ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
February 4, 2011
1:05 p.m.

MEMBERS PRESENT

Representative Eric Feige, Co-Chair
Representative Peggy Wilson, Vice Chair
Representative Alan Dick
Representative Bob Herron
Representative Cathy Engstrom Munoz
Representative Berta Gardner
Representative Scott Kawasaki

MEMBERS ABSENT

Representative Paul Seaton, Co-Chair
Representative Neal Foster

COMMITTEE CALENDAR

HOUSE CONCURRENT RESOLUTION NO. 2
Urging the Alaska Historical Commission to prepare recommendations for the naming of a geographical feature in the state as a permanent legacy in recognition of President Ronald Reagan's service to the United States of America.

- MOVED HCR 2 OUT OF COMMITTEE

HOUSE JOINT RESOLUTION NO. 11
Urging the United States Congress to refrain from passing legislation that designates land in Area 1002 of the Arctic National Wildlife Refuge as wilderness.

- MOVED HJR 11 OUT OF COMMITTEE

OVERVIEW: DEPARTMENT OF NATURAL RESOURCES - DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

- HEARD

OVERVIEW: ALASKA DEPARTMENT OF FISH & GAME - DIVISION OF WILDLIFE CONSERVATION

- HEARD

PREVIOUS COMMITTEE ACTION

BILL: HCR 2
SHORT TITLE: RONALD REAGAN LANDMARK
SPONSOR(s): REPRESENTATIVE(s) STOLTZE

01/21/11	(H)	READ THE FIRST TIME - REFERRALS
01/21/11	(H)	RES
02/04/11	(H)	RES AT 1:00 PM BARNES 124

BILL: HJR 11
SHORT TITLE: OPPOSING ANWR WILDERNESS DESIGNATION
SPONSOR(s): REPRESENTATIVE(s) MILLETT

01/21/11	(H)	READ THE FIRST TIME - REFERRALS
01/21/11	(H)	RES
02/04/11	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

JOE MICHEL, Staff
Representative Bill Stoltze
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Presented HCR 2 on behalf of Representative Stoltze, sponsor.

REPRESENTATIVE CHARISSE MILLETT
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Spoke as the sponsor of HJR 11.

ADRIAN HERRERA
Arctic Power
Washington, D.C.
POSITION STATEMENT: Testified in support of HJR 11.

ROBERT SWENSON, State Geologist & Director
Division of Geological & Geophysical Surveys (DGGS)
Department of Natural Resources (DNR)
Fairbanks, Alaska
POSITION STATEMENT: Provided a presentation of the Division of Geological & Geophysical Surveys.

COREY ROSSI, Director
Division of Wildlife Conservation
Alaska Department of Fish & Game (ADF&G)

Anchorage, Alaska
POSITION STATEMENT: Provided an overview of the Division of Wildlife Conservation.

ACTION NARRATIVE

1:05:38 PM

CO-CHAIR ERIC FEIGE called the House Resources Standing Committee meeting to order at 1:05 p.m. Representatives Dick, Herron, Munoz, P. Wilson, Gardner, and Feige were present at the call to order. Representative Kawasaki arrived as the meeting was in progress.

HCR 2-RONALD REAGAN LANDMARK

1:06:13 PM

CO-CHAIR FEIGE announced that the first order of business would be HOUSE CONCURRENT RESOLUTION NO. 2, Urging the Alaska Historical Commission to prepare recommendations for the naming of a geographical feature in the state as a permanent legacy in recognition of President Ronald Reagan's service to the United States of America.

1:07:03 PM

JOE MICHEL, Staff, Representative Bill Stoltze, Alaska State Legislature, speaking on behalf of Representative Stoltze, sponsor, explained that HCR 2 is a resolution urging the Alaska Historical Commission to prepare recommendations for the naming of a geographical feature in the state after the nation's 40th president, Ronald Reagan. The Alaska Historical Commission is a nine-member commission that advises the governor on programs concerning history and pre-history, historical sites and buildings, and geographic names. The members of the commission also serve as state representatives for the Alaska geographic names program; in that capacity the commission reviews and provides recommendations regarding names proposed for physical features in the state. Currently, there are 17 geographic sites in Alaska that have been named after former presidents of the U.S. Mr. Michel noted that the timing of HCR 2 is to commemorate the centennial of President Reagan's birth. Alaska has recognized President Reagan several times by declaring February 6th Ronald Reagan Day, but has no permanent memorial to honor him.

1:08:21 PM

REPRESENTATIVE P. WILSON inquired as to whether the sponsor had any ideas regarding possible geographical features or would it be left up to the commission.

MR. MICHEL answered that the sponsor has no geographical features in mind and is leaving it up to the Alaska Historical Commission to make a decision with regard to the geographical feature.

1:09:02 PM

CO-CHAIR FEIGE, upon determining no one wished to testify, closed public testimony.

1:09:43 PM

REPRESENTATIVE MUNOZ moved to report HCR 2 out of committee with individual recommendations and the accompanying fiscal notes. There being no objection, HCR 2 was reported from the House Resources Standing Committee.

HJR 11-OPPOSING ANWR WILDERNESS DESIGNATION

1:10:11 PM

CO-CHAIR FEIGE announced that the next order of business would be HOUSE JOINT RESOLUTION NO. 11, Urging the United States Congress to refrain from passing legislation that designates land in Area 1002 of the Arctic National Wildlife Refuge as wilderness.

1:10:33 PM

REPRESENTATIVE CHARISSE MILLETT, Alaska State Legislature, explained that HJR 11 relates the legislature's opposition to any wilderness designation in the Arctic National Wildlife Refuge (ANWR), particularly in Area 1002. With the passage of the Alaska National Interest Lands Conservation Act (ANILCA) in the 1980s the federal government made a promise that Area 1002 would and could be developed for oil and gas resources. Representative Millett informed the committee that ANWR resolutions and legislation are the main topic of energy discussions in Congress. A notable resolution that has been introduced by Congressman Markey is H.R. 139, which proposes

designating [ANWR] as a wilderness area. Furthermore, Secretarial Order 3310 basically provides the Bureau of Land Management (BLM) the ability to make a wilderness area designation. Representative Millet opined that all of Alaska's ANWR lands are under attack, but particularly Area 1002. She pointed out that a resolution, such as HJR 11, provides for the legislature's voice to be heard. She noted that she has been assured that these types of resolutions make it into the hands of those who need to see them and relay that Alaskans are environmentalists by nature and that the state's resources are developed in a careful and mindful manner.

1:13:14 PM

REPRESENTATIVE HERRON related his support for HJR 11, but asked whether the sponsor would accept [the inclusion] of a "WHEREAS" clause regarding national security.

REPRESENTATIVE MILLETT said she would be amenable to the addition of such a provision.

1:13:51 PM

REPRESENTATIVE MUNOZ inquired as to the status of U.S. Congressman Markey's resolution.

REPRESENTATIVE MILLETT related that usually a Congressional resolution supporting the opening of ANWR garners 50-80 cosponsors, which isn't a lot. However, the concern is that every year such efforts gain momentum. She noted that such Congressional action has been stopped because of the actions of the Alaska State Legislature. She also noted that 78 percent of Alaskans are in favor of opening ANWR for development. Representative Millett said that she could obtain the status of the Congressional legislation.

1:14:53 PM

CO-CHAIR FEIGE opened public testimony.

1:15:07 PM

ADRIAN HERRERA, Arctic Power, began by informing the committee that he is responsible for running the Arctic Power Offices in Washington, D.C., and promoting the environmentally responsible opening of ANWR, Area 1002, to oil and gas [development]. He mentioned that he has been working in this capacity for about

six years now. He also mentioned that Arctic Power is a 501(c)(6) Alaska-based grass roots organization with the sole goal of the successful passage of environmentally responsible oil and gas development legislation on Capitol Hill. Mr. Herrera then related that Arctic Power strongly supports HJR 11 and encourages passage of it. Arctic Power does its upmost to prevent the passage of legislation proposing to declare Area 1002 as wilderness lands. It's important, he opined, to have a basis to argue these points, which HJR 11 provides and codifies in a manner that's acceptable to Congress. Resolutions such as HJR 11 are helpful when Arctic Power debates these matters with congressmen who disagree with Arctic Power's position.

1:16:51 PM

MR. HERRERA highlighted the provision of HJR 11 that speaks to the September 2010 announcement by the U.S. Fish and Wildlife Service that it will conduct a wilderness review in its environmental impact statement (EIS) regarding all three areas of ANWR: refuge lands, wilderness lands, and Area 1002 that is neither. The opinion of the Alaska attorney general, as well as Arctic Power, is that the decision to include a wilderness review is in direct conflict with ANILCA and the National Environmental Policy Act (NEPA). He related that ANILCA specifies that no study for removal or any removal of land in Alaska may take place without Congressional approval. Therefore, Arctic Power believes [the EIS] violates that principle. With regard to NEPA, when considering an EIS that discusses wilderness plans, all alternative land uses must be considered. However, the U.S. Fish & Wildlife Service forbade the discussion of oil and gas exploration in Area 1002 when it heard public testimony last year. The draft report for the Comprehensive Conservation Plan (CCP) will be submitted April 2011 and the final report in April 2012. He recalled that it has been said that fighting this issue on Capitol Hill is a long-term process due to the checks and balances of democratic government. However, if it's ever declared wilderness, the process to undo it would be even more difficult. In fact, he personally believes such a designation would be impossible to change. Therefore, Arctic Power strongly encourages the state to do what it can to fight legislation or reports that prevent the option of exploration in Area 1002.

1:18:50 PM

REPRESENTATIVE MUNOZ requested that Mr. Herrera provide a brief history regarding the establishment of Area 1002 and how it was compromised in the ANWR legislation.

MR. HERRERA explained that in 1980 ANILCA was implemented, which expanded what was originally referred to as the Arctic National Wildlife Range to 19.5 million acres and divided it into the existing three sections. The southern section was designated as refuge lands as defined by the National Wildlife Refuge Act, the center/original section was designated as wilderness lands, and Area 1002 that was neither wilderness or refuge lands but rather designated as an area that was set aside for the study of potential oil and gas exploration and development. The ANILCA stipulated that it was up to Congress to decide and couldn't be decided by national monument status from the president or through an administrative act. The study took place between 1980 and 1986 and in 1986 the first report from the U.S. Department of Interior recommended development of Area 1002. Coincidentally, the first ANWR CCP by the U.S. Fish & Wildlife Services was released in 1986. Therefore, between 1987 and 1995 there was fairly contentious debate. In 1995 both bodies of Congress passed an act to allow development of Area 1002, but it was vetoed by President Clinton. To date, 12 pro-ANWR development pieces of legislation have passed the U.S House and 3 such have passed the U.S. Senate, for a total of 15 pieces of legislation that have passed through Capitol Hill in support of the development of ANWR legislation. Mr. Herrera said he didn't recall any successful passage of legislation against the development of ANWR.

1:21:35 PM

REPRESENTATIVE HERRON asked if Arctic Power still has the support of the community of Kaktovik.

MR. HERRERA replied yes, adding his belief that the majority of the residents of Kaktovik support this issue as does Mayor Annie Tikluk.

1:22:24 PM

REPRESENTATIVE HERRON related that in a 2007 League of Conservation Voters questionnaire, President Obama said he strongly rejects drilling in the refuge [ANWR]. He asked if there have been any other documented statements on ANWR from President Obama.

MR. HERRERA offered his belief that President Obama's position remains the same, although he hasn't made many direct statements on ANWR in the past few years. Of note, December 6, 2010, was ANWR's 50th anniversary and there was a large push by the environmental movement to support national monument status for ANWR. Letters promoting the aforementioned were sent to the White House, but there was no response other than stating the need to review all alternative energies when devising the nation's energy plan. He opined that the lack of comment from the White House and the president is a significant message.

1:24:28 PM

CO-CHAIR FEIGE, upon ascertaining no one else wished to testify, closed public testimony.

1:24:46 PM

REPRESENTATIVE P. WILSON moved to report HJR 11 out of committee with individual recommendations and the accompanying zero fiscal note. There being no objections, HJR 11 was reported out of the House Resources Standing Committee.

Overview: Department of Natural Resources - Division of Geological & Geophysical Surveys

1:25:14 PM

CO-CHAIR FEIGE announced that the next order of business would be an overview from the Division of Geological & Geophysical Surveys.

1:25:28 PM

ROBERT SWENSON, State Geologist & Director, Division of Geological & Geophysical Surveys (DGGS), Department of Natural Resources (DNR), began by noting that the committee's packet should include his slide presentation and the DGGS's annual report, which includes all the projects DGGS is currently undertaking. He directed the committee's attention to slide 2, which relates the mission of DGGS:

> Conduct geological and geophysical surveys to determine the potential of Alaskan [sic] land for production of metals, minerals, fuels, and geothermal resources; the locations and supplies of groundwater and construction materials; and the potential geologic

hazards to building, roads, bridges, and other installations and structures.

MR. SWENSON then moved on to slide 3, which is a digital elevation model of Alaska. One of the main challenges is the scale in Alaska. The red polygon on the map is the same size as Colorado, which puts into perspective the size of Alaska in comparison with a state that also has a significant resource base. He then reviewed the tertiary, youngest, sedimentary basins in the state; these are the locations of oil and gas and coal resources in the state. The tertiary sedimentary basins are distributed across the state, with the two primary resource development areas being in the North Slope and the Cook Inlet regions. He continued by pointing out all the mineral occurrences, all the load deposits that have been identified across the state. The orange dots are those deposits that are in active development/production. The [pink] triangles are those [deposits] that have had historic production and the red triangles are those [deposits] with potential for production. Mr. Swenson highlighted a series of dots that illustrate the huge amount of samples of geophysical analyses across the state and the vast breadth of potential across the state. However, he noted that not all areas will have the potential to achieve resource development.

1:29:29 PM

MR. SWENSON pointed out the series of circles in the lower part of the map, which illustrates the areas which the division is reviewing in terms of tsunami hazards. Part of DGGS's mandate is to review geological hazards to the state's infrastructure and residents. He then pointed out the active volcanoes in the state, which DGGS in partnership with the University of Alaska Fairbanks, the U.S. Geological Survey (USGS), and the Alaska Volcano Observatory address. He also highlighted the seismic activity, active faulting, in the state that is of significant focus of DGGS in terms of infrastructure and public safety. Alaska is a very active state seismically, he stated. Mr. Swenson then directed attention to the series of very light-colored polygons for which DGGS has acquired high resolution geologic information, high resolution geologic maps. On this slide, although it doesn't seem that DGGS has covered much of the state, it actually has mapped a tremendous amount of the state. Still, there's much of the state left to map.

MR. SWENSON, referring to slide 4 entitled "Alaska Geological Facts," pointed out that Alaska's resource endowment is

unequaled anywhere else in the U.S. The state has more seismicity, volcanoes, and geologically hazardous areas than any other in the nation. Furthermore, Alaska has 156,000 square miles of state-controlled land. Although that state-controlled land is the primary focus of DGGS, the division does a lot of work on Native and federal acreages as well.

1:31:27 PM

REPRESENTATIVE HERRON asked if DGGS extrapolates what landowners next to state land have [in terms of geologic and geophysical resources].

MR. SWENSON replied yes, noting that the geology does not stop at geopolitical boundaries. Often, there is better exposure on other acreage. Depending upon access to that acreage, DGGS has performed geophysical surveys and mapping efforts on federal acreage in concert with the USGS as well as the Bureau of Land Management (BLM).

1:32:33 PM

MR. SWENSON, returning to his presentation, directed the committee's attention to slide 5, which is DGGS's organizational chart. The division staff totals 48. He characterized his staff as very dedicated. The division has six different sections, each of which has its own mandate and focus. The areas of focus are energy resources, mineral resources, engineering geology, volcanology, geologic communications, and the geologic materials center. One of the key areas is geologic communications because of the importance of getting the information into the appropriate hands. The information, he noted, is mainly in a digital format. With regard to the geologic materials center, he opined that the collection is astounding. Referring to slide 6, which highlights the 2010 DGGS field projects, he related that DGGS had the most field programs since his time with the division. The slide illustrates that DGGS is working across the state on various projects in the areas of mineral resources, energy resources, engineering geology, and volcanology. The projects being tackled by the engineering geology section are working on a number of hazards issues in terms of infrastructure and community safety. The most recent work of the engineering geology section was in Kivalina to review detailed geology of sites for possible relocation.

1:34:21 PM

MR. SWENSON, moving on to slide 7 entitled "High Resolution Geologic mapping," said that currently the state is covered with geologic maps. However, each geologic map isn't equal as the map depends upon its resolution. The 1:250,000-scale geologic map has been published for most of the state. Although those are good and useful maps, the resolution is relatively low. Such maps aren't of sufficient detail for resource identification or geologic hazards analysis. He noted that the committee packet should include handouts that describe geologic mapping and how it's used.

1:35:27 PM

REPRESENTATIVE GARDNER recalled meeting a geologist from the University of Alaska who discussed aerial mapping and the need for a receiver or upgrades to [the mapping equipment] in order to receive the full benefit.

MR. SWENSON related his understanding that Representative Gardner is referring to the geodetic correction, which is a big issue across the state. He explained that the geologic maps also use topographic information. In most areas, the current elevation information of the state is not up to the same standard as the rest of the U.S. The topographic maps have contours for elevation. When those maps were made, the information had to be projected on the ellipsoid, since that's the shape of the earth, so that the map represents what the ground is seeing. Therefore, when a survey is conducted if the surveyor doesn't have the corrected geoid, elevations can be as far off as 30 meters. Such level of discrepancy is insufficient for infrastructure, specifically airports and other such infrastructure. Therefore, DGGS is in the process of a statewide effort to correct the geoid via the lower resolution gravity data that the National Oceanic and Atmospheric Administration (NOAA) is in the process of collecting. He also mentioned that higher resolution elevation information, from 30 meter resolution to 10 meter resolution, is also being collected. In areas where resolution needs to be at the meter or centimeter scale, DGGS is in the process of collecting [Light Detection and Ranging] LiDAR information. He explained that LiDAR information is laser information that's collected from an airplane. "So, we're behind the curve, but we're certainly moving towards trying to get forward on that," he stated.

1:38:23 PM

REPRESENTATIVE P. WILSON inquired as the cost of obtaining this data.

MR. SWENSON confirmed [that obtaining this data and mapping] costs a lot. For example, the LiDAR survey from Fairbanks to Anchorage along the road would cost about $500,000 for a mile wide at about 10 centimeter resolution. He noted that it's a multi-agency effort to obtain better elevation information for the state. Probably close to $4 million has been spent on this effort and much federal funds have been leveraged in order to cover 10 percent of the state with 10 meter resolution. Much of the effort has been to prioritize the areas to be surveyed because it's not possible to obtain high resolution data for the entire state.

1:39:55 PM

REPRESENTATIVE GARDNER asked whether this information is important when performing mineral studies or for safety when flying. She inquired as to why this detailed information matters.

MR. SWENSON said that it depends upon a number of issues. Still, having the correct elevation is incredibly important for all types of resource and infrastructure development. The ability to extrapolate the topography into the data sets provides DGGS the ability to extract the geologic information that's used for resource and hazard assessments. The resolution becomes important depending upon the information being collected. For example, for some areas data at the 30 meter resolution may be adequate, while for other areas more detailed resolution is necessary.

1:41:49 PM

CO-CHAIR FEIGE related his understanding that the USGS is typically charged with making maps of the U.S. He asked if the USGS is engaged in a process to do that across the country. If so, he questioned where Alaska ranks in the priority list.

MR. SWENSON confirmed that the USGS is engaged in making maps throughout the country. Although the USGS is making an effort in Alaska to update the data, Alaska is behind in terms of the resolution of its topography. He noted that the USGS has a large priority list, and thus it's looking at some of the higher populated areas in the Lower 48.

1:42:42 PM

MR. SWENSON, in response to Representative P. Wilson, explained that a depth sounder on a boat relates [depth and topography] information in relation to the boat, not in the context of the earth.

1:43:28 PM

MR. SWENSON, returning to his presentation, told the committee that an incredible amount of data goes into the detailed geologic mapping illustrated on the previous slide. Slide 8 entitled "DGGS Integrated Mapping Program" illustrates the various layers of data used. Depending upon what is being mapped, different types of information are used. The top three layers on slide 8 are the different airborne geophysical information. The surface geology is very important because there has to be an understanding how to interpret the remote sensing information that DGGS receives. The bedrock geology is really the focus in many areas as is mineral locations, and land status data. Again, many different data sets are used to produce these maps. A few examples of the results of the data sets and maps are related on slide 9 entitled "Program Results." He informed the committee that DGGS has completely altered and updated the entire stratigraphic column for the North Slope, which is incredibly important in terms of the exploration of the oil and gas on the North Slope. A key matter in an exploration effort is understanding the location of the reservoir bodies within the context of all the rock that has been deposited on the North Slope.

MR. SWENSON, referring to slide 10, said that he put forward the resource development chain in order to put into context how DGGS would go forward using the data DGGS generates as well as other data sets in order to move from a point of not understanding a resource to the point of production. He reviewed the various links: data, land, capital, regulatory, exploration, and production. The key point, he emphasized, is that everything moves in one direction; that is each link is of equal importance. He pointed out that there is also a feedback loop, which DGGS does by gathering information from any type of exploration of the resource, which is placed in DGGS's data sets and iterated through the data sets for the next phase of exploration.

1:46:53 PM

MR. SWENSON moved on to slide 11 entitled "Engineering Geology Infrastructure Studies." He explained that once the process reaches production, it has to be brought to market and that requires infrastructure. The DGGS is involved with infrastructure in terms of geologic hazards and material sites. The division, he related, performs a lot of work in identifying fault hazards in the state that would impact the state's infrastructure as well as material sites for the construction of any infrastructure. Mr. Swenson pointed out that the next few slides relate the "areas we're moving to." In Alaska, an incredible amount of attention is paid to the energy situation in the state. This coming summer, DGGS will be focusing on the Susitna Basin in terms of its resource potential. Slide 12 highlights the Airborne Geophysical/Geological Mineral Inventory (AGGMI) program, which is incredibly important. A number of airborne geophysical surveys have been shot across the state and there is a prioritized list of new areas. Of the 40 million acres that have been identified as potential for minerals, a little over 6 million acres has been covered with high resolution geophysics. The next slide, slide 14, illustrates some of the areas the division is focusing on in terms of geologic hazards related to climate change, which is important particularly when relocating communities. As was mentioned earlier, volcano monitoring is a program in which DGGS, USGS, and UAF partner. The program has been very busy recently. There are monitoring stations on an incredible number of volcanoes on the Aleutian Chain as well as in the Cook Inlet region. He pointed out that the obvious issues [with regard to volcanoes] are aviation and public safety.

1:49:04 PM

MR. SWENSON, referring to slide 16 entitled "Alaska Energy Data Inventory," informed the committee that the Alaska Energy Data Inventory (AEI) is one way to disseminate the information DGGS has to the public. Furthermore, DGGS is working with the Alaska Energy Authority (AEA) to [disseminate] all the energy information for local energy development. He explained that a geologic distribution is being used so that one can access a map, circle the area of interest, and obtain all the available data for those energy resources.

1:49:36 PM

MR. SWENSON then moved on to the slide entitled "Alaska Geologic Materials Center." The map at the top of that slide illustrates the distribution of samples. About 13 million feet of

exploration and production drilling represented in the samples that [DGGS] has; these are from diamond-drill core samples. In response to Representative P. Wilson, informed the committee that these samples are stored at the Geologic Materials Center that is located just outside of Eagle River. The division is involved in a concerted effort to upgrade the facility as it's at about 170 percent of capacity right now. In fact, beyond the original facility there are 60 shipping containers that have been filled with samples and the samples continue to grow. There has been an incredible effort to move the sample collection into a reasonably modern facility. In fact, two years ago DGGS received a capital improvement project request and is in the process of receiving architectural engineering design for a new building. This sample collection, he emphasized, is one of the cornerstones of the state's data infrastructure. All companies entering the state seeking resource development come to the center because it has such a collection of samples from throughout the state that is available for modern analysis. For example, the collection includes core samples from throughout the state that can be tested for rare earth elements now that they are a hot commodity.

1:51:58 PM

MR. SWENSON, in response to Representative P. Wilson, related that the plan is to design a facility at 150 percent with the capability and utilities to allow for expansion, when it's necessary. He informed the committee that the division has the statistics regarding how fast it's gaining data. Therefore, there's an understanding of the size facility that's necessary. In further response to Representative P. Wilson, Mr. Swenson told the committee that DGGS has limited ability to perform modern technical analysis. However, the division has a system by which companies can take samples off-site for analysis, but there is a stipulation that all the material that isn't consumed must be returned. Furthermore, all the data, not interpretations, obtained from the analysis must be provided to the state as well.

1:54:21 PM

CO-CHAIR FEIGE related his understanding that when companies drill their own core samples, those samples are proprietary for a few years after which those samples become part of the public domain.

MR. SWENSON agreed with Co-Chair Feige's understanding, adding that the type of information DGGS receives is dependent upon the permit and the statute. The Alaska Oil and Gas Conservation Commission (AOGCC) controls the confidential two-year cycle of proprietary information.

1:55:21 PM

CO-CHAIR FEIGE asked whether DGGS has considered using Kulis Air National Guard Base as it has a number of buildings that the state will take possession of soon.

MR. SWENSON replied yes, explaining that DGGS went through a comprehensive review of all available state space. He noted that he could provide the committee a report on that search.

1:55:52 PM

MR. SWENSON, returning to his presentation, directed the committee's attention to slide 18, which lists DGGS's 2010 Accomplishments. He highlighted that DGGS is able to complete 1,700 square miles of geologic mapping in high priority areas and over 600 square miles of high resolution geophysics. Furthermore, DGGS is involved in a $1.8 million project to acquire high resolution LiDAR from Prudhoe Bay to Valdez and the Canadian border. In conclusion, he told the committee that the DGGS Annual Report the committee has is also available online and he would be happy to answer any questions about it.

1:56:57 PM

MR. SWENSON, in response to Representative Herron, said that Milt Wiltse, former state geologist, was a role model for him. Mr. Wiltse had an incredible background in airborne geophysics, which he started.

REPRESENTATIVE HERRON, noting that Mr. Swenson has been the state geologist since 2005, asked him to share his newest challenge.

MR. SWENSON opined that the Geologic Materials Center is his biggest challenge at the moment because he truly believes it's the cornerstone of the access to data for the state's resources. However, the center is sorely inadequate for a state like Alaska and thus it is imperative the facility be upgraded. The other challenge is in regard to the lack of high resolution information for Alaska. The ability to access and facilitate

the responsible development of the state's widely dispersed resources is very limited, in terms of the amount of data that DGGS can provide.

1:59:41 PM

CO-CHAIR FEIGE inquired as to existing projects that are the results of efforts of DGGS.

2:00:07 PM

MR. SWENSON informed the committee that DGGS performed the airborne geophysics for Livengood, released it to the public, and then followed it up with surface geologic mapping. The geologic interpretation of the Money Knob site within the Livengood survey found vertical faulting and uplift. The past drilling had a geologic model in mind that was very different than the reality of the site. The airborne geophysics allowed interpretation at a much finer scale, which showed that it was a thrust fault. The division published that geologic map, which became a critical part of the understanding of International Tower Hill Mines Ltd. and led to a change in the drilling plan. Mr. Swenson said there are a number of different situations similar to Livengood. He clarified that DGGS's job is to help facilitate the understanding of those little geologic details that may change an entire exploration model. Mr. Swenson then highlighted the Cosmopolitan site offshore of Anchor Point, which was only [explored] due to a DGGS sample.

2:02:26 PM

The committee took a brief at-ease.

Overview: Alaska Department of Fish & Game - Division of Wildlife Conservation

2:02:37 PM

CO-CHAIR FEIGE announced that the last order of business would be an overview from the Division of Wildlife Conservation.

2:06:06 PM

COREY ROSSI, Director, Division of Wildlife Conservation, Alaska Department of Fish & Game (ADF&G), began by reviewing the mission of the Division of Wildlife Conservation: "To conserve and enhance Alaska's wildlife and habitats and provide for a

wide range of public uses and benefits." He then reviewed the primary goals of the division, which are "to (1) protect, maintain, improve, and enhance the wildlife resources of Alaska; and (2) provide for their greatest use by the people, consistent with the sustained yield principle, for the well being of the people and the economy of the state." As with other agencies, the Division of Wildlife Conservation serves a broad range of users. Mr. Rossi then informed the committee that the Division of Wildlife Conservation is one of six divisions within ADF&G and has 242 authorized positions, of which 178 are full-time and 64 are part-time/seasonal. The division staff is divided in the five regions around the state and each region has a regional supervisor, a management coordinator, a research coordinator, and area biologists.

2:08:36 PM

REPRESENTATIVE P. WILSON inquired as to whether there are vacant biologist positions within the division.

MR. ROSSI answered that currently the division has vacant positions as it does periodically. He opined that it's rare that there isn't some position [open] since the division has so many staff. In further response to Representative P. Wilson, Mr. Rossi said he didn't have a number for the positions that are actually biologists as opposed to technicians and other designations. However, he offered to provide that information to the committee.

2:09:40 PM

MR. ROSSI, returning to his presentation, directed the committee's attention to the slide entitled "Core Service Overview." He said that surveys and inventories of big game are a large part of the division's work as it seeks to ensure that decisions on population and harvest objectives are based on adequate scientific information. Another important service is harvest assessment. Although wildlife research is important, he emphasized that the Division of Wildlife Services is a management organization and the underpinnings of that management is science. Another large part of the division's core service is intensive management, which is primarily the predator control program that also includes habitat management.

2:10:46 PM

REPRESENTATIVE GARDNER related the concern she has heard that the predator control program, particularly aerial wolf hunting, gives the state a "black eye" nationally and globally. Therefore, she requested that Mr. Rossi discuss less controversial ways of controlling predators, such as sterilization programs for wolves.

MR. ROSSI stated that there are a number of ideas on how to manage the damage caused by predators. The damage, he clarified, is that upon prey populations, which in the case of wolves would be moose and caribou populations. The most effective and direct path to mitigating the damage is to remove the predator from the situation by either killing or relocating it. However, relocating wildlife is expensive. Additionally, sometimes predators are relocated to areas where the habitat is already at capacity and thus the predators have difficulty competing with others, can't find adequate resources to sustain themselves, or out compete the existing predators which results in the loss of a predator. Therefore, the shortest and most economical path is the removal of the predators.

REPRESENTATIVE DICK related his understanding that there isn't any aerial wolf hunting in the state, rather there is aerial predator control.

REPRESENTATIVE GARDNER clarified that she is merely inquiring as to the cost and effectiveness of aerial wolf killing versus sterilization.

MR. ROSSI said that it's difficult to provide a direct comparison, which assumes the same result, because sterilization would not necessarily correct the problem. The goal, he identified, is to increase prey not remove predators. With sterilization, a direct comparison can't be made because it doesn't necessarily work the same. He noted that sterilization has been tried experimentally in the 40-Mile area with mixed results.

2:15:32 PM

MR. ROSSI, returning to his presentation, continued reviewing the division's core services, including the special areas program, education and outreach program, wildlife diversity program, and wildlife viewing program. With regard to the division's funding, Mr. Rossi informed the committee that the division receives Pittman - Robertson, federal, funds, which are available on a matching basis. These funds are the result of

excise taxes on sporting goods. The division also receives funds from [the Alaska Department of Fish & Game] that are from the license fees and also receives funds from the state general fund and the federal State Wildlife Grant Fund. Mr. Rossi then turned to the survey and inventories program within the division. Within the survey and inventories program, the division conducts population estimates, age-sex counts, twinning rates in moose, and habitat inventories. Of importance with the survey and inventories program are the composition surveys, which review a group of moose and determine the percentage of population that are bulls, cows, and calves. The aforementioned helps monitor the condition of the population and what's available for harvestable surplus. With regard to the harvest assessment program, there is mandatory reporting for all harvests. The division attempts to assess the harvest quantity/quality and hunter effort, which are important to those conducting the harvest. Mr. Rossi then turned to the wildlife research program, which is a large and well developed program. He informed the committee that there are wildlife researchers in each of the five regions of the state and often multi-year field studies are performed. Research is conducted on big game, non-game, marine mammals, water fowl, and small game. He noted that the division has identified small game, such as ptarmigan, grouse, and hare, as areas in which it hopes to be more aggressive.

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MR. ROSSI moved on to the core service of intensive management, the law for which is in Alaska Statute. Intensive management law does include habitat and predator management. Currently, the intensive management programs encompass less than 10 percent of the state. Each time a new intensive management area is initiated, there is a specific plan with specific objectives and measures associated with the plan, and the plan is reevaluated periodically to measure its effectiveness. An ineffective plan is eliminated or made more effective, he said. Mr. Rossi clarified that per statute the intensive management law:

- mandates the production of human benefits from certain defined ungulate populations
- to enhance, extend, and develop the population to maintain high levels or provide for higher levels of human harvest
- to achieve a high probability of success for human harvest of the game population

2:19:56 PM

REPRESENTATIVE DICK related that he lives in Area 19, Western Alaska, that has been severely impacted by past wildlife management. Therefore, he asked if Mr. Rossi foresees any hope for the moose population returning to what it once was.

MR. ROSSI informed the committee that there are a number of areas for which the division has increased populations to the population objective. However, there are areas in which the division has not quite met the objectives and thus continues to move toward the objective. Moreover, there are areas the division has been unable to help at all, which he attributed primarily to land ownership patterns. For instance, the Yukon Flats area has been especially difficult because although the area has some of the best moose habitat in the state, it has some of the lowest moose density in the state. In some of the areas, such as Area 19 and the Southern Alaska Peninsula, there has been a turn around. Area 20A is an example of a now very high density moose population that also has a high predator population as well. Therefore, a temporary reduction in the predator population allowed the prey to increase and then the predator population increased as well. Mr. Rossi reiterated that although sometimes the limitation to the [intensive management program] is cost, the primary limitation is land ownership patterns. For example, the entire Alaska Peninsula is completely closed to caribou hunting. Unfortunately, it's difficult for the division to implement a predator management program because the caribou calve on the federal lands. In contrast, the caribou in the Southern Alaska Peninsula calve on state lands. Therefore, the division has had the ability to manipulate the situation such that the Southern Alaska Peninsula is very productive. He then reviewed the history of the Southern Alaska Peninsula Caribou herd that resulted in the removal of wolves. In the first year, 28 wolves were removed from the Southern Alaska Peninsula and the caribou population grew from .5 calves per 100 cows during the fall count to 39 calves per 100 cows; a substantial increase. During the second year, only eight wolves needed to be removed and there were 43 claves per 100 cows. This year 2 wolves were removed from the Southern Alaska Peninsula and there were 47 calves per 100 cows. Therefore, the hope is that in the next year or so the Southern Alaska Peninsula herd will have a few surplus bulls and thus allow Tier II hunting in the area.

2:25:28 PM

MR. ROSSI, returning to his presentation, moved on to the special areas program, which is an important program to the division. He said that most would think of the special areas program as the state's version of the wildlife refuge program. There are 32 special areas encompassing 3.2 million acres, including refuges, critical habitat areas, and sanctuaries. There are 12 refuges, 17 critical habitat areas, and 3 sanctuaries. He mentioned that the division has a fairly well developed education and outreach program that includes hunter education programs, school-based programs, outdoor skills, moose and bear awareness, and shooter safety. In fact, [the division's] educators were meeting in Juneau this week to plan how to make the public education programs more robust, informative, and useful. The division also has the connecting children with nature program as well as the wildlife diversity program, which was commonly known as the non-game program. The wildlife diversity program was initiated in 2002 and has steadily grown. He informed the committee that the wildlife diversity program implements Alaska's Wildlife Action Plan. Currently, the program has three biologists that cover the five regions of the state and there is one program coordinator in headquarters. The wildlife diversity program is funded by the State Wildlife Grant Program. He noted that the program is for species that aren't traditionally hunted, and therefore not eligible for other funding. The wildlife diversity program has the following goals:

- Keep Common Species Common
- Recover Species at Greatest Risk (listed species)
- Conserve Habitats & Ecosystem Function
- Expand Knowledge Base for Conservation
- Engage People in Conservation
- Increase the Power of International Partnerships

MR. ROSSI, returning to the special areas program, related that there has been success in the Anchorage and Mat-Su Valley area where user groups have spontaneously developed. He highlighted the organizations of the Friends of Potter Marsh and the Friends of Palmer Hay Flats.

2:29:06 PM

MR. ROSSI then directed attention to the wildlife viewing program, which the division is trying to develop. The wildlife viewing program seeks to encourage safe enjoyment of Alaska's wildlife in a natural setting, create and promote opportunities

for wildlife viewing in communities, assess current viewing sites and develop new ones, and seek creative ways to fund the program. Mr. Rossi opined that although the wildlife viewing program is very important, traditionally it has been grossly underfunded. According to a 2006 Fish & Wildlife Survey, 496,000 people participated in wildlife viewing in Alaska in 2006. In that same year, 208,000 Alaskans enjoyed wildlife viewing. Furthermore, wildlife watchers spent $581 million in Alaska in 2006. The aforementioned numbers illustrate and support that the wildlife viewing program is important.

2:30:25 PM

REPRESENTATIVE HERRON, returning to the intensive management program, stated his support for the state's intensive management areas, which he believes work, and highlighted the success of the program in McGrath and Unit E in Bethel. He then related his belief that if wolves aren't controlled, they will decimate the moose population. He then asked if the department, specifically the division, has a position on the legislation he introduced last year addressing hunting and fishing reserves.

MR. ROSSI related that at this point the department hasn't developed a specific decision, but the department is supportive of enhancing wildlife populations for the use of people. "We manage these resources on behalf of people," he said.

2:32:04 PM

REPRESENTATIVE HERRON asked if Mr. Rossi has read Representative Dick's book regarding wolves in the Holitna area.

MR. ROSSI replied no, but noted he has heard about it.

2:32:29 PM

REPRESENTATIVE MUNOZ related that there are a group of citizens in Juneau who are interested in a critical habitat designation for the Taku River, which is an international river that is home to five species of Pacific salmon. She asked whether a critical habitat designation could be structured in such a way that it would have an impact on barging activity on the river. The barging activity originates in Canada and then enters Alaska.

MR. ROSSI said he could not speak directly to that specific issue. However, when there is a critical habitat designation, how other uses impact the critical habitat area is evaluated.

In further response to Representative Munoz, he agreed to research this specific situation with the Taku River.

2:34:37 PM

REPRESENTATIVE DICK agreed that the moose population is flourishing in McGrath. However, he attributed that to the fact that the wolf hunters live in McGrath and only [hunt] out to 50 miles beyond McGrath due to the cost of [fuel]. He then asked if there is any entity in Alaska working to help get the moose population back [in the areas beyond McGrath].

MR. ROSSI answered that there are various sportsmen's groups doing so. He also noted that [increasing moose populations] is very important to the division. To that end, the division has been reviewing ways in which to make its intensive management programs more efficient. The division has been exploring how to have a smaller footprint, such as concentrating intensive management close to a village.

2:36:25 PM

REPRESENTATIVE DICK related that residents of Lime Village have special privileges to hunt in Lake Clark National Park & Preserve, but he understands that there isn't anything to hunt there due to the lack of predator control in that area. He opined that prey animals, such as moose and caribou, on federal lands aren't protected, and therefore it's important to emphasize the need for intensive management on state lands.

2:37:15 PM

CO-CHAIR FEIGE inquired as to health of the Porcupine Caribou herd.

MR. ROSSI answered that it's doing very well. In fact, the Central Arctic Caribou Herd is also doing well. A photo census of the Porcupine Caribou herd has been completed, which is the first censuses in 10 years. These caribou censuses are expensive and difficult to do due to the weather. The Porcupine Caribou Herd is currently being recounted, but at the moment the population appears to be substantially higher than previously thought. On the Canadian side, the minimum threshold for utilization of the caribou is about 115,000. The [division] recently told the Canadians that there are a minimum of at least 123,000 caribou in that herd, although he believes the recount will find there are closer to 200,000 caribou.

2:39:19 PM

CO-CHAIR FEIGE remarked that the aforementioned information is very different than that from various groups in the Lower 48. He noted that he represents a part of Delta Junction, where at times there is conflict between agriculture users and bison. The bison were introduced to the area in the 1920s and the herd size is about 360 animals. There is debate regarding whether the bison can be considered an invasive species.

MR. ROSSI characterized the situation in Delta Junction as a difficult one in which the division manages the area for multiple users. The Delta bison herd is a very popular herd with hunters, so much so that it's almost impossible to draw a tag. However, he acknowledged that the bison are responsible for some damage to agricultural producers in Delta Junction. Therefore, the division has worked closely with the agricultural producers in Delta Junction to develop solutions. Recently, the Wildlife Services Program under the U.S. Department of Agriculture has been contacted for its expertise in finding solutions.

2:41:24 PM

MR. ROSSI, in response to Representative Herron, said he didn't know that anywhere is free of the danger of hogs. He pointed out that Down South hog populations are expanding rapidly and are difficult to manage. He opined that it would be unlikely for hogs to be able to survive and proliferate in Alaska to the point of being a problem. With regard to coyotes, coyotes have been in Alaska for a very long time albeit not in the abundance they are in some areas. The division is concerned about the areas where the abundance of coyotes may impact sheep. Therefore, the division is doing surveys now to determine the impact of coyotes on other species.

REPRESENTATIVE HERRON mentioned that coyotes are a menace where he lives and coyotes are caught all the time. The advantage of killing coyotes is that they are not as "sexy" as wolves [in the eyes of those in the Lower 48], he said.

2:43:31 PM

REPRESENTATIVE P. WILSON, referring to the slide entitled "Wildlife Diversity Program Goals," requested explanation of the goal to increase the power of international partnerships.

MR. ROSSI used endangered birds as an example. He reminded the committee that a number of the endangered birds are only in Alaska for their breeding season and then they move on to other countries. Therefore, it's very important to have international partnerships in terms of management, particularly with migratory birds. The same would be true with marine mammals, he said. Mr. Rossi pointed out that the state can do all it can to protect a species when it's in the state, but it can't control what occurs in other countries.

2:44:58 PM

MR. ROSSI, in response to Representative Dick, informed the committee the division has been working for about 15 years to reintroduce wood bison to Alaska. Wood bison were extirpated from Alaska 150-200 years ago. Wood bison are a close cousin to the Plains bison, which are located in Delta Junction and elsewhere in the state. Not only was the wood bison extirpated from Alaska, but it's also endangered in Canada. Near Portage, there is a captive wood bison population of about 90 animals and there is the expectation of about 30-40 calves this spring. The goal, he related, is to restore the wood bison species to abundance. There is a lot of interest in the wood bison, ranging from those Interior residents who would like the wood bison to be returned to abundance in Alaska as a food source and those who want to view it. However, there are complications in dealing with the federal government, specifically the U.S. Fish & Wildlife Service that administers the Endangered Species Act. Mr. Rossi explained that the situation is one in which the division wants to release the wood bison in March 2012, but it has been confounded with difficulties with the U.S. Fish & Wildlife Service regarding special rules associated with the release. In fact, the optimum release site was identified in the Yukon Flats, but Doyon told the division it didn't want them released there because it didn't trust that the federal government would follow through and allow Doyon to continue to develop its resources. Therefore, the division is working diligently with the U.S. Fish & Wildlife Service to obtain a special rule such that the wood bison can be released and established in abundance.

REPRESENTATIVE DICK related that his constituents want the wood bison to be reintroduced, but not if it would result in the inability to access the land and more [unnecessary] regulations.

MR. ROSSI said he is sensitive to that.

2:48:57 PM

CO-CHAIR FEIGE mentioned that he had recently seen a national hunter magazine article that spoke highly of Mr. Rossi. He opined that Mr. Rossi seems to have a good reputation and he looked forward to working with him in the future.

2:49:50 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 2:49 p.m.