ALASKA LEGISLATURE COMMITTEE FILES 1991-1992 8672
7142 HOUSE RESOURCES

Resource Issues: Forrestry

2-19-92

U.S.F.S. APPRAISAL SUMMARY
FOR
KPC TIMBER SALE
ESTABLISHING
STUMPAGE RATES EFFECTIVE 3-1-89

MEMO EFF 5/1/91

SPECIES	SPRUCE	HEMLOCK	YELLOW CEDAR	RED CEDAR	TOTAL AVE	TOTAL AVE
PERCENT	18	68	6	8	100	100
VOLUME MMBF-5 YRS.	177	653	55	73	958	958
APPRAISAL ON LOG SCALE BASIS:						
SELLING VALUE	$661	$554	$869	$376	$578	$596
LOGGING COST	177	178	178	178	177	205
SPEC ROADS	45	45	45	45	45	46
TOTAL LOGGING COST	222	221	223	223	222	251
MFG COST	258	286	59	59	250	322
TOTAL COST	480	507	282	282	472	573
CONVERSION	181	47	588	94	106	23
P&R ALLOW (IF AVAIL.)	76	70	75	30	72	74
INDICATED NET STUMPAGE	105	-23	513	64	38	-46
INDICATED RATES	$150	$22	$557	$109	$83	-1
MINIMUM RATES					$2	$2

Forest Service Returns to States $323 Million in Receipts

The Forest Service paid $323 million in National Forest receipts for FY 1991. Forest Service Chief F. Dale Robertson announced that the money went to 41 states and Puerto Rico.

On Sept. 24, the U.S. Department of Agriculture made interim payments of $228 million to states based on estimated National Forest revenues for the year. A final payment of $94 million, based on actual receipts collected during the year, was paid on Dec. 17.

Actual fiscal 1991 receipts collected from the sale and use of National Forest resources totaled $1.29 billion.

By law, 25 percent of the revenues collected by the Forest Service from the use of National Forest System lands and resources are returned to the states where the lands are located. The states are required to use the funds for schools and roads. Robertson said the funds are collected primarily from timber sales, grazing, recreation and mineral extraction on 191 million acres of Forest Service land.

These payments do not include 25 percent of the 1991 National Grassland revenues. Those payments are based on calendar year 1991 receipts and will be made in March 1992.

The three states receiving the largest payments are Oregon, $141 million; California, $56 million; and Washington, $41 million.

How Much Did Your State Get?

National Forest Payments to States
Fiscal Year 1991

State	Total Payment
Alabama	$1,436,320.32
Alaska	9,298,893.27
Arizona	5,002,305.90
Arkansas	4,367,211.62
California	56,045,154.14
Colorado	4,105,051.79
Florida	1,257,369.74
Georgia	1,082,671.63
Idaho	14,106,370.90
Illinois	56,985.60
Indiana	25,063.01
Kentucky	635,218.59
Louisiana	2,812,497.08
Maine	35,338.34
Michigan	1,701,021.71
Minnesota	2,062,037.88
Mississippi	6,089,594.69
Missouri	1,999,913.90
Montana	9,009,450.17
Nebraska	41,358.39
Nevada	351,943.70
New Hampshire	517,515.64
New Mexico	1,363,545.50
New York	8,843.56
North Carolina	614,521.17
North Dakota	68.05
Ohio	150,639.52
Oklahoma	486,871.13
Oregon	141,176,614.05
Pennsylvania	4,165,852.54
South Carolina	1,144,618.96
South Dakota	2,205,259.61
Tennessee	399,876.51
Texas	2,391,730.34
Utah	1,495,377.04
Vermont	155,337.32
Virginia	525,435.84
Washington	40,808,776.04
West Virginia	1,056.967.20
Wisconsin	782,177.23
Wyoming	1,804,960.39
Puerto Rico	5404.61
Grand Total:	**$322,782,164.62**

F S Facts That May Shock You

by Gordon Cox

A few honest facts from the Forest Service:

* One-third of the United States is covered with forests (731 million acres out of a total of 2.3 billion acres.)

Remarks of Ernesta Ballard
House Resources Committee: Juneau, February 19,1992

My name is Ernesta Ballard. I live in Ketchikan and am Chief Operating Officer of the village corporation in Saxman, the Cape Fox Corporation. From 1983 to 1986 I was the Regional Administrator for the United States Environmental Protection Agency for Region 10. I am not unfamiliar with the charged environment in which decisions regarding natural resources are made.

I am grateful for this opportunity to provide some of my own observations about the state of affairs of natural resource development in Alaska today.

In Alaska, as in the rest of the free world, natural resource development is usually financed and performed by the private sector. To assure that these activities are conducted without adverse consequences, the Legislature has passed a set of laws governing many things, including the preservation of the physical environment. It is appropriate that such laws restrict development if the resulting cost of the lost opportunity is more than off set by the value of a public benefit returned. It is the legislature's difficult task to determine which benefits are public benefits - in other words, which benefits truly accrue to the people in the broadest sense.

good or bad.

Conflicting values exist side by side within families, communities, political parties and churches: anywhere people are. This isn't a problem until public policy introduces incentives or restrictions that favor one point of view.

There is no disagreement among most parties to this debate about the requirements for responsible development. The disagreement is far more basic: it is a disagreement about the value of development at all, and a disagreement about who has the power to resolve the value dispute.

Our political system has weathered many storms in its two hundred year history in which value based fights were resolved by legislative policy.

From slavery to fluoridation of public water supplies we have overcome divisive debate and disagreement.

There have been winners and losers.

There always are in value fights.

People usually don't change their minds
The power to settle these value based fights rests with the legislature.

I do not think that we are witnessing the rape, pillage and plunder of Alaska.

I believe that what is at stake is the initiative and capability of the free enterprise system. How ironic that the countries of Eastern Europe are emerging from 40 years of shackled freedom at the same time that development projects all over this country are loosing a war of attrition with the regulatory agencies charged by legislative bodies with permitting their plans.

Permission or denial should be timely and scientifically based. It should be objective, not subjective.

I believe that the best hope for a tolerable transition into a state economy not totally dependent on oil lies in the vitality of the private sector.

I believe that taxes, royalty revenue and private capital create a healthy opportunity for both development and government and regulation to flourish.

The true creation of wealth depends on the extraction of natural resources. Value added processing just shuffles the wealth around - whether it is "hard" value added in manufacturing, or "soft" value added in marketing, advertising or sales. The service and government economies

CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY

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I believe that the legislative stage is well set in Alaska for responsible resource development. I believe that the regulations governing such key issues as water and air quality can do the job and still allow for profitable operation. I believe that the permitting, monitoring and reporting requirements will prevent abuse.

I also believe that the system has broken down.

We are no longer seeing an orderly process of planning, application, and analysis leading to permit or denial. Our development process is gridlocked with lawsuits, appeals, campaigns and strategic maneuvering. These battles are ostensibly waged over the degree to which each individual project conforms to the law. However, taken together, this massive amount of controversy suggests something different.

When every single timber sale offered in Alaska is appealed and delayed, I conclude that what is happening is not the reasonable enforcement of law. I believe that the fight over the Tongass or the Chugach or ANWR is a fight over conflicting values that cannot be won or lost through the application of the Forest Practices Act, or any other act, no matter how many times you amend it.

By values I mean the general guidelines an individual uses to judge whether things are right or wrong, whether things are

good or bad.

Conflicting values exist side by side within families, communities, political parties and churches: anywhere people are. This isn't a problem until public policy introduces incentives or restrictions that favor one point of view.

There is no disagreement among most parties to this debate about the requirements for responsible development. The disagreement is far more basic: it is a disagreement about the value of development at all, and a disagreement about who has the power to resolve the value dispute.

Our political system has weathered many storms in its two hundred year history in which value based fights were resolved by legislative policy.

From slavery to fluoridation of public water supplies we have overcome divisive debate and disagreement.

There have been winners and losers.

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The power to settle these value based fights rests with the legislature.

I do not believe that those opposed to natural resource development in Alaska are interested in enforcing the law: I believe that they want to seize the power to impose a new public agenda which more closely adheres to their values.

The debate over natural resources development cannot be resolved by fine tuning sale documents, development plans or drilling rig footprints.

The debate cannot be resolved by the courts in piecemeal adjudication because there is no law against development, and so efforts to develop will go on.

The debate cannot be resolved without creating winners and losers because there can be no compromise when the objectives are so unalterably opposed.

The debate must be resolved by clear statements of policy from the legislature. If there is to be no more development of resources in Alaska, then say so. If, on the other hand, development is to be permitted within the parameters of the law, then allow it to happen in a timely way. Tolerate the outrage of the losers, as you must in other equally charged, emotional debates.

I believe that what is at stake here is <u>not</u> the environment.

I do not think that we are witnessing the rape, pillage and plunder of Alaska.

I believe that what is at stake is the initiative and capability of the free enterprise system. How ironic that the countries of Eastern Europe are emerging from 40 years of shackled freedom at the same time that development projects all over this country are loosing a war of attrition with the regulatory agencies charged by legislative bodies with permitting their plans.

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I believe that taxes, royalty revenue and private capital create a healthy opportunity for both development and government and regulation to flourish.

The true creation of wealth depends on the extraction of natural resources. Value added processing just shuffles the wealth around - whether it is "hard" value added in manufacturing, or "soft" value added in marketing, advertising or sales. The service and government economies

are merely derivative - they take a cut out of every new dollar until nothing is left.

The private sector is prepared to comply with the law, pay our taxes and take the risks associated with development. What we ask in return is timely, understandable and objective regulation and law enforcement.

In closing, I'd like to say a few things about House Bill 29, the so-called "Citizen Lawsuit" bill. In my opinion, there are several elements missing from this bill that are generally present where good law and good government exist. Probably the most important of these missing elements are, standing, and accountability.

Let explain briefly what I mean.

With respect to standing, what I mean is often a citizen suit is brought by a party that has absolutely no standing in the affair: a party that is not a neighbor, a stakeholder, a potentially harmed party or in any other way involved. Theoretical standing is attributed to a concept of state wide citizenship that mocks some of our important concepts of privacy and property rights.

With respect to accountability, I mean two things. First, virtually always, citizen lawsuits are brought by a party for

whom nothing is at risk or at stake in the outcome. For example, if the lawsuit delayed a project but ultimately was lost, the citizen litigant is not held accountable for the cost of delay.

The second accountability problem with citizen lawsuits is one that I consider to be one of the most fundamental problems facing the country today. That is, the abdication by elected officials of their responsiblity to the voters. We have three branches of government, not seven, or ten, or fifty or more. We have a predictable balance of power with checks and balances.

I believe citizens have ample opportunity for involvement in our governance at the polls, in the conventional way. If they don't like the laws they can get rid of you guys. If they don't like the administration, they can get rid of the executive. Citizen lawsuits pit the citizens against the regulatory agencies in an arena outside the triangle of responsive government. Citizen lawsuits pit citizen plaintiffs against citizen defendants without the restraints of power established in federal and state constitutions.

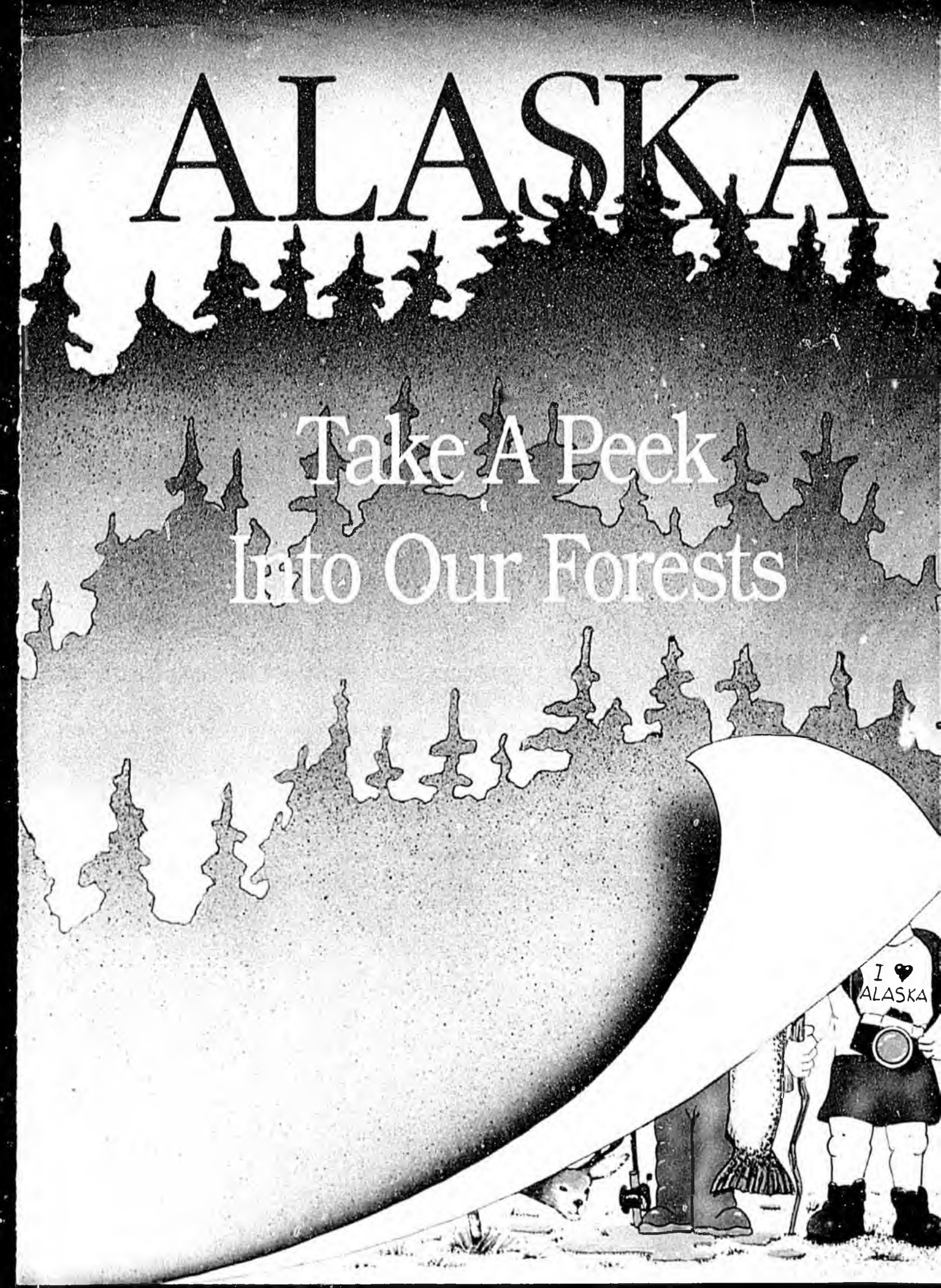
House Bill 29 proposes a particulary aggressive form of legislation. It is compulsive, and arbitrary, and vests citizen litigants with extraordinary powers, including the powers of search and arrest. Some have referred to it as a

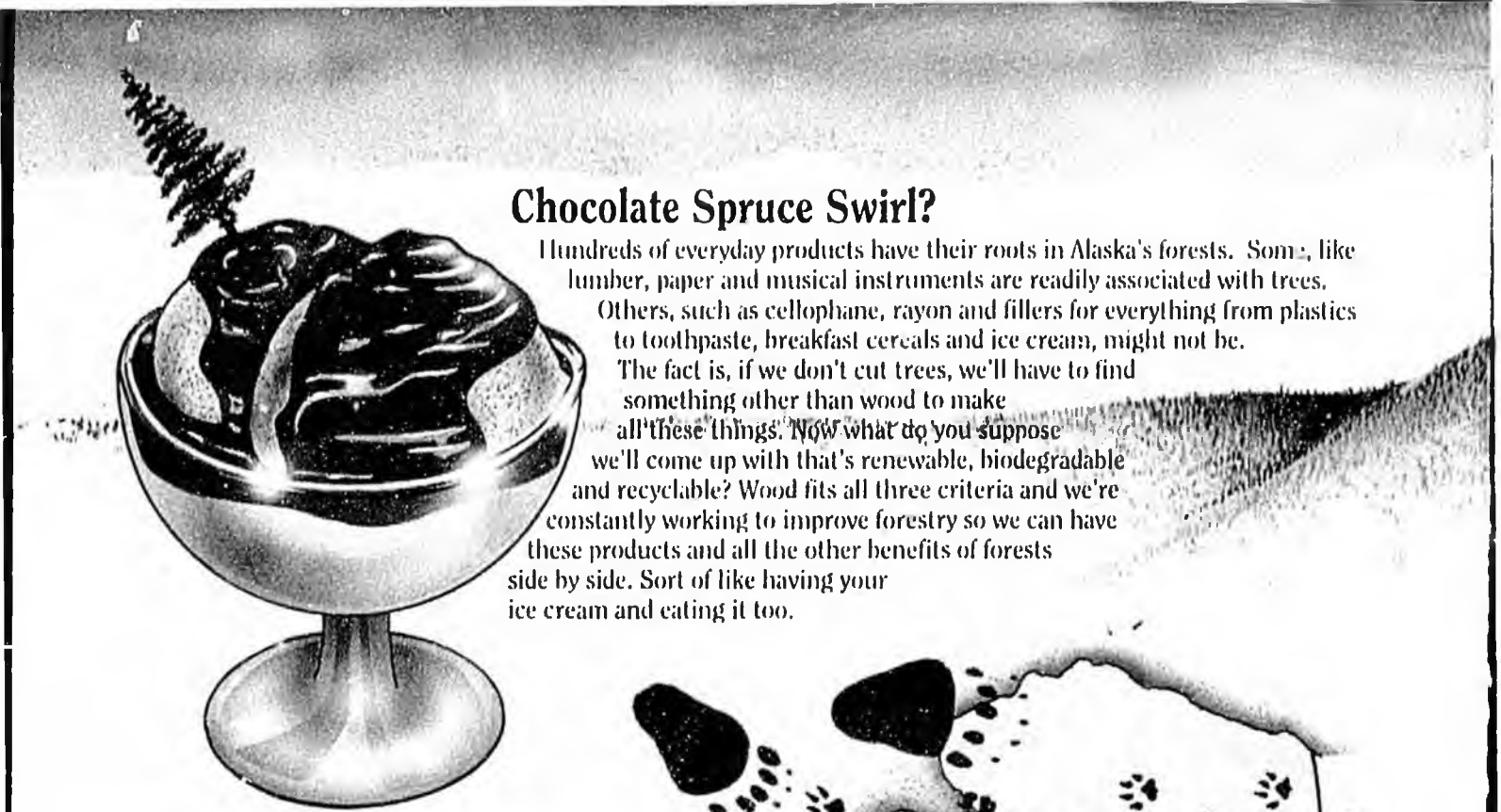
"vigilante bill". I urge you not to pass it.

Thank you for this opportunity to be here today.

ALASKA

Take A Peek Into Our Forests





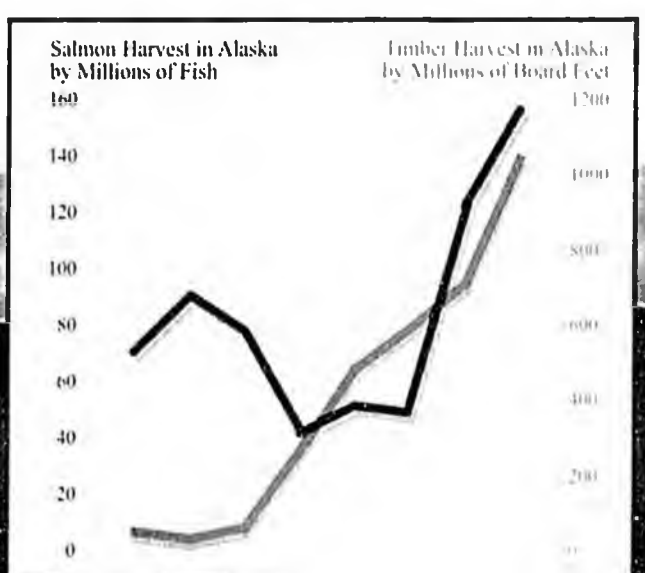
Chocolate Spruce Swirl?

Hundreds of everyday products have their roots in Alaska's forests. Some, like lumber, paper and musical instruments are readily associated with trees. Others, such as cellophane, rayon and fillers for everything from plastics to toothpaste, breakfast cereals and ice cream, might not be. The fact is, if we don't cut trees, we'll have to find something other than wood to make all these things. Now what do you suppose we'll come up with that's renewable, biodegradable and recyclable? Wood fits all three criteria and we're constantly working to improve forestry so we can have these products and all the other benefits of forests side by side. Sort of like having your ice cream and eating it too.

What Are All Those Footprints?

Alaska's forests are full of wildlife. Why, there's way more game in Southeast than people. Same's true statewide, but we're just talking about SE right now because that's where most of the logging occurs. And logging seems to raise a question about wildlife. The folks who keep track say there are 250,000 deer, 16,000 bear and 2,500 moose just in SE and, not surprisingly, the numbers keep going up. That's because the forests are managed to protect wildlife habitat while still allowing logging.

Seems to work pretty well. We've got so many deer that in some areas hunting season lasts six months with limits up to six deer per season. And the Fish & Game folks say if you hike through the woods there's an eight in 10 chance of seeing a bear. They seem to think that's good.



155 Million Salmon Can't Be Wrong

One thing that's important to Alaskans is salmon, so we thought we'd check on their numbers. And holy coho, have we got salmon. Over 155 million of them. That's just the number caught last year in Alaska, what the Fish & Game people call "excess." And 1991 is supposed to be just as good. One of the state fish guys, Herman Savikko, told us the reason for all the fish is we're managing salmon and forests better. He says, "It's getting better and better every year." With salmon harvests going up and up things can't be all that bad.

Getting Better Every Harvest

Ninety-four percent of Alaska's forests will never be logged. But on the 6 percent where we do log, we're working to make the forest produce more and better products. The biggest improvement comes from managing timber. The first time a forest is logged, about half the wood is good only for making pulp. But the next forest on the same site will produce twice the wood, with twice the value from each acre. It'll have more spruce, a better wood than hemlock, and more of the trees will be good enough for lumber and other valuable products.

Money Does Grow On Trees

"Only three industries provide year-round, long-term jobs in Alaska: timber, minerals and government. Of those, timber is the only renewable resource. It will be here forever." That's what Frank Seymour told us and his job is keeping track of jobs for the state.

Frank says the forest products industry provides about 6,000 direct jobs in Alaska. But what's really significant is those workers earn about $210 million. And each forest industry job creates two more jobs for folks like truck drivers, waitresses, accountants and even lawyers.

We're the Alaska Forest Association

Yep, we're the folks who cut down trees. Thought we'd clarify that right up front. Our members are loggers, foresters, folks who run sawmills and the people who make and sell our equipment. People like you, who have a special attachment to Alaska and live in places like Sitka, Cordova, Tok, Afognak, Cube Cove and Fairbanks.

Now as you know, there always seems to be a story in the papers that says the loggers are doing this or that and it usually talks about fish or wildlife or sediment or something. Just to keep the story straight we checked with people in the Alaska Department of Fish and Game, Alaska Department of Commerce, U.S. Forest Service and the like. We think you might be interested in what they told us. When you get all done, if something's not clear, or you've got a question or two, just give us a call in Ketchikan at 225-6114.

We'd be pleased to hear from you.

ALASKA FOREST ASSOCIATION, INC.
111 Stedman Street
Ketchikan, Alaska 99901

Old Growth Forever

Wow! Alaska's old growth forests are really kind of humbling. The giant spruce, hemlock and cedar were growing before this country was a country. Young trees replace the old that fell to wind, disease or just old age. All around are deer and moose and mice, woodpeckers, mink, bears, wolves, eagles, martens and beavers. Nature at its finest. It's comforting to know almost 80 percent of Alaska's coastal old growth is totally protected and will remain just like it is today, forever. Wow!

Roads To Paradise

Free time in Alaska is definitely not for the indecisive. From hunting and fishing to kayaking to wilderness hikes, the choices our forests offer are so many, and so unique, people travel thousands of miles for the opportunity. To reach their favorite campground, fishing hole or trail head it takes a plane, boat or road. If by road, chances are it was built as a logging road.

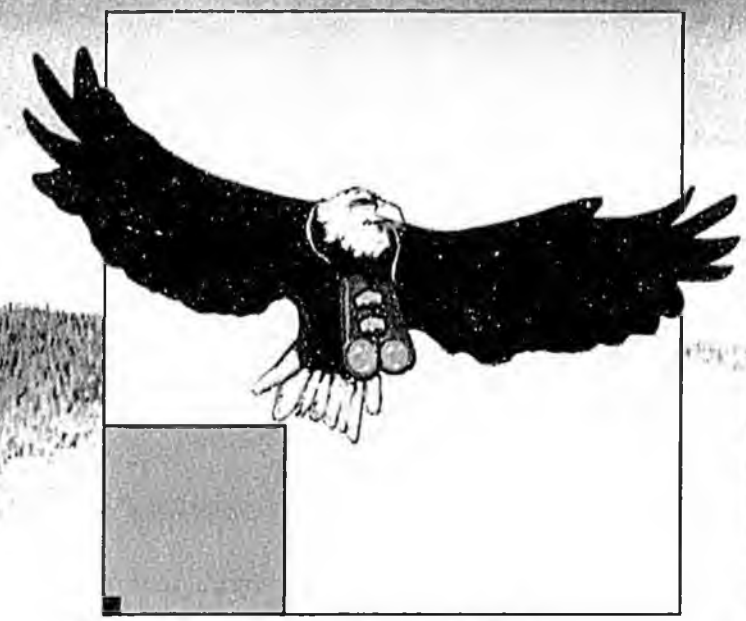
Prince of Wales Island is a good example. In the 1950s, there were only seven miles of road on the entire island. Today, nine of the island's 12 towns are connected by over 700 miles of roads built by loggers.

Alaska, Where Even the Wildlife Can Kick Their Paws Up And Relax

There are no threatened or endangered species in Alaska's forests. Not one. For Alaska's wildlife, it's a pretty carefree life. In fact, some critters that are struggling elsewhere flourish here. Take the grizzly bear. Today only 1,000 are left in the lower 48, but in Alaska, we count 40,000 among our neighbors. And we've got more bald eagles than we know what to do with. We ship 'em off to places like Michigan and Maine so they can get a fresh start there.

Sprucing Up the Harvest Areas

"Hmm, let's see. If we just push the edge of this harvest unit down that draw, move this boundary around those rocks, and leave a patch of trees here, it'll look more natural." That's the kind of thing you hear landscape architects say as they help lay out timber harvests on national forests. The LAs (that's what they call 'em) are there to make sure those nice views get due consideration. They'll reshape and stagger harvest areas so a nice green forest is always in view of scenic roads, trails and waterways. Just trying to keep things tidy for when company comes.



- Tongass National Forest Area
- Portion Available for Logging
- Area Actually Logged in a Year

An Eagle Can Fly For Miles Without Seeing A Logger

There's more talk about logging in Alaska than there is logging. You see, 94 percent of Alaska's forest land is closed to logging and only a small amount of the other 6 percent is actually logged in any given year. The largest square on the graph here represents the total amount of land in the Tongass National Forest, the medium-sized square represents land where logging may one day occur and that tiny little square represents the area that actually gets logged in a given year. Kind of like an ant trying to eat New Jersey.

Clearly the Way To Log In Alaska

Give hemlock and spruce lots of sun and they'll grow like weeds. That's why we clearcut in Alaska. It opens the forest floor to sunlight and as many as 15,000 seedlings sprout naturally on each acre. Now that's way too many trees for one acre, so we thin 'em back to about 300; helps 'em grow better.

"Uh, waiter? There's a log in my stream."

That's okay. We meant to do that. It used to be biologists thought debris in the water was detrimental to fish. But now we know those logs help form pools where fish can spawn and hide. So forest managers will often place logs in streams. And fish need shade so we leave trees along the banks. The wide strips of forest left on each side also protect the stream and provide habitat for everything from the insects fish eat to beavers, deer and other wildlife. It's all part of our commitment to responsible forest stewardship. And it's the law.

Forest Facts

This Land is Your Land

You might already be aware of this, but for those people just flying through, 90% of Alaska is owned by all of us. It's owned by government agencies. There's over a square mile of land for every person in Alaska. Compare that to New Jersey where there are 1,000 people for every square mile.

Forest Land Ownership

Total Area 129,000,000 Acres

Chances...

Of being struck by lightning: 1 in 600,000
Of catching a fish in Alaska: 1.86 sport fish for each trip
Of seeing a bear in the woods: 8 in 10
Of an acre of Alaska forest **never** being logged: 94 in 100

Dollars From the Land

Fishing:	$1.3 billion
Tourism:	$800 million
Timber:	$684 million
Mining:	$500 million
Total:	$3.284 billion

Need A Drink?

Alaska has:
3 million lakes
Over 10,000 salmon streams
79 natural hot springs
33,904 miles of shoreline
30,000 square miles of glaciers

Seward's Folly

When old Bill Seward, Secretary of State in 1867, agreed to buy Alaska from the Russians for $7.2 million (that's 2¢ an acre), people thought he didn't have both his oars in the water. Well, today Alaska's forests alone produce over $680 million worth of products each year. And it takes just two days for Alaska's oil wells to pump out enough to pay for that folly.

Tongass National Forest

16.9 million acres makes it the nation's largest national forest.

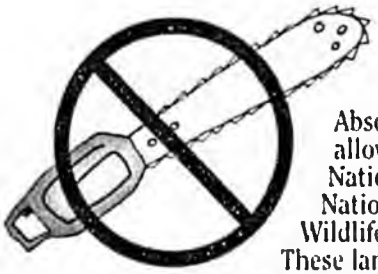
(35%) 5.9 million acres are wilderness, closed to all development.
(28%) 4.7 million acres non-forested lands.
(14%) 2.4 million acres are not suitable for commercial forest.
(23%) 3.9 million acres are capable of growing commerical forests.

Of the 3.9 million acres that are commercial forests

(62%) 2.4 million commercial, but managed for other resources.
(38%) 1.5 million acres scheduled for harvest in the next 100 years.

Now That's Big

Alaska is the northernmost, westernmost and easternmost of the United States. (The Aleutian Chain crosses the International Dateline, placing part of the state in the Eastern Hemisphere.)

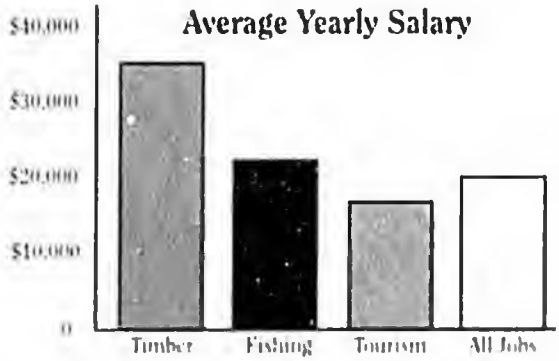


No Logging Allowed

Absolutely no logging is allowed in Wilderness Areas, National Parks and Preserves, National Monuments, National Wildlife Refuges and State Parks. These lands comprise 140 million acres or almost 40% of the total land area in Alaska.

Alaska's Forests

378 million acres of land in Alaska (more than twice the size of Texas)
129 million acres are covered with forest (more than twice the size of Oregon)
58 million acres are totally preserved in wilderness areas (an area larger than Utah)
21 million acres are commercially productive forests (an area the size of Maine)



Alaska: 378 Million Acres of Recreation

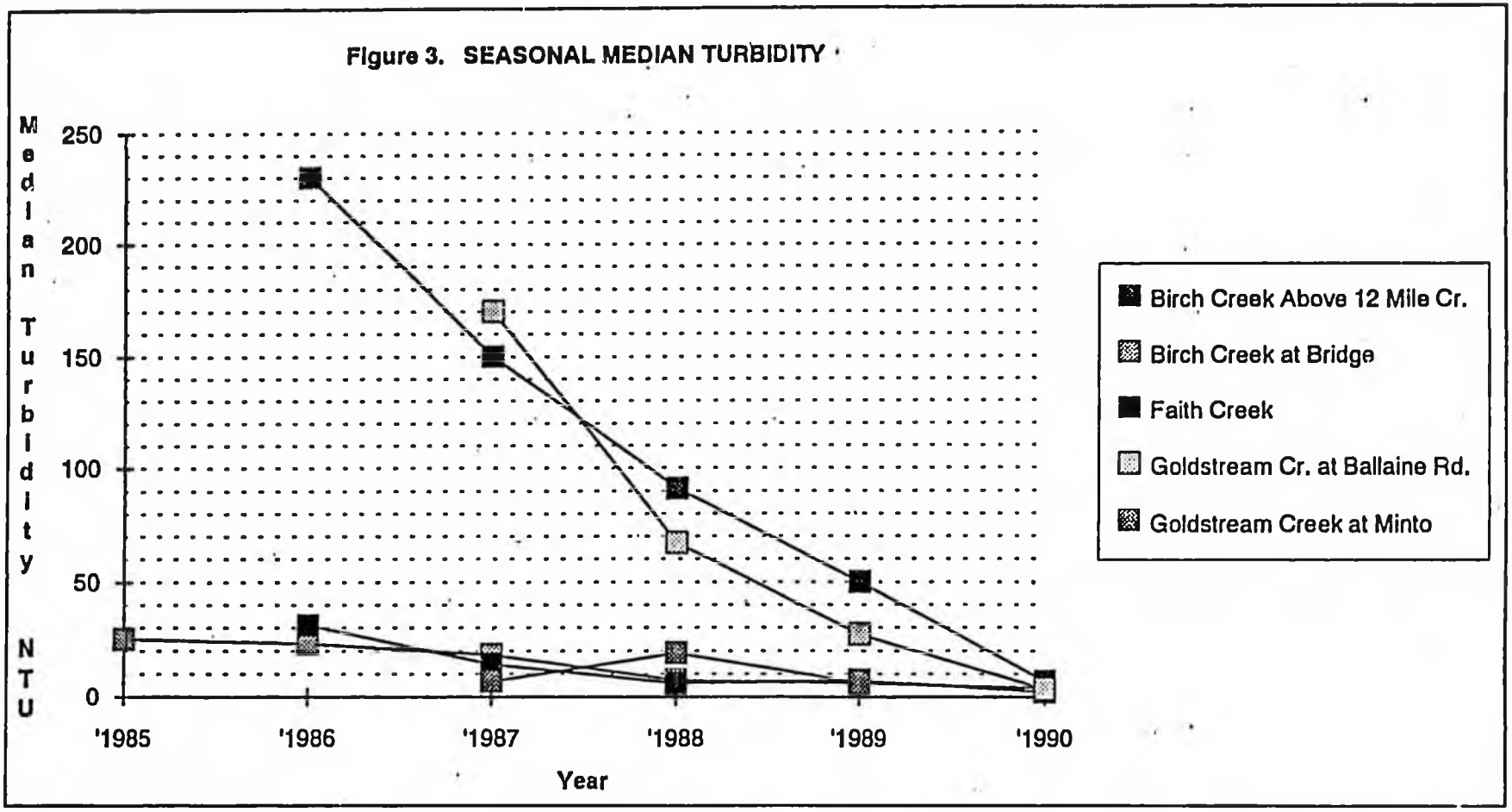
Less than 1/20 of 1 percent of Alaska has been altered by man
2 National Forests cover 22.5 million acres
2 Forest Service National Monuments cover 3.2 million acres
15 National Parks, Monuments and Preserves on 54 million acres
132 State Park units cover more than 3.2 million acres
57.5 million acres federally designated wilderness
16 National Wildlife Refuges cover 77 million acres
26 National Wild and Scenic Rivers
370 public cabins, campgrounds and picnic areas
329 million acres of public land open to recreation
391,308 sports anglers (1990)
96,837 hunting licenses sold (1990)

Resource Issues: Mining 2-13-92

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1990 ANNUAL MINING REPORT

Figure 3. SEASONAL MEDIAN TURBIDITY



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Susan Andrews at (907) 265-6847

ARCO EXPLORATORY WELL
EXPERIENCES GAS BLOWOUT

ANCHORAGE, AK., February 13, 1992 -- Equipment was being mobilized this morning to stem the flow of a gas blowout at an exploratory well being drilled by ARCO Alaska, Inc. ten miles southwest of the Kuparuk River oil field on the North Slope.

The well, the Cirque No. 1, encountered a shallow zone of natural gas Wednesday evening, and some drilling mud was expelled from the well. The rig is located on an ice pad.

There was no fire and no injuries, according to ARCO officials. Non-essential personnel were evacuated from the location Wednesday evening and the site was secured. By 6 a.m. Thursday, the gas flow was estimated to be half the initial flow.

ARCO officials said they are waiting for daylight this morning to assess the situation. Power on the drilling rig was shut down as a safety precaution Wednesday evening.

Cleanup equipment is being staged at a site five miles north of Cirque No. 1. Spill response and fire department personnel from the Kuparuk field were sent to the site Wednesday evening.

The drilling rig is under contract from Doyon Drilling.

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ALASKA MINERS ASSOCIATION, INC.
501 W. Northern Lights Blvd., Suite 203, Anchorage, Alaska 99503 FAX: (907) 278-7997 Telephone: (907) 276-0347

Agenda

House Resources Committee

Thursday, February 24, 1992

1. Issues of Current Concern (Steve Borell)
   - A. In Place Taxation of Natural Resources
   - B. RS 2477 Rights of Way Regulations & Policies
   - C. Reclamation Regulations
   - D. Land Availability and Restrictions
   - E. State Adoption of Federal Clean Air Act
   - F. UAF School of Mineral Engineering

Status Updates by Individual Mining Companies:

2. Echo Bay (David Stone)
3. Fairbanks Gold
4. Alaska Placer Development (Karl Hanneman)
5. Cominco (Steve Newkirk)
6. Placer Dome (Joe Piekenbrock)
7. Cambior/Valdez Creek
8. Usibelli (Charlie Boddy)

ALASKA MINERS ASSOCIATION, INC.

501 W. Northern Lights Blvd., Suite 203, Anchorage, Alaska 99503 FAX: (907) 278-7997 Telephone: (907) 276-0347

SUMMARY
OF
LEGISLATIVE CONCERNS OF THE ALASKA MINING INDUSTRY
FEBRUARY 1992

Multiple Use of Lands/Land Availability Issues

* * - Protection from Mineral Closure
* * - Annual Land Withdrawal Report
* * - Oversight of Coastal Zone Management

State Policy Issues

* * - Permanent Exemption of In Place taxation
* - State Land Selections
* - Funding for an Alaska Mineral Assessment Program
* - Mental Health Lands
* - Resource Cabinet
* - Continue Legislative Support And Funding of the Minerals Commission
* - Continue AMEREF Funding Program
* - University Level Education Programs
* - RS 2477 Right-of-Way
* - Navigable Waterways
* * - Road Development
* - Fish And Game Management

Regulatory Reform

* * - Automatic Extension of Permits Affected by Court Proceedings

Environmental Regulation

* - Department of Environmental Conservation
* - Wetlands

Mine Operation Issues

* * - Flexible Work Week
* * - Time at the Face Underground

NOTE: AN "*" INDICATES LEGISLATION NEEDED

ALASKA MINERS ASSOCIATION, INC.

LEGISLATIVE CONCERNS OF THE ALASKA MINING INDUSTRY
FEBRUARY 1992

MULTIPLE USE OF LANDS

The issue of multiple use of State lands is central to the future of mining in Alaska. Mineral deposits are rare and encompass a wide range of types and sizes. Because our understanding of the processes that generate mineral deposits is continually evolving, it is difficult to predict where they occur.

Only through high risk exploration dollars and evaluation efforts of trained professionals will Alaska's mineral resources be defined. To allow for the discovery and development of valuable minerals, it is imperative that State lands be managed for multiple uses without restrictive land use designations.

Before mineral closures or other restrictions on State land are allowed, the following requirements should be met: 1) management of the area is not possible unless some uses are excluded and 2) mitigation measures cannot be developed to allow full multiple use. When such findings are made and substantiated, the areal extent of State lands subject to restricted use must encompass the smallest practical size and the uses be restricted for the shortest practical length of time.

Approximately 60% of Alaska (Federal and State) is already closed to mineral entry and mining or any other form of development. Closures promulgated through area plans have often exceeded 100,000 acres per plan and are justified with findings of incompatibility. However, such findings are seldom either well substantiated or adequately documented. The past proliferation of mineral closures is a serious threat to responsible resource development. Because of the geologic uncertainties involved in discovering a mineral deposit, it should be assumed that a major mineral deposit could exist on any given parcel of land. To close that parcel to mineral entry would preclude discovery of the deposit. Many lands selected by the State were originally chosen for resource development; this objective should not be compromised.

LEGISLATION NEEDED: Protection from Mineral Closure

* We recommend that land use statutes be changed to require legislative action before greater than 640 acres or longer than 0.5 mile long strip along a drainage are closed to mineral entry.

* We recommend that all administrative closures have a "sunset" date, not to exceed five years after the enactment of the closure. Mineral closures currently in existence would "sunset" five years after enactment of the legislation.

* We recommend that before any mineral closure is initiated, a well substantiated and documented evaluation of the mineral resources of the area must be completed and weighed objectively with other competing uses.

LEGISLATION NEEDED: Annual Land Withdrawal Report

* Require DNR to report to the legislature and the Governor at the start of each legislative session a detailed account of any State lands that were closed to mineral location and mining during the previous calendar year, specifying for each closure: 1) the known resource value of the area, 2) the reason for the closure, 3) the effective date, and 4) the legal description of the area.

This reporting requirement would allow the Governor, Legislature and the public to see clearly what closures occurred and would provide a measure of accountability of DNR for their past closures. it is currently very difficult to get a statewide picture of the closures that have occurred.

LEGISLATION NEEDED: Oversight of Coastal Zone Management

* As currently structured the local Coastal Resource Service Area (CRSA) boards are not responsible to the executive Branch. A bill providing oversight of Coastal Management Programs is needed in order to ensure that state and national concerns, as well as local concerns, are considered for resource development projects in the Coastal Zone.

Alaska CRSA boards view issues from a local perspective and try to use the Coastal Zone Management programs as a vehicle for zoning and resource management in their local areas. The decisions of these boards can tie up a project in expensive litigation for extended periods with no hope for timely resolution.

STATE POLICY ISSUES

Alaska needs to give a stronger positive signal regarding development in the State by providing a stable and intelligible regulatory and tax environment. The Green Creek and Red Dog mines, the first significant hardrock mines in Alaska since WWII,

began operating 1989. However, the perception still held by most mining companies and lending institutions is that the Alaska State Government does not support mining or minerals development. In order to change this perception, the state must insure that projects will not be adversely affected by changes in or new interpretations of State regulations.

Headway was made in the 1991 legislative session with the repeal of the worldwide unitary corporate tax. This change in the corporate tax structure provides a positive signal to the international business community.

The issues on taxation, availability of lands, education, and infrastructure discussed below are areas where the State of Alaska needs to send a positive signal to international mining industry.

Taxation of In Place Resources

Prior to July of 1990 mineral reserves in place were taxable by municipalities. Oil and gas had a specific exemption but minerals did not. In the spring of 1990 the second session of the Sixteenth Legislature passed a two-year exemption for minerals and instructed the Department and Community and Regional Affairs, assisted by the Department of Commerce and Economic Development, to develop recommendations to the legislature regarding taxation of natural resources in place.

In place taxation is a bad policy for many reasons. It is extremely difficult to predict whether or not a "resource" will ever be economically minable. Market conditions, changes in regulations, geologic stability, ore grade, consumer buying, international events, etc. all affect mining costs and/or metal prices. Rock that is "ore" (material that can be mined at a profit) changes depending on these factors. Hugh resources may exist but they often cannot be mined at a profit. Taxation of the resources in place would provide a major negative incentive for all types of mineral development.

LEGISLATION NEEDED: Permanent Exemption of In Place Taxation

* A permanent exemption for the in place taxation of natural resources is required before July 1992.

* We recommend that all administrative closures have a "sunset" date, not to exceed five years after the enactment of the closure. Mineral closures currently in existence would "sunset" five years after enactment of the legislation.

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State Land Selections - The Remaining 18 Million Acres

The State should use all geologic information now available to wisely choose the highest value lands to fulfill the remaining 18 million acres of state selections. The potential for future oil, gas and minerals should be the guiding factor in making the majority of these selections. Parts of the National Petroleum Reserve Alaska (NPRA), including 2.5 million acres along the southern edges of the reserve, should be included in these selections.

Funding for an Alaska Mineral Assessment Program

Geologic and geophysical information is valuable to all mineral industry representatives from prospectors to multi-nations corporations. Funds should be provided for geologic and geophysical field programs to enhance the basic geologic understanding of the state which would in turn result in increased exploration activity. We support the Minerals Commission's recommendation that $50 million dollars be provided for a decade-long initiative to be called the Alaska Mineral Assessment Program (AMAP).

Mental Health Lands

We would encourage the legislature to provide any appropriations necessary to insure that the objectives and mandates of Chapter 66 can be fully realized in a timely manner. A major part of the original SB 65 that was not addressed in the final version involves the current and future program needs of the mentally disabled.

Resource Cabinet

The Department of Commerce and Economic Development (DCED) should be included as part of the Resource Cabinet. For too long the State has floundered along without the DCED having an effective voice in the development of the States resources. Making DCED a part of the Resource Cabinet would help change this situation.

Continue Legislative Support and Funding of the Minerals Commission

The Alaska Mineral Commission was established in 1986 to help the State identify and resolve major issues that have adversely affected the minerals industry. Commission members donate many hundreds of hours of their own time at no cost to the State. Funding should be made available through DCED to provide travel expenses, per diem and staff support to allow the Commission to carry out its mandate.

Continue AMEREF Funding Program

The Alaska Minerals and Energy Resource Education Fund (AMEREF) provides assistance to schools to interest and train young people in wise use of our state's minerals and the role that these minerals play in our lives. Funding for AMEREF is a joint effort between the minerals industry and the State with two thirds of the cost paid by industry.

University Level Education

AMA supports the continued legislative funding of the University of Alaska programs in mineral engineering, mining technology, earth sciences and the Minerals Industry Research Laboratory. The mining technology/vocational program to date has provided basic level training for several hundred people, most of whom have subsequently gone to work in mines in the State.

RS2477 Rights-of Way

A provision, RS2477, contained in an 1866 law gives states right-of-way across Federal lands on routes that have historically been used by the public. In Alaska, where the federal government controls so much land, these historic rights-of-way are crucial for access. However, Alaska must assert its rights and begin active management of all RS2477 roads and trails. Furthermore, the State must resist all Federal attempts to restrict access to state lands through administrative lands reclassification (e.g. Areas of Environmental Concern, Critical Habitat Areas) and the assessment of user fees for transit across Federal lands.

Navigable Waterways

Alaska should continue to actively pursue and actively protect its rights to waterways and should not allow the Federal government to usurp Alaska's rights. Cooperative agreements with federal agencies must not diminish the rights of Alaska or the rights of the citizens to use their waterways.

Road Development

Alaska should actively pursue extensions and upgrades to rural roads that will eventually provide highway access to areas that are currently inaccessible. The Denali Highway is an excellent example of how, over time, a poor quality trail can become an effective highway. The Department of transportation should begin actively and legally developing the road system in the State.

LEGISLATION NEEDED: Road Development

* The lack of infrastructure, particularly roads and highways, has a serious negative effect on all aspects of the economy. Several roads that would provide access for recreational use as well as provide infrastructure for industry merit serious consideration:

1) Petersville Road Extension - west to the Collinsville Mining District and then south into the Beluga Coal Field.
2) Hatcher Pass Loop Road - upgrade for year around use.
3) Talkeetna Highway - from the Glenn Highway across the east flank of the Talkeetna Mtns. to the Denali Highway
4) Taku Highway - Juneau to Atlin, B.C.
5) Bradfield Canal Road - from near Wrangell to Cassiar Hwy
6) Copper River highway - reconstruct the right -of-way as a gravel road.
7) Healy Highway - from Healy east along the north flank of Alaska Range to the Richardson Highway
8) Coldfoot to Bettles - upgrade existing section and extend as needed
9) Stampede Road - from Healy to Kantishna
10) Whittier Road
11) Yukon to Kuskokwim Road - extend the existing Ruby to Poorman Road across to the Kuskokwim River
12) In the Nome area - Glacier Creek to Mt. Distin, Solomon Road, Skookum to Bluff, Council to Ophir Creek, Teller to Lost River, and Kougarok to Serpentine Hot Springs.

Fish and Game Management

Alaska must have a policy of active management of its resources as is required by the State Constitution The current attitude of preserving natural habitat to the exclusion of any other uses must become more balanced. Alaska now contains more than 166,900,00 acres that are managed as "natural". Fish, wildlife and habitat should be actively managed, not just preserved. Environmental enhancement, along with recognition of the value of short term impacts, should become part of ADFG strategies.

REGULATORY REFORM

Even though there appears to be a partial resurgence in exploration and mining activity, the State of Alaska is slowly regulating itself out of a mining industry. The number of permits, time required to secure those permits, the number of agencies and the costs related to obtaining permits are out of control.

A streamlined permitting process defining the DNR Division of Mining as the lead agency for mining projects is recommended. The identification of Division of Mining as lead agency would provide structure to accompany the expertise and statutory authority that already exists. This would be a major step toward cleaning up the costly, multiple permit system that has developed over the past decade.

LEGISLATION NEEDED: Automatic Extension of Permits Affected by Court Proceedings

* The following statement should be placed in statute:

> "The term of any permit issued by the State of Alaska shall tolled (extended) during all periods while the issuance, validity, completeness, etc. of such permits is being challenged in the State or Federal courts and upon the termination of such litigation the term of such permit(s) shall continue to run until the term of the permit(s) has encompassed the time period originally defined by such permit(s)."

ENVIRONMENTAL REGULATION

Individuals within the Department of Environmental Conservation (DEC) must be accountable for their actions. Technically qualified personnel, with expertise pertaining to the industry which they are assigned to regulate, must be employed. Too often unqualified and inexperienced people are given the job of overseeing and inspecting in Alaska.

The DEC has all the authority needed to regulate industry. It must learn to use this authority in a reasonable, constructive and professional manner. We need to work together as a team to find solutions that promote development of natural resources as required by the State Constitution and protect the environment.

Wetlands

Alaska should be exempted from a strict application of the proposed national "no net loss of wetlands" policy until a suitable policy can be formulated specifically for Alaska that recognizes the unique type, quantity and value of Alaskan wetlands.

MINE OPERATING ISSUES

Several laws are now in existence impose inefficient operating requirements on the mining industry. Some of these laws are a carry over from the past and no longer serve a purpose.

LEGISLATION NEEDED: Flexible Work Week

* A need exits to allow work schedules to be adjusted on a site by site basis which would result in more efficient work scheduling and provide a more desirable time-off pattern for employees. In Alaska this is particularly significant where mines are in remote locations and miners maintain their residence in a village or city far removed from the mine site.

LEGISLATION CONCERN: Time at the Face Underground

* There is need to remove the 8 hour limit for working time at the face in underground mines. The existing law is from a time in history when most work was done by hand. Today underground operations are highly mechanized and there is effectively no difference between working underground or on the surface.

ALASKA MINERS ASSOCIATION, INC.

3/20/91

LAND STATUS IN ALASKA
(Millions of Acres)

	Total	Total "Wilderness"	Total Closed to Mining	Total Open to Mining
Federal Lands				
National Park Service	54.7	32.8	54.7	0
U.S. Fish & Wildife	77.1	18.5	77.1	0
U.S. Forest Service	22.8	5.7	5.7	17.1
Bureau of Land Mgmt.	57.9	2.4(2) 23.0(3)	2.4 23.0	32.5
Department of Defense	2.5		2.5	0
Subtotal	215.0(1)	82.4	165.4	49.6
State Lands				
State Parks	3.2		3.2	0
Administrative Mineral Closures	5.3		5.3	0
Other State Lands	77.9		0	77.9
Not Selected/TA'd	18.		0	18.
Subtotal	104.4(1)		8.5	95.9
Private Lands				
Native Corporations	45.6		0	45.6.(4)
Other private	0.5		0.5	0
Subtotal	46.1		0.5	45.6
Total	365.5	82.5	174.4	191.1

(1) Final acres that will result after all State and Native land transfers.

(2) Wild and Scenic River Corridors total approximately 2.4 million acres and these are managed the same as Wilderness designated lands.

(3) National Petroleum Reserve Alaska is effectively managed as Wilderness.

(4) Open to mining if leased from Native Corporations.

Resource Issues: Water

2-26-92

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER

400 WILLOUGHBY AVENUE
SUITE 400
JUNEAU, ALASKA 99801
PHONE: (907) 465-3400

February 25, 1992

Dear Legislature:

Attached you will find copies of materials pertaining to the Division of Water (DOW). Included is information concerning the organization of DOW, a description of the division's mission and major program functions that DOW is involved in, a synopsis of Alaska's water resources, and information on how and why DOW was created.

I have also included information on appropriations of water in the state to date which exceed 50 acre feet per year, some commonly asked questions with DOW's answers concerning water management fees, and copies of HB 550 and SB 442 which would establish the state's ability to assess water management fees or provide for the sale of water.

I would be very happy to discuss any of the above enclosed materials and answer any questions you might have. Please do not hesitate to call on me if I can be of assistance. In closing, I am also including a graph of predicted state oil production through the year 2015. I believe you will agree that we have about eight years remaining to change Alaska's dependance on oil revenues as the primary means for financing governmental functions of the state.

Sincerely,

Ric Davidge
Director

Enclosures

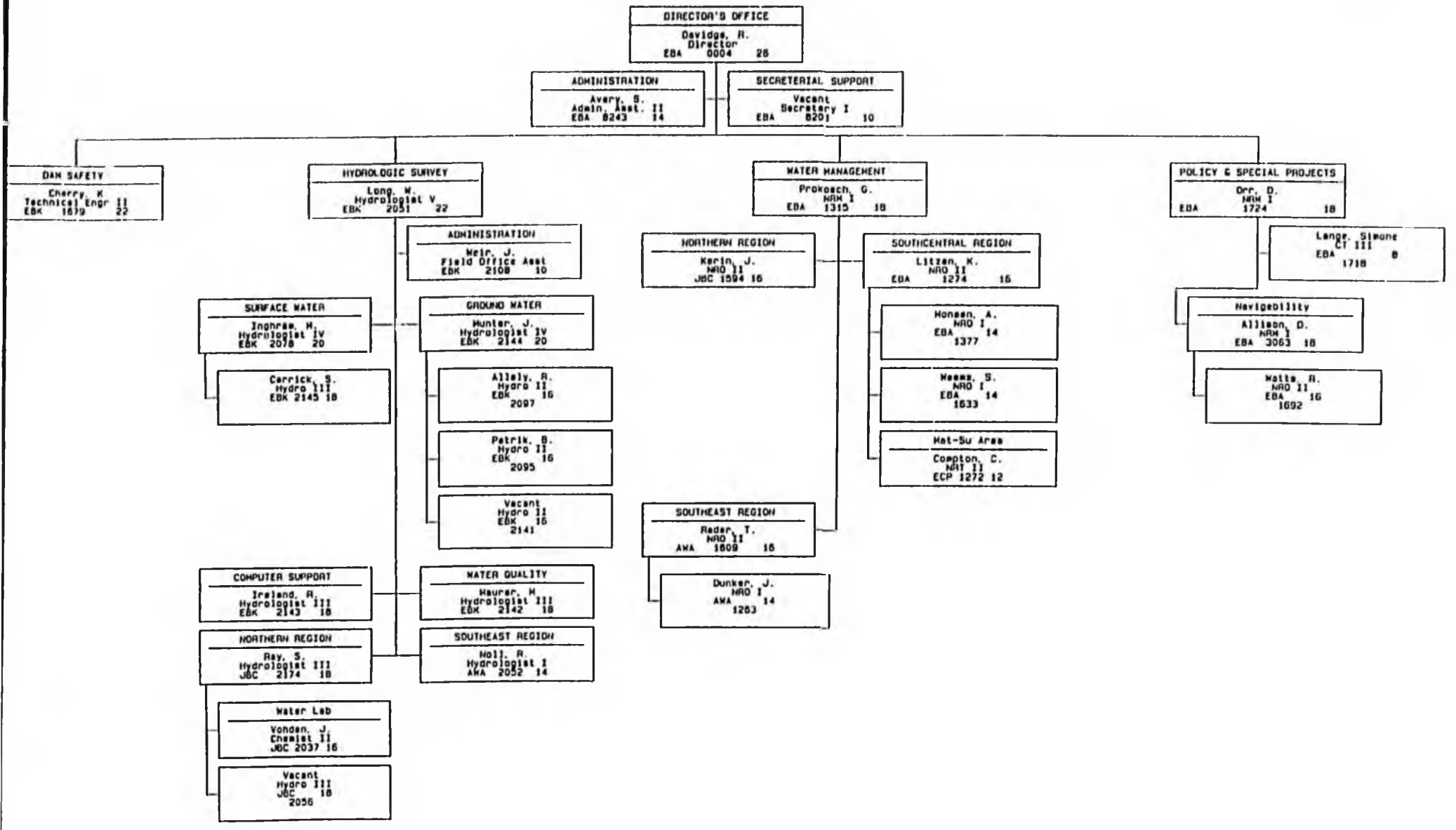
THE DIVISION OF WATER

The Alaska Division of Water manages an estimated 40% of our Nation's water resources including over 3 million lakes and an estimated 20,000 streams. These responsibilities include the State Water Policy and Management Strategy; issuing water rights; administering the dam safety program; rendering and reviewing administrative navigability determinations, asserting ownership and management of submerged lands; surveying, collecting and distributing water resource data related to the quantity and quality of surface, ground and coastal waters of Alaska; coordinating water related data collection and management activities with other agencies; providing support to the State Water Board; advocating responsible water development including water exports. The Director of the Division represents the Governor at the Western States Water Council consisting of 17 western states.

In addition to the Office of the Director, the Division of Water is comprised of five sections; Hydrologic Survey which includes the State Water Lab, Water Management, Policy and Special Projects, Navigability, and Dam Safety and Construction. The Division has offices in Anchorage, Fairbanks, Juneau and Wasilla.

DEPARTMENT OF NATURAL RESOURCES

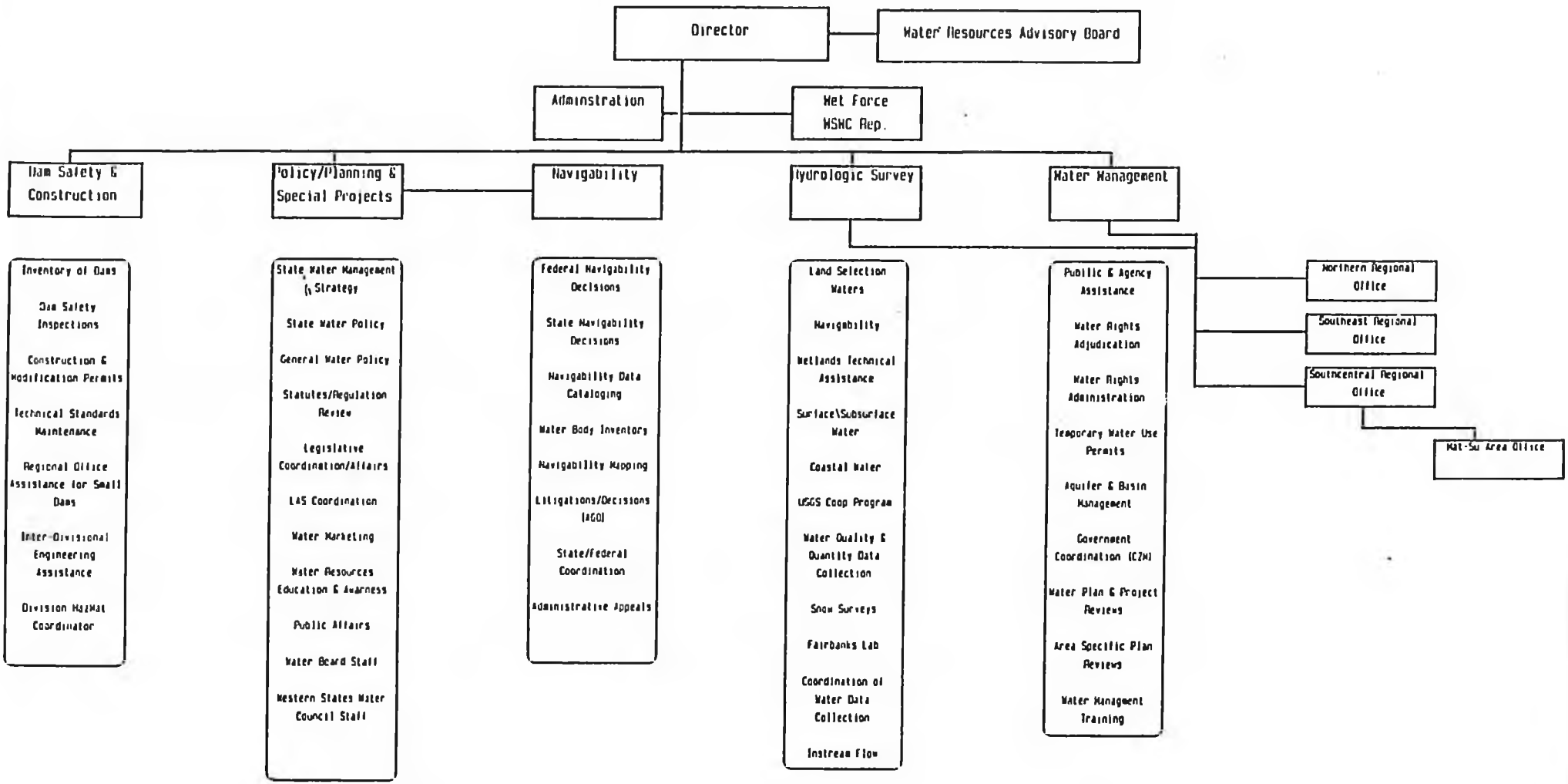
DIVISION OF WATER

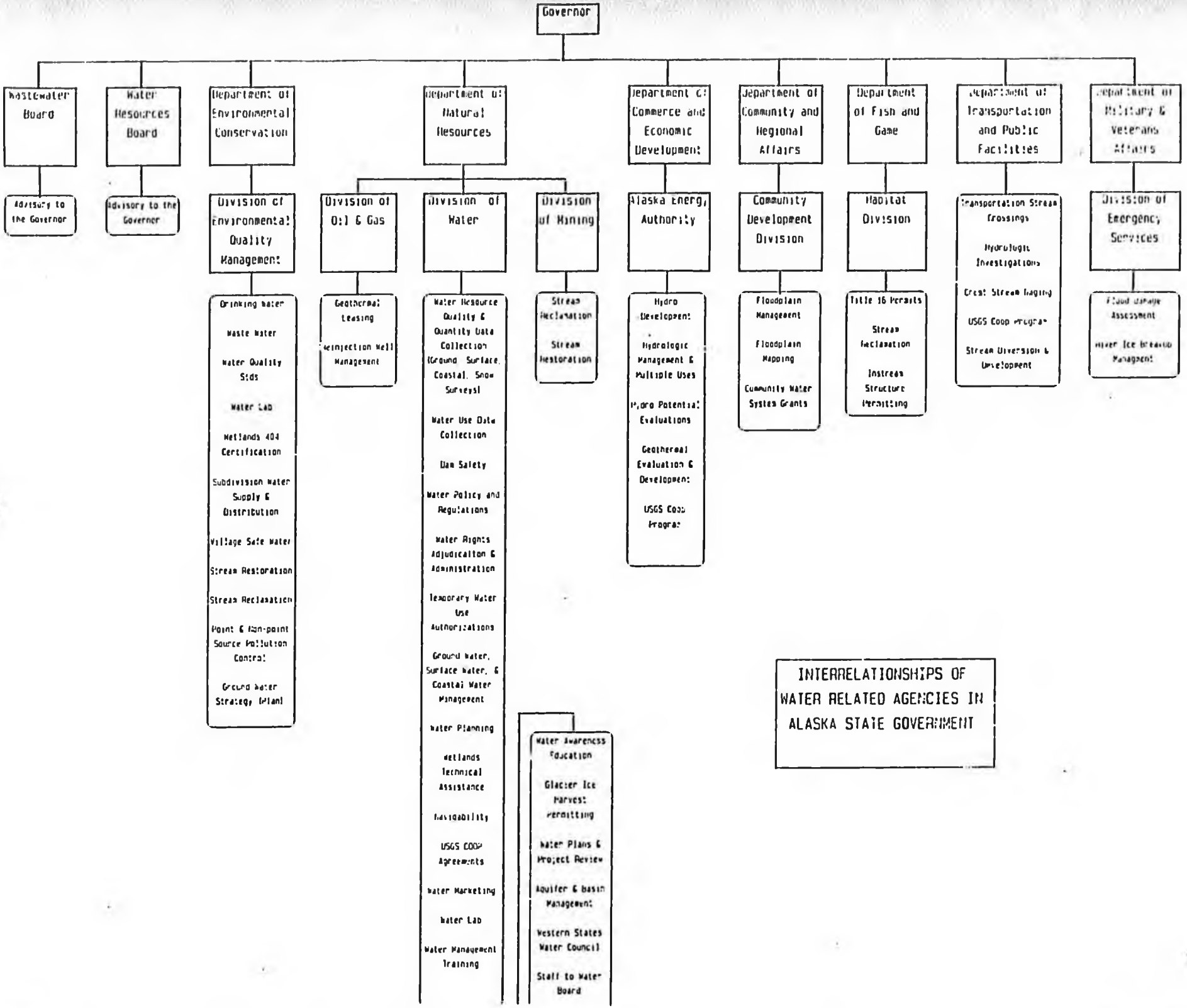


Department of Natural Resources

Division of Water

Program Functions





INTERRELATIONSHIPS OF WATER RELATED AGENCIES IN ALASKA STATE GOVERNMENT

MEMORANDUM STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES DIVISION OF MANAGEMENT

TO: Max Hodel
Chief of Staff
Office of the Governor

DATE: June 25, 1991
FILE NO.: Diwater
PHONE NO.: 465-2409

THRU: Shelby Stanley
Director
Office of Management and Budget

SUBJECT: Establishment of Division of Water Resources

FROM: Harold C. Heinze
Commissioner

One of the first organizational suggestions I received as Commissioner was to establish a separate Division of Water Resources. Now that I have had time to study this suggestion and consult with affected interests (i.e., Water Resources Board, House Resources Committee, etc.). I am convinced that creation of this division would be in the best interest of the State.

In recent years, water management has become increasingly important to Alaskans. Water availability is critical to our cities and villages, our fisheries, oil and gas production, seafood processing, hydroelectric development, mining, recreation, navigation and a host of other purposes. Maintenance of our water resources and water allocation decisions among user groups is expected to become even more important in the 1990's. A Division of Water will provide the necessary focus and demonstrate our recognition of the importance of this resource and our commitment to responsible management.

Water resources programs within the Department of Natural Resources currently reside in two divisions -- the Division of Land and Water (DLW) and the Division of Geological and Geophysical Surveys (DGGS). The DLW water programs include the water rights and dam safety projects. Other DLW water responsibilities include serving as staff to the Water Resources Board, representing the State on the Western States Water Council, and water resources planning. The DGGS is responsible for water resources data collection, storage, analysis, and dissemination, and for providing hydrologic assistance to DLW and other government agencies.

The Division of Water Resources would initially consist of 20-25 permanent positions. A new Director position at the Range 26 level will be established. The proposed organizational chart is attached for your approval.

AS 46.15.020(3) specifically authorizes the Commissioner to establish a Division of Water and no new statutes or changes to existing law will be necessary.

IN ACCORDANCE WITH AS 46.15.020(3), A DIVISION OF WATER IS ESTABLISHED IN THE DEPARTMENT OF NATURAL RESOURCES AS DESCRIBED ABOVE, EFFECTIVE ON THE DATE APPROVED.

J. Shelly Stanley

SHELBY STASTNY
DIRECTOR
OFFICE OF MANAGEMENT AND BUDGET

Walter J. Hickel

WALTER J. HICKEL
GOVERNOR

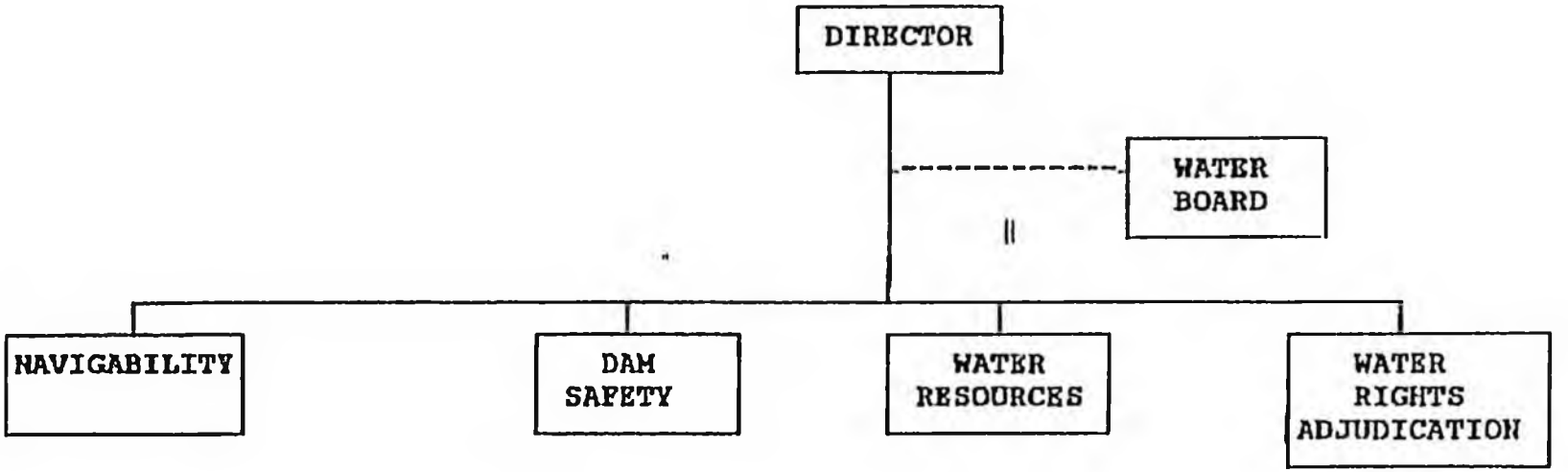
6-27-91

DATE

Attachment

cc: Gary Gustafson, Director, DLW
Tom Smith, Acting Director, DGGS
Sharon Barton, Director, Management

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER



Harold C Heinz
COMMISSIONER, DEPARTMENT OF NATURAL RESOURCES

J Kelly Stuart
DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Walter J Hickel
GOVERNOR, STATE OF ALASKA

6-27-91
EFFECTIVE DATE

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER
PCN LIST

Division of Geological & Geophysical Surveys

PCN	Title	Name	Location
10-2051	Hydrologist V	Long	Eagle River
10-2144	" IV	Munter	" "
10-2097	" II	Allely	" "
10-2141	" II	LaSage	" "
10-2095	" II	Petrik	" "
10-2078	" IV	Inghram	" "
10-2145	" III	Carrick	" "
10-2142	" III	Maurer	" "
10-2143	" III	Ireland	" "
10-2174	" II	Ray	Fairbanks
10-2037	Chemist II	Vohden	" "
10-2056	HydrologistIII	Moorman	" "
10-2055	Geologist IV	Motyka	Juneau
10-2052	Hydrologist I	Noll	" "
10-2108	Field Office Assistant	Weir	Eagle River

Division of Land & Water

10-1679	Tech Engineer	K. Cherry	Anchorage
10-1724	Nat Res Mgr I	M. Harle	" "
10-1692	Nat Res Off II	R. Watts	" "
10-1718	Clerk Typ III	P. Reamer	" "

Water Rights Adjudicators

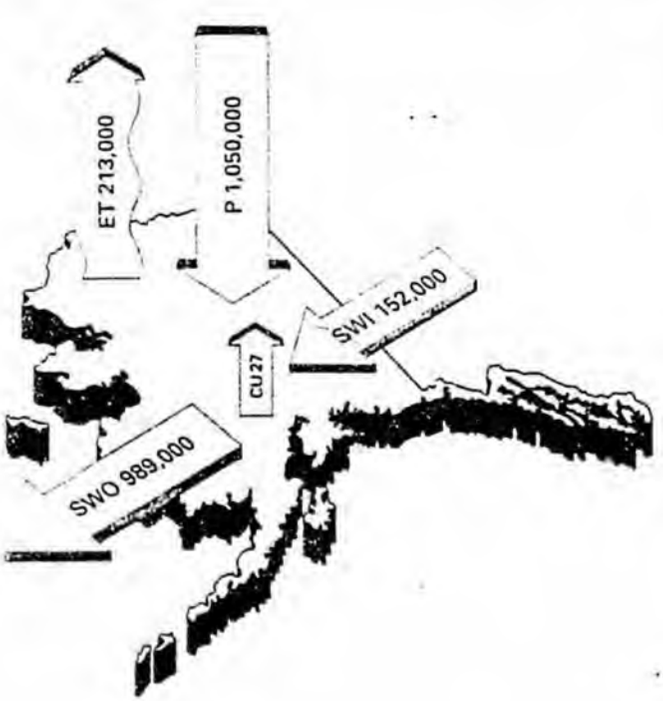
10-1263	Nat Res Off I	Dunkar	Juneau
10-1609	Nat Res Off II	Rader	" "
10-1274	Nat Res Tech	Litzen	Anchorage
10-1377	Nat Res Off I	Monson	" "
10-1272	Nat Res Tech	Compton	Wasilla (1/2 time)
10-1315	Nat Res Mgr I	Prokosch	Anchorage
10-1633	Nat Res Off I	Weeks	" "
10-1594	Nat Res Off II	Kerin	Fairbanks

ALASKA
Water Supply and Use

Alaska's water supplies might appear to be unlimited because of the large quantities of precipitation received in the State (fig. 1A). Statewide average annual precipitation is about 1,050,000 Mgal/d (million gallons per day), and average annual runoff is about 989,000 Mgal/d. Alaska contains more than 40 percent of the Nation's surface-water resources. Three rivers (the Yukon, the Kuskokwim, and the Copper) are among the 10 largest in the United States. More than 3 million lakes range in area from pond size to about 1,000 mi² (square miles). Also, large amounts of water are stored within two principal aquifers. Environmental conditions, legal restrictions, and technological problems, however, limit the usability of these abundant supplies.

Alaska encompasses a land area of about 586,000 mi², or about one-fifth of the area of the conterminous United States. Climates range from frozen desert in the Arctic Slope basin to maritime rain forest in the Southeast Alaska basin. Average annual precipitation and temperatures range from about 5 inches and 10° F (degrees Fahrenheit) in the Arctic Slope basin to about 300 inches and 45° F in the Southeast Alaska basin. Much precipitation occurs as snow. Glaciers and icefields cover 28,500 mi², or nearly 5 percent of the land (Post and Mayo, 1971) and affect the timing and the quantity of runoff. Many of the rivers are silt laden, are affected by midwinter overflow icing or ice-jam flooding at spring breakup, or are ice covered much of the year. The occurrence and the availability of ground water are limited by permafrost. The extent and thickness of the permafrost decrease southward from a continuous layer as much as several hundred feet thick in the Arctic Slope basin to areas that are generally free of permafrost in the South Central Alaska and the Southeast Alaska basins. Because of these conditions, there is no certainty that either surface or ground water will be available at a given time and location.

Several water issues in Alaska result from this variability in the availability and occurrence of the water resource. Additionally, the legal precedents for obtaining water rights cause conflicts. Com-



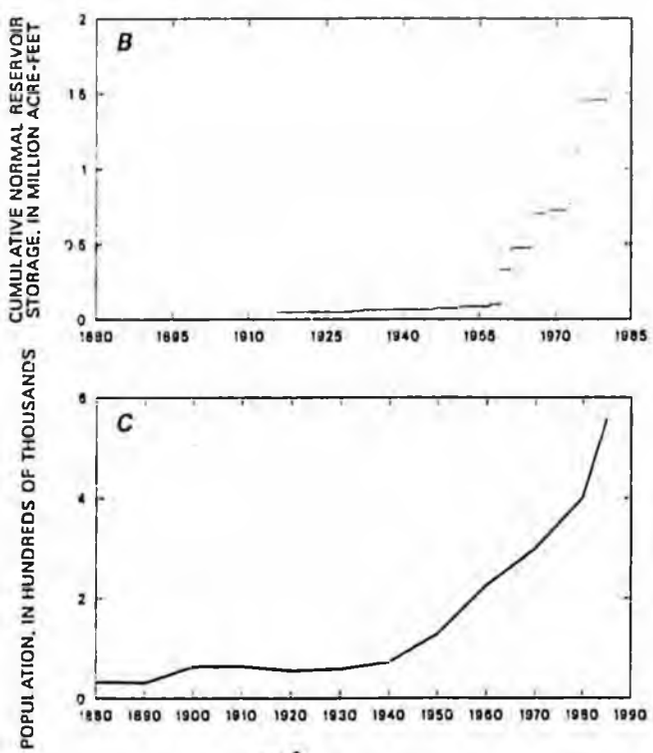


Figure 1. Water supply and population in Alaska. *A*, Water budget, in million gallons per day. *B*, Cumulative normal storage of reservoirs with at least 5,000 acre-feet capacity, 1880 to 1985. *C*, Population trend, 1880 to 1985. *D*, Population distribution, 1985; each dot on the map represents 1,000 people within a census tract. Abbreviations: CU, consumptive use; ET, evapotranspiration; P, precipitation; SWI, surface-water inflow; SWO, surface-water outflow. (Sources: *A*, R.D. Lamke (U.S. Geological Survey, written commun., 1985. *B*, U.S. Army Corps of Engineers, 1981. *C*, *D*, Compiled by U.S. Geological Survey from U.S. Bureau of the Census data.)

petition for limited surface-water resources exists among industry, fish hatcheries, recreation, and fish and wildlife habitat demands. Ground-water-rights issues primarily involve public supply in basins where surface water is scarce. Currently (1987), the Arctic Slope, the South Central Alaska, and the Southeast Alaska basins are the focus of these issues.

HISTORY OF WATER DEVELOPMENT

In 1914, the first large reservoir was constructed to provide power for the mining and the timber industries in the Southeast Alaska basin. Since then, 19 additional reservoirs that have storage capacities greater than 5,000 acre-ft (acre-feet) have been built for electric power generation and public supplies. Of these 20 reservoirs, 13 are in the Southeast Alaska basin, 6 are in the South Central Alaska basin, and 1 is in the Yukon basin. These reservoirs contain a cumulative capacity of about 1.78 million acre-ft (fig. 1*B*).

The first significant increase of Alaska's population occurred during the gold rushes of the late 1800's (fig. 1*C*). Postwar migration and homesteading increased the population during the late 1940's and 1950's. Population growth during the 1960's and 1970's can be attributed to the development of oil fields in Cook Inlet and at Prudhoe Bay and the related pipeline-construction activities. The continued rapid population growth of the early 1980's can be attributed to the general economic well-being that oil production brought to the State. The population reached 558,000 in 1985; 77 percent of the inhabitants live within 5 of the 28 census districts, or county equivalents (fig. 1*D*). Anchorage contained 44 percent of the State's population; the next largest concentrations of population were in Fairbanks (13 percent), Kenai (8 percent), Matanuska–Susitna (7 percent), and Juneau (5 percent).

Interest in Alaska's water supplies began during the gold rushes of the late 1800's; miners washed the placer deposits to extract the gold. The population growth and the corresponding urban development, especially after 1940, placed increasing emphasis on water supply. Increasing needs for water supplies for power in the Southeast Alaska and the South Central Alaska basins, for the pulp and paper industry in the Southeast Alaska basin, and for the canneries in the Southeast Alaska and Southwest Alaska basins created demands for water-resource information. Intensive development of other natural resources began during the 1960's and continued through the 1970's. Water was critical to support the oil fields in the Arctic Slope basin and the petrochemical, the seafood, and the timber production industries in the South Central Alaska and the Southeast Alaska basins. Continued population growth, especially in the South Central Alaska basin, increased the demand for public supplies; ground water became a major source of supply. Maintaining instream flows became an issue during the late 1970's, and that concern has increased during the 1980's. Instream flow for hydroelectric power generation and fish hatcheries is an additional water issue today.

WATER USE

The State's water budget is shown diagrammatically in figure 1*A*. Several natural conditions limit the quantity of freshwater that can be recovered efficiently from Alaska's hydrologic environment; for example, the availability of surface water may be affected by the timing of winter freezeup and spring breakup and by the quantity and the timing of runoff derived from melting snow and glacier ice. The availability of ground water is limited by thick lenses and layers of relatively impermeable sediments and by the limited extent of coarse-grained permeable sediments. In permafrost zones, even coarse-grained sediments may be frozen. Thus, although a substantial quantity of water may be present within the State, the water may not be available when and where it is needed.

Hydroelectric powerplants used 1,480 Mgal/d to generate 18 percent, or 746 GWh (gigawatthours), of the electricity used statewide. About 90 percent of this power was generated in the Southeast Alaska basin. The water was used instream, and no water was considered for consumptive use.

Surface-water withdrawals supplied 82.2 percent of the water needed for offstream uses; ground water provided the remaining 17.8 percent. These values were determined by using the results of a cooperative survey conducted by the Alaska Department of Natural Resources and the U.S. Geological Survey in 1985, in which communities and industries estimated their water use. Where quantities of water use were not available, such data were estimated on the basis of similarities between communities and uses. The statewide distribution of total, surface-water and ground-water withdrawals is aggregated by county in figures 2*A*, 2*B*, and 2*C*, respectively. Surface-water withdrawals by principal drainage basin and ground-water withdrawals by principal aquifer are shown in figures 3*A* and 3*B*, respectively. Aquifers have been grouped informally into unconsolidated alluvium and glacial outwash aquifers and bedrock aquifers (U.S. Geological Survey, 1985, p. 129–131). Major ground-water withdrawals were from the unconsolidated aquifers.

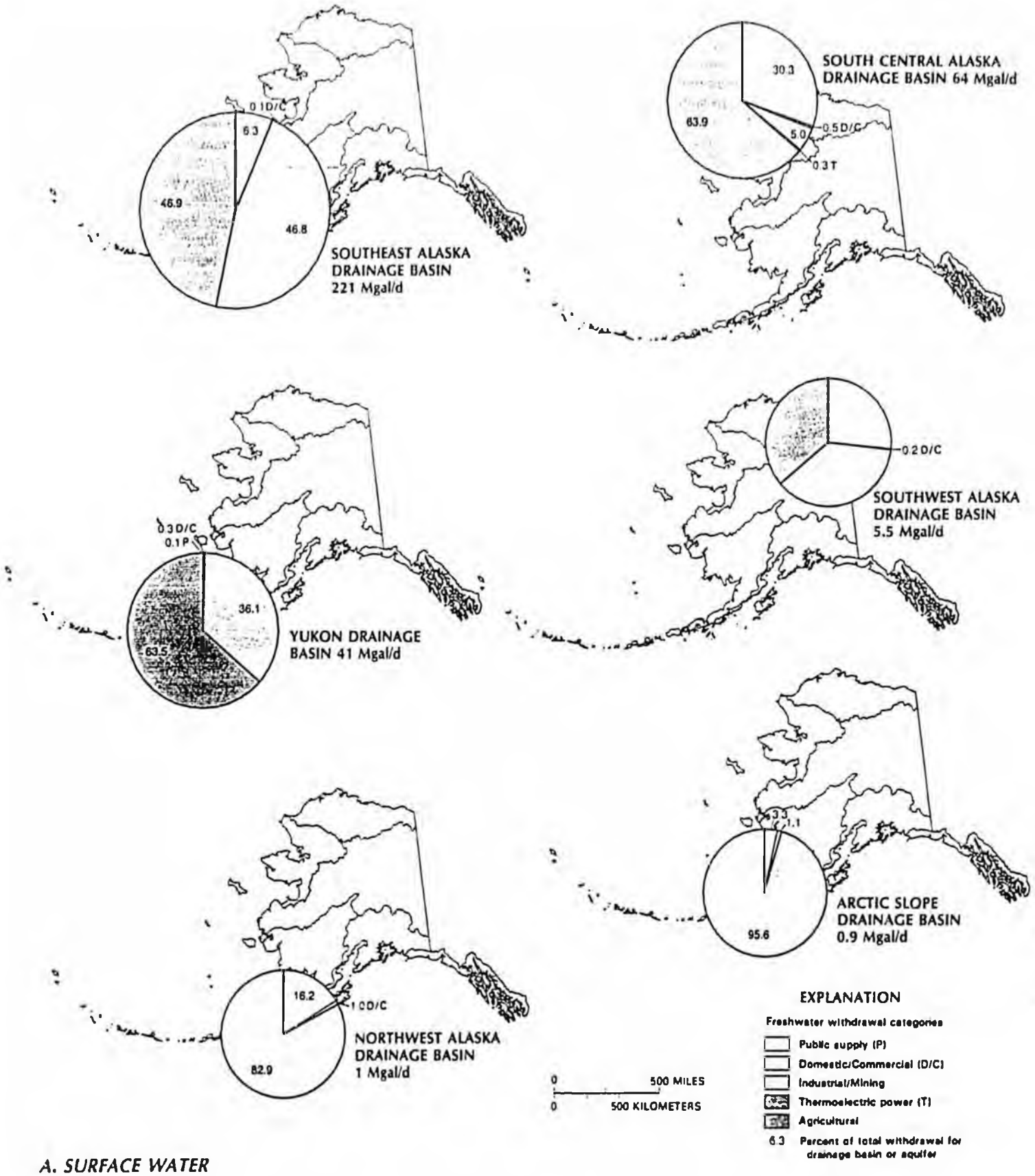
Most withdrawals occur in three of the principal river basins—Southeast Alaska, South Central Alaska, and Yukon (fig. 3*A*). Withdrawals in the Southeast Alaska basin were 55 percent (221 Mgal/d) of total water use in Alaska. About 99 percent of these withdrawals was surface water. Industry and fish hatcheries were the primary users of this water. In contrast, the South Central Alaska basin accounted for about 27 percent (110 Mgal/d) of the total withdrawals during 1985. This basin withdrew about 64 percent (64 Mgal/d) of the total ground water during 1985. The large withdrawals for public supply and self-supplied domestic uses provide water to the comparatively large population of the area. Public supply, self-supplied domestic, and industry were the major water users. The Yukon basin accounted for 15 percent (41 Mgal/d) of the total withdrawals. Water used for mining and fossil-fueled powerplants was 74 percent of the 61 Mgal/d withdrawn in the Yukon basin. Surface water was used for nearly two-thirds of this quantity.

The remaining basins, the Arctic Slope, the Southwest Alaska, and the Northwest Alaska, included 8 percent of the population and used 3 percent of the total water. Public supply and self-supplied domestic and commercial uses accounted for 61.9 percent of the ground-water withdrawals within the Yukon basin.

The source, use, and disposition of Alaska's water resources are shown diagrammatically in figure 4. The quantities of water given in this figure and elsewhere in this report may not add to the totals indicated because of independent rounding. The source data indicate that total freshwater withdrawals were 406 Mgal/d, of which 334 Mgal/d was surface water and 72 Mgal/d was ground water. The use data indicate that, of total freshwater use, industry and mining accounted for 34.7 percent and agriculture accounted for 38.6 percent. The disposition data indicate that most water (93.3 percent) was returned to natural sources and was available for reuse. Estimated consumptive use was 6.7 percent (27 Mgal/d).

Alaska's water is generally of sufficient quantity and acceptable quality for most uses. However, population increases during the last decade, especially in urban areas, have strained water-distribution systems and generated concern about water availability. In Anchorage, a measurable decline in ground-water levels has been attributed to increased withdrawals. Saltwater intrusion has halted further ground-water development in Auke Bay, near Juneau. In Kenai and in the Arctic Slope basin, water supply is a concern to communities near petrochemical industry activities.

Surface- and ground-water quality problems have been caused either by natural processes or by human activities. Natural processes include suspended sediment caused by glaciers, salinity, and undesirable concentrations of iron or arsenic produced by geo-



A. SURFACE WATER

Figure 3. Freshwater withdrawals by category of use and hydrologic unit in Alaska, 1985. *A*, Surface-water withdrawals by principal drainage basin. *B*, Ground-water withdrawals by principal aquifer. Abbreviation: Mgal/d is million gallons per day. (Sources: *A*, Drainage basins from Seaber and others, 1987; data from U.S. Geological Survey National Water Data Storage and Retrieval System. *B*, Data from U.S. Geological Survey files.)

chemical processes. Human activities include petrochemical contamination, the addition of nitrates through septic-tank systems, and the encroachment of saltwater in response to intensive ground-water withdrawal. Nevertheless, even in areas of water-supply difficulties, Alaska's water is generally satisfactory for most uses, although locally it may not be readily obtainable from the nearest or most economical source.

Public Supply

Public-supply systems withdraw, treat, and distribute water to users. The total withdrawals for public-supply in Alaska were an estimated 76 Mgal/d (fig. 4), which was 18.7 percent of total withdrawals in 1985. Surface water provided 46.2 percent (35 Mgal/d) of public-supply withdrawals, and ground water provided 53.8 percent (41 Mgal/d). Of total withdrawals for public supply, 40.3 percent was delivered for commercial use, and 39.0 percent was delivered for domestic use. About 60 percent (45 Mgal/d) of public-supplied water was delivered in the South Central Alaska basin.

About 62 percent of Alaska's population was served by public water suppliers in 1985. The Municipality of Anchorage supplied water to one-half of the population served by public-supply systems. The per capita use by all public-supply customers ranged from 10 to 380 gal/d (gallons per day) in 1985. Public-supplied domestic use ranged from 6 to 170 gal/d per capita. These values reflect the different types of water-distribution systems; for example, a public-supply system in the Arctic Slope basin may consist of a water-

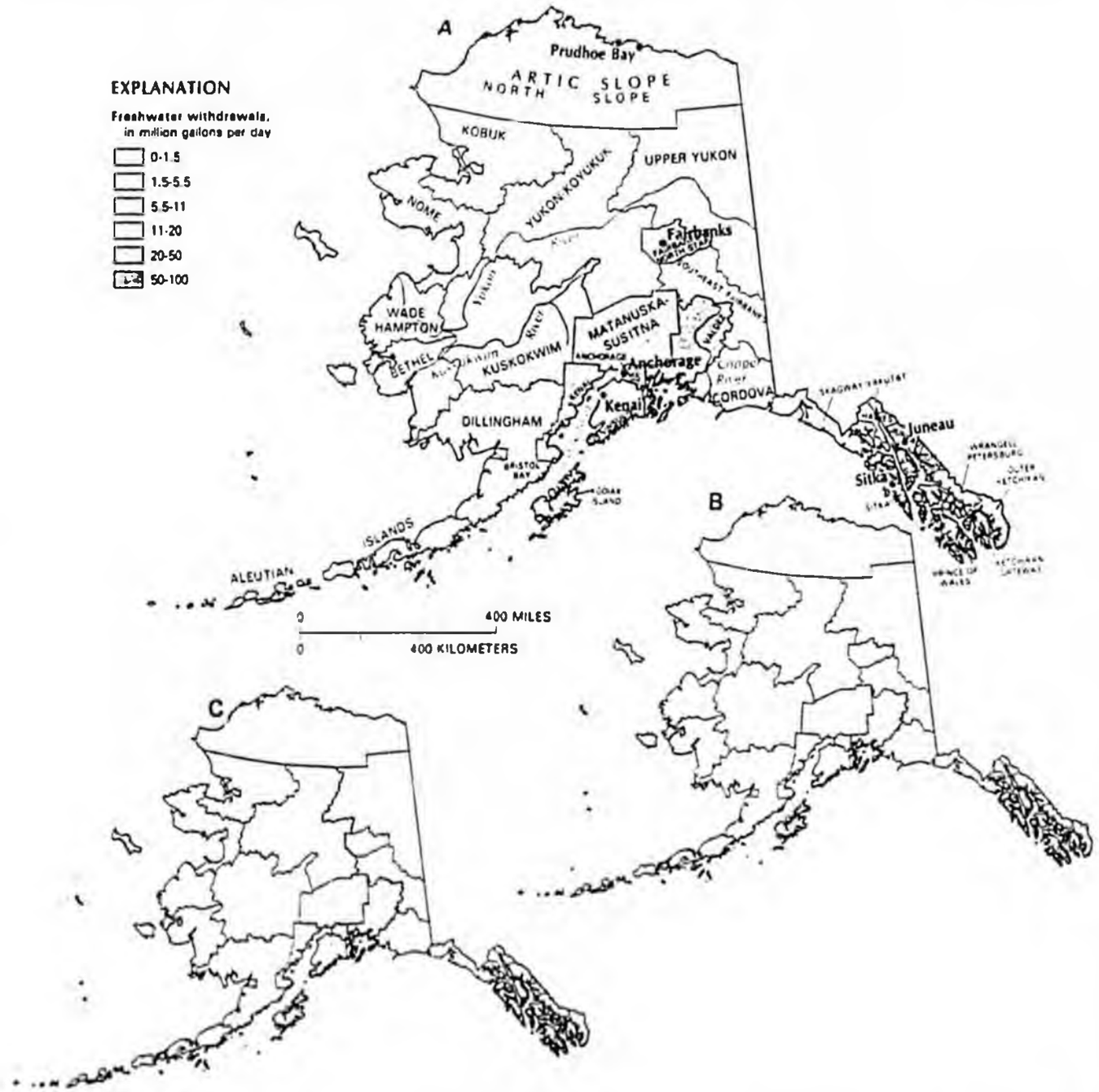


Figure 2. Freshwater withdrawals by county in Alaska, 1985. *A.* Total withdrawals. *B.* Surface-water withdrawals. *C.* Ground-water withdrawals. (Source: Data from U.S. Geological Survey National Water Data Storage and Retrieval System.)

delivery truck or a common well, and the primary use is domestic. In contrast, water in the Southeast Alaska basin is abundant, and distribution systems commonly are leaky; residents commonly leave their faucets running to prevent the pipes from freezing. In addition, water-intensive industries in the Southeast Alaska basin are served by public supply.

DOMESTIC AND COMMERCIAL

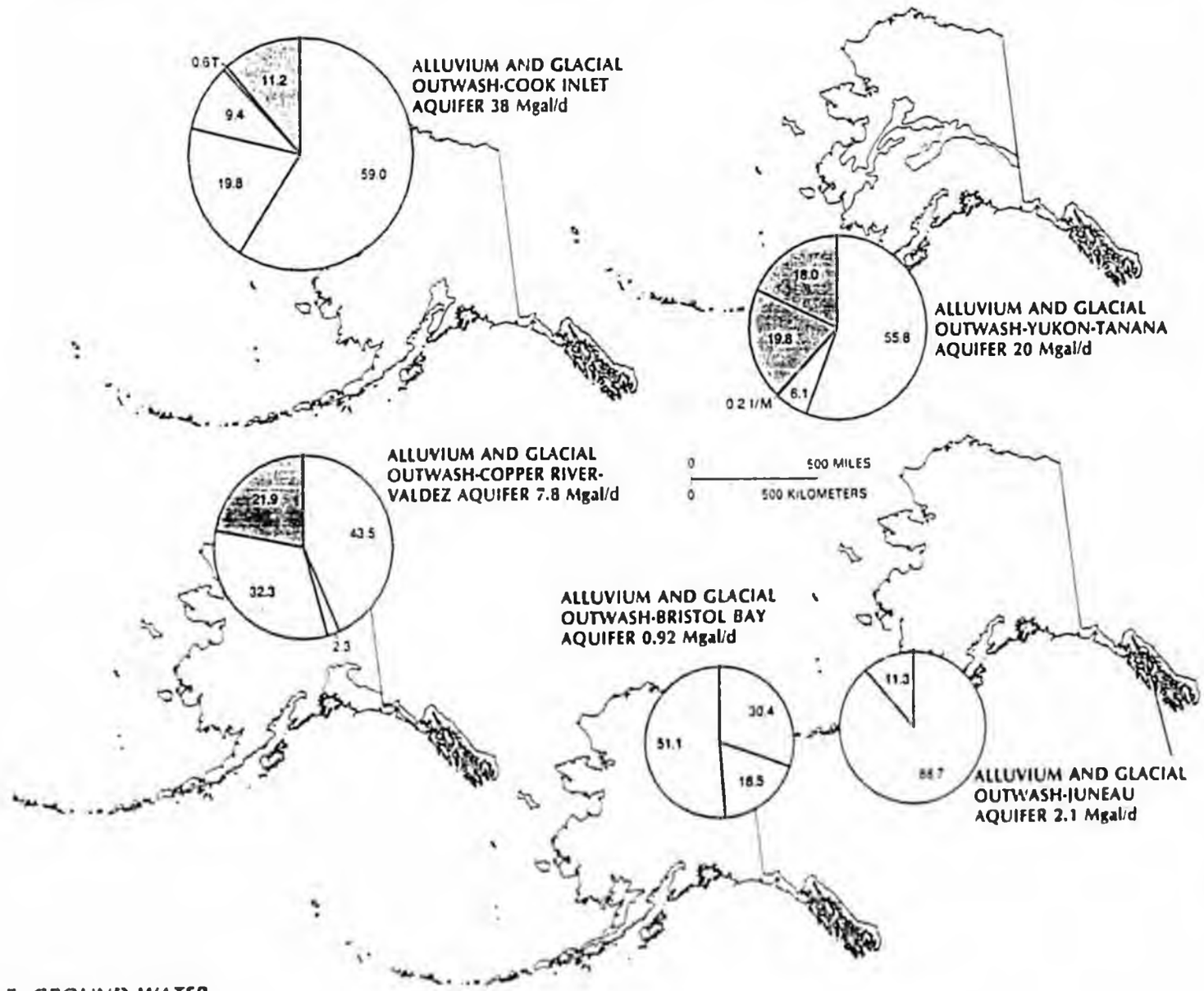
Total domestic and commercial water use, including conveyance losses and consumptive use, from public-supplied and self-supplied sources was 78 Mgal/d (fig. 4). Domestic use was about 39 Mgal/d, of which 29 Mgal/d was delivered by public-supply systems and 10 Mgal/d was self-supplied. Commercial withdrawals were about 31 Mgal/d, virtually all from public-supply sources. Conveyance losses were 7.6 Mgal/d.

The average per capita domestic use for the population served by public supply was about twice that for the population that was self-supplied. This difference can be explained, in part, by conditions under which water is delivered to homes that use these two types of supply. Public-supply systems typically serve a household that has standard plumbing. In contrast, many self-supplied households haul water from a lake, spring, river, or well and may have no plumbing.

INDUSTRIAL AND MINING

The estimated industrial and mining use was 141 Mgal/d in 1985. This represents 34.7 percent of total offstream water use (fig. 4). Industry used about 122 Mgal/d, of which 87 percent was self-supplied from surface-water sources. About 89 percent of the industrial water use was in the Southeast Alaska basin. Wood-pulp mills and seafood-processing industries in this basin used more than 100 Mgal/d in 1985. The petroleum industry was a major water user in the South Central basin.

Mining accounted for about 19 Mgal/d of water use. The Yukon basin had the largest area of mining activity and accounted for 76 percent of this water use. Adequate water supplies to support the exploration, development, and production in the Arctic Slope



B. GROUND WATER

Figure 3. Freshwater withdrawals by category of use and hydrologic unit in Alaska, 1985—Continued.

basin are commonly difficult to locate. Surface water is used primarily by placer-mining operations for washing sediments.

THERMOELECTRIC POWER

The fossil-fueled powerplants included in the survey used an estimated 31 Mgal/d (fig. 4) to produce 3,430 GWh of electricity during 1985. About 97 percent of the water was used by two plants in the Yukon basin, whereas 80 percent of the power produced by fossil fuel was produced by six plants in the South Central Alaska basin. These differences reflect the availability of water, the age of the powerplants, and perhaps different reporting methods. The water was used mainly for cooling purposes, and most was returned to surface-water sources.

AGRICULTURAL

Agricultural use during 1985 was an estimated 157 Mgal/d (fig. 4). Fish hatcheries dominated this category by using about 156 Mgal/d, of which 66 percent was used in the Southeast Alaska basin. Although the hatcheries in the Southeast Alaska basin exclusively use surface water, facilities elsewhere use ground water, which has a more consistent temperature and quality.

Agricultural water use for purposes other than fish hatcheries or irrigation totaled 0.21 Mgal/d, 48 percent of which was on Kodiak Island. Only 0.03 Mgal/d was used for irrigation; all of the reported irrigated farm acreage is in the Matanuska Valley, which is 40 miles north of Anchorage.

WATER MANAGEMENT

The Alaska Water Use Act (AS 46.15.010–270), which was enacted in 1966, established procedures to appropriate State water. The Act defines the doctrine of prior appropriation ("first in time, first in right") authorized by the State Constitution and delegates administration of the Act to the Alaska Department of Natural Resources (ADNR). The Act established procedures for maintaining existing water rights and for obtaining new water rights to all surface and ground water in Alaska. Water appropriations are limited to the specific use for which an individual applies. Additionally, the ADNR issues permits authorizing development and beneficial use of water. Issuance of a certificate of appropriation by the ADNR to the applicant is the final step in the water-rights process.

The original regulations implementing the Water Use Act were amended extensively on December 29, 1979, and incorporated as 11 AAC 93, Water Management. Recent amendments to the Water Use Act relate to geothermal development, reservation of water for instream uses, and administrative and judicial basinwide water-rights adjudication.

To manage the State's water resources effectively, the ADNR's Division of Land and Water Management (DLWM) requires technical descriptions and analyses and interpretations of various hydrologic conditions. The Department's Division of Geological and Geophysical Surveys (DGGS), Water Resources Section, provides the necessary data, analyses, and interpretations. Many long-term data are collected and interpreted by the U.S. Geological Survey, in cooperation with other Federal, State, and municipal agencies. Water managers of the DLWM use this information for water appropriation and water management decisions. Additionally, the DGGS, in cooperation with the U.S. Geological Survey and other State and Federal agencies, has developed and implemented the Alaska Water Resources Evaluation Plan to coordinate water-data collection and water-resource investigations in the State (Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys, and U.S. Geological Survey, 1985).

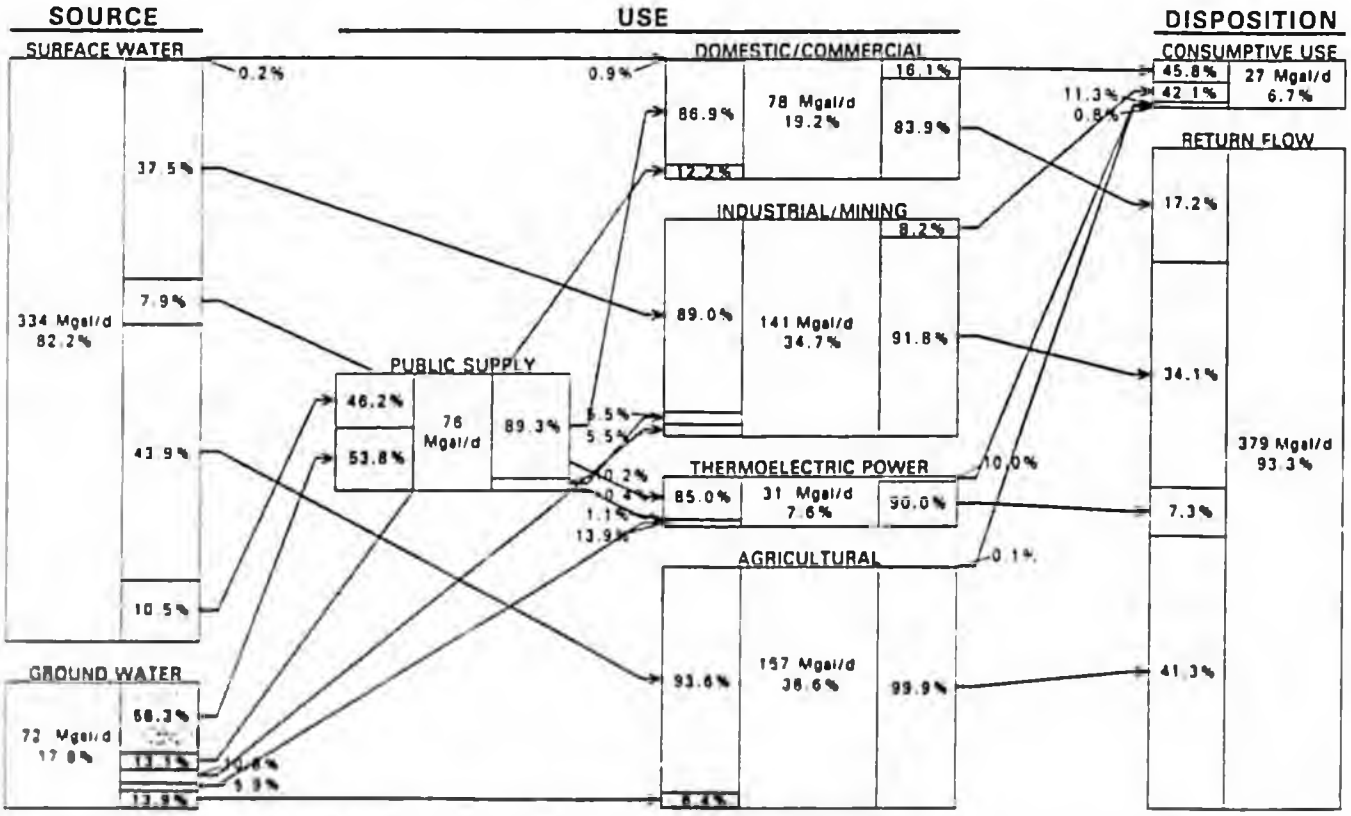


Figure 4. Source, use, and disposition of an estimated 406 Mgal/d (million gallons per day) of freshwater in Alaska, 1985. Conveyance losses in public-supply distribution systems and some public water uses, such as fire fighting, are included in the total shown for domestic and commercial use; losses in irrigation distribution systems are included in the total shown for agricultural return flow. All numbers have been rounded and values may not add to totals. Percentages are rounded to the nearest one-tenth of 1 percent (0.1%) between 0.1 and 99.9 percent. (Source: Data from U.S. Geological Survey National Water Data Storage and Retrieval System.)

Although few streams in Alaska are overappropriated, potential water-use problems exist. In the event of water shortages or drought, Ship Creek at Anchorage and Indian River at Sitka could possibly be examples in which the amount of legally obtainable water may exceed the water available for use. Water issues in Alaska also include hydroelectric projects, placer mining, oil development, salmon aquaculture, and proposed mining developments in the Southeast Alaska basin.

Most ground-water shortages in Alaska currently involve water for public supply and domestic use. Some areas within the Municipality of Anchorage are experiencing great ground-water demand for public and single-family domestic water supplies. As water levels declined, domestic wells become dry. The ADNR and Municipality of Anchorage are working cooperatively to solve several water-supply and distribution problems. Another area experiencing declining ground-water levels and saltwater intrusion is the Auke Bay area near Juneau (Dearborn, 1985), where the ADNR established Alaska's first "Critical Groundwater Management Area" to restrict further water-well drilling and development of ground water.

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Hydraulic "giant" used to remove overburden and expose gold-bearing gravel north of Fairbanks, Alaska. (Photograph by Gary Prokosch, Alaska Department of Natural Resources.)

Prepared by Leslie D. Patrick and Elisabeth F. Snyder, U.S. Geological Survey, and Mary Lu Harle, Alaska Department of Natural Resources

FOR ADDITIONAL INFORMATION: District Chief, U.S. Geological Survey, 4230 University Drive, Anchorage, AK 99508–4664

WATER APPROPRIATIONS 50 ACRE-FT. PER YEAR OR GREATER			
Type of Use	No. of Large Users	Ave. Acre-Ft Per User	Total Acre-Ft per Year
Cash Grains	2	405	810
Potatoes	1	100	100
Field Crops	12	145	1744
Farms-general	31	1584	49099
Animals-noncommercial	1	123	123
Lawn and Garden	5	266	1331
FinFish Fishing	1	5000	5000
Fish Hatcheries	79	4478	353736 *
Lode Gold	11	861	9472 *
Placer Gold	896	2130	1908270
Molybdenum Mining	1	1447	1447 *
Metal Mining	5	678	3389
Coal Mining	1	281	281
Crude Petroleum	2	1253	2505
Sand and Gravel	1	539	539
Aggregate Wash	2	328	657
Highway Construction	2	1202	2403
Frt. Trucking Terminal	1	484	484
Meat Packing	2	1086	2171
Seafood Canned	8	2874	22993
Seafood Fresh	1	81	81
Pulp Mills	1	5415	5415
Urea and Fertilizer	4	1149	4597
Petroleum Refining	1	855	855
Electric Power Generation	21	81983	1721650
Hydro Power Generation	72	35577	2561528
Public Supply	42	6531	274303
Sanitary and Waste	1	1954	1954
Steam Supply	3	67	202 *
Construction Material Whsl.	1	4000	4000
Office Building	1	61	61
Golf Course	2	60	120
Rec. Services	6	519	3115
Colleges	2	175	351
Wildlife Conservation	43	227537	9784083
Total	1265		16728869

* Does not include applications accepted, and pending.

WATER MANAGEMENT FEES

WHY A WATER MANAGEMENT FEE ?

The State of Alaska is considering a water management fee for a number of reasons, not the least being a method for the state to recover the cost of managing Alaska's water resources from the users of that resource. A water management fee has a few other benefits that the Department feels make the overall management fee proposal a complete management package. The management fee concept in addition to management cost recovery, promotes the idea that water is a valuable natural resource that is required by all Alaskans to fulfill their basic needs, such as for drinking and bathing, but is also used for the generation of power (hydroelectric, natural gas and oil), food (agriculture, seafood and other processing), timber, other petroleum products, mining, and many other products and services used on a day-to-day basis. These same water resources are used in their natural state to protect fish and wildlife and their habitat, recreation, transportation and water quality. The management fee concept may also promote water conservation. There are a number of studies that show, as the cost of water increases, the use of water decreases. The management of Alaska's water resource will also benefit the state's water rights program by providing the opportunity to update many of its water right files by eliminating those water rights no longer in use or by decreasing those water rights where the total quantity of water is no longer being used. The holders of these water rights will let the Department of Natural Resources know when they stopped using water or are using less water than what was originally granted to them when they receive their management fee notice each year. The updating of the water rights system will help the water manager better understand the water use requirements for specific commercial and industrial water users, sources of water in specific areas, where water is used and what it's used for.

WHO PAYS ?

Individuals and commercial and/or industrial businesses who use Alaska's water resources. In reality, it's not cost effective or feasible to charge all water users a fee. It has been estimated to cost the state $50.00 to send and receipt a bill, so the lower limit of a management fee would have to be $50.00. If the management fee is set at $1.00 per acre foot of water used, no water user using less than 50 acre feet per year would be charged. 50 acre feet of water is equal to about 44,600 gallons of water per day. The homeowner using an individual water system (well, stream, or lake), most small businesses, community water systems (serving less than 90 homes), and placer miners using a suction dredge smaller than 6 inches would not be subject to a management fee. The larger water users (50 acre feet per year or more) would be subject to the management fee. These could include commercial and industrial businesses, seafood processors, public water supply, agriculture, mining, pulp mills, oil and gas development, oil and gas processing and other large water users.

WOULD THE AVERAGE HOMEOWNER BE AFFECTED BY THE MANAGEMENT FEE

No, a homeowner using a well, spring, stream or lake for his water supply would not be affected by the management fee. The management fee would only apply to those water users using a quantity of water equal to or greater than 50 acre feet of water per year. A typical single family home uses about 500 gallons of water per day or 0.6 acre feet per year.

WHAT WILL THE FEES BE USED FOR ?

Our State Constitution does not allow the revenue generated from the management fee to be dedicated for a specific purpose. The Department of Natural Resources would account for these revenues under a separate accounting system and would request the legislature to appropriate these revenues each year to the Department for the purpose of managing the state's water resources. The yearly revenues would be used to collect, analyze and distribute water resource data, administer the water rights program, water resource planning, enforcement and compliance, and public education. Any revenues generated in excess of those necessary for management purposes can be used to strengthen the state's stream gaging network, establishment of instream flow reservations, and to provide funds to improve or construct remote water systems for towns and villages.

HOW MUCH REVENUE CAN BE GENERATED ?

Currently there are about 12,000 active water right files in the state. Those water users with a Permit to Appropriate Water or a Certificate of Appropriation would be subject to management fees if their use of water is 50 acre feet per year or more. Of the 12,000 active files less than 1265 use a quantity of water equal to or greater than 50 acre feet per year. The quantity of water associated with these 1400 water right files is about 16,720,000 acre feet per year. The largest single category of water user, if you include pending water right applications, is for fish and wildlife conservation. There are 43 files in this category with a total quantity of 9,780,000 acre feet or 58% of the total quantity associated with the 1265 water right files. The water in this category is proposed for use, or is used, for instream flow reservations, fish ladders, and habitat enhancement projects. Of the 43 water rights in this category, 42 belong to the Alaska Department of Fish and Game. It is the intent of the department to exempt state agencies and non-profit organizations from the management fee. If the water used by these exempted agencies and organizations are subtracted from the total quantity of water (16,720,000 acre feet), the quantity subject to management fees would total 3,400,000 acre feet. Assuming the management fee was set at $1.00 per acre foot per year, the revenues generated could total as much as 3.4 millon dollars a year. As the state grows and water appropriations increase accordingly, the revenues would also increase.

NOTE: These revenue figures are subject to the review and updating of the estimated 1265 water right files in which water use of 50 acre feet a year or more is on record.

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Type of Use	No. of Large Users	Ave. Acre-Ft Per User	Total Acre-Ft per Year
Cash Grains	2	405	810
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Seafood Fresh	1	81	81
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Rec. Services	6	519	3115
Colleges	2	175	351
Wildlife Conservation	43	227537	9784083
Total	1265		16728869

* Does not include applications accepted, and pending.

HOUSE BILL NO. 550

IN THE LEGISLATURE OF THE STATE OF ALASKA

SEVENTEENTH LEGISLATURE - SECOND SESSION

BY THE HOUSE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

Introduced: 2/19/92
Referred: Labor & Commerce, Resources, Finance

A BILL

FOR AN ACT ENTITLED

"An Act relating to the authority of the commissioner of the Department of Natural Resources to establish water use fees or provide for the sale of water resources; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* **Section 1.** AS 46.15.020(a) is amended to read:

(a) The commissioner shall exercise all those powers and do all those acts necessary to carry out the provisions and objectives of this chapter. The commissioner may

(1) subject to AS 36.30 (State Procurement Code), enter into contractual agreements necessary to carry out the provisions of this chapter including agreements with federal, state, and local agencies;

(2) apply for, accept, administer, and expend grants, gifts, and loans from the federal government and any other public or private sources for the purposes of this chapter, and adopt procedures and do acts not otherwise restricted by law which are necessary to qualify the state to receive grants, gifts, and loans;

(3) establish a division of water in the Department of Natural Resources and assign to that division the responsibility for carrying out the provisions of this chapter;

(4) notwithstanding any other provision of law, establish, by regulation, in appropriate circumstances, a water use fee or provide for the sale of water resources.

* Sec. 2. This Act takes effect immediately under AS 01.10.070(c).

SENATE BILL NO. 442

IN THE LEGISLATURE OF THE STATE OF ALASKA

SEVENTEENTH LEGISLATURE - SECOND SESSION

BY THE SENATE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

Introduced: 2/19/92
Referred: Resources, FSH, Finance

A BILL

FOR AN ACT ENTITLED

"An Act relating to the authority of the commissioner of the Department of Natural Resources to establish water use fees or provide for the sale of water resources; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*** Section 1.** AS 46.15.020(a) is amended to read:

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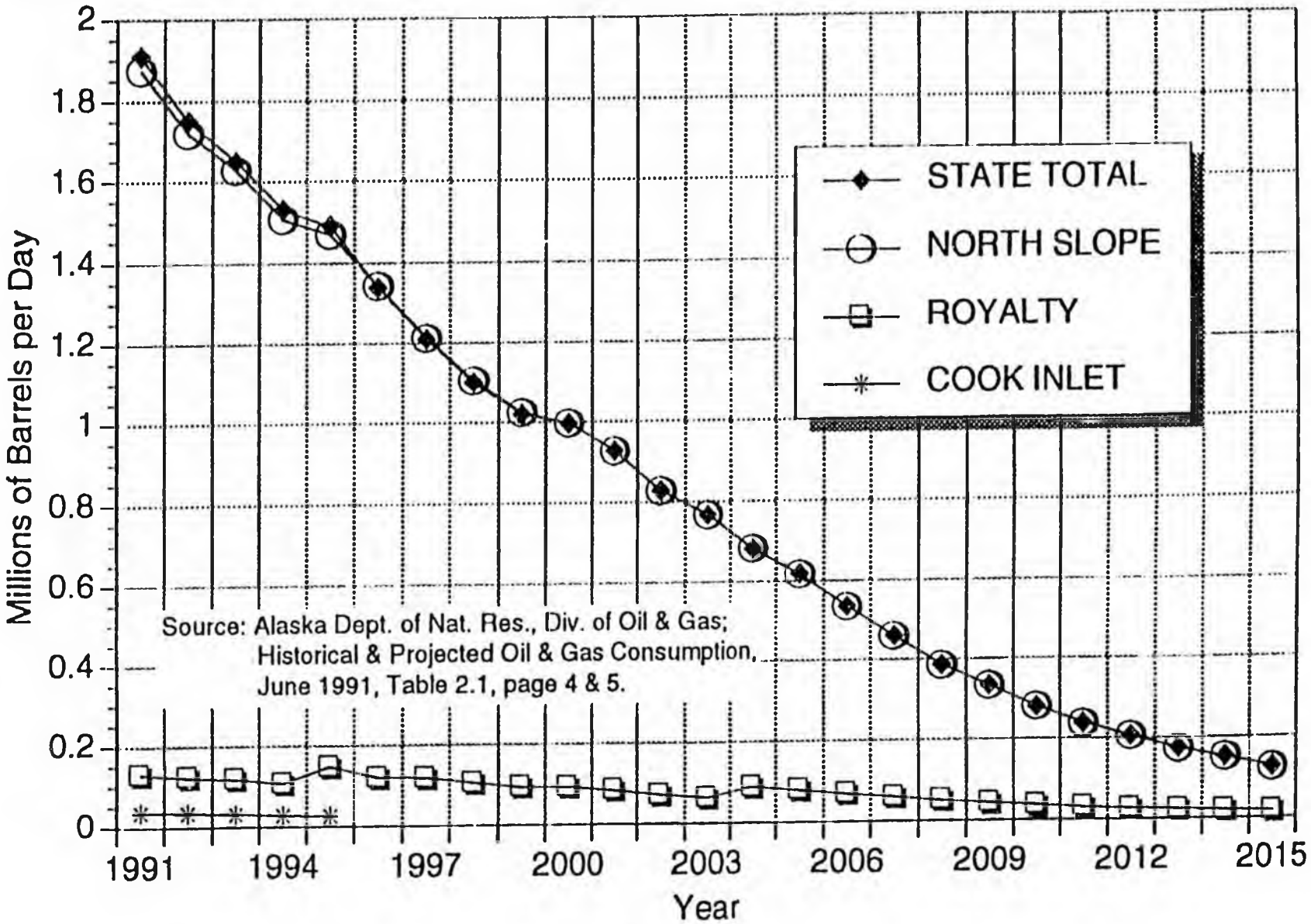
(2) apply for, accept, administer, and expend grants, gifts, and loans from the federal government and any other public or private sources for the purposes of this chapter, and adopt procedures and do acts not otherwise restricted by law which are necessary to qualify the state to receive grants, gifts, and loans;

(3) establish a division of water in the Department of Natural Resources and assign to that division the responsibility for carrying out the provisions of this chapter;

(4) notwithstanding any other provision of law, establish, by regulation, in appropriate circumstances, a water use fee or provide for the sale of water resources.

* Sec. 2. This Act takes effect immediately under AS 01.10.070(c).

Figure 4. Predicted State Oil Production



Alaska Water Resources Board

Established pursuant to AS 46.15.190-240

February 1992

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Office: 345-4000
Term ends: 2/21/93
Occupation: Well driller

Anthony F. Williams
9029 Rosedale Street
Juneau, AK 99801
Work: 463-5756
Home: 789-2301
Term ends: 2/21/93
Occupation: Miner

John A. Sander
Commissioner
Department of Environmental Conservation
Box O
Juneau, AK 99811-1800
Office: 465-2600
(ex-officio member)

J. David Norton
Alyeska Pipeline Serv. Co.
1835 S. Bragaw, Mail Stop 530
Anchorage, AK 99512
Work: 265-8179
Home: 276-2530
Term ends: 2/21/95
Occupation: Project Manager Design & Construction

Jenifer McBeath
1777 Redfox Drive
Fairbanks AK 99709
Work: 474-7431
Home: 479-2870
Term Ends: 2/21/94
Occupation: Researcher & Univ. Prof.

Keith E. Tryck
P.O. Box 310
Girdwood, AK 99587
Work: 277-2204
Home: 783-2666
Term ends: 2/21/95
Occupation: Miner

Harold C. Heinze
Commissioner
Department of Natural Resources
400 Willoughby Avenue
Juneau, AK 99801
Office: 465-2400
(executive secretary)

ALASKA WATER RESOURCES BOARD

Resolution 92-1

Arctic National Wildlife Refuge Task Force

WHEREAS: In Resolution 91-5 the Alaska Water Resources Board recommended that the State fund water data collection program for ANWR; and

WHEREAS: The State has a request for funding of this program from the Division of Water, Alaska Department of Natural Resources; and

WHEREAS: The Kenai Groundwater Task Force has been very successful in establishing the cooperative efforts of state agencies, federal agencies and privnte industry in pursuing a similar project; and

WHEREAS: The ANWR Water Data Collection effort would lend itself very well to the sam type of joint effort; and

WHEREAS: It would be beneficial and important for industry to participate as an indication of its commitment to environmentally sound and orderly development of ANWR.

NOW THEREFORE BE IT RESOLVED:

The Alaska Water Resources Board recommends that the administration invite industry to participate in a cooperative effort on ANWR ground water data collection.

Adopted this 7th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-2

Division of Water Funding

WHEREAS: The Alaska Water Resources Board congratulated Governor Hickel and Commissioner Heinze for their decision to finally establish a Division of Water; and

WHEREAS: The creation of the Division of Water culminates years of effort by this Board and many others; and

WHEREAS: The creation of the Division of Water did transfer funds existing appropriations to properly fund the new division; and

WHEREAS: The Division of Water, although in its infancy, has already identified a significant new revenue source to the state through a water use fee; and

WHEREAS: Sufficient funds for Fiscal Year 92 are necessary to provide the Fiscal Year 92 base for the Division of Water.

THEREFORE BE IT RESOLVED:

That the Alaska Water Resources Board urges the Commissioner to allocate funds to the Division of Water which represent Fiscal Year 92 appropriations intended for water programs; and

FURTHER BE IT RESOLVED:

That the Alaska Water Resources Board calls upon the Governor and the Commissioner to modify the Fiscal Year budget to reflect the above mentioned changes.

Adopted this 7th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-3

Ballast Treatment for Water Transport Tankers

WHEREAS: The export of water by marine tanker has been authorized by ADNR and there are pending applications of further permits; and

WHEREAS: The use of large marine tankers used for water transportation is a developing industry and the associated terminal facilities have not been constructed;

WHEREAS: The public process for ballast water discharge of water tankers has not been established.

NOW THEREFORE BE IT RESOLVED:

The Alaska Water Resources Board request that a public review process be established and implemented before ballast water discharge permits are issued for any marine tankers in the water transport trade.

Adopted this 8th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-4

Funding for Water Resources Data Collection

WHEREAS: The water resources of Alaska have not been adequately quantified; and

WHEREAS: A complete data storage and retrieval system has not been implemented for surface and ground water; and

WHEREAS: The newly created Division of Water has proposed a potential revenue source for the State of Alaska by establishing a user fee for users exceeding 50 acre feet/year.

NOW THEREFORE BE IT RESOLVED:

The Alaska Water Resources Board request that funds be identified in Alaska Department of Natural Resources budget request for a comprehensive data collection and retrieval system for Alaskas' water resource: and

BE IT FURTHER RESOLVED:

The ADNR pursue user fees to be paid by consumptive users of water to offset the general fund expenditure to quantifying for Alaska water resources.

Adopted this 8th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-5

Continual Participation in Wetlands Policy Development

WHEREAS: The National Wetlands Policy is in its final staged of development; and

WHEREAS: This policy will have a major impact on Alaska; and

WHEREAS: The Alaska Water Resources Board has previously expressed its concern over this issue in Resolution 91-6, March 20, 1991; and

WHEREAS: The Alaska Water Resources Board continues to be concerned about the impact of the National Wetlands Policy concerning Alaska.

NOW THEREFORE BE IT RESOLVED:

That the state investigate the possibility of state assumption of the Army Corps of Engineers responsibility in Alaska: and

BE IT FURTHER RESOLVED:

That the investigation clearly review the benefits and problems associated with continued Corps of Engineers administration versus on state administration.

Adopted this 8th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Charwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-6

AWRB

Snowfall Data Collection

WHEREAS: Accurate data on snowfall is essential to any planning concerning the uses of Alaska's Water Resources, including those in Arctic National Wildlife Refuge; and

WHEREAS: U.S. Weather Services methods of measuring snowfall have been found to be highly inaccurate in areas prone to high wind conditions; and

WHEREAS: The Soil Conservation Service has undertaken to improve the accuracy of snowfall collection data through the use of shielded facilities; and

WHEREAS: The S.C.S. service has made use of local schools to aid in gathering of accurate snowfall data.

NOW THEREFORE BE IT RESOLVED:

That the Alaska Water Resources Board request the Governor notify state and federal agencies to establish accurate snowfall data collection and recording facilities throughout Alaska; and

BE IT FURTHER RESOLVED:

That the Water Board directs the Commissioner of Natural Resources to work with the Soil Conservation Service to establish accurate snowfall collection and recording facilities throughout Alaska.

Adopted this 8th day of November, 1991
Alaska Water Resources Board

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-7

Adequate Funding for the Alaska Water Resources Board

WHEREAS: The Alaska Water Resources Board funding is provided through the budget of the Department of Natural Resources; and

WHEREAS: The level of funding to provide for the twice yearly meetings and staff support is approximately $10,000; and

WHEREAS: The Alaska Water Resources Board has been and continues to be an effective citizen's entity which focuses on and brings together a broad spectrum of water quality and quantity issues and recommends action to appropriate governmental bodies; and

WHEREAS: The Alaska Water Resources Board is respected by citizens, industry, legislators and agency personnel as a deliberative and balanced forum before which to present concerns and suggestions on water matters; and

WHEREAS: Resolutions from the Alaska Water Resources Board have resulted in the establishment of the such programs; as the remote maintenance worker, the Kenai Ground Water Task Force; in-stream flow, dam safety and basin-wide adjudication.

NOW THEREFORE BE IT RESOLVED:

The Alaska Water Resources Board requests support from the Department of Natural Resources and the legislature for adequate funding in the 1993 budget for continued effective functioning; including two meetings and staff support.

Adopted this 7th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

ALASKA WATER RESOURCES BOARD

Resolution 92-8

Support for Continued Participation in Western States Water Council

WHEREAS: The Western States Water Council studies, recommends actions and lobbies on all water related issues affecting Western States, including Alaska; and

WHEREAS: The Alaska Water Resources Board has long advocated Alaska's membership an active participation in the Council because the information network and resource assistance provided by that organization is very beneficial; and

WHEREAS: The Western States Water Council is an effective and well respected voice on all water matters in Washington, DC and the state capitals of participating members; and

WHEREAS: Participation in Council meetings by staff from Alaska Departments of Natural Resources and Environmental Conservation have shared Alaska's experiences and concerns with other western states and have learned from the many presentation and policy papers provided by the Council.

NOW THEREFORE BE IT RESOLVED:

The Alaska Water Resources Board strongly urges continued membership and active participation in the Western States Water Council by the State of Alaska.

Adopted this 7th day of November, 1991
Alaska Water Resources Board

Peg Tileston

Peg Tileston, Chairwoman
Alaska Water Resources Board

Fact Sheet:

Alaska Department of NATURAL RESOURCES

Alaska Water Resources Board

Division of Land & Water Management • October, 1990

The seven-member Water Resources Board advises the Governor on all matters relating to the use and appropriation of water. This includes reviewing bills, statutes and regulations that govern water rights, multi-purpose uses of water, prevention of pollution, protection of fish and game, water resources studies and plans, water resources development, dams, impoundments, and reservoirs. The Alaska Water Resources Board was established by Article 3 of Alaska Statute 46.15, the Water Use Act, which was enacted in 1966.

Membership

The Board is composed of seven citizens appointed by the Governor and confirmed by the Legislature, who have knowledge about the use, conservation and protection of water in Alaska. Board members serve four-year terms of office and represent a geographic diversity and variety of occupations and professions associated with water resources. The Director of Boards and Commissions in the Governor's Office will provide application information to anyone interested in serving on the Board.

In addition to the seven citizen members, the Commissioner of Environmental Conservation is an ex-officio member, and the Commissioner of Natural Resources is the executive secretary and provides staff to the Board.

Board Meetings

The Board is required by AS 46.15.220 to hold at least two meetings a year, with one of the meetings held in Juneau. The Board holds the Juneau meeting each spring when it reviews pending water resources legislation and meets with legislative committees and the Governor. The Board also holds a fall meeting in another part of the state to discuss regional water issues and to allow residents an opportunity to voice their water resources concerns to the Board. Meetings generally last two to three days. On occasion, the Board holds interim meetings which may be by teleconference.

The Board covers a wide range of topics at its meetings. In general, a presentation on a topic is given by an agency, industry, interest group representative or member of the public, followed by a discussion of the topic by the Board. At the conclusion of meetings the Board adopts resolutions recommending a course of action to the Governor. The Board may also send a resolution or letter to a state agency, the legislature, or the Congressional delegation, or informally discuss problems with agency representatives.

Public Participation

All Board meetings are open to the public and the public is invited to attend. An evening is set aside for a public comment session specifically to allow members of the public, industry, interest groups or agencies to discuss water resources matters of concern with the Board.

More Information

For further information about the Water Resources Board, its meetings or current members, contact:

Department of Natural Resources
Division of Land and Water Management
Water Resources Board Coordinator
P.O. Box 107005
Anchorage, Alaska 99501-7005
(907) 762-2263

Office of the Governor
Director of Boards and Commissions
P.O. Box A
Juneau, Alaska 99811-0101
(907) 465-3500

ALASKA WATER RESOURCES BOARD

February 1992

BIANNUAL REPORT TO THE BOARD

by Ric Davidge, Director of Water
State of Alaska

Much has happened since my last report to you. I do want to again encourage each of you to take the time and visit with us between Board meetings. I hope the materials that we have sent you over these months have helped you keep in touch. As you know Dan Allison has been assigned by Dave Orr to assist in staffing the Board. We would like you to communicate directly with him if you have any travel or per diem questions. Dan would also like any feed back on the monthly mailings, the agenda or the packet provided you.

The Water Summit

We have had the first meeting of the senior managers for state and federal agencies involved in water resource management in Alaska. Nearly every agency was represented. Termed the "Water Summit", this gathering, the first of its kind since Statehood, sat down and reviewed who was doing what and how we can do it better together. Commissioners Heinze (DNR), Sandor (DEC), and Rosier (F&G) lead the meeting.

One of the conclusions of the Summit was the creation of a Water Management Council. This water management coordinating body, originally suggested by Frank Trelease in 1976 although in a different form, will consist of the senior program managers at the Director's level of all state and federal agencies dealing with water issues. Mike Menge, Director of Environmental Quality, ADEC; Frank Rue, Director of Habitat, ADF&G; and myself will formalize the Council for approval by the Cabinet. We hope to have this completed by the first of March this year.

The Council will meet no less than quarterly to review water program coordination issues and resolve any conflicts. Activity specific cooperative agreements will be developed and institutionalized to ensure decisions are carried forward over time. Broader programmatic agreements will also be developed to ensure that key activities are coordinated. For example: The Division of Water has discovered that public water systems have been permitted and are in operation without any authorization to use the water. Already this problem has been identified by the Council and internal procedural changes are being implemented to ensure this does not happen.

One of the most important results of the Summit is the identification and development of specific work groups. One of the key groups is in water data collection, storage, management, reporting/publishing and quality control. A host of other work groups have been identified and I hope to be able to report to you at the Board meeting just what they are, who has been assigned to them, what their task is, and what due dates have been set for completion.

The recommendations of the State Water Resources Board are an important source of direction to the emerging Water Management Council. You might say that we now have a vehicle to ensure that your recommendations are directly addressed in the cooperative nature that many require. It is our intention to advise the Water Board of all meetings of the Council so that you may attend.

National Water Law Conference

I have just returned from attending my first Water Law Conference and am pleased to report that I was able to convince the Attorney General's office to assign an Assistant AG to water. Rob Nauheim, Asst AG in the Civil Litigation Division in Anchorage has been assigned to work on water issues and was able to travel with me to the Water Law Conference.

Alaska continues to be on the cutting edge of many water management issues. It is generally agreed that our "public interest doctrine" in the "Alaska Water Act" is one of the best, most specific and forward thinking. It also clearly places authority and responsibility on the Commissioner of Natural Resources as he considers water management decisions. Alaska's "In Stream Flow" statute is also considered one of the best in the nation and is being used as the basis for such statutes in other states.

Our proposed water user fee and water sales legislation and the approach we are taking with this bill is considered novel and very progressive by many states that are also wrestling with the question of financing water resource management in the face of fewer general fund dollars. I expect we will see some national interest in how this all works out.

One of the best things that comes out of these multi-state meetings is the development of a network with top officials across the nation on water issues. Both Rob and I connected with many scholars and litigators who are on the front line of water policy.

New Application Regulations

Faced with the need to increase program receipts as a revenue base for water management funding, and with some technical and policy problems in the existing water management regulations, we have spent a great deal of time making the

necessary corrections. The proposed regulations to implement these changes have now been published for public comment including providing for public hearings in three major cities.

We did not just raise fees. In fact we propose to lower the fee for single family domestic applications because, it is my opinion, and one I believe you share, that the public interest is served with a low fee that encourages applications, not required by law, from single family domestic water users. But it is the well log data we receive from this source of applications that provides the widest sampling of ground water resources in developing areas for the least cost.

In addition to the application fee adjustments in the proposed regulations, we have included the State Water Management Policy for public comment. This has been previously presented to you and all state agencies for review and comment. Dave Orr and I have reviewed all comments received and modified the policy to reflect what we believe to be the interest of most. I want to encourage you to review this articulation of state water management policy and participate in the public commenting process.

Exports

I continue to make an effort to market the water resources of Alaska. In this endeavor I am more and more aware of the need for water resource data and information management. As I discuss potential sources for water exports I find that ADF&G often has data on the source as a potential location for hatcheries or for other purposes. This has brought the FRED Division and DOW Hydrology closer together in a very constructive way. I also find that there are a number of large water sources in SE that have already had some impact by man in the form of dams or pipelines many of which are no longer in operation. Rick Noll our new Hydrologist III in Juneau continues to do an outstanding job in coordinating with federal and state agencies on potential water export sources.

I have spoken before the Metro Water District of Southern California (165 managers), the Association of California Water Agencies biannual meeting (over 500 managers) and with a number of smaller groups. My presentation includes over 80 slides and about a 30 minute talk. This has been well received and many follow up calls are initiated.

Sun Belt Water of California continues to be the only applicant for water exports to date. We have two applications and anticipate many more. I continue to be impressed with the sensitivity that Sun Belt shows to Alaska environmental and political concerns. I recently met with the CEO and senior managers of Montgomery Engineering in Pasadena, following the Water Law Conference. Montgomery is working with Sun Belt on the tanker concept.

David Kennedy, the Director of Water for California, and I have established a very positive and professional relationship. He is highly regarded in the western states and continues to be a valuable resource.

I have started to collect materials on water markets in California and other states. John Fraser, Ex Dir, Assoc. of Calif Water Agencies has been a great help. If you are interested in any of this material let me know.

Western States Water Council

July 1993 Meeting of WSWC will be in Anchorage

The Executive Committee of the Council has agreed to have its July 1993 meeting In Anchorage, Alaska. This will be the third time the Council has met in Alaska but the first time in Anchorage. I am working with the Alaska Visitors Association and local hotels etc. to ensure that this visit is very successful. Given the level of interest in Alaska at the Council I expect a full meeting with even some hangers on. The participation of the Board at this Council meeting would be most helpful to the Council and the Board. I will keep you advised of our scheduling progress.

Reauthorization of the Clean Water Act

For the last two meetings of the WSWC we have spent a great deal of time on Senate Bill 1181. We have forwarded to each of you the last rendition of the bill from the majority staff of the Senate Environment and Public Works Committee. Mike Menge, who has now joined me on the Council representing the Commissioner of ADEC, has taken the lead on this very complicated and expanding issue. The State of Alaska has prepared and submitted some preliminary comments on the bill which have been sent to you. We are continuing to review the legislation and assist Mike in his efforts. On February 7, Mike attended a meeting in Washington, D.C. with representatives of all states, EPA and Congressional staff. Mike will give you a report during the Board meeting on the status of this important legislative activity.

FERC Issues

At my request the Alaska Energy Authority has assigned Brent Petrie to the Council to work with me on FERC issues. I have enclosed in your packet a copy of his report from the last meeting.

National Water Policy Act

There appears to be little activity on this effort in Congress and I do not expect any significant activity until after the November election. The concerns of states and tribes have been heard in the Congress and we expect the legislation to recognize the

critical role western states play in water policy. We will continue to keep you advised as this issue develops.

Wetlands

During the last meeting of the WSWC, the Deputy Administrator for EPA and the Assistant Secretary of the Army discussed the comments they have received on the wetlands delineation manual. We were encouraged to hear that most states commented that regional criteria should be developed recognizing the different hydrological, vegetation and soils characteristics of wetlands. They also recognized that "values" can be quite different based on regional ecologies.

I also had the opportunity to talk with Assistant Administrator of EPA, LaJuana Wilcher at the Water Law Conference. She advised that there is broad recognition of the differences in Alaska wetlands and that the State has impacted far less than 1 percent of its wetlands. LaJuana has just completed a tour of Alaska with Senator Murkowski and participated in a number of hearings on national wetland policy.

WET FORCE has meet twice since the last board meeting and is monitoring developments. Our focus is to identify specific wetland delineation criteria unique to Alaska and to provide the technical, scientific support needed by the Commissioner and DEC on wetland issues. We have also reviewed an ecological mapping program of the State that was done some years ago and is now underway with USGS and EPA.

State Water Management Organizations

The staff of the WSWC have been very helpful in assisting me solicit and collect copies of state laws and regulations as well as organizational materials from the western states on how they have organized their water resource management. You should know that a number of states, Oregon being the most aggressive, are proposing many water organizational changes. There seems to be an effort to merge water quality and quantity together as managers discover the interrelationships of these two aspects of water management and the efficiencies that can be realized. We have collected the material we have to date in binders that you are certainly welcome to review. We will continue to collect this material for reference purposes.

Our efforts have, however, triggered a general awareness that the WSWC needs current organizational information on each member state and the Council staff are now attempting to institutionalize the collection and review of such material each year or as changes are made.

State Fee Programs

Similar to our efforts to collect organizational information from other states, we have also collected material on water fees. This material is in a binder in the main office and available to you. This review did discover a law in Utah that charges a special fee for removal of groundwater from a drainage. This idea is now being reviewed by myself, staff and the AG's office as a possible mechanism to establish a special fee for the removal of water from a hydrological unit. This may be one of the means we use in our regulations, provided the water fees legislation is passed, to assess a separate fee for water transfers out of a hydrological unit.

The State of Oregon appears to be leading other states and moving quickly towards an aggressive fees program, according to the pages we received from a DRAFT report prepared for the Governor of Oregon. It is also important to note that Oregon recently won an important court decision that federal agencies must pay a state for the adjudication of a reserved federal water right. This recognizes that the water belongs to the people of that state, or to the state itself, depending on the particular state constitution, and that the state is the proper entity to adjudicate water rights on all lands within that state.

We will continue to solicit and collect information on other State fee programs. We have recently been informed that the State of Kentucky has had a water user fee program in existence for over 15 years.

Legislation

As you all know by now the administration has agreed to support two bills introduced by Rep. Cliff Davidson. HB354 that will direct and provide funding for a cooperative effort by USGS and the State to evaluate our water data collection network, and HB353 that will direct and provide funds for the completion of the STORET or similar information system are now formally supported by the State. We have not agreed to support HB355 which would make amendments to the instream flow statute because we believe that the public interest doctrine embodied in the Water Act and language in the Instream flow law are more than sufficient to ensure that fish and wildlife concerns are addressed.

One of the problems we have identified in HB355 is the reference to a general reservation of "wildlife habitat". To date I have not been able to find a model or water appropriation tool that would allow adjudicators to "reserve" water specific to wildlife needs. The quantification of a "wildlife habitat" reservation presents enough scientific problems that I suggested to Rep. Davidson he drop the reference. We do continue to work with Rep. Davidson and his staff as well as ADF&G to identify any specific concerns that can not be addressed in existing law or process.

I am concerned that we have a growing number of instream flow reservation applications pending that we do not have the fiscal or manpower resources to adjudicate. I have raised this issue directly to ADF&G and in the Water Summit. I have also suggested that funds now consumed by ADF&G from the Dingell-Johnson fund be reapportioned to allow the funding of one adjudicator in the Division of Water for instream applications. These funds are basically used for water bodies that are used for sport fishing, however almost all streams that are of concern to ADF&G would be those that are used or potentially could be used for sport fishing. Rather than use the Dingell-Johnson funds to just make applications we should use some for adjudications too. I will continue to work with ADF&G and the US FWS in an effort to resolve this.

Budget

Although there was significant discussion at the last Board meeting about the budget of the Division of Water, with the assistance of DNR's Division of Management and my Section Chiefs, it looks as if we can get through this fiscal year without to much concern. I do receive monthly reports on expenditures and the fiscal office in Juneau is watching this closely for me.

We have included a copy of the FY93 DNR Budget overview for your review and discussion at the meeting. We certainly look forward to your assistance as we move our budget through the various legislative committees. If you have specific questions regarding any budget concerns please call me directly.

Title Navigability

I have made some organizational changes in this area allowing more people to work on this priority. In addition to Russ Watts, Dan Allison and Dave Orr have been assigned aspects of title navigability. We have presented the Bureau of Land Management our first drainage wide navigability determination and are awaiting their review and comments. These are due to me by February 15th so I should have an updated report for you at the meeting. We have included a status report on our review of water bodies in federal units in your packet.

The development of our data base on waterbodies continues. We are currently awaiting the acquisition and receipt of some additional computer hardware and software that will significantly expand our capabilities. If the STORET legislation is approved and the funds are made available, the integration of our data base and STORET should also provide use with graphic capabilities on waterbodies.

Consistent with my decision that when we are surveying title navigability, we review entire stream basins or watersheds rather than segments of streams, staff is now reviewing the Kantishna watershed. Kantishna was identified as a high priority due

to mining claim and National Park Service conflicts.

State Water Management Strategy

We have called in some national (with offices in Alaska) water consulting firms and discussed with them our ideas on the development of a State Water Management Strategy. I have also met with one firm while in California which has expressed an interest in our effort. What we asked of each was their ideas on approach and what we could expect to get for the proposed $150,000 originally requested. We have received comments from three of the firms and are awaiting comments from the California firm. Each of the firms understands that their participation in this informal consultation does in no way give them any advantage when and if a formal request for proposal is issued. Once we have received all the comments and suggestions requested we will make them available to you.

Increase Water Rights Compliance

As we discussed in the last board meeting, I have identified a priority of alerting Alaskans that they need to protect their water rights by securing permits and certificates. We did send two adjudicators out to the Palmer and Wasilla area for two days and asked them to contact commercial enterprises that we thought should, but did not have, water rights. Although the return has not been what I would have hoped, we did make a number of important discoveries about ADEC permitted public water systems that did not have water rights. We are in the process of correcting this coordination problem.

With the publication of proposed adjustments in water application fees, we expect a serge of water rights applications. We are also still looking at the Water Management Strategy project as an important vehicle to alert people to protect their water rights.

To date it is my conclusion that our most cost effective approach is in program coordination. The institutionalization of the Water Management Council is key to identifying compliance problems. We will continue community notification efforts such as we have begun with the financial institutions in the Anchorage area and with municipalities.

Hydrological Survey

In addition to the update you have in your packet from Bill Long, I want to raise a couple of issues. When I arrived it was brought to my attention that conflict had developed between USGS and the State Hydro Survey. Bill Long, Section Chief for our Hydro Survey and Phil Carpenter, State Director for USGS and I have spent a few hours reviewing and exploring this challenge. I am pleased to report to you that

we now have resolved the concerns and have begun 1992 with a very close and constructive working relationship which was culminated in a new Coop-Agreement.

This effort was then extended to the US Soil Conservation Service and we should soon have a cooperative agreement between the Division and US SCS as well as USGS that will set a standard for interagency cooperation. To me this was a significant accomplishment and one that is greatly due to the mature and professional efforts of Bill Long and Phil Carpenter.

The Interagency Hydrologic Committee has also recognized that the relationship between the state and USGS as well as all other water management related agencies has greatly improved. Again the institutionalization of the Water Management Council is essential if we are to continue to move forward in agency cooperation.

We have also included for your attention a Cost Recovery Agreement which we have negotiated with USGS. Jim Munter is the key staff person on this agreement.

Dam Safety

The Lake of the Hills Dam in Anchorage has not been in compliance with respect to their emergency notification and action plan for some time. Due to the continuing efforts of Kyle Cherry and the AG's office we have served notification of penalties etc. to the homeowners association which has now resulted in a serious effort to come into compliance. Kyle continues to work with the Municipality of Anchorage and the homeowners association to bring this high risk dam into compliance.

We are working closely with the Homer community to assist in their efforts to correct problems with their drinking water dam. These problems appear to be from the construction of the core of the dam. We should know by this summer what needs to be done to correct the problems.

One of the things I discovered over the past months is that emergency preparedness exercises have not considered dam failures in the past. As a result we have requested that during the next natural disaster exercise some specific dams fail and that the exercise evaluate the effectiveness of our efforts to deal with such events. We hope to have our first experience this spring. I'm sure you will all find this of interest at our next meeting.

Time Management Program

As we discussed in the first meeting I required all employees of the DOW to fill out time/project management forms. My purpose in doing this was two fold. One it would allow me weekly to know and understand what we are all doing and second

it would give me some idea of the amount of time and money we spent doing it. We have reviewed the data collected over the last half the 1991 and evaluated the program. I have decided that I will now rely on each of my Section Chiefs to keep track of time and costs and that they will be responsive to management questions as they arise.

I have instituted a monthly report requirement for all section chiefs and field offices. You have the first such reports included in your packet. Dan Allison will now send each member of the Board a copy of all monthly reports after they are received and reviewed by me. This should assist you in keeping up to date on what we are doing.

Review of all PDQ's

With the creation and organization of the Division of Water it is necessary that we review and revise all Position Description Questionnaires (PDQ). This is the document that describes what each position is responsible for and what management's expectations are. We are well on our way to finalizing these documents. If you are interested in a particular position description please contact me directly.