

Energy bill benefits Alaska

A new energy research facility for Barrow, recognition of the North Slope Science Initiative and new procedures to encourage energy exploration in the National Petroleum Reserve-Alaska are some of the highlights of the massive \$12.3 billion, 1,724-page energy bill signed by the president last month.

“Industry has committed a great deal of money to lease and explore in the reserve, but the climate, distance from support services and environmental factors present incredible hurdles to overcome before oil can flow into the pipeline,” said BLM Alaska State Director Henri Bisson. “We are gratified that legislative changes recognized these realities in the energy bill so development can occur.”

The Energy Policy Act of 2005 allows for lease extensions in the reserve (upon payment of a fee of \$100 per acre leased) if there is a discovery or continued exploration is warranted. Prior to this act, the lease would expire if there was no production in 10 years, a

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Inside ...



Edward Bovy

Thirty years ago, Alaska was in the midst of its biggest boom, the construction of the trans-Alaska oil pipeline. What if it happens again? Find out in our feature story, Pipe Dreams, beginning on page 7.



Susan Sharbaugh

Each summer, this tiny Arctic Warbler and about 450 other bird species from six continents migrate to Alaska to nest and raise their young. Find out why scientists want to learn more in stories on pages 3 and 6.

Energy Bill

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requirement very difficult to meet in this remote corner of Alaska where infrastructure is lacking. The law also allows the Secretary of the Interior to waive, suspend or reduce rental fees or royalties to promote development.

Other provisions outline how leases can be combined in the reserve. “This will minimize the impact to surface resources and assist consolidating facilities,” said Colleen McCarthy, BLM’s deputy state director for energy and mineral resources.

The North Slope Science Initiative is directed to:

- identify and prioritize inventory, monitoring and research activities addressing cumulative effects of anticipated development activities and environmental change on the North Slope,
- facilitate cooperation and coordination among agencies and organizations, and
- minimize duplication of effort, share expertise and assure the collection of quality information.

The bill also:

- establishes royalty incentives and a demonstration grant program in several areas, including Cook Inlet, to use carbon dioxide and other gases to enhance recovery of oil and natural gas,
- authorizes \$61 million to establish the Barrow Geophysical Research Facility, and
- provides financial assistance to states to establish and maintain geological and geophysical data archive facilities.

On the web

The entire energy bill can be read on the Internet at

<http://thomas.loc.gov/cgi-bin/query/D?c109:6:./temp/~c109juA1Fv::>

The search continues

In August BLM researchers took a light-weight drill rig up the Dalton Highway to Franklin Bluffs to test how well it performed in permafrost conditions. The goal was to reach a coal seam between 2,000 and 3,000 feet. Unfortunately the drill string broke at 1,818 feet and efforts to redrill failed.

“One factor contributing to the break was the lighter drill steel we were testing,” said project leader Beth Maclean. BLM will consider upgrading to heavier steel in the future.

The coring program is a multiyear effort to drill and test coalbeds for natural gas throughout Alaska. If enough gas can be extracted from coal in the right location, a village could have its own local alternative fuel for home heating and power generation.

The next phase of the project is to relocate the rig to Wainwright to drill and evaluate coalbeds underlying the village, if BLM can secure funding. Maclean estimates that it will take about \$1 million to continue. BLM hopes to put together



BLM’s portable drill rig at Franklin Bluffs

a package of interagency contributions to keep this promising program moving forward.

Information from the Franklin Bluffs test could test a theory that coal in permafrost may not contain gas; if this theory proves valid, it could significantly reduce estimates for North Slope coal bed gas reserves.

The Franklin Bluffs drilling is part of the Rural Energy Program, an interagency effort that includes participation from the State of Alaska and the U.S. Geological Survey.

New fire service barracks dedicated



BLM national Director Kathleen Clarke was on hand in July to dedicate the new 70,000-square-foot firefighter barracks at Fort Wainwright. The \$17.1 million project will house up to 390 summer firefighters from Alaska and the Lower 48 from mid-February to mid-November. The new barracks also will be used in the off-season by U. S. Army troops in transit to participate in cold weather exercises. It replaces facilities dating back to the 1940s that did not meet health and safety codes.

As of Aug. 26, 598 fires have burned approximately 3.64 million acres in Alaska this fire season.



Craig McCaa

PEARD BAY, ALASKA — “We’ve got another one!” BLM Arctic Field Office wildlife biologist Debbie Nigro lowered her binoculars and ran across the beach toward a group of low, netting-covered boxes set on the sand at the water’s edge.



Craig McCaa

Greg Norwood collects a blood sample from a western sandpiper. Blood samples are later processed with a centrifuge to separate plasma and red blood cells, then frozen for later lab analysis.

(top) Greg Norwood releases a red phalarope after banding it.

A juvenile red phalarope, a member of the sandpiper family, fluttered against the trap’s netting. Nigro scooped the diminutive brown and white bird into her hand and ran with it back to a folding table covered with bird banding and sampling equipment.

U.S. Fish and Wildlife Service volunteer Greg Norwood took the bird from Nigro. His deft hands quickly took the phalarope’s head, bill, leg, and wing measurements, weighed it, checked its feathers, gave it a numbered metal band and unique combination of colored plastic bands, extracted two blood samples, and painted the top of its head with bright colors, easily seen through binoculars.

Then he released the bird which then flew down the beach and plopped down on the sand as if to ponder this strange and unexpected stop in its migration to the Southern Hemisphere.

A New Coastal Plain Study

The red phalarope and the numerous other shorebirds floating in the surf or pecking at bugs along the beach are the reason

Nigro and Norwood are spending 32 days camping at Peard Bay on the shores of the Chukchi Sea.

The two are staffing the westernmost, and most remote, of five research camps extending across the North Slope from Peard Bay, 50 miles southwest of Barrow, eastward for 360 miles to the Jago River in the Arctic National Wildlife Refuge.

Their field work is part of an expansive research effort mounted this summer to study the importance of Alaska’s Arctic Coastal Plain to migrating shorebirds. The project involves BLM, the U.S. Fish and Wildlife Service, University of Alaska Fairbanks, Alaska Science Center, and Manomet Bird Observatory (Mass.), among others.

Heading the whole effort is Audrey Taylor, a graduate student at the University of Alaska Fairbanks who will write a doctoral dissertation about the findings.

Taylor’s project concentrates on a handful of shorebird species whose populations are decreasing for unknown reasons. However, so little is known about the distribution and numbers of birds on the coastal plain that the study can’t help having broad benefits to ornithologists.

By including observations of passerines (songbirds) and waterfowl as well as shorebirds, the study should aid in the larger effort of identifying birds or habitat that might be especially sensitive to

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Mystery Migrants

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environmental alterations on the Arctic Coastal Plain. Such alterations might come in the form of global climate change, pollution, or further development of the North Slope's considerable oil and gas reserves.

"This many camps, this many agencies ... and the huge, east-west geographic extent of this study — It's a sign of how important people think this is," says Nigro.

Aside from one 1970s study at nearby Franklin Point, Peard Bay is new territory for ornithologists, says Nigro.

"Nobody has studied Peard Bay before. There's no species list for this location. We can get this data from a relatively unknown place."

World Travelers

When they're not trapping and banding birds, much of Nigro's and Norwood's time is spent walking nine 1-kilometer-long transects that stretch along a 5-mile-long spit of wind-swept sand littered with driftwood, whale vertebrae, dead seals, and tattered remnants of fishing nets. As they walk, Nigro and Norwood record the number, type and location of birds they observe. Each transect is completed every fourth day.

They also look for promising places to set up their traps, which they move every day depending on where birds are congregating.

On a rainy, blustery morning



Dunlin

USFWS/ Kelly Kerrisk Knepp

in early August, Norwood abruptly stops his four-wheeler and whips out his binoculars.

He has his binoculars trained on a single, tannish-gray bird standing by the water line about 60 feet away. Its size, shape and plumage clearly distinguish it from the phalaropes, sanderlings and western sandpipers seen earlier that morning.

He confirms his earlier hunch that it's a Mongolian plover, a bird that belongs on the other side of the Pacific Ocean, in eastern Siberia. Sightings in this part of Alaska are rare.

When working with shorebirds, one is frequently reminded of the impressive travel credentials of these small, delicate-looking birds. In mid-July Norwood captured a dunlin that had already been banded by another ornithologist.

"It had a nasty old band, a band that had Chinese characters on it. Then I found some numbers."

Norwood called in the band numbers by satellite phone and learned from international contacts in the birding community that the dunlin had been banded in China on Jan. 15.

"When that bird was banded, it would have had different plumage

than when I caught it," Norwood says. "It would have likely been on a mud flat, probably in not nearly so remote a location. But how it got here to Peard Bay — that's what we'd like to know."

Shorebirds that spend summers on Alaska's Arctic Coastal Plain migrate as far as Central and South America, Japan and Asia, and even New Zealand.

These international travels have taken on new importance in recent years because of concerns over the spread of communicable diseases.

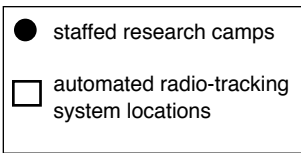
As they capture and band birds this summer, Nigro and Norwood are collecting swab samples from the birds' intestinal openings to test for avian influenza A (H5N1), the "bird flu" that has killed poultry and people in several Asian countries.

The concern is that wild birds that have contracted the virus from infected poultry in Asia might carry it to Alaska as they migrate. There they could potentially introduce the virus to North and South American birds. According to a recent *Anchorage Daily News* article, the virus has already been detected in migratory birds in China but has not yet been found in Alaska's birds.



Greg Norwood uses telemetry equipment to listen for birds that have been outfitted with tiny radio transmitters. His receiver allows him to pick up transmissions not only from the birds he and Debbie Nigro have captured, but also from birds captured at the research camps farther east.

Craig McCaa



Some of Alaska's North Slope migrants include Dunlin, Western Sandpiper and this juvenile Red Phalarope.

Stay Tuned

The shorebirds' activities on a smaller scale – within the Arctic Coastal Plain – are also of great interest as ornithologists strive to understand the birds' post-breeding movements and their preparation for lengthy migratory flights.

The blood samples that the researchers collect during banding will be analyzed for triglyceride concentrations, which can be used to ascertain how successfully the birds are fattening in preparation for migration. Comparison of fattening rates between sites may indicate which locations have habitat especially important for the birds' successful migration. Corticosterone levels in the blood will indicate the birds' reaction to stress (in this case, their capture) and provide an indication of their general health.

Because ornithologists know so little about where and when shorebirds move or how long they stay at specific sites, approximately 75 birds are being outfitted with tiny radio transmitters, each with

its own frequency.

The Peard Bay researchers, along with the other project participants, check for signals from the birds several times a day using hand-held, directional antennas.

In addition, radio telemetry signals from the birds' transmitters are logged by seven Automated Radio-Tracking Systems (ARTS) placed along the coast. The ARTS stations consist of fixed antennas connected to solar- and battery-powered radios that scan approximately 80 radio channels. Data is stored on-site until researchers dismantle the stations in the fall.

This winter, Taylor and other researchers will spend months analyzing blood samples and poring over the radio telemetry data.

By then, the banded red phalarope, along with the thousands of other red phalaropes Nigro and Norwood observed at Peard Bay this summer, should be enjoying summertime sunshine hundreds of miles off the coast of Chile.

— Craig McCaa

Photo credits: (left to right) USFWS/ John and Karen Hollingsworth, USFWS/ Donna Dewhurst, Craig McCaa

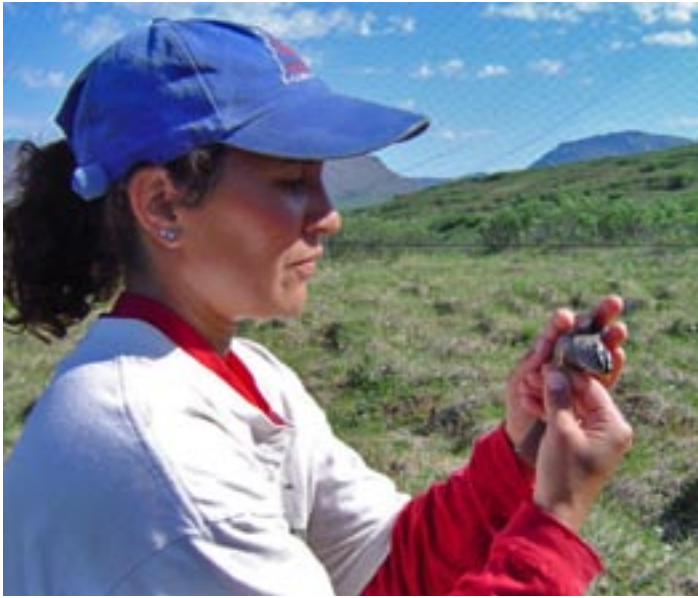


Debbie Nigro (kneeling) checks the data logger at an automated radio-tracking system (ARTS) station several miles from the camp at Peard Bay. Arctic Field Office acting manager Herb Brownell on left, Greg Norwood on right.

Craig McCaa

Tiny visitors make Denali Highway home

Susan Sharbaugh



SCIENCE
— ON THE —
PUBLIC
LANDS

Susan Sharbaugh



Susan Sharbaugh



Only enthusiastic birders would attribute the long, loud series of buzzy notes to that of the Arctic Warbler found along the Denali Highway. Little is known of this tiny, olive-green, migrating songbird, placing it as a sensitive status species with the Bureau of Land Management in Alaska.

A two-year cooperative study with the Alaska Bird Observatory and other partners began in the spring of 2004 in the long-term hope of preventing further listings of the Arctic Warbler by the U.S. Fish and Wildlife Service as either a threatened or endangered species. As part of this study, researchers hope to identify when Arctic Warblers arrive in Alaska, where nests are located, what habitat they prefer, and what preys on this small passerine.

Last summer, June 6 marked the first recorded arrival of this Philippines migrant. Four study plots between the Tangle and Macleran Rivers were habitable and 24 Arctic Warbler nests were identified. The nests, difficult to locate and cryptic in design, were often found under overhanging tussocks. Dome-shaped with side entries, they apparently were as much of a mystery to predators as to researchers, as predation proved to be extremely low.

Researchers found that both parents feed the fledglings. A high rate of nesting success was achieved which, according to Susan Sharbaugh, senior biologist at the Alaska Bird Observatory, is rare amongst songbirds. "This season we are anxious to see if this unusually high rate of success continues," explains Sharbaugh. "We expect that last summer's dry conditions proved beneficial to the Arctic Warbler; long-term research would help make those determinations."

Mist nets and tape recorded song playbacks allowed for 22 adults to be color-banded and 48 nestlings to be silver banded. Researchers are anxious to see if adults will return to their nest sites and whether or not any fledglings will return to the research area. Biologists also hope to determine the range of Arctic Warbler habitat. To learn more about Arctic Warbler research visit the Alaska Bird Observatory website at <http://www.alaskabird.org>

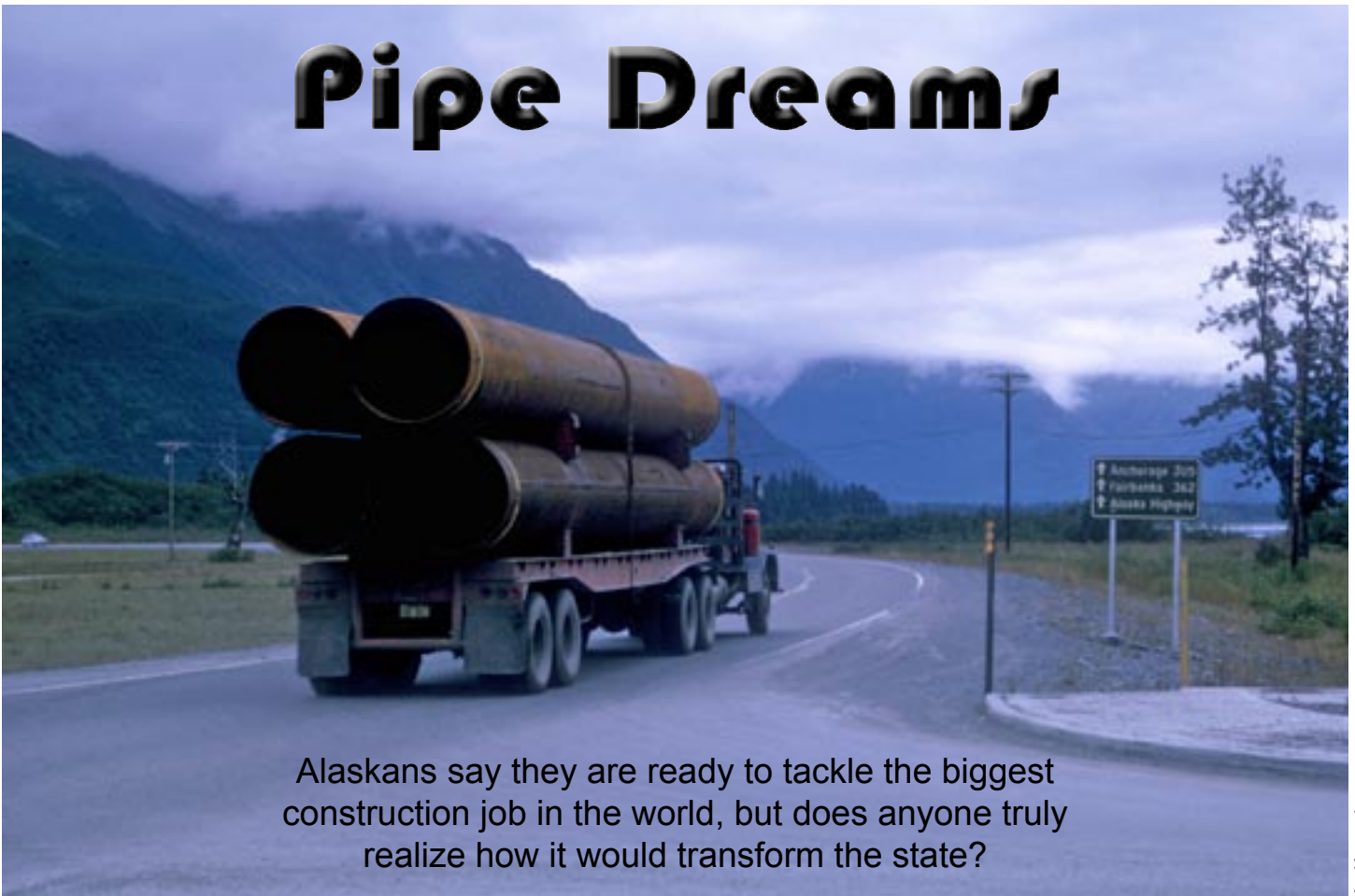
— Marnie Graham

(top) Alaska Bird Observatory field biologist Amal Ajmi releases a White-crowned Sparrow.

(middle) A White-crowned Sparrow also visited the research area.

(bottom) Although this delicately-woven Arctic Warbler nest is on the ground, predators apparently do not recognize it easily.

Pipe Dreams



Alaskans say they are ready to tackle the biggest construction job in the world, but does anyone truly realize how it would transform the state?

Art Kennedy

The old saying “be careful what you wish for” is never truer than when you are wishing for the mother of all construction projects. Right now many Alaskans, including the governor, are pursuing the biggest construction project ever conceived, a gas pipeline to bring some of the estimated 35 trillion cf of natural gas on the North Slope to market at a rate of 4 billion cubic feet/day.

Conventional wisdom around the state says it’s not a matter of if, but when. But the “when?” still depends on state government and industry working out some complex agreements on a variety of issues, particularly financial matters, as well as industry committing to a route that makes sense in a global economy. Then there are alternate routes and spur routes throughout Alaska. A route through Canada adds an international layer of

(above) 48-inch pipe leaving Valdez, 1970.

complexity. And that’s just for starters.

Some cost estimates for the project range in the \$19 billion to \$20 billion price range. But if past experience can predict the future, this could eventually approach \$40 billion. A significant part of this cost is related to creating or improving the infrastructure necessary to make the project possible. Infrastructure — roads, railroads, ports, airstrips and bridges — will need upgrading to handle the volume and weight of the heavy pipe, massive valves, monster-sized equipment, mountains of gravel, and shiploads of supplies that will be needed to build the line. *(Editor’s note: for purposes of analysis, this article will assume at least one route from the North Slope through Tok into Canada will be included in the proposal. Spur routes within Alaska are also under consideration.)*

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More than a pipeline

Here’s just a few of the needed projects identified so far that would be visible to the traveling public:

- replace the northbound Eklutna River bridge to increase load capacity, Glenn Highway
- major reconstruction, Steese Highway and Third Street, Fairbanks
- Tanana River Bridge replacement, Alaska Highway
- redeck Yukon River Bridge, Dalton Highway
- widen, repair and resurface Atigun Pass, Dalton Highway
- replace Chilkat River Bridge, Haines Highway
- new Moose Creek Railroad Overcrossing, Richardson Highway
- new interchange, North Pole, Richardson Highway
- weigh station upgrades, Fox and Tok, plus additional stations

The big build — one scenario

To get a line built to Alberta, about 1,750 miles of pipeline would be constructed in winter and another 396 miles built in summer.

To speed the construction process, the line itself would be built in two directions from many locations called spreads. There would be three spreads in Alaska and another six in Canada. In Alaska, the spreads would be supported by up to 15 construction camps of 800 to 1,200 people, all requiring food, fuel, supplies and sanitation. Eleven of these could be located on sites used previously to build the oil pipeline. By comparison, an average Alaska village has a population of about 500.

The overall labor force could peak at about 7,000 people.

Pipe could arrive at ports such as Port MacKenzie, Seward, Whittier, Valdez and Haines and be transported to storage yards (41 of which would be in Alaska) and a number of marshalling and coating yards. Rail would be the preferred method. Later it would be hauled into position by truck for assembly and burial.

The line would be buried underground in a gravel-filled trench except at major river crossings. Material sites for the gravel will need to be located along the entire route. (TAPS took 73 million cubic yards of construction fill and was buried for only 380 miles).

A large gas treatment plant would need to be built on the North Slope to compress and chill the gas. (Actual construction could be done offsite and barged north.)

A companion gas extraction facility would be built in Alberta to feed a variety of existing lines and/or any new lines built to the Midwest.

Pipe



The gas would be chilled where it crosses permafrost, so refrigeration plants and compressor stations would also be needed along the route.

Although the Yukon River bridge was originally designed to hold two pipelines, upgrades have added weight, raising concerns that a second bridge may be needed. Also, the two lines may have to maintain some separation for safety.

Building in a post 9-11 world means background checks on construction workers and much higher security at construction camps could be necessary.

Reality check: remaining challenges

There are a number of technical problems to be solved before a gas pipeline can be built. Here's just a few ...

- Evaluating high-strength steel
- Improving fracture arrest (cracking in pipe will continue unless stopped)
- Improving weld design
- Designing small stream crossings that avoid water flow blockage
- Improving communications systems used during construction
- Manufacturing the pipe
- Designing safer pipeline crossings at fault lines (e.g. Denali Fault)
- Recruiting a skilled labor force (7,000 at peak construction)
- Upgrading infrastructure — roads, railroads, ports, airstrips, and bridges

Upstream

- Prudhoe Bay
- Point Thomson
- Other gas

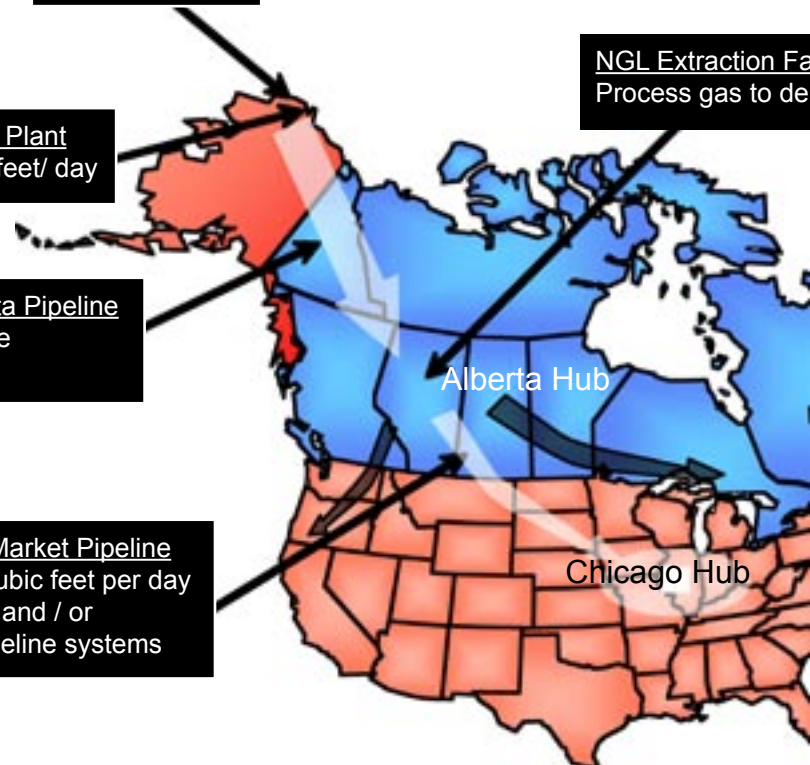
NGL Extraction Facility
Process gas to de

Gas Treatment Plant
~4.5 billion cubic feet/ day

Alaska to Alberta Pipeline

- Buried pipeline
- 48 or 52 inch

Alberta to Market Pipeline
~4 billion cubic feet per day
to Chicago and / or
existing pipeline systems



Dreams



Lessons learned

Lessons Learned from Constructing the Trans-Alaska Oil Pipeline, a Comptroller General's Report to Congress, was published by the General Accounting Office in 1978. This report, written nearly 30 years ago, was meant to serve as a guide to improve the effectiveness of future large-scale construction projects and specifically mentions an Alaska natural gas pipeline as one possibility that could benefit from the information.

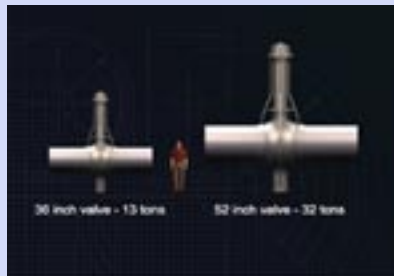
The study concluded:

- First and subsequent cost estimates should be viewed with skepticism.
- As much site-specific data as is economically practicable should be obtained.
- Technical and geological uncertainties should be thoroughly investigated.
- Cost and inventory control systems should be in place before construction starts.
- Project expenditures should have ongoing (rather than post construction) government audit to protect the public interest. This would require agreements to provide the government direct access to project files and records.



Art Kennedy

Facility
Delivery spec



A valve for a 52-inch pipe weighs 32 tons. 150-200 valves would be needed for the line. Specialized equipment to install oversize pipe would need to be manufactured.



(center) Pipe came by the truckload in 40 foot and 60 foot lengths and weighed 235-285 pounds per foot.

(above left) Pipe storage yard, Valdez, 1971. Planners estimate a gasline would require up to 41 similar storage yards.

(above right) Unloading ATCO buildings, Seward, 1970's. Port MacKenzie is poised to become a major port of entry for gasline cargo.

Pipe Dreams

—continued from page 7

“The scope and complexity of this project, regardless of the route chosen, will require unprecedented planning and coordination plus exceptionally strong communication between agencies,” says Interior Department Special Assistant Cam Toohey. The Alaska Natural Gas Pipeline Act (ANGPA) anticipated this complexity and established a cabinet level position to give direction to all federal agencies associated with the project.

BLM and other agencies know that once initial decisions are made, they will have to complete an incredible amount of work in a short period of time to fulfill their own roles and responsibilities and to keep the project on schedule. There’s so much work to organize that they are taking steps now to get ready for whatever happens.

High-level discussions, information exchanges and informal meetings between government agencies at both the state and federal level have been held and will continue in hopes of getting issues settled in advance to minimize problems later.

“This project will be different because all the agencies will be acting in a unified manner,” said FERC’s Mike Boyle while setting the tone at a recent interagency planning session.

Once industry finalizes its preferred route and agreements are reached with the State of Alaska, Native corporations and Canada, the Federal Energy Regulatory Commission (FERC) will prepare an environmental impact statement (EIS) and schedule the numerous public meetings. The Alaska Natural Gas Pipeline Act (ANGPA) requires that this be completed in 18 months from the time an application is received by FERC and puts sideboards on any court appeals.

Right now, BLM is developing a business plan to determine how to handle issues and identify staffing and budget needs. This plan covers four key areas in depth where the agency anticipates the most work: rights-of-way, compliance with the National Environmental Policy Act, government-to-government consultations, and land conveyance issues.

During the project’s siting phase, BLM’s primary responsibility will be to prepare and issue the right-



The Yukon River Bridge was completed in 1975. It is unlikely a gas pipeline will be able to share this bridge for a variety of reasons.

of-way on the federal portion of the route, coordinating with the State of Alaska to make sure it is consistent with the State right-of-way.

Portions of potential routes cross lands selected by either the State of Alaska or Native corporations. These selected lands have yet to be conveyed. BLM has scheduled meetings this fall with landowners to discuss the issue and secure their priorities. “Our goal is to get selected land along any proposed right-of-way prioritized and transferred to the final owner prior to the pipeline coming on line,” says Ramona Chinn, BLM-Alaska deputy state director for conveyance management.

In addition to issuing the main right-of-way for the project, “There is the potential for an additional workload for BLM to authorize all the temporary uses that will be needed to support the project. These could include temporary roads, material sites, construction camps, storage areas, airstrips and any other uses that will not be a permanent part of the pipeline infrastructure,” says Carolyn Spoon, chief of BLM-Alaska’s Branch of Lands and Realty.

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A Happy Valley Camp, 1970, one of 29 camps needed to build the oil pipeline. Construction camps required for a new gasline will use previous camp locations whenever possible.

Help wanted: everyone needed

Thirty years after the “glory days” of the oil pipeline boom, most government workers have retired, taking their experience with them. Jerry Brossia, federal authorized officer at the Joint Pipeline Office, is one of the few left. He estimates that there were about 250 federal and state employees involved in the oversight for the oil pipeline construction and that about ten of these are still working today.

However, current federal and state employees still know a great deal about pipeline operations gained from working on day-to-day operations plus a number of major projects such as the right-of-way renewal and the reconfiguration project.

Anyone who employs skilled people in Alaska will be up against potential staffing problems. Will your employer be able to keep receptionists, dish washers, delivery drivers, accountants, security guards or anyone else when the lure of a project of this magnitude inflates wages to attract workers? And what will be the impact of 7,000 workers and their families on highways, recreation sites, schools, the housing market and the state economy? One study anticipates that fewer outside-of-state workers will bring family members up to Alaska (compared to when the oil pipeline was built), minimizing demand for new housing.

Thirty years of changes in communications, construction techniques, technology, and transportation will no doubt affect how building another pipeline plays out. No one has all the answers, but people are thinking about it just in case those pipe dreams come true.

— Edward Bovy



Pipe train in Turnagain Arm, 30 years ago.

Show me the money

A new gas line will create a ripple through Alaska’s infrastructure. Make that a tidal wave. Ports, highways and the railroad will all be greatly affected and agency officials are scrambling to identify financial impacts.

The Alaska Railroad is the preferred means of carrying the pipe at least as far as Fairbanks. Existing capabilities can handle 8,000-to-10,000 tons per train. The railroad anticipates needing a number of new sidings to allow trains to pass and two-way traffic. It will also need more flatcars, locomotives and better railroad crossings. Leasing rolling stock can solve part of the problem but the cost for upgrades still could easily exceed \$500 million. Current funding allows for about \$80 million a year in projects, nowhere near what will be needed.

The railroad is planning an extension from Eielson Air Force Base to Delta Junction within five years to support the missile defense project, so the question arises, “Why not keep going into Canada?” The Yukon Territory and Alaska state government are currently exploring two routes that match up with potential gas line routes. Also, the Mat-Su Borough envisions an entirely new road-rail corridor connecting Port MacKenzie with Willow, allowing “pipe trains” to bypass Anchorage and Wasilla.

Alaska highways will experience a marked increase in trucks hauling heavy and oversized loads, wearing pavement and slowing passenger car travel. Alaska Department of Transportation officials have already identified bridges that will need to be replaced before the gas line is built plus a lengthy list of upgrades, passing lanes, traffic signals, turnouts and weigh stations. The total cost is approaching \$1 billion.

Currently Alaska is spending about \$250 million a year for highway projects and has a \$10 billion wish list of other projects unrelated to the gas line. The magnitude of additional projects is prompting officials to worry that if conventional funding is the only source, projects in urban areas could be put on hold. “We won’t have all the money needed ... choices will have to be made,” says David Miller of the Federal Highway Administration.

One bright spot from all this is after the line is built, Alaska will be left with a number of legacy projects creating a 21st century infrastructure that will benefit Alaskans for years to come.



Biologist helps streamline subsistence hunting permits

Fisheries biologist Elijah Waters will tell you right up front “I’m big on hunting!” So, when he transferred from Roseburg, Ore., to the Glennallen Field Office, he started wondering why it took BLM employees up to 15 minutes to process a subsistence hunting permit application. When an office issues more than 2,500 permits (more than half the permits in the state), it means a lot of people can be waiting in line. Back in Oregon, the state government had things computerized so he knew there was a better way.

Teamwork with a friend in BLM’s Division of Information Resource Management led to a modified software program that retained a significant amount of repetitive information — such as name, address, and driver’s license number — that carries over from year to year. BLM tested and refined the program for the past four years. “We liked it so much we started showing it to other agencies like the Forest Service and National Park Service,” says Waters. He also gave demonstrations to the Federal Subsistence Management Board; it got their attention.

This year, a new interagency internet-based refinement of the process, developed by the Fish and Wildlife Service Office of Subsistence Management during the past year, comes on line for the first time. An application that used to take 15 minutes to process now takes just three. The system also assigns permit numbers automatically, improving what had been a cumbersome process due to the number of variations in the types of permits. It will also flag multiple permit requests.



Marnie Graham

Colleen Phillips issues a Federal Subsistence Hunting Permit to local hunter Frank Hobson Jr.

And for the second year, hunters will report their success (or lack thereof) directly to the office issuing their permit. “We enter the reports daily from the field offices and everyone on the system has instant access to the data. It’s really pretty slick. And if there’s a question as to the legality of a kill, we can track it back to a specific hunter, usually within a day,” says Waters.

All the information goes into the same federal permit harvest database whether it is a moose permit in Nome, a muskox permit on the Seward Peninsula, a deer permit on the Tongass Forest, or a caribou permit for the Nelchina herd in the Copper River Valley.

“Timely reporting of harvest data is critical to the management of the resource,” says Taylor Brelsford, the BLM representative on the Federal Interagency Staff Committee. He likes the new system because it improves management by allowing for mid-season adjustments to bag limits where the Federal Subsistence Board has delegated this authority to local managers. Last year, the BLM Glennallen District Manager was able to authorize cows to be hunted during

the winter caribou hunt based on recent population survey results and the fall harvest data for the area. The permit harvest data is also used by the federal board to easily review harvest patterns in relation to wildlife population levels and to adjust season and bag limits.

Subsistence Permits Now Available at Glennallen Field Office:

BLM-Glennallen Field Office has started issuing permits for the 2005-06 federal subsistence hunting seasons for moose and caribou in Game Management Unit 13. Permits are granted to anyone who can provide evidence of meeting all federal residency requirements of Game Management Unit 13 or 20D (excluding Fort Greely), and can provide photo identification and a current Alaska resident hunting license. As a consideration to Delta Junction residents, GFO staff traveled to Delta Junction to issue permits over the course of two days, where 700 permits were processed. Subsistence permits will be available at the Glennallen Field Office from now until March 31, 2006. It is anticipated that nearly 3,000 permits will be issued this season.

185 acres of prevention

Converting black spruce to hardwoods could help save Delta Junction



Mark Musitano

Selective thinning on the edges provides a transition from the black spruce forest to the cleared area.

The North Jarvis Stand Conversion Project shows what it means to take a proactive approach in an area where wildland fire has the potential to disturb a community and private property. The Alaska Fire Service (AFS) and the U.S. Army Alaska (USARAK) began work two years ago to convert a black spruce stands to hardwoods.

Most of the area around Delta Junction has burned and is a vegetative mosaic except for the Jarvis area which consists of nearly solid black spruce. The area is close to the Alaska Range, Fort Wainwright Donnelly Training Area lands and the town of Delta Junction which receive strong winds that are channeled from the mountains toward them. The stand conversion fuel break is not expected to stop a wind-driven crown fire, but is strategically placed to break up the fuel continuity and provide an area from which to fight fire.

Work began in 2003 with hand-thinning on both ends of the break to present a park-like transition between the natural vegetative cover and the 5-mile-long, 300-foot-wide swath etched into the thick black spruce. The piles left from the thinning were burned after snow fell in the autumn of 2003 and 2004. Two mechanical treatments were tested to create the break and determine which was most cost-efficient and reached the desired outcome.

Mark Musitano, the military zone fuels specialist and project lead says that trying both the shear-blade and hydro-ax treatments provided a good opportunity to look at the cost difference and results on-the-ground.

About 10 percent of the break was hydro-axed while the rest was shear-bladed. Hydro-axed areas cost about

\$2,500 per acre, more than double the estimated \$1,100 per acre for the shear-blade treatment (including the cost to burn the windrows in fall 2005 and 2006).

Tree and shrub composition and density, ground cover, percentage bare soil, duff depth and permafrost depth are being monitored by USARAK and AFS personnel. Permanent study plots are in place.

This project is the first in a three-phase plan by AFS and USARAK. The second phase involves working with the Division of Forestry in Delta Junction to promote defensible space – emphasizing Firewise program guidelines. The third phase will clear, as funding allows, a series of polygons to the south of the break to alter the fuel continuity.

Interagency and community cooperation has been a key component to the project's success. Personnel from AFS, USARAK, the Salcha Big Delta Soil and Water Conservation District, and the USDA Natural Resource Conservation Service have cooperated effectively to complete the first phase in a short time.

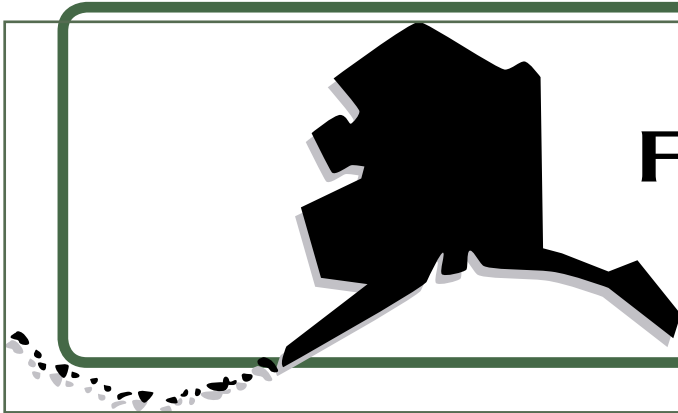
— Maggie Rogers



Mark Musitano

The strategically-placed 5-mile fuel break will also provide a safe area to fight any future fire.





Frontier Flashes

late breaking news from around Alaska



Donna Gindie

Volunteers spread wood chips on educational trails in the Campbell Creek Science Center's outdoor classrooms on National Public Lands Day 2004.

National Public Lands Day 2005

BLM's Anchorage Field Office invites local residents to lend a hand on **National Public Lands Day** at the Campbell Tract, Saturday, Sept. 24. From 8:30 a.m. until 12:30 p.m., volunteers can help with several trail projects.

Then from 12:30 until 4:30 p.m., the Campbell Creek Science Center will host its annual open house with educational activities for families and children of all ages. Drop by and pick up your copy of the science center's 2005-2006 poster calendar. And be sure to check out the center's new educational kiosk, "Get Energized!" This interactive computer-based program will raise your energy IQ with educational games, exercises and even a quiz. The program is also available on CD-ROM.

For more info about National Public Lands Day at the Campbell Tract, call the BLM Campbell Creek Science Center at (907) 267-1247.

Two Recordable Disclaimers Signed. Alaska State Director Henri Bisson signed recordable disclaimers of interest (RDI) for the Tazlina River, Tazlina Lake and Kasilof River on Aug. 15, 2005. The RDIs affirm the federal government no longer has interest to approximately 13 miles of submerged lands underlying the Kasilof and 40 miles of riverbed underlying the navigable waters of the Tazlina River and about 36,480 acres of lakebed underlying Tazlina Lake.

Dalton Highway. A camera crew from Südwestrundfunk, a German regional public broadcasting company, traveled the Dalton Highway this August to film a documentary on the road's history and people. BLM Ranger Lenore Heppler, Yukon Crossing volunteers Bob and Thelma Bowser, and Arctic Interagency Visitor Center staff members were interviewed.

Cordova. BLM Alaska's Resource Advisory Council members visited Cordova and the Bering Glacier Aug. 10-12. The council learned about BLM's involvement and the importance of scientific studies being done at North America's largest glacier.

White Mountains NRA. The popular Wolf Run Cabin in the White Mountains National Recreation Area was destroyed by the Beaver Creek Fire on approximately Aug. 19. The loss of Wolf Run cabin will make use of the area more challenging for some trail users since the nearest cabins are 9-12 miles away, an important consideration when skiing or dog mushing. Several wooden bridges used to access other cabins in the area remain at risk and their condition hasn't been confirmed due to low visibility caused by smoke.

The Beaver Creek fire was started by lightning on June 20 and was reported to be about 155,800 acres in size on Aug. 22. Coincidentally, news of the loss of Wolf Run cabin came as recreation planners for the Eastern Interior Field Office prepared materials for construction of a new cabin to replace the Crowberry Cabin which was destroyed by last year's Boundary Fire.

BLM's Anchorage Field Office installed a new interactive educational kiosk at its Campbell Creek Science Center. The kiosk features a program called "Get Energized!" designed to teach middle school through adult learners about energy and the role BLM lands play in our nation's energy picture. The program also includes an informative segment about the energy resources of Alaska's North Slope. The program is also available on CD-ROM and includes an educator's guide.



Shellye Poster

Planning roundup

The **Ring of Fire Draft Resource Management Plan/Environmental Impact Statement** will be released Sept. 30, 2005. This will also start a 90-day public comment period. The BLM will hold public meetings in Anchorage, Wasilla, Kenai, Juneau, Haines, Skagway and Kodiak during this time.

The Ring of Fire Draft RMP/EIS will be available in hard copy and on CD. To obtain a copy of the document, contact *Amy_Lewis@urscorp.com* or phone (907) 261-9730. Written comments should be mailed or hand delivered by Dec. 30 to the BLM Anchorage Field Office, Ring of Fire RMP/EIS, 6881 Abbott Loop Road, Anchorage, AK 99507. Comments may also be sent via email to *akrofrmp@blm.gov*.

For more information about the Ring of Fire Draft RMP/EIS, contact land use planner Robert Lloyd at (907) 267-1214.

BLM completed initial scoping for **The Bay RMP/EIS** earlier this year and released a scoping report in June. Most public comments addressed mineral exploration and development, habitat management, recreation, access issues, and special management area designations.

During the next year BLM will analyze

data, formulate alternatives, and prepare the draft RMP/EIS for release in September 2006. The Final RMP/EIS will be published in July 2007.

The Bay RMP/EIS will provide a comprehensive framework for managing and allocating uses of BLM-administered lands and resources in the Bristol Bay and Goodnews Bay areas of southwest Alaska. The Bay planning area includes approximately 3.6 million acres of BLM-administered lands. About half these lands are selected by the state or by Alaska Native corporations under the Alaska Native Claims Settlement Act.

Contact project lead Patricia McClenahan at (907) 267-1484 (*akbayrmp@blm.gov*) if you'd like a copy of the scoping report or if you want to know more about the Bay planning process.

The 90-day public comment period on the **Draft East Alaska Resource Management Plan** ended on July 28th. A total of 4,439 comments were received on a variety of issues including the revocation of PLO 5150, 17b easements, the Slana disposal, Wild and Scenic River suitability determination, and off-highway vehicle management. Comments were submitted through written letters, e-mails, and spoken testimony at seven public hearings held throughout the planning

region in mid-May.

A special meeting of the Southcentral Subsistence Regional Advisory Council on July 27 provided another chance for the Copper Basin residents to give oral comments on the plan. Fairbanks residents seem to be most concerned about providing non-motorized winter recreation opportunities.

Currently, the planning team in Glennallen is analyzing the comments and plans to release the Final Environmental Impact Statement and Record of Decision by the end of this year. For questions or more information about the East Alaska RMP contact team lead Bruce Rogers at (907) 822-3217.

BLM has extended the public scoping period on its planning effort for the **southern portion of the National Petroleum Reserve-Alaska** to Oct. 17, 2005. The public is invited to suggest issues and concerns that should be analyzed in the draft plan scheduled for release in the summer of 2008. Public meetings are being held throughout the North Slope, plus Fairbanks (Sept. 1) and Anchorage (Sept. 20).

Comments can be submitted by mail to South NPR-A Planning Team, BLM, 222 W. 7th Ave. #13, Anchorage, AK 99513.

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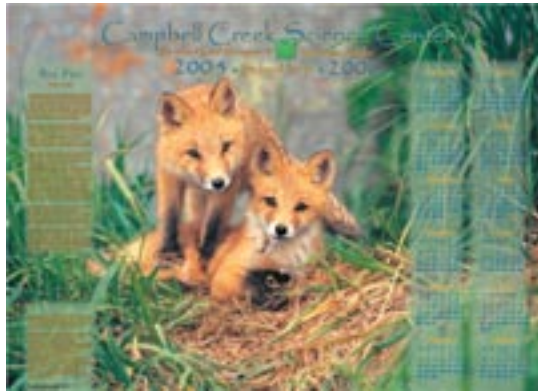
Vanessa Rathbun



BLM has installed a new inset panel at its Anchorage Airport mural between gates C2 and C3. The panel features a fall color timeline for Alaska and directs residents to locations where they can participate in a number of family activities on the public lands. A new panel titled Arctic Treasure will be on view from mid-October to mid-December.

BLM released its annual poster for the 2005-06 school year promoting the Campbell Creek Science Center. Copies are being sent to schools in the Anchorage area. They are also available at BLM offices in Anchorage and at the science center beginning Sept. 26.

Carol Belenski



BLM Partners with Iditarod Trail Nonprofit Group. The Anchorage Field Office will renew a five-year assistance agreement with Iditarod National Historic Trail Inc., a nonprofit that works with the BLM to coordinate projects with local volunteer groups along the 1,000-mile trail system. During the past five years, this successful partnership has helped BLM with trail marking, interpretive signing, and partnering with local historic groups around the state. Future projects include cataloging historic resources and developing website and interpretive materials.



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