

HB

83

HFIN

FILE

HOUSE COMMITTEE REPC T

(11)

Date Referred to Committee: March 9, 2005

FURTHER REFERRALS:

Date of Committee Action: April 7, 2005

The FINANCE Committee considered:

HB 83

HOUSE BILL NO. 83

SEISMIC HAZARDS SAFETY COMMISSION

"An Act relating to the Alaska Seismic Hazards Safety Commission."

Recommends it be replaced with HCS or CS for HB 83 (FIN)
 For Senate Bills with new title: Technical Title New Title: HCR _____ Same Title New Title

- attach amendments
- add new referral to _____ Committee
- Letter of Intent _____ Committee

List of Abbrev for Depts.:

- ADM
- CEC
- COR
- CRT
- EED
- DEC
- DIG
- GOV
- HSS
- LEG
- LAW
- LWF
- MVA
- DSR
- DPS
- REV
- DOT
- UA

<u>NEW FISCAL NOTES</u>				
*Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero
MVA			✓	

<u>PREVIOUS FISCAL NOTES</u>				
List by Dept(s):	FN#	Fiscal	Indet.	Zero
DNR	2			✓

<u>Signing with recommendations</u>	Printed Last Name	DP	DNP	NR	AM
	Hawken			✓	
	CROFT	✓			
	Holm			✓	
	Fester	x			
	STEUTE			✓	
	Kelly			x	
	MOSES	x			
	Weyrauch	x			
Chair:	Meyer	✓			
Chair:	Chevroll	x			

FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: _____
Bill Version: CSHB 83 (MLV)
() Publish Date: _____

Revision Date/Time (Note if correction): _____ Dept. Affected: Military and Veterans Affairs
Title Alaska Seismic Safety Commission RDU Military and Veterans Affairs
Sponsor Representative LeDoux Component Homeland Security and
Requester (H) Finance Component No. 2657
Emergency Management

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services
Travel
Contractual
Supplies
Equipment
Land & Structures
Grants & Claims
Miscellaneous
TOTAL OPERATING

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts
1003 GF Match
1004 GF
1005 GF/Program Receipts	.	.	.	.	.	.
1037 GF/Mental Health	.	.	.	.	.	.
Other (Specify Type-Do not abbreviate)	.	.	.	.	.	.
TOTAL	.	.	.	.	.	.

Estimate of any current year (FY2005) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)
This fiscal note is indeterminate. Depending on the number of meetings and the locations of the meetings costs would be incurred by the Department of Military and Veterans Affairs for a representative to travel and participate.

Prepared by: John Cramer Phone (907) 465-4602
Division: Administrative Services Date/Time 3/29/05 9:18 AM
Approved by: Commissioner Craig E. Campbell Date 3/29/2005
Agency: Military and Veterans Affairs

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FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: _____
 Bill Version: CSHB 83(MLV)
 (H) Publish Date: 2/4/05

Revision Date/Time (Note if correction): _____ Dept. Affected: Natural Resources
 Title: An Act relating to the Alaska Seismic Hazards Safety Commission RDU: Resource Development
 Component: Geological Development
 Sponsor: Rep. LeDoux, Rep. Gultenberg
 Requester: (H) MLV Component No.: 1031

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2005) cost: _____

Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

There is no fiscal impact to DNR associated with implementation of this legislation.

Prepared by: Rod Cornbellick Phone: 907-451-5007
 Division: Geological & Geophysical Surveys Date/Time: 2/1/2005
 Approved by: Tom Irwin, Commissioner Date: 2/1/2005
 Agency: Natural Resources

adopted 4-7-05

24-LS0372Y
Bullock
4/7/05

CS FOR HOUSE BILL NO. 83()

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-FOURTH LEGISLATURE - FIRST SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES LEDOUX, GUTTENBERG

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to the Alaska Seismic Hazards Safety Commission; and providing for
2 an effective date."

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

4 * Section 1. AS 44.37.065(b) is amended to read:

5 (b) The commission is composed of 11 [NINE] members appointed by the
6 governor for terms of three years. A member holds office until a successor is
7 appointed. A vacancy is filled for the unexpired term.

8 * Sec. 2. AS 44.37.065(c) is amended to read:

9 (c) The governor shall appoint to the commission

10 (1) a representative from the University of Alaska;

11 (2) three representatives [A REPRESENTATIVE] from local
12 governments [GOVERNMENT];

13 (3) a representative from the Department of Natural Resources;

14 (4) a representative from the Department of Military and Veterans'

1 Affairs;

2 (5) a representative from an appropriate federal agency;

3 (6) a representative of the insurance industry; and

4 (7) three members from members of the public who are expert in the
5 fields of geology, seismology, hydrology, geotechnical engineering, structural
6 engineering, emergency services, or planning.

7 * **Sec. 3.** AS 44.37.067 is amended to read:

8 **Sec. 44.37.067. Powers and duties.** (a) The commission shall

9 (1) recommend goals and priorities for seismic and tsunami hazard
10 mitigation to the public and private sectors;

11 (2) recommend policies to the governor and the legislature, including
12 needed research, mapping, and monitoring programs;

13 (3) offer advice on coordinating disaster preparedness and seismic and
14 tsunami hazard mitigation activities of government at all levels, review the practices
15 for recovery and reconstruction after a major earthquake or tsunami, and recommend
16 improvements to mitigate losses from similar future events;

17 (4) gather, analyze, and disseminate information of general interest on
18 seismic and tsunami hazard mitigation;

19 (5) establish and maintain necessary working relationships with other
20 public and private agencies;

21 (6) review predictions and warnings issued by the federal government,
22 research institutions, and other organizations and persons and suggest appropriate
23 responses at the state and local levels; and

24 (7) review proposed seismic and tsunami hazard notifications and
25 supporting information from state agencies, evaluate possible socioeconomic
26 consequences, recommend that the governor issue formal seismic and tsunami hazard
27 notifications when appropriate, and advise state and local agencies of appropriate
28 responses

29 (b) The commission may

30 (1) advise the governor and the legislature on disaster preparedness
31 and seismic and tsunami hazard mitigation and on budgets for those activities and

1 may recommend legislation or policies to improve disaster preparedness or seismic
2 and tsunami hazard mitigation;

3 (2) conduct public hearings;

4 (3) appoint committees from its membership and appoint external
5 advisory committees of ex-officio members; and

6 (4) accept grants, contributions, and appropriations from public
7 agencies, private foundations, and individuals.

8 * Sec. 4. AS 44.37.069(3) is amended to read:

9 (3) "seismic and tsunami hazard mitigation" or "mitigation" mean
10 activities that prevent or alleviate the harmful effects of seismic and tsunami hazards
11 to persons and property, including identification and evaluation of the seismic and
12 tsunami hazards, assessment of the risks, and implementation of measures to reduce
13 potential losses before a damaging event occurs.

14 * Sec. 5. AS 44.37.069 is amended by adding a new paragraph to read:

15 (4) "tsunami" means a large ocean wave produced by an earthquake or
16 undersea volcanic eruption.

17 * Sec. 6. AS 44.66.010(a)(9) is amended to read:

18 (9) Alaska Seismic Hazards Safety Commission (AS 44.37.065) -
19 June 30, 2006 [2005].

20 * Sec. 7. AS 44.66.010(a)(9) is amended to read:

21 (9) Alaska Seismic Hazards Safety Commission (AS 44.37.065) -
22 June 30, 2008 [2006].

23 * Sec. 8. The uncodified law of the State of Alaska is amended by adding a new section to
24 read:

25 **CONDITIONAL EFFECT.** Section 7 of this Act takes effect only if the governor
26 makes the appointments to the Alaska Seismic Hazards Safety Commission authorized under
27 AS 44.37.065(c), as amended by sec. 2 of this Act, before June 30, 2006. The governor shall
28 notify the revisor of statutes when all appointments have been made.

29 * Sec. 9. If sec. 7 of this Act takes effect under sec. 8 of this Act, it takes effect June 30,
30 2006.

31 * Sec. 10. Except as provided in sec. 9 of this Act, this Act takes effect immediately under

1 AS 01.10.070(c).

ALASKA STATE LEGISLATURE

Representative
David Guftenberg



Representative
Gabrielle LeDoux

Sponsor Statement

CS for HB 83

**"An Act relating to the Alaska Seismic Hazards Safety Commission;
and providing for an effective date."**

The CS for HB 83 extends the termination date for the Alaska Seismic Hazards Safety Commission until June 30, 2010 and adds the word "tsunami" to all of the sections addressing the scope of the work of the Alaska Seismic Hazards Safety Commission. This will increase the focus of that Commission to include tsunamis.

With more than 33,000 miles of shoreline, Alaska has been and can be devastated by earthquakes and tsunamis. Since about 1900, Alaska has had 80 magnitude 7 or larger earthquakes. This includes the second- and third- largest worldwide earthquakes, which were larger than the recent earthquake in Indonesia.

Tsunamis can and will greatly affect the fishing industry in coastal Alaska as was evidenced in the 1964 Alaska earthquake, which greatly impacted the coastal communities of Prince William Sound and has caused immense damage recently in the fisheries and aquaculture sectors of the affected countries in the Indian Ocean.

Alaska accounts for more than half of all the earthquakes that occur in the U.S. and about ten percent of all earthquakes worldwide. One of the roles of a Seismic Hazards Safety Commission would be to provide a proactive resource for state and local government officials and Alaskan communities that want assistance in acquiring information and guidance necessary to help mitigate earthquake and tsunami hazards.

Alaska's population is growing and the state's infrastructure is developing. The Alaska Seismic Hazards Safety Commission can play a vital role in reducing earthquake related losses. The Alaska Seismic Hazards Safety Commission is an invaluable asset in promoting the earthquake preparation essential to reducing our earthquake threat and future losses to the state that, without effective mitigation measures, are inevitable.

FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSHB 83((MLV)
(H) Publish Date: 2/4/05

Revision Date/Time (Note if correction): _____ Dept. Affected: Military and Veterans Affairs
Title: Alaska Seismic Hazards Safety Commission RDU: Military and Veterans Affairs
Sponsor: Representative Ledoux Component: Homeland Security and
Emergency Management
Requester: (H) Special Committee MLV Component No.: 2657

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2005) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)
There is no fiscal impact.

Prepared by: John Cramer Phone: (907) 465-4602
Division: Division of Administrative Services Date/Time: 2/1/05 11:58 AM
Approved by: Craig E. Campbell, Commissioner Date: 2/1/2005
Agency: Department of Military and Veterans Affairs

LESSMEIER & WINTERS

LAWYERS - LLC

VINTAGE BUSINESS PARK
3000 VINTAGE BOULEVARD
SUITE 100
JUNEAU, ALASKA 99801

MICHAEL L. LESSMEIER
GREGORY W. LESSMEIER
SHELDON E. WINTERS

TELEPHONE: (907) 796-4999
FACSIMILE: (907) 796-4998
E-MAIL: lw@gcl.net

January 27, 2005

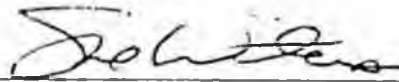
Representative Gabrielle LeDoux
State Capitol, Room 412
Juneau, Alaska 99801

Re: House Bill 84

Dear Representative LeDoux:

I am writing to you on behalf of State Farm Insurance Companies with respect to House Bill 84. State Farm supported the creation of the Alaska Seismic Hazards Safety Commission and supports your proposal to extend the Commission through another five years. If there is any assistance or information we can provide to you, please feel free to call.

Sincerely,



Sheldon E. Winters

SEW/caf
RepLs.Doux01SEW.wpd

Honorable Gabrielle LeDoux
Representative
State of Alaska

Gabrielle

Thanks for the call concerning the State of Alaska Seismic Hazards Safety Commission. I am particularly concerned that the Commission has never been filled and is facing expiration soon unless commissioners are appointed in the near future. Of all the states, none has a greater need for such a group.

Here are several contacts that may be very helpful. I suggest you contact them.

Representative Dave Guttenberg, House District 8 – Fairbanks. Rep. Guttenberg is also interested in the Seismic Hazards Safety Commission and has both information and expertise.

Commissioner Tom Irwin, Department of Natural Resources. I have been told he has reports and documents related to the Seismic Hazard Safety Commission that have not been released to the public but probably could be made available to members of the state legislature. Ph. 907-465-2400, email: <tom_irwin@dnr.state.ak.us>

Dr. Rod Con bellick, Acting Director of the Division of Geological & Geophysical Surveys. Rod is very knowledgeable regarding the Seismic Hazards Safety Commission, the history of its formation, and a lot more. Ph. 907-451-5007, email <rod@dnr.state.ak.us>

Consider the following:

ALASKA IS EARTHQUAKE COUNTRY

Alaska is the most seismically active state in the union. For comparison, California, widely regarded as the benchmark state for earthquake hazards nationally, has experienced 16 magnitude 7 or larger earthquakes historically (since about 1900). A magnitude 7 or larger earthquake is very powerful and if such an earthquake occurs in a populated region will cause widespread and severe damage and may result in casualties. During the same period, Alaska has had 80 magnitude 7 or larger earthquakes, including the second- and third-largest worldwide, the 1964 magnitude 9.2 (Prince William Sound - Kodiak) and 1957 magnitude 9.1 (eastern Aleutian Islands) earthquakes. Both of these were larger than the recent earthquake in Indonesia that generated the catastrophic tsunami in the Indian Ocean, and both generated killer Pacific-wide tsunamis. Indeed, Alaska accounts for more than half of all the earthquakes that occur in the United States and about ten percent of all earthquakes worldwide.

MOST ALASKANS LIVE NEAR BIG ACTIVE FAULTS

Alaska's population is largely concentrated in the seismically active regions of the state. The largest and most active faults in Alaska (and North America) are the Aleutian subduction zone and the Queen Charlotte-Fairweather fault. The Aleutian subduction zone extends from northern Prince William Sound near Cordova and Seward southwest to Kodiak and further

west along the Pacific side of the Alaskan Peninsula and Aleutian chain. This is one of the largest faults in the world and one of the most active. It produced both the 1957 and 1964 earthquakes. The Queen Charlotte-Fairweather fault system extends through southeast Alaska from the Yakutat-Sitka area south past Juneau, Ketchikan and the other communities in the panhandle. The Queen Charlotte-Fairweather fault is the Alaska equivalent of California's San Andreas Fault, just as large, just as active, and for southeast Alaska communities, just as dangerous. Anchorage faces exposure to the Aleutian subduction zone, as illustrated by the damage it caused there in 1964. Anchorage and the Mat-Su valley are in close proximity to the large and highly active Castle Mountain fault and a host of potentially dangerous faults in northern Cook Inlet. Fairbanks also is located in an area of significantly high seismicity from buried active faults that lie beneath the Tanana lowlands.

ALASKANS HAVE BEEN "LUCKY" SINCE 1964

Although a number of strong earthquakes have occurred in Alaska since the devastating 1964 earthquake, all have fortunately been located far away from populated areas. This is somewhat remarkable considering the close correlation between population centers and our largest and most active faults. It is only a matter of time before we experience another serious earthquake that centers on one of our cities. Preparedness is the only antidote we have to mitigate our seismic exposure. The Seismic Hazards Safety Commission is a potentially invaluable asset in promoting the earthquake preparation essential to reduce our earthquake threat and reduce future losses to the state that, without effective mitigation measures, are inevitable.

RECENT LESSONS LEARNED (OR NOT LEARNED)

On Nov. 3, 2002 the Denali fault in the central Alaska Range ruptured and generated a magnitude 7.9 earthquake, the largest "continental" earthquake in North America in the past 150 years. Fortunately the Denali fault is located in a sparsely populated part of the state. However, the fault rupture intersected the Trans-Alaska Oil Pipeline and offset the pipeline about 18 feet. Much to the credit of Alyeska Pipeline Service Company, a thorough study of earthquake hazards to the pipeline was conducted prior to its construction. Where the pipeline crossed the Denali fault special engineering design was incorporated, which allowed the pipe to withstand the 18 feet of offset and strong shaking without failure. The pipeline was only briefly shut down and no oil was spilled. Without the special seismic design considerations the pipeline most certainly would have sustained significant damage and been off line for a much longer period at great cost to the state and the petroleum industry. Since the Denali fault-pipeline crossing is adjacent to the Delta River and the river was thawed and flowing at the time of the earthquake, a large oil spill could have been catastrophic, with oil entering the Delta River, the Tanana and Yukon rivers, and possibly the Bering Sea. The state of Alaska dodged that bullet only because of earthquake preparation in the form of knowledge and engineering design to accommodate the Denali fault hazard. Did we learn anything from this experience? Failure to establish a state Seismic Hazards Safety Commission would suggest we did not.

A REAL AND PRESENT NEED

One of the roles of a Seismic Hazards Safety Commission would be to provide a resource for state and local government officials and Alaskan communities that want assistance in acquiring information and guidance necessary to help mitigate earthquake hazards. For example, presently our community (Kodiak) has determined that there is significant cause to believe some of our schools may not be life-safe in the event of a strong local earthquake. To this end, the Kodiak Island Borough has raised funds through a voter-approved bond issued to investigate the earthquake safety of our schools. Inherent in this process is the need to follow complex FEMA guidelines and understand specialized technical information regarding earthquakes and engineering. Compliance with the FEMA regulations is necessary if we are to qualify for federal funds to accomplish mitigation goals. For almost a year our local government has been struggling with these issues without the necessary expertise and little in the way of sources for advice and guidance. Failure to meet strict FEMA requirements jeopardizes the possibility of federal financial support to mitigate our hazards. The Kodiak community has discovered first-hand how useful a Seismic Hazards Safety Commission would be and how difficult it is for small local governments in the state to dealing with the earthquake mitigation issue.

THE CLOCK IS TICKING

As Alaska grows and our state's infrastructure develops time is passing and the next severe earthquake is drawing closer. Meanwhile, no coherent statewide program is in place to specifically to promote and support earthquake preparedness, and no official group is available to assist Alaska's communities with the mitigation measures needed to reduce our exposure to this threat. Do we need to experience the potentially huge financial losses and casualties a large earthquake in an urban area will bring to our state before we take action to reduce the earthquake hazard? Mitigation pays great dividends and costs very little compared to such losses. However, it is effective only if the mitigation action is done before the earthquake. Alaska cannot afford to stand idly by and wait for the inevitable, the consequences are too great. Establishment of the Seismic Hazards Safety Commission is a powerful first step in saving Alaskan lives, property, and financial well-being. Failure to complete the process by appointing the commission is unconscionable.

Finally, what role could the Commission play in reducing earthquake related losses in the state? According to the Alaska Division of Legislative Audit, Audit Digest #10-20038-05 as posted on the State of Alaska Web Site:

<http://www.legaudit.state.ak.us/pages/digests/2005/20038dig.htm>

- The mitigation of seismic hazards refers to studying, identifying, and prioritizing actions that could be taken to reduce the impact of earthquakes. The most cited tangible mitigation measure has been modification of zoning and building codes. Accordingly, the actual implementation of many of the commission's earthquake mitigation recommendations would have to be done by local governments. Having local representatives as part of the commission may facilitate the implementation of the commission's recommendations.
- Many local governments adopted the International Building Code (IBC) and have, therefore, already been involved in deciding if they believe it is in the public's interest to

update local codes in conformity with IBC changes. Having more local government members would bring, to the commission, a sense of the local concerns about adding or modifying existing local ordinances for improved earthquake mitigation factors."

Local jurisdiction representation on the commission is very important, but I think it is unfortunate that the legislative audit report's emphasis is placed on the use of building codes and zoning to mitigate seismic hazards. Code and zoning regulation is only a small part of a wide range of possible approaches the commission might take to reduce our exposure to seismic hazards. Some critics of the Commission construe such regulation negatively. Other more important and potentially more useful commission approaches could include coordination of state wide education and awareness, development of links with local, state, and federal agencies including FEMA, the US Geological Survey, Association of Structural Engineers, and a host of private and government agencies that could provide a range of assistance to local officials, private industry, and Alaska citizens.



SSA statement in support of improved earthquake and tsunami hazard mitigation

As compassionate people we are all saddened by the death and destruction caused by the Sumatra earthquake and resulting tsunami, but as seismologists we are additionally dismayed by the needless deaths since tsunami warning systems are scientifically and technologically possible. Indeed, many seismologists are reflecting on our discipline's responsibility for the extent of the human suffering. However, this reflection is rarely on what more we could have done scientifically and more often on our inability to translate and disseminate our knowledge in a way that might have made a difference. We have known that very large earthquakes are likely off the coast of Sumatra (as well as many other similar subduction zones). We have known that large, though comparatively rare, tsunamis have been generated there (as well as in most other ocean basins). We have the understanding and technology to rapidly issue warnings for tsunamis based on seismic and oceanographic data (and already issue warnings for the Pacific Basin). We publish scientific papers about our understanding of past events and the way geology works, often with an eye to anticipating future hazardous events. With all of this knowledge and technology how could this disaster have occurred? Unfortunately too often the connection between scientific understanding and practical, applied use of that understanding is lacking or comes too late.

There is no question we seismologists had a responsibility to publicize information about earthquakes and tsunami hazards in the Indian Ocean. Of course, there are hazard studies and maps about this area as well as many other places around the globe susceptible to the rare but very disastrous event. However, it may not be enough to publish technical papers and give presentations at professional meetings. Indeed, all of the major earth science funding agencies in the U.S. (NSF, U.S.GS, NOAA, NASA) have effective education and outreach programs. Educational books, pamphlets, posters and numerous web pages are produced and made available through many channels. Hazard information is available to almost any educated person seeking it. But, is this enough? Do we have more than research and educational responsibilities for hazard mitigation? We also have an advocacy responsibility. In addition to providing the results of our research by producing educational materials we must take these materials to those who can implement hazard reduction programs. We must be willing to go directly to governmental officials and, through the media, to the general public. We must not assume that responsible officials will find, read and act on our publications without us taking an active role. We must insist that the media responsibly report the important hazard mitigation information, not just the sensational aspects of potential disasters.

In the aftermath of this particular disaster the U.S. Government has recently proposed a

new effort to improve tsunami warning systems, primarily for U.S. coastal areas. Discussions have reviewed what we could have done differently and what we can do to prevent a similar disaster in the future. The proposed effort combines the capabilities of two agencies to address the problem. The U.S. administration is proposing to commit \$37.5M to improve tsunami warning systems in the Pacific, Atlantic and Caribbean. This is a good idea and will not only help protect U.S. coastal areas but help protect those of neighboring countries as well. However, this technological solution is just a small part of an effective real solution. There is a real danger that in our haste to fix what was broken in the recent disaster, we will fix the wrong thing for next time. Not only is this plan embarrassingly U.S.-centric it doesn't clearly address the whole problem, even for the U.S.. Detecting the earthquake and generating a warning is one thing but distributing the warning to all at-risk populations who have been educated about what to do is the bigger, more critical mitigation effort. Indeed, education alone, even without a warning system, could save large parts of a coastal population. Effective information could be as simple as, "If you feel a strong earthquake and/or see the ocean level behave in an unusual way, get off the coast as fast, far and high as possible." This plan should contain a much stronger educational component.

There are other dangers of the quick fix. While this is an opportunity to significantly improve mitigation efforts for the very serious yet rare tsunami hazard it is critical that the enormity of the recent tragic event not sidetrack us from other equally dangerous and more common hazards. Earthquakes without tsunamis are still the biggest geologic hazard worldwide. Unfortunately, even a moderate earthquake directly under one of the world's very large but unprepared cities will result in many more deaths than resulted from the Indian Ocean tsunami. The quick fix of a warning system is not applicable in such a case. However, improved hazard mapping and building construction practices would make a huge difference. Science and engineering show both where the hazards are high and propose techniques to significantly mitigate those hazards. U.S. science funding has made great advances; however, again putting the results into practical action is too often forgotten. As one example, while Congress authorized the Advanced National Seismic System to take a lead role in improving earthquake hazard mitigation it has only appropriated 10% of the needed and authorized amount of funding. It would be truly unfortunate if in our rush to fix the tsunami problem we forget about other, even more hazardous situations and wait until after one of those occurs to make serious advances. Similarly, while it is laudable that the U.S. is providing large sums of money and other resources, both public and private, for Indian Ocean tsunami relief efforts, it would be very unfortunate for these funds to be siphoned from programs designed to mitigate future disasters of a similar or greater magnitude. It is critical that we review all potential hazards for their likelihood and impact and distribute precious resources in a way that will maximize the chances of making a big difference next time.

—Stephen D. Malone, President

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Anchorage Daily News

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Tsunami warning system won't end threat to Alaska

BUOYS: Purpose of devices is to warn rest of Pacific of waves from earthquakes here.By TOM KIZZIA
Anchorage Daily News*(Published: January 15, 2005)*

Alaskans shouldn't be lulled by the existence of high-seas buoys in the Pacific Ocean into thinking they are much better protected from danger than residents of Banda Aceh in Indonesia, according to earthquake and tsunami experts here.

 [Photo gallery](#)

The buoys that detect passing waves are subject to breakdown -- as evidenced by the fact that three of the six currently deployed have been out of service for a year.

More significantly, earthquake and tsunami experts said in recent interviews, those buoys are deployed to warn the rest of the Pacific Rim about tsunamis generated by earthquakes in unstable Alaska. An Alaska-generated wave would probably hit the shore here before it reaches the first buoy heading south.

"By the time it gets to the buoy, you better have everybody evacuated," said Paul Whitmore, the scientist-in-charge at the West Coast/Alaska Tsunami Warning Center in Palmer.

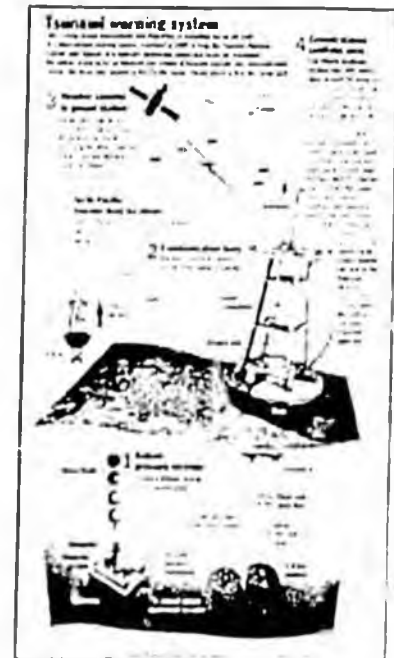
The situation is the same in the Indian Ocean. A buoy warning system there might have provided advance warning to Sri Lanka, which was hit several hours after the triggering earthquake Dec. 26. But it would not have alerted the coast of Sumatra, adjacent to the rift zone in the Andaman Sea.

An expanded buoy system in the Pacific, such as the one proposed Friday by the Bush administration, would provide more notice to Alaska of tsunamis coming from other places. But it would be unlikely to help with Alaska's own waves, whether generated by shifting subsea faults or landslides. Both kinds of waves proved devastating here during the 1964 earthquake.

What Alaska does have going for it, compared with the Indian Ocean nations, is a much more extensive deployment of seismometers and a notification system ready to put out alerts of a possible tsunami in a matter of minutes. Alaska also has a series of tidal gauges in coastal communities, helpful to some extent in confirming the existence of a wave as it passes, and a civil defense system drilled in the potential dangers to coastal towns. People have been told not to wait for a siren to evacuate.

"If the ground is shaking hard enough so that you have trouble standing, it's close," state seismologist Roger Hansen said. "I would say go to higher ground."

How high is high enough? Alaska is now mapping its tsunami danger zones. In Homer, for example, state and University of Alaska experts just released last month a new map showing the



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[Click on photo to enlarge](#)

expected high-water mark of waves generated by the two likeliest subsea earthquake hazards. The result was surprisingly good news, with only a small segment of the low-lying Homer Spit likely to get washed over. Even so, city officials said, they would evacuate the Spit if the Palmer center reported a wave heading into Cook Inlet.

"We're in the prevention business," Homer fire chief Bob Painter said.

The new "inundation map" is based on mathematical formulas -- accounting for such things as fault lines and sea bottom contours -- first worked out for Kodiak and calibrated against the actual waves that killed six people there after the 1964 Alaska earthquake. The numbers are run through a supercomputer at the University of Alaska Fairbanks. Similar hazard maps are being prepared for Seward and Sitka, Hansen said.

Anchorage is believed to have virtually no danger from long-distance tsunamis because it is at the end of Cook Inlet, whose long shallow straits would dissipate any wave's energy, Hansen said.

The new Homer map doesn't account for what has long been thought the most serious tsunami threat in the area, an eruption and landslide at Augustine Volcano about 60 miles away. Scientists have grown sharply divided over whether the island volcano presents a major tsunami threat.

Apart from Augustine, subsea landslides often trigger local tsunamis with little warning. Chris Waythomas, a hydrologist with the Alaska Volcano Observatory, said five of the seven fatal tsunamis in Alaska history were probably landslide-induced, including the most recent one, in Skagway in 1994.

The Pacific alert system for long-distance waves began to take shape after a 1946 earthquake in the Aleutians produced a wave that surprised Hawaii, killing 159 people along the waterfront in Hilo. Major waves from that quake hit Chile 12 hours later.

Prediction efforts took another big step forward after the magnitude-9.2 earthquake in Alaska in 1964, with establishment of a central information gathering point in Palmer. Most of the deaths caused by the 1964 quake were due to waves, including 10 as far away as Crescent City, Calif.

Today, the Palmer facility is hooked into 150 seismic sites around the world, including 50 outside the Pacific region. When these sites send information of a serious shake, employees notified by beepers are expected on the scene in five minutes. They assess the data and decide whether the quake may have generated a wave. An automatic warning system sends alarms to the National Weather Service, the Coast Guard and various emergency response agencies.

They won't know whether the subsea rumble really created a tsunami until they start to pick up information from tidal gauges at docks in a scattering of coastal towns. Some of those gauges feed information to Palmer via satellite steadily, while others beam data only every half hour, Hansen said.

The deep-sea buoys in the Pacific can pass along more precise measures of a wave's size. But their most important role may be in calling off false alarms. Presumably a tsunami alert has already been issued by the time the wave passes the so-called DART buoys (for "Deep-ocean Assessment and Reporting of Tsunamis"), which are set in water several miles deep. The DART buoys have sensors on the ocean floor capable of gauging the pressure change of waves only half an inch tall as they pass. If no wave is detected, the alarms are called off, saving coastal evacuations that may cost tens of millions of dollars, officials say.

Indeed, the buoy system won kudos in November 2003 when they allowed Hawaii to cancel an evacuation after an ominous 7.5-magnitude quake in the western Aleutians.

"They're better for canceling warnings than issuing them," said Whitmore, at the Palmer center.

Unfortunately, the western Aleutian DART buoy that gave the all-clear in 2003 is currently out of service, as is the buoy off Unalaska and one other off the Oregon coast.

"Some of us on the steering committee are concerned that half the system is down now," state seismologist Hansen said, referring to a national tsunami hazard group made up of five Pacific rim states and three federal agencies.

One of the three broken DART buoys has already been pulled and repaired and is ready for redeployment when winter sailing weather allows, according to National Weather Service spokesman Greg Romano.

"We are taking steps to make it a more rugged system," Romano said.

Increasing the number of deep-sea buoys would provide faster information and would also help triangulate the source and direction of waves, Whitmore said. The wave off Sumatra was over a 600-mile zone, not simply from the quake's epicenter, he said.

For Alaskans near the source of a wave, though, more buoys may not be much help. The first seismographic report of a potential tsunami may be the only useful warning Alaska gets.

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SEAFOOD.COM NEWS [FAO Press statement] 13 January 2005, Washington and Rome -- The tsunami waves have had a devastating impact on the fisheries sector in many countries of the Indian Ocean, FAO said today.

In Sri Lanka, more than 7 500 fishers have been killed by the tsunami and over 5 600 are still missing. More than 5 000 Sri Lankan fishing families have been displaced and 80 percent of coastal fishing vessels have been completely destroyed or very seriously damaged, including around 19 000 boats. Ten out of the 12 main fishing harbours in the country have been completely devastated including infrastructure such as ice plants, cold rooms, workshops and slipways.

FAO has already sent fisheries experts to Sri Lanka to advise the government on the repair and rehabilitation of fishing harbours and infrastructure, fishing boats and fishing gear.

In the Nanggroe Aceh Darussalam Province of Indonesia, where 42 000 fishers and their families live, 70 percent of the small-scale fishing fleet have been destroyed. In Nias Island, about 800 fishing canoes have been destroyed. Two thirds of local fisherfolk from the capital Banda Aceh were killed by the waves.

Fish farming was severely affected in northern Sumatra with about 1 000 fish cage farms having been completely destroyed.

'FAO is currently assessing the damage and will help the government and local authorities to repair and replace fishing boats and gear and start with the initial repair of water fishponds and infrastructure so that fish production can be resumed as soon as possible,' said Jeremy Turner, Chief of the Fishery Technology Service.

In the affected coastal areas of Thailand, 386 fishing villages with a population of around 120 000 people have lost about 4 500 fishing boats, or their fishing gear has been seriously damaged. Most fishing boats are owned by small-scale, traditional fishers. The total damage to marine capture fisheries alone is estimated at around \$16.6 million.

Eight fishing harbours and their infrastructure have been seriously damaged. The affected aquaculture industry has suffered a serious setback. A total of around 15 800 fishing cages have been damaged, this has caused losses of about \$33 million. In some areas, seafood supplies have dropped by 90 percent since the tsunami.

FAO is preparing support measures for fisherfolk in six southern Provinces of Thailand providing essential fisheries inputs and assisting in the repair of damaged fishing vessels and damaged fishery infrastructure.

In the Maldives, where a very large part of the population depends on fishing for their livelihood, more than one third of all inhabited islands were severely damaged and hundreds of boats and harbours were destroyed. FAO is planning to assist the country with the repair and replacement of fishing boats, engines and fishing gear as well as with

the repair and rehabilitation of fisheries infrastructure.

In the state of Andhra Pradesh in India, fishers along the 1 000 km coastline were the worst hit by the tsunamis. Around 2 000 fishing boats and about 48 000 fishing gears were lost, about 300 000 fishers have lost their jobs. In the state of Tamil Nadu, 591 fishing villages and 30 islands of the Andaman and Nicobar islands have been badly affected by the tsunamis. India's seafood exports may decline by around 30 percent as a result of the tsunami.

In Myanmar, some 200 villages spread along the southern coast and heavily relying on fishing have been hit by tsunamis and lost fishing vessels, fishing gear and infrastructure. Some 17 seaside fishing villages have been reported as destroyed and at least 53 people as killed by the tsunamis. FAO is preparing for a long-term participation in relief and rehabilitation measures for the affected fishing communities.

In Malaysia, the livelihoods of about 6 000 fishers have been affected by the disaster.

In Somalia, around 2 000 fishing boats have been destroyed. FAO is assisting in damage and needs assessments and making preparations for the repair of damaged fishing vessels and for the provision of essential fishing inputs in six southern provinces of the country. FAO will also provide short-term financial aid and training in improved fishing techniques and boatbuilding to about 2 000 fishers.

In the Seychelles, coastal fish farms and the artisanal fisheries sector suffered extensively. A great number of fishing vessels were damaged or lost. The two fish processing plants and cold storage facilities located at the fishing port in Victoria were also affected by the tsunamis. FAO is preparing assistance programmes for the repair and replacement of fishing vessels and landing facilities and for the restoration of sustainable livelihoods in the fisheries sector.

The damage caused by the recent tsunamis in the fisheries and aquaculture sectors of the affected countries is worse and more complex than expected, Turner said.

FAO's Fisheries Department has embarked on a concerted effort to assist the fisheries and aquaculture sectors of the tsunami effected countries through relief and rehabilitation measures and projects.



Alaska Division of Legislative Audit Audit Report #10-20038-05



November 10, 2004

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 and Title 44 of the Alaska Statutes, the attached report is submitted for your review.

DEPARTMENT OF NATURAL RESOURCES ALASKA SEISMIC HAZARDS SAFETY COMMISSION

October 22, 2004

Audit Control Number

10-20038-05

This audit was conducted as required by AS 44.66.050 and under the authority of AS 24.20.271(1). Alaska Statute 44.66.050(c) lists criteria to be used to assess the demonstrated public need for a given board, commission, agency, or program subject to the sunset review process. Currently under AS 44.66.010(a)(21), the Alaska Seismic Hazards Safety Commission is scheduled to terminate on June 30, 2005. If the legislature takes no action to extend the termination date, the commission would be allowed one year in which to conclude its administrative operations. Because the commission has been inactive since it was created in 2002, we recommend its termination date not be extended.

The sunset review was conducted in accordance with generally accepted government audit standards. Fieldwork procedures utilized in the course of developing this report are set out in the Objectives, Scope, and Methodology section.

Pat Davidson, CPA
Legislative Auditor

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Department of Natural Resources

OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 and Title 44 of the Alaska Statutes, we have reviewed the activities of, and circumstances surrounding, the Alaska Seismic Hazards Safety Commission (ASHSC). As required by AS 44.66.050(a), the legislative committees of reference are to consider this report during the legislative oversight process involved in determining if the commission should be reestablished. Currently, AS 44.66.010(a)(21) states that the commission will expire on June 30, 2005. If the legislature does not extend the termination date for the commission, ASHSC will have one year to conclude its administrative operations.

Objectives

There are two central, interrelated objectives of our report are:

1. To determine if the termination date of ASHSC should be extended.
2. To determine if ASHSC is operating in the public interest.

Scope and Methodology

The assessment of the operations and performance of the commission is to be based on criteria set out in AS 44.66.050(c). Criteria set out in this statute relates to the determination of a demonstrated public need for the commission. However, since the Alaska Seismic Hazard Safety Commission was never actually constituted, we are unable to provide an evaluation of the commission's activities in accordance with AS 44.66.050(c).

Therefore, the major areas of our review were legislative committee minutes and various documentation developed and presented in the course of deliberations involved in the passage of legislation establishing ASHSC. Additionally, we:

- Reviewed applicable statutes related to ASHSC.

- Reviewed minutes of legislative committee hearings related to the legislation that established ASHSC.
- Reviewed Executive Order 105, issued by Governor Murkowski in January 2003.
- Reviewed the activities and publications of state organizations in the western United States with missions and objectives similar to that of ASHSC.
- Interviewed the Department of Natural Resources' commissioner and the manager responsible for activities related to the mission and objectives of ASHSC.
- Interviewed local government building officials regarding how various communities in the states deal with seismic issues through adoption and enforcement of building codes.
- Reviewed correspondence of Commissioner Irwin of the Department of Natural Resources regarding his position and comments on the public policy objectives related to both the past and the future of ASHSC.

ORGANIZATION AND FUNCTION

In 2002, the legislature established the Alaska Seismic Hazards Safety Commission (ASHSC). In committee testimony, the primary sponsor of the legislation characterized the commission as having an "umbrella status" over various state agencies that would permit it to coordinate a seismic hazard mitigation policy for the state.

To better promote intergovernmental coordination, the commission was originally established in the Office of the Governor. ASHSC was transferred to the Department of Natural Resources by Executive Order Number 105, issued by Governor Murkowski in January 2003.

ASHSC is comprised of a cross section of members from government, business, and academia.

The Seismic Hazards Safety Commission was designed to be made up of individuals from a wide cross section of government and private sector representatives. The nine commission members were to be representatives from:

1. the University of Alaska;
2. local government;
3. Department of Natural Resources;
4. Department of Military and Veterans' Affairs;
5. an appropriate federal agency;
6. the insurance industry; and,
7. three members from the general public "*who are expert in the fields of*"
 - a) geology,
 - b) seismology,
 - c) hydrology,
 - d) geotechnical engineering,
 - e) structural engineering,
 - f) emergency services, or
 - g) planning.

ASHSC was structured in such a way to address what the legislature saw as a "*pressing need to provide consistent*

policy framework and a means for continuing coordination of programs and public safety practices related to seismic hazards at all governmental levels and in the private sector."

The legislature mandated that the commission recommend goals and priorities for seismic hazard mitigation to both governmental agencies and the private sector. ASHSC was also to recommend policies to the governor and legislature related to such things as research, mapping, and monitoring programs necessary for effective seismic mitigation.

Department of Natural Resources, Division of Geological and Geophysical Surveys

Alaska Statute 41.08.010 establishes in the Department of Natural Resources (DNR), a division of geological and geophysical surveys under the direction of the state geologist. The state geologist is appointed by the commissioner of DNR, and responsible for conducting geological and geophysical surveys to determine the potential of Alaskan land for:

1. production of metals, minerals, fuels, and geothermal resources;
2. the locations and supplies of groundwater and construction materials; and,
3. the potential geologic hazards to buildings, roads, bridges, and other installations and structures.

The state geologist is also responsible for conducting other surveys and investigations necessary to advance the geology of the State. With the approval of the commissioner, the state geologist may acquire, by gift or purchase, geological and geophysical reports, surveys, and similar information.

State law further specifies that the Division of Geological and Geophysical Surveys shall:

1. *collect, record, evaluate, and distribute data on the quantity, quality, and location of underground, surface, and coastal water of the state;*
2. *publish or have published data on the water of the state;*
3. *require the filing with it of the results and findings of surveys of water quality, quantity, and location;*
4. *require of water well contractors, the filing with it of basic water and aquifer data normally obtained, including but not limited to well location, estimated elevation, well driller's logs, pumping tests and flow measurements, and water quality determinations;*
5. *accept and spend funds for the purposes of this section, AS 41.08.017, and 41.08.035 and enter into agreements with individuals, public or private agencies, communities, private industry, state agencies, and agencies of the federal government;*
6. *collect, evaluate, and distribute geologic data on seismic events and engineering geology of the state;*
7. *identify potential seismic hazards that might affect development in the state;*
8. *inform public officials and industry about potential seismic hazards that might affect development in the state.*

BACKGROUND INFORMATION

Mitigation of seismic hazards refers to studying, identifying, and prioritizing actions that could be taken to reduce the impact of earthquakes. Accordingly, seismic hazards mitigation can involve everything from considering where earthquakes are most likely to strike to how buildings, bridges, other infrastructure, and even topography can be built or modified to reduce damage.

Mitigation involves studying seismic risks and coordinating action to minimize damage

Similar organizations in other states have taken such actions as studying earthquake-prone areas and evaluating infrastructure and topography in regions that have been identified as being at highest risk. These other state commissions work with local, state, and federal governments in addition to private sector interests to construct or modify buildings, bridges, highways, and power lines to reduce the damage earthquakes may cause. Such commissions also coordinate activities such as the evaluation of the topography of high risk areas. From such evaluations the organization considers what measures could be taken to avoid such things as flood damage from rivers and lakes or other damage from landslides or avalanches that may be precipitated by an earthquake.

Mitigation is distinguished from response because it involves trying to anticipate earthquake damage and taking steps to reduce or avoid damage and loss of human life. Response, in contrast, involves actions taken after an earthquake strike, which are necessary to restore and protect public health and safety. Response stems from preparedness, and the legislature made a formal finding in the enabling legislation that

[Although the state has made significant improvements in disaster preparedness since the great earthquake of 1964, there has been little corresponding improvement in measures to reduce the disaster potential of major earthquakes and, consequently, to reduce the dependence on disaster relief.

Legislation establishing the Alaska Seismic Hazards Safety Commission (ASHSC) had extensive legislative support

The legislation setting up ASHSC passed with overwhelming support. In April 2001 the bill, HB 53, was adopted by the House of Representatives by a vote of 36-2. In May 2002 the legislation was adopted by the Senate by a vote of 17-3. The measure was signed into law by Governor Knowles in August 2002 - with an effective date of September 29, 2002. The 2002 legislature also made an FY 03 appropriation of \$33,500 for commission operations.

Outgoing Governor Knowles did not make any appointments to the commission prior to the November 2002 elections. In March 2003, Governor Murkowski issued an executive order transferring ASHSC from the Office of the Governor to the Department of Natural Resources (DNR). Governor Murkowski, however, made no appointments and, at the end of FY 03, the commission's entire appropriation lapsed unspent and was swept into the

[1]

state's Insurance Catastrophe Reserve Fund.

In FY 04, the \$28,900 in funding for ASHSC was transferred to DNR and included in the general fund base budget for the Geological Development allocation. While there was no financial activity related to ASHSC, the Geological Development general fund allocation is lapsing just under \$10,000 which is less than \$28,900 intended for ASHSC. In FY 05, there were no budgetary transactions specifically related to the commission that either increased or decreased the portion of the Geological Development allocation related to ASHSC.

It is likely no appointments were made because DNR Commissioner Irwin recommended ASHSC statutes be repealed. The commissioner's recommendation was based on his belief that the cost of ASHSC was too high. In

correspondence with Legislative Audit, the commissioner stated that after receiving further information regarding ASHSC – and satisfying himself that the annual operating costs could be kept to \$10,000 rather than a previous budget projection of \$28,000 – he had changed his opinion and recommendation with regard to continuance of the commission.

Accordingly, he recommended that the Boards and Commission staff in the Office of the Governor proceed with appointments. In the view of the commissioner, there is a need for active coordination of earthquake-hazard mitigation activities between all levels of government and the private sector in the state. Having ASHSC in place to advise the governor, legislature, local governments, and the private sector on ways to reduce future economic losses and casualties from earthquakes is a valuable and necessary function. As of mid-October 2004, Governor Murkowski has yet to make an appointment to the commission.

REPORT CONCLUSIONS

Under state law, the burden of demonstrating a continuing public need for a given board, commission, or agency that is subject to termination rests with the entity subject to sunset review. [2] Accordingly, since the commission has not been active since it was created in 2002, it is difficult to make the argument there is a demonstrated public need for the commission's termination date to be extended.

Since there is no functioning commission, we recommend that the legislature not extend the termination date of the commission. By not extending the termination date the Commission will have one year to administratively conclude its operations, and will cease to exist at June 30, 2006.

We recognize when the commission was created it received overwhelming support from the legislature. Additionally, other western states that are prone to earthquakes have created boards and commissions with duties similar to that of the Alaska Seismic Hazards Safety Commission. If there is legislative interest in continuing the commission, we offer a recommendation regarding the composition of the commission that would enhance its operational effectiveness.

FINDINGS AND RECOMMENDATION

Recommendation No. 1

The legislature should consider, if it extends the termination date of the Alaska Seismic Hazards Safety Commission, altering the composition of the commission to provide more representation of local government.

Much of the testimony heard in support of the commission's enabling legislation (HB 53) stressed the importance of communicating policy and possible mitigation measures that could be taken by all levels of government. A major area of concern involved the development of local community zoning ordinances and building code requirements to minimize the impact that the seismic shock would have on residential, government, and commercial buildings. Staff working with similar seismic mitigation agencies, in other western states we surveyed, often cited improvements to local planning requirements and building code restrictions as a major, if not primary, tangible benefit of their organization's accomplishments.

As mentioned in the Background Information section, it was the finding of the 2002 legislature that there had been little *"improvement in measures to reduce the disaster potential of major earthquakes..."* since the great earthquake of 1964. In many respects, at both the state and local government level this may be the case. However, the evolution of building codes as reflected in the recently developed 2003 International Building Code (IBC) has resulted in increasingly stronger seismic-related construction requirements – primarily in response to the devastating destruction of earthquakes outside of the United States in recent years.

At the present time the standard code that is increasingly being recognized and adopted by local governments is the 2003 IBC. All building officials we spoke to commented that extensive seismic-related requirements were already incorporated into the IBC and that they varied depending on a region's seismic risk rating. One local building official adamantly maintained that the IBC seismic requirements were already too stringent for his region, and any statewide policy group that would want more extensive requirements would not be welcomed.

We contacted numerous local government building officials in the State regarding how the recommendations of the Alaska Seismic Hazard Safety Commission could be put in place through local building codes. Most communities have a building code advisory commission that makes recommendations about local construction codes. A modification of the code generally involves making local exception to the "standard" code, which most communities have adopted by reference.

The commission would benefit from additional representation by local government for two primary reasons:

- As discussed above, the mitigation of seismic hazards refers to studying, identifying, and prioritizing actions that could be taken to reduce the impact of earthquakes. The most cited tangible mitigation measure has been modification of zoning and building codes. Accordingly, the actual implementation of many of the commission's earthquake mitigation recommendations would have to be done by local governments. Having local representatives as part of the commission may facilitate the implementation of the commission's recommendations
- Many local governments adopted the IBC and have, therefore, already been involved in deciding if they believe it is in the public's interest to update local codes in conformity with IBC changes. Having more local government members would bring, to the commission, a sense of the local concerns about adding or modifying existing local ordinances for improved earthquake mitigation factors.

The commission membership is currently defined as a nine-member commission with one representative of local government. If the legislature is considering continuation of the commission, we believe that a statutory revision or expansion to the commission membership should include at least three local government representatives from seismically different geographic areas of the state.

AGENCY RESPONSES

Department of Natural Resources

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

FRANK H. MURKOWSKI, GOVERNOR

- 400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FAX: (907) 465-3886
- 550 WEST 7TH AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
FAX: (907) 269-8918

December 27, 2004

Ms. Pat Davidson
Legislative Auditor
Legislative Budget and Audit Committee
P.O. Box 113300
Juneau, AK 99811-3300

Re: Seismic Hazards Safety Commission Report
10-20038-05

Dear Ms. Davidson:

Thank you for the opportunity to review the Alaska Seismic Hazards Safety Commission (ASHSC) Preliminary Report to the Legislative Budget and Audit Committee. As I stated in my prior letter to Mr. Griffen the draft report is very thorough and actually emphasizes the need for the ASHSC. I disagree with the conclusion that the ASHSC has not been active and it is therefore difficult to argue that there is not a demonstrated public need. I support the ASHSC and I urge the Legislature to extend the sunset date.

Alaska is the most seismically active state in the country. The legislature approved the ASHSC because they listened to the concrete arguments provided by professionals for the need for the commission. They recognized the success of similar commissions in other states for reducing earthquake losses and they took assertive action to address the issues in Alaska.

The risk of earthquake losses is steadily increasing and it should be clear as we witness the devastation caused by the earthquake in Asia that we need to minimize the state's risk as Alaska's population and infrastructure expand. Reducing losses at reasonable cost requires public commitment at the highest levels to earthquake-conscious siting, design, and construction. I believe that the ASHSC will provide the focus for this commitment. Governor Murkowski is currently reviewing nominees for appointments.

I concur with the Report's Recommendation No. 1 to increase representation of local government. Hazard mitigation occurs primarily at the local level and I agree that local governments in diverse regions of the state should be represented on the commission. This will ensure that proposed mitigation measures are appropriate, reasonable, and effective.

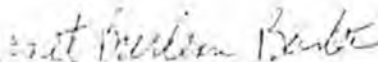
The report states that it is likely that no appointments were made to the commission because I initially recommended that the enabling statutes be repealed. As recognized in

Ms. Davidson
December 27, 2004
Page 2 of 2

state of affairs if a commission of this type is not extended because of my intent to be fiscally responsible. I take my job as Commissioner seriously and I weigh the benefits of an issue in light of the budget and my stewardship responsibilities. To act otherwise would be irresponsible. Once I was assured that the commission could be supported with a reduced budget I fully supported the commission and I recommend that the sunset date be extended. I expect the ASHSC's future recommendations to enhance public safety in our seismically active state.

Please contact me, Rod Combellick (451-5007; rod@dnr.state.ak.us) or Janet Burleson Baxter, 465-4730, if you would like further clarification on the department's recommendation on this issue.

Sincerely,


Thomas E. Irwin
Commissioner

cc: Rod Combellick
Janet Burleson Baxter
Marty Rutherford
Lorraine Derr
Linda Hay

[1]

State law, AS 37.05.289 (b), allows a sweeping of certain funds at the end of each fiscal year under the following provision:

If the amount necessary to satisfy claims or judgments for which payment may be due under the state insurance program in a fiscal year exceed the unexpended balance of the amounts allocated to the account, the department may charge an additional amount from the unencumbered balance of any appropriation that is determined by the commissioner of administration to be available for lapse at the end of the fiscal year.

[2]

AS 44.66.050(b) states

During a public hearing, the board, commission or agency shall have the burden of demonstrating a public need for its continued existence or the continuation of the program, and the extent to which any change in the manner of exercise of its functions or activities may increase efficiency of administration or operation consistent with the public interest. [emphasis added]

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