

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

March 5, 2014

3:31 p.m.

MEMBERS PRESENT

Senator Cathy Giessel, Chair
Senator Fred Dyson, Vice Chair
Senator Peter Micciche
Senator Click Bishop
Senator Anna Fairclough
Senator Hollis French

MEMBERS ABSENT

Senator Lesil McGuire

OTHER LEGISLATORS PRESENT

Senator Kelly

COMMITTEE CALENDAR

SENATE CONCURRENT RESOLUTION NO. 16

Requesting the Governor to investigate and report to the legislature regarding the development of a large coal power plant and associated electric grid to provide energy to residents of the state.

- MOVED CSSCR 16(RES) OUT OF COMMITTEE

SENATE BILL NO. 77

"An Act relating to big game hunting with children."

- MOVED CSSB 77(RES) OUT OF COMMITTEE

CHINOOK SALMON RESEARCH INITIATIVE OVERVIEW & UPDATE

- HEARD

REVIOUS COMMITTEE ACTION

BILL: SCR 16

SHORT TITLE: REQ GOV TO INVESTIGATE COAL RESOURCES

SPONSOR(S): SENATOR(S) KELLY

02/24/14 (S) READ THE FIRST TIME - REFERRALS
02/24/14 (S) RES
03/03/14 (S) RES AT 3:30 PM BUTROVICH 205
03/03/14 (S) Heard & Held
03/03/14 (S) MINUTE(RES)

BILL: SB 77

SHORT TITLE: BIG GAME HUNTING WITH CHILDREN
SPONSOR(s): SENATOR(s) MICCICHE

03/13/13 (S) READ THE FIRST TIME - REFERRALS
03/13/13 (S) RES, FIN
02/24/14 (S) PRIME SPONSOR CHANGED: MICCICHE
REPLACED KELLY
02/24/14 (S) BILL REPRINTED 2/24/14
03/05/14 (S) RES AT 3:30 PM BUTROVICH 205

WITNESS REGISTER

SENATOR PETE KELLY
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Sponsor of SCR 16.

SENATOR PETER MICCICHE
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Sponsor of SB 77.

LARRY SIMONS
Staff for Senator Micciche
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Explained amendment to SB 77.

DOUG VINCENT-LANG, Director
Division of Wildlife Conservation
Alaska Department of Fish & Game
POSITION STATEMENT: Commented on Sitka Black-tail deer issues in SB 77.

PETER PROBASCO, representing himself
Member, Board of Game
Palmer, Alaska
POSITION STATEMENT: Supported SB 77.

TERESA SAGER-ALBAUGH, representing herself

Member, Board of Game
Mentasta Pass, Alaska
POSITION STATEMENT: Supported SB 77.

KEVIN BROOKS, Deputy Commissioner
Department of Fish & Game
Juneau, Alaska
POSITION STATEMENT: Provided an overview of the Chinook Salmon Research Initiative (CSRI).

ED JONES, Fish and Game Coordinator
Division of Sport Fish
Alaska Department of Fish and Game (ADF&G)
POSITION STATEMENT: Commented on the Chinook Salmon Research Initiative (CSRI).

BEN MULLIGAN, Legislative Liaison
Alaska Department of Fish and Game (ADF&G)
POSITION STATEMENT: Explained Susitna beaver habitat assessment program.

ACTION NARRATIVE

[3:31:07 PM](#)

CHAIR CATHY GIESSEL called the Senate Resources Standing Committee meeting to order at 3:31 p.m. Present at the call to order were Senators Dyson, Fairclough, Bishop, Micciche, French, and Chair Giessel.

SCR 16-REQ GOV TO INVESTIGATE COAL RESOURCES

[3:32:01 PM](#)

CHAIR GIESSEL announced SCR 16 to be up for consideration.

[3:32:14 PM](#)

SENATOR PETE KELLY, Alaska State Legislature, Juneau, Alaska, sponsor of SCR 16, said he wanted an amendment to be offered.

[3:32:55 PM](#)

CHAIR GIESSEL moved Amendment 1 (A.2).

28-LS1519\A.2
Nauman
2/28/14

AMENDMENT 1

OFFERED IN THE SENATE

Page 2, line 5, following "investigate":

Insert ", without regard to federal permits or restrictions,"

SENATOR FAIRCLOUGH objected for discussion purposes.

[3:33:21 PM](#)

CHAIR GIESSEL explained that this amendment makes a simple change on page 2, line 5, by inserting the above wording.

[3:33:49 PM](#)

SENATOR FAIRCLOUGH asked him to explain the intent.

SENATOR KELLY responded that this resolution is about "the grave danger we find ourselves in in this state" with regard to energy. He recalled what Putin did in the Ukraine, Czechoslovakia in 1938, and Poland in 1939. Events can change on a dime. Who would have thought on September 11 you would find that the whole world had changed in an instant when two planes crashed into the Towers?

Things like that will happen and our energy prices will go through the roof and we are already paying prices in some communities that just simply aren't sustainable. He said, "Alaska is facing an energy poverty; it's going to wipe us out."

He said this resolution is about defying the federal government, because for years we've heard people say just go drill in ANWR. Well, we can't; it's federal ground and if you did find some company that wanted to go out there and take the risk of a fine or tax consequences, then they have to cross federal land and rivers, and there are thousands of problems between there and delivering the oil in Valdez.

[3:36:07 PM](#)

SENATOR KELLY said he envisions investigating the possibility of building a coal power plant with state funds on state land to federal specifications but without regard to federal permits. The reason being that so often the state meets federal specifications and then some judge in San Francisco says, "Sorry, you didn't say 'Mother, May I?'"

SENATOR KELLY said we are people of the rule of law; but that isn't going to matter. The nuances of federal regulations are not going to matter when we simply can't afford to turn our lights or our furnaces on because the cost of energy has gone

through the roof. So, he wanted the Governor and the Administration to investigate and the state to build a power plant on state land and when it's built we turn it on.

[3:37:26 PM](#)

SENATOR FAIRCLOUGH asked if he was asking for a process: for the Governor to work to identify somewhere on state land a coal fired plant. What she objected to was using the rule of law.

SENATOR KELLY replied that the purpose of building a coal fired plant on state land is we don't need permission from the feds to do that on state land. If we build it on state land, the question is whether you turn it on or not. He understood that this was a little bit of dreaming, but the fact is we are going to need to dream a little bit big to protect the generations of the future. Something is going to come that is going change energy prices once again and the last time it crippled Alaskans. This is investigating a process; it's not building a power plant. A lot more discussion is needed than a concurrent resolution.

[3:39:07 PM](#)

SENATOR DYSON said he was a great enthusiast for the use of Alaska's coal. He pointed out on page 2, line 5, it says to investigate development of "a large coal power plant," and in electric generation always has the argument about distribution as opposed to centralization, and power distribution over long distances is difficult. He asked if Senator Kelly was specifying doing this in only one location.

SENATOR KELLY replied that the resolution identifies some places in the state and one is the coal reserves up by Kotzebue. The point is that Alaskan reserves are about half of the United States' reserves and it could provide power for 100 years.

SENATOR DYSON corrected that it could power all of North America for 300 years.

SENATOR KELLY said it's low sulphur coal and in fact the coal near Fairbanks, which isn't the best, is equivalent to the coal that meets the standard of the 1990 Clean Air Act. The question is does it envision other places; and that is a policy decision for the Governor's group.

SENATOR DYSON asked if it was fair to say on the record that his intention was to not limit this to "a" very large plant, but concept to be used wherever it makes sense.

SENATOR KELLY answered that was correct. Senator Dyson had mentioned DC power and even though it is a bit of a dream right now, but technology is moving quickly and by the time this is put together, we could hope to power rural Alaska from a gigawatt plant in MatSu or Fairbanks or Kotzebue, for that matter, from coal.

SENATOR MICCICHE said a lot of folks in his district were upset at doing another a study. But the further resolve says for \$75,000 worth of study we get to understand: the potential cost of coal plants from 200 megawatts to 2 gigawatts, the cost of a kilowatt of a coal generated energy in comparison to other sources, the technological potential for transmission, and how a large mine coal plant might help balance future needs of the state with hydro and other types. He wanted to know the answers to that question. This is not an anti-environmental thing. There is a huge supply of potential coal energy lying right here and we should understand whether or not they can be used responsibly.

[3:43:38 PM](#)

SENATOR FAIRCLOUGH removed her objection [therefore Amendment 1 was adopted] and offered conceptual Amendment 2 on page 2, line 5, after the word "development of" delete "a" and after "large coal power plant" insert the letter "s" on the word "plant". So it would then read:

Be it resolved that the Alaska State Legislature respectfully requests the Governor to investigate without regard to federal permits or restrictions the development of large coal power plants and associated electrical grid to provide energy to residents of the state to heat their homes and keep their lights on.

CHAIR GIESSEL objected for discussion purposes.

SENATOR FAIRCLOUGH responded that the purpose was to address Senator Dyson's thought and what she heard from the sponsor was his concurrence that we could look at more than one.

SENATOR KELLY said he had no objection to that language.

[3:45:07 PM](#)

CHAIR GIESSEL removed her objection and conceptual Amendment 2 was adopted. She pointed out that the Emma Creek Coal Project Plan was in their packets as well as a recent "Energy and

Economic Impacts of Coal in Interior Alaska," a McDowell Group report.

[3:45:42 PM](#)

CHAIR GIESSEL noted opposition to coal comments during previous committee testimony: someone said that climate change is settled and there was talk about CO₂, and she included the response to that in a report called "The Social Cost of Coal." She said people forget that CO₂ is plant food and the optimal level for plant growth is 1200 parts per million. Presently, we're at 400 parts per million. So, for each little increment of CO₂ we are actually reaping positive results in food production for people to live here, and over the last 100 years plant growth has increased by 60 percent.

CHAIR GIESSEL said certainly, climate has changed multiple times over the centuries. We had an ice age 12,000 years ago, a lesser ice age from 1560 to 1820, but we also had the medieval warming period and that's never talked about. That was from 1200 to 1410 A.D. and during this time Norwegians came to Greenland, found it to be such a rich environment that they farmed and lived there for a couple hundred years. The temperature then was 2-3 degrees Centigrade above the today's baseline.

She added that Henry's Law states that at any given temperature the amount of gas dissolved in solution is directly proportional to the pressure of the gas in the air above the solution (the ocean and CO₂). As CO₂ increases in the atmosphere, Henry's Law states, and has proven, that the amount of CO₂ in the ocean also increases. So, Chair Giessel concluded that there is an "automatic balancing system in our environment."

CHAIR GIESSEL said there is a lot of advocacy for green and alternative energy such as wind turbines, but 3-5 tons of copper is in every wind turbine. That is two solid Chevy Suburbans. So, to say that coal will be the demise of the humane race is just exaggeration.

[3:49:13 PM](#)

SENATOR MICCICHE said a fascinating book to read was "The History of Weather."

SENATOR DYSON agreed that there was a lot of misinformation in the public. He could defend a pretty cogent argument that the Industrial Revolution could not have gone forward without coal and that it saved the forests of Europe. The energy just wasn't available then. When you think about all the ills that went

along with it, virtually all the things we enjoy in modern life - the machines and efficiencies, and medical science - power has enabled the provisions of clean water and a way of treating waste. "If you think pollution in cities is bad from automobiles, you should have seen or heard about what it was like with horses." He could also make a pretty good case that the oil industry saved the whales, because before the oil industry, sperm whale oil was a premier lubricant.

[3:52:26 PM](#)

SENATOR DYSON moved to report SCR 16, version \A as amended, from committee to the next committee of referral with individual recommendations and attached fiscal note(s). There were no objections and CSSCR 16(RES) passed from the Senate Resources Standing Committee.

[3:52:59 PM](#)

At ease from 3:52 to 3:55 p.m.

SB 77-BIG GAME HUNTING WITH CHILDREN

[3:55:10 PM](#)

CHAIR GIESSEL called the committee back to order and announced SB 77 to be up for consideration.

[3:55:26 PM](#)

SENATOR MICCICHE sponsor of SB 77 said he had a couple of amendments and moved Amendment [1].

28-LS0630\A.2
Bullard
2/26/14

AMENDMENT 1

OFFERED IN THE SENATE BY SENATOR MICCICHE
TO: SB 77

Page 1, line 12, following "subsection":

Insert ", except for a Sitka blacktail deer when the harvest limit for the deer is one for each person,"

CHAIR GIESSEL objected for discussion purposes.

[3:55:51 PM](#)

LARRY SIMONS, Staff for Senator Micciche, Alaska State Legislature, Juneau, Alaska, explained that this was inserted where the harvest limit for the Sitka blacktail deer is one for

each person. The purpose is to encourage youth hunting in areas where the limit is one blacktail deer. The concern is without this amendment that each hunter in a youth hunt normally has to punch their tag, so the adult and the youth hunter both have to punch their tag. That's a high price to pay for a small Sitka blacktail deer. The thought here is to allow just the youth hunter to punch their tag on a youth hunt.

[3:57:20 PM](#)

SENATOR FAIRCLOUGH asked if the sponsor supported the amendment.

SENATOR MICCICHE responded that he didn't oppose the amendment. He explained that he is the sponsor and Senator Kelly is a co-sponsor.

[3:58:08 PM](#)

At ease from 3:58:08 to 3:58:57 p.m.

[3:58:57 PM](#)

CHAIR GIESSEL asked if there was further discussion on Amendment 1 (A.2).

SENATOR DYSON said the amendment makes sense and asked for them to consider adding the deer on the Prince William Sound that are also small.

[4:00:18 PM](#)

DOUG VINCENT-LANG, Director, Division of Wildlife Conservation, Department of Fish & Game, said the Sitka blacktail deer issue came up at a board meeting about a year ago when they were trying to create a youth hunt for deer in Prince William Sound outside of Cordova. One of the main issues the public raised was that they didn't want to go out hunting with their son or daughter and have that count against them for a small animal like those deer that are numerous. So, in that case, the board exempted Sitka blacktail deer from the rule. This would allow them to do that under this regulation rather than doing it under Hunting Heritages, which is where they got with that hunt in Cordova.

SENATOR MICCICHE agreed that the deer are the same species.

[4:01:19 PM](#)

CHAIR GIESSEL removed her objection and Amendment 1 [referred to as A.2] was adopted.

[4:01:28 PM](#)

SENATOR MICCICHE moved Amendment 2.

28-LS0630\A.3
Bullard
2/28/14

AMENDMENT 2

OFFERED IN THE SENATE
TO: SB 77

BY SENATOR MICCICHE

Page 1, line 5:
Delete "may [SHALL]"
Insert "shall"

CHAIR GIESSEL objected for discussion purposes.

MR. SIMMONS explained that Amendment 2 [referred to as A.3] is to leave the statute the way it is now, which reads: "For the purpose of encouraging adults to take children hunting the Board shall establish annual hunting seasons in appropriate areas of the state..." and that is the intent of the section. He explained that by changing it to "may" some might think this gives the board the option and the intent of this whole section is to more than just encourage the board, but to in a sense direct the board just the way the statute does now.

SENATOR DYSON stated that he appreciated the change.

[4:03:07 PM](#)

CHAIR GIESSEL, finding no further questions, removed her objection and therefore Amendment 2 was adopted.

[4:03:22 PM](#)

SENATOR MICCICHE commented that we live in a state that has a rich tradition of subsistence, social, and cultural events based on hunting, and the best way to hand off those traditions safely is to accompany young people on their first hunts. He said SB 77 allows hunting training.

MR. SIMMONS added that the purpose of the bill is to grant the Board of Game more flexibility in establishing youth hunts by removing some timing requirements that are in the law now and to allow families to harvest two Sitka blacktail deer in situations where otherwise they would only be able to harvest one.

[4:05:01 PM](#)

PETER PROBASCO, representing himself, member, Board of Game, Palmer, Alaska, said he supported SB 77. He explained that the board does strongly support youth hunting. He personally liked

the bill because it brings the significance of getting youth out into the field.

[4:07:03 PM](#)

TERESA SAGER-ALBAUGH, representing herself, Member, Board of Game, Mentasta Pass, Alaska, said she supported SB 77 and read a statement that supported youth hunts and described how the board has been frustrated in timing issues for creating them annually as required. Changing the annual youth hunt requirement from "shall" to "may" is one of the key provisions that inspired the board's support for SB 77.

She said their hunting regulations currently provide special hunts with special seasons, bag limits, or both for a number of different groups, some of which include youth, the disabled, bow hunters, muzzle loaders, community hunters, and Tier 2 hunters. She urged them to carefully consider the impacts of the board establishing at least one new youth hunt in Alaska every year. When coupled with the numerous other special hunts that are provided to various user groups, it's mathematically certain that at some point the harvestable surplus of game will be fully allocated to select classes of hunters.

She reminded them that adults have always had the option of taking children hunting under regular seasons and bag limits and this will not change regardless of SB 77's final outcome. She wanted to offer the perspective that mandatory annual creation of youth hunts isn't really necessary.

[4:09:12 PM](#)

SENATOR MICCICHE responded that the "may" portion of this bill does not require the creation of annual youth hunts and it was changed to "shall". The intent of the bill is not to create an expectation that there will be game available in areas that are challenged with population issues.

SENATOR DYSON said he caught the implication that the board would have to come up with a new one every year and the law does not require that.

MS. SAGER-ALBAUGH clarified that she intended to mean create a new hunt every year. And their interpretation was acceptable to her.

[4:11:30 PM](#)

SENATOR FAIRCLOUGH asked if she had been told that this language mandates something that legislators are not aware of.

MS. SAGER-ALBAUGH answered that it has been brought to her attention a number of times by members of the public that the board is failing to comply with the statute as it is currently written by not adopting youth hunts each year.

SENATOR FAIRCLOUGH asked for ADF&G's opinion.

MR. VINCENT-LANG noted that the statute had been on the books for many years and five or six youth hunts have been created. It wasn't fair to say that the board has to create them, but the key words are "in appropriate areas" and that they "shall" consider creating them. So, in a fully allocated hunt they might decide that is not an appropriate area for a youth hunt. The board has a lot of discretion. The main issue the board struggles with here is the earlier start date for schools; August is just too early to have a meaningful youth hunt.

[4:13:51 PM](#)

CHAIR GIESSEL said he pointed out the deletion of some significant language there which they hadn't really explored and adding "that are open before schools start in the fall and before regular hunting season begin" made this much more flexible.

MR. VINCENT-LANG replied that ADF&G is looking for those hunt opportunities to bring to the board, but they really struggle with it especially in the Anchorage area when most of the moose seasons are in September and October and then his main problem is having enough staff.

SENATOR FAIRCLOUGH asked if the general public misunderstands what the board is supposed to be doing and she wondered if a bulletin could be issued so that at least there isn't the anticipation of new annual hunts being created.

[4:15:17 PM](#)

SENATOR MICCICHE said nothing in this language requires the creation of an annual hunt. It says they will be created in appropriate areas of the state. Folks are misunderstanding things and the department would be very busy if they addressed them all.

[4:16:12 PM](#)

MR. VINCENT-LANG said his intent was to bring opportunities to the board to fulfill their obligation of creating youth hunts where possible. They may not create any in a given year or they

may actually get rid of some that are causing significant allocation or conservation issues.

[4:16:57 PM](#)

SENATOR FAIRCLOUGH asked if there was anything about youth hunts on the board website.

MR. VINCENT-LANG answered they would find them in their hunt supplements and probably in a specific section on their website about youth hunting opportunities.

Another thing the board has been doing is adding a requirement that anybody that is able to draw one of these permits has to have hunter education; this would be a nice follow-through to their hunter education programs.

[4:17:53 PM](#)

SENATOR FAIRCLOUGH said if board members are expressing concern about being questioned it would be good to clarify that if it didn't cost too much.

MR. VINCENT-LANG responded if this passes he would have that conversation with the board.

[4:18:59 PM](#)

SENATOR BISHOP asked if he visits with his peers in the Lower 48.

MR. VINCENT-LANG answered yes.

SENATOR BISHOP said he understood that the State of Pennsylvania took the whole week off and everybody went hunting.

MR. VINCENT-LANG said he had heard that; many other states have a law that says it's an excused absence from school.

[4:19:42 PM](#)

SENATOR MICCICHE noted a youth program site on their website that talks about training, leagues, and youth conservation camps and at the bottom is a youth small game hunt - kind of a different thing.

CHAIR GIESSEL closed public testimony.

[4:21:41 PM](#)

SENATOR DYSON moved to report SB 77, version 28-LS0630\A as amended, from committee to the next committee of referral with

individual recommendations and attached fiscal note. There were no objections and CSSB 77(RES) was reported from the Senate Resources Standing Committee.

[4:22:07 PM](#)

At ease from 4:22 p.m. to 4:23 p.m.

CHINOOK SALMON RESEARCH INITIATIVE OVERVIEW & UPDATE

[4:23:49 PM](#)

CHAIR GIESSEL called the committee back to order and announced a presentation on the Chinook Salmon Research Initiative (CSRI) Overview and Update.

[4:24:15 PM](#)

KEVIN BROOKS, Deputy Commissioner, Department of Fish & Game, Juneau, Alaska, said he would give them a general overview of the Chinook Salmon Research Initiative. They proposed a \$30 million five-year initiative in 2014 and \$7.5 million was appropriated as a first component. There is another request for \$10 million in 2015.

He explained that the focus of the initiative is to conduct research on the causes of decline in Chinook salmon that is occurring statewide. They identified 12 indicator stocks from the Yukon all the way to Southeast Alaska to work on; each was unique and carefully chosen for the contributions they can get from additional research. They will conduct a multi-faceted comprehensive work on the lifecycle, trying to identify where in the life-cycle the effects are occurring for mortality that are affecting productivity and low abundance. That work will include adult and juvenile work, genetics work with coded wire tagging, local and traditional knowledge (LTK), and looking at subsistence harvest patterns.

About 10 percent of the overall project will be RSAed to the University for research projects, because they have unique skill sets. They have also conducted a bit of outreach to NGOs and other parties to partner with them to accomplish some of this work.

[4:26:44 PM](#)

MR. BROOKS said the Chinook Initiative is on their home page website, which provides a lot of ongoing details of their projects. He said this is complimenting the work that is already being done by the department. Just in 2013 they have initiated a

lot of work on weirs on sonars in genetics to help identify some of the causes of declines in Chinook.

[4:27:07 PM](#)

MR. BROOKS said this is not intended to be a five-year study culminating in a report. As they get knowledge that is helpful to them in managing fisheries and advising the board on allocation decisions, they will use that as soon as it becomes available. Ultimately, their goal is to provide harvest opportunity for Alaskans.

He said the legislature provided funds for doing enhancement work and so where they can, they are enhancing fish populations through hatcheries and working with the board where there are abundant stocks of other species to provide opportunities there while Chinook is undergoing a low cycle.

[4:29:44 PM](#)

SENATOR FRENCH asked what the process of gathering traditional knowledge would look like.

[4:30:22 PM](#)

MR. BROOKS replied that the Subsistence Division would go out into communities and interview folks, because they provide a lot of knowledge that can fill in gaps that their survey instruments have in identifying harvest patterns.

SENATOR FRENCH asked how information is captured and then acted on.

MR. BROOKS answered in many cases they do face-to-face interviews and sometimes they employ local residents to assist them. The division also uses a survey instrument as a matter of course. So it would be a combination of those kinds of things.

SENATOR FRENCH said he thought they could make a fascinating historical document at some time with that information on past salmon runs.

[4:31:43 PM](#)

MR. BROOKS answered that they do document the efforts of the division; it is maintained on their data base and made available on their website.

[4:32:00 PM](#)

SENATOR MICCICHE asked which of the 12 primary Chinook rivers in Alaska are not currently suffering from low abundance.

[4:32:23 PM](#)

ED JONES, Fish and Game Coordinator, Division of Sport Fish, Alaska Department of Fish and Game (ADF&G), replied that all 12 rivers are suffering, but the Nushagak appears to be doing better than most. That could be a function of the stock assessment program that is in place. This is a widespread event ranging from Southern British Columbia all the way to the Yukon.

[4:33:24 PM](#)

SENATOR MICCICHE said that his work is imperative, because Alaskans are spending a lot of time pointing fingers at each other when obviously the issue is statewide and he wanted to know if there was anything this legislature or he could do to help.

[4:33:55 PM](#)

MR. JONES said the decline in Chinook has obviously caused social and economic hardships across the state. This Chinook Research Initiative is an investment to address the critical knowledge gaps that limit management capabilities. Through it they will gather the information necessary to assist managers with more accurate and timely measures of productivity ultimately improving management confidence and affording increased fishing opportunities when possible.

This year there are 35 Chinook salmon research initiative projects going on in the water. They received detail operations plans for all of them and since the fall staff had been meeting and fine tuning the methods and objectives. They recognize there is a fundamental need to more precisely characterize Chinook salmon productivity and abundance across the state and to gather the information necessary to understand the root causes of these widespread declines and to fill the knowledge gaps.

[4:35:04 PM](#)

MR. JONES said in 2012 the ADF&G created the Chinook Salmon Research Team and hosted a symposium in mid-October of 2012 to provide information on the Chinook declines and to provide perspectives on relevant research and management needs. The main focus of the symposium was to identify key knowledge gaps and assemble a list of priorities to address specific questions pertaining to Chinook salmon abundance and productivity in the state. He said that over 400 stakeholders attended the symposium in person, over the phone, and via the Internet and all presentations and panelist discussions, comments, and questions were used by the research team as an aide in developing a

special publication 13-01 entitled "The Chinook Salmon Stock Assessment and Research Plan 2013." It is available on their website. This plan was developed to guide their efforts towards a better understanding of Chinook salmon productivity and abundance in the state.

[4:37:29 PM](#)

MR. JONES said for nearly a decade Alaska and British Columbia have been suffering from poor production. The last time Alaska had production at this poor level was nearly four decades ago. The research plan documents these stocks' specific declines and points out the gaps in knowledge that impair their management. The plan also describes the general life history of Chinook salmon in the state, makes recommendations for research, and provides guidance on funding, but the core of the plan is a stock specific life history-based approach to research that focuses on the 12 indicator stocks from around the state that represent diverse life histories and migratory characteristics over a broad geographic range.

MR. JONES reviewed FY14 projects on slide 11 as follows:

- Adult spawning abundance in 9 out of 12 of the indicator stocks for \$1.8 million
- Juvenile abundance work in 8 of the 12 indicator stocks for \$670,000
- Detailed marine sampling programs in the water in three areas for \$350,000
- Subsistence work will take place in 8 of the indicator stocks. The projects are designed to study the local and traditional knowledge (LTK) of Chinook salmon subsistence fishers, to study the patterns and trends in subsistence fishing, and to estimate the actual in-season harvest due to subsistence fishing for \$620,000
- Another \$850,000 is allocated to ADF&G for Chinook salmon genetic base line and marker development and process and growth studies by UAF
- In total \$4.4 million will be spent this year specific to the Chinook Salmon Research Initiative.

[4:39:19 PM](#)

MR. JONES said he would next give a little detail on the indicator stocks. Starting in the North in AYK they have the Yukon and the Kuskokwim; in Bristol Bay the Nushagak system, on the Alaska Peninsula they are using the Chignik, on Kodiak Island they have the Karluk; in Upper Cook Inlet they have the Susitna and Kenai; near Prince William Sound they have the

Copper River; in Southeast Alaska they have the Chilkat, the Taku, the Stikine and the Unuk Rivers.

[4:40:13 PM](#)

MR. JONES said the Unuk River is the largest watershed they will work on. It's trans-boundary, meaning they work cooperatively with Canada. Their plan is to perform both adult and juvenile work in addition to three subsistence projects. The adult work has been tabled until next fiscal year.

[4:40:54 PM](#)

MR. JONES said they will implement a marker capture study to estimate the adult spawning abundance this year and do the three subsistence projects. Next year they will start the juvenile work.

On the Nushagak River they will perform both the adult and juvenile work and the subsistence LTK project this year. The juvenile work will be a feasibility study this year, but the adult work is going to be at full capacity in the user marker capture study.

For the Chignik River they are going to use a weir to estimate adult abundance and implement a detailed marine sampling program to gather genetics and harvest information to code wire tag recovery information. There will also be a subsistence LTK and harvest study rolled together in this fiscal year.

[4:41:58 PM](#)

MR. JONES said the Karluk River has a weir to estimate abundance and they will also implement a juvenile abundance program. In addition, a detailed marine sampling project is going in the water this year.

[4:42:11 PM](#)

SENATOR FRENCH asked how the weir works.

MR. JONES answered that the weir is performs total fish enumeration. The river gets completely blocked off with pickets or other means and they will pull a couple of them to count fish across the counting platform.

SENATOR FRENCH asked if that happened every 24 hours.

MR. JONES explained that the typical operation would be to hold fish up during the day (they tend to not move in the daylight hours unless they are running) and weir operations start up

about 10 or 11 o'clock at night and goes through until 4 or 5 in the morning. They'll pull pickets and count fish and at the same time they will have a capture device so they can subsample the population for age, sex, length, and tag information.

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He said the Susitna River in Cook Inlet will have a juvenile and adult abundance project funded through this initiative, but the work will begin in FY15. This year they are funding a detailed marine sampling program through the initiative in Upper Cook Inlet. But the adult work is already in the water and is funded under a separate CIP, but they will take over funding next year. A subsistence LTK study is also being funded now through the Pacific Coastal Salmon Recovery Fund.

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MR. JONES said the Salmon Initiative is funding a subsistence LTK study on the Kenai River and a separate CIP is covering adult abundance work, but next year the Chinook Initiative will take over both the adult and the juvenile aspects of this work.

[4:45:06 PM](#)

SENATOR MICCICHE asked if any netting programs are being used for studying abundance in the Kenai River.

MR. JONES replied that the current program is phasing the original sonar technique up river to mile 13, and the practice with that sonar is to not only enumerate Chinook Salmon but to also subsample the population through a netting program to get a size and age breakdown of those fish. It is the same method that has been going on for years. The sonar location as changed so it is being adjusted to new surroundings.

[4:46:23 PM](#)

SENATOR MICCICHE suggested that some legislators may not understand some of the impacts on the river systems that are available on the road system, and if there is an opportunity to educate them on the river by observing some of those operations he thought it would be extremely helpful.

MR. JONES responded, "You [all] are cordially invited to come out and participate."

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MR. BROOKS stated that last year there was a lot of interest in the new sonar site and they actually did tours. So, his point was well taken.

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SENATOR FRENCH asked what happened on the Copper River map. "Did we just give up Alaska to Canada?"

MR. JONES replied that it was a mistake that would get fixed.

[4:49:04 PM](#)

MR. JONES said they were going to do both adult and juvenile work on the Chilkat River near Haines as well as an LTK study. This is a long term project that is now being supplemented through the Chinook Initiative, but it still gets some base level funding. The same holds through for the other three projects in Southeast: they are doing adult and juvenile abundance work on the Taku River and on the Stikine (as well as an LTK study). The Taku and Stikine are trans-boundary rivers and fall under the purview of the Pacific Salmon Treaty; the managers work together between the two countries. They will do adult and juvenile work on the Unuk River in Southern Southeast Alaska funded under the Chinook Initiative.

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MR. JONES reviewed a few key points: the primary objective of this work is to increase their confidence in estimates of adult spawning abundance, especially in the face of poor production. First and foremost, they have to accurately estimate how many fish are actually getting on the spawning grounds. To be honest, the program has quite a few holes that this will help shore up.

He said the detailed marine sampling programs are design to estimate stock-specific harvests among other things; this is ultimately accomplished through genetic stock I.D. and coded wire sampling programs. This information is used to improve run reconstruction and benefits abundance-based management. This is a tool to get out into the mixed-stock fishery and actually estimate how many of a certain stock are actually being harvested by the various fisheries.

[4:53:32 PM](#)

MR. JONES said in closing, when you add a juvenile abundance program on top of an adult abundance program, you can then estimate marine survival, a huge piece of information that is currently only available for four of the 12 indicator stocks, and those are all in Southeast Alaska. Those programs began in the early 90s, but the department has had stock assessment programs for Chinook salmon since the early 70s that provided consistent measures of abundance. It's well known that the

Southeast stock assessment program leads by example and they are hoping to let some of this experience and knowledge spread its way north to the rest of the state.

To show how valuable such a program can be, the information they have obtained from the Southeast stocks has shown marine survival during the current period of poor production has essentially dropped from our usual 2-4 percent to 1 percent. So, for every 100 Chinook juveniles going into the ocean we used to get 2-4 adults back; now we're getting back about 1 percent. Some have suggested it could be because of the fresh water environment, but they actually estimate the juvenile abundance in these systems and have seen that the abundance of juveniles has been average to above average during this period of time. So, they know it's happening in the marine environment. Through this initiative they will be able to do similar work up around the corner all the way to the Nushagak and maybe all the way to the Yukon.

MR. JONES summarized now that things are starting to come together, they are really going to start to focus on the outreach and collaborative research aspects of this work, and experience has shown that they need the locals on board.

[4:54:10 PM](#)

SENATOR MICCICHE said aside from the by-catch folks that are discarding Chinook that every user group is equally important in this state. He represents a district with 36,000 Alaskans and every one of them is a fisheries biologist he quipped, but his last statement about locals is extremely important. Part of this initiative absolutely has to be the education of Alaskans. They are looking for relief today - now - and the way Alaskans find relief today is at the expense of their neighbors. He asked what the plan is to educate Alaskans so they stop taking it out on each other and to help them understand that these issues are often systemic, oceanic, atmospheric issues that won't be solved today, and it may take some time to get back to adequate abundance in our Chinook runs.

[4:55:51 PM](#)

MR. BROOKS replied that obviously circumstances vary by river system: a river that is 100 percent allocated creates a different dynamic with the users and it does come down to information and educating those folks. That is why they are taking such a comprehensive approach to try and get at it.

He said that Commissioner Campbell is on the North Pacific Fisheries Council and hears about the by-catch issue quite often, and one of the things that really resonated with him is even if you can pinpoint 12,000 fish that are being caught in a by-catch scenario it doesn't explain why 200,000 fish didn't go up in the river - although it's certainly a contributing factor.

4:57:16 PM

MR. JONES added that efforts are being made to get publications out and to implement a fish facts program, in this case, "Chinook Facts," and that will soon come out in a newsletter available on the web and hard copy. Right now they need to get some information about what is fixing what happened in Southeast Alaska. The fisheries are covered by the Treaty, but every spring they will come out with an abundance index that is a measure of the abundance of Chinook salmon passing by the waters of Southeast Alaska. The indicator now is that number is going to be very high and the reason is because although Alaska and British Columbia have been in a period of poor production, Washington, Oregon, and California have been experiencing the opposite; their numbers are off the charts right now. Records are being set in many areas.

He said there will be more Chinook to catch in Sitka this year, but regulations well be designed to catch those fish, but that backfires in most people's minds given the fact that Alaska is in a period of poor production. The word needs to get out that although we're in a period of poor production up here, the stocks being caught are off the Southeast coast, so they can be more aggressive. He said there are other examples, but it's true that folks don't understand and it would be good to sit down and discuss these different behaviors. It could go a long way to help some inner fishery strife.

5:00:16 PM

SENATOR MICCICHE said they watched those stocks crash down South and asked what caused them to do that and what made them come back?

5:01:07 PM

MR. JONES replied that it's important to understand that the department has pretty good control over what happens in the fresh water environment, but once you get out into the marine environment, even if they did know what was going on - for instance, if the ocean was a warmer temperature than ever before - he didn't know how the problems would be solved. He thinks you narrow the scope and pin down the areas where it might be

happening and then you look at whether something can be done, but more than likely the marine environment is out of your hands. Alaska is unique in that it still has its habitat; its fresh water environment stands alone on the West Coast.

5:02:17 PM

SENATOR MICCICHE said that his assumption was correct: that they don't understand the crashes that happened in British Columbia, Washington, Oregon, and California, and they are just celebrating the returns of those stocks.

MR. JONES answered for one thing the Upper Columbia River Chinook stocks essentially head out to the Gulf of Alaska and the Bering Sea just like the Taku River fish do. They go to the same part of the world to grow up in the marine environment. For some reason, the Upper Columbia River Chinook salmon is doing very well right now, whereas the Taku is in a period of poor production. That is information they tend to believe narrows the scope down to the first few months at sea; and for some reason his opinion is that the Columbia River stocks are getting a head start; they are surviving at a higher rate for whatever reason, maybe food availability; who knows what the real issue is. Whereas the Taku, when they go to the early marine that's when they are dying. It's not just one stock, but what is occurring regionally and no one knows the cause.

Generally, they can say that marine survival will work its way back north and improve up here and then what happens down south is the opposite. Early indications through some of the stock information he has seen is that British Columbia and Southeast Alaska are producing more juveniles in the last year and that's the first step in seeing this creep up the coast. The next step would be to see that happen for the Copper River, Cook Inlet and the AYK.

5:04:52 PM

SENATOR FRENCH asked how he defines a "juvenile."

MR. JONES answered that a juvenile is a fish that is still in fresh water in terms of this presentation and adults are in the marine environment. Once they hit the marine environment they are not necessarily mature fish; they are rearing fish and some folks may consider those juveniles as well.

5:05:41 PM

SENATOR MICCICHE recapped that the last low trends happened in the late 60s and early 70s and 1973-75 was the upper end of the run. He asked what the issue was then.

MR. JONES answered that the stock assessment programs they had in place during the early 70s and late 60s were in rivers that were very good for end of season abundance and they know production was very similar to what they are seeing now. The department used catch as a surrogate in some cases for analysis and used different ways to come up with the runs for the earlier years, because the programs weren't very strong back then. But some of them were and those showed a poor period of production. The difference back then when the production was poor was that fishing was not reigned in. So, they had poor production but also exploitation rates that were too high to support escapement. Now they do a good job with escapement, but they have to curtail the fisheries.

[5:07:44 PM](#)

MR. BROOKS responded to Senator Micciche's question on education and noted a Peninsula newspaper called "The Moose News" and that one is in production on Chinook as well.

SENATOR MICCICHE said he liked "The Moose News" and thought it a good way to communicate. His goal is to help Alaskans understand and they may have to be patient for maybe a decade. We can't afford to have the user groups implode in the meantime.

[5:09:00 PM](#)

VICE CHAIR DYSON said the issue of preservation of our own fresh water environment was important and noted the huge damage beaver caused on the Susitna Flats by building their dams and choking off streams. He asked what could be done about trapping out the beaver in the area where they are killing the fish streams and restoring the stream beds to what they were before the beaver hit them.

[5:12:07 PM](#)

BEN MULLIGAN, Legislative Liaison, Alaska Department of Fish and Game (ADF&G), said they just initiated a habitat assessment working with the Matsu Fish and Wildlife Commission and the Matsu Salmon Partnership to go out into the Susitna River drainage to look at beaver dams and assess where they are a detriment. In some places they are a deterrent for sockeye salmon productivity, but in some ways they are good for coho juveniles.

5:13:02 PM

VICE CHAIR DYSON adjourned the Senate Resources Standing
Committee meeting at 5:13 p.m.