HB

284

HOUSE COMMITTEE REPORT

(11)
Date Referred to Committee: April 9, 1998

FURTHER REFERRALS:

Date of Committee Action: 4/23/98

The FINANCE Committee considered:

HB 284

HOUSE BILL NO. 284

TIMBER THREATENED BY PESTS OR DISEASE

"An Act relating to infestations and diseases of timber."

recommends it be replaced with the following committee substitute CS HB 284 (FIN) [X] the same title [ ] a new title

[ ] additional referral to _____ Committee
[ ] attached amendment(s)

ADOPTS: _____ Letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept)

[ ] fiscal note(s) _____

[ ] zero fiscal note(s) _____

APPROVES PREVIOUS: (Dept/Date)

[✓] fiscal note(s) DNR 4/9/98

[ ] zero fiscal note(s) _____

SIGNING WITH RECOMMENDATIONS		DP	DNP	NR	AM
	Therriault			✓	
	Kelly	✓			
	MULDER	✓			
	martin	✓			
	Kohring	X			
	J. Davies			X	
	grussendorf	X			
	FOSTER	X			
	Moses			X	
	G. Davis	X			

CO CHAIR'S SIGNATURE _____
Therriault

FISCAL NOTE

STATE OF ALASKA

BILL NO. HB284

1998 LEGISLATIVE SESSION

Revision Date

Dept Affected: Natural Resources

Title: Infestations and diseases of timber

BRU: Resource Development

Component: Forest Management & Development

Sponsor: Hodgins

Requester: (H.RES)

Component Serial No. 435

Expenditures/Revenues (Thousands of Dollars)

OPERATING EXPENDITURES	FY99	FY00	FY01	FY02	FY03	FY04
PERSONAL SERVICES	390.6	390.6	390.6	390.6	390.6	390.6
TRAVEL	45.0	45.0	45.0	45.0	45.0	45.0
CONTRACTUAL	180.0	180.0	180.0	180.0	180.0	180.0
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	615.6	615.6	615.6	615.6	615.6	615.6
CAPITAL EXPENDITURES	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN REVENUES (fund code)	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	615.6	615.6	615.6	615.6	615.6	615.6
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	615.6	615.6	615.6	615.6	615.6	615.6

Estimate of any current year (FY98) cost: $ 0.0

POSITIONS

FULL-TIME	3	3	3	3	3	3
PART-TIME	6	6	6	6	6	6
TEMPORARY	0	0	0	0	0	0

ANALYSIS: *(Attach a separate page if necessary)*

1) This bill would require more extensive insect and disease surveys to identify all infested or diseased areas and to determine where insect or disease outbreaks are likely to spread from one land ownership to another. Estimated cost would be 15 additional surveys @ $10.0/survey = $150.0 contractual services.

2) Declaration of infestation zones would require documentation and publicity. Estimate 15 declarations @ $4.0/action = $60.0 personal services.

3) DNR would need additional funding to develop infestation suppression agreements with all landowners in infestation zone. Estimate 30 agreements @ $3.7 each = $111.0 personal services for 3 weeks of a Forester II's time for each agreements. Plus 15.0 travel.

Cont. on attached page

Prepared by: Jeff Jahnke, Director /mw Phone: 465-3379

Division: Forestry Date: 10-Mar-98

Approved by Commissioner: for

Agency: Natural Resources Date:

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ANALYSIS, cont.

4) DNR would require additional funding for salvage on state land. Currently the department relies on CIP funding to offer salvage timber sales in excess of the amount possible under operating funds. Estimated cost = 1 Forester II x 2 regions x 9 months x $5.4 mo = $97.2 + 3 For Tech III x 2 regions x 6 months x $3.4 mo = $122.4, + $30.0 travel costs for layout and $30.0 contractual funding for notice and equipment needs. Total = $279.6. On average, this would fund salvage sale design and layout for approximately 5.4 MMBF/year and reforestation on approximately 540 acres [illegible] in any part of the state depending on the location of infestation and availability of markets.
5) This would require a total of 3 new full-time Forester II positions and 6 new part-time Forest Tech III positions located primarily in Southcentral and Interior Alaska.
6) Change in net revenue is assumed to be zero. Some salvage sales would bring in net revenue, but many would be deficit sales.

ALASKA WILDLAND ADVENTURES ™

P.O. BOX 589 GIRDWOOD, AK 99587

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DIRECT: 907-783-2928
WITHIN ALASKA: 800-478-4100
DIRECT: 907-783-2928
FAX: 907-783-2130

DATE: 4/23

FAX

TO: House Finance Committee ATTENTION: 465 - 6813

FROM: Scott Thomas TO FAX #: 253-1261

OF PAGES TRANSMITTED (INCLUDING THIS PAGE): 3

PLEASE CALL A.W.A. UPON RECEIPT
☐ YES ☒ NO

MESSAGES:

Comments regarding HB284

ALASKA WILDLAND ADVENTURES

Printed On Recycled Paper

April 22, 1998

To the House Finance Committee,

Alaska Wildland Adventures has operated backcountry lodges, natural history, rafting, and fishing trips for twenty-two years on the Kenai Peninsula and in the Kantishna region of Denali National Park. Our goal is for our guests to actively experience Alaska in the spirit of appreciation, participation, and sensitivity toward the land, and its inhabitants. In all of our activities, we strive to provide high-quality natural and cultural history interpretation of the areas we visit and the flora and fauna that we observe.

The tourism industry is dependent upon the preservation of Alaska's wilderness character, scenic viewsheds, fish and wildlife populations, and their critical habitat. Our industry ultimately depends upon these qualities to attract clients. HB 284 could have serious negative impacts on Alaska's tourism industry.

Alaska Wildland Adventures believes that it is appropriate to manage forests in response to the Spruce Bark Beetle outbreak to guard against catastrophic wildfire and protect private property. Alaska Wildland Adventures also acknowledges that there are situations where it may be best to allow the forest ecosystems to recover naturally. We have been operating Kenai River rafting and fishing trips and hiking trips in areas seriously effected by the Spruce Bark Beetle for the last 10-15 years. Specifically, our guests appreciate natural ecosystems at work more than they do clearcuts and logging roads. For our form of tourism, a natural recovery, or management strategies that mimic natural disturbance of forest ecosystems has more economic value than aggressive treatment. Local, sustainable, value-added timber harvesting is preferable to extensive, large-scale logging operations that are not ecologically or economically sustainable over the long-term.

Without environmental safeguards in place for timber sales less than 200 acres, fish and wildlife populations could suffer. It is within the state's best interest to protect fish and wildlife habitat. Residents and visitors alike depend upon Alaska's fish and wildlife resources for consumptive and non-consumptive uses.

P.O. Box 389 • Girdwood, Alaska 99587 • Direct: 907-783-2928
Toll-Free: 800-334-8730 • Fax: 907-783-2130 • Email: wildland@alaska.net • www.alaskawildland.com

This bill could also undermine the efforts underway through the Bark Beetle Task Force. The task force encompasses federal and state agency representatives and others from many different interest groups. HB 284 potentially undermines the efforts of the task force.

Please oppose HB 284.

Sincerely,

Scott Thomas
Program Director

cc: Alaska Wilderness Recreation and Tourism Association
Governor Tony Knowles
Alaska Conservation Alliance

State of Alaska
Department of Natural Resources
Division of Forestry

Please deliver the following pages to:

NAME Marc Thibeault LOCATION _____

FAX NUMBER 465-3884 # OF PAGES, INCLUDING COVER 16

FROM:

NAME Marty Welborn, DNR LOCATION AFR

TELEPHONE 269-8473 FAX 561-6654 DATE/TIME 4-22-98

COMMENTS:

Mark- Here are our written comments on HB284 plus some background on insect + disease conditions + our bark beetle programs. I plan to be at the LIO tomorrow.

Thanks for your help. Please call if you have any questions.

-Marty Welborn

Dave Wallingford

269-8450

House Finance Committee

DATE: 4/23/98

PLACE: CAP 519

SUBJECT OF MEETING:
HB 284
HB 313
HB 315

NAME	REPRESENTING	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?		WHAT SUBJECT/ WHICH BILL?
*Pamela LaBolle PVRS	Alaska State Chamber	217 2nd St. Suite 201			586-2323	(Y)	N	HB 284
Michael Morgan	Dept of Ed					(Y)	N	CS for HB 313
Kevin Ritchie	ALASKA MUNICIPAL LEAGUE	217 2nd St			5586325	(Y)	N	HB 313
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	"

Alaska State Legislature

Official Business

State Capitol
Juneau AK
99801-1182

SPONSOR STATEMENT

HB 284-"An Act Relating to Infestations and Diseases of Timber"

This legislation amends AS 41.17.082(d) to require the commissioner to implement necessary salvage measures when timber on state or municipal forest land is:

(1) infested or diseased and thereby poses a significant threat to surrounding healthy timber, or

(2) subjected to an environmental catastrophe, and as a result, is susceptible to infestation or disease, to prevent the spread of infestation or disease, the timber shall be salvaged as rapidly as practicable...if possible, salvage should occur before there is a significant loss of merchantability of the timber.

HB 284-Spruce Bark Beetle

State of Alaska DNR DIV FORESTRY 1/30/98:
... a summary--1997 Alaska Forest Insect and Disease CONDITIONS IN BRIEF--of the 1997 statewide aerial insect and disease survey conducted by the U. S. Forest Service and State of Alaska, Department of Natural Resources, Division of Forestry.

..."Since about 1992, more than 5 million acres of Alaska's forests have been affected by insects with spruce beetle-caused tree mortality accounting for 2.3 million acres of this total."

By contrast, total timber harvest since 1954, for the TONGASS National Forest accounts for approximately 360,000 acres as of 1996.

SOUTH CENTRAL ALASKA: Statewide aerial surveys mapped MORE THAN 1.1 MILLION ACRES of dead and dying beetle-infested spruce in 1996, a 61% increase in over the past two years.

In Southcentral Alaska, the logging of beetle-killed timber is the first stage in a reforestation process that will lead to healthier forests faster than if nothing is done.
Intensity of the Spruce Bark Beetle infestation sets it apart..foresters ..concerned about lack of spruce regeneration.

SUMMARY:

OPTIONS:

CONTINUE TO STUDY:
KENAI BOROUGH MAP--- 1989-96 SPRUCE BARK BEETLE INFESTATION BY YEAR;KENAI PENINSULA BOROUGH SPRUCE BARK BEETLE TASK FORCE)

CREATE: JOBS, JOBS, JOBS;
- TAKE ACTION SOLVE THE PROBLEM

FIRE SUPPRESSION (WILDFIRE THREAT ELIMINATED /REDUCED)

PUBLIC SAFETY

REFORESTATION

NEED ACTION--CAN'T WAIT TEN MORE YEARS!

WINSTON CHURCHILL: "TO GAIN ONE'S WAY IS N0 ESCAPE FROM THE RESPONSIBILITY FOR AN INFERIOR SOLUTION."

Resource Development Council
for Alaska, Inc.

121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503-2035
(907) 276-0700 Fax: (907) 276-3887 e-mail: rdc@aonline.com

April 20, 1998

Representative Mark Hodgins
State Capitol 110
Juneau, AK 99801-1182

Re: Support for HB 284

Dear Representative Hodgins:

The Resource Development Council would like to lend its support to HB 284, legislation relating to the spruce bark beetle infestation on the Kenai Peninsula.

RDC is a membership-funded, non-profit trade organization made up of businesses and individuals from all resource sectors, Native corporations, labor unions, and business associations. RDC's mission is to grow Alaska through the responsible development of our natural resources.

Timber harvesting is necessary to restore the forest's health and the Commissioner of Natural Resources needs the flexibility to act quickly and definitively under the provisions of HB 284.

Fish streams, wildlife habitat, and view sheds are in greater jeopardy from the aging spruce dying and falling down than from salvage operations that can be done properly and professionally to re-establish a healthy forest which has or will be deforested by the beetle.

Along with improving forest health, strategic harvesting also helps eliminate the fire hazard dead trees pose to life and property. Letting nature take its course could result in devastating wildfires and a forest that will likely evolve into grasslands void of evergreens for generations.

Salvaging portions of the Peninsula's dead and dying timber would generate new economic activity and jobs, as well as allow Alaskans to utilize the infested trees, which have a value for several years after the beetle kills them.

New roads built to reach harvest areas would diversify recreation opportunities and venues, allowing residents access to high country for mountain biking, hiking and skiing.

Forest scientists emphasize that a combined program of logging and reforestation can restore forest health much faster than doing nothing.

Thank you for the opportunity to comment on HB 284. RDC strongly supports this legislation and we urge its passage this session to give the Commissioner of DNR the rapid ability to restore forest health and reduce the risk of catastrophic fire.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL
for Alaska, Inc.

Ken Freeman
Executive Director

Spruce Bark Beetle Task Force Funding Recommendations

4-16-98

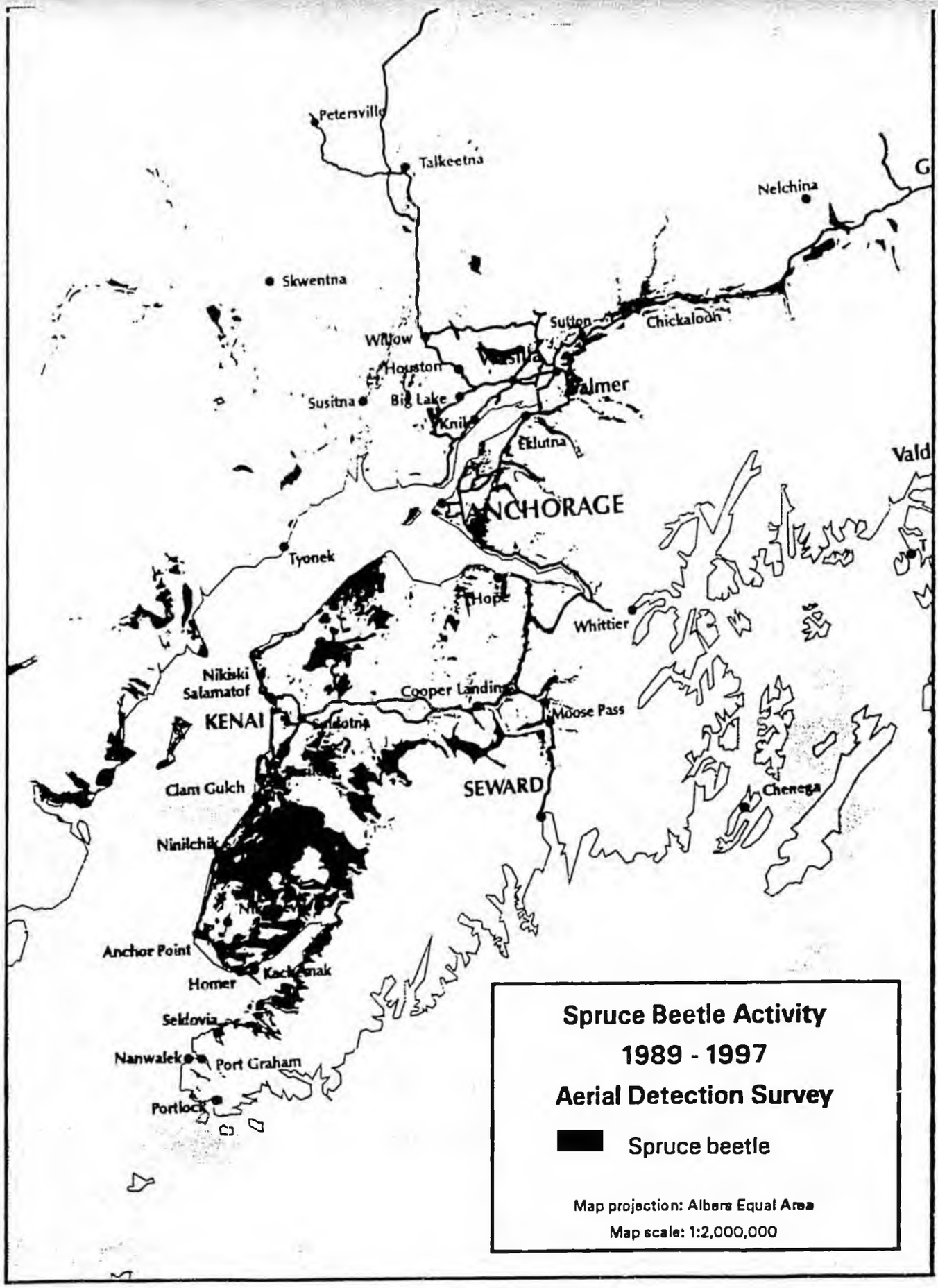
Category and Amount	Reference Section	Description
Early Funding Actions		
15,000	1	1. Urban Interface Fire Hazard Assessment. **Using the National Wildland Urban Interface Advisory Group methodology, identify, adopt and implement a wildland/urban interface fire hazard assessment to prioritize resources and efforts in high risk areas of the Kenai Peninsula with the work product to serve as a model for potential use in other areas of Alaska. This assessment is envisioned to include on-site surveys in the Borough's urban interface / high risk area of fuels and fire behavior, physical characteristics, and potential for ignition. Responsibility is the Division of Forestry in cooperation with local fire agencies. The targeted completion date is June 1, 1998.**
10,000	2 (b1)	**2.** Public Education and Outreach Programs. I. Technical Assistance and Public Information. b. Improve public access to relevant information. 1) Establish an electronic clearinghouse that provides descriptions of how to deal with beetles with responsibility for implementation shared by the Co-op Extension Unit and DNR. Immediate Action. **Kenai Peninsula Borough to develop and maintain a coordinated Home Page that will contain information expected to be most frequently sought by land owners. Access to more advanced or specialized information will be made available via links to existing and future federal, state, local and private sources. Implementation by July 1, 1998.**
85,000	2II	Public Education and Outreach Programs II. Spruce Bark Beetle Coordinator. **The Task Force recognizes that the Urban Interface fire risks are a problem with or without the beetle infestation and also recognizes the importance of urban trees to Alaska communities. As a result, there is consensus that additional effort should be made to assist urban communities and their related efforts (including volunteers, grants, and planning) for community and urban forest areas. Specific areas of responsibility would include assisting communities in satisfying requirements for qualifying for grants such as the "Trees USA" program which requires tree inventory, identification of a responsible person for the program, a**

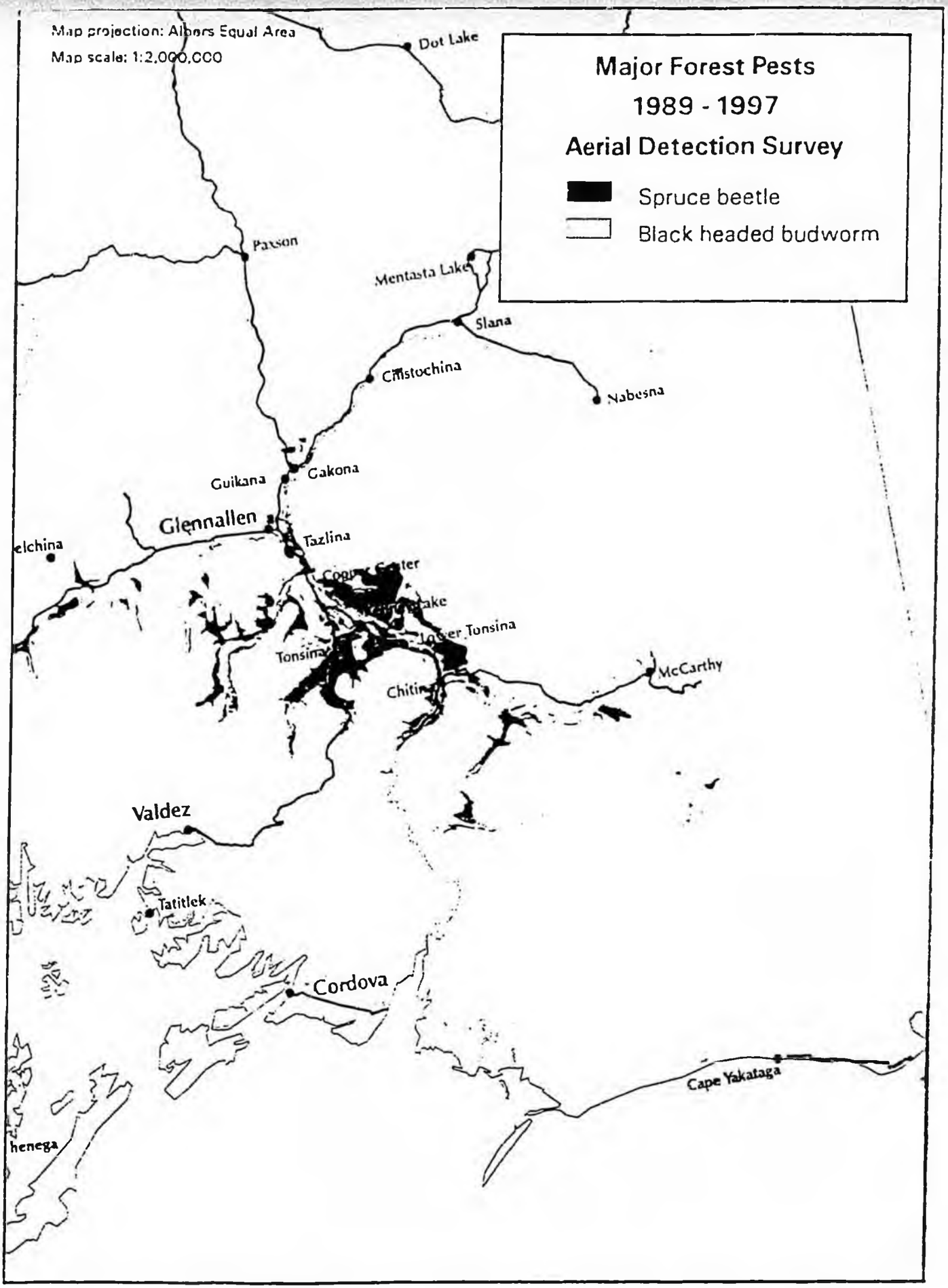
		long term plan for urban tree health, and an annual "Arbor Day Celebration." In an effort to assure the most cost effective coordination possible, the Task Force considered a variety of means to meet this objective and concluded that a Spruce Bark Beetle Coordinator should be added to the Kenai Peninsula Borough staff. The Coordinator position should be added in July 1998 and will also serve to coordinate the related initiatives recommended by the Task Force.
30,000	2iva	2. iv A) Public Education. The objective is to implement a proactive approach to public education that considers methods to enhance the tourist and resident opportunities including trail restoration, signage, and access. Specific projects are intended to educate tourists (and residents) on natural forest systems. Recommendation reflects the Task Force's view that the beetle problem is part of a natural ecological process that takes a long time to cycle and that tourists and residents should be educated as to the context of the infestation and what is being done. a. Immediate Action. Create an interpretive brochure that describes the infestation, including its historical context, and the actions that are being taken. the brochure will be distributed to tourism and public organizations and efforts should be made to include the information in popular tourist publications such as the Kenai Peninsula Visitor's Guide (the deadline for getting a page in this year's publication is April 14, 1998), the Anchorage Daily News Visitor's Guide, the Milepost, and a page in the Alaska Sports fishing regulation booklet made available each year to anglers. In addition, the Task Force recommends that at least two (2) locations with view of infested areas receive interpretive signage describing the infestation. Initial funding of $30,000 is recommended.
75,000	4iii	iii. Immediate Actions - Pilot Project. The East End Road in Homer has been identified as a high hazard urban interface area due to fire hazards and limited access. The Task Force supports an initiative to reduce the hazards to ingress/egress in the area. State improvements to East End Road are presently scheduled for 2003 which will include widening the road and clearing additional right of way. The Task Force recommends that action be taken to determine the feasibility and

		funding needed to accelerate the already planned right of way clearing beginning in 1998 instead of 2003. The Task Force does not intend to suggest a wider right of way clearing than already planned. In addition the necessary sites of refuge should be identified and necessary preparations of the sites completed. The pilot project should include testing the "C.A.N." communication system as well as provide information and assistance to private landowners that compliment the emergency preparedness effort. Area to be included: Miles 8 to mile 20 on East End Road in Homer. Responsibility: State Forestry, Kenai Peninsula Borough, Department of Transportation. Funding Required: $75,000.00
25,000	Sill	III. Spruce Seeds. A genetically diverse source of spruce seeds for future regeneration of infested areas should be collected and properly stored. The DNR Division of Forestry should oversee the broad and systematic collection of spruce tree seeds from infested and at risk areas on the Kenai Peninsula. The intent is to capture the genetic diversity of different subpopulations of parent trees before they all die. Immediate Action: The Task Force recommends $25,000 for collection to begin in September 1998.
25,000	Land Vegetation	1. Land and Vegetation Cover Mapping for the Kenai Peninsula **The Task Force recommends funding of $25,000 for phase #1 of the Land and Vegetation Cover Mapping for the Kenai Peninsula, recognizing the existing funding commitment of $65,000 already in place from other sources outside the Task Force for this phase of the project. Additionally, the Task Force supports federal funding for phase 2 of this project in order to support such activities as site specific fire risk assessment, tracking and predicting spruce beetle infestation, and detailed analysis of individual timber stands. Maps would be based on aerial photographic interpretation, or recently declassified military technology, and would cover selected portions of the Kenai Peninsula. Federal funding for this phase is expected not to exceed $200,000.**
50,000	Trans C	Transportation Corridor Mapping Project. Project is to provide a comprehensive landscape level transportation planning tool by consolidating information on the existing and projected transportation infrastructure into a GIS based. Kenai Peninsula wide mapping system. The information will be used to evaluate spruce bark beetle task force recommendations on access and transportation system development as they relate to fire risk, public safety, emergency evacuation routes, timber harvest and other activities. In addition, the

		mapping will be used to evaluate the anticipated cumulative effects on fish, wildlife and other resources from road improvements, timber harvest related road construction and other transportation system developments that may occur in beetle infested or at risk areas. The project includes the creation of the initial maps from information currently available and included in various GIS formats from the Borough, State DNR, Forest Service and Fish and Wildlife data bases. In addition, there will be "ground-proofing" of the mapped roads via a combination of GPS data gathering and orthographic photo interpretation.
55,000	**Mitigation 1**	• Addressing Consensus Mitigation Measures • Extend the Fire Management Officer to 12 months • Extend the Training and Prevention Positions to 10 months • Extend two Instructor/Technician positions to 6 months • Extend the Warehouse position to 8 months • Action items addressed: o Develop evacuation routes and sites of refuge. Consensus recommendation reference is 4(I.)(a) "Emergency Notification and Evacuation - Immediate Actions - Emergency Preparedness - Identify Evacuation Routes." o Urban interface fire hazard assessment. Reference 1 "Urban Interface Fire Hazard Assessment" currently projected at $15,000 o Support the Spruce Bark Beetle Coordinator. Reference 2 (ii) Spruce Bark Beetle Coordinator for $65,000.of total $150,000. o Provide year round public education resources. Reference 2 (I.) b (ii) • "Longer Term Technical Assistance" • Conduct defensible space workshops and fuel reduction interventions. Reference 2 (I.) b (ii) "Longer Term Technical Assistance" • Support risk mitigation efforts • Provide technical assistance and training to local fire service. Reference 6 iv, 6 iii, 7(I.) 7(ii), 7 (iii), and • Support a year round burn permit program if such program is implemented.
90,000	**Mitigation 2**	• **Mitigation Measures to Accomplish Early Action Task Force Objectives** • Add a Fire Risk Management/Fire Behavior Position to support all other aspects of the SSB-TF recommendations and to take the lead on the Fuel Modeling and Fuel Map projects. • Reference 3 I, ii "Fuel Modeling and Risk/Hazard/Behavior Assessment"

460,000		Total of Early Action Item Expenditures as of 4-16-98


Petersville
Talkeetna
Nelchina
Skwentna
Sutton
Chickaloon
Willow
Houston
Palmer
Susitna
Big Lake
Eklutna
ANCHORAGE
Tyonek
Hope
Whittier
Nikiski
Salamatof
KENAI
Cooper Landing
Moose Pass
Clam Gulch
SEWARD
Chenega
Ninilchik
Anchor Point
Homer
Seldovia
Nanwalek
Port Graham
Portlock
Spruce Beetle Activity
1989 - 1997
Aerial Detection Survey
Spruce beetle
Map projection: Albers Equal Area
Map scale: 1:2,000,000


Map projection: Albers Equal Area
Map scale: 1:2,000,000
Major Forest Pests
1989 - 1997
Aerial Detection Survey
Spruce beetle
Black headed budworm
Dot Lake
Paxson
Mentasta Lake
Slana
Chistochina
Nabesna
Gakona
Guikana
Glennallen
Tazlina
elchina
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State of Alaska
Department of Natural Resources
Division of Forestry

Please deliver the following pages to:

NAME Shar Smith LOCATION HFIN - Juno

FAX NUMBER 465-6813 # OF PAGES, INCLUDING COVER 4

FROM: phone 465-2378

NAME Marty Wilbourn LOCATION Anch

TELEPHONE 269-8473 FAX 561-6659 DATE/TIME 4-24-98 3 2:45

COMMENTS:

Shar - Attached are

1) The written comments we sent to the committee for inclusion in the packet, &

2) my oral comments @ the 4/23 hearing. They are very similar - there are just a few additions in the oral testimony.

Let me know if you have questions or if you prefer an electronic copy.

- Marty W.

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

3601 C Street, Suite 1034
Anchorage, Alaska 99503-5937

DIVISION OF FORESTRY

April 6, 1998

Rep. Gene Therriault, Co-Chair
Rep. Mark Hanley, Co-Chair
House Finance Committee
State Capitol Room 511
Juneau, 99801-1182

Dear Chairmen Therriault and Hanley,

We would like to reaffirm our position on HB 284. The Department of Natural Resources continues to oppose this bill because:

- It would not reduce the impacts of major infestations, but it would substantially increase agency costs.
- It doesn't provide effective new tools to address infestations. DNR already has the authority to do emergency sales and below cost sales. The authority to waive the FPA notification requirements risks water quality and fish habitat protection without effectively combating beetle populations.
- The Spruce Bark Beetle Task Force has nearly finished drafting its recommendations for actions to respond to the beetle infestation. Legislative changes should be coordinated with Task Force recommendations.

HB 284 would have little or no effect on large infestations because it does not address the main factors that prevent control of insect outbreaks. First, climatic conditions play a key role in determining the size of outbreaks, and are not controllable by agency action. Pests such as bark beetles occur naturally throughout Alaskan forests, and their populations can explode when weather conditions are favorable. Second, feasible salvage harvesting is limited by weak markets for low value timber, funding for timber sales and reforestation, and multiple use concerns about impacts of timber harvest and roading on other resources and activities.

HB 284 increases state costs by requiring the state to do more intensive insect and disease surveys, and to develop agreements with private landowners, regardless of the private owners' interests. Landowners respond to infestations in a variety of ways depending on their management intent and authorities for their land. Reforestation actions after harvest also vary depending on the owners' long-term intent for the land and their financial situation. It is unclear whether Section 1, paragraph (d) would require the state to pay for "necessary salvage measures" on private land.

Implementing this bill will be costly, since it requires action statewide. In 1997, surveys recorded seventeen different types of insects or diseases that damaged more than 100

acres of forest land in Alaska, affecting a total of 2.5 million acres. These sites are scattered around the state, many in areas that are remote. Because of the land ownership patterns in Alaska, many of these outbreaks cross ownership boundaries. It is not feasible or cost-effective to actively fight all these outbreaks. Particularly in remote areas, some level of infestation -- like wildfire -- is a natural disturbance that results in a mix of young and old forest stands, which in turn provide diverse habitats for wildlife.

The fiscal note submitted by DNR is very conservative. In 1996, the Society of American Foresters invited infestation experts from British Columbia to view the bark beetle infestation in southcentral Alaska. The experts recommended that the state spend at least $50 million dollars per year to respond to the infestation.

We respectfully request that you do not forward HB 284 at this time. As soon as recommendations from the Spruce Bark Beetle Task Force are available, we would be glad to work with you on any recommendations that would require changes to state law or additional state funding.

Sincerely,

Jeff Jahnke
Director

FAXED 4-20-98

Oral Testimony for Department of Natural Resources
HFIN Committee hearing on HB 284
April 23, 1998

Mr. Chairman and members of the committee. I appreciate the opportunity to testify today. DNR is continuing to salvage and reforest infested timber on state land. For example, we have held 23 salvage sales on the Kenai Peninsula since 1994.

We also would like to reaffirm our position on HB 284. The Department of Natural Resources continues to oppose this bill because:

- It would not reduce the impacts of major infestations, but it would substantially increase agency costs.
- It doesn't provide effective new tools to address infestations. DNR already has the authority to do emergency sales and below cost sales. The authority to waive the Forest Practices Act notification requirements risks water quality and fish habitat protection without effectively combating beetle populations. The Forest Practices Act requirements have not been a major factor precluding salvage operations.
- The Spruce Bark Beetle Task Force has completed its recommendation for near-term action. The recommendations for long-term action have been drafted and will be finalized on May 6. Legislative changes should be coordinated with Task Force recommendations.

HB 284 would have little or no effect on large infestations because it does not address the main factors that prevent control of insect outbreaks. First, climatic conditions play a key role in determining the size of outbreaks, and are not controllable by agency action. Pests such as bark beetles occur naturally throughout Alaskan forests, and their populations can explode when weather conditions are favorable. Second, feasible salvage harvesting is limited by weak markets for low value timber, funding for timber sales and reforestation, and multiple use concerns about impacts of timber harvest and roading on other resources and activities.

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Implementing this bill will be costly, since it requires action statewide, not just on the Kenai Peninsula. In 1997, surveys recorded seventeen different types of insects or diseases that damaged more than 100 acres of forest land in Alaska, affecting a total of 2.5 million acres. These sites are scattered around the state, many in areas that are remote. Because of the land ownership patterns in Alaska, many of these outbreaks cross ownership boundaries. It is not

feasible or cost-effective to actively fight all these outbreaks. Particularly in remote areas, some level of infestation -- like wildfire -- is a natural disturbance that results in a mix of young and old forest stands, which in turn provide diverse habitats for wildlife.

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We respectfully request that you do not forward HB 284 at this time. As soon as recommendations from the Spruce Bark Beetle Task Force are available, we would be glad to work with you on any recommendations that would require changes to state law or additional state funding.

Presented by Marty Welbourn, Chief of Forest Resources, DNR Division of Forestry

4/23/98 pm

adopted
NO OBJ

AMENDMENT #2

OFFERED IN THE HOUSE BY REPRESENTATIVE DAVIES

TO: CS HB 284 (RES)

Page 1, line 7, following "owners,"

Insert "and that insect and disease control work is feasible"

4/23/98 pm Kelly

#1

Withdrew

LS0798\F

~~Conceptual~~

Amendment

Offered in the House

To: CS for HB 284(RES)

Page 2, lines 20 and 21. Delete: ", other than a requirement of or a regulation adopted under AS 41.17.115 – 41.17.119,"

CS FOR HOUSE BILL NO. 284(RES)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - SECOND SESSION

BY THE HOUSE RESOURCES COMMITTEE

Offered: 4/9/98
Referred: Finance

Sponsor(s): REPRESENTATIVE HODGINS

A BILL

FOR AN ACT ENTITLED

"An Act relating to infestations and diseases of timber."

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

* **Section 1.** AS 41.17.082(d) is amended to read:

(d) The commissioner may undertake surveys and appraisals to obtain data on regional insect infestations and disease conditions. Upon a determination that an area is infested with forest insects or infected with diseases injurious to forest resources and that the infestation or infection threatens the forest land or timber of adjacent owners, the commissioner **shall** [MAY] establish the boundaries of an infestation or infection zone. The commissioner **shall** [MAY] enter into an agreement with an owner or with a governmental agency to control or suppress infestation or infection within the zone **and to implement necessary salvage measures. When timber on state or municipal forest land is (1) infested or diseased and thereby poses a significant threat to surrounding healthy timber, or (2) subjected to an environmental catastrophe and, as a result, is susceptible to infestation or disease, to prevent the spread of infestation or disease, the timber shall be salvaged as rapidly as**

as provided in the agreement (page 1, line 9)

practicable considering the available access to the timber and the marketability of the timber. If possible, salvage under this subsection should occur before there is a significant loss of merchantability of the timber. Upon a determination by the commissioner that insect and disease control work within the zone is no longer necessary or feasible, the commissioner shall terminate the zone.

*** Sec. 2.** AS 41.17.082 is amended by adding a new subsection to read:

(e) The commissioner shall declare an emergency when 100 acres or more of timber is infested or diseased within the boundaries of an infestation or infection zone established under (d) of this section. Upon the declaration of an emergency, the commissioner may

(1) offer emergency and salvage sales under AS 38.05 of infested or diseased state timber or state timber that is threatened with infestation or disease;

(2) harvest infested or diseased state timber regardless of whether the proceeds from the harvested timber will provide a net return to the state;

(3) exempt salvage and emergency sales of less than 200 acres from the preparation of a plan of operations under AS 41.17.090;

(4) require reforestation of a greater degree, quantity, and type than otherwise required by this chapter for the reforestation of riparian areas; and

(5) waive a requirement of this chapter and regulations adopted under this chapter, other than a requirement of or a regulation adopted under AS 41.17.115 - 41.17.119, if the commissioner finds that the waiver will substantially contribute to controlling or eliminating the infestation or disease.

no obj
adopted #2
#3 conceptual

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Alaska Department of NATURAL RESOURCES

BRIEFING:

State Spruce Bark Beetle Programs

March 11, 1998

DEPARTMENT OF NATURAL RESOURCES -- DIVISION OF FORESTRY

OVERVIEW

Goals. The goals of the state's bark beetle programs are to accelerate reforestation, reduce wildifre risk, maintain diverse forest types and ages to support a wide variety of public uses, and capture economic value from infested trees before they decay.

All sales are designed to protect and enhance forest diversity and support multiple use. Sale design is based on vegetation, land uses, habitat values, beetle impacts, access, and economic feasibility. Site-specific prescriptions are done for each sale. In the Kenai and Copper River areas, DNR has helped fund Department of Fish and Game habitat biologists to help design the sales to protect or enhance fish and wildlife values.

Infested area. In cooperation with the US Forest Service, DNR annually maps insect-infested areas statewide. Based on these surveys, about 3 to 4 million acres have been infested with spruce bark beetles statewide since 1989. In 1996, active outbreaks were mapped on roughly 1.1 million acres statewide. Aerial surveys for 1997 have been completed, and indicate a decrease in observable spruce beetle activity to approximately 565,000 acres. However, the spruce bark beetle is endemic wherever there is Sitka, white, or Lutz spruce. 1997 ground assessments in the most heavily impacted areas -- southcentral Alaska, the Copper River basin, and the Haines area -- suggest that beetle populations are still very high. Severe outbreaks are expected to continue in parts of these areas for several more years.

Economics of state timber sales. The amount of timber actually purchased and cut depends largely on timber markets. The beetle-killed wood is suitable primarily for pulp or chips, and markets for these products are currently low. Five recent sales on the Kenai Peninsula received no bids due to weak markets. DNR may delay some salvage sales if there is no market for the wood.

DNR requires that all timber sales bear the cost of harvesting, roads, and site preparation. In addition, the sales will bear varying proportions of the costs of contract administration and replanting. For some sales, such as those in the Moose Pass area where timber values and volumes are high, revenue will probably exceed total cost. On small sales, the state will pay most of the replanting and administration costs. The main benefits are that dead and dying wood will be salvaged to provide jobs and wood products, and replanting will accelerate forest regrowth in infested areas.

DNR staffing for timber sales is quite limited. In the Kenai area, we have two full-time forest management positions, and part of two additional positions. In the Haines area one full-time

position and one part-time position have forest management responsibilities. No positions in the Copper River area have operating funds for forest management. The DNR timber salvage program depends heavily on capital funding from the legislature, and when fire risk is low, we also use fire-fighting technicians to help prepare timber sales, and we borrow staff from throughout the state to help with salvage sale layout when other duties allow.

Can harvesting control the beetles? State timber sales cannot control the widespread beetle outbreak in southcentral Alaska or Haines. In small areas where infestation is just starting, harvests may slow the spread or reduce the percent of trees attacked. Diverse vegetation types and ages may be the best long-term remedy for beetle outbreaks.

Reforestation. The Alaska Forest Resources and Practices Act (AS 41.17) does not require reforestation on timber sales that are salvage operations like the harvests in beetle-impacted areas. However, DNR has publicly committed to reforesting all state timber sales. Some sites will regenerate naturally after site preparation; most areas will need planting. We will replant with native tree species grown from local seed sources. The timber purchaser pays site preparation costs. Where feasible, DNR requires the purchaser to pay planting costs.

Do bark beetles increase the risk of wildfire? Increased fuel loads and grass cover following the beetle epidemic on the Kenai Peninsula has raised the risk of intense, rapidly-moving fires that would be difficult to control. A January, 1998 assessment of fire risk is available from the Division of Forestry -- *Kenai Peninsula Spruce Beetle Epidemic Fire Danger/Behavior Status Report.* Fire risk is particularly high near some residential areas where the chance of human-caused fire starts is high. For example, in the East End Road area near Homer several factors create high fire danger: dead forest mixed with grassland surrounds numerous homes, clearings along powerline ROWs are narrow, and one lane roads make access difficult.

The best defense against wildland fire is a mosaic of different age classes of green vegetation. Landowners may need to remove dead and dying trees and replant with fire resistant vegetation to minimize the hazard from wildland fires in the wake of a spruce bark beetle infestation. For residential areas, DOF holds informational meetings to help landowners reduce fire hazards.

Beetle-killed trees were not a factor in the Miller's Reach #2 fire in June, 1996. In contrast, the Crooked Creek fire on the western Kenai Peninsula did burn through beetle-killed spruce. The volume of dead vegetation in the fire area directly affected the spread and intensity of the fire, which included active crown fires.

Sustained yield. Under the Alaska constitution and state law, DNR must manage renewable resources for sustained yield. In general, we must achieve and maintain in perpetuity "a high level annual or regular periodic output of the various renewable resources of forest land and water without significant impairment of the productivity of the land and water" (AS 41.17.950(17)). The Supreme Court further determined that this permits timber cutting "at a level that cannot be sustained over a rotation only in unusual circumstances. ... Such

circumstances might include such things as salvage cuts where trees have been killed or damaged... ." (SEACC v. Alaska, 1983) To date, DNR salvage harvests have not exceeded the allowable cut for each decade.

Public involvement. State law requires that DNR provide for meaningful public participation in the timber sale process. The public process is lengthy and expensive, but it is also essential on public land. Public concerns have affected the sale process and sale design, and reinforced DNR's commitment to careful harvest and reforestation.

In all areas, the Division of Forestry prepares a Five-Year Schedule of Timber Sales (FYSTS) annually. The schedule provides an overview of state proposals for timber harvest, reforestation, and transportation. A Forest Land Use Plan (FLUP) is also prepared for each individual sale. Schedules and plans are subject to review by agencies and the public before DNR adopts them. In addition to these requirements, DNR has made special efforts to involve the public in forest management in each of the areas with severe beetle infestations as noted below.

KENAI AREA

State land ownership and allowable cut. The State of Alaska owns approximately 2.1 million acres of land in the Kenai Peninsula Borough, or 20% of the total area. Half the state land is in state parks, refuges, and critical habitat areas. Of the 1.1 million acres of the state public domain, 449,000 acres are forested land: 248,000 acres west of Cook Inlet, and 201,000 acres on the Kenai Peninsula and Kalgin Island. The state has selected an additional 410,000 acres of land in the Chugach National Forest that may be state-owned in the future. The estimated annual allowable cut for the Kenai Peninsula is 1,652 acres; for the west side of Cook Inlet and Kalgin Island, it is 1,816 acres. Allowable cuts are regulated over a ten year period. Therefore, 16,520 acres could be harvested each ten years on the Peninsula, and 18,160 acres on Kalgin Island and the west side.

State forest land affected by bark beetles. By 1993, about 90,000 acres of state land on the Kenai Peninsula were infested by bark beetles, and the beetle infestation is still expanding into new areas. Beetles also infest state land on Kalgin Island and state land west of Cook Inlet. The most heavily impacted state land is on the western Kenai Peninsula south of Tustumena Lake to Homer and Kachemak Bay, and in the Moose Pass area.

Affected forests include stands of white spruce, Lutz spruce, and Sitka spruce in either pure stands or mixed stands with birch, cottonwood, or aspen. In infested areas, future stands are likely to be more open, have more grassy areas, and where hardwoods are present, have more hardwood-dominated stands.

State forest management. Prior to 1994, DNR sold an average of 200 acres of timber sales per year. Starting in 1994, in response to the infestation, the amount of state timber offered has greatly increased. Since 1994, DNR has offered 23 salvage sales totaling 10,009 acres on the

730 MMBF

Kenai Peninsula and Kalgin Island. Twenty-one of these sales have been purchased, and two remain available for purchase over-the-counter. One salvage sale prepared by DNR in the Moose Pass area also included Mental Health Trust land. The current draft Five-year Schedule of sales proposes about 23,740 acres of sales over the next five years on the Kenai Peninsula.

Additional public outreach. DNR has made special efforts to involve the public in forest management decisions in the Kenai area.

- Establishing a citizen's advisory panel led by the Kenai Peninsula Borough mayor that reviewed all sales on the FY 94-98 Five-Year Schedule, including the FY 95 and FY96 sales. DNR adopted all the unanimous recommendations of the panel, and made many changes to respond to recommendations that weren't unanimous.
- Holding public meetings on timber sales in nearby communities and scheduling field trips to the larger proposed sales.
- Conducting a workshop on the proposed Caribou Hills timber sale with a variety of interest groups and agencies.
- Involving the public in development of a Forest Health Management Plan for the Kenai.
- Working with the US Forest Service and a citizens' advisory committee during joint federal-state forest management projects for the Cooper Landing and Moose Pass areas.
- Meeting with media representatives and including them in field trips to harvest areas.
- Preparing a handout on the infestation for tour companies that use the Kenai Peninsula.
- Steadily improving the Five-year Schedules and Forest Land Use Plans to ensure that the public gets clear, complete information on planned sales.
- Participating in public forums such as the Pratt Museum series on spruce bark beetles.
- Participating in interagency planning efforts including the Kenai Area Plan, Kenai Spruce Bark Beetle Task Force, Interagency Forest Ecology Study Team, and interagency brown bear conservation strategy.

How will timber sales affect other land uses? Tourism and recreation: Most of the sales including those in the Falls Creek-Ninilchik area and on Kalgin Island will have little impact on recreation and tourism. These sales are in flat, low country off the main road system. They receive little current recreation use or tourism, and will not be visible to road travelers. Harvested areas will be visible to air traffic between Anchorage and Homer.

Sales in the Moose Pass area have the greatest potential to affect scenery, recreation, and tourism. Large beetle-killed areas also have the potential to affect these activities. The USFS analyzed recreation and scenic impacts on state and federal land. The state is using this information to design sales to minimize these impacts.

Fishing: Protecting fish habitat and water quality is the main goal of the state's Forest Resources and Practices act. The Act prohibits harvesting within 100 feet of anadromous and high value fish streams on all state land. On the Kenai, we use wider buffers for key areas, such as the Ninilchik River corridor. Buffers and required best management practices prevent significant impacts to fish habitat.

Wildlife habitat and use: Kenai forest lands also provide upland wildlife habitat and areas for hunting and wildlife viewing. Whether we harvest timber or not, the composition of Kenai forests and habitat will change as beetles kill extensive areas of spruce. By encouraging regrowth of mixed hardwood-spruce forests and accelerating regeneration, more diverse stands will be grown. Timber harvests should have a neutral to beneficial impact on habitat for most wildlife species. DNR is funding the Department of Fish and Game to participate in the design of state timber sales.

Timber sale access. Timber access is one of the most controversial issues for the Kenai forests. ADF&G has expressed concern on the impacts of new access on wildlife, especially bears. DNR proposes no new permanent roads for state timber sales. Temporary roads and winter roads will provide access. Most access will use existing trails, such as seismograph lines. Temporary roads will be put to bed after harvesting and reforestation is complete. The timber purchaser pays road construction and maintenance costs during the life of the sale. In the Moose Pass area, we are considering designing some sales for helicopter logging to minimize road access.

Timber harvest methods. DNR designs harvest methods for each sale based on the extent of beetle damage and opportunities for natural regeneration. In general, we propose salvaging the dead, dying, and immediately threatened spruce trees. We will leave most hardwoods, smaller spruce, seed trees, stream buffers and leave areas for wildlife, and trees that aren't threatened by beetles. In some areas, beetles have killed nearly all trees, and the harvest will approach a clearcut patch. In others, many trees will be left.

Appeals and litigation. On September 22, 1994, Trustees for Alaska and four other groups appealed the FY95-99 FYSTS in Anchorage Superior Court. There was no administrative appeal of the schedule. On October 25, the same groups asked the Anchorage Superior Court for an emergency stay of the auction of eight small timber sales. The Court denied the stay and the sales were auctioned. Trustees added the eight sales and the Falls Creek sale to their original lawsuit and expanded the list of appellants to nine groups and one individual. Since then, the individual, petitioned the court to withdraw from the suit and the court granted his petition.

On November 30, 1994 the same groups appealed the Kalgin Island FLUP to the DNR Commissioner. The Commissioner denied the appeal and Trustees requested reconsideration of the denial. The Department of Law counseled that reconsideration cannot be granted under current statutes. Trustees asked the Anchorage Superior Court for an emergency stay of the auction; the court denied the stay on January 11, 1995.

Trustees et. al and another individual filed appeals of the Falls Creek Sale with DNR in January, 1995. The DNR Commissioner denied both appeals. Trustees filed for an emergency stay; but their request was denied by the court February 7, 1995 and the sale was auctioned.

On June 5, 1995, the Court ruled in DNR's favor on a motion to recover expenses in the Trustees case. The Court ordered the appellants to pay the State $4,931 as the reasonable costs of

preparation of the record filed to date.

Judge Souter denied two motions by Trustees on November 1, 1995. He denied a motion to add the FY 96-00 Five-Year Schedule to the case, stating that it is inappropriate to roll multiple appeals into one case, and that a court appeal of the FY 96-00 Schedule would require a separate case. He also denied a motion to submit an over-length brief and add 470 pages of new material to the record. He directed them to rewrite their brief and strike any references to their addendum. On March 21, 1997, Judge Souter ruled in DNR's favor on all counts. Appellants requested that the court reconsider whether they qualify as public interest litigants, which determines liability for court costs. The appeal period for Judge Souter's ruling will not close until the petition for reconsideration has been decided.

One person appealed DNR's coastal consistency finding on the Falls Creek sale to the Coastal Policy Council. The CPC reviewed the appeal and decided in DNR's favor on all counts.

On September 18, 1995, Trustees for Alaska appealed the final finding for the Crown timber sale to the Commissioner of Natural Resources. The Commissioner denied the appeal and DNR auctioned the sale.

Two individuals appealed DNR's forest management program to the Superior Court. They alleged that DNR was not harvesting enough timber to meet Constitutional direction to maximize use. The court ruled on all but one count in fall, 1994, and decided in DNR's favor on each count. Alaska Husky Wood, Inc. filed a similar case against the state in April, 1996. The state asked the court to consolidate this with the earlier case and the court agreed. On March 9, 1997 the court ruled in DNR's favor on all counts in this case. The court also awarded attorney's fees to the state. The appellants appealed the ruling, and the Supreme Court heard oral arguments on the case on November 19, 1997. A final ruling is expected within six months.

The Alaska Center for the Environment and the Anchorage Audubon Society appealed the Caribou Hills timber sale. On January 6, 1998, the Commissioner denied the appeals, and the sale was sold on January 8, 1998.

COPPER RIVER AREA

State land ownership and allowable cut. The State of Alaska owns 3.3 million acres of land in the Copper River Basin, of which approximately 30,000 acres is commercial timber. The estimated annual allowable cut on state land is approximately 200 acres per year. Vegetation mapping for state land in the Copper Basin is limited.

State forest land affected by bark beetles. In 1996, about 230,000 acres of land on all ownerships in the Copper Basin was infested by bark beetles. The infestation is still expanding in most areas. Most beetle activity is on federal or Native corporation land, however, state land is significantly impacted in some areas. Acreage figures for the amount of infested area on each

ownership in 1996 are not yet available. Many areas are intensively infested with most of the white spruce killed by beetles. Many of the stands are pure white spruce and may convert to alder where the spruce are killed.

Proposed forest management. In FY 96, DNR received capital funds from the legislature for timber salvage, and we have expanded our timber sale program in the infested areas. DNR offered the first of the salvage sales in the Copper River in 1997, but received no bids for the timber. It is currently available over the counter. DNR also prepared about 6 MMBF in salvage sales for BLM on roughly 4,200 acres of federal land in the Copper Basin.

Timber sale planning and public involvement. DNR is currently identifying areas with potential for timber salvage and reforestation. We have also met with other landowners and interest groups to identify forest management issues that will be addressed through the Five-year Schedule of Timber Sales and Forest Land Use Plans for salvage sales. DNR began working with the public on these issues in 1994, but suspended the work temporarily due to lack of funding.

The first of the salvage sales are included in the FY 97-01 Five-year Schedule. Two sales totalling 3.8 MMBF were offered for sale in January, 1998, but received no bids. The sales are likely to be purchased over-the-counter if markets rebound.

HAINES AREA

State land ownership and allowable cut. DNR manages the 270,410-acre Haines State Forest. Within the Forest, 49,231 acres are commercial forest land available for timber harvest. The annual allowable cut on this land is 6.96 million board feet per year (an average of roughly 370 acres per year).

State forest land affected by bark beetles. The 1996 survey mapped about 16,000 acres of infestation, about 10,000 acres of which is state land in the Haines State Forest. It appears the total infested area is continuing to expand. About 51% of the commercial timber base -- 25,039 acres -- has been significantly infested by the spruce beetle. The beetles have killed from 50% to 99% of the spruce in these stands. A total of about 35,000 acres of state land has been infested since 1989 in the Haines area. The main forest type is a mix of Sitka spruce and hemlock. Future stands are likely to be dominantly hemlock in much of the infested area. The hemlock in this area is highly decadent, with 60% of the hemlock timber volume being pulp quality.

Proposed forest management. DNR sold approximately 22.7 MMBF of timber from the Haines State Forest from 1993-1995. In FY 96, DNR received capital funds from the legislature for timber salvage. With these funds we offered the 14.4 MMBF Thunder Creek salvage sale from 565 acres of infested land. Lynn Canal Conservation Society appealed this sale to the Commissioner of DNR. The Commissioner denied the appeal. The sale was offered, but not purchased due to low markets for pulp. We reconfigured the sale to include less timber (4.3

MMBF), and it was purchased in May, 1997. Several small salvage sales were also prepared and sold with this funding and we are continuing to offer small salvage sales. We expect to offer about 25 MMBF over the next five years.

Reforestation. All large sales require the purchaser to replant with Sitka spruce grown from a local seed source. On the small salvage sales, DNR provides the seedlings and contracts for planting.

Additional public involvement. DNR manages the state forest under the Haines State Forest Management Plan. The plan was adopted in 1986 after extensive public input.

OUTREACH TO PRIVATE LANDOWNERS

DNR also manages federal-funded programs in Forest Stewardship and Urban and Community Forestry. Four staff members in southcentral Alaska work in these programs. They assist communities and individuals with forest management plans, consult on forestry issues, and disseminate information on protecting private homes and trees from fire and insects.

The Forest Stewardship program provides landowner assistance through site visits, written plans, public workshops, and federal cost-share programs. Since starting, 156 stewardship plans have been prepared covering 13,600 acres of private land, and most of these address spruce beetle concerns. Spruce beetle abatement techniques used by individual landowners include sanitation harvesting, trap trees, pruning, and pesticide application. DNR Forest Stewardship staff have also conveyed grants to help five Alaska Native corporations in southcentral Alaska. The grants provide for multiple-use planning, and spruce beetle impacts have been a major consideration in preparing the plans.

Forest Insect & Disease Conditions - 1997 Summary
DNR Division of Forestry
March 11, 1998

STATEWIDE AERIAL SURVEYS

U.S. Forest Service and Division of Forestry entomologists conduct annual aerial mapping to document areas where forest damage is occurring, that is, areas with current defoliation or recently killed trees. Trained observers in fixed-wing aircraft prepare a set of sketch maps depicting the extent of various types of forest damage including recent bark beetle mortality, defoliation, and abiotic damage such as yellow-cedar decline. Flooding, wind damage, and landslides are also noted. The extent of many significant diseases, such as stem and root decays, are not included since this damage is not visible from aerial surveys.

DOF and US Forest Service entomologists question state and federal agencies and other landowners to determine the high priority areas for mapping each year. In addition, they select some areas to map over several years to establish year-to-year trends.

Forest damage information is sketched on 1:250,000 scale USGS quadrangle maps at a relatively small scale (one inch would equal about eight miles on the ground). Larger scale maps are sometimes used for specific areas to provide more detailed assessments when specialized surveys are requested. The sketch map information is later digitized and computerized in Geographic Information System (GIS) for permanent storage and to allow retrieval by a number of users.

Due to the short Alaska summers, long distances, high airplane rental costs, and the short timeframe when common pest damage is most evident (usually July and August), mappers must strike a balance to cover the highest priority areas with available personnel and funding.

1997 AERIAL SURVEY RESULTS

Each year aerial surveys cover about 25% of Alaska's 129 million acres of forested land (25 to 30 million acres). However, this year, surveys in the interior were hampered by smoke and inclement weather. Nevertheless, of the areas covered, insect and disease activity declined from 2.3 million acres in 1996 to 1.7 million acres. Major declines in three of the four most active insects—spruce beetle, spruce budworm, and larch sawfly—accounted for this reduction.

Insects

Active **spruce beetle** infestations declined by 50 percent (to 563,741 acres) from 1996 totals in both southcentral and southeast Alaska. Many spruce stands are now 80 to 90 percent dead and have few or no trees susceptible to infestation, i.e., stands of mature, even-aged, slow-growing spruce. Visually, th tands are gray and have few recently killed trees so are not mapped in the annual survey. It is estimated that over 2.3 million acres are in this condition due to spruce beetle

activity over the last seven years. This accounts for most of the reduction in the active spruce beetle infestation noted in 1997. There is heavy mortality in most spruce stands in the lower Kenai Peninsula from Bradley Lake near Kachemak Bay northwest to Tustumena Lake and south to East End Road near Homer, and in the Copper River Valley.
The Homer area experienced a tremendous beetle flight this year so many more spruce trees will have red needles in 1998. The beetles have decimated most of the spruce stands in the main Copper River Valley; however, many side drainages remain under attack. Beetles have also been active in the Susitna River Valley for several years, but the loss of spruce will not be as devastating there because of the greater mix of hardwoods.

Although it may appear that the spruce beetle has run its course, areas remain that beetles could expand into. Assuming that conditions favorable to beetles continue in areas with susceptible stands, it is safe to predict that beetle activity is not yet over. However, populations are not expected to reach the 1996 level of 1.13 million infested acres in the near future.

Total spruce beetle activity in southeast Alaska decreased from 35,700 acres in 1996 to 19,050 acres in 1997. The beetle outbreak in Glacier Bay National Park, on the ridge east of Gustavus decreased as did the infestation at the mouth of the Stikine River. The beetle infestations in Haines and along the Taku River remained at about 1996 levels.

The **spruce budworm,** which defoliated more than 230,000 acres of white spruce in 1996, diminished by 84 percent in 1997, down to 38,416 acres. Nearly all of the budworm activity has been confined to trees along the Yukon and Tanana rivers. Most of this infestation is centered around Tanana, but over the past two years it has migrated westward along the Yukon River to Ruby. Many trees in this area have severely diminished crowns due to several years of defoliation. This infestation is expected to continue its decline over the next few years.

Approximately 29,000 acres of hemlock and Sitka spruce were defoliated by the **black-headed budworm** in Prince William Sound. While the Cordova area experienced some of the heaviest defoliation, most of the defoliated acres were in sheltered coves from Knight Island north to Valdez Arm and east to the Copper River. A warm, early spring and summer were advantageous for the budworm. If the weather continues to be warm and dry in 1998, budworm populations will likely increase in Prince William Sound. Budworm populations are decreasing in southeast Alaska—only 1,200 acres were affected. These populations often rise and fall over a period of a few years and cause some top-kill and minor levels of mortality.

In southcentral Alaska, nearly 272,000 acres of birch showed signs of stress from a combination of drought and insects. This caused many leaves to turn brown prematurely. Large populations of **birch leafminer** were prevalent in the Anchorage bowl and **birch aphids** were reported throughout Anchorage and the Mat-Su Valley.

Willow defoliation by the **willow leaf blotchminer** declined 93 percent in 1997 to only 3,501 acres. This outbreak, which was scattered throughout the interior, the Copper River Valley, and the Anchorage area, peaked at 150,000 acres in 1992. Since then, it has been in decline and appears to be over.

This marks the fifth consecutive year of defoliation by the **larch sawfly**, but populations fell by 56 percent in 1997. Some mortality of larch, attributed to five years of heavy defoliation, was noted near Fairbanks. In southeast Alaska, **hemlock sawfly** defoliation levels decreased slightly from 8,250 acres in 1996 to 6,638 acres in 1997.

Diseases

The most important diseases and declines of Alaskan forests in 1997 were wood decay of live trees, root disease of white spruce, hemlock dwarf mistletoe, and yellow-cedar decline. Except for yellow-cedar decline, acres affected by these diseases are difficult to detect by aerial surveys. Nonetheless, all are chronic factors that significantly influence the commercial value of timber and alter key ecological processes such as forest structure, composition, and succession. Wildlife habitats are produced directly by wood decay fungi, hemlock dwarf mistletoe, and spruce broom rust through the formation of tree cavities and witches brooms.

In southcentral and interior Alaska, **root disease** continues to cause growth loss and mortality in white spruce stands. Impacts are greatest in young-growth managed stands where seedlings grow near infected stumps. Volume losses of spruce due to heart, butt, and sap rot fungi are substantial; sap rot decay quickly develops and degrades spruce trees killed by spruce bark beetles. There is a high incidence of stem decay in living hardwoods. In southeast Alaska, approximately one-third of the gross volume of forests is defective due to **heart rot** and **butt rot fungi**.

Hemlock dwarf mistletoe continues to reduce growth and cause top-kill and mortality in old-growth forests; its impact in managed stands depends on the number of large infected tre s left after harvesting. Some 477,000 acres of **yellow-cedar decline** have been mapped across an extensive portion of southeast Alaska. Snags of yellow-cedar accumulate on affected sites and forest composition is substantially altered as yellow-cedar trees die and give way to other tree species. Salvage opportunities for this valuable resource are now being recognized.

Foliar diseases of conifers had little ecological significance and were generally at moderate levels throughout Alaska, except for an outbreak of spruce needle cast in young-growth forests on Afognak Island. Canker and foliar fungi caused large, but unmeasured, damage to hardwood species in southcentral and interior Alaska.

Animal Damage

Porcupines continued to damage and kill several conifer species, and brown bears wounded the lower boles of many yellow-cedar. Both types of damage occured in localized areas of southeast Alaska.

FOREST PEST RESEARCH

The goal of integrated pest management (IPM) is to use a combination of management techniques (mechanical, cultural, biological, chemical) to reduce pest populations or maintain

them at acceptable levels. DOF and U.S. Forest Service entomologists are examining several IPM strategies for potential use in forestry. The following studies, begun in 1996 and continued in 1997, are investigating the effectiveness of attractant pheromones produced by insects, and stand manipulation through selective thinning in controlling insect pests.

Thinning Effects on Spruce Bark Beetles: Three monitoring studies on the Kenai Peninsula are looking at ways to minimize spruce beetle population build-ups during outbreaks. State and U.S. Forest Service researchers hope to determine the effectiveness of thinning, pruning, and fertilizing in reducing beetle-caused tree mortality. The studies are also monitoring changes in understory vegetation as a result of thinning. Preliminary results of the infestation survey indicate a significant reduction in beetle-killed trees in the thinned vs. unthinned spruce stands in spite of the very heavy beetle flights in 1997. In one area near Tustumena Lake, 70 percent of the spruce in unthinned plots were attacked by beetles and only 30 percent were attacked in the thinned plots.

Spruce Bark Beetle Pheromone Study on the Kenai Peninsula: Since 1994, the state and federal entomologists have been testing the spruce beetle anti-attractant pheromone methylcyclohexenone (MCH), as a biologically safe method for reducing the numbers of successful spruce beetle attacks on standing, mature spruce trees in lightly infested stands.

DOF and the U.S. Forest Service began a spruce beetle pheromone study in 1997 on lands near Anchor Point owned by the state and the Ninilchik Native Association. The U.S. Department of Agriculture IR4 Project for biopesticide development provided the funding. Results from the test were not conclusive in demonstrating the treatment's effect, although MCH treated plots received 17 percent fewer attacks than the untreated check plots.

Researchers hope that developing a successful chemical release device will provide the optimal release rates needed for Alaska's cooler climate so that MCH can be approved for use in protecting individual trees on high-value sites. Increasing populations of beetles to epidemic levels have not enabled adequate testing of the anti-attractant compounds in recent tests. However, a successful IPM strategy to reduce beetle attacks to acceptable levels must have these tools available as options.

Ips Engraver Beetle Monitoring and Trap Out Projects: The division's entomologist established two pheromone studies on the Ips beetle in interior Alaska. The studies looked at trends in the Ips infestation, identified favored habitat and brood material in logging areas, evaluated sanitation procedures during salvage logging operations, and attempted a modified trap-out in selected thinned spruce stands.

The Ips engraver beetle does not usually kill significant numbers of spruce. However, occasionally, when given the proper conditions, populations build up rapidly and kill trees weakened by defoliators; physical damage, such as snow, ice, and wounds; or trees affected by harvest operations.

The first study, in the Goldstream Valley near Standard Creek, looked at population fluctuations of Ips during timber harvest and movement of beetles through different habitats, including

harvested and unharvested stands. The second study, conducted at Tok in cooperation with Tanana Chiefs Conference foresters, used two attractant pheromone combinations to trap Ips beetles from overstocked spruce stands that were thinned in 1995. Information gained from this research will help foresters monitor beetle populations during and after harvest, better understand how beetle populations respond to thinning activities, and time thinning operations to minimize bark beetle build-ups. Information collected will also compare two attractant pheromones of the Ips beetle and further define their importance in the early-attack dynamics of this bark beetle.

FOREST INSECT AND DISEASE INFORMATION

The Division of Forestry internet home page has information on several DOF programs including forest health and forest insect surveys. The address for information on forest health, insect and disease is: **www.dnr.state.ad.us:80/forestry/web_bugs.htm**. The home page also provides links for accessing various types of forest health information and for sending e-mail messages.

The U.S. Forest Service State & Private Forestry home page contains addresses for federal entomologists and plant pathologists, current forest insect and disease conditions (aerial and ground survey data), and sections on forest health research and publications, e.g., spruce beetles, SBExpert software, Alaska forest diseases, and an abbreviated bibliography of Alaska forest health management publications. The address is **www.alaska.net/~cnfspf/fhpr10.htm**.

The following products can be prepared from the statewide surveys and GIS databases:

- Copies of individual GIS quadrangle maps for 1997 surveys (11" x 17")
- Digital file information in miniature quad format showing individual pest damage, major waterways, and USGS place names (user must provide appropriate data storage disk)
- Digital data file of 1997 forest damage coverage in ArcInfo (ESRI, Inc.) format. This requires a written request to DOF. Some data is available from the file transfer (ftp) site maintained for DNR through the Alaska Geographic Data Clearinghouse at www.agdc.usgs.gov/data/state/dnr/beetle.html
- Maps of cumulative or specific-purpose forest damage prepared from the division's GIS database. A written or e-mail request is required and a fee may be charged for some maps.

Data and map information requests: Submit requests to Roger Burnside, Alaska Department of Natural Resources, Division of Forestry, 3601 C Street, Suite 1034, Anchorage, AK 99503-5937; telephone: (907) 269-8460; fax: (907) 561-6659; or E-mail: rogerb@dnr.state.ak.us.

House Finance Committee

DATE: 4/23/98

PLACE: CAP 519

SUBJECT OF MEETING:

HB 284
HB 313
HB 315

NAME	REPRESENTING	BUSINESS/PERSONAL MAILING ADDRESS	ZIP	(H) PHONE	(W) PHONE	DO YOU WANT TO TESTIFY?		WHAT SUBJECT/ WHICH BILL?
Pamela LaBolle	Alaska State Chamber	217 2nd St Suite 201			586-2323	(Y)	N	HB 284
Michael Morgan	Dept of Ed					(Y)	N	CS for HB 313
Kevin Ritchie	ALASKA MUNICIPAL LEAGUE	217 2nd ST			586/325	(Y)	N	HB 313
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	
						Y	N	

ANC Daily News 3/26/98

Fire threat heightens in Homer

Spruce bark beetle, dry weather to blame

By JON LITTLE
Daily News Peninsula Bureau

SOLDOTNA — Homer's East End Road may become a wildfire-response model this summer under plans being generated by the Kenai Peninsula Borough's spruce bark beetle task force.

People living on the southern Kenai Peninsula probably will be deluged with all the pamphlets and meetings they can handle.

The rural road may see wider shoulders, cleared "sites of refuge" and repairs along rutted side roads so heavy emergency trucks can get through.

Also, people living on the southern Kenai Peninsula probably will be deluged with all the pamphlets and meetings they can handle as various agencies try to get the word out on how to avoid losing lives and homes to wildfire.

The beetle task force plans to issue its complete list of ideas later this week, but fast action around Homer was high on the group's agenda Wednesday at the end of a two-day discussion.

East End Road, from eight to 20 miles outside Homer, is a narrow country road crowded on both sides by old stands of tightly packed spruce, now dying from the ongoing infestation of bark beetles. People have built homes among the trees.

While fire risk from dead spruce is a complex issue, task force members are operating under the assumption that dead trees will ignite easier than moist living trees. On a dry day, they say, dead forests will ignite with little more than a dropped match. Add wind to the mixture, and the result could be the kind of fast-moving wildfire that ravaged Big Lake in June 1996.

The fear is, such a wildfire could bear

Please see Page B-3, FIRE THREAT

ning on renters

FIRE THREAT: Homer facing dangerous season

Continued from Page B-1

down on East End Road and trap people on the wrong side of the dead-end road.

One idea kicked around by the panel was to accelerate parts of the state's road construction plans for East End Road. The rutted old pavement is due for repairs in a couple of years, but Borough Mayor Mike Navarre said perhaps the state can get a jump on clearing the right of way of trees. Paving still could be completed later.

Another idea was to carve small clearings along the road that might serve as refuges — places where someone could hunker down a few hours if fire blocks the road.

While East End Road is considered a critical fire risk, it is not the only place where people have carved out homes on the edge of the Peninsula's vast wildlands. Task force members suggest governments come up with a list of all the Peninsula's high-risk areas.

The entire region south of Tustumena Lake, the location for most of the Peninsula's beetle infestation, is seen as a hot zone, they said.

Beyond immediate fire risk, the panel is considering recommendations for future studies of the Peninsula's vegetation patterns and the effect of roads on fire risk to help agencies make decisions as they react to the spread of beetles.

The task force was funded by a $500,000 grant from the U.S. Forest Service. It has until June 30 to file a report.

Fire season, meanwhile, begins Wednesday along the south-facing Homer benchlands as snow melts and before moist spring grasses have emerged.

A series of public meetings has been scheduled to discuss the beetle problem and the panel's conclusions. They are set for April 14, from 1 to 5 p.m. and 7 to 9 p.m. at the Borough Building in Soldotna; April 15, from 9 a.m. to 3 p.m. at the Borough Building and then 7 to 9 p.m. the same day at the Bidarka Inn in Homer; and April 16, from 10 a.m. to 3 p.m. again in the Borough Building, followed by a 7-to-9 p.m. meeting at the Moose Pass school.

Task Force Consensus Recommendations

April 16, 1998

Description of each Recommendation subject to task Force Review and Final Approval - Contains edits received through 4-16-98

1. **Urban Interface Fire Hazard Assessment.**
   i. Using the National Wild land Urban Interface Advisory Group methodology, identify, adopt and implement a wildland/urban interface fire hazard assessment to prioritize resources and efforts in high risk areas of the Kenai Peninsula with the work product to serve as a model for potential use in other areas of Alaska. The assessment is envisioned to include on-site surveys in the Borough's urban interface/high risk area of fuels and fire behavior, physical characteristics, and potentials for ignition. **Responsibility**: Division of Forestry in cooperation with local fire agencies. The targeted completion date is June 1, 1998. Recommend allocation of $15,000 for the project.

2. **Public Education and Outreach Programs**
   i. **Technical Assistance and Public Information.**
      a. **Publicize tree seedling sources**. Objective is to make it easier for small landowners to locate tree seedlings should they wish to replace trees. DNR's Division of Forestry should maintain a list of sources of small quantities of seedlings and produce simple publications for the public on where and how to acquire the seedlings. This effort is anticipated to be possible without additional costs and the Task Force directs that the Division of Forestry should work with the Kenai Peninsula Borough and the USFS to coordinate printing of the publication(s). It is noted that the Task Force is not suggesting elaborate and costly publications -- just the basic information in a brief format.
      b. **Improve public access to relevant information.** Establish an electronic clearinghouse that provides descriptions of how to deal with beetles with responsibility for implementation shared by the Co-op Extension Unit and DNR. The information should keep public advised of what is being done .
         1. **Immediate action**. Kenai Peninsula Borough to develop and maintain a coordinated Home Page that will contain information expected to be most frequently sought by land owners. Access to more advanced or specialized information will be made available via links to existing and future federal, state, local and private sources. Recommended funding of $10,000 for

implementation by July 1, 1998.

2. **Longer term Technical Assistance.** The Task Force recommends that this effort also include the addition of one position to the UA Cooperative Extension Unit at $75,000 per year with $40,000 per year budgeted for publications and communications. A 5-year project is suggested with an assessment of the project merits by the end of year 4. The Task Force envisions the effort to be proactive and community oriented with a majority of the work conducting workshops and making other public contacts out side of an office.

ii. **Spruce Bark Beetle Coordinator.** The Task Force recognizes that the Urban Interface fire risks are a problem with or without the beetle infestation and also recognizes the importance of urban trees to Alaska communities. As a result, there is consensus that additional effort should be made to assist urban communities and their related efforts (including volunteers, grants, and planning) for community and urban forest areas. Specific areas of responsibility would include assisting communities in satisfying requirements for qualifying for grants such as the "Trees USA" program which requires tree inventory, identification of a responsible person for the program, a long term plan for urban tree health, and an annual "Arbor Day Celebration." In an effort to assure the most cost effective coordination possible, the Task Force considered a variety of means to meet this objective and concluded that A Spruce Bark Beetle Coordinator should be added to the Kenai Peninsula Borough staff along with two hazard management positions. The hazard management positions provide onset assistance to the public with a focus on addressing fire load and fire risk reduction. The Coordinator position should be added in July 1998 and will also serve to coordinate the related initiatives recommended by the Task Force. The projected annual costs for the added positions is $150,000.

iii. **State Stewardship Program.** The Task Force recognizes the valuable contribution of the State Division of Forestry's Stewardship Program and agrees that there should be increased support for the program in Alaska with an objective of improving and expanding public access to reforestation advice and support. Recommendation is for one position at KPB and funding support for planning and reforestation of private lands. The projected budget is suggested to be $75,000 per year for personnel which will include silviculture treatment and increased funding for cost-shared treatment of $100,000 per year for a 5-year total budget of $875,000 with intent to reassess program before expiration.

iv. **Public Education.** The objective is to implement a proactive approach to public education that considers methods to enhance the tourist and resident opportunities including trail restoration, signage, and access. Specific projects are intended to educate

tourists (and residents) on natural forest systems. Recommendation reflects the Task Force's view that the beetle problem is part of a natural ecological process that takes a long time to cycle and that tourists and residents should be educated as to the context of the infestation and what is being done.

a. **Immediate Action.** Create an interpretive brochure that describes the infestation, including its historical context, and the actions that are being taken. the brochure will be distributed to tourism and public organizations and efforts should be made to include the information in popular tourist publications such as the Kenai Peninsula Visitor's Guide (the deadline for getting a page in this year's publication is April 14, 1998), the Anchorage Daily News Visitor's Guide, the Milepost, and a page in the Alaska Sports fishing regulation booklet made available each year to anglers. In addition, the Task Force recommends that at least two (2) locations with view of infested areas receive interpretive signage describing the infestation. Initial funding of $30,000 is recommended.

b. **Longer Term Action.** The Task Force also suggests that there should be a more extensive interpretive display regarding the infestation that should either be established at an existing facility in the Borough or that appropriate financial support be made available in coordination with other groups or agency initiatives with similar objectives.

v. **Tourism.** Recommendation is for a longer term project for a Demonstration Forest Area (Homer area recommended) where 50 acre block(s) would be opened to study and illustrate the results of alternative silviculture treatments. Project would provide public viewing areas as to what the beetle infestation looks like as well as the actions that are being taken in different areas.

3. **Fuel Modeling and Risk/Hazard/Behavior Assessment** - Fuel loading and the associated risks in specific forested areas must be understood and considered in developing management practices related to forest health and practices. The Task Force recommends that two initiatives be completed as tools to Forest management with specific assistance envisioned for pre-suppression planning, and for prescribed burning to regenerate forests or to reduce fuel loading.

i. **Fuel Model Map.** Create a fuel model map for the Kenai Peninsula that will serve as the basis for developing a plan to identify areas where management practices can enhance forest resources including wildlife populations. The map should help predict fire behavior and is not the same as a vegetation map. Suggest designation of one DOF fire manager and one USDA FS Manager to lead the effort.

ii. **Actions Prior to Fuel Load Reduction Efforts.** The Task Force recognizes that fuel load reduction and management practices (including prescribed burns) is a potential management tool. A Borough-wide Geographic Risk and Hazard Assessment is

recommended. This project would complement management planning and identification of areas where wildland burning within prescription or prescribed fire (or alternative fire load reduction techniques) could enhance various forest resources. The hazard assessment would evaluate the fuel complex defined by type, moisture, arrangement, volume, etc. The risk assessment would determine the likelihood of fire ignition in examined areas. The behavior assessment would examine fire behavior under alternative weather scenarios as patterned on John See's 1990 Cooper Landing Spruce Bark Beetle Fire Behavior Analysis.

4. **Emergency Notification and Evacuation.** The Task Force supports providing safe evacuation routes and sites of human refuge. As a result, there is consensus that a prompt examination should be made to identify areas with insufficient evacuation routes in the Borough. Necessary access for fire fighting resources as well as breaks in the continuity of fuel are required. In addition there is a need to identify sites of refuge in the event of an fire emergency and to assure emergency communications to residents takes advantage of modern technologies.
   i. **Immediate Actions - Emergency Preparedness.** Identify evacuation routes. Responsibility: State Forestry, Kenai Peninsula Borough, Local Fire Agencies. Target completion date is July 1, 1998 to be conducted using existing personnel.
      a. **Identify evacuation routes.** State Forestry, Kenai Peninsula Borough, Local Fire Agencies.
      b. **Identify sites of refuge.** Responsibility: State Forestry, Kenai Peninsula Borough, Local Fire Agencies.
      c. **Emergency Notification.** Expand existing "Community Activation Net" (CAN) to include coverage for evacuation routes and sites of refuge. Essentially, the CAN system should be overlaid on the evacuation plan. Responsibility: Kenai Peninsula Borough.
   ii. **Immediate Actions - Prepare Budget.** Following completion of the above inventory of evacuation routes and sites of refuge develop a budget as to needed actions to provide sufficient facilities to address the Borough's requirements.
   iii. **Immediate Actions - Pilot Project.** The East End Road in Homer has been identified as a high hazard urban interface area due to fire hazards and limited access. The Task Force supports an initiative to reduce the hazards to ingress/egress in the area. State improvements to East End Road are presently scheduled for 2003 which will include widening the road and clearing additional right of way. The Task Force recommends that action be taken to determine the feasibility and funding needed to accelerate the already planned right of way clearing beginning in 1998 instead of 2003. The Task Force does not intend to suggest a wider right of way

clearing than already planned. In addition the necessary sites of refuge should be identified and necessary preparations of the sites completed. The pilot project should include testing the "C.A.N." communication system as well as provide information and assistance to private landowners that compliment the emergency preparedness effort.

Area to be included: Miles 8 to mile 20 on East End Road in Homer.

Responsibility: State Forestry, Kenai Peninsula Borough, Department of Transportation.

Funding Required: $75,000.00

iv. **Longer Term Actions.** The Task Force agreed that an examination of existing Borough regulatory impediments to rapid response be examined as well as standards imposed on new subdivision developments in fire risk areas. The following two recommendations are made:

   a. **Identify and remove and/or streamline regulatory obstacles.** The Borough is requested to examine current impediments to a rapid clearing of right of way in critical areas where emergency evacuation routes are being implemented as well as where actions are necessary to protect public health and safety.
   b. **Road Development in Subdivisions.** The Task Force agrees that there is a need to evaluate current Borough road standards and identify fire risk as one of the considerations in establishing standards for new roads. The objective is to avoid creating transportation impediments (or traps) in emergency response and assure that the access standards as well as roadway standards do not add to the existing risks. The NFPA 299 or similar standards are suggested for guidance in application of new standards for new subdivision roads in identified high risk areas.

5. Timber Management and Sales Practices

i. **Reexamine Feasibility of an Instate Seedling Nursery.** The Task Force considered the issue of seedling availability to both large and small entities. The high demand customers such as CIRI and Circle DE experience logistical challenges during periods when hundreds of thousands of trees are being brought in for replanting. There is also considerable demand by small landowners that may not be currently met. A number of organizations have current interest in this subject including the Reforestation Council and potentially local native corporations. The State Division of Forestry is requested to

conduct a study to determine the merits and economic feasibility of establishing a seedling nursery in Alaska. The Task Force, in designating Division of Forestry as lead agency for this effort, is not suggesting that the Nursery should be a state facility. The Task Force suggests funding the effort with $5,000.

ii. **Consideration of Fire Reduction and Public Safety in Timber Sales.** The Task Force encourages government and major land owners to design and locate their timber sales in a manner that complements efforts to reduce fire and public safety hazards and risk of ignition. The recommended policy is considered as complementary to fire hazard minimization with reductions in fuel loading and potential catastrophic fires. The fire risk should be a high priority in existing and future sales programs.

iii. **Spruce Seeds.** A genetically diverse source of spruce seeds for future regeneration of infested areas should be collected and properly stored. The DNR Division of Forestry should oversee the broad and systematic collection of spruce tree seeds from infested and at risk areas on the Kenai Peninsula. The intent is to capture the genetic diversity of different subpopulations of parent trees before they all die.

   a. **Immediate Action**: The Task Force recommends $25,000 for collection to begin in September 1998.
   b. **Additional parameters** recommended include:
      1. Collect and store 500 pounds of seed as soon as possible beginning in the fall of 1998. Based on past experience it is understood that the collection effort will take between 3 and 7 years.
      2. Collect Borough wide utilizing cooperative agreements with all land holders where possible and encourage public assistance in collection of seeds.
      3. Periodically reassess the collection goal and process.
      4. Make seed available at whatever price necessary to recover cost.
      5. Projected cost is $200 per pound for collection ($100,000) and $50,000 for storage freezer utilities.

iv. **Limited Examination of Forest Practice Act Regulations**. Convene a technical group (subject matter experts including representatives of the Timber industry and major land owners) to review **11 AAC 95.195** ("Clearing of Spruce Trees") and **11 AAC 95.370** ("Slash") for adequacy in preventing or controlling beetle infestation in Alaska and make specific recommendations to review the regulations or develop internal DNR staff guidance as needed.

6. ICS Team and Seasonal Fire Fighter Availability and Training

i. **Establish a KPB Type III ICS Team** using existing personnel and resources. This would be a rapid response ICS team of local

resources that would respond to support local fire agencies when requested. Intent is for the Team to manage incidents that can be handled locally and/or until a Type II or Type 1 team arrives. **Responsibility:** Kenai Peninsula Borough and local fire agencies.

ii. **Coordinate Availability of State Forestry Support to Coincide with Local Fire Season.** The Task Force encourage state forestry to staff the KPB commensurate with the risk and with the local fire season. For example, there is presently an approximate 30 day lag between the start of the fire season on the lower Peninsula and arrival of adequate fire fighting personnel and equipment (such as helicopters and water buckets). Due to the additional risk associated with the spruce bark beetle infestation and the increase in population on the Kenai the State should increase the number of wild land firefighters assigned to the Kenai Peninsula during the fire season. **Responsibility:** State Forestry.

iii. **Assistance Identifying Programs for Small Local Fire Agencies.** Division of Forestry should take the lead in identifying programs that are intended to assist local fire agencies that do not have sufficient fire fighting equipment and resources. Additional assistance requested in helping these local agencies qualify for the programs.

iv. **Fire Training.** Currently there is a lack of access to fire training for smaller communities' fire protection efforts. The Task Force agrees that wildland fire fighting training should be made available to local fire service jurisdictions and/or organizations. **Responsibility:** State Forestry, USFS FS, BLM and Local Fire Agencies.

Immediate Action: Develop a training plan identifying the number of individuals and their location as well as cost projection. Target for training plan completion: June 1, 1998. **Responsibility:** Kenai Peninsula Borough and Borough Fire Departments.

7. Fire Equipment Caches and Supplies

i. Provide fire caches of loaned fire equipment to local fire districts. Fully utilize the State Forestry Fire Stores program to assist local jurisdictions with loaned caches of equipment. Responsibility: State Forestry.

ii. Assist local jurisdictions with the purchase of wild land fire protection equipment and supplies through state and federal contracts. Responsibility: State Forestry.

iii. Locate and distribute federal excess property to local fire districts. This will require an effort to locate suitable equipment throughout the country and may require making "spruce bark beetle fire risk mitigation" a high priority in the federal excess property program. Coordination of property screening services and transportation of useful excess property to Alaska will also be required. **Responsibility:** Kenai Peninsula Borough, State Forestry, and USFS.

8. Slash and Debris Disposal

i. The Task Force recommends that the Kenai Peninsula Borough, in

cooperation with ADEC and private interests, conduct an evaluation of the feasibility of acquiring and/or leasing large volume grinders and/or incinerators to be operated at KPB landfills and transfer sites to dispose of stumps or other debris from fuel reduction efforts in areas where burning is unsafe or must be limited. These facilities, if feasible, are expected to facilitate hazard mitigation efforts, protect air quality, and may have a secondary benefit of enhancing land development as well as extending the life of the landfills.

Additional Consensus Recommendations Reached

4-16-98

1. **Communications - Early Action Item: Provide public information taking advantage of current work products such as the Fish and Wildlife Service's program "The Role of Fire in Alaska" and other published materials that improves the public's understanding of the beneficial uses of fire. Projected Cost: $20,000**
2. **Support for Risk Mitigation Effort. The Task Force recommends additional support be provided to the Fire Risk Mitigation and Education Project. Funding is requested to extend the present two positions to 10 months per year which will enable the training for volunteer fire departments and public to take place in winter months when people are able to attend and in advance of the fire season.**
3. **Coordination of Hazard Tree Removal including right-of-way clearing.** There is an immediate need to initiate a tree removal effort that will eliminate the current and projected risks of dead or dying trees to public facilities such as schools, campgrounds, roads, and right of ways. The effort should include an educational component which 1) encourages the public and land owners to coordinate efforts to safely remove hazard trees near power lines to reduce the risk of electrocution, fire, and power interruption; and 2) educate landowners on the importance and value of cutting back hazard trees from near residences, public areas, and power lines. In addition there should be a removal program with an objective of removing hazard trees from areas that threaten public facilities and right-of-ways.

   Projected Costs and Timing: $ 5.2 Million over 5 years. (Cost based on projected 6,000 acres of power line right a way at $800/acre (500 miles of 100 foot width) plus the equivalent of 500 acres of hazard trees threatening public facilities.

4. **Fuel Breaks. All landowners (including government, trusts, large land owners, and other institutions) should be encouraged to break up the continuity of fuels and make an effort to connect natural fuel breaks in and around developed areas. All agencies should adopt this policy and encourage landowners to implement this practice on private lands.**
5. **Landscaping.** All landowners should consider fire resistant landscaping as a priority when making planting and regeneration decisions (including the selection of fire resistant landscape materials) around or near improvements

including buildings, roads, and utilities.

6. **Community Planning and Involvement. Encourage the establishment of community planning and local action groups to provide an ongoing local effort in support of the Beetle infestation management.**
7. **Forest Practices Act Implementation**. There is presently inadequate state funding to support the implementation of the Forest Practices Act regulations which negatively impacts efforts to manage the Beetle infestation (Clearing of Spruce Trees under 11 AAC 95.195 and Slash under 11 AAC 95.370.). The Task Force urges adequate funding to the three agencies charged with implementing the Forest Practices Act and Regulations (ADNR Division of Forestry, ADF&G, and ADEC).
8. Native Species. If artificial revegetation is selected for landscape level treatment of beetle impacted areas, revegetation should be with native species. This includes planting spruce trees but does not preclude planting other native species.
9. Use of Fire as a Management Tool. There should be a plan that identifies the opportunities to use prescribed fire, or wildfire burning within prescription, which may potentially enhance various forest resources and remain acceptable to the public. Project components include:

    a. Identification of smoke management issues and applicable air quality standards.
    b. Designation of one DOF Manager and 1 USDA FS Manager to obtain or enhance advanced prescribed burn qualifications.
    c. Develop burning prescriptions for selected blocks of land.

1. **Notices to Absentee Property Owners**. The Kenai Peninsula Borough's existing communications with absentee property owners should be augmented with relevant information regarding the beetle infestation and programs underway that may impact the property owner.

18. **Tree Removal Clearinghouse**. Recommend that the Borough establish a clearinghouse where property owners can obtain a listing of individuals and companies who have indicated an interest in removing trees from similar sized land tract's. This activity is expected to be one of the services provided by the Spruce Bark Beetle coordinator.
19. **Transportation Study**.

Project Objective: Provide a comprehensive landscape level transportation planning tool by consolidating information on the existing and projected transportation infrastructure into a GIS-based, Kenai Peninsula-wide mapping system. The information will be used to evaluate spruce bark beetle task force recommendations on access and transportation system development as they relate to fire risk, public safety, emergency evacuation routes, timber harvest and other activities. In addition, the mapping will be used to evaluate the

anticipated cumulative effects on fish, wildlife and other resources from road improvements, timber harvest related road construction and other transportation system developments that may occur in beetle-infested or at risk areas.

Major Project Actions:

A. To facilitate local fire planning for fire prevention, fire-fighting actions and emergency evacuation efforts in response to the increased fire risk associated with spruce bark beetle infestations, major public and private landowners and managers will provide information on existing transportation systems such as the Borough's logging road maps and the 911 emergency response maps and consolidate it into a GIS map(s). Over time, both improved and unimproved easements will be identified.

B. Spruce bark beetle task force recommendations related to prevention measures or response actions in interface or remote areas may require upgrading existing roads or construction of new roads for timber harvest or fuel reduction. The mapping will provide a basis for a landscape level evaluation of the direct and indirect, long-term and cumulative effects to fish and wildlife and other resources associated with task force recommendations that lead to road construction or improvement. Based on an analysis of fire hazards and risk and fish and wildlife and other concerns, the evaluation may result in recommendations on alternative access options and mitigation measures.

C. The mapping can be used to assist in determining the location of appropriate road corridors by avoiding or mitigating both short-term and long-term impacts to fish and wildlife and other resources.

Responsibility:

The Kenai Peninsula Borough will take the lead in coordinating and imputing data into its GIS system and then creating the map(s). This will be a collaborative effort including all major public and private landowners and managers affected by recommendations made by the spruce bark beetle task force. Public and private entities responsible for developing, implementing and managing the mapping include:

Estimated Project Costs:

Projects costs for the creation of the initial maps are nominal as most of the information is currently available and included in various GIS formats from Borough, State DNR, Forest Service and Fish and Wildlife data bases. The Borough would be impacted with computer and personnel time. Additional work includes the ground-proofing of the mapped roads on Borough and private lands. This would be accomplished through a combination of GPS data gathering, field notes and orthographic photo interpretation. The map(s)

would be continually updated, but will take about a year to complete the initial "ground proofing" and photo work at an estimated cost of $50,000.

20. **Land and Vegetation Cover Mapping for the Kenai Peninsula.** The Task Force recommends funding of $25,000 for phase #1 of the Land and Vegetation Cover Mapping for the Kenai Peninsula, recognizing the existing funding commitment of $65,000 already in place from other sources outside the Task Force for this phase of the project.

    Additionally, the Task Force supports federal funding for phase 2 of this project in order to support such activities as site specific fire risk assessment, tracking and predicting spruce beetle infestation, and detailed analysis of individual timber stands. Maps would be based on aerial photographic interpretation, or recently declassified military technology, and would cover selected portions of the Kenai Peninsula. Federal funding for this phase is expected not to exceed $200,000.

21. **Use of Fire as a Management Tool.** The Task Force encourages the Chugach National Forest, Kenai National Wildlife Refuge, Alaska State Division of Forestry and Kenai Peninsula Borough to create an interagency prescribed fire working group to coordinate prescribed fire activities on the Kenai Peninsula including the following:

    a. Developing plans which identify areas where prescribed fire, or wildlife burning in prescription, could enhance various forest resources while remaining acceptable to the public;
    b. Improving prescribed burning qualifications for agency personnel;
    c. Planning for the availability of resources, including overhead, for prescribed fires;
    d. Identifying smoke management and air quality issues;
    e. Educating the public about the beneficial use of fire;
    f. Assisting in the implementation of prescribed fire projects; and
    g. Identification of additional funding sources for these projects.

1. **Use of Organized Emergency Fire fighting Crews for Fuel Reduction Projects.**

    The Alaska Fire Service maintains a roster of emergency fire fighting crews from across the State including crews from the Kenai Peninsula and from small Native villages which have high unemployment rates. Many of the projects identified for implementation, including fuel reduction, fuel break construction and prescribed fire, are very labor intensive and require skills similar to those found in trained fire fighting crews. The Task Force recommends that the crews identified by the Alaska Fire Service could be utilized on a rotating basis to work on projects on Borough, State, National Forest, and National Wildlife Refuge

Lands. The use of the crews is expected to generate the following benefits:

a. Availability of trained fire fighting resources for wildfire suppression on the Peninsula;
b. Availability of resources for prescribed fire projects;
c. Training for the crews;
d. Economic stimulus to disadvantaged communities across the State; and
e. Ready availability of crews who are organized and trained to implement many of the proposed projects.

Funding for the crews would be tied to the individual projects. The State Division of Forestry would take the lead on the coordination and use of the crews.

1. Wildlife Maintenance.

Background. Maintaining wildlife is important to the economy and quality of life on the Kenai Peninsula. Research suggests that habitat changes related to the spruce bark beetle infestation tend to benefit some species and harm some species with a neutral net effect. Some wildlife species are sensitive to human responses to the infestation. The brown bear population in particular is sensitive to human activities and it is vulnerable due to its geographic isolation on the Kenai Peninsula. The health of the brown bear population is also a good indicator for the health of many other wildlife species due to both its habitat requirements and its sensitivity to human activities.

Objective. It is the intent of the Task Force to provide for human health and safety needs while maintaining wildlife habitat to the extent possible. Understanding and maintaining brown bear corridors and other significant units of bear habitat near human development are important elements of planning and implementing actions recommended by the Spruce Bark Beetle Task Force. Determining and recognizing public opinion is necessary during the process of finding the appropriate balance.

Action Recommended. The Task Force recommends that the state and federal governments collaborate to establish a Kenai Brown Bear Planning Team that will operate on a consensus basis. The team should be composed of agency representatives and representatives of key public interests including environmental, fishing, oil and gas, tourism, timber, property owners, and other private interests deemed appropriate. The Planning Team is to develop a brown bear conservation plan which can be utilized in planning for health and safety and other infestation related issues. No recommendation is made on funding.

2. Federal Reforestation Funding

Introduction

Across the Kenai Peninsula the spruce bark beetle epidemic has resulted in many tens of thousands of acres which are in need of reforestation. These acres cross all ownerships and range in size from parcels as small as a few acres to thousands of acres. There are currently some 17,000 acres which have been harvested, but exempted from reforestation under the State Forest Practice Act. There is also concern about areas where timber sales, especially near the urban interface, are uneconomic because of the cost of reforestation. The issue of reforestation to more fire resistant native species in the urban interface is also an important consideration.

Recommendation

The Task Force recognizes the need for forest stewardship, including reforestation, across all ownerships. To encourage the reforestation on the Peninsula, the Task Force recommends the following:

1. Address the Areas Presently Exempted from Reforestation under the Alaska Forest Practices Act. Establish a fund in the amount of $1,250,000 to be used for reforestation on those acres exempted from reforestation under the State Forest Practices Act. This fund would be administered by the Kenai Peninsula Borough.

2. Reforestation in the Urban Interface. Establish a fund in the amount of $750,000 for reforestation on areas of timber harvest for fuel reduction on lands in the urban interface. Emphasis for reforestation should be placed on fire resistant species such as birch, aspen and other native hardwoods, or a mixture of fire resistant species and spruce. This fund would be administered by the Kenai Peninsula Borough.

1. **Reforestation of State Timber Sales with Objective of Fuel Reduction in or near Urban Interface. Establish a fund in the amount of $1,000,000 to be used for reforestation on State timber sale lands where the objective of the sale is to reduce fuels in or near the urban interface. The purpose of the reforestation will be to provide maximum benefits to fish and wildlife.**

1. **Science Committee Status**. The Task Force reached consensus that the Science Committee, originally envisioned in a supporting role to the Task Force, will not be convened as part of this process. The participation of the six state and federal agencies as Advisory Panelists provided input on most science issues raised. As a result, the Task Force consensus is that there are no specific outstanding science questions that are deemed sufficient to warrant the expenditures for the science committee. The Task Force focus has been on generally applicable policy recommendations that are made with an awareness that site specific considerations must be made during implementation. The Task Force agreed that Mr. Boyd Wickman, identified at the outset as the Chair of the Science Committee, should be contacted and asked for an estimate for the costs to prepare a comprehensive bibliography

of spruce bark beetle related scientific reports and research with particular applicability to Alaska.

2. Recommended Resource Utilization for Addressing Task Force's Recommendations on Mitigation.

The Task Force reviewed reached consensus on the most economical manner to achieve the Mitigation Measures recommended in several of the preceding recommendations. These recommendations are grouped in two categories.

- **Mitigation Measures 1.** Action items addressed:
  - Develop evacuation routes and sites of refuge. Preceding consensus recommendation reference is 4(i.)(a) "Emergency Notification and Evacuation - Immediate Actions - Emergency Preparedness - Identify Evacuation Routes."
  - Urban interface fire hazard assessment. Reference 1 "Urban Interface Fire Hazard Assessment" currently projected at $15,000
  - Support the Spruce Bark Beetle Coordinator. Reference 2 (ii) Spruce Bark Beetle Coordinator for $65,000.of total $150,000.
  - Provide year round public education resources. Reference 2 (i.) b (ii);
  - "Longer Term Technical Assistance";
  - Conduct defensible space workshops and fuel reduction interventions. Reference 2 (i.) b (ii) "Longer Term Technical Assistance";
  - Support risk mitigation efforts; and
  - Provide technical assistance and training to local fire service. Reference 6 iv, 6 iii, 7(i.) 7(ii), 7 (iii).

Recommended Action at cost of $55,000.

- Extend the Fire Management Officer to 12 months
- Extend the Training and Prevention Positions to 10 months
- Extend two Instructor/Technician positions to 6 months
- Extend the Warehouse position to 8 months
- **Mitigation Measures 2.**

- Add a Fire Risk Management/Fire Behavior Position to support all other aspects of the SSB-TF recommendations and to take the lead on the Fuel Modeling and Fuel Map projects. Projected cost of $90,000.

- Reference 3 I, II "Fuel Modeling and Risk/Hazard/Behavior Assessment"