NorthernLine

"Behind is a great forest that goes to the Arctic…and here we must draw our line."
~ Gary Snyder, *Front Lines*

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A Time of Transition

by Kristen Hendricks

Autumn is a time of transition. In interior Alaska the transition happens earlier than the rest of the country, and although we are still not in the full swing of winter, we are well past the long hours of sunlight and green foliage that is summer. We are seeing changes all around us, and not just those that come with the natural transition of the seasons. Climate Change is impacting our landscapes and communities in irreversible ways; villages are literally moving locations to avoid rising sea levels, landscapes and habitats are changing before our eyes as temperatures continue to rise.

As you know, irresponsible mining and oil and gas development is a large contributor to Climate Change. As a global community, we must shift from destructive oil and gas development to sustainable and renewable energy sources. In the Arctic we are seeing progress in limiting development, but oil and gas leases, as well as mining claims, continue to threaten the health of habitats and communities. Development in the Arctic has global ramifications, and in turn development on the other side of the planet impacts our fragile ecosystems north of the Arctic circle.

In response, our work at the Northern Center has shifted. We continue to focus on protecting wildlands, waters, and communities in interior and arctic Alaska, but we must now take into account the global effects of Climate Change on these precious landscapes. We must shift our end goal, from protecting a specific place in the Arctic for future generations to use and enjoy, to protecting the Arctic so future generations can continue to enjoy the entire planet.

As the planet experiences changes that may be irreversible, the thinking of individuals and communities must change in response. There must be a shift from compliance and acceptance to awareness and prevention. This is already happening; in Fairbanks and across the country, people from all different communities have realized that Climate Change is an issue that effects everybody, regardless of social class, education, race, or gender. People are coming together to challenge leaders and corporations to listen and to change.

This movement must continue to grow and evolve and gain momentum if we are to protect our lands, not just those especially dear to us in northern Alaska, but entire ecosystems across the planet. This shift in our environment caused by Climate Change is happening, but a shift in our thinking, and actions as a global community, will ensure we do not do further damage. Protecting the Arctic is not only important for Alaska, but for the world.

This edition of the Northern Line takes a look at this shift. A personal account from a veteran who visited the Arctic National Wildlife Refuge reminds us that the Arctic is important, not just for our environment, but also for our spirits, a fact that Alaska Natives have always known, and share with a Northern Center staff member at their bi-annual gathering. Our summer research assistant points out that a just transition away from fossil fuels must address Climate Change, but it must also address the roles of Alaska Natives and villages in interior and Arctic Alaska - villages that often rely on the money brought in by oil and gas companies. Guest authors look at the role renewable energy is going to play in the transition away from fossil fuels, and the feasibility of creating a 100% renewable energy reliant state. These articles serve as a sign that this movement is growing, that progress is being made, people are aware, and change is happening, now we just need to spread the word.

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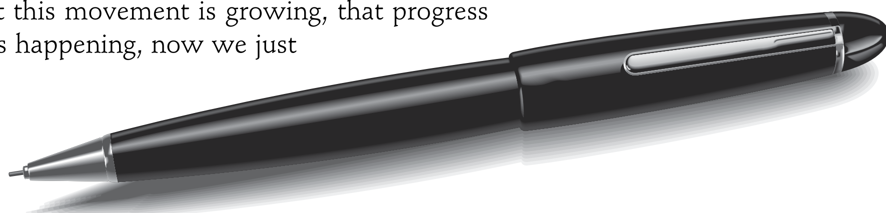
Do you have: Comments about articles? Corrections to point out? Accolades to share?

We would love to hear from you! Letters to the Editor can be sent to officemanager@northern.org or mailed to The Northern Line Editor, 830 College Road, Fairbanks, AK 99701. A selection of letters to the editor will be published in future issues of *The Northern Line.*



The Northern Line
Environmental News of Arctic and Interior Alaska

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Welcome to the Northern Center

Kristen Hendricks
Communications Coordinator

Kristen moved to Fairbanks from Brooklyn, New York after coming for a visit that turned into a permanent relocation. She studied Medical Illustration at the Rochester Institute of Technology in upstate New York and after graduation moved to Brooklyn where she worked in marketing and communications. Once she moved to Fairbanks she took up as many outdoor activities as she could, including skiing, hiking and rock climbing. She spent a lot of time exploring the Interior, capturing what inspired her most in her paintings. She quickly fell in love with Alaska, and Fairbanks and northern Alaska in particular, and realized the need to preserve these special places. When not at the Northern Center you can find her learning to skijor with her dog, Hawthorne, climbing with her boyfriend, Nick, or working on her current artwork.

Julia Mickley
Clean Water & Mining Coordinator

Julia has a background in outdoor education and wildfire management. Her undergrad is in Human Development and Social Relations from Earlham College, and she has continued her education at the University of Alaska Fairbanks. She has worked for the BLM, Forest Service, Nature Conservancy, and Youth Conservation Corps. She also has experience abroad doing Conservation work in New Zealand and Community Development in Cambodia. Julia is most happy when in the woods, and looks for sports, activities, and volunteer work that support her need to be in nature. She desires to advocate for the Alaska landscape and aims to be a positive force in that mission.

Duncan Figurski, Arctic intern

Duncan studies Interdisciplinary Science, with a minor in Psychology, at the Eugene Lang College in New York City. Outside of school Duncan works as an art teacher at a non-profit school in downtown Manhattan. He believes that reaching a more sustainably viable planet comes not only from our practices, but the way in which we perceive the environment and ourselves.

I had no concrete idea of what to expect out of this summer. Being from New York City my idea of Alaska was based on a mish-mash of movies, history, and books that all seemed to highlight Alaska as a cold, removed, and beautiful state. I knew it was going to be bright, and I knew that there would be trees, but other than that most of my knowledge was trivial anecdotes such as "it has the largest collective shoreline" or, "it's the only state in the country to be within the bounds of the arctic". I knew more about the Northern Center than the State, I had poked around the website fastidiously trying to accumulate some semblance of "practice" for this new internship. What I was overlooking is that resources of a place, or an organization, are more imbedded in the people that quench their souls on it than the stale facts that I could gather from Google. I'm very fortunate that this summer I was surrounded by those who fulfill their livelihood from the station of a small green house on College Road.

From the first day I started learning more and more about the state, the laws which structured its conservation and the forces that pushed urgency into the hearts of its citizens. The complex tangles of its history began to unravel, but I feel that it was only later that I understood the impact of these things. Understanding would come from stories; I would ask a co-worker or member or friend to elaborate on a concept I was unfamiliar with. They would start like any other explanation, but every so often they would tilt their head and bring me into the intimate world of their memories. They would invite me to understand through the lens of their own lives, and it was only then that I really began to understand exactly how much Alaska was changing. I learned so much this summer, and I had the opportunity to reinforce that knowledge with help of my friends who would continuously donate their time and thoughts in order to make sure I could get the full picture. I got to go up and down Alaska trying my best to listen and learn from the experiences of those before me, and the experiences I myself began to accumulate.

Over the summer I worked to coordinate the 2016 Run for the Refuge, worked on a variety of educational materials, aided in a handful of tabling events, and got to listen to a vast array of voices that the Northern Center went out of their way to find. I flew to Arctic Village to listen to the discussions at the 2016 Gwich'in Gathering, and drove down to the Kenai to table at Salmon Fest where the Northern Center won "Best Booth." This summer wasn't easy for me, it was an opportunity to grow, a reminder to listen, and a reason to continue. Seeing the diligence in the eyes of my friends as they would tell me those stories helped to inspire something in me that I want to continue to cultivate. The persistence of those around here can be intimidating--environmental work is rarely saturated in victory, but I now know that such persistence comes from the having listened to the past.

Caitlin Corrigan-Orosco, Education & Outreach intern

Caitlin is a student at Earlham College in Richmond, IN where she majors in Peace & Global Studies. Caitlin has a fiery passion for social justice and environmental activism. This past Spring, Caitlin's project "SustRAINable" was a recipient of the honor to attend The Clinton Global Initiative University, hosted and organized by Former President Bill Clinton and Chelsea Clinton. Recently, Caitlin traveled to Taiwan with Earlham College, where she became acquainted with the state's environmental challenges caused by globalization. After Earlham College, Caitlin plans to attend Law School. Her dream is to work for the United Nations advocating for environmental rights. Caitlin's favorite pastimes include writing and reading poetry and creative writing, hiking and backpacking, traveling, meeting new people and learning about different cultures.

Caitlin worked as the communications and outreach intern over the summer at the Northern Alaska Environmental Center and is now spending the semester studying abroad at the Institute of Buddhist Dialects in Dharamsala, India where she is interning at an environmental organization and participating in as many outdoor activities as possible.

Morgan Raspanti, Climate Change intern

A quarter past midnight on a Friday in early June I was warmly greeted by Fairbanks' midnight sun. Prior to heading for Alaska from New York, all I knew for certain was that this summer would be vastly different from my usual life. Despite my lack of preconceptions, I was eager to tap into the environmental consciousness of a landscape and community that has been most directly impacted by climate change.

Over the course of the summer I had the pleasure of interning among a group of inspiring leaders in the environmental movement of Northern and Interior Alaska. Working at the Northern Alaska Environmental Center taught me the possibilities of a small office with an important cause. This summer has undoubtedly played an important role in my personal and professional development as a creative thinker, activist and leader; further paving my path and providing me with the capacity for a successful future.

As an intern at the Northern Center I created an outreach toolkit, participated in the Alaska Learning Series and worked at tabling events. It was enriching to live the Northern Center mission statement and actively work towards creating a community around pressing issues in Alaska.

Overall, my most powerful takeaway was experiencing the capabilities of a caring community. Through my involvement with the Northern Center and the Fairbanks Climate Action Coalition I was introduced to the passionate community surrounding environmental justice in Fairbanks. Working with these individuals has renewed my faith for the future preservation of Alaska's unique landscape and further, the world at large. Being a part of this communal effort has provided me with the confidence in my own ability to be a voice of justice within the environmental movement.

Beyond my time in the office, exploring Alaska's landscape deepened my sense of nature's sacredness. I was most provoked by the mountains of the Alaska Range. The first time I drove down the Richardson highway my eyes were glued to the surrounding view. Hiking in those mountains and later camping on Kesugi Ridge were the most remarkable and highly cherished memories I have of Alaska.

This summer has been truly wonderful because of all the friends I made at the Northern Center. Thank you to everyone at the office, on the board and in the community for their hospitality, patience and care. I would also like to extend thanks to The New School and the Tishman Merit Scholarship. I am forever grateful.

Morgan grew up in New Jersey and studies Global Studies at The New School in New York City. She plans to graduate in the spring and would like to continue studying conservation efforts across the globe.

Vivian Underhill, Research Assistant

Vivian Underhill grew up in Colorado, and graduated from the University of Colorado with a degree in environmental science. After graduation, she worked at the National Snow and Ice Data Center on historical Arctic sea ice concentration and extent data, and subsequently at the US Geological Survey as a field and lab technician on water quality issues in the Rocky Mountains. She is now a Feminist Studies PhD student at the University of California - Santa Cruz. Her research is based in feminist and decolonial science studies, which examine the social and cultural implications of scientific knowledge production, with a particular eye toward the role of dynamics of power (including, but not limited to, those of gender and race) in that process.

Resilient Hope: Learning from the Gwich'in at the 2016 Gwich'in Gathering

by Jessica Girard

This summer the Gwich'in Nation held its 15th bi-annual Gwich'in Gathering in Arctic Village – and I was blessed to attend, a blessing which I am still processing. These gatherings began in 1988 to protect the "health and productivity of the Porcupine Caribou Herd, and their availability to Gwich'in communities, the very future of [these] People are endangered by proposed oil and gas exploration and development in their calving and post-calving grounds in the Arctic National Wildlife Refuge." For the last three decades the Gwich'in have held this gathering in different villages throughout the Gwich'in Nation, and have reaffirmed this mission once again, standing by their resolution to protect the caribou with unity and clarity.

It is still, weeks later, hard for me to put into words my experience at the Gathering. As most of us raised in a Western society, we think of the land as a place and the things on it – people, infrastructure, animals, as an entirely separate entity. It is an 'us and it' mentality. We bike on the pavement, we hike on the trails, we paddle down the rivers – and then we are off the land. When I arrived in Arctic Village this notion quickly dissipated…

Two years ago, I started working at the Northern Center. I was introduced to the landscapes in which we work, those that are federally managed under NEPA. I learned their geographic area, I learned the names of the Indigenous groups that live on these lands, and the ecological significance of these fragmented places across the arctic. Shortly after my hire, President Obama recommended permanent protection for the entire Arctic National Wildlife Refuge. Stating, "the [Fish and Wildlife] Service's revised CCP and final EIS address a variety of needs, including preserving subsistence uses of local inhabitants, protecting fish and wildlife populations and their habitats, and ensuring opportunities for fish- and wildlife-dependent recreation and other public uses. The revised CCP also strengthens wildlife and habitat monitoring as well as the monitoring of public use of the refuge so as to better respond to changing conditions on the landscape, particularly those associated with climate change."

Members, funders, and the conservation community at large celebrated this but still I did not fully respect its implications. I sat with members as they discussed their passions for the Refuge and met with visitors as they were headed into the Refuge. Without question, I listened and learned a lot—but I did not know. I did not know the significance of this announcement, the impact that decision meant to so many. Some time after the CCP announcement, I traveled to DC to lobby Congress to enact the President's recommendation for permanent protections for the Arctic National Wildlife Refuge. During these trips I heard firsthand from several incredible Gwich'in women who spoke with spirit and something else I couldn't identify. Then this summer I felt it: *resilient hope.*

The Gwich'in are part of the land; related to the caribou, the tundra, the streams, and the mountains—one cannot survive without the others. This is a connection I have never had to a place; on the other hand, this connection has never left the Gwich'in people. This, in my opinion, is their power – this is how humanity will survive. The revitalization of the sacred connection to the land and it's offerings is the solution to most challenges we face today. We cannot assume to simply acquire it as we attempt to acquire most things in Western models: degrees, capital, and status. We must relearn and reset our value structures, and we cannot do this without standing beside the Indigenous communities that have never let that connection go. For the first time I experienced what ties the land and the people together and how the people and the place are one in the same. The threads of connection were shared through dancing, caribou, stories, laughter and songs. These are the elements of culture that have been challenged at every front, yet I have never felt so at peace in a place or with its people.

What I felt this summer is that resilient hope, reaffirming that one cannot protect a landscape without protecting the human right to live off the land in which people come from and continue to sustain. There are so few places left where someone can say my ancestors are the river, the mountains, the trees. The Gwich'in have fought to remain a part of the Arctic Refuge, because they have not forgotten that the "future of our People are endangered by proposed oil and gas exploration and development" and for those of us who work to protect this place, we cannot forget this. An amazing youth leader told me at the Gathering something that I cannot forget. He said, long forgotten now is the Chee Zhit Gwich'in. You see Gwich'in just means people; there are the people of the lakes (vuntut Gwich'in), people of the headwaters (Tet'lit Gwich'in) and so on. Long ago when we learned of the onjiit jah (white brother) we called them Chee Zhit Gwich'in, the people of stone houses. We are all Gwich'in.

I have never felt so rejuvenated to continue this work for the people, for the place, for what ties us all together and for the feeling of hope that burns within me.

Jessica Girard, our Program Coordinator, visited leaders and community organizers at the most recent Gwich'in gathering in Arctic Village

Awareness & Acknowledgement:
A Refresher of the Systems in Which We Work

by Vivian Underhill & Jessica Girard

Oppression is most commonly envisioned as discrete, specific acts of discrimination or violence: offensive jokes or racial slurs, for instance. These are, indeed, instances of oppression, but they hold their power only within a larger matrix of other forms of oppression, and when we focus on these individual or discrete instances exclusively, we can sometimes obscure the subtler ways in which racism, colonialism, and sexism pervade our society. Activists often refer to this matrix as the 'Four I's of Oppression': ideological, institutional, interpersonal, and internalized.[1]

Any oppressive system is grounded in a belief in the inherent superiority of one social group, and because those in positions of power define societal structures, narratives, and histories, those ideologies can become embedded in the institutions that govern that society. These institutions - which range from the legal system and police practice to education and personnel systems - are informed by and reproduce these layers of privileges and oppressions. In fact, this is the function of oppression: to maintain the status quo.

Those discrete acts of discrimination that tend to dominate discussions of oppression are termed interpersonal oppression, and always stem from the internalization of ideologies of superiority, and their institutionalized manifestations. Finally, members of oppressed groups can internalize their oppression through their daily interaction with a world that treats them as inferior. These levels of oppression are always overlapping and entangled, and they all work to support each other.[2]

Importantly, calling attention to the more structural forms of oppression is not to name the marginalized groups as victims, but rather is a useful lens to understand the subtler ways that power dynamics structure our society. It is also a useful intervention in moving beyond an understanding of oppression as individually motivated and discrete. Thinking about institutional oppression encourages us to see our very governing systems themselves as having originated from, and still embodying, ideologies of superiority based on race, class, gender, and other forms of difference, despite our intentions to the contrary.

The United States, for instance, was founded as a colony on other peoples' lands, built its early wealth through a dependence on enslaved and forced labor, and expanded as a sovereign nation through the repeated genocide and dispossession of Native American nations. Our society emerged from centuries of those power dynamics, and as it stands now, continues to reproduce them in subtle ways.

Most of us today would like to think we live in a nation that prioritizes equality and justice, and we feel pride in the United States' history of civil rights movements. Yet in order to continue to work toward that goal, we must first acknowledge the ways in which injustice was built into the structures of our nation. Attending to institutional oppressions is a way of grappling with the everyday, often unintentional, but deeply entrenched manifestations of white supremacy and settler colonialism.

Many, given the political climate of the time, considered ANCSA a success. Still, ANCSA remains deeply contentious. 44 million acres remain a small fraction of the land to which Alaska Natives were and are entitled, and the process of selection and conveyance was long and complicated. Since its original passage, conflicts have centered on land selection and use, money management, and most of all, the nature of the corporate structure itself.

Most Native-owned land is held by either a regional or village corporation, and as such, ANCSA tied Alaska Native sovereignty to corporate capitalism, a tension which many consider untenable: industrial capitalist economies are inherently accumulative, and have often been destructive to local economies and environments. This tension creates the potential for conflict in and between villages as profit maximization inevitably comes into conflict with subsistence hunting and fishing values.

More broadly, ANCSA was premised on the concept of land ownership, which, though perhaps self-evident in Euro-American traditions, is not a universal way of relating to the land, and not the tradition of the people whose land was under debate This is an example of what critical anthropologist George Stetson calls coloniality: in contrast to more overt violences of colonialism, **coloniality[3] describes the ways that ways of knowing the world and relationships between humans and nature are imposed upon Indigenous populations.**

The 1980 Alaska National Interest Lands Conservation Act (ANILCA) is another example of the power of knowledge formations. In addition to providing varying degrees of special protection to over 157,000,000 acres of land, it also attempted to rectify the extinguishment of Native hunting and fishing claims from ANCSA. While considered a major step forward by many land conservationists, ANILCA provided only a weak priority for subsistence over other consumptive uses, and premised that priority on a distinction between rural and urban users, not ethnicity.[4] The original extinguishment of subsistence rights opened the door for subsistence rights to subsequently be determined in the political arena, and gradually weakened with time.

Also, Western views of subsistence tend to be restrictive and static, defining it as literally that which was necessary to sustain life and no more. As anthropologists Wheeler and Thornton write in their article "Subsistence Research in Alaska: a 30-year Retrospective," "Subsistence policy in Alaska evolved in a context where the north was seen as a frontier awaiting development...Thus, subsistence policy evolved not to enhance, protect, or conserve Alaska Native subsistence economies and cultures, but rather to pursue a much more modest aim, to insure that impacts were minimized within the context of economic development."[5] This has unfolded with major impacts on how subsistence rights are seen in current permitting processes.

Both ANCSA and ANILCA show the importance of thinking about institutional oppression. Power works particularly insidiously through setting the terms of institutional processes themselves, placing voices and opinions within a hierarchy with lasting, material effects. Both policies were created with good intentions, and were overall considered successes, at least in terms of the constraints of possibility, but were necessarily defined within the terms of Euro-American modernity.

They had to fit within a world in which people could 'own' land and that ownership was demonstrated and maintained by continual presence in settlements, rather than migratory patterns; in which subsurface rights were distinct from surface rights, and one could ostensibly be exploited without affecting the other; and in which corporate capitalism and wage labor defined people's lives and livelihoods. They were based on static, precise legal definitions, and require a relatively comprehensive understanding of legal terminology to understand completely.

Further, the assumptions that undergird land planning processes like those in the Western Arctic are all based on Euro-American assumptions: that jurisdiction and sovereignty lie unproblematically with the federal government; that ownership is the only valid way of relating to an ecosystem; and that the process itself is not premised on centuries in which development was the only logical course of action with the land.

1 Grassroots Fundraising: "The Four Is of Oppression." http://www.grassrootsfundraising.org/wp-content/uploads/2012/10/THE-FOUR-IS-OF-OPPRESSION-1.pdf

2 Weber, Lynn (2010). Understanding Race, Class, Gender, and Sexuality: A Conceptual Framework. New York: Oxford University Press; Collins, Patricia Hill (2000). Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment. New York: New York Routledge. p. 295.

3 Stetson, George. "Oil Politics and Indigenous Resistance in the Peruvian Amazon The Rhetoric of Modernity Against the Reality of Coloniality."The Journal of Environment & Development 21.1 (2012): 76-97.

4 Wheeler and Thornton, "Subsistence Research in Alaska: A 30-year Retrospective." Alaska Journal of Anthropology Vol 3 Number 1.

5 Ibid. p 10.

THE NORTHERN LINE FALL 2016

Native Land Claims and Petroleum Development in the Western Arctic

by Vivian Underhill & Jessica Girard

At 23 million acres - approximately the size of Indiana - the Western Arctic is the country's largest single parcel of public lands. Located west of Prudhoe Bay and the Arctic National Wildlife Refuge, several Iñupiaq villages are located in and adjacent to these lands, and residents have used these resources sustainably for their traditional ways of life for thousands of years. The Western Arctic is also home to one of the world's largest caribou herds and giant flocks of migratory birds. The northern portion is largely arctic coastal plain, dotted with lakes, river, and bogs. To the south, tundra foothills give way to the Brooks Range. Much of the southern Western Arctic is drained by the Colville River, which flows north into the Arctic Ocean.

Most of the Western Arctic - strategically named the National Petroleum Reserve-Alaska, or NPR-A, by the U.S. government in 1923 – is legally under federal jurisdiction and is managed by the Bureau of Land Management. Ethically, historically, and morally, however, that jurisdiction is not so obvious. Long before Statehood or the long land claims process that led to the Alaska Native Claims Settlement Act, this particular swath of land was appropriated from its original inhabitants without agreement or compensation. **Those who are most affected by oil and gas drilling in the region must battle for their right to be heard, and are forced to live with final decisions from a federal government with a long history of indigenous dispossession in favor of resource extraction.**

This struggle is particularly trying to the leadership of Nuiqsut, a 450-person Alaska Native village positioned on the border of the Western Arctic Boundary, about 136 miles southeast of Barrow.[1] In a public comment letter regarding the recent process to develop a Regional Mitigation Strategy for the Western Arctic from June 14th, 2016, the Tribal Council of Nuiqsut wrote, "We are very concerned that some of our promises have been modified from agreements to agencies, industry and governmental administration. We feel we have been facing broken promises and fragmentation of the process and our concerns have been fragmented in response."[2]

Already surrounded on three sides by drilling, residents of Nuiqsut have shared their deep confliction regarding the impacts of drilling. Specifically, concerns about the respiratory health impacts of drilling so nearby, and about access to their traditional hunting and fishing lands have been voiced for decades in meetings, comment periods, and hearings. Yet, residents are also well aware that jobs are scarce in this isolated region, and the budgets of both the North Slope Borough and the village are highly dependent on oil and gas revenues. As ConocoPhillips plans to expand its Alpine field operations into the Western Arctic, Nuiqsut's leaders have taken an active role in the land planning systems for the Western Arctic, yet continue to struggle for their input to be meaningfully included.

Generations of scholars and environmental activists, from parents concerned about their children's lead intake in Flint, Michigan, to Standing Rock Sioux activists protesting the Dakota pipeline passing the border of their lands, have pointed out that situations of environmental injustice don't just 'happen' to come about, but rather are the manifestation of decades of institutional oppression, marginalization of social groups, and exclusion from the political system.[3]

In the case of Nuiqsut, the process of land management, though ostensibly neutral, is in fact – against the good intentions of individual land managers, and simply by virtue of their grounding in US land claims and legal systems – anything but neutral.

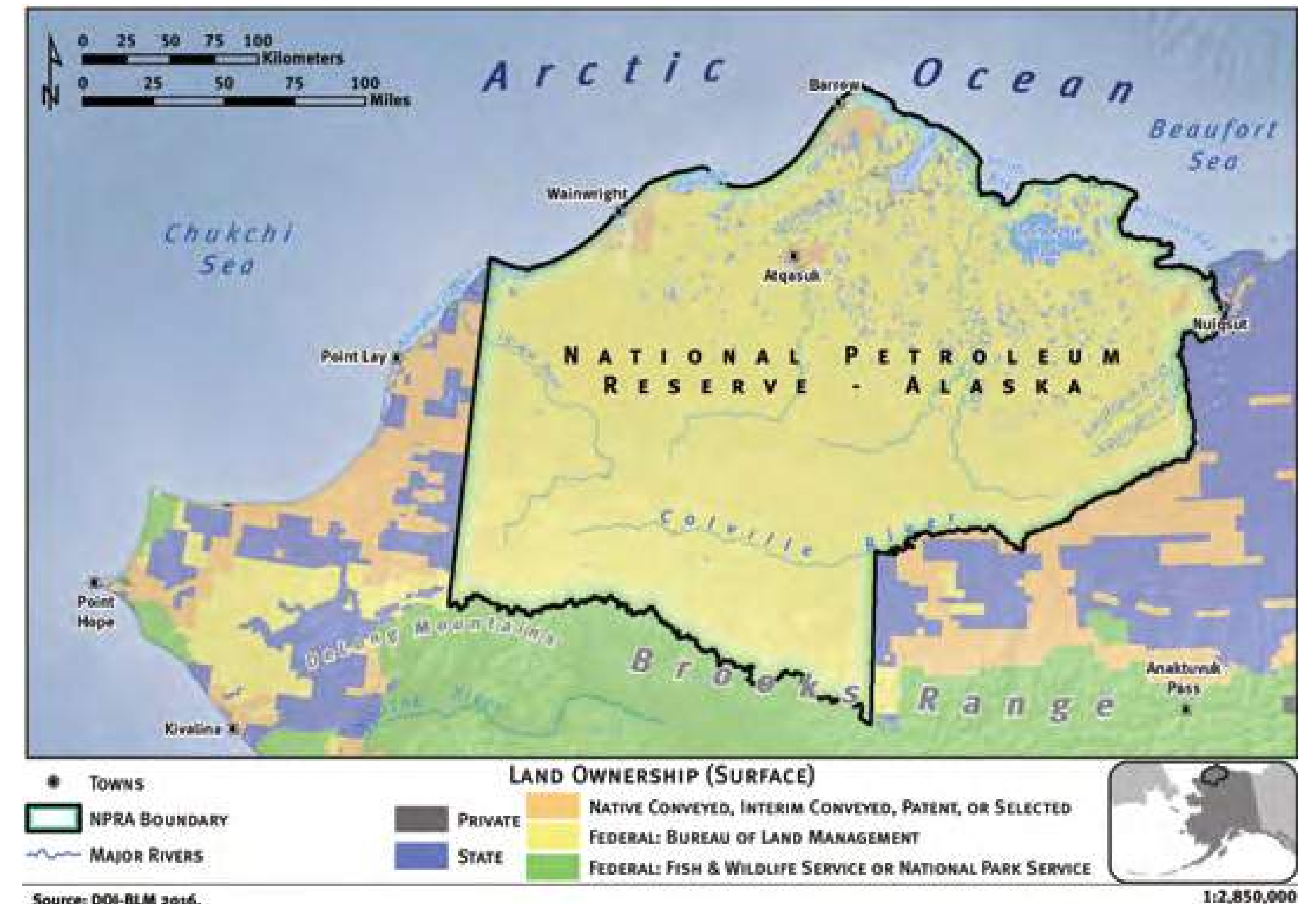
This situation asks us to think more carefully about the politics of voice in the land management decisions: who has a voice in this process, who is not heard, and why? In the case of the Western Arctic, Nuiqsut, and the other Alaska Native villages to whom it is home, this question calls up the legacies of the Native land claims movement, oil and gas development, and the origins of the United States as a settler colonial nation. A closer look into this warrants a discussion of how institutional oppression functions, as well as a closer look into the history of native land claims in Alaska. (Please see Awareness & Acknowledgement piece for more about institutional opression).

In 1974, in what would become known as the Mackenzie Valley Pipeline Inquiry, the Canadian government commissioned Justice Thomas Berger to investigate the social, environmental, and economic impact of a proposed pipeline through the Yukon and Mackenzie River Valleys. Mayor Eben Hopson, founder and late Mayor of the North Slope Borough, indigenous rights activist, and co-founder of the Inuit Circumpolar Council, was invited to testify to his experience of the impacts of oil and gas on the North Slope. His testimony also attested to the history of dispossession, at the hands of both Federal and State governments, in the Western Arctic.

1 Official Website of the North Slope Borough: Nuiqsut. http://www.north-slope.org/our-communities/nuiqsut

2 Native Village of Nuiqsut public comment letter to BLM, 6/14/2016 http://www.blm.gov/style/medialib/blm/ak/aktest/planning/NPR-A_RMS/NPR-A_Conceptual_RMS_public_comments.Par.9440.File.pdf/NVN_6-14-16_RMS_Comments.pdf

3 Laura Pulido, "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California" 2000. Annals of the Association of American Geographers 90(1), 12-40. http://www.praxis-epress.org/CGR/30-Pulido.pdf



"In the early part of this century," Hopson wrote, "our Federal government created several Naval petroleum reserves as part of an effort to insure that our Navy had access to fuel for its ships. Without asking us, for it was our land, our Federal government took from us 23,400,000 acres of land, an area roughly the size of the State of Indiana, without any compensation."[4] This land would become the NPR-A, and with the 1976 National Petroleum Reserve Production Act, heavily influenced by Hopson and others, was transferred to the Department of the Interior.[5] **Hopson's testimony serves as a reminder that the current federal jurisdiction of the Western Arctic was premised on the seizure of land without agreement or compensation, which undermines the moral authority of the federal government's claim on the area.**

Upon passage of the Alaska Statehood Act in 1958, the State of Alaska was granted permission to select 105 million acres of federally owned land – or, as Hopson reminds us, "that is to say, land taken from Alaska's Native people without asking, or payment."[6]

The Statehood Act stipulated that Native lands were exempt from selection – yet, as reported by Indian Affairs, the newsletter of the Association on American Indian Affairs in 1972, "the State swiftly moved to expropriate lands clearly used and occupied by Native villages and to claim royalties from Federal oil and gas leases on Native lands. The Department of Interior's Bureau of Land Management, without informing the villages affected and ignoring the blanket claims the Natives already had on file, began to process the State selections."[7]

Significantly, one such area was the land directly adjacent to the NPR-A and its known petroleum value. (The NPR-A remained at that time military land, and was not available for selection.) This land would, significantly, later become Prudhoe Bay. When oil was struck at Prudhoe Bay in 1968, it would change the character of the North Slope, and of Alaska, forever. Hopson wrote, "Those who can understand that the fabulous Prudhoe Bay oil field was taken from us without any compensation can begin to understand the justice of our demands

4 Hopson, Eben. Testimony Before the Berger Inquiry On the Experience of the Arctic Slope Inupiat With Oil and Gas Development in the Arctic, 1976. P 2 5"A Short Biography of the Honorable Eben Hopson." 1980. http://www.ebenhopson.com/bio/ChurchBio.html

5"A Short Biography of the Honorable Eben Hopson." 1980. http://www.ebenhopson.com/bio/ChurchBio.html

6 Hopson, Eben. Testimony Before the Berger Inquiry On the Experience of the Arctic Slope Inupiat With Oil and Gas Development in the Arctic, 1976. P 3

7 Indian Affairs, January 1972.Summarized in " Alaska Native Claims Settlement Act of 1971 (Public Law 92-203): History and Analysis Together with Subsequent Amendments." By Richard S. Jones, 1981. http://www.alaskool.org/projects/ancsa/reports/rsjones1981/ancsa_history71.htm

today. The Arctic is owned by us, the Inupiat. We do not mind sharing it with others, but we want to negotiate terms.”

In response to this maltreatment, villages began to organize and protest across the state, and in 1964, Steward Udall, then Secretary of the Interior, refused to process any State selections that were protested. The State selection process quickly ground to a halt. In the same year, the Arctic Slope Native Association was formed and formally claimed aboriginal title to all 88,581 square miles of the region. In January 1969, as one of his last acts in office, Secretary Udall formalized his ‘land freeze’ with the issuance of Public Land Order 4582. However, his action was too late to save the Iñupiat title to Prudhoe Bay; the federal government had given provision title to about 12 million acres of State-selected land before the land freeze.[8]

Between 1969 and 1971, the Alaskan Federation of Natives lobbied with Congress over the amount of land they were due, eventually raising the number from an original 10 million acres (less than 3% of the land to which they were due) to 40 million. As Eben Hopson explained to Justice Berger, “Back in those days in America, you must remember, there was not much political sympathy with the notion of aboriginal land rights.”[9]

Richard Nixon signed ANCSA into law in its final form in 1971. It was at the time the largest land claims suit in United States history. ANCSA extinguished Alaska Native land claims and hunting and fishing rights, in exchange for title to what would eventually become 44 million acres of land and $962.5 million. Controversially, ANCSA also created 12 Regional Corporations (a 13th was created for Alaska Natives residing outside Alaska) and over 200 village corporations, whose mission would be to maximize profits from their land and monetary assets.

Decades later, still working under these land laws, in 2013, the BLM published an Integrated Activity Plan and Environmental Impact Statement (IAP/EIS) for the Western Arctic.[10] It was seen as a major success for environmentalists, because it established or reaffirmed approximately 13 million acres of special area designations, much of which are unavailable to oil and gas activity. It also laid out best management practices and lease stipulations to protect sensitive ecological areas—a significant step forward in the protection of vital habitat. Only months later, however, during the permitting of ConocoPhillips’ Greater Moose’s Tooth 1 (GMT-1) drill site, the BLM issued an “exception” to allow a permanent road and pipeline through the Fish Creek area, which had previously been off-limits.[11]

The Fish Creek area is rich with caribou and fish, and has long been an important area to the Native village of Nuiqsut for traditional hunting and fishing ways of life. The Tribal Council of Nuiqsut had been a cooperating agency during the permitting process, and through extensive public comment, had made it known that they preferred a slightly longer, slightly more expensive road that would skirt the Fish Creek boundary entirely. Upon hearing of the exception, which went against their expressed wishes, they were understandably frustrated.

Sam Kunaknana, then President of the seven-person Nuiqsut Tribal Council, wrote a public letter to Governor Bill Walker highlighting their frustration with the lack of opportunity for meaningful community input in land management processes. In particular, he protested Walker’s communication with Secretary of the Interior Sally Jewell, in which Walker had disregarded the Tribal Council’s desires and pushed for ConocoPhillips’ planned alternative. “To bulldoze through the permitting process,” Kunaknana wrote, “and push aside mitigation measures that help protect subsistence resources and environmental quality, completely disregarding the impacts on the tribal people of the region, is unconscionable.”[12] Among residents of Nuiqsut, land managers, and environmental groups, there is a palpable sense of discontent with the ways that permitting processes go, and how difficult it is to get anti-development concerns to be meaningfully incorporated.

Being engaged in land management processes requires enormous amounts of time, energy, and dedication; in small villages, where leaders wear multiple hats at the same time, capacity is already stretched thin, and that frustration is compounded when people then feel like their comments simply disappear into a vacuum and the machinery of petroleum development simply goes on as usual.

Decades after the land claims process itself, and centuries after the United States first began overriding others’ sovereignty, we still are struggling with the myriad instances of oppression that tail us, no matter how much progress we make. **While the intent is never to replicate colonial dynamics of power, this is precisely what it will do if we do not actively work against that tendency: its foundations themselves are not neutral, and in fact have a history of favoring resource extraction above all other uses, and have a history of supporting indigenous sovereignty only when it’s necessary. As conservationists who engage regularly with land planning processes for various reasons, the first step must be to see clearly the institutional oppressions recreated in those systems. Only then can we change the system so it’s more equitable.**

It seems fitting, finally, to return to the struggle of the Standing Rock Sioux, whose protest at the time of this writing against a pipeline will be familiar to Alaskans. As Rebecca Solnit, an environmentalist, feminist, and writer, wrote, “This is a continuation of those historic battles, except this time some of us white people can get on the right side of history--and ecology.”

8 http://www.akhistorycourse.org/modern-alaska/alaska-native-claims-settlement-act 9Hopson, Eben. Testimony Before the Berger Inquiry On the Experience of the Arctic Slope Inupiat With Oil and Gas Development in the Arctic, 1976. P 2

9 Hopson, Eben. Testimony Before the Berger Inquiry On the Experience of the Arctic Slope Inupiat With Oil and Gas Development in the Arctic, 1976. P 2

10 BLM: National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (2013). VOl 1: Abstract, Executive Summary, Chap 1-3 https://eplanning.blm.gov/epl-front-office/projects/nepa/5251/41003/43153/Vol1_NPR-A_Final_IAP_FEIS.pdf

11 BLM: National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (2013). Final Record of Decision. https://eplanning.blm.gov/epl-front-office/projects/nepa/5251/42462/45213/NPR-A_FINAL_ROD_2-21-13.pdf

12 Alaska Dispatch News: “Blasted over oil project, Alaska governor seeks broad tribal policy.” January 25, 2015. http://www.adn.com/energy/article/governor-blasted-over-oil-project-seeking-broad-tribal-policy/2015/01/26/

THE NORTHERN LINE FALL 2016

An Alaskan Roadmap to 100% Renewable Energy

by Eric Schaetzle & Ceal Smith

Historically, when renewable energy becomes a cost competitive option people make the switch from fossil fuels. Today, many US cities, like Burlington, Aspen, and Juneau meet a significant percentage of their energy needs from hydropower, a technology that became cost effective long ago. Wind power improved later, allowing other cities, like Greensburg, KS, to tap into this rapidly growing market.[1] Today the most recent and rapid growth is in solar. The prediction is that it will meet an increasingly large percentage of energy demand in the future as entire cities and regions move toward renewable energy.[2,3] The emergence of SolarCity and other big players in the renewable energy scene illustrate the tremendous growth opportunities for private industry. As improvements in renewable energy continue, improvements in building performance, weatherization, and energy conservation and efficiency compliment them.[4,5,6] The potential for Alaska to realize gains in these areas as well has been widely recognized.

Seven years ago, in January 2009, Gov. Palin asked Alaskans to focus on obtaining 50% of our electric generation from renewable sources by 2025,[7,8] an announcement that accompanied the release of a new document from the Alaska Energy Authority titled “Alaska Energy: A first step toward energy independence.”[9] Unfortunately, Alaska Energy didn’t provide a road map for how to reach this goal. At the time, Alaska’s “50 by 2025” goal was on the cutting edge; suggesting a higher target of 100% renewable energy would have been dismissed as not only impractical, but impossible to reach. Yet a few years earlier, in 2007, Kodiak Island, Alaska began a multi-phased, step by step approach that by 2014 culminated in their electric grid generating 99.7% of it’s power from renewable energy sources.

Today, advancements in clean energy and integration technologies (known as “smart grid”) have spurred explosive growth in the number of cities, states, and countries planning and working toward 100% renewable energy goals. Those of us watching from the sidelines have been forced to revise our beliefs about what is possible. It no longer takes a visionary to embrace such a goal, just a leader with enough common sense to see where the world is headed.

AN EXPANDING ROLE

In 2015 the “Solutions Project,” led by Mark Jacobson at Stanford, did in fact create a 100% renewable roadmap for Alaska. The plan identifies energy sources of 70% wind, 15% hydro, 7% geothermal, and 6% solar to enable a staged shift in all energy sectors (electricity, transportation, heating/cooling, and industry) to renewable sources.[10] Jacobson’s plan includes a 30% decrease in power demand gained by converting from combustion to electricity and end-use energy efficiency improvements. It also accounts for electricity and heat storage.[11] Since Alaska has a solar resource comparable to Germany (Fig. 1), currently the fifth largest producer of solar energy in the world[12], Jacobson’s proposed energy mix could be adjusted to include a higher ratio of solar. Erin Whitney at the Alaska Center for Energy and Power, for example, has noted that “solar is the most untapped resource in our state.”[13] As prices for PV panels drop, solar energy generation has grown considerably across the state, from the Northwest Arctic Borough to Copper Valley.[14] In Fairbanks, for example, the Golden Valley Electric Association is exploring a community solar project.[15, 16]

There are other examples of what a more developed plan to move to 100% renewable energy might look like. San Diego energy expert Bill Powers developed one such plan for four heavily populated Bay Area Counties in California. Bay Area Smart Energy 2020 (BASE)[17] uses proven low cost technologies to convert the electric grid to renewable sources through energy conservation and efficiency, demand response, and local, distributed renewable energy supplemented by a few strategically placed utility-scale renewable energy projects and community scale storage. Clearly, there are substantial differences between the climates of Alaska and California. We can’t “copy and paste” the BASE 2020 plan for our state, but otherwise Powers’ nuts and bolts approach is what we need in Alaska.

The litmus test for an Alaskan renewable energy plan will be its ability to deliver power under the most demanding conditions, such as an Alaskan winter, but other Arctic regions haven’t found this to be an obstacle. As part of a “Neo Carbon Energy” project, Christian Breyer and associates from the Lappeenranta University of Technology in Finland, at a similar latitude as Alaska, created an economically viable 100% renewable energy plan that relies on a highly flexible system design and dramatic increases in wind and solar generation capacity.[18,19,20] Recently this same team completed renewable energy system modeling for Russia, and found it to be one of the most energy-competitive regions.[21] Similarities between Finland and Russia and the climate and geography of Alaska are apparent.

In fact, the Alaska Energy Authority found that Alaska has “some of the best renewable resources in the world” and collaborated with the Renewable Energy Alaska Project to create a “Renewable Energy Atlas of Alaska.”[22] They identified four distinct geothermal resource regions suitable for large-scale geothermal power projects. Alaska has over 90% of the nation’s river current and tidal energy resources. Western and coastal regions of the state have wind resources that are rated “excellent” and

1 Geiling, Natasha. (21 Jan 2016) What Will It Take For America To Go 100 Percent Renewable? Climate Progress. 2 Leidreiter, Anna. (4 Nov 2015) A global shift to 100% renewables is not just cleaner – it’s about equality. The Guardian. 3 City of Vancouver. (Nov 2015) Renewable City Strategy. 4 Marsik, Tom. (7 Jan 2016) Energy literacy yields extraordinary financial returns while helping the planet. Alaska Dispatch News. 5 Mitigation Advisory Group. (Aug 2009) Greenhouse Gas Inventory and Forecast and Policy Recommendations Addressing Greenhouse Gas Reduction in Alaska. Alaska Climate Change Sub-Cabinet. 6 Alaska, 26th Legislature (2009-2010). SB 220: “An Act relating to energy efficiency, energy conservation, and alternative energy...” 7 Alaska, 26th Legislature (2009-2010). HB 306: “An Act declaring a state energy policy.” 8 Forgey, Pat. (18 Jan 2009) Palin releases energy ‘plan.’ Juneau Empire. 9 Alaska Energy Authority. (2009) Alaska Energy: A step toward energy independence. 10 Mark Z. Jacobson et al. (2015) 100% clean and renewable wind, water, and sunlight (WWS) all-sector energy roadmaps for the 50 United States. Energy and Environmental Science. 11 Mark Z. Jacobson et al. (2015) Low-cost solution to the grid reliability problem with 100% penetration of intermittent wind, water, and solar for all purposes. Proceedings of the National Academy of Sciences. 12 Sawin, Janet et al. (2015) Renewables 2015 Global Status Report - Key Findings. REN21. 13 Whitney, Erin (27 Sept 2015) Returning Home to Alaska: Seeing Energy in a New Light. 2015 Arctic Energy Summit. 14 DeMarban, Alex. (22 Dec 2015) Copper Valley region expects to rely fully on renewable energy in summer. Alaska Dispatch News. 15 Mondelli, Pete. (21 Sept 2015) Community Solar Project. GVEA Board Meeting Materials p.73-86 16 Milkowski, Stefan. (19 Nov 2015) Smart solar for GVEA. Fairbanks Daily News-Miner. 17 Powers, Bill. (April 2011) Bay Area Smart Energy 2020. Powers Engineering. 18 YLE News. (9 Jun 2015) Researchers: All Finnish energy could be renewable in 35 years. 19 Child, Michael, Teresa Haukkala, and Christian Breyer. (17 Sept 2015)The Role of Solar PV in the Long-term Sustainability of the Finnish Energy System. Lappeenranta University of Technology. 20http://www.neocarbonenergy.fi/21 Bogdanov, Dmitrii and Christian Breyer. (12 Nov 2015) Eurasian Super Grid for 100% Renewable Energy power supply: Generation and storage technologies in the cost optimal mix. Proceedings of the ISES Solar World Congress. 22 Alaska Energy Authority and Renewable Energy Alaska Project. (2013)Renewable Energy Atlas of Alaska. 23 Troll, Kate. (22 Jan 2009) My Turn: Defining Alaska as a clean energy state. Juneau Empire.

"outstanding."[23]

Geothermal and hydroelectric energy are "base load" — that is they produce the minimum amount the electric grid has to have to operate at any given time.[24] Combined with wind, solar, energy storage, greater efficiency, improved high-voltage direct current (HVDC) technology,[25] and demand response, Alaskans would have no problem getting through the harshest winters. Evidently, such was also the conclusion of the Finnish researchers for their country.

The obstacles to a 100% renewable energy plan are not the cold and dark of winter, but rather, policies that disincentivize renewable power generation[26,27] and limit demand response. Thankfully, the Regulatory Commission of Alaska is looking to restructure the Railbelt grid with the creation of an Independent System Operator that would dispatch energy more efficiently and set a universal transmission tariff.[28,29,30]

Today the energy sector is driven more by improvements in technology and shrinking costs than improvements in resource extraction. Consequently, economic growth is no longer dependent on fossil fuel production. The shift has only begun to ripple across the globe, though we are feeling its direct effects here in Alaska. If we remain bound to the older model of extraction, we will miss being part of the emerging economic development paradigm. We don't have a roadmap to a 100% renewable future yet, but that's not for lack of reason, and it's becoming increasingly apparent it's not for lack of ability either.

INCENTIVES FOR GROWTH

The clear message of the Paris agreement is that the age of fossil fuels is drawing to a close. Policies that internalize the environmental and public health costs of carbon pollution, such as carbon pricing schemes and, in the US, the Clean Power Plan, will favor renewable energy and spur investment in and development of clean technology, promoting greater adoption and lowering costs. It's important to take into account these current and future changes to tax and energy policy when considering what our future energy infrastructure should look like.

The research and technical experience in putting a renewable energy plan into practice could expand our growing role in the $20 billion global industry in next generation clean technology as other regions of the globe move in the same direction. Recognizing this potential for their own country, Iceland built a knowledge export economy around geothermal resources.[31] To date, 144 countries currently have renewable energy policy targets.[32] With no sign of this trend slowing,[33] Iceland made a wise investment.

Even without a mandatory goal or policy incentives, renewables are expanding in Alaska.[34] In 2014, we produced 28% of our electricity with water, wind, and other renewable energy sources.[35] Between 2007 and 2014 we saw a 20-fold increase in wind power generation.[36] Through the vision of its residents and collaboration with industry leaders, Kodiak residents saved millions in annual fuel costs and lowered ratepayer electric bills when they reached 99.7% renewable power generation. Residents are now beginning to switch from oil to electric heat pumps to heat their homes.[37,38] In Kotzebue, wind power is already providing 20% of average electricity demand, saving the community $900,000 in 2014 alone.[39] There are many more examples besides these.

According to the Alaska Center for Energy and Power, more than 70 of Alaska's 200 microgrids have integrated renewable power into the mix,[40] and there's plenty of room left to grow. In their recent Alaska Dispatch News commentary, Meera Kohler and Gwen Holdmann pointed out that Alaska has "the highest per capita investment in renewable energy technology of any state."[41] This research is driven, in part, by the overarching vision of reaching our "50 by 2025" goal and a desire to lower the cost of energy for all Alaskans.

One thing is obvious, whether we have a roadmap or not, this is the direction Alaska is moving. But without a plan the process of transformation will take longer and be less efficient.

CONCLUSION

As Alaska reels from climate change and collapse of the oil markets, now is the time to embrace a 100% renewable energy goal. By make a binding commitment we guarantee a renewable future for Alaska and Alaskans that demands a comprehensive and detailed roadmap. Our economy has nothing to lose from a big push in the growth of renewable energy. Our world-class fishing and forest products industries and rural communities are struggling to understand and keep up with rapidly escalating impacts from climate change[42,43,44,45] effects caused directly by greenhouse gas emissions entering our oceans and atmosphere. Alaska's mining industry will continue to be needed to supply the raw materials to build a clean energy economy, whenever recovering these from our waste stream is not possible.[46] A renewable plan for Alaska, by itself, would represent no threat to our oil and gas export industry, as the market for that resource is predominately influenced by factors beyond our control. Even Norway, which generates 98% of its electricity from renewables, remains one of the world's largest oil exporters.

To fit real numbers to a plan, to identify efficiency potentials, prime renewable energy development and growth potential, and best practice policies and financial incentives, we need to gather state energy specialists, our utilities, and national organizations and experts like Bill Powers and Mark Jacobson together. All Alaskans should be a part of a state level dialogue about our energy future so we can discuss options, get community input, share ideas and benefit from one another's experience. It's good for the environment, good for the economy, and provides Alaskans energy free from the boom and bust cycle of the oil economy.

24 Clark, Chris. (2015) Explainer: Base Load and Peaking Power. REwire. KCET. 25 Holdmann, Gwen. (Jun 2013) Small-Scale High Voltage Direct Current Transmission. Alaska Center for Energy and Power. 26 IPCC. (2011) IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation. 27 Scheer, Hermann and Amy Goodman. (15 Oct 2010) Hermann Scheer (1944-2010): German Lawmaker, Leading Advocate for Solar Energy and "Hero for the Green Century" in One of His Final Interviews. Democracy Now. 28 Carr, Polly. (20 Aug 2015) Alaska has both reason and resources to lead the way to clean power. Alaska Dispatch News. 29 Grove, Casey. (24 Nov 2015) Independent power producers declare victory after regulations update. Fairbanks Daily News-Miner. 30 Waldholz, Rachel. (28 Jan 2016) Railbelt utility overhaul could mean more renewables, cheaper power. Alaska Public Radio Network. 31 Ellis, Tim. (24 Jul 2015) Fulbright Arctic Initiative: Circumpolar Scholars Studying Region's Problems. KUAC, Fairbanks. 32 Sawin, Janet et al. (2015) Renewables 2015 Global Status Report - Key Findings. REN21. 33 International Energy Agency. (10 Nov 2015) World Energy Outlook 2015. 34 Vice Adm. McGinn, Dennis. (3 Oct 2009) Alaska is set to lead in renewable energy. Alaska Dispatch News. 35 Energy Information Administration. (Feb 2015) Electric Power Monthly, February 2015. U.S. Department of Energy. 36 Energy Information Administration. (1 Sept 2015) Alaska increases wind power capacity in utility-scale and distributed-scale projects. U.S. Department of Energy. 37 Guevara-Stone, Laurie. (19 May 2015) An Alaskan Island Goes 100% Renewable. Rocky Mountain Institute. 38 Bunker, Kaitlyn, Kate Hawley, and Jesse Morris. (Nov 2015) Renewable Microgrids: Profiles from Isalnds and Remote Communitiesacross the Globe. Rocky Mountain Institute. 39 Hobson, Margaret Kriz. (20 Oct 2015) A renewable energy success story above the Arctic Circle. EnergyWire, E&E Publishing. 40 Alaska Center for Energy and Power. (Oct 2014) Global Applications Program [Brochure]. 41 Kohler, Meera and Gwen Holdmann. (24 Aug 2015) Rural Alaska's arctic development depends on sure, affordable energy. Alaska Dispatch News. 42 Loring, Philip et al. (19 Dec 2015) Community Work in a Climate of Adaptation: Responding to Change in Rural Alaska. Human Ecology. 43 Furgal, Chris et al. (13-15 Feb 2008) Climate Change & Impacts on Human Health in the Arctic. An International Workshop on Emerging Threats and Response of Arctic Communities to Climate Change. 44 Alaska, State. (14 Sept 2007) Administrative Order 238 Establishing the Alaska Climate Change Sub-Cabinet. 45 Adaptation Advisory Group (27 Jan 2009) Alaska's Climate Change Strategy: Addressing Impacts in Alaska, Executive Summary. Alaska Climate Change Sub-Cabinet. 46 Research Needs Work Group. (Jun 2009) Recommendations on Research Needs Necessary to Implement an Alaska Climate Change Strategy. Alaska Climate Change Sub Cabinet.

THE NORTHERN LINE FALL 2016

Paving Tundra in Ultimate Wilderness

by Jayme Dittmar

The Paving Tundra team traveled to several villages along the Ambler road corridor while researching and filming for their upcoming film, *Paving Tundra*.

The Brooks Range is subject to a trial of which we are all familiar - mineral extraction and development vs. wildness. But the Brooks Range is unique; it is North America's ultimate wilderness and one of Earth's largest roadless areas.

This summer our crew of five filmmakers and Alaska explorers completed a 350 mile packrafting expedition along the proposed Ambler road corridor. We stopped at the six subsistence villages that would be most impacted by road development.

We are Paving Tundra. We don't claim to be athletes, seasoned subsistence residents, miners, activists or scientists. We do hope to create a film and relating media that highlights these voices. Our goal is to bring awareness not to the differences of the people that claim this range as "theirs," but to the similarities they share - to the land that contains their thoughts, activities and livelihoods.

In the quest for accurate storytelling we found ourselves sitting at the feet of elders and running around fire circles with children. We rarely knew what time it was, and we never knew the day of the week. We attended "bear parties," picked berries and set fishnets. Welcoming strangers brought us into their smokehouses, fish camps and homes.

The experiences, memories and stories from our expedition will be developed into film and multifaceted media, designed to portray the complex realities of developing an access road and mining district in the wilderness of the Brooks Range

Paving Tundra is partnering with the local village councils, the Brooks Range Council, the Northern Alaska Environmental Center, the WILD Foundation, and members of the outdoor industry. To learn more, visit us at www.pavingtundra.com.

The Ambler Mining District Industrial Access Project is a proposal for a private mining road that traverses ~ 220 miles along the foot of the Brooks Range from the Haul Road to a large mineral deposit by the Ambler River. The project, funded with general funds, has just been approved to begin the NEPA (National Environmental Policy Act review) process. There are six communities with resolutions opposing the proposed road. *The Paving Tundra* Documentary is anticipated to debut in the summer of 2017.

TO LEARN MORE:

Watch a short video: https://www.npca.org/advocacy/35-stop-the-ambler-mining-road

Join the Brooks Range Council: http://www.brooksrange.org/

Visit the Parks Service website: http://www.nps.gov/gaar/learn/management/ambler-row.htm

Donlin Gold: Impact vs Jobs

by Julia Mickley

From Cook Inlet, across the Alaska Range, down the Kuskokwim River, to the Aleutian Islands, Donlin Gold will directly affect 65 communities and an exponential amount of landscape, including the Iditarod National Historic Trail. This "is the definition of a megaproject" (Alaska Journal of Commerce). The plan includes over 300 miles of pipeline and access road from Cook Inlet to Crooked Creek, a 2.2 mile wide open pit mine just North of the Kuskokwim River, a 2,240 acre waste rock pile (6 trillion lbs. of waste rock/ year), a 2,351 acre tailings impoundment requiring water treatment in perpetuity, and over 200 miles of barging on the Kuskokwim River. It will be one of, if not the largest, open pit gold mines in the world.

There are many economic benefits to this massive project. Regional Native Corporation's will meet their goals to "generate profit for the corporation and its shareholders and provide other socioeconomic opportunity and benefits to the shareholders and their descendants." The Draft Environmental Impact Statement, DEIS, estimates less than 600 regional residents would be employed during the nearly three decade operation of the mine; even more jobs would be available during the construction phase. Donlin Gold is developing compensatory mitigation plans for sanitation, site cleanup, trail improvement, recycling, and habitat restoration. Many people welcome the project proposal with the hope that the changes that ensue will address many of the needs and issues of the region.

But the benefits the mine brings are not free. "What use will a gold mine be to us once the large money hungry corporation gets their money out of our pristine lands?" Esther questions.

> **I'm concerned about the Donlin Mine. My concern is that my grandchildren will not have what I had access to all my life. The fish, the birds, moose, beaver, muskrat, all what we ate when we were children and I and my family continue to eat. We cannot eat a gold mine's money.**
>
> ***Esther Donhauser Diehl, a lifelong Aniak resident.***

"The high potential for loss of an entire village as well as seasonal fish camps for many others in the next 10-20 years cannot justifiably be ignored…" Orutsararmiut Native Council admonishes in their comment letter opposing the mine as proposed. They are referring to the erosion they expect to unfold as large barges carrying goods for the mine, disturbing the sandy banks of the Kuskokwim. The EPA and Alaska Community Actions on Toxins brought up expressed concerns over increased levels of mercury and arsenic in already high surface water concentrations. For Bethel, emergency response is a forefront issue as the proposed Bethel port and yard dock would store and transport hazardous substances. Then there is the pipeline proposal through a high-yield subsistence area and in conjunction with 58 miles of the Iditarod National Historic.

EarthJustice and other environmental organizations echo BLM's ANILCA 810 (Alaska National Interest Lands Conservation Act) analysis expecting high environmental impact. A "failure of the safety measures planned for the Donlin Gold Mine could cause catastrophic damage to the ecosystem of the Yukon-Kuskokwim Delta and would obliterated the subsistence way of life… and devastate the fisheries on the Kuskokwim River and its tributaries" explained the Yukon Kuskokwim Health Corporation in their resolution of opposition. Though "the council understands the need for economic opportunities… it should not be at the risk of negatively impacting our lives, our health, our land, our culture and our subsistence way of life" Asa'carsarmiut Tribal Council summarized.

13 communities provided public comments to the DEIS. They brought up concerns about tailings dam failures, transport and storage of toxic chemicals, emergency spill response, contamination, impacts of barging, increased mercury and arsenic concentrations, ground water depletion at mine sight, access routes, climate change uncertainties, impact to salmon, smelt, fish habitat, wetlands, and landscape. They also had concerns about the public process and asked for more time.

The Environmental Protection Agency rated the DEIS as "EO2"- Environmental Objections. Their review found "potentially serious impacts to human health and the environment." They and other government agencies requested additional analysis, and recommended a revised or supplemental Draft EIS.

Veterans, including Karla Terry, traveled to the Arctic Refuge to experience the calm of the landscape, and the negative impacts climate change has had on the environment.

Living in Love

by Karla Terry

Being surrounded by 360° of solitude, with the exception of four other small groups that briefly encountered us, we were on our own, we shared the river with wildlife and that was it. You may ask why this is so important to me. It's a necessity to shut out the buzzing of everyday life, to set my frequency where it is 100% on God. For ten whole days I needed not search for God; it was all around me. I opened my eyes in the morning and I felt the pulse of God of the Universe so pure in its most undisturbed state. I awoke to the sound of the Canning River just being a river, flowing, carving out the bank, changing the shape of things, and giving life to other forms of life. I awoke to birds just being birds, singing, chirping, surviving in a desolate landscape. I awoke to the humming of mosquitos just being mosquitos, pollinating, being our arch nemesis, and bringing balance to the beauty of the Arctic. There was no way for me to ignore my higher source, a source I choose to call God. God tucked me into my sleeping bag at night, zipped my tent door shut and waited for me to wake.

This is not new to me. It's in the quiet, in the remote faraway places where I found God again for the first time and on my own terms, and this is where I continue to discover more. It's because of places like the Arctic that I started to feel comfortable using the word "God." It's places like the Arctic where I feel the most loved, where I came to believe that everything is and will always be OK. My time in the Arctic National Wildlife Refuge is where the reminder of love and compassion to all beings was once again concretely implanted in my heart.

Perched in an "eagle's nest" I asked the same question I frequently ask when I'm in a place of awesome beauty. I asked the heavens "how do you want me to live?" In all the years and all the times of asking this I have expected to hear a voice cutting through a cloud with a shimmering ray of light with a clear cut plan like "Karla move to this city and save children" or "Karla move to this town and feed the homeless." Of course that message never came. But this time when I asked that same question, as I've asked a hundred times over, seated high above, overlooking the river I was given an answer! This answer did not come in the form of words but rather a feeling. I felt all the love I could stand, my chest filled with a warmth that I can only describe as magic. I felt it all over my body; an overwhelming state of love, of being in love. In that moment I was shown how much love I was capable of.

So God answered my question. How do you want me to live I asked and the Universe answered: "in LOVE." It made me see that I am here to give love with no restrictions or guidelines, with no stipulations on your place of origin or sexual orientation, your political standing or financial background. I am not to withhold love for ANY reason, not due to age, shape, gender, even if you don't love or like me. The Universe knows I will not do this perfectly every day, but I will be given reminders like a hawk flying over congested midday traffic, coyotes crying at night, or wildflowers growing freely in an unexpected place. I will also be given many opportunities to try again and again.

So what happens when I feel like I cannot or do not want to keep trying, or when I'm failing miserably at this love thing? God sends me back home to nature to sit quietly with all the glory that has been created for me. It doesn't matter in what form it manifests itself, whether it's mountains, high desert, a river, prairie, or King Ocean. It pulls me to the center of the earth and takes me to a place of peace and healing, a place where I can respect all of humankind as well as the flora and fauna of this earth, even space. All that is left to do is be grateful for the moments I am given in sacred quiet spaces and do my best to protect them so that many more people who pass through the madness of life get a place where they can be in love. Even if it's brief and only away from things of man, we all deserve this most magical gift I call LOVE.

Northern Center Highlight's Annual Award Winner Achievements

by Elisabeth Balster Dabney

The Northern Center's annual awards are a way for the Board of Directors and staff to recognize the tremendous and outstanding support of our membership, volunteers, and community partners. Without the time and service provided by this year's award recipients we wouldn't have been able to do what we do to protect northern Alaska.

Awards were presented for Volunteer, Activist, Youth, Business, and Conservationist of the Year. This year's **Volunteer award** recipient is truly dedicated to the Northern Center. **Eric Olsen** spends countless hours on our Facilities Committee lending his expertise and ensuing our office space and yard is functioning and cared for. Additionally, Eric is a perennial presence and volunteer at Northern Center sponsored and organized events.

We cannot say enough about our **Business of the Year, Event Alaska.** Owned by Kara Nash, her dedication and commitment to offering specialized event planning for community events in Fairbanks, Alaska has left a lasting impact on the local non-profit community.

This year's **Youth of the Year, Tristan Glowa** is dedicated to the conservation of northern Alaska. His organizing efforts have been used to garner attention and rally support across the country to protect arctic Alaska and raise climate change awareness and action.

Our **Activist of the Year** works tirelessly to build people power for social and environmental change in Alaska and over the last year, her dedication to seeing real change in the conversation about climate change has shown tremendous leadership. **Danielle Redmond** is the director of the Alaska Climate Action Network and continues to encourage and promote state-wide climate action.

Finally, we were incredibly excited to award this year's **Conservationist of the Year** award to the **Susitna River Coalition.** They have spent countless hours fighting against the proposed Susitna-Watana dam and their service to the region and Alaska has set the state on a course to sustainable sources for electricity generation.

Northern Center staff Elisabeth and Anna, and interns Morgan, Caitilin, and Vivian attend Salmonfest 2016 in Ninilchik.

Events

Annual Meeting
Our annual membership meeting and picnic was held on May 20th at the Northern Center.

SALMONFEST
In July, Northern Center staff and interns traveled to Ninilchik to participate in Salmonfest, a weekend-long festival that celebrates Salmon and the waters and habitats those fish call home. Attendees were able to speak with us about the work we do to keep Alaskan waterways clean and habitable. The response from festival attendees and organizers was positive; the Northern Center won **BEST EDUCATIONAL BOOTH**, an award based on appearance, organization and engagement with the public.

Conservation in Alaska
At the beginning of the fall, we paired up with Trustees for Alaska, an Anchorage based environmental law firm to raise awareness about conservation in Alaska. Local members were invited to speak with one another and Northern Center staff about our programs, current work, and future projects. Vicki Clark, the Executive Director of Trustees for Alaska, and Elisabeth Balster Dabney, the Northern Center's Executive Director both gave speeches about the importance of standing up for conservation in Alaska.

This year's events included our annual member picnic at the Northern Center. Recipients of awards, included volunteer of year, Eric Olsen, youth of the year, Tristan Glowa, and activist of the year Danielle Redmond. Below local members gathered together to celebrate conservation in Alaska at Venue in downtown Fairbanks.

In Memorium

Fairbanks, AK — On November 4, 2015 long-time Northern Center member and conservationist Florence Collins passed away at the Fairbanks Pioneers Home. Florence was a geologist and aviator and helped create an enduring conservation community in Interior Alaska.

Florence edited the long standing feature in the Northern Center's Northern Line titled, "Conservation Abstracts," a compendium of conservation-related news items. She volunteered for this task with absolute consistency for many years. An annual award, the Florence Collins Award, is awarded each year for outstanding contribution to the conservation of northern Alaska. Her contribution to conservation of Interior and northern Alaska cannot be overstated. She was a champion of the 1980 landmark bill, the Alaska National Lands Conservation Act and worked tirelessly to ensure traditional ways of life were preserved and understood.

Fellow Northern Center member Terry Reichardt remembers Florence, "I knew Florence as an environmentalist who never stopped caring and never stopped contributing. We both shared a love of Alaska's wilderness. But it was her friendship that I will miss most. Florence was a good friend to me, to many others, and especially to Alaska's environmental community."

Florence's passing is sad news for the entire conservation community of Alaska.

Where the Northern Center is Going

by Elisabeth Balster Dabney

The Northern Alaska Environmental Center is celebrating 45 years of environmental protection of the far north. Since 1971, the mission of the Northern Center has largely stayed the same: promote and protect conservation stewardship of arctic and interior Alaska through education and advocacy. Over the years, how we do our work has changed, but what we do has largely remained the same. In the recent past the Northern Center has gone through a series of transitions that took the center from a heavy policy and litigation focus to the original grassroots advocacy and organizing model that won campaigns like the passing of ANILCA and the Wilderness Act. This transition was due to a Board decision in the fall of 2013 to re-focus the direction of the Northern Center.

Once the organizational structure of the Northern Center was aligned with the transition goals of the Board, work could be done to implement the vision. In 2015, the staff of the Northern Center held a staff retreat. We pulled out the butcher paper and got to work answering some tough questions. Who are we? What are we good at? What are we not good at? What are we doing successfully? Where are our weaknesses? Further, we explored our funding sources and potential new funding avenues; pivoting the movement without losing our roots; the Northern Center culture; and where we wanted to be in 1, 2, 3, 5 year(s). The Board of Directors invited our conclusions to be presented at their annual retreat for consideration and enhancement by the Board. This open dialogue between the Board and staff created a synergy and shared vision about where the Northern Center needed to go.

POLICY & LEGAL ➜ GRASSROOTS ACTIVISM & ORGANIZING

:: What does this mean? We are at a place where our work can thrive and we can measure success.
For the past 16 months we have been able to see our base grow and the engagement level of our local champions increase. Our planning documents: Strategic Plan, Annual Operating Plan, and individual work plans have proven successful at keeping us accountable to our transition commitments and provided the sideboards to maintain nimble and focused campaign work.

:: What are we doing? We're convening conversations and identifying solutions.
We are leading the campaigns against the proposed road to Ambler and the Donlin Creek gold mine. And we are advocating, every day, for the strongest possible local solutions for the Interior's air quality problems. The core of the Northern Center's work is arranged in five programmatic areas: Arctic; Local; Climate Change and Energy; Clean Water and Mining; and Youth Education.

Our work in the **arctic program** includes the western arctic (National Petroleum Reserve-Alaska), the Arctic National Wildlife Refuge, and the Arctic Ocean Outer Continental Shelf (OCS). In the western arctic we would like to see permanent protections for the 5 Special Areas as outlined in the BLM's 2013 Integrated Activity Plan (IAP), a full analysis of cultural and climate impacts of GMT-1 before the BLM even considers approval of GMT-2, and a Regional Mitigation Strategy (RMS) that is reflective of the cultural and traditional ways of life that exist in directly impacted north slope communities. We support the President's recommendation for Wilderness designation for the additional 12.28 million acres of the Arctic Refuge and given the current political climate, advocate to the US Fish & Wildlife Service for minimal management. Lastly, after 8 long years of litigation, there are no current leases in the Chukchi Sea and we are advocating for no new leases in the current 5-year leasing program for the Arctic Ocean.

Our **local program** work is focused on cleaning up the Fairbanks air. In 2014 and 2015, the Northern Center facilitated an "ownerless" campaign with local citizens to defeat two (one in 2014 and one in 2015) ballot propositions that would have taken local-based solutions out of Fairbanks and put them in the hands of the Alaska Legislature. Over 50% of the Fairbanks North Star Borough's particulate matter 2.5 (PM2.5) pollution is caused by outdoor wood boilers. Currently, there are less than 200 in the area. By keeping the power to make decisions at the local level we can facilitate change-out programs, clean burning education, and ultimately the banning of hydronic heaters.

Our work in the **climate change and energy program** is the newest and emerging rapidly to include a powerful base of support in Fairbanks and the rest of Interior Alaska. The Northern Center facilitated the creation of the Fairbanks Climate Action Coalition with several community members in 2015 and it is 300-members strong with a steering committee and working groups. The Northern Center commissioned a report for a just transition to a clean energy economy for north slope communities and gathered stakeholders together in Anchorage and Fairbanks this summer to get solutions-based input from those directly impacted by climate change. The report is being finalized and will provide the groundwork to engaging Alaskans in a just transition across the state.

Our **clean water and mining program** work is focused on two levels: issue work and monitoring. We are leading the campaigns against the proposed road to the Ambler mining district in the foothills of the Brooks Range and the Donlin Creek gold mine in southwest Alaska. We monitor the existing mining landscape to ensure the highest level of protections possible for current mine operations. Our clean water and mining coordinator sits on the BLM's Resource Advisory Council sub-committee for placer mining and we're in the process of updating our mining position statement and drafting a reclamation policy as some of northern Alaska's largest open pit mines begin to make closure plans (within the next decade).

Finally, our **youth education program** serves to bring up new environmentalists. We work with two universities, Earlham College and The New School to bring summer interns to Alaska each year. Most recently, these internships have fulfilled work plans in the arctic, clean water and mining, climate change, and outreach programs.

:: Where do we want to go? We're building a bridge. Climate + Community + Conservation
Changing the direction of ***how*** the Northern Center does our work necessitated a plan of how we would bridge the generational interests of a growing membership. In other words, how do we pivot the movement without losing our roots? The Northern Center's positions and policies are still and will remain strongly rooted in the conservation of public lands in northern Alaska. With the increasing threat of climate change on all aspects of our work there is a growing movement among young Alaskans to act. As a center, we are providing the place for climate activists to meet with conservationists to start a dialogue. We are convening the meetings and building the relationships between groups. The issues of climate change (and climate action) and conservation are not moving on separate planes, they are converging. An emerging community of activism exists in Interior Alaska and it includes both ANILCA-era conservationists and climate activists.

Help Us Seal The Deal: No New Leases in the Arctic Ocean

The Long Road of Arctic Offshore Leasing Could Come to an End

September 2015: Shell leaves the Arctic Ocean amongst widespread stakeholder, citizen, economic and policy pressures. As well as insufficient indications of oil and gas at their one exploration well: cost $7 billion dollars

October 2015: The Department of the Interior cancels remaining 2011-2016 Arctic Offshore lease sales. **However, the Administration leaves Arctic Ocean for potential lease sales through 2017-2022.** Simultaneously, the Bureau of Safety and Environmental Enforcement (BSEE) deny requests from Shell and others for lease suspensions, which would have extended the expiration date of their current lease holdings.

April 2016: Bureau of Ocean Energy Management collects comments for 2017-2022 lease sales in the Arctic Ocean. **Over 100 Fairbanksans commented against these leases at the openhouse, with an additional 300 commenting online.**

May 2016: Royal Dutch Shell Plc, ConocoPhillips and other companies quietly relinquished leases in the Arctic Ocean amidst increasing offshore drilling regulations, citizen opposition, and low oil prices.

June 2016: Royal Dutch Shell Plc drops it's legal efforts to hold onto its offshore leases in the Arctic Ocean.

Over 2 million people from all over the country comment to stop Arctic Offshore leases.

July 2016: The Department of the Interior solidifies exploratory drilling regulations focusing on oil spill response plans. Senator Murkowski introduces legislation to double offshore lease sales in the 2017-2022 leasing plan.

September 2016: Russia announces a temporary moratorium on new offshore oil and gas licenses for drilling on the countries Arctic shelf. Scientists, and policy makers meet with President Obama to urge him to cancel offshore leasing, in the interest of climate.

Today: The Obama Administration will make an announcement after the 2016 election as to the 2017-2022 Arctic Lease sales. **YOU STILL HAVE TIME TO SHOW YOUR SUPPORT!!** Please sign our our petition at northern.org and join the millions that have asked the President to stop all offshore leasing in the Arctic Ocean once and for all.

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The Northern Alaska Environmental Center promotes conservation of the environment and sustainable resource stewardship in Interior and Arctic Alaska through education and advocacy.