Harnessing Our Collective Strength to Create More Resilient Communities

August 6-7, 2019 | Alaska Bible Seminary, Bethel, Alaska
Harnessing Our Collective Strength to Create More Resilient Communities

Work Session Objectives:
Collectively and holistically address energy, economy, and rapid environmental change on the Y-K Delta by identifying and committing to shared, specific, achievable actions that:

- Improve quality of life.
- Leverage opportunities and have tangible impacts on regional challenges.
- Have clear champions and partners with capacity for action.
- Are actively supported by regional organizations.
- Energize and build momentum through creative and collaborative action.

Tuesday, August 6, 2019

8:00 – 8:30 Registration and Breakfast (provided)
8:30 – 9:00 Welcome and Gratitude to Our Land and People
9:00 – 9:30 Setting the Stage: Why the “Three E’s”? Why an integrated approach?
9:30 – 9:50 Foundation for Action: Confirming a Shared Vision and Goals
9:50 – 10:00 BREAK: Introduce yourself to three people you don’t know and one hope you have for the work session.

Infrastructure
10:00 – 10:30 Presentations: The YK Story and Looking Ahead at Relevant Infrastructure Policies/Programs
10:30 – 12:00 Discussion: Priority Infrastructure Strategies and Actions
12:00 – 1:00 LUNCH: (provided) Presentation

Housing
1:00 – 1:30 Presentations: The YK Story and Looking Ahead at Relevant Housing Policies/Programs
1:30 – 3:00 Discussion: Priority Housing Strategies and Actions
3:00 – 3:15 BREAK: Introduce yourself to three people you don’t know and one hope you have for the work session
3:15 – 4:15 Regional Activation: Strength in Numbers and the Importance of Political Engagement
4:15 – 4:30 Day 1 Summary, Comments and Prep for Day 2
**Wednesday, August 7, 2019**

8:00 – 8:30  **Breakfast:** (provided)

8:30 – 9:00  **Group Discussion of Day 1 Presentations and Outcomes**

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**Subsistence and Surface Travel**

9:00 – 9:30  **Presentations:** The YK Story and Looking Ahead at Relevant Subsistence and Surface Travel Policies/Programs

9:30 – 10:30  **Discussion:** Priority Subsistence and Surface Travel Strategies and Actions

10:30 – 10:45  **BREAK:** Introduce yourself to three people you don’t know and one hope you have for the work session

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**Energy**

10:45 – 11:15  **Presentations:** The YK Story and Looking Ahead at Relevant Energy Policies/Programs

11:15 – 12:00  **Discussion:** Priority Energy Strategies and Actions (Part 1)

12:00 – 1:00  **LUNCH:** (provided)

1:00 – 1:45  **Achieving Our Vision:** Confirm Collective Energy Strategies and Actions (Part 2)

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**Economic Development**

1:45 – 2:15  **Presentations:** The YK Story and Looking Ahead at Relevant Economic Development Policies/Programs

2:15 – 2:30  **BREAK:** Introduce yourself to three people you don’t know and one hope you have for the work session

2:30 – 4:00  **Discussion:** Priority Economic Development Strategies and Actions

4:00 – 4:40  **Activation:** Confirming Our Priorities for Action

4:40 – 5:00  **Wrap-Up and Adjourn**
Vision

YK Regional Energy Vision: “Leaders pioneering a unified, creative approach to access abundant, affordable, efficient energy utilizing local resources.”

YK Regional Environment Vision: “Current and future generations enjoy healthy ecosystems that sustain our communities and our indigenous way of life.”

YK Regional Economic Vision: “A strong, innovative, self-reliant Yukon-Kuskokwim economy supported by our resilient culture and regional collaboration.”

Shared Goals

1. More local and regional jobs and businesses (e.g., in renewable energy technology, new housing design/construction) increase the financial resources and capacity needed to adapt to environmental and other changes.

2. Energy costs are lower and stable because buildings are energy efficient and communities use renewable energy.

3. Present and future environmental change is understood better.

4. Community infrastructure meets community needs, accommodates anticipated environmental change, and is built and maintained with regional resources.

5. The health of the natural environment that supports subsistence and traditional culture is protected.

6. The region’s people and communities enjoy good health, wellness and safety.

7. The region has a well-educated and trained regional workforce and future leadership. Youth are engaged earlier and more often in business operation, community leadership and service provision.

8. Projects are supported by in-region resources as well as investment from outside the region.
Criteria for Prioritization

Prioritize strategies/actions that:

A. Are most important to the people of the region.
B. Can begin within the next 1-3 years.
C. Can make a difference.
D. Do not duplicate work that is already in progress.
E. Have commitment from 1 or more partners to lead implementation.
INFRASTRUCTURE

Presentations:
The YK story and looking ahead at relevant policies and programs.

Sally Russell Cox
Community Resilience Programs
Alaska Department of Commerce, Community, and Economic Development
Division of Community & Regional Affairs

Jaci Overbeck
Coastal Hazards Program Manager
Alaska Department of Natural Resources - Division of Geological and Geophysical Surveys

David Andrew
Tribal Administrator
Native Village of Napakiak

Walter Nelson
Council Member
City of Napakiak

Max Neale
Senior Program Manager
Alaska Native Tribal Health Consortium

Others Who Can Help:

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Jason Hoke</td>
<td>Federal Co-Chair</td>
<td>Denali Commission</td>
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<tr>
<td>Brian Lefferts</td>
<td>Director, Environmental Health and Engineering</td>
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<tr>
<td>Deanna Latham</td>
<td>Vice President of Support Services</td>
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<tr>
<td>Tom Ravens</td>
<td>Professor of Civil Engineering</td>
<td>University of Alaska Anchorage</td>
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<td>Dave Cramer</td>
<td>President/Project Manager</td>
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<td>Heather Gross</td>
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<td>Meredith LaValley</td>
<td>Project Analyst</td>
<td>Interagency Arctic Research Policy Committee (IARPC)</td>
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<td>Davin Holen</td>
<td>Coastal Community Resilience Specialist</td>
<td>Alaska SeaGrant</td>
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<td>Amber Metallo</td>
<td>Coordinator</td>
<td>Alaska Silver Jackets</td>
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<tr>
<td>Amy Holman</td>
<td>Regional Coordinator for Alaska</td>
<td>National Oceanographic Atmospheric Administration</td>
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<tr>
<td>Molly McCammon</td>
<td>Executive Director</td>
<td>Alaska Ocean Observing System (AOOS)</td>
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INFRASTRUCTURE

Discussion:
Confirm collective priorities for shared actions that can begin in the next 1-3 years.

Strategies from Existing Plans
A. Develop infrastructure throughout the region to support and grow local economies, including water, wastewater, energy, airports, telecommunications, bank stabilization, schools, and health clinics.
B. Develop new community infrastructure that is affordable, meets local needs and responds to environmental change.
C. Improve the scope and accuracy of environmental change projections to inform decisions about where the land will support built infrastructure and the technology that will work in different places.
D. Expand in-region capacity to fund, construct and maintain resilient community infrastructure, building on traditional adaptation skills and realism about the limits of out-of-region support.

Actions from Existing Plans
1. Integrate local knowledge and work by out-of-region researchers to expand base data on environmental change.
2. Use improved base data to develop community and regional risk assessments.
3. Expand local capacity to complete and carry out community-level plans that:
   – identify the risks to community infrastructure from environmental change;
   – provide a local and culturally effective process for identifying priority infrastructure improvements (and other environmental adaptation actions);
   – increase the community’s eligibility to receive out-of-region funding to carry out the plans.
4. Develop, test and utilize practical new forms of infrastructure, including more mobile technology.
5. Set priorities and work to carry out regional infrastructure projects, such as the YK freight corridor, regional airport in Emmonak, airport upgrades, access to natural gas, fiber option connections, Bethel Port facilities upgrades, Pilcher Mountain gravel.
HOUSING

Presentations:
The YK story and looking ahead at relevant policies and programs

Mark Charlie
President
AVCP Housing Authority

Brent Lannen
Loan Specialist
USDA Rural Development

Shelly Wade
Principal::Owner
Agnew::Beck Consulting (assisting with Bethel Housing Strategic Planning)

Others who can help:

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<td>Calvin Cockroft</td>
<td>Tribal Housing Director</td>
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<tr>
<td>Jack Hébert</td>
<td>Chief Executive Officer</td>
<td>Cold Climate Housing Research Center</td>
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HOUSING

Discussion:
*Confirm collective priorities for shared actions that can begin in the next 1-3 years.*

**Strategies from Existing Plans**
A. Meet the region’s current and future housing needs with affordable, quality housing.
B. Develop new housing that:
   - Costs less to heat and operate.
   - Can adjust to permafrost thaw and other environmental changes.
   - Can be moved if needed.
C. Build new housing with local/regional resources, people and materials.

**Actions from Existing Plans**
1. Complete community/regional risk assessments (*also in the Infrastructure and Subsistence and Travel sections*).
2. Advocate for the tribal housing authority to be eligible for water and sewer infrastructure funds to help offset the cost of housing development.
3. Construct and/or rehabilitate 1,800 homes toward the region’s goal of 3,000 affordable, quality additional homes by 2022.
4. Pilot new funding approaches that better leverage existing housing (and other) funding sources for housing projects.
5. Improve the energy efficiency of homes (*also in the Energy section*).
6. Use building design and construction methods that allow homes to adjust to climate change, such as adjustable foundations and movable homes.
7. Support local lumber, sawmill, and home manufacturing efforts such as a truss manufacturing plant to reduce the cost of building materials and increase local employment opportunities.
8. Develop a trained local workforce to construct and/or rehabilitate homes (*also in the Economic Development section*).
9. Offer culturally effective education on how to finance a new home to residents and local agencies.
## SUBSISTENCE AND SURFACE TRAVEL

### Presentations:
The YK story and looking ahead at relevant policies and programs.

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Aaron Moses</td>
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<td>Clarence Daniel</td>
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<td>Malinda Chase</td>
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<td><strong>Adapt YK Delta Steering Committee</strong></td>
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<td>Jennifer Hooper</td>
<td>Natural Resources Director</td>
<td>Association of Village Council Presidents</td>
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<td>Fred Phillip</td>
<td>Ambassador</td>
<td>Bering Sea Elders Group</td>
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<td>Mellisa Heflin</td>
<td>Executive Director</td>
<td>Bering Sea Elders Group</td>
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<td>Marvin Parent</td>
<td>Representative</td>
<td>Marshall Traditional Council</td>
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<td>James Charles</td>
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<td>Lower Kuskokwim Fish and Game Advisory Committee</td>
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<tr>
<td>Susan Taylor</td>
<td>Member</td>
<td>Bethel Chamber of Commerce</td>
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<td>David Runfola</td>
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<td>Megan Leary</td>
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<td>Ray Born</td>
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<td>Ryan Maroney</td>
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<td>Eva Patton</td>
<td>Subsistence Council Coordinator</td>
<td>U.S. Fish &amp; Wildlife Service Office of Subsistence Management</td>
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SUBSISTENCE AND SURFACE TRAVEL

Discussion:
Confirm collective priorities for shared actions that can begin in the next 1-3 years.

Strategies from Existing Plans
A. Sustain the resources and practices that support subsistence and cultural traditions.
B. Utilize new opportunities for healthy locally harvested and/or produced foods.
C. Increase the safety and convenience of surface travel throughout the year (including subsistence access, inter-community travel, freight and recreation).
D. Improve base data and projections of environmental change, focused on changes in surface travel, subsistence access, species habitats, seasons of species/resource availability, and the presence of helpful or disruptive new species.
E. Adapt surface travel options to changes in the environment (such as permafrost thaw, declining snowfall, and growing hazards from unstable ice and open water on rivers and lakes) and number of people traveling.
F. Protect the quality of habitats crossed by trails, especially salmon streams.

Actions from Existing Plans
1. Increase opportunities for youth to develop subsistence skills.
2. Develop new approaches and new partnerships to better understand future environmental change.
3. Develop a network of climate monitors in Yukon Kuskokwim communities.
4. Better incorporate local knowledge and concerns in fish and wildlife management as habitats, seasons and species shift, recognizing that conditions vary in different areas.
5. Include subsistence and food security strategies in community plans.
6. Use the results of the YK fish preservation project to improve options for preserving fish, meeting community needs and avoiding waste.
7. Continue the mapped inventory of existing trails corridors/routes.
8. Identify trails/routes to improve, harden or relocate; work with landowners to secure these routes.
9. Improve trail marking and better systems for real-time data on ice conditions on rivers and lakes.
10. Train residents on trails-related businesses and job skills.
Presentations:
The YK story and looking ahead at relevant policies and programs.

Roderick Phillip  
Manager  
Puvurnaq Power Company

Natalie Hanson  
Executive Director  
Nuvista Light & Electric Cooperative, Inc.

Chris Rose  
Executive Director  
Renewable Energy Alaska Project

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<td>Bertha Prince</td>
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<td>Givey Kochanowski</td>
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<td>U.S. Department of Energy, Office of Indian Energy</td>
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<td>Rebecca Garrett</td>
<td>Program Manager</td>
<td>Alaska Energy Authority</td>
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<td>Tashina Duttle</td>
<td>Program Manager</td>
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<td>Laura Tellez</td>
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<td>Alba Brice</td>
<td>Director of Business Development</td>
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<td>David Meyers</td>
<td>Director of Business Development</td>
<td>STG Incorporated</td>
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<td>Brian Hirsch</td>
<td>President</td>
<td>Deerstone Consulting</td>
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ENERGY

Discussion:
Confirm collective priorities for shared actions that can begin in the next 1-3 years.

Strategies from Existing Plans
A. Stabilize and reduce the cost of energy for residents and businesses.
B. Build, upgrade and retrofit structures to minimize energy use and adapt to anticipated environmental change, such as ground shifting from permafrost thaw.
C. Utilize renewable energy sources that increase energy security and reduce greenhouse gas emissions, such as wind, solar, energy storage, heat pumps, biomass, river hydroelectric.
D. Where feasible, develop sub-regional or micro-grids that integrate renewable energy and reduce costs through economies of scale.

Actions from Existing Plans
1. Use energy audits, building codes and demonstration projects to make community buildings as energy efficient as possible.
2. Create a legacy document explaining why the State of Alaska Power Cost Equalization (PCE) Program exists; clarify that PCE is not a subsidy, but an agreement between urban and rural areas.
3. Continue to investigate opportunities for regional access to natural gas.
4. Develop the well-trained regional workforce of operators and repair technicians needed for existing and new energy generation technology.
5. Initiate a coordinated campaign to educate state legislators and federal agencies about needed energy investments, with specific requests to invest in the YK Delta.
ECONOMIC DEVELOPMENT

Presentations:
The YK story and looking ahead at relevant policies and programs.

Brent Latham
Acting Chief Operating Officer
Association of Village Council Presidents

Fannie Black
Programs Coordinator
Yuut Elinauviat

Mark Leary
Director of Development and Operations
The Native Village of Napaimute

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<tr>
<td>Ana Hoffman</td>
<td>President/Chief Executive Officer</td>
<td>Bethel Native Corporation</td>
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<td>Reyne Athanas</td>
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<td>Audrey Alstrom</td>
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<td>Michael Ulroan</td>
<td>Regional Director</td>
<td>ANSEP</td>
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ECONOMIC DEVELOPMENT

Discussion:
Confirm collective priorities for shared actions that can begin in the next 1-3 years.

Strategies from Existing Plans
A. Grow the local/regional economy.
B. Create or attract new jobs, businesses, and revenues that:
   a. increase capacity to respond to future challenges and opportunities.
   b. provide solutions to energy, infrastructure and climate change challenges.
C. Recognize and sustain subsistence as a key contributor to regional economic and cultural health.
D. Grow a capable, well-trained regional workforce, with a focus on skills needed for emerging opportunities.
E. Support local/regional business development and grow in-region entrepreneurship.

Actions from Existing Plans
1. Prepare residents for work in emerging economic sectors, including energy, housing, infrastructure, trails and resource development.
2. Work with children and youth to develop the skills to comfortably and successfully operate within workplace culture.
3. Develop new school curricula that give students real life learning opportunities and build future employment skills, such as in alternative energy.
4. Provide education in finance, business basics, and life management skills to help residents understand credit, loans, insurance and banking opportunities.
5. Promote farm-to-table and seafood-to-table commercial and export opportunities for locally grown and harvested goods, including value-added processing.
6. Partner with impact investors, who seek to generate a measurable, beneficial social or environmental impact alongside a financial return.
7. Prioritize investments in regional infrastructure projects (described in the Infrastructure section).
8. Improve systems for regional planning and coordination, including:
   − Establish more regular regional communication.
   − improve in-region socio-economic data collection to inform shared regional strategies
   − Develop unified regional requests for support from out-of-region partners; for example, to do climate change research.
   − Increase capacity for communities to assess risks and opportunities, as well as to develop and carry out community plans.