

INLETKEEPER®

... PROTECTING THE COOK INLET WATERSHED & THE LIFE IT SUSTAINS

Homer - P.O. Box 3269, Homer, AK 99603 - (907) 235-4068 Anchorage - 308 G St., Ste. 219, Anch. AK 99501 - (907) 929-9371 keeper@inletkeeper.org www.inletkeeper.org Winter 2006/2007



COOK • INLETKEEPER

CONTENTS

Massive Coal Strip Mine Slated for Cook Inlet	1
Inletkeeper's Pipeline Safety Expertise in Demand after BP Incident	1
Message from your Inletkeeper	2
Causes of BP's Corrosion Problems	3
Congressional Testimony for Low-stress Transmission Pipelines	4
Inletkeeper Takes Hard Line on Salmon, Clean Energy & Jobs	4
Highlight: Pollution Response	4
Update on Cook Inlet Energy Projects	5
Coalbed Methane Development Hibernates in Southcentral	5
Tanker Grounding Investigation	6
Dwindling Beluga Whale Pop.	6
Inletkeeper Continues Fight to Protect Salmon	6
Can You Say "Impervious"?	7
Building Partnerships in Upper Cook Inlet	8
Protecting Cook Inlet from Pebble Mine Impacts	8
9th Annual Splash Bash	8
East End Road Construction	9
Volunteer Interns	9
Volunteer Spotlight	10
In (Staff!) Transition:	10
New Look for Web Site	10
Citizens' Water Quality Laboratory	11
Citizen Volunteers Protect Waters	11



Massive Coal Strip Mine Slated for Cook Inlet

Chuitna Coal Would Lock Alaska Into More Climate Change, Mercury Pollution

If two Texas millionaires have their way, Cook Inlet will become ground zero for an effort to make Alaska a massive coal mining province — with coal for Asian markets and coal-fired power plants in Alaska. The state of Alaska has convened a Large Mine Permitting Team to speed-up state and federal authorizations for the proposed Chuitna Coal Project, and the federal Environmental Protection Agency (EPA) has placed the project on a regulatory fast-track. As a result, many Alaskans remain unaware this massive project is moving forward in Alaska's most populated and fastest-growing watershed.

The proposed Chuitna coal strip mine — located near the communities of Tyonek and Beluga approximately 45 miles west of Anchorage — would strip approximately 1 billion tons of coal from over 20,000 acres of rich bear, moose and fish habitat. The project proponent — PacRim Coal — is financed largely by Texans Richard Bass and

(Continued on page 3)



The massive proposed Chuitna coal strip mine will destroy fish and bear habitat, aggravate climate change, and produce toxic mercury.

Inletkeeper's Pipeline Safety Expertise in Demand after BP Incident

Senior Engineer Lois Epstein Sought by Federal Legislators, National Media

Cook Inletkeeper's Senior Engineer and Oil & Gas Industry Specialist, Lois Epstein, has played a vital role improving oil and gas pipeline safety in Cook Inlet. In the wake of British Petroleum's (BP) decision to shut down much of its North Slope/Prudhoe Bay operations on August 6, 2006 due to extensive corrosion on its low-stress transmission pipelines, Epstein's expertise has been widely sought. That's because she's a 10-plus year public member of a federal Department of Transportation advisory committee on oil pipelines, a consultant to the Bellingham, Washington-based non-profit Pipeline Safety Trust, and an invited witness before Congress over ten times.

From August through October, Epstein served as a "pipeline expert" for numerous national and local media outlets, where her interviews focused on pipeline corrosion, the actions needed to prevent similar incidents, and how BP's situa-

tion demonstrates why oil drilling in sensitive areas is problematic. Epstein's interviews during this period included a 15 minute discussion — along with BP Exploration/ Alaska President Steve Marshall — with Ray Suarez on public television's *The NewsHour with Jim Lehrer*, a half-hour interview by Al Franken

(Continued on page 2)



Lois Epstein

"The federal government's pipeline safety rules do not apply to this type of pipeline, and that has to at least have contributed to the problem."
Jim Lehrer NewsHour, August 8, 2006.

A Note From Your Cook Inletkeeper

Dear Friends of Cook Inlet –

I've been proud to work with you and others to protect Cook Inlet now for more than 11 years.

Today, I can honestly say we face a threat to the future of this spectacular region unlike any before.

If two Texas millionaires have their way, the proposed Chuitna coal strip mine (see related story) in the expansive Beluga coal fields west of Anchorage will open a new era in Alaska resource development – an era that will destroy some of the most precious fish and wildlife habitat in the state, and threaten our fish with toxic mercury for years to come.

Worse still is the irony in pursuing a coal-based future in the Last Frontier: Alaska has become the poster state for rapid climate change, with melting glaciers, dying forests and warming salmon streams providing a stark backdrop for things to come. All serious scientists now agree that greenhouse gases – from coal combustion and other sources – are aggravating climate change, and the correlation between human-based carbon pollution and global climate change is now indisputable.

The proposed Chuitna coal strip mine will wipe out 30 square miles of fish and wildlife habitat in Cook Inlet, and fuel dirty power plants in Asia and Southcentral Alaska. As a result, the Chuitna coal strip mine represents a beach head in our fight for true homeland security. And it puts all Alaskans at a critical crossroads: Do we head backwards, toward dirty coal and the well-known impacts to our climate, our fisheries and our families? Or do we have faith in human innovation and resourcefulness, and recognize that our future lies in clean renewable energy and the sustainable jobs and economies it will produce?

Cook Inlet is blessed with some of the greatest renewable energy resources in the nation – from incredible tidal and geothermal

potential, to remarkable wind and small-scale hydro resources.

Yes, there will be trade offs – we're an energy-dependent society and every decision we make to sustain our lifestyles will produce impacts.

But some impacts are acceptable and some are not. Alaska can become a world leader in renewable energy technology, producing long term jobs and economies the state badly needs. Now, we have a chance to define our energy future, and we have an obligation to our kids to tell our politicians, our decision-makers, and our media, that we can – and must – shape our own energy future.

In 2006 and 2007, the Alaska Climate Change Commission will hold hearings statewide. This is the perfect opportunity to say “no” to coal, and yes to alternatives that will sustain our families, communities and fish and wildlife resources for years to come. And if your publicly-owned utility is moving toward coal, let them know you see a different future. We're all busy. But there's no more important discussion than whether we lock Alaska in a decades long addiction to dirty coal, or lead the nation toward a clean energy future. I hope you'll join us.

Yours for Cook Inlet,



Bob Shavelson
Executive Director
& Cook Inletkeeper



INLETKEEPER is published biannually by Cook Inletkeeper, a 501(c)(3) nonprofit organization dedicated to protecting the Cook Inlet watershed and the life it sustains. Subscriptions are mailed free to members and are available to others upon request. To become a member, or for more information, contact:

**COOK INLETKEEPER
HOMER OFFICE**
P.O. Box 3269, Homer, Alaska 99603
3734 Ben Walters Lane
ph: (907) 235-4068
fx: (907) 235-4069

**COOK INLETKEEPER
ANCHORAGE OFFICE**
308 G Street, Suite 219
Anchorage, AK 99501
ph: (907) 929-9371
fx: (907) 929-1562

www.inletkeeper.org
keeper@inletkeeper.org

INLETKEEPER STAFF

Bob Shavelson
Executive Director & Inletkeeper
Lois Epstein, P.E.,
*Senior Engineer, Oil
& Gas Industry Specialist*
John Plaskett
Lab Manager
Sue Manger
Stream Ecologist
Edan Badajos
Lab Analyst/Research Asst.
Will Schlein
GIS & Web Specialist
Michael Allen
Development Director
Nancy Tappan-Eigenheer
Finance Officer
Ingrid Harrald
Volunteer Coordinator

COOK INLETKEEPER BOARD OF DIRECTORS

Rob Ernst, President (*Nikiski*)
Benjamin Jackinsky, Vice President (*Kasilof*)
Mike O'Meara, Treasurer (*Homer*)
Nancy Wainwright, Secretary (*Anchorage*)
Tom Evans (*Nanwalek*)
Susan Mumma (*Seldovia*)
Robin McLean (*Sutton*)
Mako Haggerty (*Homer*)



Pipeline Safety (cont. from page 1)

heard nationally on Air America Radio, and an hour-long conversation with Steve Heimel on Talk of Alaska (these can be viewed or heard at www.inletkeeper.org/pipeline-corrosion.htm).



WATERKEEPER ALLIANCE

Coal Mine Cont. *(from page 1)*

Herbert Hunt, who have substantial holdings in the nation's second largest coal producer, Arch Coal. The location of the project – amidst the massive Beluga coal fields in the Cook Inlet/Susitna basin – has been billed as one of the largest sub-bituminous coal reserves at tidewater in the world. The project would be the first to open the Beluga coal fields with new extraction, power and transportation infrastructure. As a result, it represents a critical precedent for the direction of resource and energy development in Alaska for at least the next hundred years.

The stakes couldn't be higher. Alaska possesses roughly half the nation's coal reserves, and as oil and gas prices remain high, coal has become increasingly attractive, especially to burgeoning Asian markets seeking cheap power supplies. But coal is hardly cheap if we factor in the true costs of production and use. For example, coal strip mining is a notoriously intensive land use that destroys watersheds, wildlife habitats and salmon streams, and there are countless examples Outside where coal mining has ruined once vibrant ecosystems. Additionally, the combustion of coal produces mercury emissions that can drift long distances to contaminate Alaska's renowned wild salmon fisheries, and coal burning has long been implicated in air pollution that harms hundreds of thousands of Americans each year. Finally – and perhaps most importantly – coal combustion produces the highest levels of greenhouse gases of any traditional energy source, and as Alaska's salmon streams grow warmer, it's critical to move forward with energy production that will mitigate – rather than aggravate – the effects of climate change.

Aside from the effects of climate change, mercury and air pollution, the proposed Chuitna strip mine would have substantial direct effects on people and communities in the area. For example, permit application materials submitted by PacRim indicate the proj-

ect would dump roughly 7 million gallons of mine wastewater each day into tributaries of the Chuitna River, one of Southcentral Alaska's premier King salmon streams. The mine's footprint would similarly destroy bear, fish and moose habitat important to commercial, recreational and subsistence users. Finally, PacRim is proposing a trestle over a mile long, jutting into Cook Inlet, to move the coal to market; this trestle would fall into critical beluga whale habitat, impact existing commercial set-net fishing permits at the site, possibly disrupt salmon migrating to the Mat Su Valley and Anchorage, and result in roughly 400 new large vessel visits to the rough and icy waters of Upper Cook Inlet each year.

As a result, the true costs of producing, exporting and burning Beluga coal are anything but low, and Alaska now stands at a cross roads: do we move forward, to embrace an energy future that includes clean power (e.g. tidal, wind, geothermal and small-scale hydro), increased energy conservation and efficiency, and sustainable long term jobs – a future where Alaska becomes a worldwide leader in clean energy production? Or do we move backwards, toward more boom and bust development, more air, land and water pollution, and increased greenhouse gas emissions? For Inletkeeper, the answer is clear, and we're working hard with the Alaska Center for the Environment, the Alaska Coalition, Sierra Club, Trustees for Alaska and local citizens to ensure Alaskans understand the choices – and the precedent – presented by the Chuitna coal strip mine. EPA intends to issue the draft Environmental Impact Statement for the strip mine in early 2007, and permitting will ensue shortly after that. For more information, see www.inletkeeper.org or contact Bob at 907.235.4068 ext. 22 or bob@inletkeeper.org.



Causes of BP's North Slope/Prudhoe Bay Corrosion Problems

According to Cook Inletkeeper Senior Engineer and Oil & Gas Industry Specialist Lois Epstein, those responsible for BP's pipeline corrosion problems are:

- The federal government, for exempting rural "low-stress" pipelines from regulation, resulting in no federal requirements or inspections of these lines. The federal Pipeline and Hazardous Materials Safety Administration (PHMSA, part of U.S. DOT) did a good job *after* BP's 200,000 gallon March 2006 spill on the North Slope from one of these pipelines, requiring "smart pigging" (to detect wall thinning) of similar BP pipelines on the North Slope, draining of the leaking pipeline, etc. As a result of PHMSA's two enforcement orders following the spill, BP responded to the widespread corrosion it found carrying out

those orders by deciding to shut down certain North Slope operations.

- BP, for not performing effective corrosion prevention, especially given the company's resources and access to technical expertise.
- The State of Alaska, for not performing effective corrosion oversight using its oil discharge prevention and contingency plan authorities, overseen by the Alaska Department of Environmental Conservation (ADEC). Additionally, the State of Alaska has a history of not fining large industry for spills (see, for example, Cook Inletkeeper's 2004 enforcement report at www.inletkeeper.org/enforcement.htm).



Congressional Testimony Results in Proposed Bill for Low-stress Transmission Pipelines

Need Citizen Support to Convince Congressman Young of Tougher Standards

Following BP's shut-down and the subsequent reopening of its Prudhoe Bay operations, Congress held three hearings in Washington, DC on BP's pipeline corrosion situation and its impact on energy supplies. U.S. House of Representatives Committee Chairman Don Young invited Cook Inletkeeper Senior Engineer Lois Epstein to testify at one of these hearings on September 13.

As a result of her testimony, the head of the Association of Oil Pipe Lines (a nationwide industry trade association) asked Epstein if she would work with AOPL to develop legislative language addressing low-stress transmission pipelines like BP's. This effort resulted in a bill that would, if enacted, require low-stress transmission pipelines to meet the same standards as higher-stress transmission pipelines. The House Energy and Commerce Committee unanimously passed this bill on September 27 and Senator Stevens introduced a bill with this language that same day. Prior to this bill becoming law, Chairman Young's committee also must pass it; it contains more stringent language on low-stress transmission pipelines than a different bill currently supported by Congressman Young.

Please contact Congressman Young's committee office at 202 225-9446 and ask him to support the Amendment in the Nature of a Substitute to H.R. 5782, the pipeline safety bill passed by the House Committee on Energy and Commerce on September 27.



Highlight: Pollution Response

Inletkeeper Helps Protect Kachemak Bay Shellfish Beds

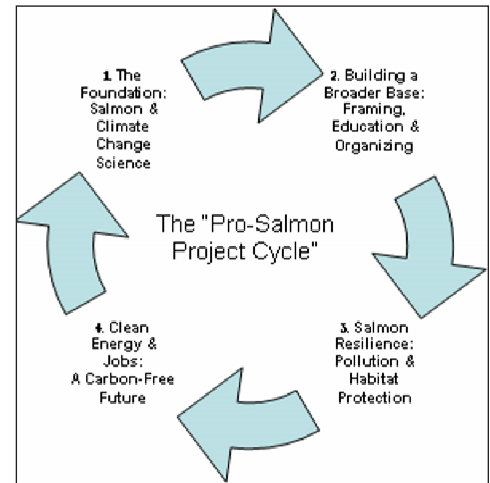
Inletkeeper's network of citizen "eyes and ears" plays an important role protecting water quality and sensitive habitat around Cook Inlet. In May 2006, a concerned citizen reported a large landing craft at the back of Kachemak Bay, engaged in questionable sand blasting activities over a holiday weekend. Kachemak Bay is a state Critical Habitat Area (CHA), and sand blasting pollution can contain a variety of contaminants toxic to the area's sensitive shellfish beds. Inletkeeper worked with the citizen/complainant, and now the State of Alaska has initiated a criminal proceeding for alleged illegal pollution. Inletkeeper maintains a toll-free hotline for citizens to report pollution or habitat destruction.

**IF YOU SEE POLLUTION
OR HABITAT DESTRUCTION,
CALL COOK INLETKEEPER'S HOTLINE:
1-888-MY-INLET**

Inletkeeper Takes Hard Line on Salmon, Clean Energy & Long Term Jobs

Climate Change, Fish Science Drive Water Quality, Habitat & Community Protections

Conservationists have often been labeled "anti-everything," and for good reason - we often fail to enunciate the values we represent. As part of its 10 year anniversary in 2005, the Inletkeeper Board and staff embarked on an ambitious planning effort to elevate our values, and to move



beyond the false labels crafted by well-funded opponents to water, fish and habitat protection. As a result, Inletkeeper identified its core values: clean water, abundant fish and wildlife, strong communities, lasting jobs and renewable energy. Among these values, Inletkeeper recognized that healthy, wild salmon resonate with a diverse cross-section of Alaskans, and that salmon connect us across political, religious, cultural and economic lines unlike any resource in the entire state.

As we head into 2007, Cook Inletkeeper is taking a broad view of the political, social and economic landscape. For one thing, we recognize the Cook Inlet watershed is the most populated and fastest-growing region in Alaska; and we also know it is the front line in the climate change battle to protect the state's renowned wild salmon runs. For the past five years, Cook Inletkeeper has documented alarming warming trends in local wild salmon streams, and fisheries scientists warn that high stream temperatures make fish increasingly vulnerable to pollution, predation and disease. Now, Inletkeeper is poised to unite its efforts into a more seamless work plan that: 1) relies on water quality monitoring, salmon research and climate change science to 2) frame and elevate a climate change message that targets Alaskans' deep-rooted attachment to fresh, healthy wild salmon; 3) and provide a platform to organize citizens, businesses and groups to stop and/or alter projects that directly and indirectly impact Alaska salmon while 4) promoting renewable energy projects and long-term jobs to define a cleaner, smarter and more secure future for Alaska. Cook Inletkeeper will continue to focus on the things that set us apart — strident advocacy and defensible science — but we'll move forward with the a new vision that recognizes industrial activities that aggravate climate change threaten our communities, our jobs and our salmon. For more information on Inletkeepers' salmon, climate change and energy work, contact Bob at 907.235.4068 ext 22 or bob@inletkeeper.org.



Update on Cook Inlet Energy Projects: The Good, the Bad & The Ugly

Cook Inlet natural gas supplies have been in the news lately, with the Agrium fertilizer plant in Nikiski facing past and future gas shortages, a 2004 U.S. Department of Energy study showing gas shortages in the region as early as 2009, the potential for a spur line to Southcentral from the proposed North Slope natural gas pipeline, and local power producers searching for long-term fuel supply contracts. Aside from the proposed wind farm on Fire Island near Anchorage, Cook Inletkeeper has been tracking several energy projects, including a tidal energy prototype project for Knik Arm, a proposed coal-fired power plant in Seward, and Agrium's Blue Sky coal gasification and power plant project.

Tidal Energy: A Rising Tide of Clean, Endless Energy

While not likely to produce much energy in the near future, Ocean Renewable Power Company of Florida has plans to install a prototype tidal power module in Cook Inlet's Knik Arm. This module will operate for twelve months, collecting data on tide characteristics and the prototype's impact on the marine environment including fish. Should this prototype be successful, OPRC will apply to the Federal Energy Regulatory Commission for an operating permit. Because Cook Inlet's tides are the largest in the U.S., other companies also have shown interest in pursuing tidal power here, particularly in Knik Arm. Inletkeeper supports renewable tidal power for clean, long term energy production and sustainable jobs, and is encouraging companies to explore using the rise and fall of the tides — and not simply their lateral movement — to produce power.

Seward Says “No” to Coal-Fired Power Plant

For several weeks last winter, avalanches disrupted power lines to Seward and the community paid a high price for power from an inefficient diesel generator. Following this event, Anchorage developer Mark Marlow proposed that Seward build a coal-fired power plant that would receive coal from Healy by train and make Seward energy self-sufficient. Excellent organizing and information collection on renewable energy alternatives and the problems with coal by the Resurrection Bay Conservation Alliance — with some help from Cook Inletkeeper staff — resulted in the Seward city council voting down the coal project in August.

Agrium's Blue Sky Project

Since the late 1960's, the fertilizer plant in Nikiski has been using “excess,” low-cost natural gas in the region to produce the hydrogen needed for fertilizer production. The plant currently uses approximately 1/5 of the natural gas from the Cook Inlet region. In recent years, Agrium has struggled to get enough low-cost gas to operate the plant, especially during the coldest time of the year when gas is used preferentially for heating.

As a result, Agrium began in fall 2005 looking into building a coal gasification plant and an adjacent coal-fired power plant. The power plant would provide electricity to the gasification operations and excess electricity to the Rail belt power grid stretching from Homer to Fairbanks. Coal gasification produces hydrogen and other products from coal, and the carbon dioxide produced can be injected underground, e.g., for use in “enhanced oil recovery” in Kenai-area oil fields. Agrium's original Blue Sky design would have fed approximately 200 megawatts of excess electricity into the Railbelt power grid.

During discussions with Agrium this past year, Cook Inletkeeper staff expressed support for the coal gasification project as it would maintain well-paying jobs in the Kenai area without significant environmental harm. Staff had two major concerns: 1) excess power of 200 MW could facilitate development of the Pebble mine, and 2) the coal used would come from the Chuitna coal mine (see p. 1). This past summer, Agrium decided to build a power plant that would provide only approximately 70 MW of excess power (not enough to supply the Pebble mine) and to utilize Healy-area coal from its already-open mine. While Cook Inletkeeper still is concerned about the 70 MW of excess coal-fired power that Blue Sky will produce due to its impact on local air pollution levels, the mercury emissions from the coal that could affect Alaskan fish, and coal's relatively high contribution to global warming, the project is much improved compared to its original design.



Coalbed Methane Development Hibernates in Southcentral

Inletkeeper Helped Lead Property Rights Battle

Coalbed methane (CBM) is a relatively new energy resource that requires pumping huge volumes of water off coal seams to release their methane gas. In 1999, Cook Inletkeeper took an industry-sponsored tour to better understand interest in CBM development around Cook Inlet. Alarmed at the scope of proposed development, Inletkeeper played a central role highlighting the downsides of CBM development by bringing in groups with CBM experience to hold workshops and organize local citizens. Among other things, Inletkeeper drafted a “Property Owners Bill of Rights” for CBM drilling and other activities on private property. The ensuing uproar led Senator Scott Ogan to resign under a cloud of conflict of interest, and caused the state to rescind its CBM leasing law. In 2004, CBM developers relinquished over 200,000 acres of CBM leases in the Mat Su Valley, and this past summer, over 22,000 acres of CBM leases on the Lower Kenai Peninsula reverted back to the state. Now, the challenge is to embrace renewable energy supplies and common-sense efficiency measures to foreclose CBM development in other fish habitats and populated areas across the state.



Tanker Grounding Investigation Report Due Soon

Seabulk Pride Incident Highlights Navigational Safety Problems

Early on the morning of February 2, 2006, Cook Inletkeeper Bob Shavelson received a cell phone call from a concerned citizen; a laden oil tanker – the *Seabulk Pride* – had been ripped from its mooring by heavy ice at Nikiski, and ran aground in the heart of Cook Inlet salmon and beluga whale habitat. Through a well-coordinated response and considerable luck, response crews re-floated the tanker after a small spill. However, the incident highlighted yet again the inadequacies of navigational safety in Cook Inlet, where notoriously rough water

and heavy ice make transit difficult without dedicated support tug vessels. Inletkeeper has maintained pressure on state and federal authorities to upgrade navigational safeguards for years, and now, with the pending release of the *Seabulk Pride* investigation by the U.S. Coast Guard, Inletkeeper is poised to elevate citizen concerns. Among other things, Inletkeeper will press to provide safe moorage, enhanced spill response capacity, tug vessel support and additional vessel repair support services in Cook Inlet. For more information on the Coast Guard's



report on the *Seabulk Pride*, and Inletkeeper's response, contact Bob at 907.235.4068 ext. 22 or bob@inlet-keeper.org.



Inletkeeper Continues Fight to Protect Salmon From Pollution

Murkowski Administration's "Mixing Zone" Proposal Now Before EPA

When the Murkowski Administration came to power in 2002, it immediately set-out to dismantle long-established protections for Alaska's prized coastal resources and salmon habitats. In an overt gesture to the mining industry, the Murkowski Administration moved to roll-back a long-standing rule that prohibits polluting "mixing zones" in fish spawning areas. Mixing zones embrace the long-discounted notion that dilution is the solution to pollution, and they allow permit compliance to be measured far downstream from pollution discharges – after contaminants have been thoroughly mixed in the receiving waters. Inletkeeper played a leading role knocking back the first mixing zone proposal, generating thousands of citizen comments.

Undeterred, the Murkowski Administration then ignored public comments, and rammed through a slightly revised proposal in early 2006. A state bill to undo the Administration's efforts, introduced by Representative Paul Seaton (R-Homer) and Senator Gary Stevens (R-Kodiak), died in committee under pressure from mining interests. Now, the federal EPA must approve the proposed change to Alaska's Water Quality Standards, and Inletkeeper is working with Trustees for Alaska and other groups to ensure EPA accurately applies the Clean Water Act, and rejects the state's proposal. For more information, contact Bob at 907.235.4068 ext. 22 or bob@inletkeeper.org



EPA is now considering the Murkowski Administration's proposal to allow polluting "mixing zones" in Alaska fish streams.

Inletkeeper Files Petition to Protect Dwindling Beluga Whale Population

Cook Inlet Icon Teeters on Edge of Extinction

The Cook Inlet beluga whale (*Delphinapterus leucas*) is a small, isolated stock of whales that is genetically distinct and geographically separated from the four other beluga stocks found in Alaskan waters. After tight restrictions on Native subsistence harvests in 1999, federal scien-

tists believed the Cook Inlet beluga population would rebound. It did not, however, and the National Marine Fisheries Service listed the stock as "depleted" under the Marine Mammal Protection Act in 2000. Annual aerial surveys conducted by NMFS since then reveal the population has "flat

lined" at best, and in fact may still be declining. Today, NMFS estimates fewer than 200 whales may remain, from a historic count of approximately 1300.

In response, Trustees for Alaska – on behalf of Inletkeeper, Alaska Center for the Environment, Alaska Community

(Continued on page 7)

Dwindling Beluga Whale Population *(from page 6)*

Action on Toxics, Friends of Potter Marsh/Anchorage Coastal Wildlife Refuge, Audubon Alaska, Center for Biological Diversity, North Gulf Oceanic Society, and two individuals - filed a formal petition with NMFS to list the Cook Inlet beluga whale under the Endangered Species Act in Fall 2006. Among other things, the petitioners want NMFS to designate "critical habitat" in Upper Cook Inlet to protect important feeding, birthing and migration areas. Upper Cook Inlet, however, is host to numerous industrial projects and proposals,

and industry and government officials are working to undermine beluga protections. For example, the Knik Arm Bridge and Toll Authority this summer authorized up to \$50,000 for lawyers to fight the ESA listing, and the mayors of Anchorage, the Matanuska-Susitna Borough and the Kenai Peninsula Borough have pledged \$25,000 for the effort.

Despite increasing industrialization in Upper Cook Inlet over the past 40 years, there have been no focused studies to understand the effects of human activities

on whale behavior or survivorship. Inletkeeper will continue to press NMFS to designate critical habitat for the Cook Inlet beluga, to ensure this icon will remain part of the intricate fabric of life in Southcentral Alaska. For more information on the Cook Inlet beluga whale, see NMFS web site at: <http://www.fakr.noaa.gov/protectedresources/whales/beluga.htm> or contact Bob at 907.235.4068 x22 or bob@inletkeeper.org



Can You Say "Impervious"?

Mapping Impervious Surfaces to Protect Salmon Streams

What is an impervious surface? And why do we care? Impervious surfaces are generally exposed areas where vegetation has been removed and barren soil and/or gravel is obvious. Impervious surfaces include roads, buildings, roof tops, parking lots, driveways, and gravel pits.

As the amount of impervious surface cover in a landscape increases, a chain of events begins that alters the way water is transported and stored, thereby affecting the entire local water cycle. Once this chain of events commences, the effects are far-reaching, and can result in degraded fish and wildlife habitat, decreased water quality, and impacts to near shore estuarine habitat.

National studies show that impervious surfaces are reliable indicators of fish habitat and water quality. In many regions of the country, as little as 10% impervious cover in a watershed has been linked to stream degradation, with the degradation becoming more severe as impervious cover increases. A more recent urbanization study conducted by the U. S. Geological Survey in five watersheds in Anchorage, Alaska, however, found cause for concern from impervious cover at much lower levels: 4.4 –5.8% impervious area.

So Cook Inletkeeper, with funding from the U.S Fish and Wildlife Service and state-of-the-art GIS support from the Kenai Watershed Forum, has determined how much impervious cover

Watershed	Sub- watershed	Watershed area (miles ²)	Impervious area (miles ²)	Percentage impervious
Ninilchik River		137.5	1.66	1.20%
	Lower Ninilchik River	22.5	0.57	2.53%
	Headwaters- North Ninilchik River	53.1	0.49	0.92%
	Headwaters – South Ninilchik River	62.0	0.60	0.97%
Deep Creek		218.2	1.57	0.72%
	North Fork Deep Creek	38.0	0.02	0.06%
	Headwaters Deep Creek	57.9	0.16	0.27%
	Clam Creek	21.4	0.19	0.90%
	Silver Salmon Creek	33.5	0.51	1.53%
	South Fork Deep Creek	67.4	0.69	1.02%
Stariski Creek	Stariski Creek	52.1	0.82	1.57%
Anchor River		224.8	2.60	1.16%
	Upper South Fork Anchor River	65.2	0.08	0.12%
	Chakok River	38.1	0.42	1.09%
	North Fork Anchor River	30.9	0.74	2.39%
	Beaver Creek	20.0	0.06	0.28%
	Twitter Creek	15.7	0.18	1.15%
	Lower South Fork Anchor River	55.0	1.13	2.06%

there is in the Deep Creek, Ninilchik River, Stariski Creek, and Anchor River watersheds. The results are hot off the press: these watersheds have less than 2.6% impervious cover presently. The Ninilchik and Anchor Point areas have the greatest concentration of hard surfaces; the upper reaches of Deep Creek have the least. In this analysis, seismic lines and trails were not included in the impervious cover calculations.

The results of this analysis provide important baseline information to under-

stand future population and economic growth. We now understand where we are on the curve of development, which provides unique insights for natural resource planning, and habitat and water quality monitoring. Our next step will be to analyze differences in water quality, water quantity and macro invertebrate data between developed and undeveloped portions of the watersheds.



Protecting Cook Inlet from Pebble Mine Impacts

Cook Inlet Alliance Formed to Educate Citizens & Communities

While many Alaskans know about the massive proposed Pebble open pit mine – to be set amid the renowned fisheries of the Bristol Bay watershed – few recognize how significantly the project would affect Lower Cook Inlet. Specifically, Iniskin Bay, on the West Side of Lower Cook Inlet, is slated to be the port for shipping operations, ore transport, and possibly slurry de-watering. Current plans also include a power line to cross Cook Inlet to feed Pebble's considerable energy needs. Inletkeeper recognizes the significant potential effects to Cook Inlet communities and fisheries from the Pebble mine, and has played a central role supporting the Cook Inlet Alliance (CIA), which is a volunteer group of citizens dedicated to gathering and sharing information regarding the proposed Pebble open pit mine and related projects. The CIA is a project of the Kachemak Bay Conservation Society. To receive updates or information about Pebble and CIA events, please contact Valerie Connor at 907.235.6371 or George Matz at 907.235.9344, or e-mail cookinletalliance@gmail.com



9th Annual Splash Bash a Great & Gusty Gathering!

Inletkeeper Shares Appreciation for Hard-Working Volunteers

The weather was blustery, but the mood couldn't have been sunnier during this year's 9th Annual Splash Bash. Held at the Bishops Beach Pavilion on July 18th, this well attended event was a fun way to get together and show our appreciation to all the monitors and other volunteers who have made the Inletkeeper programs so effective. Local band *Work in Progress* supplied some wonderful tunes, and everyone got plenty of food, drink, and merriment.

Milli Martin received Cook Inletkeeper's Volunteer of the Year for her five years of service, and for successfully completing a 5-yr data set at Twitter Creek. Volunteer Team of the Year was presented to Tom Callopy and Mary Frische for their overall enthusiastic and positive contributions to CEMP, their fantastic photos of bugs, their humor and their dedication. Other volunteers recognized were: Anne Wieland (Most Data Sheets), Frank Vondersaar and Brooks Guetschow (Most Enthusiastic New Volunteers), Jim Levine (Most Hours Dedicated), Scott Miller (Most Reliable Volunteer), Neil and Kyra Wagner (Most Reliable Team), Jonas Akers (Most Dedicated Volunteer), and Duane Howard and Lani Raymond (Most Dedicated Team).

Thanks to Cook Inletkeeper's Citizens' Environmental Monitoring Program volunteers:

Jonas Akers, Edan Badajos, Ori Badajos, Dale Banks, Heather Beggs, Laura Brooks, Tom Collopy, Laurie Daniel, Mary Frische, Mike Gracz, Brooks Guetschow, Patty Graham, Duane Howe, Jacob Keller, Hans Klausner, Jim Levine, Milli Martin, Jessica Marx, Scott Miller, Bree Murphy, John Mouw, Craig Phillips, Lani

Raymond, Derek Reynolds, Anna Sansome, Chris S'gro, Rebecca Swearingen, Frank Vondersaar, Kyra Wagner, Neil Wagner, Karen West, Anne P. Wieland, Lindsay Winkler.

Thanks also to all the wonderful businesses and groups who made our 9th Annual Splash Bash Volunteer Appreciation Party possible: Two Sisters Bakery, Homer Brewing Company, Latitude 59, Fat Olives Pizza, Ring of Fire Meadery, Kachemak Shellfish Growers Co-op, Fritz Creek General Store, Nomar, Ulmer's Drug, Kachemak Gear Shed, Scruggs Automotive, Sourdough Express, KBBI, Islands and Ocean Gift Store, The Pratt Museum, Solstice Music, Coal Point Trading Company, North Country Charters, and the band *Work in Progress*.



Thank you, volunteers Tom Callopy and Mary Frische!



Building Partnerships in Upper Cook Inlet

Fastest Growing Region in State Needs More Water Science, Monitoring

Cook Inletkeeper has been working with citizens and groups throughout the Cook Inlet watershed over the past 12 years to monitor and protect water quality and fish habitat. But in the fastest-growing region in the state – the Mat Su Valley – there's a pressing need for more scientific information to guide better resource management decisions. Now, Cook Inletkeeper is pleased to join a partnership of watershed groups, agencies and individuals interested in fish conservation in the Mat-Su Basin in upper Cook Inlet. More than 50 people attended the first Matanuska Susitna Basin Salmon Conservation Partnership meeting on September 6th

in Palmer to discuss future directions and opportunities. The Partnership is in a unique position to hit the ground running with funding available from the National Fish Habitat Initiative, and the Mat-Su Partnership is one of five pilot partnerships in the nation recognized by the national initiative. Cook Inletkeeper looks forward to new collaborations and successes with the Partnership to protect water quality and fish habitat in the upper inlet. For more about the National Fish Habitat Initiative, see www.fishhabitat.org; for more information on Inletkeeper's salmon stream monitoring efforts, contact Sue at 907.235.4068 ext. 24 or sue@inletkeeper.org



East End Road Construction Water Quality Monitoring Report

A Model for Agencies, Private Contractors and Citizen Groups

From June 2004 through April 2006, Cook Inletkeeper worked with the Homer Soil and Water Conservation District, the Department of Transportation and Public Facilities, and contractor Quality Asphalt Paving to monitor streams along the East End Road construction project in Homer, Alaska. This monitoring partnership stands as a model for how agencies and private contractors can work with citizen groups to monitor our public waterways and promote best management practices that protect water quality in our local streams.

After monitoring the East End Road construction project, findings show that temporary and long-term best management practices (BMPs) employed to prevent soil erosion and sediment loss were effective in reducing the amount of sediment leaving the construction site. This is reflected in the lower turbidity levels recorded at sites downstream of the work zone. Effective BMPs employed on the East End Road project include silt fences, straw bales, rock-lined channels and ditches, slope drains, live water diversion, mulching, and seeding.

BMPs employed during this project were highly effective, however Inletkeeper recognizes the inherent limits BMPs have in preventing pollution, and even the best BMPs can fail. For example, temporary BMPs such as silt fences and straw bails were not as effective during rain events or during the winter months. BMPs that had been damaged were actively revised and repaired, but only through the construction season. There was not adequate inspection or maintenance of BMPs during the winter shut down period.

The data collected during this project did not produce any detectable changes in temperature, pH, or specific conductance in the streams monitored. Continued monitoring will provide infor-

mation on how quickly streams return to pre-construction conditions and the effectiveness of long-term BMPs.

Inletkeeper will continue to work with agencies and contractors to set a high bar for water and habitat protection during road construction work. Importantly, Inletkeeper believes the best pollution prevention measures must be built-into projects at the design stage, where critical decisions can affect the overall environmental impacts of the eventual project. For more information, see www.inletkeeper.org or contact Edan at 907.235.4068 ext 23 or edan@inletkeeper.org.



Cook Inletkeeper's Edan Badajos inspects Best Management Practices (BMP's) and samples water quality at the East End Road construction site in Homer.

Volunteer Interns Provide Essential Help!

Good causes seem to attract good people, and Cook Inletkeeper is definitely no exception. This summer graced us with not only one, but two hardworking, bright and extremely friendly interns. Erin Babcock joined us early in April from Reno, Nevada, as part of the Patagonia program. Cook Inletkeeper extends a very special **Thank You to Patagonia** for such terrific support! Erin enthusiastically joined up in all aspects of the monitoring program. Through rain and wind, she managed to help put out temperature tidbits, identify bugs, build casings, and help in the lab. With such a wonderful addition to the office and field, we don't know how we manage without her!

Blake Langdon joined us in July to help us out in the peak of summer craziness. She was a huge help with the Splash Bash, August bio-assessment, stream monitoring and also helped out in the lab whenever possible. Blake grew up in Anchorage so was quite at home with the soggy field conditions. She even biked to work every day through it all! Blake is off to Chicago to study Biochemistry, and we know she will be incredibly successful in all that she does.

Cook Inletkeeper would like to thank both Erin and Blake for their giving spirit and wonderful energy around the office. Come back and visit soon!



Interns Blake Langdon (left) and Erin Babcock

Volunteer Spotlight

It is impossible to think of Cook Inletkeeper's CEMP program without thinking of Anne Wieland. Anne joined the program's first training class in 1997, and has been an extremely committed volunteer ever since. Not content to monitor just one site, Anne monitored up to five sites at a time. In her almost 10 years at Cook Inletkeeper, Anne has collected over 200 samples - 15% of CEMP's total data collected! - and donated almost 300 hours to the organization.

Anne's dedication does not stop there. A few years ago, Anne noticed development of a large timeshare resort was affecting the Rice Creek watershed and she jumped into action. Anne put a temporary

halt on construction through diligence, monitoring, and by working with the City Council.

Anne is also very involved in all aspects of the local community: she created a local guide to sustainability, is an avid gardener and subsistence fisherwoman, a KBBI classical DJ, and helped bring the Bioneers Conference to Alaska.

Our community and our organization have always been lucky to have Anne in our midst. Last September she made an important decision to share her time between Pennsylvania and Alaska, and we hope she is able to continue her stewardship there. In the meantime we'll be counting the days until her return.



Anne Wieland

Inletkeeper: In (Staff!) Transition:

Inletkeeper has had a busy year, and while we've been fortunate over the years to retain high quality staff, 2006 saw several important changes. This past summer, Development Director **Marla McPherson** chose to pursue a career shift after more than 8 years in various positions with Inletkeeper. Marla became Inletkeeper's first Development Director in 1998, and her sharp intellect, witty humor and multifaceted skills made her an integral part of the Inletkeeper team. To fill our development slot, Inletkeeper hired **Michael Allen**, who comes to the organization with a long history of successful business and fundraising experience. In Fall 2006, Inletkeeper also said good-bye to long time Finance Officer **Yvonne Prucha**, who played an instrumental role helping Inletkeeper organize its finances, create budgets and account for its spending. To handle our financial work, Inletkeeper recently hired new Finance Officer Nancy Tappan-Eigenheer, who was born in Switzerland and comes to the organization from KPMG, a top 5 world financial consulting company, where she managed multiple engagements for their Mergers and Acquisitions Department. Finally, Inletkeeper said good-bye this Fall to

Laboratory Director **John Plaskett**, who played an instrumental role bringing the organization's laboratory services up to a highly professional level. John's departure signals a structural shift to streamline Inletkeeper services and reflects a more sustainable medium-to-long term outlook for the organization's monitoring work. Inletkeeper's deepest appreciation goes out to John, Marla and Yvonne for their extraordinary work to protect Cook Inlet, and we welcome Mike and Nancy to continue our important efforts.



Nancy Tappan-Eigenheer and
Michael Allen

GOODBYE STYROFOAM!

Biodegradable Plates & Bowls
Sugar Cane Pulp Clamshells
Plant-Based Biodegradable Cutlery
Biodegradable Plastic Cups & Containers
Non-Toxic Cleaners - Recycled Tissue

Restaurant - Home - Office - Special Event

Loopy Lupine Recycled Products
www.loopylupine.com
(907) 235-5100

Delivery service in Homer Area
Shipping available to other areas

New Look for Cook Inletkeeper's Web Site

Check out the new look of www.inletkeeper.org. We have made navigating the site easier but have kept functionality for our members who use older computers or browsers too. Summaries of our programs have been updated to reflect the changing challenges and goals we have to protect the Cook Inlet watershed and the life it sustains. Dynamic, up-to-date highlights of our work can be seen on the homepage and on the "News and Events" page so bookmark our website and come back frequently. It is easy to sign up for our periodic email updates through the "Sign Up" link at the top of each page on the site. You can join, renew your membership, or make additional contributions on the "Support Inletkeeper" page using links to the secure servers at **Network for Good** and **PayPal**. We welcome comments on what you think about the new site and suggestions on how we can improve it for you - please contact Will at 907.235.4068 ext. 28 or will@inletkeeper.org with your thoughts and feedback. Thank you!



Citizen Volunteers Continue Vital Role Protecting Local Waters

Rolling Up Their Sleeves & Getting Their Hands Wet for Water Quality Protection

Since 1997, Cook Inletkeeper volunteers have been rolling up their sleeves to collect scientifically defensible water quality and other measurements on waterbodies throughout the Kachemak Bay watershed. In June, Cook Inletkeeper released its annual water quality report, which showed the Citizen's Environmental Monitoring program collected a total of 214 observations at 25 sites, with 37 volunteers contributing 571 hours of time to the program in 1995. This effort equates to over \$10,000 in services to the local community.

Data compiled from the CEMP program detected high turbidity in Homer area streams, most notably at Miller Creek on East End Road. Bacteria screening tests also have shown elevated levels in Miller Creek, and nearby Palmer Creek. Importantly, data collected by volunteers within the Anchor River Watershed in the summer of 2005 revealed high temperatures that exceed state water quality standards, which may pose a risk to migrating salmon as well as egg and fry survival. This trend is consistent with data collected by Cook Inletkeeper's more intensive salmon stream monitoring program. In the near future, the CEMP program plans to increase temperature monitoring and to start measuring flow on select streams.

Cook Inletkeeper's efforts around Kachemak Bay are coordinated with similar work by a host of groups and agencies around the Cook Inlet watershed, which collectively comprise the Citizens Environmental Monitoring Partnership. Spearheaded by Inletkeeper in 1998, this unique effort ensures citizens around the entire Inlet use protocols that are scientifically defensible, and that collected data is centralized for better resource management decisions. To see Cook Inletkeeper's 2005 Citizens' Environmental Monitoring Report, go to: www.inletkeeper.org. For more information on Inletkeeper's citizen volunteer monitoring efforts, or on the Cook Inlet CEMP Partnership, contact Ingrid at 907.235.4068 ext 37 or Ingrid@inletkeeper.org.



Citizens' Water Quality Laboratory Update

The Cook Inletkeeper laboratory is redirecting its activities to focus on supporting internal and partner programs for water quality monitoring and research. These include the Salmon Stream and Citizen Environmental Monitoring in addition to the KBRR System-Wide Monitoring Program and the Kenai Watershed Forum projects which are expected to continue into 2007. Many of our analytical projects are ending in October and will not continue into the next year, and the laboratory service and staffing is being scaled back accordingly.

Approximately one thousand analyses have been conducted for filtered nutrients, total nutrients and chlorophyll on eight external projects that generated close to \$20,000. With the redirection of services, the lab will be able to continue to offer a high level of commitment, community service and analytical quality.

After December 1, contact Laboratory Technician Edan Badajos at 907.235.4068 ext. 23 or edan@inletkeeper.org for any laboratory related questions.



Thanks to Cook Inletkeeper's Major Funders:

Alaska Center for the Environment
Alaska Community Share
Alaska Conservation Foundation
Alaska Oceans Program
Ben and Jerry's Foundation
BoatUS Foundation
Brainerd Foundation
Bullitt Foundation
Center for Alaskan Coastal Studies
Combined Federal Campaign
Endurance Fund
Fund for Wild Nature
Louise H. Foley & Margaret Frischkorn Wildlife & Conservation Fund
Homer Foundation and City of Homer
Mountaineers Foundation
George H. and Jane A. Mifflin Memorial Fund
Giles W. And Elise G. Mead Foundation
New-Land Foundation
NOAA Marine Fisheries Service
Norcross Wildlife Foundation
Oak Foundation
Patagonia
Project Aware
Skaggs Foundation
True North Foundation
Unitarian Universalist Funding Program
US Environmental Protection Agency
US Fish and Wildlife Service
WestWind Foundation
Wolfensohn Family Foundation

And of course, thanks again to all of Inletkeeper's new and renewing members!



Cook Inletkeeper
P.O. Box 3269
Homer, Alaska 99603

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
Homer, AK 99603
Permit No. 12



Join Cook Inletkeeper at www.inletkeeper.org



WE NEED YOUR EYES & EARS ON COOK INLET!
JOIN COOK INLETKEEPER & HELP PROTECT WATER QUALITY

YES! I want Cook Inletkeeper to continue its important work to protect the Cook Inlet watershed and the life it sustains! Please accept my tax deductible contribution in the amount of:

_____ \$ 40 _____ \$ 100
_____ \$ 60 _____ \$ 500
_____ \$ 75 Other \$ _____

Please contact us about: ☐ gifts of stock ☐ including Cook Inletkeeper in my will

Name _____

Address _____ City _____ State _____ Zip _____

Home Phone () _____ Work _____ Fax _____ e-mail _____

_____ My check is enclosed Please charge my gift to my Mastercard/Visa (circle one):

Account No: _____ Exp. date: _____

Signature: _____ Amount: _____

