

SJR

48

Alaska State Legislature

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Senate Committee on Resources

M E M O R A N D U M

April 8, 1986

TO: All Members
Senate Resources Committee

FROM: Staff *H* Senate Resources Committee

RE: *S*AJR 48 Relating to the continued operation of
the Institute of Northern Forestry at
Fairbanks and the Forestry Survey Group
in Anchorage

SJR 48 requests the U.S. Congress to appropriate funds and direct the U.S. Forest Service to reverse its decision to close the Institute of Northern Forestry at Fairbanks and to restore the capacity of the Anchorage Forestry Survey Group.

As part of the federal government budget cuts, the U.S. Forest Service Institute of Northern Forestry at Fairbanks is proposed to be closed. The budget for this operation is \$735,000. In addition, a \$150,000 reduction is proposed for the Forest Inventory Research group at Anchorage.

There is a zero fiscal note.

Enclosures:

U.S. Forest Service fact sheet on Fairbanks
U.S. Forest Service fact sheet on Anchorage
Memo from DNR
Institute of Northern Forestry work plan

STATE OF ALASKA 1986 LEGISLATIVE SESSION FISCAL NOTE

Revision Date : _____

REQUEST

Bill/Resolution No.: SJR 48
 Title: Continued operation of the
 Institute of Northern Forestry
 Sponsor: Senate Resources
 Requestor: Senate Resources
 Date of Request: April 7, 1986

FISCAL DETAIL

Agency Affected: _____
 BRU: _____
 Components: _____

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -

CAPITAL	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -
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REVENUE	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -
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FUNDING : (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS :

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

Prepared by: Senate Resources Committee Phone: 465-3818
 Division: _____ Date: April 7, 1986

Approved by ^{Chairman} ~~Commissioner~~: _____ Date: April 8, 1986
 Agency: Senate Resources Committee

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

February 5, 1986

Pacific Northwest Forest Experiment Station Comments on
Proposed Closure of Institute of Northern Forestry, Fairbanks

As part of the fiscal 1987 budget submitted to Congress February 5, the Chief of the Forest Service has proposed closure of the Institute of Northern Forestry at Fairbanks. As the Institute of Northern Forestry, the Forest Service has carried on research at Fairbanks, since the mid-1950's, and the current facility was constructed in 1962-1963. Current programs include research on management strategies for interior Alaska forests, effects of fire and methods of control, classification of Alaska vegetation, dealing with forest insects, managing forest habitat for wildlife, and managing for quality water from forests. The laboratory has seventeen employees, in a 13,000 square foot facility, located on the University of Alaska campus.

The closure is proposed as part of a continuing effort to reduce the costs of government. The sharp downturn in the 1987 budget, coupled with the impact of inflation on budgets of the last few years, necessitates significant management actions.

Past research has focused on providing a basic understanding of the characteristics and ecology of Interior Alaska forests. With current need to reduce expenditures, it is inappropriate to embark on the next generation of studies, which should emphasize development of the land and its resources. All research on managing forests and fire will be eliminated, and wildlife habitat research will be reduced, for an annual cost reduction of \$735,000. Those programs that remain will be moved to Anchorage, to avoid the fixed costs of maintaining a facility in Fairbanks. To the greatest extent possible, employees will be reassigned to funded jobs at Anchorage or at other locations.

FACT SHEET

Reagan Administration Proposed Budget Reductions and Resulting Change in Forest Service Research Programs in Alaska in Fiscal Year 1987 (Begins October 1, 1986)

1. Reduce funding at Fairbanks Forestry Sciences Laboratory (Institute of Northern Forestry) by \$735,000.
2. This would close the Laboratory and terminate the services of 10 permanent employees.
3. All research on silviculture, ecology of Interior Alaska forests, vegetation classification, genetics, and fire effects and control, is scheduled to be terminated. Wildlife habitat research would be reduced but not closed out.
4. The remaining research and employees at Fairbanks in soil, water, forest insects, and wildlife habitat will be consolidated with the Forestry Inventory Research at the Anchorage Forestry Sciences Laboratory.
5. Reason given for closing the INF laboratory is that research to date has focused largely on basic forest and related ecology. Now there is need to shift to a new generation of studies, mostly applied, emphasizing development and utilization of forest resources. Funding is inadequate to do this.
6. Funding for the Forest Inventory Research at Anchorage will be reduced by \$150,000. This will substantially slow, but not stop multiresource inventory in Alaska. Major river drainages, now scheduled for inventory that would be postponed for several years include the Kuskokwim-Bristol Bay, Copper River, Kenai Peninsula, South Central Alaska, Upper and Lower Yukon River Basins, and the Kobuk River Basin, all areas of high public interest.

Anchorage

SUMMARY OF BUDGET CUT IMPACTS ON PNW 4103, FY87

February, 1986

THE SITUATION

Given the President's budget for FY 1987, the Forest Inventory and Analysis Unit in Anchorage can expect to take a \$148,000 (Washington Office appropriation level, \$130,000 PNW Station level) cut in its budget. Over the past 5 years, Anchorage FSL (FIA) has received an operating budget between \$160,000 and \$270,000 after removing salaries and Portland/WO overhead. In FY 1985, PNW 4103 received operating funds totaling \$269,000. This was reduced in FY 1986 to \$226,000, and is targeted to be cut to \$96,000 in FY 1987.

No new permanent positions have been added to FIA staff since June, 1984. One position (a Research Biologist) which vacated, has not been refilled, in order to compensate for normal salary increments (In-step increases, etc.). Numerous other cost savings measures have been implemented to reduce overhead costs, such as space reduction, computer reconfiguration, etc.

The basic "housekeeping" budget need for PNW 4103 (FIA) is about \$40,000. With \$56,000 left, there will be no funds to continue field work. The \$56,000 will barely keep data analysis running on data that have been collected during FY85 and FY86.

IMPACTS

Work to continue--The work to be continued for FY 1987 will involve only data analysis associated with the legislatively mandated 1990 RPA Timber Assesment, as well as data analysis of field data previously collected in the Tanana River Basin and southeast Alaska in FY 1983-85.

Work to be discontinued--With the budget cut, it will be necessary to discontinue collection of field data on the Chugach National Forest and Copper River Basin; classification of Landsat scenes for the Copper River and Kuskokwim River Basins; and collection of aerial photography resource materials for these same areas. Additionally, because of the Research Biologist position vacancy, there will be decreased emphasis on wildlife habitat research and associated efforts.

The consequence of these efforts being discontinued will result in difficulty meeting national legislative mandates to respond to the Resources Planning Act's requirement for nationwide timber and vegetation assessment information on a periodic (10 year) basis, especially looking ahead to the period between 1990 and 2000.

There is an added consequence in that Federal budget cuts promise to close out the SCS's River Basin Mapping and Inventory and Monitoring programs. Additionally, the State of Alaska is cutting back in its timber and vegetation inventory efforts in both the Division of Geological and Geophysical Services and in the Division of Forestry. These agencies, along with FIA, are the only Natural Resource agencies currently collecting vegetation inventory and mapping information on a state-wide basis. With no vegetation inventory data input, management decisions will suffer for all Alaska agencies, state and federal.

The current research objectives and areas of research for PNW 4103 (Anchorage FSL) are as follows:

RESEARCH OBJECTIVES

The research objectives of the Alaska Forest Inventory and Analysis (FIA) unit at Anchorage, as stated in the Research Work Unit Description, are to:

- 1). Evaluate the renewable resource inventory needs for the State of Alaska and summarize these in terms of data elements to be measured;
- 2). Inventory the renewable resources for Alaska in accordance with the Forest and Rangeland Renewable Resources Research Act of 1978, and;
- 3). Analyze and report the results of these inventories in an integrated context.

CURRENT AREAS OF RESEARCH

Research has previously proceeded on a regular basis, providing timber inventory and other vegetation inventory information on a sub-region by sub-region basis (often on a river basin basis). Several areas are currently going through a resource analysis stage, including:

- Porcupine River Unit
- Upper Yukon River Unit
- Susitna River Basin Unit
- Chugach National Forest Unit
- Tanana River Basin Multi-resource Inventory Unit
- Southeast Alaska Multi-resource Inventory Unit

Research is also proceeding in the analysis stage involving some very important subject areas relating to Natural Resource Management decisions. These include:

- Estimating changes in areas and volumes of timber on lands transitioning from federal ownership to Native and State ownership due to various selection legislation. This work is partially completed for the Tanana River Basin, for southeast Alaska, and for the Chugach National Forest.
- Preparation of Landsat vegetation classification maps for the Tanana River Basin and the Southeast Alaska Units.
- Development of vegetation profiles for use in evaluating wildlife habitat for the Tanana River Basin and Southeast Alaska Units.
- Developing biomass estimates for all vegetation in the Tanana River Basin and the Southeast Alaska Units.
- Developing new sampling and data collection techniques for use in multi-resource inventories.

The planned Federal and Alaska State budget cuts will mean discontinuation of these kinds of multi-resource/vegetation inventory analyses for the uninventoried River Basin Units of Alaska, which include the Yukon, Kuskokwim, Copper River, Bristol Bay, and Kobuk basins.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES

State of Alaska

COMMISSIONER'S OFFICE

5-2
F-5

TO: John Katz
Special Council

DATE: February 25, 1986

FILE NO:

TELEPHONE NO: 465-2491

FROM: Esther Wunnicke
Commissioner

SUBJECT: Federal Budget
Cut Impacts

John Sturgeon has brought to my attention that the President's budget for 1987 calls for some cuts to the U.S. Forest Service and the Bureau of Land Management that if not restored could have grave negative impacts to Alaska. I am requesting your assistance in bringing to the attention of our Congressional Delegation some of the following proposed cuts and their impact specifically on Alaska. I have listed them in descending priority order.

Research

When you look at proposed station cuts in other states and the tremendous forest research void, we feel that the complete closure of the Institute of Northern Forestry (INF) at Fairbanks is not justified. Other states have the research base on which they can continue to develop, but Alaska is still in the growing stage and is lacking even the most basic research. The research program helps fund work in the key areas of forest genetics, insects and disease, watersheds, wildlife habitat and fire ecology and behavior, all of which are important to Alaska as we try to strengthen our overall economy as our revenues from oil decline. The State of Alaska has over 60% of its lands in a "let-burn" protection category. The impact on the environment, wildlife habitat is not completely understood. We were depending on the INF to find the answers.

The recently established 2 million acre Tanana Valley State Forest is at a point in its development that Forest research information unique to our interior northern latitudes is vital. In addition, forest lands now being considered for management by Doyon and other Interior native regional corporations, have in the past and will in the future, rely on INF research information concerning timber harvest, regeneration, wildlife habitat, and other resource concerns. Good sound decisions can only be made when one has the necessary information. Without the proper facts any resource development effort will be plagued with controversy because of unknowns.

The Forest Inventory and Analysis Unit in Anchorage will be cut \$150,000, which will call for the discontinuation of collecting field data on the Chugach National Forest and

Copper River Basin. This, along with the Federal budget cuts that will close out the SCS's River Basin Mapping and Inventory and Monitoring programs, will mean that no new vegetation inventory data will be available. No new data means that management decisions will suffer for all Alaska agencies, State and Federal, at a time when we need to make the right decisions. The planned Federal budget cuts will mean the discontinuance of these kinds of multi-resource/vegetation inventory analyses for the uninventoried River Basin Units of Alaska, which include the Yukon, Kuskokwim, Copper River, Bristol Bay, and Kobuk Basins. I understand the House has scheduled a hearing on this proposal for February 27 in Washington, D.C.

Fire Management

Reductions in the BLM fire program in Alaska will be felt by our protection organization as we are dependent on them for support. Our two organizations are extremely dependent on each other to meet the protection job for just the priority resource base. There is a direct savings in operating costs of over \$3 million to the State and nearly \$4 million to the BLM by the existing coop-agreement for protection. The use of in State forces are a critical component for both Federal and State agencies and any reduction in either organization will simply equate to over twice the cost for actual suppression.

Recent studies show that Alaska is now at the minimum level for organization requirements for fire suppression. Additional reductions will not only cost more dollars in suppression, but lives and property will be lost.

State and Private Forestry

Loss of the ability of the U.S. Forest Service to provide forest management and utilization funding will impact the State technical assistance to Alaska's forest industry. New developing industries need help which may not be forthcoming.

State and Private Forestry grants are also cut, which will effect our fire suppression program. The State's fire protection responsibilities have now increased to 134 million acres. Although State appropriations cover most of the cost of program, Federal funding is a necessary component of our State's fire protection activities.

The rapid increase of insect and disease in our forests affects both the commercial productivity and scenic beauty. Elimination of the Pest Scout Program will no doubt put a heavy burden on the State to get into a program where we have no funding or expertise.

We would appreciate any direction you can provide to our Delegation so they may become aware of what these reductions will do to our State as we strive to build up the revenue base.

Fairbanks

Institute of Northern Forestry
Pacific Northwest Research Station
USDA Forest Service

Multidisciplinary Research Work Unit 1651

- a. Title: Ecology and management of taiga ecosystems in interior Alaska
- b. Mission: Develop an understanding of the ecology of forest ecosystems in interior Alaska for use in land-use planning and management.
- c. Six Problem Areas with integrated research studies between problem areas.

Problem 1. Development of a vegetation classification system which is correlated with soil and site characteristics. A standard hierarchical classification system that includes all major plant groups is essential for use by all agencies statewide.

Problem 2. Obtain understanding of the behavior and effects of fire in taiga communities in order to provide information for the development of fire management plans in interior Alaska. Majority of fires in interior are lightning caused. Eighty percent of the taiga has burned once in the last 200 years. Plant succession is strongly influenced by wildfires. Costs of fire suppression in Alaska are very costly; therefore, the capability to accurately forecast behavior of fires in various fuel types would result in substantial savings. Effects of wildfire on vegetation growth and succession and soil are being studied. Research is underway on the use of controlled burns in site preparation for regeneration and wildlife habitat management.

Problem 3. There is a need for methods for the regeneration of white spruce and harvesting impacts on the white spruce ecosystem. Methods for regenerating white spruce in upland forests have been developed with soil scarification required; however, regeneration methods and white spruce growth information is lacking for floodplain or river bottom forest. An interdisciplinary study is underway on an island in the Tanana River in order to determine forest management alternatives for white spruce on floodplain sites.

Problem 4. The relation of host and site characteristics to damage by the spruce beetle and major tree defoliators is needed. Spruce beetle outbreaks have infested 240,000 areas of white spruce annually during the last 10 years. The lack of forest management in the Chugach NIF has lead to extensive stands of slow-growing over mature white spruce. Research is underway to develop silvicultural methods for the management of white spruce in south-central Alaska. Host resistance in relation to site is one of the

Problem 4—continued.

alternatives that is under study." The role of carbon/nutrient levels in stands of aspen and birch have been found to affect the phytotoxins (defensive chemicals) which either kill feeding insect larva or inhibit feeding.

Problem 5. The effects of timber harvest and placer mining on stream sedimentation and water quality in relation to land management planning is being researched. Stream quality and site productivity in relation to landscape stability and sedimentation production are emphasized in present studies. Both areas of watershed management research include concern with the natural undisturbed state and with consequences of resource management and landscape alteration.

Problem 6. Moose habitat and forage relationships is needed to develop habitat management guidelines for mountainous areas of Alaska. A study is underway in Denali National Park utilizing the behavior of radiocollared moose. Forage use by plant species and intake on a daily and seasonal basis will aid in the description of habitat preference by moose.

Research Work Unit 3102

- a. Title: Improving utilization of woody biomass for fiber and energy.
- b. Mission: To provide land managers with more effective tools for determining economically acceptable strategies for harvesting, utilizing, and distributing forest biomass.
- c. Three Problem Areas with Problems 1, 2 and part of Problem 3 located in Portland, Oregon.

Problem 3. Develop information for making economic and technical evaluations of converting woody biomass to energy. Biomass from clearing land for farming has not been utilized and presents a disposal problem. Utilization of biomass for energy would make land clearing for farming or forest type conversion more economical. Access to existing softwood sawtimber is needed. Markets for products potentially available from hardwood timber are also needed. Studies on lumber recovery, long term storage of wood chips, and burning wood chip with coal for electricity generation are underway.

Research Program Statistics for INF

A. Staff	<u>Payroll</u>
11 Scientists	
3 Technical support	
5 Non-technical support	
<u>19 Total</u>	<u>\$792,000</u>
5 Temporary summer employment	35,000
3 Extramural funded Cooperative Research Agreements (UAF)	25,000
<u>Total payroll allotment</u>	<u>\$852,000</u>
 B. Total FY-86 Budget	 \$1,170,000
C. Total FY-87 Budget	<u>435,000</u>
 FY-87 Reduction	 \$-73 ⁵⁰ ,000

~~n EV107 Research~~

→ 1. Eliminate:

a. Timber Management Research

Development of guidelines for managing interior forests following a multiple use concept and sustained yield basis. Guidelines for (1) natural and artificial regeneration, (2) silvicultural and timber harvesting methods, (3) productivity of fiber and forage, and (4) development of a standard Alaskan Vegetation Classification System to be used by all Natural Resource-related agencies.

b. Forest Fire Research

Development of guidelines for determining the effects of control/no-control fire suppression strategies.

Development of guidelines for using prescribed fire for wildlife habitat restoration, site preparation for natural and artificial regeneration, vegetation management, and conversion of non-productive forests to fiber and forage producing stands.

2. Research Programs Proposed for Move to Anchorage

a. Wildlife Habitat Research

Development of initial management guidelines for moose habitats in mountainous areas of interior Alaska. This includes management practices that create, protect, or enhance the mix of habitats for moose.

b. Watershed Management Research

Development of guidelines to prevent stream sedimentation and impacts on water quality from timber harvest, wildfire and prescribed fire, and general site disturbance.

c. Forest Insect Research

Development of forest management guidelines for reducing tree susceptibility to bark beetles and hardwood defoliators.

Development of non-insecticidal methods for protecting high-value trees in campgrounds, recreational and urban areas.

1. History of lab

- 1958 Research on tree physiology started
- 1962 Fire research and plant ecology (succession)
- 1962 New lab built
- 1966-1970 Research expanded to include impact of forest insects, timber management, watershed management
- 1974-1980 Wildlife management, forest genetics

2. a. Staffing - 11 professional scientists

- 3 professional support
- 5 research support services

b. Scientists include:

Silviculture, forest genetics, forest ecology, forest entomology, fire science, forest hydrology and water quality, soil science, and wildlife ecology

3. Clientele

a. Users of research results

- Alaska Department of Natural Resources (Division of Forestry and Division of Lands)
- Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- U.S. Fish and Wildlife Service
- Soil Conservation Service
- Forest Service
- Alaska Native Corporations
- University of Alaska

4. Cooperators

-All above agencies

5. Multidisciplinary Research Work Unit

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c. Six Problem Areas with integrated research studies between problem areas.

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Problem 5. The effects of timber harvest and placer mining on stream sedimentation and water quality in relation to land management planning is being researched. Stream quality and site productivity in relation to landscape stability and sedimentation production are emphasized in present studies. Both areas of watershed management research include concern with the natural undisturbed state and with consequences of resource management and landscape alteration. A research watershed (Caribou-Poker Creek) is located 30 miles north of Fairbanks.

Problem 6. Moose habitat and forage relationships is needed to develop habitat management guidelines for mountainous areas of Alaska. A study is underway in Denali National Park utilizing the behavior of radiocollared moose. Forage use by plant species and intake on a daily and seasonal basis will aid in the description of habitat preference by moose.