

HB

87

REPRESENTATIVE ERIC CROFT

SPONSOR STATEMENT HB 87 MINING INFRASTRUCTURE INVESTMENT ACT

HB 87 is designed to promote Alaska's industry by creating an ordered process to evaluate and fund roads and other infrastructure to Alaska's isolated mineral deposits.

HB 87 creates a Mining Infrastructure Fund to receive all of the taxes, license fees and other payments made by the mining industry to the state. This fund pays for mining infrastructure with no increase in mineral or other taxes. The Mining Infrastructure Fund also assures continued mapping of Alaska's mineral wealth by reliably funding airborne geophysical surveys.

In addition, HB 87 relieves Alaska miners from burdensome regulation by assuring that mines do not have to put water back in a stream any cleaner than the natural condition of that stream.

Section 1 creates the Mining Infrastructure Fund within the Department of Natural Resources and gives the Commissioner the power to create criteria to prioritize the competing mining infrastructure projects.

Section 2 addresses mining operations in areas with naturally occurring levels of pollutants in the water. In the past, some mines have been forced to put water back cleaner than it was when they took it in. Currently, Alaska regulations allow a discretionary exemption for mines from this onerous requirement. HB 87 turns this regulatory discretion into a statutory right.

HB 87 will promote jobs for Alaskans and increase mineral investment in the state by allocating the money that comes into the state from mining to public uses that directly promote the mining industry and increased mineral development. It will further help the industry by easing the water quality requirements without harming the environment.



DGGS AIRBORNE GEOPHYSICAL/GEOLOGICAL MINERAL INVENTORY PROGRAM

WHY STATE-FUNDED AIRBORNE GEOPHYSICS?

- **Alaska is in competition with the rest of the world for exploration dollars.** Most other countries and provinces are ahead of Alaska in having geophysical data and detailed geologic maps available to the public. Many of these provincial governments, such as Ontario and many of the Australian governments, fund very similar geophysical and geologic projects.
- **These days exploration companies need to see this type of data prior to exploring regions largely covered by surficial deposits and vegetation.** Having data available is an enticement for exploration.
- **Individual mining companies have conducted their own surveys during the past several decades, but that data is not available to other companies.** These same companies don't explore as many places as they might, because airborne geophysical data is expensive. **Their proprietary surveys do not foster inter-company competition to move projects forward.**
- **Individual mining companies do not generally conduct regional geologic mapping.** They rely on geologic mapping in the public domain to guide their interests. Most of the geologic maps of Alaska are on a generalized level such that exploration companies have little guidance to help them determine where they should concentrate.
- **Individual prospectors and small companies cannot afford their own geophysical surveys.** Individual prospectors have an important role. It's typically the smaller operator that finds something and markets it to the larger companies.
- **Providing this "seed package" of data for numerous mining districts encourages companies to begin more detailed exploration in more areas than they could have afforded on their own.** Having the data already available **decreases their initial risk**, and presents more possibilities for their deposit exploration model.
- **The increased exploration competition causes more money to be spent on the ground and leads to more mineral discoveries.**
- **Acquiring and releasing geophysical data demonstrates to mining companies that Alaska encourages responsible mining.**
- **Drilling to find an ore body is an expensive process.** Companies use many techniques to pinpoint potential drill targets before drilling. Information and methods used include regional and detailed geologic mapping, airborne and ground geophysical surveys, geochemical surveys, and radiometric age dating. **The quarter-mile line spacing at which we acquire geophysical data provides the public with a level of information still termed "regional" by exploration companies.** The data we provide enable exploration companies and prospectors to refine exploration projects and more effectively spend their exploration dollars. **By helping them spend their money wisely, the potential for finding economic deposits is increased.**
- **And last, the geophysical data never go out of date and investment gains value as geological data are accumulated.**
- **Alaska's mineral industry was valued at slightly over \$1 billion in 2001. Exploration funds however are down both worldwide and in Alaska. If we want to encourage mining development in Alaska's future, we need to actively pursue exploration.**

WHY AIRBORNE GEOPHYSICS FOLLOWED BY GEOLOGIC MAPPING?

- **The geophysical data aid the geologists to trace rocks and structures under overburden and vegetation.** Other technology, such as remote sensing, do not yield information about the subsurface and aid little in geologic mapping for Alaska.
- **This method of acquiring detailed airborne geophysical data followed by ground-truth geologic mapping dramatically increases the rate new geologic knowledge is acquired and yields high quality data.**
- **Most cost-effective method for improving geologic knowledge of Alaska.** The geophysical data allow good geological maps to be produced in a fraction of the time it would take to make a geologic map without the geophysical data. Additionally, a geologic map made without the geophysical data must be based on guesswork for covered areas and in many places in Alaska, surficial deposits cover 98% of the land.
- **Geologic knowledge gained from a particular survey tract has direct implications to areas outside of the survey tract.** For example, by studying the geology of geophysical survey tracts in Interior Alaska, we understand structural complications all over Interior Alaska, not just in the survey tracts. **This has had a profound impact on exploration in Interior Alaska.**

HOW THIS PROGRAM DIFFERS FROM OUR PAST GEOPHYSICAL PROGRAMS

- **Concentrates on largely historical mining districts where there's good potential for undiscovered mineralization rather than on generalized academic coverage.**
- **Acquire electromagnetic (EM) data and/or radiometric data in addition to the aeromagnetic data.** These data are complementary. **Some things that show up on EM data don't show up on aeromagnetic data, and vice-versa.**
- **The data yield tremendous detail on stratigraphy, petrology (rock type), and structure that may be characteristic of mineralization.**
- **The relatively close flight spacing and the low altitude with which we fly geophysical surveys yields greater ability to distinguish rock units and structure.**
- **Data are offered digitally.** Computer enhancements that are available to everyone including individual prospector allows one to see **very subtle details not visible in typical geophysical map presentations.** Allows industry to leverage tremendous added value from the data to reach State's desired outcomes.
- **Variety of products available within 7 to 8 months of the project funding.** Fast turnaround for a wide range of products. **Maintains the momentum of private-sector investment and technical participation.**
- **The program is a success in part because the private sector, native corporations, local, state, and even federal agencies, have input into and directly benefit from the program.** Therefore, they have supported the program.

We compiled requests from a variety of organizational sources, including industry, Alaska Miners Association, Mineral Commission, borough governments, Native Corporations, smaller prospectors and miners to create the list of areas proposed for surveys. Of the proposed candidate areas, portions of 17 have been surveyed and about 36 remain unsurveyed.

- We produce **inch-to-the-mile geologic mapping** of the survey tracts when funds and available personnel permit. These new geologic maps are **significant improvements** from earlier maps made without the benefit of geophysics.

WHAT ARE THE RECENT AND IMMINENT PRODUCTS OF THE PROGRAM

- Released geophysical data in March 2002 for about **670 sq. miles** in the Broad Pass, Liberty Bell (Bonnifield), and southeast Pogo area. Released **55 products** in map, text, and digital form. **Funded by the State Legislature.**
- **Acquired data for 618 sq. miles** in the Council area on the Seward Peninsula. Data will be released by mid-February 2003. **Funded by the State Legislature.**
- Released a **bedrock geologic map, surficial geologic map, comprehensive geologic map, an engineering geologic map, and geochemical data** for the **Eagle A-1 Quadrangle**, part of the Fortymile geophysical survey tract, in June 2002. **Funded by the State Legislature** and subsidized in part by matching money provided by the U.S. Federal STATEMAP program.
- By June 2003 we will release a **bedrock geologic map, surficial geologic map, comprehensive geologic map, an engineering geologic map, and geochemical data** for about **400 square miles** of the **Salcha River—Pogo survey tract**. **Funded by the State Legislature** and subsidized in part by matching money provided by the U.S. Federal STATEMAP program.
- **Because of the expertise we have developed over through this program, the U.S. Bureau of Land Management (BLM) asked DGGs to oversee acquisition and processing of their geophysical surveys to ensure data quality and compatibility with State data.** These federal projects generally concentrate on Federal and Native land and are not regularly funded. **As a result of the success of the DGGs surveys, the following two surveys were flown during the past year, with BLM funding, over largely federal lands.**

Acquired data for 350 sq. miles in the Mt. Hayes Quadrangle near Paxson in southcentral Alaska and monitored merging of that data with 250 sq miles of previously-acquired data. Data will be released by mid-February 2003.

Acquired data for 641 sq. miles near Sleetmute and Donlin in southwestern Alaska. Data will be released during summer 2003.

SOME INDICATIONS OF RESULTS FROM THE PROGRAM

- **Number of claims staked in most survey tracts increases both before and after the survey data are released.** Claim staking starts in many areas as soon as the location of a future survey tract is announced, and in some areas, such as Fairbanks, the potential tract has been completely staked prior to acquisition of survey data. Dick Swainbank (DCED) compiled claim staking data for some of our survey tracts and these data support the belief that there is a rise in staking before and/or after data release. Unfortunately, no agency or person routinely compiles the numbers of claims in Alaska.
- **Industry acquires and uses the data.** Companies typically acquire the data immediately after release and begin analyzing it and acting on its content, at times immediately having crews ready to stake claims. **Industry has written strong letters of support for the program.**

- **Exploration decisions and property acquisition have been based on the data.** Geochemical investigations and drilling by private companies proceed in many of the survey tracts.
- **Targets have been drilled, some picked solely from the geophysical data** such as in the Chulitna area, and some after further geologic and geochemical work. We cannot control what explorationists discover nor necessarily what they make public , but that they risked the funds to drill indicates a serious level of commitment by industry, and the faith they have in the integrity of the survey products.
- **Geologic knowledge gained from this geophysical/geological program in Interior Alaska has been applied to the general area surrounding the survey tracts.** For example, after determining that the gold near Circle was present in north-east trending shear zones visible in detailed magnetic data, a prospector used ground magnetics on his property elsewhere in interior Alaska and found the same pattern of gold enrichment. He was using this information to sell his property.
- **Unfortunately it typically takes several years before significant deposits in survey areas are realized. Success rarely occurs overnight. Though we cannot point to a major mine and assert that it was found solely from the geophysical data, we know that exploration decisions and property acquisition have been based on the data.**

DNR Operating Budget FY2003

Restricted Revenue Detail

Department of Natural Resources

Component: Geological Development (1031)

BRU: Minerals, Land, and Water Development (330)

Master Account	Revenue Description	FY2001 Actuals	FY2002 Authorized	FY2002 Cash Estimate	FY2003 Governor	FY2004 Forecast
51200	Capital Improvement Project Receipts	40.8	91.3	148.8	146.9	90.0

Detail Information

Revenue Account	Revenue Description	AKSAS Fund	Collocation Code	FY2001 Actuals	FY2002 Authorized	FY2002 Cash Estimate	FY2003 Governor	FY2004 Forecast
59101	CIP Rcpts from Natural Resources	11100	Airborne Geophysical	0.0	31.3	31.3	33.1	30.0
59101	CIP Rcpts from Natural Resources	11100	Coalbed Methane	0.0	30.0	30.0	30.0	30.0
59101	CIP Rcpts from Natural Resources	11100	Gas Pipeline Project	0.0	0.0	57.5	53.8	0.0
59101	CIP Rcpts from Natural Resources	11100	Holitna Basin	0.0	30.0	30.0	30.0	30.0
59101	CIP Rcpts from Natural Resources	11100	Sleetmute Airborne Geo Su	20.8	0.0	0.0	0.0	0.0
59240	CIP Rcpts from Transp & Public Fac	11100	Dalton Highway Mat Source	20.0	0.0	0.0	0.0	0.0

DNR Revenue Details

DNR Operating Budget FY 2005

Restricted Revenue Detail

Department of Natural Resources

Component: Geological Development (1031)

BRU: Minerals, Land, and Water Development (330)

Master Account	Revenue Description			FY2001 Actuals	FY2002 Authorized	FY2002 Cash Estimate	FY2003 Governor	FY2004 Forecast
51010	Federal Receipts			1,163.8	1,501.5	1,725.0	1,511.9	1,196.0
Detail Information				FY2001 Actuals	FY2002 Authorized	FY2002 Cash Estimate	FY2003 Governor	FY2004 Forecast
Revenue Account	Revenue Description	AKSAS Fund	Collocation Code					
57790	Fed Proj Nat Resourc	11100	40 Mile Geological Map	78.4	0.0	0.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	Airborne Geophysics Delta	0.0	0.0	200.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	AK Data Conversion	70.8	0.0	0.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	AK GMC Renovation	15.0	0.0	0.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	AK GMC Sample Inventory	0.0	63.0	63.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	Anchorage Liquefaction	17.8	0.0	0.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	AVO	0.0	0.0	0.0	360.0	360.0
57790	Fed Proj Nat Resourc	11100	AVO Aleutian Expansion	0.0	221.0	221.0	221.0	221.0
57790	Fed Proj Nat Resourc	11100	AVO Supplement Year 4	481.9	0.0	0.0	0.0	0.0
57790	Fed Proj Nat Resourc	11100	AVO Supplement Year 5	43.9	353.8	353.8	0.0	0.0
57790	Fed Proj Nat Resourc	11100	Geochem Compilation	0.0	0.0	23.5	0.0	0.0

Geological Development

	Actuals FY93	Actuals FY94	Actuals FY95	Actuals FY96	Actuals FY97	Actuals FY98	Actuals FY99	Actuals FY00	Actuals FY01	Actuals FY02	Mgt Plan FY03
	3,189.3	3,001.4	2,651.2	2,365.6	3,601.6	2,702.0	3,616.5	3,283.2	3,543.7	3,741.3	4,024.6
Fed	283.8	477.3	272.3	300.7	1,201.7	681.4	1,394.3	1,086.2	1,163.8	1,232.7	1,511.9
GF	2,330.3	2,297.8	2,029.4	1,961.1	2,007.1	1,963.0	2,021.3	2,032.4	2,049.2	2,071.4	1,993.1
GF/PR	31.8	63.3	42.8	50.8	392.8	54.9	54.4	37.4	39.0	26.2	55.1
I/A	17.0	7.8	11.9	0.0			0.9	2.4	94.6	134.6	66.4
CIP Receipts	526.4	155.2	294.8	53.0			5.0	8.0	40.8	92.1	146.9
SDPR							140.6	116.8	148.3	184.3	251.2
Invst Loss									8.0		
Total:	3,189.3	3,001.4	2,651.2	2,365.6	3,601.6	2,699.3	3,616.5	3,283.2	3,535.7	3,741.3	4,024.6