projects. Meet ANSEP’s regional director Yosty Storms, REAP’s Education Director Colleen Fisk, and ACEP’s PSI Operations Manager Heike Merkel to learn about hands-on lessons they’ve used and outcomes from their different programs.

PRESENTERS:
- Colleen Fisk, Renewable Energy Alaska Project
- Heike Merkel, Alaska Center for Energy and Power
- Yosty Storms, Alaska Native Science and Engineering Program

MODERATOR:
- Audrey Alstrom, Alaska Native Science and Engineering Program

2:00 PM - 3:15 PM
CAN YOU AFFORD A DISASTER?
TIKAHTNU E
Disasters and resulting damages are expensive to recover from. Can you afford to weather that financial storm? Join us as financial professionals discuss realistic scenarios, costs and resources and share advice on how you can protect and prepare yourself and your family by becoming financially prepared for a disaster.

PRESENTERS:
- Kelly Lynkins-Longlet, Northrim Bank
- Patrick Berry, Credit Union 1

MODERATOR:
- Megan Kohler, Alaska Department of Environmental Conservation
2:00 PM - 3:15 PM
RENEWABLE ENERGY AND RURAL ALASKA POWERHOUSES
KAHTNU #1
In recent years, there has been an explosion of interest in and development of renewable energy projects in rural villages. Despite the many lessons learned, it remains challenging to integrate renewables into rural Alaska microgrids. Our presenters will discuss their experience and insights into the successful design and construction of hybrid renewable diesel systems.

PRESENTERS:
• Dennis Meiners, Intelligent Energy Systems
• Jeremy Vandermeer, Alaska Center for Energy and Power
• Bill Price, Alaska Energy Authority

MODERATOR:
• Allison Payne, AECOM

2:00 PM - 3:15 PM
ALASKA'S CHANGING ENVIRONMENT
TIKAHTNU C
Alaska’s environment is changing at unprecedented speed. A team of climate researchers and science communicators at the International Arctic Research Center at the University of Alaska Fairbanks have compiled observations about the major changes currently affecting Alaska’s physical and biological systems. We will focus on the past five years, though we also provide information from earlier decades for historical context. This effort is by no means comprehensive but serves to highlight the monumental shifts occurring in our state.

PRESENTERS:
• Rick Thoman, Alaska Center for Climate Assessment and Policy
• John Walsh, Alaska Center for Climate Assessment and Policy
• Tina Buxbaum, Alaska Center for Climate Assessment and Policy

MODERATOR:
• Tina Buxbaum, Alaska Center for Climate Assessment and Policy

3:30 PM - 4:45 PM
BULK FUEL TANK FARM UPDATES: CONSTRUCTION, TRAINING, AND REGULATIONS
KAHTNU #1
Come learn about the changes in the way tank farm projects are developed in Alaska. Our presenters will discuss how the Denali Commission is helping navigate the current funding landscape, how the Alaska Energy Authority is managing its Bulk Fuel Tank Farm Construction program, and the United States Coast Guard’s recent initiative for tank farm inspections and regulatory enforcement.

PRESENTERS:
• Bill Price, Alaska Energy Authority
• Jeremy Altendorf, US Coast Guard
• Tom Wolf, Denali Commission

MODERATOR:
• Brenda Hewitt, Alaska Department of Commerce, Community and Economic Development

3:30 PM - 4:45 PM
RESEARCH NEEDS IN THE BERING SEA REGION: SEEKING INPUT FOR A COORDINATED SCIENTIFIC APPROACH
TUBUGHNENQ’ #4
Sea ice loss, changes in weather/precipitation patterns, species distribution, water temperatures, and land cover, permafrost thaw and increased maritime activities all indicate the need for additional study into what these changes mean for the rapidly transforming Bering Strait ecosystem. The region is critical to the many villages that depend upon it for subsistence on both sides of the Strait. It is also of global importance, as a link between Arctic change and weather extremes, a bellwether for climate change at middle/low latitudes and to our national security. An informed response is needed from researchers and communities working together and we need each other’s input. Research priorities identified at the recent Alaska Marine Science Symposium on what some managers, co-management groups, communities, scientists and other stakeholders felt were urgent research questions will be presented and a preview of an input session at AFE on February 12 will be provided.

PRESENTERS:
• Cheryl Rosa, US Arctic Research Commission
• Danielle Dickson, North Pacific Research Board

MODERATOR:
• Doug Huntman, Alaska Forum

3:30 PM - 4:45 PM
IKAAGVIK SIKUKUN: BRIDGING THE SCIENTIFIC AND INDIGENOUS COMMUNITIES TO STUDY SEA ICE CHANGE
TIKAHTNU C
Taking its name from the Iñupiaq phrase for “ice bridge” the Ikaagvik Sikukun project has successfully built bridges between a diverse team of scientists and Indigenous Knowledge-holders to study the changing sea-ice environment of Kotzebue Sound, Alaska. We have witnessed two exceptional years (2018 and 2019) with unprecedentedly low sea ice extent and the earliest start of bearded seal (Erignathus barbatus) hunting in recent memory. Join the diverse voices of the Ikaagvik Sikukun team as we share an overview of our research approach and preliminary results using a combination of standard presentations, film, and discussion.

PRESENTERS:
• Robert Schaeffer, Native Village of Kotzebue
• Ross Schaeffer, Native Village of Kotzebue
• Nathan Laxague, Lamont-Doherty Earth Observatory of Columbia University
• Carson Witte, Lamont-Doherty Earth Observatory of Columbia University
• Donna Hauser, University of Alaska Fairbanks
• Sarah Betcher, Farthest North Films
• Jessica Lindsay, University of Washington
• Christopher Zappa, Lamont-Doherty Earth Observatory of Columbia University

MODERATOR:
• Christopher Zappa, Lamont-Doherty Earth Observatory of Columbia University
3:30 PM - 4:45 PM
THE SUN SHINES IN ALASKA: SOLAR POWER PROJECTS ON THE RAILBELT
KAHTNU #2
Though the days are dark in Alaska right now, solar power is taking off across the state! Come hear Jenn Miller from Renewable IPP speak about the largest solar project in the state happening just around the corner in Willow. Renewable IPP’s mission is to deliver affordable solar energy to Alaska through utility scale solar farms. Come hear about their 1.2-megawatt (MW) Willow Solar Farm Expansion project which installed over 3,200 solar panels! Golden Valley Electric Association (GVEA) already supplies over a MW of solar power to their member owners and has also built a 563-kilowatt solar demonstration project in south Fairbanks. Tim DeMarre from GVEA will address the project construction details of their solar farm, as well as its performance over the past 12 months of operation. They will touch base on some of the lessons learned, as well as how the project moves forward regarding operations & maintenance, using the solar farm for “arctic environment” solar farm testing, etc. The Alaska Center for Energy and Power will provide an overview and update on solar PV growth and trends along the Railbelt, including net metering developments, Solarize campaigns, and other technical and research opportunities.
PRESENTERS:
• Tim Demarre, Golden Valley Electric Association
• Chris Pike, Alaska Center for Energy and Power
• Jenn Miller, Renewable IPP
MODERATOR:
• Tom Benkert, Alaska Energy Authority

3:30 PM - 4:45 PM
WILDFIRE AND YOU IN A CHANGING CLIMATE
TIKAHTNU D
The role of wildfire in Alaska’s forest ecology and sustainability, the effect of climate change in Alaska’s fire regime, and the importance of safety from and prevention of wildfire in populated areas is critical to Alaskans. As part of a US Forest Service grant, the AK Div of Forestry has been tasked with training educators (teachers, parents and community members) to teach our youth about wild land fire ecology and wild land-urban interface fire protection. The Alaska Natural Resources and Outdoor Education Association (ANROE) is implementing this grant through workshops which integrate on-line resources and “on-the-ground” activities for educators. (One credit university courses are being offered throughout the state immersing educators in Next Generation Science Standards aligned curricula including Fire in Alaska, FireWorks and Alaska FireWise program.) This presentation will share a glimpse of this course by offering, via lecture and group participation, a quick overview of the curricula, activities and available resources.
PRESENTERS:
• Mary Timm, Educational Horizons
MODERATOR:
• Meg Burgeff, Alaska Forum

3:30 PM - 4:45 PM
NATURE-BASED 21ST CENTURY SKILLS: PREPARING STUDENTS FOR LIFE-LONG SUCCESS
TUBUGHNENQ’ #5
Nenana City School students joined together with educators in an intense study of specialized, interest-based curriculum of choice during an extended period of Denali backcountry camping. A personalized-learning, “intensive program” format allowed students to travel throughout Denali’s wilderness, to explore ideas in depth, to focus on the creation of art, and to work on projects that identify and create service projects in order to support the needs of their greater community. Led by the students, this session’s participants will learn best practice techniques for helping students work through stats in the natural environment by identifying and understanding their strengths, identifying social emotional skills gaps that might hinder their success and providing both whole group and personalized learning curriculum to bridge those gaps. We will equip educators with the tools and teaching strategies to help students move past ACE scores to find grittiness and develop the essential college and career readiness skills they need.
PRESENTERS:
• Bernard Peterson, Nenana
• Albert Amaktoolik, Nenana
• Jerome Andrews, Nenana
• Aiden Coy, Nenana
• Isabelle Wasillie, Nenana
• Eric Filardi, Nenana City School
MODERATOR:
• Kendra Calhoun, University of Alaska Fairbanks

3:30 PM - 4:45 PM
2019 ICE SEAL UNUSUAL MORTALITY EVENT
TUBUGHNENQ’ #3
Learn about the 2019 ice seal (bearded, ringed, and spotted) Unusual Mortality Event and how to report dead seals to better prepare responses to stranding’s in 2020. Time will also be allotted for a question and answer session.
PRESENTERS:
• Gay Sheffield, University of Alaska Fairbanks
• Barbara Mahoney, National Marine Fisheries Service
MODERATOR:
• Barbara Mahoney, National Marine Fisheries Service
ALASKA FORUM ENVIRONMENTAL TRAINING AND APPRENTICESHIP PROGRAM

- Forest Technician Training; April 13 – 17, 2020; Kenai
- Basic Firefighting/Red Card Training; April 20 – 24, 2020; Kenai
- Alaska Certified Erosion and Sediment Control Lead Refresher; April 28; Palmer
- Alaska Certified Erosion and Sediment Control Lead; April 29 - 30; Palmer
- Forklift Safety; May 1; Palmer
- Alaska Qualified Sampler; May 4 – 7; Anchorage
- Confined Space; May 8; Palmer
- Hazardous Wastes Operations & Emergency Response 40 hr; May 11 – 14; Anchorage
- Hazardous Materials Awareness; May 15; Anchorage
- Emergency Spill Response Training; May 18 – 19; Anchorage
- Household Hazardous Waste Awareness/Community Recycling; May 20; Anchorage

All ETAP Trainings are offered at no cost for qualified participants.

ZENDER ENVIRONMENTAL

- Backhaul, OSHA 10 hr Safety, Freon Removal; April 27-May 1, 2020 Anchorage
- 2020 Qualified Sampler Training (Water Quality/Soil Sampling), May 11-13, Anchorage
- Qualified Sampler Training (Water Quality/Soil Sampling), Summer 2020, Dates TBA Juneau
- 2020 Backhaul HHW and Prescription Drug Disposal; July 14-16, Bethel
- 2020 Sustainable Solid Waste and Composting Training Dates TBA, Anchorage
- 2020 COMBINED ISWMP Refresher AND Community Waste Education AND Business of Trash Training; September 15-18, Anchorage

For more information contact Simone Sebalo, ssebalo@zendergroup.org; 907.341.3279 and to apply see our website www.zendergroup.org/sw.html

TRAININGS ARE FREE.

For more information about ETAP and upcoming trainings contact Meg Burgett, mburgett@akforum.org; 907.202.9612. For a full training calendar and information on registering for trainings, see our website http://www.akforum.org/apprenticeship/about-etap/
Kate Troll is currently an op-ed columnist and speaker on conservation and climate issues. She has a Master’s in Natural Resource Management from the Yale School of Forestry and Environmental Studies. As Executive Director of the Alaska Conservation Voters, Kate helped with the creation of the Alaska Renewable Energy Fund and lobbied for the Sustainable Energy Act. She served as Executive Director for United Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State of Alaska. Internationally, Kate was Regional Fisheries Development Specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analyst for the State Fishermen of Alaska. She also worked as a fisheries development specialist and policy analy
10:30 AM - 11:45 AM
ENVIRONMENTAL IMPACTS OF MILITARY TRAINING IN ALASKA
TIKAHTNU D
A panel is scheduled to present information from the US Navy, US Air Force and US Army on past military training and potential environmental impacts, as well as a discussion of mitigating aspects of said training. Information will also be presented on upcoming exercises and training.

PRESENTERS:
• Kenneth Scarle, US Air Force
• Susan Martin, US Air Force
• John Mosher, US Air Force
• Timothy Croft, US Air Force

MODERATOR:
• Kenneth Scarle, US Air Force

10:30 AM - 11:45 AM
CERCLA PROPOSED PLAN FOR THE HISTORICAL RED DEVIL MINE
KAHTNU #2
The Red Devil Mine was the largest mercury mine in Alaska until abandonment in 1971. The Bureau of Land Management (BLM) subsequently assumed liability and began cleanup efforts under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In 2019, BLM and its partners completed a Remedial Investigation (RI) and Feasibility Study (FS). BLM’s proposed plan summarizes the RI/FS study and identifies the BLM’s preferred cleanup alternative.

PRESENTER:
• Mike McCrum, Bureau of Land Management

MODERATOR:
• Ben Martich, Geosyntec Consultants

10:30 AM - 11:45 AM
ANCHORAGE SCHOOL DISTRICT BRINGS BACK THE LUNCH LADY!
TUBUGHNENQ’ #3
The largest school district in the state ditched disposal trays and pre-made food. This change resulted in: reduced program costs, reduced food waste by 40-50%, and created better lunches for students. Come learn how they did it and how you can bring it to your organization.

PRESENTER:
• Andrew Mergens, Anchorage School District

MODERATOR:
• Rebecca Colvin, Alaska Department of Environmental Conservation

10:30 AM - 11:45 AM
HARVESTING ENERGY FROM WOOD AND WASTE: BIOMASS AND LANDFILL GAS FUELS IN ALASKA
TUBUGHNENQ’ #4
Dan Smith from Alaska Native Tribal Health Consortium (ANTHC) will address biomass projects which use wood fired boiler systems that displace fuel oil for heating public facilities. Using locally harvested wood in the heating system instead of fuel oil keeps energy dollars in the local economy and reduces the dependence on fuel oil for heating. These benefits promote energy sustainability and resiliency, as well as providing the added benefits of creating new jobs. Taylor Asher from the Alaska Energy Authority (AEA) will present on the Alaska Wood Energy Development Task group, a partnership of 20 organizations working to help communities displace fossil fuels and reduce heating costs through the use of locally sourced woody biomass. Case studies of cordwood, chip, and pellet systems will be examined along with current projects and accomplishments of the task group. Mike Salzetti from Homer Electric Association (HEA) will discuss how HEA and the Kenai Peninsula Borough (KPB) are partnering to investigate a potential Landfill Gas Project. The presentation will cover a project overview and the engineering and economic analysis that has been completed to investigate the feasibility of the Project. If built, the Project would reduce greenhouse gas emissions, lower the KPB’s leachate evaporation costs and provide HEA with another dispatchable renewable energy source.

PRESENTERS:
• Dan Smith, Alaska Native Tribal Health Consortium
• Taylor Asher, Alaska Energy Authority
• Mike Salzetti, Homer Electric Association

MODERATOR:
• Mark Madden, Municipality of Anchorage

10:30 AM - 11:45 AM
THE ANTHROPOCENE: OUR CONSERVATION PARADIGM FOR THE FUTURE?
TIKAHTNU C
The Anthropocene is this emerging era of Earth’s history wherein human activities are becoming a dominant, disturbing and destabilizing force upon the entire Earth system. It is bringing substantial changes to Alaska’s landscapes, resources, and lifeways. While the Anthropocene is a scientific term describing the totality of human-Earth interactions, it is also an approach to stewardship. It challenges us to re-think long-standing notions of nature, our role in the biosphere, and our current conservation paradigm. This presentation will summarize the environmental, scientific, social, and ethical dimensions of the Anthropocene.

PRESENTERS:
• John Morton, US Fish and Wildlife Service, retired
• Charla Sterne, US Fish and Wildlife Service
• Roger Kaye, US Fish and Wildlife Service

MODERATOR:
• Nancy Fresco, University of Alaska Fairbanks
10:30 AM - 11:45 AM
ALASKA YOUTH FOR ENVIRONMENTAL ACTION
TUBUGHNENQ’ #5
AYEA is a statewide connection of youth leaders that help support one another in the fight for a healthier and sustainable future. AYEA is youth led and driven but works in close partnership with amazing adults to help coordinate and organize events and activities around environmental and social justice. We want to highlight the importance of speaking up and using your voice to convince policy makers to take environmental action. We will demonstrate some of the ways in which individuals can stand up for what they believe in within their own communities with an interactive activity during our session. Join us!

PRESENTER:
• Cassidy Austin, Anchorage
• Shania Murphy, Ketchikan

MODERATOR:
• Kendra Calhoun, University of Alaska Fairbanks

10:30 AM - 11:45 AM
MOVING ELECTRONS ACROSS ALASKA’S RAILBELT: ELECTRIC GRID REFORM
TIKAHTNU E
The six electric utilities in the Railbelt electric grid have all been operating independently for approximately 75 years. After decades of discussion, all six are now embarking together in an effort to create a so-called “electric reliability organization” or ERO for the entire region. A Railbelt ERO would be regulated by the Regulatory Commission of Alaska (RCA) but would be charged with developing and overseeing region-wide reliability and interconnection standards as well as regional planning for new generation and transmission projects. This panel will provide an overview of the process that has gotten us to this point, and a snapshot of the work that must still be accomplished by the utilities, other stakeholders, the RCA and state legislature in order for this new regional entity to become a reality.

PRESENTERS:
• Edward Jenkins, Matanuska Electric Association
• Chris Rose, Renewable Energy Alaska Project
• Antony Scott, Regulatory Commission of Alaska

MODERATOR:
• Allison Payne, AECOM

2:00 PM - 3:15 PM
ELECTRIC VEHICLES
TIKAHTNU E
Electric Vehicles (EV) are here! Organizations around Alaska are working to build the State’s first EV charging network. Come and learn about challenges and opportunities for increasing EV ownership and accelerating adoption of EV technology in Alaska. Topics will include Alaska Energy Authority Volkswagen funding, rate making, and community involvement.

PRESENTERS:
• Dimitri Shein, Alaska Electric Vehicle Association
• Betsy McGregor, Alaska Energy Authority
• Tim Leach, SparkBox LLC

MODERATOR:
• Robert Venables, Southeast Conference

2:00 PM - 3:15 PM
COLLABORATION OPPORTUNITIES WITH USACE ON WATER RESOURCES PLANNING AND PROJECTS
KAHTNU #2
This session will focus on exploring the various opportunities for tribal collaboration and local partnership with the US Army Corps of Engineers (USACE) in Alaska. Discussion will introduce USACE programs and highlight partnership opportunities that focus on local issues related water resource planning and management, including erosion, climate change, and use of watershed studies to assist with water resource management and subsistence sustainability planning.

PRESENTER:
• Kendall Campbell, US Army Corps of Engineers

MODERATOR:
• Amanda Andraschko, US Air Force

10:30 AM - 11:45 AM
GET WHERE YOU ARE GOING: SAFE TRAVELS OFF THE ROAD SYSTEM
K’ENAKATNU # 6
The Alaska State Troopers conduct over 450 search and rescue operations across Alaska every year. How can you avoid being one of these numbers? Join Alaska’s Search and Rescue Coordinator as he discusses how to safely travel in rural Alaska. From trip plans, to gearing up, find out how you can prepare you and your community to get where you are going safely.

PRESENTERS:
• Paul Fussey, Alaska State Troopers, Department of Public Safety

MODERATOR:
• Megan Kohler, Alaska Department of Environmental Conservation
YOUTH AS THE AGENT OF CHANGE
TUBUGHNENQ' #5
This presentation will cover work done by Homer and Anchorage students in the fields of marine debris and environmental monitoring. In Homer, AK a recent plastic bag ban was passed that took effect January 1st, 2020. At 9 locations, you can pick up free reusable Boomerang Bags made by volunteers in the community. This initiative was started in 2017 by a Junior Girl Scout Troop of the Kachemak Bay Girl Scouts. Members of this Girl Scout Troop testified at a City Council meeting on behalf of the plastic bag ban, are still actively supporting sewing bees and bag distribution, participating in small- and large-scale marine debris cleanup efforts and creating marine debris art to raise awareness in the community. Students who are selected for a summer high school internship with the Center for Alaskan Coastal Studies learn to lead natural history tours, assist with outdoor camps and conduct several environmental monitoring projects during the summer. You will hear reflections about the positive impacts that a high school internship can provide. Taking action is important for youth and can lead to civic engagement and behavior change. As a culmination the 4th grade class from Rabbit Creek Elementary will talk about how they explored the issue of marine debris through the creation of a marine debris art piece made from a buoy collected on Augustine Island during a remote clean up that took place in the summer of 2019. This art piece was featured in a First Friday Marine Debris Buoy Art Show at CACS in Homer in September. They will lead attendees of the session in creating a collaborative piece of buoy art that will be displayed throughout the conference and then at their school.

PRESENTERS:
• Rebecca Trowbridge, Center for Alaskan Coastal Studies
• Henry Reiske, Center for Alaskan Coastal Studies
• Elizabeth Trowbridge, Center for Alaskan Coastal Studies
• Holly Rinehart, Rabbit Creek Elementary
• Daisy Kettle, Center for Alaskan Coastal Studies
• Leslie Robertson, Artist
• Alisa Aist, Center for Alaskan Coastal Studies

MODERATOR:
• Kendra Calhoun, University of Alaska Fairbanks

2:00 PM - 3:15 PM
INVASIVE SPECIES IN ALASKA - HOT TOPICS
KAHTNU #1
In the past few years new invasive species issues have become a problem in Alaska. From illegal release of non-native fish and pets to observations of invasive species in new areas, individuals at natural resource agencies and others are working together to respond to these new challenges. Learn more about these invasive species and what you can do to prevent new introductions or the spread of invasive species.

PRESENTERS:
• Katie Spellman, University of Alaska Fairbanks
• Nicole Swenson, Tyeonek Tribal Conservation District
• Danielle Verna, Alaska Pacific University
• Dan Coleman, Alaska Department of Natural Resources

MODERATOR:
• Tammy Davis, Alaska Department of Fish and Game
2:00 PM - 3:15 PM
ALASKA OCEAN ACIDIFICATION NETWORK: TRIBAL OCEAN MONITORING IN ALASKA
TIKAHTNU C
This presentation will include a brief overview of ocean acidification and will then focus on tribal led monitoring efforts in the Chugach region, Southeast Alaska, Kodiak, and the expansion of activities to Western Alaska and the Arctic. Participants can learn how to get involved in ocean acidification monitoring at the local level.
**PRESENTERS:**
- Jeff Hetrick, Alutiiq Pride Shellfish Hatchery
- Jacqueline Ramsey, Alutiiq Pride Shellfish Hatchery
- Andie Wall, Kodiak Area Native Association
- Kari Lamphier, Sitka Tribe of Alaska
**MODERATOR:**
- Dave Lockard, Alaska Energy Authority

2:00 PM - 3:15 PM
FILM FESTIVAL
TIKAHTNU BALLROOM
Come join us for the 11th Annual Alaska Forum Film Festival with over 15 different films being highlighted during the 2020 Film Festival. POPCORN IS PROVIDED!
This session will feature 100% Renewable Alaska, Restoring the Eklutna River, Igigig’s Path to Self-Sustainability, Cordova’s Food and Energy Security Challenges, Nothing to Say and Trouble in Paradise. A question and answer session will follow select films.

3:30 PM - 4:45 PM
DEVELOPING SCHOOL BASED ACTIVITIES TO SUPPORT INDIAN GENERAL ASSISTANCE PROGRAM (IGAP) OBJECTIVES
TUBUGHNEQ’ #3
In this session, learn about the resources available to you to create meaningful activities for school students that do not compete with, but compliment what students are learning in the classroom. This session will also help support project planning efforts of participants. Participants will actually learn how to perform activities and learn methods of presenting information.
**PRESENTER:**
- Brenda Duty, Alaska Department of Fish and Game
**MODERATOR:**
- Meg Burgett, Alaska Forum

3:30 PM - 4:45 PM
SOLAR POWER IN RURAL ALASKA
TIKAHTNU E
The recent success of solar projects around the state have proven what is possible in Alaska, and off-grid communities in rural areas stand to benefit greatly from improved solar technologies. Come learn about the successes and challenges of implementing solar power in rural Alaska, including projects in Hughes, Deering, Buckland, and the Nome region, along with new developments, including bifacial technologies and snow-shedding coatings.
**PRESENTERS:**
- Erin Whitney, Alaska Center for Energy and Power
- Dave Messier, Tanana Chiefs Conference
**MODERATOR:**
- David Lockard, Alaska Energy Authority

3:30 PM - 4:45 PM
FRESH EYES ON ICE: CONNECTING THE ARCTIC THROUGH A REVITALIZED FRESHWATER ICE OBSERVATION NETWORK
TIKAHTNU C
Wide-scale observations of freshwater ice and how its presence has changed over time meet a fundamental need for rural communities that depend on ice for transportation and subsistence harvest, to industries that rely on winter water for ice road construction, to scientists studying climate change and ecosystem services. The Fresh Eyes on Ice observation network collects data across a wide area using satellite observations, monitoring stations on lakes and rivers, and field campaigns by snow machine—all integrated with a partnership of community-based local scientists, teachers, and school children – building on the older Alaska Lake Ice and Snow Observatory Network (ALISON)
**PRESENTERS:**
- Laura Oxtoby, University of Alaska Fairbanks
- Dana Brown, University of Alaska Fairbanks
- Chris Arp, University of Alaska Fairbanks
**MODERATOR:**
- Katie Spellman, University of Alaska Fairbanks

3:30 PM - 4:45 PM
TWO SESSIONS ON TWO SESSIONS ON IN SITU REMEDIATION
TIKAHTNU D
Anaerobic Bioremediation of Benzene in Groundwater: Recent research has shown that anaerobic benzene biodegradation is catalyzed by a very narrow subset of microorganisms. Field tests have confirmed that anaerobic degradation through bioaugmentation is a viable option for remediation of benzene in groundwater. This presentation will highlight first-to-field approaches for using these novel bioaugmentation cultures. Topics will include understanding dosing requirements, remedial timeframes, and ranges of conditions over which the cultures are effective.
**PRESENTERS:**
- Sandra Dworatzek, SiREM
- Rick Girouard, Ahtna
**MODERATOR:**
- Ben Martich, Geosyntec Consultants

3:30 PM - 4:45 PM
COMMUNITY-SCALE COMPOSTING IN RURAL ALASKA - GUSTAVUS DISPOSAL AND RECYCLING CENTER
KAHTNU #2
The Disposal & Recycling Center (DRC) has been composting Gustavus’ food waste since 2001. This presentation tells the story of the composting operation, why it came into being, and describes the current methodology and facility used in the process. Food waste composting is an essential recycling and waste diversion program for the DRC and is an integral part of the facility’s high diversion ratio (57% in fiscal year 2019). Composting food waste with a small budget in a rural community with limited resources is a challenge but is also a source of community pride. Paul Berry has been leading the composting program since its inception and has been managing the DRC since 1994.
**PRESENTERS:**
- Paul Berry, Zender Environmental Health and Research Group
**MODERATOR:**
- Christi Scott, Alaska Department of Environmental Conservation
3:30 PM - 4:45 PM
INVASIVE SPECIES MANAGEMENT IN ALASKA:
WHAT YOU NEED TO KNOW
KAHTNU #1
Invasive species are reaching communities throughout
Alaska through a variety of pathways making prevention,
inventory, and management increasingly important even in
rural areas of the state. Funding, training, and support are
available for those that wish to initiate new invasive species
management programs or sustain existing programs. This
session will introduce participants to some of the emerging
invasive species issues in Alaska they should be aware of,
and what potential funding, training, or support services
are available. Participants will walk away with key
contacts, strategies, tools, and potential funding sources for
managing invasive species.
PRESENTERS:
• Jim Renkert, Alaska Department of Natural Resources
• Justin Fulkerson, University of Alaska Anchorage
• Gino Graziano, University of Alaska Fairbanks
MODERATOR:
• Gino Graziano, University of Alaska Fairbanks

3:30 PM - 4:45 PM
AN OPEN DISCUSSION ON ENGAGING RURAL
AND ALASKA NATIVE YOUTH IN ARCTIC STEM
TUBUGHNNENQ’ #5
We want to hear from you! In this youth focused session,
we are asking participants to share their experiences,
thoughts, and strategies on how to better engage Alaska
youth in Science, Technology, Engineering, and Math
(STEM) programs that are being offered in Alaska.
We want to know what is working, what isn’t working,
and hear your ideas on how to make these programs
more useful to Alaska youth (focusing on high school,
undergraduate, graduate, out-of-school youth). We hope
you’ll join us.
PRESENTER:
• Janet Warburton, Arctic Research Consortium of US
MODERATOR:
• Kendra Calhoun, University of Alaska Fairbanks

3:30 PM - 4:45 PM
CIRCUMPOLAR SOLID WASTE MANAGEMENT
AND MARINE PLASTICS: GLOBAL PARTNERSHIPS
TUBUGHNNENQ’ #4
This session will bring together past and current solid waste
and marine plastics efforts in the Arctic Council.
PRESENTERS:
• Joël Plouffe, Arctic Council Secretariat
• Liz Mack, Aleut International Association
MODERATOR:
• Santina Gay, Environmental Protection Agency

3:30 PM - 4:45 PM
FILM FESTIVAL
TIKAHTNU BALLROOM
Come join us for the 11th Annual Alaska Forum Film
Festival with over 15 different films being highlighted during
the 2020 Film Festival. POPCORN IS PROVIDED!
This session will feature Exploring the Fjords: A Hands-On
Teachers’ Workshop, Hooked: Inspiring Youth, Creating
Opportunity, ACEP Utility Intern Story 1 and 2 and Ikaagvik
Sikikun: Indigenous Perspective of Climate Change. A
question and answer session will follow select films.

3:30 PM - 4:45 PM
ALASKA FORUM BOARD MEETING
K’ENAKATNU # 6
Invitation Only
2020

**KEYNOTE EVENT: MELISSA FARLOW, NATIONAL GEOGRAPHIC PHOTOGRAPHER**

Melissa Farlow has worked extensively for National Geographic magazine in the American West for stories on public lands, environmental issues and wild horses. Primarily known for her personal approach when photographing people, Farlow documented diverse cultures and landscapes while in South America, Quebec, Alaska, the Alps, and the Okefenokee Swamp in over 20 National Geographic projects. Awarded a Pulitzer Prize with the staff of the Louisville Courier-Journal, Farlow received a National Headliner Award as well as Pictures of the Year portfolio honors while at the Pittsburgh Press. Named Distinguished Alumni by the IU School of Journalism, she was inducted into Indiana Journalism Hall of Fame in 2013. Farlow’s National Geographic books include Wild Lands of the West and Long Road South on the Pan American highway. She photographed in Ecuador and documented women’s roles in three African countries—Ethiopia, Mali and South Africa—for Women in the Material World. Her images are printed in over 70 books including Day in the Life series and a number of Geographic’s books including The Photographs, Best 100 Wildlife Photographs and in Women Photographers at National Geographic. Join us to learn and see more of Melissa’s adventures that have taken her across the globe.

**READY, SET, GO: EVACUATIONS AND SHELTERS**

Are you READY for that next disaster? Are you SET to stay informed during that next disaster? Finally, if you are told GO, do you know where to GO? Come take a moment to learn what each action means and how you can be prepared for that next disaster.

**SCIENCE, POLICY AND POLITICAL DECISION MAKING: PART I: THE PAST**

Changes to our current social-ecological systems in the Arctic have and are influencing northern communities. Why does it matter? Governmental policy providing guidance on the management and service structure in the Arctic assume environmental constants that no longer exist. These three Science, Policy, and Political Decision-Making sessions will investigate the relationship between science and the political arena. How is scientific research (data collection and interpretation) used to create policies that can influence the success and resilience of Alaskan towns and villages? Although it is still too early to completely understand what major changes will happen to the Arctic, society has seen recent perils such as increasing coastal erosion, rising sea levels, changing distribution of biota, increasing severe weather/storms, and disruptions in rural social systems. These sessions will touch on scientific contributions to the policymaking process that identifies and responds to our social systems and the biota and communities that currently lives in the Arctic.

**THE FEASIBILITY AND SUSTAINABILITY OF DATA COLLECTION USING UNMANNED AIRCRAFT IN RURAL ALASKA**

Is your community interested in collecting landscape level, climate change data for use in long-term planning and decision-making? If YES, then please join us for a session to discuss the opportunities, challenges, and basic costs of the real-time data collection techniques proposed for the Native Village of Unalakleet and viability of setting up a long-term program as discovered through a Bureau of Indian Affairs sponsored feasibility study.

**KAHTNU #1**

- Michelle Torres, Alaska Department of Military and Veteran’s Affairs

**KAHTNU #2**

- Jessica Garron, University of Alaska Fairbanks

**KAHTNU #3**

- Margaret Hall, Model Forest Policy Program
- John Henry, Native Village of Unalakleet
- Jessica Garron, University of Alaska Fairbanks

**KAHTNU #4**

- Jessica Garron, University of Alaska Fairbanks
10:30 AM - 11:45 AM
SUBSISTENCE FISH CONSUMPTION IN RURAL ALASKA
TIKAHTNU D
This session will present our methods, findings, and major conclusions regarding the risk of dietary methylmercury versus the benefits of subsistence fish consumption in Alaska. Federal consumption guidelines advise eating 227-340 grams of low mercury fish per week, yet rural Alaskans eat an average of over 1,000 grams. Fears over mercury in fish have contributed to low consumption rates, yet the State of Alaska advises unrestricted consumption of some species including salmon to help improve public health. Because mercury exposure can have severe and permanent effects, we used traditional and non-traditional approaches to evaluate risk from mercury in salmon using Alaska-specific datasets.
PRESENTERS:
- Kristin Bridges, Geosyntec Consultants
- Robert Gerlach, Office of the State Veterinarian
- Chris Furin, Office of the State Veterinarian
MODERATOR:
- Megan Marie, Alaska Department of Fish and Game

10:30 AM - 11:45 AM
ENVIRONMENTAL RESTORATION EFFORTS AT FEDERAL SITES IN ALASKA
TIKAHTNU C
The Defense Logistics Agency, Federal Aviation Administration, US Army, US Navy, and US Air Force will present information on their respective environmental cleanup projects in Alaska. The discussions will generally address progress that has been made in the past year to accomplish remediation goals that protect human health and the environment and/or future plans for sites.
PRESENTERS:
- Therese Deardorff, Defense Logistics Agency
- Judo Garcia-Lata, US Navy
- Donna Baulmer, US Air Force
- Kenneth Andraschko, US Army Corps of Engineers
- Brad Platt, Federal Aviation Administration
MODERATOR:
- Taylor Tidwell, US Air Force

10:30 AM - 11:45 AM
LOCAL ENVIRONMENTAL OBSERVATION (LEO) YEAR IN REVIEW
TUBUGHNENQ’ #5
LEO Network is an online platform that allows people to share information about environmental change. This session provides an overview of LEO Network, an introduction to using the platform for local event tracking, and an update on new features that enhance capacity for understanding environmental change and planning for resilience.
PRESENTERS:
- Mike Brook, Alaska Native Tribal Health Consortium and LEO Network
- Mike Brubaker, Alaska Native Tribal Health Consortium
MODERATOR:
- Erica Lujan, Alaska Native Tribal Health Consortium and LEO Network

10:30 AM - 11:45 AM
PERMITTING 101: HOW TO UNDERSTAND GOVERNMENT PERMITS AND HOW TO BE AN EFFECTIVE COMMENTER
TUBUGHNENQ’ #3
The government – the feds, the state, maybe even your locality – issues a bewildering variety of permits. Some may authorize a project you hate; others may put roadblocks in the way of a project you love. Others are just confusing. This session will give you a method to think about and understand them. It will also make you a better commenter – a better participant in what your government does. The session is intended to help individuals, tribes, and others write comments and understand the bewildering array of permits and actions the government throws at them. It particularly focuses on state and federal natural resource and land use authorizations.
PRESENTER:
- Bob Loeffler, University of Alaska Anchorage
MODERATOR:
- Keith Guyer, Kuna Engineering
11th Annual Film Festival

AFE Film Festival Schedule
Tikahtnu Ballroom

Alaska Forum

Tuesday, February 11th 2:00 - 3:15
- 100% Renewable Alaska
- Restoring the Eklutna River
- Igiugig’s Path to Self-Sustainability
- Cordova’s Food & Energy Security Challenges
- Trouble In Paradise
- Nothing to Say

Tuesday, February 11th 3:30 - 4:45
- Exploring the Fjords: A hands on teachers workshop
- Hooked: Inspiring Youth, Creating Opportunity
- ACEP Utility Intern Story 1
- ACEP Utility Intern Story 2
- Ikaagvik Sikukun: Indigenous perspective of climate change

Wednesday, February 12th 3:30 - 4:45
- Evaluating Nearshore Communities in Lower Cook Inlet
- Cloven: Path of the caribou
- Âsônâmâtowin: A sharing of Indigenous knowledge

Thursday, February 13th 2:00 - 3:15
- Water Quality Monitoring Program
- Salvage

Thursday, February 13th 3:30 - 4:45
- Harbo Technologies
- Last Man Fishing

2020
Chris Hladick serves as the Regional Administrator for the Pacific Northwest and Alaska Region. His responsibilities include overseeing the environmental protection efforts for the states of Alaska, Idaho, Oregon and Washington including 271 tribal governments. Mr. Hladick served as Commissioner of the Alaska Department of Commerce, Community, and Economic Development from 2015 – 2017 where he worked to protect consumers while building a strong economy and healthy communities. During his tenure, he oversaw approximately 500 employees in six divisions and seven agencies. He previously served as City Manager in Unalaska, Alaska for 14 years where he was responsible for the day-to-day operation of city services and programs and long term planning goals for the city. Earlier in his career, Mr. Hladick served as City Manager in Dillingham, Alaska and the City Manager and Public Works Director in Galena, Alaska.

Jason W. Brune was appointed as the Commissioner of the Department of Environmental Conservation on December 3, 2018. Prior to his appointment, Mr. Brune was the senior director of land and resources at Cook Inlet Region Inc. (CIRI), an Alaska Native Corporation. Mr. Brune oversaw and participated in the development and administration of CIRI’s 1.6 million acres of subsurface resources, including oil, gas, minerals, sand and gravel, and coal. He supervised the team’s staff, environmental contractors, stakeholder management, and legal review, while building relationships with CIRI’s villages. Mr. Brune also worked to identify priorities for addressing contaminated lands. Prior to working at CIRI, Mr. Brune worked for Anglo American as the company’s public affairs and government relations manager. Brune is also the former executive director for the Resource Development Council. He has a bachelor’s degree in biology from Carleton College and his graduate work was in environmental science at Alaska Pacific University. He has served on the Alaska Sealife Center Board, Cook Inlet Beluga Whale Endangered Species Act (ESA) Recovery Team, Tyonek Tribal Conservation District Board, the Exxon Valdez Oil Spill Public Advisory Committee, and numerous other business and civic organizations.
2:00 PM - 3:15 PM
ENERGY EFFICIENCY – THE LOW-HANGING FRUIT OF ENERGY SAVINGS
TIKAHTNU D

Colleen Fisk from the Renewable Energy Alaska Project (REAP) will discuss REAP’s energy efficiency education outreach, including hands-on classroom visits, teacher trainings, and free curricula. Brendan Babb from the Municipality of Anchorage will be talking about the Anchorage’s i-team work helping municipality facility managers use data to make immediate no/low cost changes that save energy in government buildings. Using 15-minute electricity usage data from Chugach Electric Association (CEA) and Matanuska Electric Association (MEA) and collaborating with Alaska Housing Finance Corporation (AHFC), the i-team is able to leverage data science to detect possible anomalies and potential optimization opportunities. The municipality facility managers are then able to use their expertise to see if there are quick low-cost changes that can be made to save energy. Michael Spencer from AHFC will present on Building Monitoring (BMON) technology and reporting capabilities. You cannot manage what you don’t measure, and what you don’t manage can cost you. This is one reason the AHFC developed a free open source building monitoring system that measure real-time energy use and provides a complete summary of operating performance. The system is able to track building occupancy, temperature, electricity, and fuel use as well as access data from multiple sources, including established weather stations, building automation systems, databases, and other points. Rob Jordan will discuss AEA’s efforts to reduce energy consumption with energy efficiency programs including, Commercial Property Assessed Clean Energy (C-PACE), Village Energy Efficiency Program (VEEP), and the Alaska Energy Efficiency Partnership (AEEP).

PRESENTER:
• Michael Spencer, Alaska Housing Finance Corporation
• Rob Jordan, Alaska Energy Authority
• Colleen Fisk, Renewable Energy Alaska Project
• Brendan Babb, Municipality of Anchorage

MODERATOR:
• Kate Ayers, Chugach Electric

2:00 PM - 3:15 PM
THE ALASKA TRAILS INITIATIVE
KAHTNU #1

The Alaska Trails Initiative (ATI) is a coalition of trails organizations from around the state who are collaborating with leaders in government, business and the non-profit sector to invest more in the trails we love. The ATI coalition seeks to develop and share a strong, unifying message of the positive impacts of trails and the long-term economic benefits of investments in trail development and maintenance. By highlighting the economic benefits that trails can bring to communities across the state, ATI hopes to promote sustainable economic development. Come join in the discussion on how trails can have a positive impact in your community!

PRESENTER:
• Chris Beck, Alaska Trails
• Steve Cleary, Alaska Trails

MODERATOR:
• Bob Loeffler, University of Alaska Anchorage

2:00 PM - 3:15 PM
COMMUNITY CONCERNS AND FUTURE RESEARCH EFFORTS IN THE BERING SEA REGION
KAHTNU #2

The Bering Sea region is experiencing rapid and extreme climate-related changes affecting fisheries, subsistence, ecosystems and rural communities. We seek to gather residents of the Bering Sea/Strait region to help develop a framework for a new comprehensive study of the Bering Sea region. Indigenous knowledge holders and community members affected by these changes are encouraged to attend. We seek to ensure any new research responds to local concerns and will gather input on: 1) emerging research concerns, 2) how local residents and researchers can work together effectively, and 3) communication approaches that gather input and provide results in a timely and appropriate manner.

PRESENTER:
• Cheryl Rosa, US Arctic Research Commission

MODERATOR:
• Kate Hoyatt, US Forest Service

2:00 PM - 3:15 PM
THE EXPERIMENTAL ARCTIC PREDICTION INITIATIVE
TUBUGHNENQ’ #3

The experimental arctic prediction initiative (EAPI) is designed to help Alaskans with short-term and long-term climate change planning. Researchers from UAF’s International Arctic Research Center are working to help stakeholders address immediate needs in response to new risks. This presentation outlines the structure and objectives of EAPI, reviews early product development, and highlights first efforts with stakeholder engagement.

PRESENTER:
• Joseph Little, University of Alaska Fairbanks

MODERATOR:
• Nancy Fresco, University of Alaska Fairbanks

2:00 PM - 3:15 PM
RURAL WORKER HEALTH AND SAFETY TRAINING RESOURCES
TUBUGHNENQ’ #4

Alaska's rural economy is a mixed cash and subsistence economy. Most rural Alaska villages have very few full-time year-round jobs and many of the jobs that are available are in high risk industries such as construction, waste management, hazardous materials removal or emergency response. Additionally, due to the remoteness of these communities, the consequences of even minor workplace injuries can be severely elevated as appropriate medical attention may be hundreds of miles away. Robust worker safety training programs are sorely needed, but many of the same barriers to rural economic development – including lack of public infrastructure, high turnover and high cost of doing business – also present challenges to providing initial and ongoing health and safety training in rural Alaska communities.

The Alaska Native Tribal Health Consortium, Alaska Forum, Zender Environmental and the University of Washington Northwest Center of Occupational Health and Safety all deliver programs that provide worker safety and health training and consultation for rural Alaska workers. This
session will provide program overviews, delivery methods and how you can take advantage of the trainings they provide.

PRESENTERS:
• Jason Kutman, Alaska Native Tribal Health Consortium
• Chris Fish, Alaska Native Tribal Health Consortium
• April Reed-McCoy, Zender Environmental Health and Research Group
• Meg Burgett, Alaska Forum
• Nancy Simcox, University of Washington
MODERATOR:
• Mary Goolie, Environmental Protection Agency

2:00 PM - 3:15 PM
AMCHITKA UNDERGROUND NUCLEAR TEST SITE MONITORING
TUBUGHNENQ’ #5
The United States government conducted three underground nuclear tests on Amchitka Island, Alaska in the 1960’s and 1970’s. The legacy from those tests includes 7 earth-fill disposal pits that contain diesel-contaminated drilling mud and 3 underground cavities where the nuclear tests were conducted. The US Department of Energy Office of Legacy Management is responsible for the long-term stewardship and monitoring of the former test sites and associated wastes. This session will describe efforts to address earthquake damage to some of the mud disposal pits, as well as the sampling results from the radiologic monitoring completed in 2016.

PRESENTERS:
• Stephen Pitton, Navarro Research and Engineering
• Susan Kamp, Navarro Research and Engineering
MODERATOR:
• Jason Nguyen, US Department of Energy

3:30 PM - 4:45 PM
HIGH-RESOLUTION CLIMATE MODELING FOR SOUTHEAST ALASKA
KAHTNU #1
Southeast Alaska is a region comprised of exceptionally steep topographical gradients wherein coastal rainforests abut expansive high-elevation ice fields. Its people depend on water and relatively small changes in the delivery of this water can immediately disrupt quality of life. To help resolve this landscape and to provide historical and plausible future climate scenarios for Southeast Alaska, this research analyzes new dynamically downscaled climate model simulations.

PRESENTER:
• Rick Lader, The Alaska Climate Adaptation Science Center
MODERATOR:
• Nancy Fresco, University of Alaska Fairbanks

3:30 PM - 4:45 PM
BRIDGING THE BOREAL: SEVEN YEARS OF CONSERVATION IN INTERIOR ALASKA AND NORTHWEST CANADA
KAHTNU #2
Since 2012 the Northwest Boreal Landscape Conservation Cooperative - a diverse group of partners in Alaska, Yukon, British Columb ia, and Northwest Territories - have been collaborating on forward-thinking approaches to conservation in the boreal. Many resources and tools have been developed by the Cooperative increasing understanding of changing lands, waters, climate, and wildlife and creating strategies to address changes. We present an overview of tools, resources, and upcoming projects with opportunities to engage in our partnership. We will share tools to incorporate climate change into resource management, new science findings, and our partnership with Indigenous Sentinels Network.

PRESENTER:
• Leonna Heffner, Northwest Boreal Landscape Conservation Cooperative
MODERATOR:
• Kate Mohatt, US Forest Service

3:30 PM - 4:45 PM
SCIENCE, POLICY, AND POLITICAL DECISION MAKING: PART III THE FUTURE - ARE WE ABLE TO ADAPT?
TIKAHTNU E
Tipping points, when referring to climate change, are thresholds that, if exceeded, will lead a series of unavoidable consequences such as risks to economies, food security, and even the amount of oxygen released from the ocean. Most scientists now believe climate change tipping points have already been surpassed and it is now time to prepare and to adapt to the unavoidable changes coming. During this session we will discuss the consequences of rapid increases in temperature, ocean acidification, and the other consequences associated by increasing greenhouse gas emissions and what we can and should do to adapt.

PRESENTERS:
• Robbin Lavoine, US Fish and Wildlife Service
• Mark Masteller, University of Alaska Fairbanks
• Todd Radenbaugh, University of Alaska Fairbanks
• Joost van Haren, University of Arizona, Biosphere 2
• Edda Mutter, Yukon River Inter-Tribal Watershed Council
• Bruce Wright, Environment Alaska LCC
MODERATOR:
• Brian Rasley, University of Alaska Fairbanks

3:30 PM - 4:45 PM
TWO SESSIONS ON REMEDIAL OPTIONS FOR PFAS
TIKAHTNU C
Colloidal Activated Carbon for In Situ Remediation of PFAS: Increasing awareness of the persistence and global distribution of per- and polyfluoroalkyl substances (PFAS) has created a demand for low cost remediation strategies. Increasing retardation in-situ via an activated carbon barrier is an appealing management strategy for PFAS as it limits downgradient exposure. This presentation will include multiple case studies on subsurface colloidal activated carbon applications.

Real Solutions for Real PFAS Problems: This presentation will discuss the options for treating PFAS contamination; present a brief history of PFAS remediation in the Moose Creek area, including testing and performance of a treatment facility; and take a look forward at next steps for PFAS treatment.

PRESENTERS:
• Paul Nielsen, NRC Alaska
• Andrew Punsoni, REGENESIS
MODERATOR:
• Ben Martich, Geosyntec Consultants
3:30 PM - 4:45 PM
R10 REGIONAL TRIBAL OPERATIONS COMMITTEE: ADVANCING ACTION TO ACHIEVE OUTCOMES FOR REGION 10 TRIBES
TIKAHTNU

The Region 10 Tribal Consortium wants to hear from you. The tribal members of this committee are elected by tribal governments to serve all of the 271 tribes in Region 10 and act as a source of information exchange between EPA and Tribes. Advocates for Tribal Sovereignty in environmental management and consultation, and influencers in EPA policy by meeting with the highest-level administrators and program leaders at EPA. Our EPA partners are also members of this committee and are comprised of the highest level Administration and Program Office Managers.

This session will introduce you to some of the new and current members on this committee, engage participants in discussion of the most pressing environmental issues and concerns for Tribes, and to learn of ways in which Tribes can be influencers in affecting public policy. Region 10 RTOC’s Policy Advisor will then walk attendees through the process of identifying opportunities for public comment, resources for assisting with submitting comments, and assist Tribal Leaders in understanding the significance of Tribal commenting on proposed rulemakings and Federal policy. For the last 30 minutes of the session, the floor will be open to attendees for discussion and engagement.

PRESENTERS:
• Raymond Paddock, Central Council of Tlingit and Haida Indian Tribes
• Brian Holter Jr., Craig Tribe
• Rick Eichstaedt, Environmental Protection Agency, Region 10 Tribal Operations Committee
• Randi Madison, Environmental Protection Agency, Region 10 Tribal Operations Committee

MODERATOR:
• Gayla Hoseth, Curyung Tribal Council

3:30 PM - 4:45 PM
REMOTE ARCTIC OIL STORAGE FACILITIES: MANAGEMENT CHALLENGES AND REGULATIONS
TUBUGHNENQ’ #3

Arctic and rural communities depend on oil and fuel to keep them warm and moving throughout the year, but they face many challenges that can hinder storage operations and lead to discharges. A solid foundation in facility management can help prevent spills that are expensive to clean up and impact the environment and local cultural practices. Operating challenges can be overcome by following regulations, involving public participation, and applying financial best management practices. Join us to learn about the issues, inspections, and solutions regarding fuel storage facilities. This session is for operators and anyone who cares about fuel storage tanks and facilities in remote Alaska.

PRESENTERS:
• Mikkel Foltmar, NORTECH
• Jane Sullivan, Alaska Division of Community and Regional Affairs Conservation
• Kirsten Ballard, NORTECH
• Esther Porter, US Coast Guard

MODERATOR:
• Jennifer Sorine, Alaska Department of Environmental Conservation

3:30 PM - 4:45 PM
REACHING YOUTH THROUGH THE CLASSROOM: HOW TO DEVELOP ENVIRONMENTAL LESSON PLANS FOR YOUR SCHOOL
TIKAHTNU

Do you wish your community’s school would teach kids about local environmental issues that affect your community? If so, this session is for you!

Teachers follow state-required guidelines on the topics and concepts at each grade level. They develop their lesson plans and curriculum based on these state standards. It’s like they have their own language and if you want something taught in their class it has to be developed in their language. This session offers a developed lesson plan that connects your environmental program goals to school curriculum. You will also be able to take this lesson plan and use it as a template to fit any environmental issue you want. Join us in a fun, experiential education opportunity to help you meet your environmental health goals.

While you may attend this session on its own, this session is intended to be paired with an extended opportunity to develop an individualized lesson plan by attending the Action Planning! Furthering Your Solid Waste Program (Thursday 3:30).

PRESENTERS:
• April Reed-McCoy, Zender Environmental Health and Research Group
• Trisha Bower, Alaska Department of Environmental Conservation

3:30 PM - 4:45 PM
FILM FESTIVAL
TIKAHTNU BALLROOM

Come join us for the 11th Annual Alaska Forum Film Festival with over 15 different films being highlighted during the 2020 Film Festival. POPCORN IS PROVIDED!

This session will feature Evaluating Nearshore Communities in Lower Cook Inlet, Cloven: Path of the Caribou and Asónamätowin: A Sharing of Indigenous Knowledge. A question and answer session will follow select films.

5:00 PM - 7:00 PM
WEDNESDAY NIGHT LIVE AT WILLIWAW (609 F. ST.)
WNL WEDNESDAY NIGHT LIVE
HOSTED BY RICHARD PORTER OF KNIK TRIBAL COUNCIL

JOIN US FEBRUARY 12 FROM 5:00 – 7:00PM
for an evening of entertainment at Williwaw! Those wearing their AFE name badges will get special discounts on food service.

ENVIRONMENTAL TRIVIA
Brush up on your knowledge of the environment, AFE and Alaska and try your hand at Environmental Trivia with your team.

MUSIC FEATURING Jared Woods
rock/acoustic/americana

WILLIWAW • 609 F STREET
DETAILED AGENDA • THURSDAY, FEBRUARY 13TH

8:00 AM - 9:00 AM  
MORNING MUSIC WITH RICK BROOKS  
TIKAHTNU BALLROOM
We imagine there is nothing quite like waking up to Rick Brooks. For over 15 years, Rick Brooks has been on the cutting edge of acoustic music in Alaska, and might just be the finest acoustic guitarist performing regularly in the state. Veteran of thousands of gigs in a multitude of styles, including touring outside of Alaska and appearing on national radio shows like “West Coast – Live,” Rick has performed with many of today’s leading guitarists, including Brit-folk legend John Renbourn and Wings (with Paul McCartney) guitarist Laurence Juber, as well as fingerstyle masters Tim Sparks and Tony McManus. He has also opened shows for many of the great acoustic bluesmen such as John Hammond, Paul Geremia, and Guy Davis.

8:00 AM - 5:00 PM  
ARCTIC COUNCIL BOARD MEETING  
K’ENAKATNU # 6  
Invitation Only

9:00 AM - 10:15 AM  
KEYNOTE EVENT: RANDY OLSON, NATIONAL GEOGRAPHIC PHOTOGRAPHER  
TIKAHTNU BALLROOM
Randy Olson is a photographer in the documentary tradition. He often works with his wife, Melissa Farlow and their work has taken them to 50 countries over the past 20 years. Even though they are published in LIFE, GEO, Smithsonian and other magazines, they have primarily worked on projects for the National Geographic Society. They normally work individually but have co-produced National Geographic magazine stories on northern California, American national parks, and the Alps. They photographed the southern United States for a book by Collins Publishing and have collaborated on over 70 books by various publishers. Randy’s 30+ National Geographic projects have taken him to almost every continent. National Geographic Society published a book of his work in 2011 in their Master of Photography series. Olson was the Magazine Photographer of the Year in the 2003 Pictures of the Year International (POYI) competition and was also awarded POYI’s Newspaper Photographer of the Year in 1991—one of only two photographers to win in both media in the largest photojournalism contest operating continuously since World War II. In 2011, Randy founded The Photo Society (thephotosociety.org) that is open to any photographer who has produced a full-length story for National Geographic magazine. The purpose of the organization is to find economic opportunities and provide exposure to members as the economics of print dwindles. The National Geographic photographers elected Randy to represent them on the Photographer’s Advisory Board (PAB) for National Geographic and The Photo Society grew from Randy’s work on the PAB and his realization that the management at the National Geographic Society didn’t really understand the hazards their photographers endured. Most recently, Randy’s work features National Geographic stories on plastics. Join us to see where Randy’s photography has taken him.

10:30 AM - 11:45 AM  
NEW HYDROPOWER ENERGY FOR ALASKA  
TIKAHTNU E
Alaska has a long history of hydroelectric power production, and currently has about 50 existing hydro projects with a new one or two a year. Hear how new energy is being produced by existing dams, how a possible project could provide energy and improve communications to a large region, and how projects can best work with fish and game to have a successful project.

PRESENTERS:
• Kevin Keith, Alaska Department of Fish and Game  
• Bryan Carey, Alaska Energy Authority  
• Bob Armstrong, Nushagak Cooperative  
MODERATOR:
• Allison Payne, AECOM

10:30 AM - 11:45 AM  
CLIMATE RESILIENCE AND MANAGED RETREAT IN ALASKA: WHERE WE ARE, AND WHERE WE AREN’T  
TIKAHTNU C
This session offers a panel discussion with audience participation on the topic of managed retreat (community relocation). Our discussion will focus on the technical and practical aspects, including funding of managed relocation and considerations for communities facing infrastructure risk due to climate change.

PRESENTERS:
• Elizabeth Bella, AECOM  
• Jon Isaacs, AECOM  
MODERATOR:
• Nancy Fresco, University of Alaska Fairbanks

10:30 AM - 11:45 AM  
DRIPS AND DROPS: OIL SPILLS AND YOUR HEALTH  
TUBUGHNEQ’ #5
Oil spills frequently occur in Alaskan communities, ranging from big incidents that you hear about in the news to small discharges from local tank farms, home heating oil tanks, vehicles, and equipment. Have you ever wondered how everyday exposures to oil could impact your health and the local food you eat? If so, join us to hear about the toxicology of petroleum products, how to prevent exposure, and agency efforts to help ensure food safety following an oil spill. This session is for anyone interested in how oil spills can impact your health and food resources as well as simple steps to protect yourself, your family, and your community.

PRESENTERS:
• Doug Helton, National Oceanic and Atmospheric Administration  
• Megan Kohler, Alaska Department of Environmental Conservation  
• Stacey Cooper, Alaska Department of Health and Social Services  
MODERATOR:
• Kathy Shea, Alaska Department of Environmental Conservation
10:30 AM - 11:45 AM
NUCLEAR REACTORS AND ALASKA – HISTORY, EVOLVING TECHNOLOGY, POSSIBLE APPLICATIONS
KAHTNU #1
Recent national policy actions and commercial investments have elevated interest in the possible applications for micro nuclear reactor energy systems. These self-contained, factory-assembled, transportable energy systems - approximately 20 megawatt or less thermal and/or electrical energy, and possibly as low as hundreds of kilowatt - may warrant consideration as a means of addressing some of the power and heat requirements for military bases, industrial and commercial sites, and some communities in Alaska and other arctic locations. Their reduced operational overhead and simplicity relative to conventional reactors, manageable size and cost, and zero-carbon/zero-particulate atmospheric emissions could potentially offer highly effective improvements relative to the energy systems currently employed in these settings. Alaska’s changing and fragile environment, remoteness, first-peoples interests, etc. provide a highly relevant early adopter context to responsibly explore arctic implementation of these systems. What are the key areas for Alaskans to consider, and how can Alaska engage with the larger dialogue elsewhere in the United States and beyond?
PRESENTERS:
• Corey McDaniel, Idaho National Labs
• Gwen Holdmann, University of Alaska Fairbanks
• Richelle Johnson, University of Alaska Anchorage
MODERATOR:
• George Roe, University of Alaska Fairbanks

10:30 AM - 11:45 AM
ALASKA HARMFUL ALGAL BLOOM NETWORK: WHAT ARE HARMFUL ALGAL BLOOMS AND HOW ARE THEY IMPACTING ALASKA?
KAHTNU #2
Harmful algal blooms in Alaska can produce paralytic shellfish toxins that have sickened or even killed people in Alaska and their presence has recently been confirmed in marine mammals and seabirds. Come learn about the Harmful Algal Bloom Network, which is dedicated to statewide awareness, research, monitoring, and response. This session will start with an overview of the Network and events that occurred this summer. We will then break into Research, Monitoring, Education, and Event Response discussion groups. Participants will be able to join a group for open discussion with Network members. Resources on regional monitoring efforts will be available. Come with questions!
PRESENTERS:
• Chris Whitehead, Sitka Tribe of Alaska
• Rose Masui, Kachemak Bay National Estuarine Research Reserve
• Darcy Dugan, Alaska Ocean Observing System
MODERATOR:
• Rose Masui, Kachemak Bay National Estuarine Research Reserve

10:30 AM - 11:45 AM
PAST, PRESENT AND FUTURE OF FISHING GEAR RECYCLING IN ALASKA
TUBUGHNENO’ #3
People in Alaska do a lot of fishing with many gear types; seines, trawls, pots, lines, and gillnets. When fishermen are finished using their gear, there are limited options for disposal in many communities. There have been many attempts at establishing recycling programs for fishing gear, going back as far as 1995. Some of these are still around, some have taken a break, and some have failed. This talk will review the past, present and future of recycling fishing gear in Alaska.
PRESENTERS:
• Nicole Baker, Net Your Problem, LLC
• Shae Bowman, Copper River Watershed Project
MODERATOR:
• Anahma Shannon, Kawerak, Inc.

10:30 AM - 11:45 AM
BLAST TRACK: THREE SESSIONS FOCUSED ON DATA GATHERING AND DEVELOPING SOLUTIONS
TUBUGHNENO’ #4
Monitoring Large Vessel Traffic in Coastal Alaska: As many as 400 large vessels operate daily within Alaskan waters. Monitoring of these vessels for disruption to subsistence activities and compliance with environmental regulations is a challenge. This presentation will showcase a tool to transmit “alerts” about large vessel movements to coastal managers and communities and inform interested communities and managers.

Advances in Bathymetric LiDAR for Shallow Water Analysis: Most construction activities on the North Slope occur in winter and use lake water to build ice roads. Selecting the right lake for a water withdrawal permit typically is a drawn-out process. Instead of the conventional approach of using small boats with sonar to map lakes, this presentation will discuss an approach that uses green wavelength LiDAR deployed from aircraft to gather higher resolution data.

Naknek Wastewater Lagoon: Adapting Wastewater Treatment in Rural Alaska. The Naknek Wastewater Lagoon was constructed in the mid-1980s near the top of a bluff on the north shore of Kvichak Bay. This presentation will discuss challenges in permitting, maintaining, and operating an aging and out-paced wastewater infrastructure in a rural Alaska setting experiencing rapid environmental changes.
PRESENTERS:
• Aaron Poe, Alaska Conservation Foundation / Aleutian and Bering Sea Initiative
• Adam McCullough, Quantum Spatial
• Lauren Divine, Aleut Community of St. Paul Island Ecosystem Conservation Office
• Trevor Crosby, Umiaq Environmental
• Kyle Brennan, Shannon and Wilson, Inc.
MODERATOR:
• Ben Martich, Geosyntec Consultants
10:30 AM - 11:45 AM
COUNCIL ON ENVIRONMENTAL QUALITY
UPDATE TO REGULATIONS IMPLEMENTING NEPA
TIKAHTNU D
The Council on Environmental Quality (CEQ) is proposing to update its regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA), which CEQ has not comprehensively updated since their promulgation in 1978. This proposed rule would modernize and clarify the regulations to facilitate more efficient, effective, and timely NEPA reviews by federal agencies in connection with proposals for agency action. It would also advance CEQ’s original goals to reduce paperwork and delays and promote better decisions. This session is for all NEPA practitioners and participants, and CEQ has invited comments on the proposed revisions at https://www.regulations.gov.
PRESENTER:
• Edward Bolding, Council on Environmental Quality
MODERATOR:
• Philip Johnson, US Department of the Interior

12:00 PM - 1:30 PM
KEYNOTE EVENT: PAUL HAWKEN,
ENVIRONMENTALIST, ENTREPRENEUR, AUTHOR
AND ACTIVIST
TIKAHTNU BALLROOM
Paul Hawken, environmental activist and author of Drawdown, The Most Comprehensive Plan Ever Proposed to Reserve Global Warming. Hawken is an environmentalist, entrepreneur, journalist, author and activist who has dedicated his life to environmental sustainability and changing the relationship between business and the environment. He is one of the environmental movement’s leading voices, and a pioneering architect of corporate reform with respect to ecological practices. On top of that, Paul is the Founder and Director of Project Drawdown, a non-profit dedicated to researching and seeking solutions to the problem of global warming. He is also the author of numerous books, including The Natural, The Ecology of Commerce, and Drawdown, a book that offers hundreds of solutions to reverse global warming.

2:00 PM - 3:15 PM
EMERGING ISSUES, TOOLS, AND EFFORTS IN
MARINE DEBRIS PREVENTION
TIKAHTNU D
This session will look at the emerging tools, techniques, and efforts groups are using for marine debris prevention. Marine debris is a multifaceted issue, with many sources and impacts. While cleanup is important, addressing debris in the long term will require finding ways to change the behaviors that create marine debris. Data shows that most marine debris is land-based - it comes from litter or improper disposal on land rather than at sea, so the best place to stop marine debris is on shore, before it enters the ocean. Attendees can expect to hear about innovative problem-solving and the emerging approaches being used in Alaska and beyond to better understand and prevent marine debris and its impacts.
PRESENTERS:
• Katherine Nalven, Defenders of Wildlife
• Henry Reiske, Center for Alaskan Coastal Studies
• Elizabeth Trowbridge, Center for Alaskan Coastal Studies
• Herminia Din, University of Alaska Anchorage
MODERATOR:
• Veronica Padula, Aleut Community of St. Paul Island Ecosystem Conservation Office

2:00 PM - 3:15 PM
ROOFTOP SOLAR IN YOUR ALASKAN
COMMUNITY
KAHTNU #1
If you’ve been driving around Anchorage or Fairbanks lately, you may have noticed some changes. Solar panels are appearing on rooftops across both communities through the Alaska Center for Energy and Power’s Solarize program. Are you or your community interested in rooftop solar, but don’t know where to start? How well do solar panels work in Alaska, and is it economic? What is net metering, and do all utilities allow it? How is net zero different from net metering? These and other questions will be explored by Michelle Wilber of the Alaska Center for Energy and Power discusses the latest rooftop solar trends and tips for different types of property owners in Alaska. In summer 2019, the Turnagain neighborhood in Anchorage participated in the 2019 Solarize Campaign. The Solarize Anchorage campaign provides neighborhoods the framework to save on solar through group purchasing. Over the course of the summer, Arctic Solar Ventures completed 88 installations (over 500kW) in the Turnagain neighborhood. Arctic Solar Ventures CEO, Stephen Trimble, will overview Arctic Solar Ventures’ program, success stories, and how future neighborhoods and communities in Alaska can learn how to set up and benefit from their own Solarize program. Also hear from Alaska Center staff on their outreach efforts to spread solar power across the state.
PRESENTERS:
• Steven Trimble, Arctic Solar Ventures
• Michelle Wilber, Alaska Center for Energy and Power
MODERATOR:
• Tom Benkert, Alaska Energy Authority
2:00 PM - 3:15 PM
BACKHAUL: SETUP, STAGING, AND SAFETY
TIKAHTNU E
Backhaul is the transportation and recycling of hazardous wastes out of rural communities. This session will highlight best practices regarding how to setup and organize connexes, storage spaces, etc. to better support a community’s backhaul program. Additional topics include organization, keeping control over collection/storage sites, and the importance of using checklists. Safety considerations (PPE, training, practices) will be discussed throughout.

PRESENTER:
• Reilly Kosinski, Zender Environmental Health and Research Group
MODERATOR:
• Stephen Price, Alaska Department of Environmental Conservation

2:00 PM - 3:15 PM
CAPTURING THE WIND ACROSS ALASKA: LARGE SCALE WIND PROJECTS IN KODIAK, FAIRBANKS AND ANCHORAGE
KAHTNU #2
Wind power has taken off across Alaska and has proven to be an economical source of green power in our state. Come hear the latest on three of the most significant wind projects in the state, as well as the possibilities for future integration of wind with energy storage. Kodiak's Pillar Mountain Wind Project has been online for just over 10 years. Darron Scott from Kodiak Electric Association will review the past performance of the project, some lessons learned, a few significant maintenance issues, and a review of how the various energy storage units have performed in conjunction with the wind project. Rocky DeMers will speak on Golden Valley Electric Association’s (GVEA) Eva Creek Wind Project, which, at just under 25-megawatts, is the largest wind project in Alaska and the first by any Railbelt utility. The project integrates well into GVEA’s system, enables the cooperative to meet its Renewable Energy Pledge ahead of schedule, and helps reduce the Interior’s dependence on oil for power generation. Fire Island Wind LLC owns and operates a 17.6-megawatt wind turbine project on Fire Island, three miles off the coast of Anchorage, Alaska. The project began delivering clean, renewable energy in the fall of 2012. Currently, the 11 wind turbines located on Fire Island have the capacity to power approximately 7,000 homes. Chris Jimenez from the Fire Island Wind Project will be presenting a little about the history of FIW, its development, capabilities, and future expansion.

PRESENTERS:
• Darron Scott, Kodiak Electric Association
• Rocky DeMers, Golden Valley Electric Association
• Chris Jimenez, Fire Island Wind
MODERATOR:
• Kirk Warren, Alaska Energy Authority
3:30 PM - 4:45 PM
PLACE-BASED ECOSYSTEM RESEARCH: PROJECT UPDATES AND OPPORTUNITIES FOR COLLABORATIVE LEARNING
KAHTNU #1
This session will provide an overview of current Alaska Center for Conservation Science and Kachemak Bay National Estuarine Research Reserve projects that incorporate place-based research and collaborative learning to address questions both shared and unique to Alaskan communities. Three of the projects highlighted are based in Southcentral Alaska (community monitoring, harmful algal blooms, and watershed ecology) and the fourth is focused on marine invasive species impacts in the Bering Sea. These projects could be implemented in other areas of Alaska to provide data on the health of our marine and freshwater systems that may be threatened by our changing climate and increasing urbanization. There will be an opportunity for questions and discussions on potential partnerships in the future at the end of the session.

PRESENTERS:
• Jasmine Mauer, Kachemak Bay National Estuarine Research Reserve
• Steven Baird, Kachemak Bay National Estuarine Research Reserve
• Rose Masui, Kachemak Bay National Estuarine Research Reserve
• Amanda Droghini, Alaska Center for Conservation Science

MODERATOR:
• Doug Mutter, Alaska Forum

3:30 PM - 4:45 PM
FUR AND FEATHERS: WILDLIFE PROTECTION AND REHABILITATION DURING OIL SPILL RESPONSES
KAHTNU #2
One major concern with oil spills is the potential impacts to wildlife. Come learn about the people and organizations dedicated to rehabilitating oiled birds and pinnipeds and explore the equipment, facilities, training, and protocols they use. Find out about the new and improved draft Wildlife Protection Guidelines for oil spill response in Alaska that inform responders how to protect animals from spills. Also discover how you can get involved with wildlife rehabilitation and comment on the draft guidelines!

PRESENTERS:
• Barbara Callahan, International Bird Rescue
• Chip Arnold, Alaska Sealife Center
• Jamie Auletta, Alaska Sealife Center
• Angela Matz, US Fish and Wildlife Service

MODERATOR:
• Jeanette Alas, Alaska Department of Fish and Game
3:30 PM - 4:45 PM  
MARINE DEBRIS REMOVAL AND RESEARCH: PROJECTS, PLANS, OBSERVATIONS  
TIKAHTNU D  
In this session you’ll hear from members of the marine debris removal and research community on recent and planned efforts, what they’re finding, and what they’re learning. Across Alaska there is an active and innovative marine debris community working to clean debris from shorelines. These projects use diverse methods but all have the common goal of removing debris and preventing impacts to the environment. At the same time, scientists are working to understand and address marine debris issues using emerging tools and technologies, and collaborating with researchers and stakeholders across communities, industries and agencies. If you are leading current cleanups, planning new efforts, or want to better understand the state of the science on marine debris, this is a great opportunity to learn from the experts.  
PRESENTERS:  
• Lauren Divine, Aleut Community of St. Paul Island Ecosystem Conservation Office  
• Veronica Padula, Aleut Community of St. Paul Island Ecosystem Conservation Office  
• Michael Levine, Ocean Conservancy  
MODERATOR:  
• Michael Williams, National Oceanic and Atmospheric Administration  

3:30 PM - 4:45 PM  
CLEAN ENERGY FINANCING  
TUBUGHNENO’ #3  
Over the last decade, the Alaska legislature has appropriated more than $900 million for grants to homeowners and communities to make homes more energy efficient and build utility-scale renewable energy projects. With the state’s revenues dropping, those state grant programs have dried up despite the strong business case for energy efficiency and renewable energy. This panel will examine new innovative ways to finance clean energy that reduce the risk to lenders, and make it easier for homeowners, businesses and communities to borrow money to develop projects.  
PRESENTERS:  
• Chris Rose, Renewable Energy Alaska Project  
• Shaina Kilcoyne, Municipality of Anchorage  
• Tom Benkert, Alaska Energy Authority  
MODERATOR:  
• Allison Payne, AECOM  

3:30 PM - 4:45 PM  
IMPACTS OF CLIMATE CHANGE ON ALASKAN VILLAGES  
TIKAHTNU C  
Climate change is affecting the livability of Alaskan villages across the state, with projected flooding and erosion impacting critical infrastructure and warmer, wetter climates influencing traditional lifestyles. Alaskan Native villages are vulnerable to climate change, experiencing escalating rates of erosion, flooding, and failing infrastructures, with a cumulative cost in the millions of dollars. There is a critical need to develop short and long-term solutions that address the impacts of climate change while supporting Alaskans residing in environmentally threatened communities. Two Bears Environmental Consulting, LLC., completed an Environmental Risk Assessment for three villages on the YK Delta; Napakiak, Newtok and Chefornak. Climate sensitivities were projected based on future climates for each decade from baseline through 2100 as predicted from the IPCC, capturing both gradual onset climate change and extreme events at the village scale using accepted forward-thinking climate practices. This session will present projected future climates, and the magnitude and timing of climate impacts on the environment and sustainability of villages at risk due to a changing climate. Although the assessments were only completed for villages in the YK Delta, the trends provide insights as to the direction and magnitude future climate impacts might have across Alaska. Community members will also discuss how they were able to incorporate the forward-looking data into their Master Plan for developing resilient communities for future generations.  
PRESENTERS:  
• Walter Nelson, Village of Napakiak  
• Ronni Wilcock, Two Bears Environmental Consulting, LLC  
MODERATOR:  
• Jase Wilcock, Two Bears Environmental Consulting, LLC  

3:30 PM - 4:45 PM  
FILM FESTIVAL  
TIKAHTNU BALLROOM  
Come join us for the 11th Annual Alaska Forum Film Festival with over 15 different films being highlighted during the 2020 Film Festival. POPCORN IS PROVIDED! This session will feature Harbo Technologies and Last Man Fishing. A question and answer session will follow select films.
8:00 AM - 5:00 PM
HAZWOPER REFRESHER COURSE
TIKAHTNU C
You must be registered to attend Friday and provide a $25 materials fee for the course. Training provided by Environmental Management Inc. This class is required annually to remain in compliance with 29 CFRR 1910.120 and provides review of the 40-hour Hazardous Waste Operations and Emergency Response class, covers new rules and regulations passed in the last year, and discusses problems encountered in field response, new waste disposal techniques, and health issues. This course is open to anyone currently holding a HAZWOPER 40-hour ID card or certificate.

9:00 AM - 5:00 PM
HOUSEHOLD HAZARDOUS WASTE MANAGEMENT - IDENTIFYING, HANDLING AND STAGING
TUBUGHNE’Q’ #4
Do you work in the environmental field in rural Alaska? Have you thought about improving household hazardous waste management in your community? Do you want to minimize your environmental footprint? If you answered YES! to any of these questions, this training is for you. The course foundation provides a broad picture of managing HHW effectively and jobsite safety. Learn to recognize hazards in handling HHW and the disposal limitations at the community landfills. Students will explore HHW classifications and gather information about the characteristics of each waste type. We introduce Safety Data Sheets (SDS) and demonstrate how to use them effectively in the field. The training covers sources of hazardous wastes in villages, construction and demolition projects waste and alternatives to HHW through green purchasing programs. Documentation for shipping material and the limitations of accumulating and storing hazardous material is included as part of the training. Want to be safe on the job? PPE (personal protection equipment), essential for being safe at work will be covered in a group discussion PPE and showcase. Want to be ready for the Zombie Apocalypse? We discuss best management practices and developing a solid waste disaster plan for situations that arise during a disaster. Finally, we cover disposal procedures for old prescription medications and show how you can add this to your community environmental program. You will leave this training full of useful information on how to improve your environment and minimize impacts to human health and subsistence resources!

PRESENTERS:
• Doug Huntman, Delta Backhaul Company
• Paul Nielson, NRC Alaska
• Ted Jacobson, Sustainable Solid Waste Solutions

9:00 AM - 12:00 PM
SOLAR PANELS 101: STOP BY TO SEE A REAL LIVE SOLAR PANEL – AND THE PEOPLE WHO KNOW HOW TO USE THEM
TIKAHTNU E
Come check out the latest in solar panel design that’s being installed across Alaska! Mark Haller, Board Member of Alaska Solar Energy Industries Association (AKSEIA) and Owner of Midnight Sun Solar will talk about what it takes to install solar on your home and start producing power from your rooftop. See a modern solar panel up close in personal and chat with Mark about the installation process. Stop by any time between 9 and noon for this informal gathering.

PRESENTER:
• Mark Haller, Midnight Sun Solar / Alaska Solar Energy Industries Association

MODERATOR:
• Allison Payne, AECOM

9:00 AM - 3:00 PM
INCREASING CAPACITY FOR CLIMATE CHANGE MITIGATION WITH HARMFUL ALGAL BLOOM BASELINE DATA COLLECTION
KAHTNU #2
The Southeast Alaska Tribal Ocean Research (SEATOR) network is composed of 16 different tribal governments working together to collect baseline environmental data in their communities. SEATOR partners use this data to help protect their community members from illnesses associated with Harmful Algal Blooms (HABs), like Paralytic Shellfish Poisoning (PSP) and Amnesic Shellfish Poisoning (ASP). This full-day workshop will consist of phytoplankton identification, shellfish biology and mechanisms of toxin bioaccumulation, an overview of how the data is used as an “early warning” predictor of HAB events, and a hands-on session where participants will work with SEATOR staff on microscopy methods.

PRESENTER:
• Chris Whitehead, Sitka Tribe of Alaska/Southeast Alaska Tribal Ocean Research
• Kari Langphier, Sitka Tribe of Alaska/Southeast Alaska Tribal Ocean Research
• Naomi Bargmann, Sitka Tribe of Alaska/Southeast Alaska Tribal Ocean Research
• Muriel Reid, Sitka Tribe of Alaska/Southeast Alaska Tribal Ocean Research
• Jennifer Maucher Fuquay, National Oceanic and Atmospheric Administration

MODERATOR:
• Chris Whitehead, Sitka Tribe of Alaska/Southeast Alaska Tribal Ocean Research

9:00 AM - 4:00 PM
MINING 101: AN OVERVIEW OF THE MINING INDUSTRY
KAHTNU #1
This one-day course will provide an overview of the mining industry, especially as it exists in Alaska. The course will provide the student with an understanding of the exploration and development process, environmental issues, industry economics, the permitting process, and public issues.

PRESENTER:
• Bob Loeffler, University of Alaska Anchorage Institute of Social and Economic Research

MODERATOR:
• Keith Guyer, Kuna Engineering
9:00 AM - 4:00 PM
**MARINE DEBRIS SUMMIT – LEVERAGING OUR COLLECTIVE EFFORTS, IDENTIFYING NEEDS AND MOVING FORWARD**
**TIKAHTNU D**

This day-long summit will focus on the disposal of marine debris, building on sessions held throughout the week at AFE on marine debris prevention, net recycling, and removal. During the summit state, federal, tribal, and international representatives will share challenges and successes in managing marine debris and discuss ways to further collaborate on the issue. The session will provide an opportunity for Alaska community residents and subsistence users to identify their concerns and questions and discuss possible effects marine debris may have on the people living in the Arctic, subsistence food, and ocean and fresh water. A panel will share efforts to dispose of marine debris collected on their shorelines and open a discussion to identify common needs and potential actions to address them. Discussion will also include the emerging issue of microplastics, focusing on research that is taking place in Alaska and across the Arctic. The summit is intended to be interactive with speakers giving presentations and strong participation by local people, researchers, and policymakers. Expected outcomes include sharing of successful models for marine debris disposal, how best to start addressing the issue at home, and the identification of future research and monitoring needs for microplastics. Participants input will play an important role in framing an action plan to address marine debris in Alaska.

**PRESENTER:**
- Peter Murphy, National Oceanic and Atmospheric Administration

**MODERATORS:**
- Molly McCammon, Alaska Ocean Observing System
- Sue Detwiler, Environmental Protection Agency

9:00 AM - 12:00 PM
**THE INDIGENOUS OBSERVATION NETWORK WORKSHOP**
**TUBUGHNENQ’ #3**

The Indigenous Observation Network (ION) is a community-based monitoring network in the Yukon River Basin of Alaska and Canada. The ION is collaboratively managed by the Yukon River Inter-Tribal Watershed Council and the United States Geological Survey with support from the United States Forest Service and University of Alaska, Fairbanks. We would like to host a half-day training workshop on Friday morning of the meeting. The training would entail both a water-quality training and a snow depth measurement training. The water-quality training will include how to collect a surface water sample for submission to laboratories for analysis and how to collect water-quality measurements in the field with field-based instruments. Snow depth measurement training will include training on a protocol to measure the depth of snowpack on a monthly basis and how to make snow-water equivalency measurements.

**PRESENTERS:**
- Kelly Elder, US Forest Service
- Edda Mutter, Yukon River Inter-Tribal Watershed Council
- Nicole Herman-Mercer, US Geological Survey
- Rachel Loehman, US Geological Survey

**MODERATOR:**
- Edda Mutter, Yukon River Inter-Tribal Watershed Council

10:00 AM - 12:00 PM
**FREE FRIDAY YOUTH WORKSHOP!**
**K’ENAKATNU #6**

Come check out our Youth Booth which will showcase our Youth Track participants who presented at this year’s Youth Track. Alaska Youth for Environmental Action (AYEA) will also be on hand to share ideas and information on environmental issues and concerns that youth in Alaska are currently facing. There will also be an open discussion about how to better engage Alaskan youth in STEM, we want to hear from YOU!

**PRESENTERS:**
- Carly Hurst, The Alaska Center
- Margi Deshefsky, Alaska Youth for Environmental Action

**MODERATOR:**
- Kendra Calhoun, University of Alaska Fairbanks

10:00 AM - 12:00 PM
**MARINE BIRD DIE-OFF ALERT**
**TUBUGHNENQ’ #5**

Since 2014, hundreds of thousands of marine birds have washed ashore from the west coast of the US north into the Chukchi Sea in a series of seven mass mortality events that are unprecedented in frequency, magnitude, and spatial scale. Documenting and sharing information about these events is one way that coastal communities, scientists and agencies can work together to understand a changing marine environment. In this session we will introduce Die-off Alert - a method for collecting important information about seabird die-offs and a way to connect to a statewide network of people tracking, communicating, and learning about these events. Participants need NO prior experience and will leave with skills and resources for documenting, sharing and receiving information about die-offs as they happen.

**PRESENTERS:**
- Hillary Burgess, Coastal Observation and Seabird Survey Team
- Lauren Divine, Aleut Community of St. Paul Island Ecosystem Conservation Office
- Aaron Lestenkof, Aleut Community of St. Paul Island Ecosystem Conservation Office
- Rose Masui, Kachemak Bay National Estuarine Research Reserve
- Tamara Zeller, US Fish and Wildlife Service

**MODERATOR:**
- Jeanette Alas, Alaska Department of Fish and Game

1:00 PM - 2:00 PM
**AGRABILIT Y IN THE LAST FRONTIER**
**TIKAHTNU E**

Come hear about a new Cooperative Extension program aimed at assisting people who own and work in the agricultural industry that may experience a barrier that limits their independence due to a disability, an injury, or aging. Partnering with Assistive Technology of Alaska (ATLA) this program is available to assist Alaskans who may need services or technology to help them make the most of their agricultural careers.

**PRESENTERS:**
- Art Nash, University of Alaska Fairbanks
- DeShana York, University of Alaska Fairbanks
- Mystie Rail, Assistive Technology of Alaska
- Tori Phipps, University of Alaska Fairbanks
1:00 PM - 4:00 PM
ESSENTIAL EMERGENCY PREP HACKS AND FACTS
K’ENAKATNU # 6
Join the experts from Cooperative Extension Service as they share practical approaches and information regarding preparing for, during and after natural disasters. A variety of information will be presented on: Preparing a practical kit, emergency heat options, food preservation and safety, and caring for animals and elders.
PRESENTERS:
• Leif Albertson, University of Alaska Fairbanks
• Steve Brown, University of Alaska Fairbanks
• Julie Cascio, University of Alaska Fairbanks
• Art Nash, University of Alaska Fairbanks
MODERATOR:
• DeShana York, University of Alaska Fairbanks

1:00 PM - 5:00 PM
CEQ PROPOSED NEPA REGULATION - TRIBAL CONSULTATION
TIKAHTNU BALLROOM
Invitation Only

1:30 PM - 2:45 PM
THE MAKING OF DOODLES
TUBUGHNENQ’ #3
Join graphic recording artist, Anne Jess, of The Doodle Biz, for a behind-the-scenes look at how she creates her engaging visual representations of our AFE sessions.
PRESENTER:
• Anne Jess, DoodleBiz

3:00 PM - 5:00 PM
LIVE! OWLS AND EAGLES AT THE FORUM
TIKAHTNU E
Join us as we welcome the Bird Treatment and Learning Center and visit with a great horned owl, snowy owl, great gray owl, and a golden eagle. Learn about bird rehabilitation and bird behavior with the experts.
CHECK IT OUT!

PHOTOBOOTH
Located on the third floor, all the way at the end next to networking services.
Available Monday-Wednesday
40 EXHIBITORS AND BOOTH LOCATIONS

Space #01
NRC Alaska LLC a US Ecology Company
Nielsen, Paul
PNielsen@nrcc.com

Space #02
Sustainable Solid Waste Solutions
Jacobson, Ted
ted.ssws@gmail.com

Space #03
University of Alaska Fairbanks
Lisac, Deven
dlisac1@alaska.edu

Space #04
ALS
Clarkson, Kurt
kurt.clarkson@alsglobal.com

Space #05
US Department of Energy
Van Holde, David
vanholded@energy.wsu.edu

Space #06
Alaska Center for Climate Assessment and Policy
Buxbaum, Tina
tmbuxbaum@alaska.edu

Space #07
Alaska Center for Climate Assessment and Policy
Buxbaum, Tina
tmbuxbaum@alaska.edu

Space #08
Frontier Fuel Service, LLC
Campbell, Aimee
office@frontierfuelservice.com

Space #09
US Department of Agriculture
Maroney, Ryan
ryan.maroney@ak.usda.gov

Space #10
Donlin Gold
Twitchell, Dan
dtwitchell@donlingold.com

Space #11
Alaska Energy Authority
Dixon, Brandy
BDixon@akenergyauthority.org

Space #12
Shannon & Wilson, Inc.
Hemry, Matt
msh@shanwil.com

Space #13
JOA Surveys LLC
Bejarano, Gabrielle
gabby@joasurveys.com

Space #14
US Forest Service
Legner, Kate
kate.legner@usda.gov

Space #15
US Army Corps of Engineers
Alaska District
Campbell, Kendall
kendall.d.campbell@usace.army.mil

Space #16
Western Alaska Landscape Conservation Cooperative
Stickman, Danielle
dstickman@alaskaconservation.org

Space #17
US Department of Housing and Urban Development
Miller, Michelle
michelle.m.miller@hud.gov

Space #18
EPA Region 10 Tribal Operations Committee
Madison, Randi
communications@region10troc.net

Space #19
National Oceanic and Atmospheric Administration
Holman, Amy
amy.holman@noaa.gov

Space #20
ARS Aleut Analytical
Baker, Jerry
jbaker@aaanalytical.com

Space #21
Delta Backhaul Company
Huntman, Doug
dhuntman@dbcalaska.net

Space #22
Summit Consulting Services, Inc.
Lancaster, David
dlancaster@scsalaska.com

Space #23
US Navy
Tan, Claudia
claudia.tan@mantech.com

Space #24
SGS North America, Inc.
Shumway, Julie
julie.shumway@sgs.com

Space #25
Alaska Teen Media Institute
Robards, Rosey
rosey@alaskateenmedia.org

Space #26
DOE Office of Legacy Management
Holmes, Kristen
kristen.holmes@lm.doe.gov

Space #27
United Tribes of Bristol Bay
Larson, Delores
dlarson@utbb.org

Space #28
North Pacific Research Board
Wagenfehr, Kayla
kayla.wagenfehr@nprb.org

See Booth Floorplans on Page 46 and 47
Space #29
TTT Environmental
Tompkins, Deborah
debbie@tttenviro.com

Space #30
Bureau of Land Management
Pendergast, Kevin
mdipinto@blm.gov

Space #31
Clean Harbors Environmental Services
Orwoll, Eric
orwoll.eric@cleanharbors.com

Space #32
Prince William Sound Regional Citizens Advisory Council
Oliver, Betsi
betsi.oliver@pwsrac.org

Space #33
Yukon River Inter-Tribal Watershed Council
Mockta, Tasha
tmockta@yritwc.org

Space #34
EMI Alaska/ETAP Advisory Committee
Bethel, Larry
lbethel@emi-alaska.com

Space #35
AECOM
Farmer, Shiree
shiree.farmer@aecom.com

Space #36
Tok Welding
Marshall, Martin
Christokmarshall@hotmail.com

Space #37
Sitka Tribe of Alaska
Lanphier, Kari
kari.lanphier@sitkatribe-nsn.gov

Space #38
University of Alaska
Maio, Christopher
cvmaio@alaska.edu

Space #39
Umiak Environmental/ETAP Advisory Committee
Trapp, Cynthia
cynthia.trapp@uicumiak.com

Space #40
UAF Cooperative Extension Service
York, DeShana
ddyork@alaska.edu

Space #41
Alaska Pacific University
Hillenbrand, Kate
khillenbrand@alaskapacific.edu

Space #42
Energy Lab
Endy, Shari
sendy@energylab.com

Space #43
Alaska Division of Forestry
DoBell-Carlsson, Trevor
trevor.dobell@alaska.gov

Space #44
Eurofins TestAmerica
Maxwell, Karen
karen.maxwell@testamericainc.com

Space #45
Denali Commission
Wolf, Tom
twolf@denali.gov

Space #46
Wilderness Visions, Inc.
Bulson, Ray
rbulson@me.com

Space #47
US Air Force
Rouse, Kristy
kristy.rouse@us.af.mil

Space #48
Clean Energy Technologies, Inc.
Mahdi, Kam
kmahdi@cetyinc.com

Space #50
University of Alaska Fairbanks
Calhoun, Kendra
kcalhoun@alaska.edu

Space #51
Alaska Center for Energy and Power
Whitney, Erin
erin.whitney@alaska.edu

Space #52
Ahna Environmental
Ewan, Peter
pewan@ahna.net

Space #53
JACOBS
Westervelt, Win
Win.Westervelt@jacobs.com

Space #54
Zender Environmental
Kewan, Charla
ckewan@zendergroup.org

See Booth Floorplans on Page 46 and 47
Registration Services and all Keynote Events will be located at the Dena’ina Convention Center, 3rd Floor.
<table>
<thead>
<tr>
<th>Session Title</th>
<th>Date</th>
<th>Session Times</th>
<th>Duration (PDH)</th>
<th>Presenter(s)</th>
<th>Presenter/Moderator Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>----------------</td>
<td>-----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session Title:</td>
<td>Date:</td>
<td>Session Times:</td>
<td>Duration (PDH):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter(s):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter/Moderator Signature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Alaska Forum Environmental Training and Apprenticeship Program (ETAP) provides industry recognized trainings and job placement assistance to support a skilled workforce that meets the needs of employers providing environmental and natural resource related employment in Alaska.

ETAP is conducted in partnership with Alaska Department of Labor, the US Department of Labor, the US Environmental Protection Agency, corporate program sponsors and Alaska employers.

For more information: www.akforum.org • email: info@akforum.org