

**ALASKA STATE LEGISLATURE  
HOUSE RESOURCES STANDING COMMITTEE**

April 19, 2017

1:03 p.m.

**MEMBERS PRESENT**

Representative Andy Josephson, Co-Chair  
Representative Geran Tarr, Co-Chair  
Representative Dean Westlake, Vice Chair  
Representative Harriet Drummond  
Representative Justin Parish  
Representative Chris Birch  
Representative DeLena Johnson  
Representative David Talerico

**MEMBERS ABSENT**

Representative George Rauscher  
Representative Mike Chenault (alternate)  
Representative Chris Tuck (alternate)

**COMMITTEE CALENDAR**

HOUSE BILL NO. 197

"An Act relating to the duties of the commissioner of natural resources; relating to agriculture; and relating to community seed libraries."

- HEARD & HELD

HOUSE BILL NO. 107

"An Act relating to certain fish; and establishing a fisheries rehabilitation permit."

- HEARD & HELD

HOUSE BILL NO. 203

"An Act relating to the sale of certain state land for use as remote recreational cabin sites."

- BILL HEARING CANCELED

**PREVIOUS COMMITTEE ACTION**

BILL: HB 197

SHORT TITLE: COMMUNITY SEED LIBRARIES  
SPONSOR(s): REPRESENTATIVE(s) JOHNSTON

03/24/17	(H)	READ THE FIRST TIME - REFERRALS
03/24/17	(H)	RES, FIN
04/10/17	(H)	RES AT 1:00 PM BARNES 124
04/10/17	(H)	-- Testimony <Invitation Only> --
04/12/17	(H)	RES AT 1:00 PM BARNES 124
04/12/17	(H)	Scheduled but Not Heard
04/13/17	(H)	RES AT 5:00 PM BARNES 124
04/13/17	(H)	Scheduled but Not Heard
04/17/17	(H)	RES AT 1:00 PM BARNES 124
04/17/17	(H)	Scheduled but Not Heard
04/19/17	(H)	RES AT 1:00 PM BARNES 124

BILL: HB 107

SHORT TITLE: FISH ENHANCEMENT PERMITS  
SPONSOR(s): REPRESENTATIVE(s) TALERICO

02/06/17	(H)	READ THE FIRST TIME - REFERRALS
02/06/17	(H)	FSH, RES
02/28/17	(H)	FSH AT 10:00 AM GRUENBERG 120
02/28/17	(H)	Heard & Held
02/28/17	(H)	MINUTE(FSH)
04/18/17	(H)	FSH AT 10:00 AM GRUENBERG 120
04/18/17	(H)	Moved CSHB 107(FSH) Out of Committee
04/18/17	(H)	MINUTE(FSH)
04/19/17	(H)	RES AT 1:00 PM BARNES 124

#### **WITNESS REGISTER**

REPRESENTATIVE JENNIFER JOHNSTON  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** As the sponsor, introduced HB 197.

TERRANOVA TASKER, Staff  
Representative Jennifer Johnston  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** On behalf of Representative Johnston, sponsor, provided a sectional analysis of HB 197.

ARTHUR KEYES, Director  
Division of Agriculture  
Department of Natural Resources  
Palmer, Alaska

**POSITION STATEMENT:** Answered questions related to HB 197.

ROB CARTER, Manager  
Plant Materials Center  
Division of Agriculture  
Department of Natural Resources  
Palmer, Alaska

**POSITION STATEMENT:** Answered questions related to HB 197.

GRACE JOHNSTON  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 197.

PATRICIA TREYDTE  
Dillingham, Alaska

**POSITION STATEMENT:** Testified in support of HB 197, but noted several concerns that she has with the bill.

DAVID OTNESS  
Cordova, Alaska

**POSITION STATEMENT:** Testified in support of HB 197.

ELIJAH VERHAGEN, Staff  
Representative Dave Talerico  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** On behalf of Representative Talerico, sponsor, further introduced HB 107.

ALPHEUS BULLARD, Attorney  
Legislative Legal Counsel  
Legislative Legal Services  
Legislative Affairs Agency  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** Answered questions regarding HB 107.

FORREST BOWERS, Deputy Director  
Division of Commercial Fisheries  
Alaska Department of Fish and Game  
Juneau, Alaska

**POSITION STATEMENT:** Answered questions regarding HB 107.

GARY MARTINEK  
Cape Coral, Florida

**POSITION STATEMENT:** Testified in support of HB 107.

MATHEW O'BOYLE, Spokesperson  
Skagway Community Fish Hatchery  
Skagway, Alaska

**POSITION STATEMENT:** Testified in support of HB 107.

WILL MAYO, Executive Director  
Tribal Government and Client Services  
Tanana Chiefs Conference  
Fairbanks, Alaska

**POSITION STATEMENT:** Testified in support of HB 107.

BRIAN WINNESTAFFER  
Chickaloon Native Village  
Palmer, Alaska

**POSITION STATEMENT:** Testified in support of HB 107.

RICKY GEASE, Executive Director  
Kenai River Sport Fishing Association  
Soldotna, Alaska

**POSITION STATEMENT:** Testified in opposition to HB 107.

NANCY HILLSTRAND  
Pioneer Alaskan Fisheries Inc.  
Homer, Alaska

**POSITION STATEMENT:** Testified in opposition to HB 107.

BRUCE CAIN, President  
Copper Valley Chamber of Commerce  
Cordova, Alaska

**POSITION STATEMENT:** Testified in support of HB 107.

BRIAN ASHTON  
Wrangell, Alaska

**POSITION STATEMENT:** Testified in support of HB 107.

#### **ACTION NARRATIVE**

[1:03:35 PM](#)

**CO-CHAIR GERAN TARR** called the House Resources Standing Committee meeting to order at 1:03 p.m. Representatives Tarr, Josephson, Johnson, Birch, Talerico, and Westlake were present at the call to order. Representatives Drummond and Parish arrived as the meeting was in progress.

#### **HB 197-COMMUNITY SEED LIBRARIES**

[1:04:42 PM](#)

CO-CHAIR TARR announced that the first order of business would be HOUSE BILL NO. 197, "An Act relating to the duties of the commissioner of natural resources; relating to agriculture; and relating to community seed libraries."

[1:04:51 PM](#)

REPRESENTATIVE JENNIFER JOHNSTON, Alaska State Legislature, as the sponsor, introduced HB 197. She explained that HB 197 brings forth local issues related to growing one's own produce to feed family members. The idea for the bill, she continued, was brought to her attention by her daughter-in-law who was looking at heirloom seeds and researching the restrictions on the local exchange of seeds.

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TERRANOVA TASKER, Staff, Representative Jennifer Johnston, Alaska State Legislature, on behalf of Representative Johnston, sponsor, provided a sectional analysis of HB 197 as follows:

Section 1 would amend the duties of the commissioner of the Department of Natural Resources (DNR) to include development and regulation of noncommercial seed use in community seed libraries.

Sections 2 and 3 would add subsection (b) to Alaska Statute (AS) 03.05.030 to allow an exemption for seed libraries from regulations governing commercial seeds as long as they comply with AS 03.20.[110], which are the guidelines for community seed libraries, and do not violate regulations that pertain to patented use without permission, be misrepresented in classification, or be prohibited by the department as a noxious (harmful) seed.

Section 4 would add new section 03.20.110 providing guidelines for seed libraries as follows: an individual can establish a community seed library that allows for 100 grams of [one variety of] seed [per person receiving the seed per year], and the packaging must be labeled with the variety, seller's name and address, year of packaging, weight of the contents, and a disclaimer statement that says not for commercial use. This section would also direct the department to create a seed registry for publication online.

Section 5 would [add] language about community seed libraries to statute regulating plant materials centers already in existence within the University of Alaska system.

Section 6 would amend AS 44.37.[030] to include community seed libraries in the information that the department must publish online and in print.

Section 7 would amend [AS 44.37.030] to include a subsection that allows the Department of Natural Resources to advise people interested in starting a community seed library on best practices and to submit information about their library without a fee.

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REPRESENTATIVE PARISH drew attention to the bill on page 2, lines 2-6 which read:

assist prospective settlers and others [DESIRING] to engage in the agricultural industry in the state **by providing** [WITH] information **about** [CONCERNING AREAS SUITABLE FOR AGRICULTURE AND OTHER] activities and programs essential to **developing** the [DEVELOPMENT OF THE] agricultural industry **and areas** in the state **that are suitable for agriculture;**

REPRESENTATIVE PARISH said the bill seems to make a substantial increase in the responsibilities of the commissioner of [DNR] by adding, "areas that are suitable for agriculture."

MS. TASKER replied that she and Rob Carter, Manager, Plant Materials Center, Division of Agriculture, DNR, have discussed this and "suitable for agriculture" is wording that both DNR and the sponsor like to specify whatever area a community garden might take, whether that be someone's backyard or community land. Also, she noted, the seed statutes haven't been updated since the 1980's, so some language cleanup was done when she and [an attorney from] Legislative Legal Services, Legislative Affairs Agency, were going through the bill. She further pointed out that the bill has a zero fiscal note.

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REPRESENTATIVE PARISH referred to a letter from Representative Talerico that he believed all committee members had signed, and which stated a bridge should be built to an area that is suitable for agriculture. Representative Parish said he doesn't want the [Division] of Agriculture itself being an advocate for bridge building because that is outside the [division's] main area of purview. Yet, he posited, the aforementioned provision would seem to add some responsibility to the [division] for that.

MS. TASKER deferred to DNR.

REPRESENTATIVE PARISH returned attention to page 2, line 6 and further inquired whether it is an increase in the responsibility of DNR to assist all the regions of the state in developing areas that are suitable for agriculture.

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ARTHUR KEYES, Director, Division of Agriculture, DNR, answered that the Division of Agriculture sees the entire state as having agriculture potential of some form or another. In further response to Representative Parish, he said it is the responsibility of the division to help all regions of the state develop areas which are suitable to agriculture, but not necessarily in regard to infrastructure.

[1:13:44 PM](#)

REPRESENTATIVE DRUMMOND asked about the definition of community seed library and whether it is defined in statute.

MS. TASKER responded that the term "community seed library" does not currently exist in statute. The bill would carve out a space in the statute that says seed libraries can exist, and provides the guidelines for labeling for seed libraries. Other states going through similar processes ran into the issue where, because of the way the statutes were written, every seed was regulated as if it was a commercial seed, which requires extensive labeling and testing. Nebraska and Minnesota went through their statutes and specifically added the words "community seed library" to carve out space for them so it is very clear that community seed libraries can exist even if not for commercial use purposes.

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REPRESENTATIVE DRUMMOND surmised that "community seed library" is defined somewhere in the bill. She inquired whether a community seed library includes the seed exchanges that gardeners around the state conduct each spring.

MS. TASKER answered that [in the bill on page 3, beginning on line 20], Article 1A. Community Seed Libraries, lays out the guidelines for a community seed library. The issue the sponsor has run into is that there are some community seed exchanges happening around the state, Ester being the largest. Unfortunately, she said, because of the way the statute is written and based on the way the regulations are written, any seed that is used for any capacity in the state must go through that extensive testing - germination percentages and labeling. Technically speaking, any seed library existing today is in violation of the code. However, she related, she has talked to Rob Carter and DNR thinks seed libraries are a great idea and therefore DNR is not assessing fees on current seed libraries. The department likes this bill because it would give DNR the authority to help and to promote seed libraries.

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REPRESENTATIVE DRUMMOND asked whether this means that seed libraries currently in existence in Alaska are doing something illegal and DNR supports the bill in order to control [seed libraries]. She said the intent of the bill is unclear if there are already community seed libraries springing up in an organic local way.

REPRESENTATIVE JENNIFER JOHNSTON replied that the bill would strengthen seed libraries and would give them greater access to doing what they do best. She warned [the state] "could be getting into federal problems if we don't do this."

[1:17:30 PM](#)

REPRESENTATIVE DRUMMOND noted that her district has a farmers market and she is getting lots of feedback from her constituents about what this bill means for the already-existing informal seed exchanges that gardeners hold around the state. She asked what HB 197 means for existing seed exchanges.

ROB CARTER, Manager, Plant Materials Center, Division of Agriculture, Department of Natural Resources (DNR), explained that the Plant Materials Center maintains and has the authority to regulate seeds, their transportation, their sales, and seed

lot sales within the state of Alaska. In regard to what this bill would do if seed exchanges are already there, he said that technically seed libraries or any seed exchange in Alaska is against the state's current regulations. However, he continued, it is not in the best interest of plant diversity or food security in the state for the division to spend time and money harassing community-oriented folks who are sharing seeds and providing opportunities for food security in a region to say that they must follow these regulations that are really drafted for commercial use. So, technically, he reiterated, the non-commercial sharing of seed - under the prohibited acts section in [Alaska's] seed regulations - is outlawed.

MR. CARTER pointed out that this bill, like many others around the U.S., is identifying that non-commercial use is as important as any issue that [the division] deals with in Alaska pertaining to food security. Crop genetic diversity, one of the foundation cornerstones of community seed sharing, is the most important key to sustainable agriculture and to food security in any region of the world, he added. The intent behind HB 197 is to put in statute that this is a legal activity and ensure that this non-commercial seed sharing activity is secured. Whether this activity is through a garden club, a fair, or a seed library, the bill is needed before other larger, non-state entities come into Alaska and start pushing federal or state regulations against these practices.

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REPRESENTATIVE DRUMMOND inquired as to how this will not cost staff time and money for the Plant Materials Center to manage these informal seed libraries that are already in existence.

MR. CARTER responded as currently written, the bill says DNR "may" and does not direct the department to do anything. Community seed library is the legal language, he said, and HB 197 just gives the department the opportunity to promote seed libraries and have a place for them on the department's internet site. As a seed consumer himself, he continued, he would love to see a one-stop shop in the state that identifies all these seed sharing activities.

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REPRESENTATIVE DRUMMOND asked how the division will contact consumers in this regard.

MR. CARTER answered that it would be a multi-faceted front like many of the things the department does. The department has great resources, such as utilization of the Alaska Grown program and all the individual gardeners and commercial farmers that the department works with already. Once individuals identify that the department has the ability to help support and promote their activities, he said, a simple web page could be put out where an individual could choose to be part of that web page. He related that he talks to many individuals who participate in these non-commercial seed sharing activities and the community is well versed that this legislation is out there. Some of them, he added, would be happy to contribute their location and contact phone numbers and dates for community events.

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REPRESENTATIVE BIRCH inquired as to how this type of seed collection would be different from commercial seed collection for carrots in the Matanuska-Susitna Valley as to the source of the seeds and how they are preserved and maintained.

MR. CARTER replied that there is very limited carrot seed production in the state of Alaska because carrots are a biennial plant and flower in their second year of growth. Commercially, he explained, carrot seeds are grown in areas like the Skagit Valley in Washington and other places around the world where they are harvested with a combine like any other large-scale seed production. They are cleaned and tested to meet both the state and federal regulations, he said, and then they are sold through brokers. Most of the farmers planting carrots on a commercial scale in Alaska order the seeds from a very large agri-business that sells tons of seeds at a time. Seeds that are sold commercially, he continued, have very strict federal and state guidelines to ensure that they follow both the state regulations and Federal Seed Act.

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REPRESENTATIVE BIRCH surmised that when talking about regionally adapted seeds harvested from plants grown in-state, it is not necessarily a commercial operation. It would be a framework for monitoring and permitting through the internet the exchange of Alaska grown seeds.

MR. CARTER responded that the bill does not have any monitoring requirements, nor does he think there is a need for any. Non-commercial use tends to be relatively small scale, he explained.

It is individuals or a group of individuals who get together to try to overwinter some carrots and then replant them and collect the seeds to share amongst themselves. These normally are not hybrids, but rather heirlooms or open pollinated varieties that have been around for decades or longer. They are in small quantities. The real key to it, he said, is individuals who find a type or variety of seed, or a genus or species of a vegetable that produces well in their region. In turn they could harvest seed off that and legally share it amongst themselves, with no ramifications from either the Federal Seed Act or Alaska state seed regulations, and not impede the state's commercial seed producers and sellers.

REPRESENTATIVE BIRCH said it sounds like a reasonable proposal.

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REPRESENTATIVE JOHNSON related a story of working in a gift store as a teenager and selling packages of Alaska seeds, with the fireweed seeds being wildly popular. Then at some point these seeds could not be sold anymore due to regulations and that is why she was pleased to become a co-sponsor of the bill.

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REPRESENTATIVE PARISH remarked a good proportion of the plants grown in Haines came from his grandmother's garden. He asked where in statute seed sharing is illegal.

MS. TASKER pointed out page 2, lines [12-14], establish that the department is regulating seeds, plants, and vegetables whether they are sold or not sold for use in the state.

REPRESENTATIVE PARISH observed that is in statute.

MS. TASKER responded yes. Continuing her answer, she noted that on page 3, lines 1-7 pertain to the labeling requirements so that any product that is being used, sold, or exchanged must be labeled. Then, one must go to the Alaska Administrative Code, Chapter 34, she said. This chapter has two pages of labeling requirements and sets out the germination percentage and the weight. Combining those two parts together, she pointed out, is makes it almost impossible for a seed library to exist, which she has confirmed with Mr. Carter. The statute is complicated and needs some updating, she added.

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REPRESENTATIVE PARISH observed that on page 3, lines 1-2, state that the commissioner "may" adopt rules, regulations, and procedures. He offered his understanding that the commissioner has adopted rules and procedures which make all the seed libraries in the state and all the individuals sharing seeds right now, if not criminals, then at least engaged in extralegal activities.

MS. TASKER answered correct and deferred to Mr. Carter for a further response.

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REPRESENTATIVE PARISH directed his question to Mr. Carter and asked whether it is a regulatory hurdle that the past DNR commissioner has put in place that makes seed sharing by private individuals and seed libraries technically illegal.

MR. CARTER replied that the biggest hurdle in those states that have come down hard on seed libraries and non-commercial seed sharing is the interpretation of the regulations and definitions of the words "offered for sale," "barter," and "trade". In Alaska, he continued, what really hinders non-commercial use is under 11 AAC 34.075, ["Prohibited acts"], which reads, "(a) No person may sell, offer for sale, expose for sale, or transport for use in planting in the state any agricultural or vegetable seed that ... [in part] (5) has not been tested within the 18 months preceding the sale, offering, or exposure for sale, or transportation". The seed libraries are not selling or offering seed for sale, he said, but the key to this is the testing within the 18 months preceding. So, technically, any individual who is moving seed in the state of Alaska, whether it is one seed or a million, who doesn't have the current labeling requirement of testing within the 18 months preceding is breaking the state's current regulations. In Alaska and around the country, that language is utilized to ensure that seed being moved around doesn't have invasive weeds in it and that is why that testing requirement has always been followed. That is really the tripping hurdle - anyone who is transporting seed with the intended use to plant that doesn't have testing, which is required by the labeling requirements in Chapter 34, is breaking Alaska's regulations.

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REPRESENTATIVE PARISH inquired why the problem cannot be solved by regulation. For example, he continued, regulation for transportation of over 100 pounds of seed. He further inquired why there isn't a lower boundary on the applicability of that because people have been doing seed sharing for as long as there has been agriculture.

MR. CARTER agreed and said [DNR] has full intent to review, update, and modernize the regulations. He advised most people do not realize that Alaska has a lot of commercial seed production, and DNR would rather see those exemptions made for non-commercial use than to modify things that may jeopardize seeds being transported for sale or offered for sale within the state that do not meet the state's regulation requirements, he said. [The department] wants to avoid loopholes; seed regulations are not there to stop someone from doing something, he explained, but rather for consumer protection so that the seed really is what the label says it is for germination and no noxious weeds. Further, if he - in his role as plant materials manager - changed the regulations so that non-commercial use and seed libraries are not impeded, the regulations could be changed again by another manager. Therefore, putting a policy into statute protects this type of activity for generations to come.

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REPRESENTATIVE PARISH suggested that perhaps Mr. Carter could amend the {statue and regulation] by adding the word "commercial" or "for commercial purposes" so someone wouldn't have to go through a seed library to legally be able to share seeds with neighbors. He then observed that the section of the bill for community seed libraries states that someone cannot give more than 100 grams of one variety to an individual within 12 consecutive months [page 3, lines 26-29]. He pointed out that some seeds, such as cherry pits, would reach that weight limit quickly.

REPRESENTATIVE JENNIFER JOHNSTON responded she has forthcoming amendments to offer.

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REPRESENTATIVE PARISH commented that the labeling requirements seem a bit stringent for what would normally be handed off in a Ziploc bag.

MS. TASKER answered that the bill has five requirements for labeling, which is a downgrade from the [current] two pages of labeling requirements. Based on her talks with Mr. Carter about the requirements, she said there is some wiggle room. For example, someone could have a sign within the space with the statement "not authorized for commercial use" rather than on every package. The seller's name and address could be kept in a binder and not necessarily be on the package of seed. Something as simple as "purple flower" would be a reasonable request, she continued, as well as the weight of the package for purposes of tracking the weight limit requirement. She offered her opinion that these requirements are limited but the sponsor will address any issues.

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CO-CHAIR TARR related that the 100-gram limit and the labeling were concerns expressed to her. She asked what the differentiation is between someone collecting seed from his or her own backyard and gifting it to a friend versus individuals participating in a seed library.

MR. CARTER replied the intent of the bill, in his professional opinion, is the bill pertains to community seed libraries defined as a place where individuals can go and use those seeds. The sponsor and her staff have identified that the bill doesn't provide an exemption so that two persons could individually share seeds with one another. That would be easy to put into Article 1, he said, but the amendments need to be heard before it can be discussed much further.

CO-CHAIR TARR urged that this differentiation be considered. She pointed out that people who collect seed for contributing to a seed library are going to want to include the genus, species, or variety information. This type of person is one step up from folks who just buy a few plants and have a pot in front of their house, she said, and therefore the committee might want to segregate that.

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REPRESENTATIVE JOHNSON noted that some of the letters in the committee packet state that the bill is alarming. She said she thinks some of the concerns could be based on misinformation and urged for further discussion of the concerns.

REPRESENTATIVE JOHNSTON responded yes and asked Ms. Tasker to discuss the forthcoming amendments.

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CO-CHAIR TARR asked Ms. Tasker to address amendments about the labeling concerns, the 100-gram limit, the requirement for being grown in-state, and treated seeds.

MS. TASKER related that the sponsor is working on amendments in response to talks with the seed libraries. She also noted that some miscommunication about what the bill does has been brought to the attention of the sponsors, so the sponsors are working with stakeholders to explain what the bill really does.

MS. TASKER said one forthcoming amendment addresses seeds that are grown outside Alaska. For example, seed libraries often receive seed donations from The Home Depot or other entities and the libraries have said they would like to be able to include these seeds. This makes sense, she said, because the seeds traveling from out of state have already undergone a labeling process as part of the federal interstate commerce rules.

MS. TASKER stated the second forthcoming amendment responds to the concern about the weight limit and would increase the limit to one pound, which Mr. Carter has agreed is a limit that should cover most seed.

MS. TASKER explained the third forthcoming amendment addresses the marijuana seed issue. This amendment would prohibit marijuana seeds from the seed library exchange.

MS. TASKER, in regard to Mr. Carter's discussion about a personal exemption, said she would work with Legislative Legal Services on language for an amendment to address those concerns.

REPRESENTATIVE PARISH requested an explicit [exemption] be given for personal non-commercial seed sharing.

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CO-CHAIR TARR stated that this type of legislation has been passed by California, Nebraska, Illinois, and Minnesota, and she will post the California legislation on the web site for people to view. She said the aforementioned amendments cover the issues that she is concerned about. She asked Mr. Carter if he would like to add anything about the forthcoming amendments.

MR. CARTER answered he doesn't see any issues with increasing the weight limit. He related that he has heard concerns about potatoes and root cuttings, but pointed out this is a formality with the state's regulations because the regulations define bulbs, straps, corms, and other such things as plants and so those are not regulated under the state's seed regulations and would have no weight restrictions. He said he feels the seed weight limit could be in the one-pound area without directly impacting anything and still providing the opportunity.

MR. CARTER pointed out that agronomically all seeds cannot be produced in Alaska, so individuals get seed from friends or family in other states, or purchase seed from outside of Alaska that they want to use for non-commercial seed sharing activities. That exemption is needed, he said, and Article 1A, Community Seed Libraries, could easily be amended to provide an exemption for non-seed library seed sharing activities to allow for one person to give another person a package of seeds for his or her garden.

MR. CARTER stated it would be up to the bill sponsor for the language that is required on packaging. He said that, as he reads the bill's current language, this could be done by a seed library with a single sign written on cardboard [displayed] above the library's seed sharing activities or within the library's seed sharing opportunities that just states these are seeds grown for non-commercial use and that would meet the requirements of the bill.

MR. CARTER offered his opinion that this is important; Alaska is lucky because it has isolation and does not have large agriculture that tends to push a little heavier on these types of regulations. The opportunity for non-commercial use and seed libraries, he said, is what is going to provide for long-term sustainability and self-reliance in the state because people in both remote and non-remote areas may not have access to seed, but they may have access to seed that has been grown in their region. Having an agricultural system that is adapted to these community environments to be self-reliant is a large portion of sustainable agriculture in a state like Alaska, he advised.

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CO-CHAIR TARR opened public testimony.

[1:51:06 PM](#)

GRACE JOHNSTON testified in support of HB 197. She said she feels passionately about this bill because she is invested in Anchorage gardening and loves how a summer garden provides fresh and nutritious food for her family. The longer that produce is on the shelf, she explained, the more the nutrition decays, so it is important to her to be able to pick directly from the garden to table. She stated she is also firmly invested in the future of gardening in Alaska through her young daughter. She would like for her daughter to be able to grow up in a state where the specialized seeds that can flourish in Alaska, those that are cold- and sun-adapted, are readily available because these seeds are not commercially viable for larger seed producers in the Lower 48 or around the world. It is therefore important to ensure that Alaskans can legally and widely share these seeds throughout the state, she said. Explicitly allowing for seed libraries will ensure that that legacy remains for the present as well as future generations.

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PATRICIA TREYDTE testified in support of HB 197, but with reservations as she has some concerns. She stated that if the subject hadn't been brought up it wouldn't need to be done. One of her concerns, she pointed out, is that the bill says "seller" as the person giving out the seeds. She questioned whether "seller" is the correct term or whether a term should be invented, such as "exchanger" or "sharer".

CO-CHAIR TARR observed that "seller's name and address" is included as one of the five [labeling] requirements [on page 4, line 2]. She related that the sponsor and her staff are taking note of this concern.

MS. TREYDTE reiterated that she doesn't know what the proper term would be, but that she doesn't think it should be "seller".

MS. TREYDTE said another of her concerns is the 100-gram [weight limit], which would not go far, particularly if someone wanted to grow a quarter acre of grain for feeding to chickens. She urged that this be addressed.

MS. TREYDTE pointed out that Alaska has a viable commercial seed potato industry and expressed her concern that the bill does not address potatoes in either start or seed form. She recognized that seed potatoes would not be included in the bill, but warned that potato, tomato, and eggplant seeds can carry late blight.

Tomato seeds, she continued, are one of the most precious and often exchanged seeds because they are easy to save. She asked whether this is something that needs to be addressed since the potato industry needs to be protected.

CO-CHAIR TARR offered her understanding that the purchase of certified seed potatoes is required. She requested Mr. Carter to address Ms. Treydte's concern about potato, tomato, and eggplant seeds.

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MR. CARTER replied that the purchase of certified seed potatoes is required for commercial use.

CO-CHAIR TARR inquired whether Mr. Carter thinks tomato, eggplant, and other seeds like that should be specifically mentioned or differentiated in the bill.

MR. CARTER responded that if it the subject was live plants he would say yes, but the bill is only talking about seeds and therefore he doesn't think it is necessary. Within that family, the easiest thing for seed savers is that they don't look for plants that have disease or that biologically aren't in good shape. They are allowing the fruit to go to maturity so that the seeds mature. A late blight infected tomato plant, he advised, would be a very poor performer and it would not be in the best interest of anyone to maintain it or collect seed from it. He said the department currently has registration for live tomato plants being shipped into the state, as well as for potatoes and within that family, but within this non-commercial seed sharing use he doesn't feel it is necessary.

CO-CHAIR TARR observed that Section 6 discusses the department's duties and gives DNR the ability to publish information about seed libraries. She suggested that perhaps this information could direct seed libraries to be careful in terms of the kind of information that is shared with participants so things like that could be prevented.

MR. CARTER answered that currently the department doesn't have the authority to spend any time or effort working with the non-commercial use of seed. He said he therefore believes HB 197, and that section specifically, would provide DNR the opportunity to not regulate, but to help promote and identify non-commercial seed sharing activities, and he is very comfortable with that.

[1:59:06 PM](#)

DAVID OTNESS testified in support of HB 197. He stated that as a gardener he wants to see anything that would facilitate the transfer of seeds and provide agricultural awareness because people growing their own food is something that has really taken off. Anything to make [seed transfer] not illegal would be a good thing, he added. Drawing attention to page 2, line 25, he asked why the bill includes regulating the farming of elk.

CO-CHAIR TARR replied that that is an existing statute under the current duties of the DNR commissioner and therefore it is not something that is being added or changed by the bill. She explained that when a section of statute is amended the whole section shows up in the bill.

[2:01:48 PM](#)

CO-CHAIR TARR, after ascertaining that no one else wished to testify, closed public testimony.

[2:01:57 PM](#)

HB 197 was held over.

### **HB 107-FISH ENHANCEMENT PERMITS**

[2:02:24 PM](#)

CO-CHAIR TARR announced that the final order of business would be HOUSE BILL NO. 107, "An Act relating to certain fish; and establishing a fisheries rehabilitation permit." [Before the committee was CSHB 107(FSH).]

[2:02:39 PM](#)

REPRESENTATIVE TALERICO, sponsor, introduced HB 107. He explained that it is a fish rehabilitation bill and the permit described in the bill could boost the survival rate of fertilized eggs to the fry stage from 5 percent in nature to 95 percent via incubation. He said the fish eggs would be collected, fertilized, incubated, and hatched, and the unfed fry would be released back into the same water. While this is not completely natural, he continued, it is as natural as it can possibly be made to rehabilitate or grow populations.

REPRESENTATIVE TALERICO pointed out that fish incubation is not new and has been done for nearly 40 years in many areas of Alaska. Similar permits for education and science already exist, he said, but this bill would clean things up by outlining these permit requirements in statute and for the purposes of rehabilitation. The bill would create the ability to not have a project labeled as either an education or science project, but to be able to utilize it as a rehabilitation project. It would be a collaborative effort with private sector nonprofits actually doing the project while under the complete direction of [the Alaska Department of Fish and Game (ADFG)].

REPRESENTATIVE TALERICO said his motivation for the bill relates to the State of Alaska's current fiscal constraints and that there is at least one party very interested in participating. This party, he related, thinks it has the ability to potentially leverage funds and to use some of its own funds to do this, while it would be a bit tough for [the state] given [the state's] current financial situation.

REPRESENTATIVE TALERICO noted he has been down this path before and that at one point it was declared as being "bucket biology and anyone could do this." However, he continued, given the requirements for the permit under this bill, the permit would not be easy to obtain. The applicant would have to satisfy many requirements before it could head down this road and it would require ADFG's approval. Once permitted, the party would have to stay engaged with ADFG by providing data in order to continue the project.

REPRESENTATIVE TALERICO allowed that different people would view the bill differently. He said some will see it as an absolute disaster and some will see it as opportunity to maybe provide more for sport fishermen and potentially more for commercial fishermen. However, he emphasized, this wouldn't be a hatchery replacement bill.

REPRESENTATIVE TALERICO stated that for his district this is a food source bill. He noted that his district begins in Tanana on the Yukon River, goes all the way to the Canadian border, and includes also a fair portion of the Tanana River. These two enormous river systems have traditionally had runs in them, he said, but recently there have been closures, including a closure just put on the Kuskokwim drainage. For the folks he represents this is a critical food source that they have traditionally used for hundreds, if not thousands, of years. Currently that option appears to be going away. The bill, he continued, is an attempt

to figure out a way to get this food source back so people can continue to fish from Tanana all the way up to Eagle, particularly in the Yukon where villages have had fish wheels for centuries.

[2:08:21 PM](#)

ELIJAH VERHAGEN, Staff, Representative Dave Talerico, Alaska State Legislature, explained HB 107 in further detail on behalf of Representative Talerico, sponsor. He noted that under current statute, AS 16.05.050(a)(5), a duty of the ADFG commissioner is to propagate fish or increase fish populations throughout the state. The department has done this with educational and science permits, he said, which are similar to what is being proposed in HB 107. The sponsor has worked with ADFG in crafting the bill's permit criteria, which begin on page 2, line 2, and which would require that the permit applicant fill out the applicant's name, reasons for doing this, the conditions justifying the project, ample communication with affected people in the area, the location, how many fish and fish eggs the applicant will collect, and the plan for incubation. These requirements, he stated, are to ensure that an unqualified person can't get a permit because [the sponsor] wants this to be a safe and reasonable process to propagate fish.

MR. VERHAGEN related that over the years the ADFG commissioner has come up with science and educational permits that are similar but are nowhere in statute. So, HB 107 would get a fish permit into statute. Also, he added, at least one interested party, the Tanana Chiefs Conference (TCC), is ready to invest its own private dollars into obtaining one of these permits. He said TCC has already worked with the biologist who has done this fish incubation and will be able to responsibly and safely boost the fish populations in the Nenana and Yukon rivers.

MR. VERHAGEN explained that under science and education permits an entity would have to obtain the permit under the premise of science, science collection, or education, whereas HB 107 would allow the entity to get a permit simply because of a need for more fish and would put this type of a permit into statute. Escapement goals haven't been met, he said, and many rivers do not even have escapement goals or fish counting due to the state's limited resources. However, he continued, the locals can attest that not near as many fish are getting up the rivers, especially as far as the Interior.

MR. VERHAGEN stated each permit would have to be signed by the ADFG commissioner and the permit [would be subject to] all the checks and balances listed on page 2, [paragraphs] (1)-(8). He pointed out that page 2, line 24, states the department "may" issue a permit. Therefore, he said, ADFG would have full latitude to reject an application or ask the applicant to amend its application if the department feels that the person or organization isn't qualified.

MR. VERHAGEN noted that science and education permits are open to governmental agencies and schools, but not to businesses. The hope under HB 107, he said, is for the private sector to collaborate under the oversight of ADFG and use private dollars to boost fish populations. But, he added, these private entities would not be able to say, "These are our fish, so you can't touch them." The fish coming from these rehabilitation projects would be open to everyone and it will be in the best interest of everyone to get as many natural fish as possible.

MR. VERHAGEN drew attention to the document in the committee packet entitled, "Early Survival (emergent fry) Comparison of Salmon Naturally Spawning Versus Assisted Spawning." He explained that in nature when salmon spawn many of the eggs are washed away without getting fertilized. Additionally, the eggs are subject to predation by other fish and animals, die from being covered by silt, or die from freezing in winter if the water table drops. With all these factors, he said, the survival rate from fertilized egg to emergent fry is about 5 percent. Through incubation, he continued, that survival rate from fertilized egg to fry is increased to 90-95 percent, which has been proven [by hatcheries] for the past 40 years. Under the bill the fry would be unfed and would be put back into the same river that [their parents] were taken out of and there would be no risk of changing the genetics. [These released fry] would be just like any other emergent fry and would have to learn to fend for themselves naturally.

MR. VERHAGEN stated that the permit proposed under HB 107 would allow qualified individuals, corporations, or other entities to use their resources and money to prove through the application process outlined in the bill that they know what they are doing. For example, he continued, he has been working on this all session and now has a good idea of how to do this, but he would probably be rejected if he applied for a permit because he doesn't have the money or resources to get the incubation equipment or to build the troughs. He further added that [the Gulkana Hatchery near Paxson that is managed by the Prince

William Sound Aquaculture Corporation] has used nearby natural hot springs to adjust the water temperatures throughout the winter while the eggs are growing.

[2:16:11 PM](#)

MR. VERHAGEN reiterated that applicants would have to know what they are doing to be given a permit. The permit would last for five years so that a return would be seen on the permittee's efforts. He noted that on page 3, beginning on line 26, the bill directs that the permittee shall collect and provide project data and reports that are reasonably requested by the department. While the department is doing a great job, he said, the state's money is limited and there are many rivers where there are no escapement goals and that have no fish counts being done, even though there are locals depending on those fish for food. In the event the department receives two permit applications for the same location on a river, he continued, the department would have the discretion to either issue two permits for the same area if it would not overpopulate the river, or to request one of the applicants to change the proposed location. Both permittees would then be providing data to the department that ADFG would not otherwise have on many of these rivers and creeks.

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REPRESENTATIVE BIRCH stated that early in his career he was the project manager at Sikusuilaq Springs Hatchery on the Noatak River. Therefore, he said, he can understand what an advantage it would be to have this supplement to the natural run of salmon. One of the challenges, he continued, is making sure it is a natural run and he appreciates that the salmon would be put back into the stream where they started. The survival rate is phenomenal, almost like "crowd sourcing" of salmon, so he likes the idea. He said he would like to hear whether there is a downside even though it looks to him like it would leverage the food source and he looks forward to supporting the bill.

[2:19:33 PM](#)

CO-CHAIR JOSEPHSON directed attention to [the bill on page 4, lines 30-31, and continuing to page 5, line 1] which read:

(e) In making a finding that the plans and specifications for a proposed construction, work, or use sufficiently protect fish and game under (d)

section, the commissioner shall consider related fisheries enhancement projects under AS 16.05.855.

CO-CHAIR JOSEPHSON expressed his concern that the commissioner could be satisfied by showing said alternative means of rehabilitation rather than doing everything possible to restore wild salmon streams. He asked Representative Talerico to address this concern.

REPRESENTATIVE TALERICO replied that this has been successfully done in the Copper River drainage for a long time. He said it is remarkable how the operators of the Gulkana Hatchery, ADFG and now the Prince William Sound Aquaculture [Corporation], have kept wild salmon stock available in the Copper River as well as the volume of fish that they've put down the river for people to utilize on a regular basis.

REPRESENTATIVE TALERICO related that currently his constituents in the upper Yukon River are at crisis levels with [the shortage of] fish. Jokes have been made about how few fish there are, he said, but it is serious for those people living in Fort Yukon, Rampart, Tanana, or any community along the river. Traditionally it is a real crisis and it is critical for [the legislature] to come up with the very best plan possible, he continued. While some may argue that it might be detrimental to the wild stock, it is at a level where action must be taken to get these supplies replenished and give fish back to these people.

REPRESENTATIVE TALERICO said the one thing he is trying to avoid is all the theories of why there are no fish because everyone could spend the next 10 years, like has been done these previous 10 years, pointing a finger at sport fishermen, or subsistence fishermen, or commercial fishermen and getting absolutely nowhere. Instead, he said, he is looking for a resolution to satisfy the user groups and make sure Alaska has the subsistence, sport, and commercial fish that are vital to the state's employment and economy.

REPRESENTATIVE TALERICO maintained the bill would not be the replacing of wild stock. This is as wild as it gets, he posited. Further, he said, the bill is not trying to replace hatcheries, which are doing a great job of getting lots of fish out there and which he supports. Rather, it is time to look at this in a comprehensive holistic approach and come up with something to resolve the issue that is at hand.

[2:23:59 PM](#)

MR. VERHAGEN suggested the bill's drafter, Alpheus Bullard, might be able to address Representative Josephson's concerns.

ALPHEUS BULLARD, Attorney, Legislative Legal Counsel, Legislative Legal Services, Legislative Affairs Agency, explained the language is conforming to a section in existing law that has to do with protection of fish and game with the existence of these new fisheries enhancement permits. The section of law that's being amended is AS 16.05.871, Protection of fish and game, and it has to do with protection of waterways for anadromous fish. This was included as a conforming amendment because these rehabilitation permits are relevant to that effort. He said he doesn't know if it would allow anything that wouldn't be allowed otherwise and therefore he doesn't know that he has an answer to Representative Josephson's question.

[2:26:16 PM](#)

CO-CHAIR JOSEPHSON requested the definition of "construction" or "work."

MR. BULLARD replied there is no set definition. To get some idea of what would be affected, he suggested that the department be asked what it has regulated underneath this statute.

[2:26:51 PM](#)

CO-CHAIR JOSEPHSON said his concern is that the section in question is protection of waterways for anadromous fish; that is the article and the topic is protecting anadromous fish. [Alaska Statute 16.05.871(a)] he continued, sticks with that subject and notes the importance of the spawning, rearing, or migration of anadromous fish. He said he understands that the aforementioned language is conforming, but stated that it seems to say, in effect, that if there is some sort of construction or work, which apparently could include hydraulic projects and diversions, one way to get to meet the requirements of this section would be to say that the fisheries rehabilitation projects, including a hatchery way up river, would suffice. Therefore, he continued, his concern is that in a net-zero sum situation, a commissioner might say that he or she is willing to continue to sacrifice improvements of anadromous fish because [the department's] fish goal is going to be met in some other way. He stated he is concerned as to what policy statement is

being made by this section of the bill. He asked whether he is misreading subsection (e) on page 4, line 30, of the bill.

MR. BULLARD responded he doesn't believe that Representative Josephson is misreading it. He posed a hypothetical situation in which there may be constructions, works, or uses that could not help but have an effect on existing anadromous fish populations or other fish populations. So, in this instance, he said, it seems appropriate that the commissioner would be asked to consider these fisheries enhancement permits.

[2:29:12 PM](#)

FORREST BOWERS, Deputy Director, Division of Commercial Fisheries, Alaska Department of Fish & Game (ADFG), stated the discussion between Co-Chair Josephson and Mr. Bullard accurately portrays the intent of that particular section.

[2:29:42 PM](#)

CO-CHAIR JOSEPHSON related that a concern heard from wild salmon advocates is that by definition these hatcheries are designed to replenish weakened stocks of wild salmon. However, he said, the process of that replenishment could further weaken what is already weakened and the wild salmon suffer further. He inquired whether the sponsor shares this concern.

REPRESENTATIVE TALERICO answered he has heard that concern and added that several people have expressed concern about the diversity of the different genetics in the salmon. However, he said, "Most of us wonder how diverse do they really get because we know that they just don't scatter-shot, they usually go back to where they were produced." Wild salmon numbers getting lower and lower and the salmon continue to be fished and the resource depleted, but there is currently no supplementing of the wild salmon with any other potential for any other kind of catch. He said he looks at this as more like, "Are we just going to work our way to an extinction process?" Obviously, he said, it would have to stop at some point if numbers get that low.

REPRESENTATIVE TALERICO recalled a presentation provided to the committee about a rehabilitation project on the Tanana River near Delta Junction in which the riverbank was rebuilt and stabilized to prevent loss of a historical park and buildings. He said that if a project were to be approved in that area, he would hate to think that the fish would be made to suffer. These things are going to have to cohabitate with each other, he

said. Destabilized riverbanks will need to be stabilized, but the potential is still there to [also protect] the fish run in the Tanana River even though the bank was stabilized. Mr. Bullard's explanation of that was really good, he said, occasionally there will be those things and they can coexist.

MR. VERHAGEN pointed out that the bill requires the release of only unfed fry. There is a 10-day window, he explained, where fry do not need to be fed because they emerge in the alevin stage [and are nourished by their still-attached] yolk sac. The unfed fry will be mixing with the natural fish, but the sponsor's argument is that the released fry are natural fish. While humans incubated them, nothing else was done to them. He said the Gulkana Hatchery has been doing this for 40 years and a difference cannot be seen between the incubated fish versus the natural fish.

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CO-CHAIR TARR related that the House Special Committee on Fisheries discussed the difference between trying to do enhancement for an entire fishery versus enhancement for a stock because the bill is limited to just the stock of a particular river or river tributary, which should minimize that risk.

MR. BOWERS replied that applications under the proposed permit in HB 107 would be limited to 500,000 eggs, which is a relatively small number of fish. He said [the department] has a genetics policy that is meant to preserve genetic diversity of wild stocks, so there would be stipulations on any applicant permitted under this bill that they would have to meet their population sizes to ensure that genetic diversity of wild stocks is not compromised. He stated that loss of genetic diversity is a legitimate concern that it is taken seriously by [ADFG].

CO-CHAIR TARR reiterated her question regarding the difference between an enhancement project that is directed toward an entire fishery versus an enhancement project that is directed more toward the stock level as provided in HB 107.

MR. BOWERS responded that it would depend on how a fishery is defined. There could be a recreational or subsistence fishery that targets a very small discreet stock in a small tributary, he said. There are many examples of that across the state; not every fishery is targeting a resource returning to a large drainage. He surmised that projects permitted under HB 107 would be attempting to rehabilitate a stock that is a component

of a larger resource. But, he continued, certainly there could be a fishery or more than one fishery that is directed at some of these resources in small tributaries that would possibly be considered under this bill.

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CO-CHAIR JOSEPHSON asked whether there is any evidence of which Mr. Bowers is aware that hatcheries of this sort have enhanced wild stock populations.

MR. BOWERS answered that [ADFG] permits several different types of aquaculture projects intended to enhance or rehabilitate fish stocks, primarily through the private nonprofit hatchery program, he said, which includes the big hatcheries around the state. A few state-run hatcheries are similar; for example, the William Jack Hernandez Hatchery in Anchorage and a hatchery in Fairbanks, but primarily big private, nonprofit hatcheries such as the [Macaulay Salmon Hatchery/Douglas Island Pink and Chum, Inc. (DIPAC)] in Juneau.

MR. BOWERS noted that [ADF&G] also permits other projects, such as the 11 bio-enhancement research projects that were permitted in 2016. He said the provisions of those permits are very similar to those contained in HB 107, such as the 500,000-egg limit. [The department] has permitted some of those projects, in the Seward Peninsula in particular, that have restored salmon stocks in streams where salmon were extirpated due to mining activity; so there have been some positive outcomes. As far as small-scale projects like this, he continued, [the department] doesn't permit many of them because the number of requests is low.

[2:38:47 PM](#)

REPRESENTATIVE WESTLAKE stated that the hatchery on the Noatak River was successful. Speaking from his personal experience, he related that in the 1980's the whole Kotzebue fish population crashed and was an economic disaster. The hatchery has now been closed about 15 years, he said, and he wonders at what point do [anadromous] fish become indigenous [fish]. He added that he travels past that fish hatchery and it is teeming with salmon because that is where they were born. Since the fisheries have never come back to what they were before, he continued, he is glad to see this bill.

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REPRESENTATIVE PARISH stated he has several reservations about the bill as a whole. He noted he has a degree in biology where salmon was a frequent topic, did a research project on Auke Lake salmon, and worked a bit for ADFG. He said he has visited a few weirs, including one on Frazer Lake, which wasn't previously a salmon stream, and where a ladder was put in and now the lake has a robust run. There is also DIPAC in Juneau. He said he is therefore not inherently opposed to fishery enhancements. But, he continued, he is concerned that giving a "19-fold competitive advantage to a subset of the population," as would be done according to the sponsor's survival statistics, would put a downward pressure on genetic diversity. Effectively increasing a subset of the population's representation 19 times over, he posited, would result in the remaining one-twentieth composing a smaller portion of the overall population.

REPRESENTATIVE PARISH offered his appreciation that the bill would require [the fry] to be returned to the same waters and be returned unfed. He said this provision would avoid what happens with hatchery fish where they are fed and come out larger and stronger and so he commends the sponsor in this regard.

REPRESENTATIVE PARISH reiterated his concern about the long-term downward pressure on genetic diversity that HB 107 would result in. While the bill would be great in the short term, he said, it would not be a long-term solution, and that leads to other factors affecting fisheries such as climate degradation, timing mismatches in outmigration and return, and larger population blooms of prey when they out-migrate. Also, he inquired whether there is a provision for local citizens - who are not keen on a project happening in their traditional fishing area - would have a mechanism to say, "no thank you."

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MR. VERHAGEN, in response to Representative Parish's last question, directed attention to the requirement on page 2, line 8, which states that the application for the permit must include "any communication, or plan for continued communication, from the applicant with affected persons, relevant organizations with applicable expertise, and stakeholders in the project area," and to page 3, line 16, which states, "if the proposed project is a salmon rehabilitation project, relevant and applicable comments relating to the proposed project submitted by a regional planning team established under [AS 16.10.375] for the region that encompasses the project area". So, he explained, the

commissioner would be looking at several things when considering an application and determining whether to accept it. Page 1 of the application includes the reasonable communication with interested and relevant parties and organizations and affected persons. The parties would be able to have discussions, which would be documented, and the commissioner would be able to see that and know whether the locals are in favor of a project.

MR. VERHAGEN then addressed genetic diversity, stating that in the late 1970's and 1980's ADFG successfully planted over 20 million sockeye eggs in the upper Karluk River and this restored the depleted run to pre-1921 populations. Also, he said, since the 1970's the Gulkana Hatchery has annually rehabilitated up to 40 million eggs per year in the Copper River watershed. He suggested Gary Martinek be asked what the Gulkana Hatchery does for continuing genetic diversity. Mr. Verhagen added that by incubating the eggs and putting [the fry] right back in, the bill is trying to keep everything as natural as possible. He also pointed out that ADFG would be using its genetics policy to closely monitor those concerns.

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CO-CHAIR TARR [opened public testimony].

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GARY MARTINEK testified that he recently retired from working at Gulkana Hatchery for 37 years and is speaking on his own behalf in support of HB 107 and the rehabilitation of salmon stocks in a reasonable and responsible way where conditions are wild. He said the hatchery is located adjacent to the Gulkana River, a tributary to the Copper River. Located 260 miles inland from the marine environment, the hatchery was started in 1973 as a research project by the Division of Fisheries Rehabilitation, Enhancement and Development (FRED) within ADFG to see if there was an efficient low-cost method of rehabilitating the heavily pressured Copper River sockeye stocks. The hatchery is located in a spring system where the water temperature only varies five degrees summer to winter and a simple non-powered gravity-feed system is used to get water from the spring to the incubators.

MR. MARTINEK reported that from 1973-1980 Gulkana Hatchery was primarily a sockeye research facility. From 1980-1984, he said, production increased to 20 million eggs and by 1987 production increased to 36 million eggs, making it the largest sockeye salmon fry producer in the world. The basic premise was to

increase the natural survival of 13-16 percent of sockeye in the spring. By placing them into an incubator the survival was increased to as high as 95 percent with 75 percent being the average historical survival. He explained that when fry emerge from the incubator they are counted, otolith marked, and released into nursery lakes where they spend one year before outmigrating to the sea. He said the fry encounter the same environmental predation issues that all wild stocks have to overcome, and that 17 percent of the returning adult sockeye are four-year-old fish and 83 percent are five-year-old fish.

MR. MARTINEK pointed out that the Gulkana Hatchery stock is just one stock of 136 sockeye stocks in the Copper River. He said an intelligent management program goes hand-in-hand to ensure wild stocks remain healthy and the commercial fleet, subsistence use, personal use, and sport fisheries all benefit from the 350,000-400,000 annually produced hatchery salmon. He further related that the monetary value of production to all user groups since the hatchery started in 1973 has been \$700 million.

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REPRESENTATIVE PARISH asked how the emergent state of hatchery-raised alevin compares with the emergent state of indigenous populations of salmon.

MR. MARTINEK replied that in the 1970's and 1980's Gulkana Hatchery did research on the hatchery spring and that is where it was determined that the survival was only 13-16 percent. The hatchery started very small and by increasing and through research the survival was increased to 75 percent.

[2:51:19 PM](#)

REPRESENTATIVE PARISH inquired as to how the hatchery's fry, when introduced to the stream, compare developmentally with the wild grown.

MR. MARTINEK responded that based on his years at the Gulkana Hatchery, hatchery fry are the same fitness as the wild stocks. Regarding earlier questions about genetic diversity, he advised that wild fish are coming into the spring before and after the egg-take for the hatchery. By looking at otoliths, he continued, it has been determined that the wild stock component in the hatchery spring is still 47 percent.

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MATHEW O'BOYLE, Spokesperson, Skagway Community Fish Hatchery, testified in support of HB 107. He said the Skagway Community Fish Hatchery is a newly founded nonprofit formed through the local municipality to address the low level of returning salmon in Skagway. In the past, he noted, Skagway has been a collection and release site for king salmon through ADFG's enhancement program encouraging stock diversification, but due to dwindling return rates the rearing facility could not sustain involvement. He explained that during the summer king salmon would be collected for egg retrieval and the eggs transported to DIPAC in Juneau for incubation. The following spring the smolt would be returned to Skagway, but a great deal of mortality occurred in the transfer from Juneau to Skagway. With the lack of eggs collected in previous years due to low return rates, he said Skagway is currently seeing a closure to sport fishing of king salmon in northern Lynn Canal.

MR. O'BOYLE added that Skagway has a natural run of coho that, with the help of HB 107, could be brought back to a reasonable population level. The underlying benefits of HB 107, he continued, are the economic and educational values. The tourist dollars brought in through sport fishing affect the community as a whole. The infrastructure that is created for this resource can plant the seed for future generations. He said Skagway's community has always been a big supporter of fish enhancement through volunteers and programs through the school. The bill would provide an additional tool in educating high school seniors who are interested in a fisheries job, thus building on Alaska's future.

[2:54:30 PM](#)

WILL MAYO, Executive Director, Tribal Government and Client Services, Tanana Chiefs Conference (TCC), testified in support of HB 107. He said TCC has had experience working with ADFG to develop a program that could be added to TCC's toolbox for fisheries. He explained that TCC wants to develop its capacities because in recent years [tribal members] have felt very vulnerable with the decline in their primary human consumption fish species as well as other [species] in the past. However, he noted, TCC has discovered that the current state permitting system basically has two types of permits, neither of which can be used for the kind of rehabilitation project that TCC would like to do. This bill would provide a third permit that would enable TCC to proceed with its projects in a close working relationship with ADFG.

MR. MAYO stressed that TCC does not in any way want to harm the wild stocks and is not approaching this haphazardly. But, he continued, TCC would like to develop the ability to enhance these stocks that [its members] depend upon if needed in the future. These are TCC's motivations, concerns, and reasons for giving its hearty support to HB 107.

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REPRESENTATIVE BIRCH said he is very encouraged to hear TCC's support. He asked how TCC envisions this moving forward and whether TCC would deploy individual incubation stations or have a central location.

MR. MAYO replied that TCC staff are running various projects around the Interior in different river systems, all within the Yukon drainage. There are counting stations and weirs among other things. He said TCC is identifying spawning streams on which enhancement projects could be done to enhance the returns to that area. Working with the department, TCC is identifying and choosing where to start a project. Brood stock would be taken from an existing stream, [the eggs] would be incubated, and then at the eyed stage of development they would be replanted into the gravel beds of their native spawning streams. The other option is to incubate the eggs until they emerge in the alevin stage and then place them into their native stream.

3:00:33 PM

BRIAN WINNESTAFFER, Chickaloon Native Village, testified in support of HB 107. He said he works for Chickaloon Native Village, which is located in the Matanuska-Susitna Valley. He outlined his extensive work experience as a fisheries biologist and noted that Chickaloon Native Village has worked on many fish population rehabilitation projects and many fish habitat restoration projects. One of the village's first fish passage restoration projects was on Moose Creek in 2005 in which over \$1 million was spent, mostly in federal funds, to reroute the stream back into its original alignment after railroad activities in the early 1900's straightened the creek and created waterfalls that precluded fish passage and essentially deleted 11 miles of spawning and rearing habitat. After rehabilitating the habitat, he continued, the village began a project to restore fish numbers by implementing a moist air incubation project from 2007-2010. The village partnered with the U.S. Fish and Wildlife Service, ADFG, and the National

Oceanic and Atmospheric Administration. The project and the process worked well and the returns of salmon, based on foot and aerial surveys, remained level when similar stocks of fish in the area dwindled.

MR. WINNESTAFFER stated that Chickaloon Native Village also replaced or rehabilitated many culverts under Matanuska-Susitna Borough and state roads that were not providing fish passage and were on their last stage of usefulness. He pointed out that because there wasn't a fisheries rehabilitation permit the village had to apply for multiple permits, such as a fish resource permit and fish transport permit with prior approval from the Cook Inlet Regional Planning Team. He said HB 107 would have been a permit that was apropos for the village's project and would have allowed the state to track the project better. It would have been labeled a rehabilitation project versus a science or education permit.

MR. WINNESTAFFER noted that all these projects represent local people taking interest in the resources. Instead of an agency coming in and telling folks what to do there is an excellent collaboration between agencies and local folks to rehabilitate [the state's] trust resources. Chickaloon Native Village was able to bring forward fish passage and population issues to the agencies and was able to leverage federal and state dollars to solve these issues, of which most were federal dollars. He said passage of HB 107 would get to the heart of these projects. The ability to rehabilitate a resource that was impacted in the past is a win-win for the people of Alaska, all user groups, and the resource itself.

REPRESENTATIVE JOHNSON offered her praise to Chickaloon for doing a great job in rehabilitating its streams.

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RICKY GEASE, Executive Director, Kenai River Sport Fishing Association (KRSFA), testified in opposition to HB 107. He posed a scenario in which there are 2,000 wild fish in the Nenana River with 1,000 females and 1,000 males. He calculated that if an enhancement program had 100 of the females at a survival rate of 95 percent and the wild stock had 900 of the females at a survival rate of 0.5 percent, in just one generation the genetic diversity would be reduced because the enhanced portion would generate two-thirds of the fry outgoing and the wild stock would generate one-third.

MR. GEASE said he understands low king returns because it is a statewide issue and [the Kenai area] feels it just as much as anywhere else. He stated that there is a difference between rehabilitating and reintroducing a population that has been extirpated versus trying to enhance low numbers of fish in a population. He said KRSFA thinks that the best strategy for low numbers of fish is to drastically reduce fishing pressure on those fish, maintain good habitat, and let nature take its course. While it is painful to go through these periods of low abundance, it is really important that this be done. The budget for king salmon research was once \$30 million and it is now half that. Budget cuts are difficult, he said, but this bill is not the right path.

MR. GEASE provided an example of where hatchery components and enhanced components can result in a "trap." He said that in the Kenai River there are enhanced runs on Hidden Lake [Trail Lakes Hatchery] and pointed out about 90 percent of the returns are [fish that live one year in freshwater and two years in saltwater (1.2 fish)], which are the really small torpedo fish that swim through dipnets and commercial nets. However, the majority of returns of sockeye on the Kenai are 2.2 fish and 2.3 fish - really large sockeye. So, he stated, the concept of loss of genetic diversity is a really critical concept and with today's department standards of strict separation between wild stocks and enhanced stocks or hatchery stocks, it is really important. He further pointed out that in many of the marine waters there are hatchery terminal fisheries that don't go into anadromous streams and which he thinks is really key going forward. He urged that more thought go into the concept of loss of genetic diversity.

MR. GEASE, responding to Representative Parish, stated he sent copies of his testimony to committee members via email.

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NANCY HILLSTRAND, Pioneer Alaskan Fisheries Inc., testified in opposition to HB 107. She said her company has been in business in Alaska for 53 years and that she worked for ADFG for 21 years in hatcheries where she raised all five species of salmon and two trout. She stated she is very aware of what is being talked about in HB 107 and is against the bill, the reason being that she has seen a lot of problems with weakened wild fish.

MS. HILLSTRAND said Alaska is blessed with its wild spawning salmon and that what needs to be done more so than putting fish

into these river systems is doing what has been done in Chickaloon - fixing culverts, fixing the habitat, and most of all going to the Board of Fisheries and asking why the fish are not getting up as far as Tanana because that has to do with management problems downriver. She related that people have worked hard to get the North Pacific Fisheries Management Council to stop some of the trawling bycatch and have been fairly successful, so maybe that will help. But, she continued, HB 107 is putting the cart before the horse because fishing and fish populations do go up and down.

MS. HILLSTRAND noted that ADFG has written a scientific paper about what has happened at Hidden Lake [Trail Lakes Hatchery], and the paper states that there is a risk with doing these kinds of things. She said it is important to read these scientific papers that show damage is being done to the wild fish. Oregon, Washington, and Vancouver have all done damage, she continued, and there are many scientific papers showing that this kind of activity - enhancement - can be very detrimental because the released fish outcompete the wild fish.

MS. HILLSTRAND brought attention to page 5 of HB 107 and noted that the regional planning teams (RPTs) were restructured with ADFG and now most of those teams are made up of hatchery people who work for the aquaculture associations. These teams are no longer made up of ADFG staff although they might have that name, she maintained, and it is really important to look at who is taking care of the state's supposed wild fish. She urged the committee to take care of the state's wild fish and said there are other ways to do rehabilitation, which is totally separate from enhancement. She also urged the two be defined.

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BRUCE CAIN, President, Copper Valley Chamber of Commerce, testified in support of HB 107. He said many of the chamber's members are sport-fishing guides, but that this year the Copper River sport-fishing season for king salmon has been closed because of a lack of return. There is the Gulkana Hatchery, he continued, and the Gulkana sockeye run is strong at about 300,000 returns and has been going on since 1977. The Copper River fishery is one of the best managed fisheries in the world. He related that the chamber has said it doesn't want the Copper River to become like the Yukon River and the hatcheries, one of the reasons for that. But, he said, no king salmon enhancement is done on the Copper River and now people are faced with the

year of where everything is closed because of lack of return on the king salmon. Efforts must be balanced, he added.

MR. CAIN maintained that incubation boxes are not an issue of genetic diversity because they come from the wild stocks and are hatched just like wild stocks. He said it is a good, non-intrusive system that has been tested and proven for many years to be successful. The Copper River sport-fishing guides will not be guiding this year, he reiterated. The fisheries can be closed like has happened on the Yukon and people can sit around hoping things come back. Or, he continued, folks can take care of themselves, which is part of the approach of HB 107, a good approach that he supports.

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BRIAN ASHTON testified in support of HB 107. He said he is representing himself but is before the committee on request of Representative Talerico to help answer questions because he has been involved in salmon restoration for over 15 years. He was involved in some of the mega-hatcheries in Southeast Alaska and helped develop some of the technologies that are being used. From being raised in villages, he said, he has realized that a balance must be found with how to help these fish survive, given that people are certainly very good at taking them. He has dealt with ADFG for many years, he continued, and is in support of HB 107 simply because it fills a gap that exists today for being able to do this effectively and have good controls on when it is appropriate and when it is not. Other permits are trying to be used that are not appropriate, he said, and he appreciates ADF&G for the years it has helped to make those permits fit. This bill simply clarifies how to do it when it is appropriate to do it.

MR. ASHTON addressed some of the statements made in opposition to the bill. He offered his belief that it was overstated about the numbers overwhelming the genetic stocks of the fish. When talking about genetics policy with the fisheries managers at ADFG, they will specifically talk about the numbers of fish that are going to be enhanced because they have had decades of experience looking at what the ratio would be of those wild fish spawning compared to greatly increasing the survival of the wild fish by assisting their survival. They will look at what the escapement is and what the numbers are, he said, and discuss how to do this without overwhelming the natural stocks, in spite of the fact that these fish are wild fish as well. The Copper

River enhancement program has had 40 million eggs a year for decades and the stock is still well.

MR. ASHTON stated that there are stocks of fish that have not come back. The Bradfield River south of Wrangell was a mutant-sized fish on a par with the Kenai River, he related. It was logged down to the watershed and the habitat was never restored. It should be a [U.S. Environmental Protection Agency] Superfund project and work is being done on getting that restored. The stock is so far down in its numbers, he said, that while it may return eventually it would take many decades to do it. The remnant stock could be captured, and the population brought back. These Southeast Alaska fish were the size of Kenai River kings. As oil continues to diminish, it is critically important to look at Alaska's natural reoccurring stocks like in the case of salmon to ensure they are being helped as best as possible.

MR. ASHTON pointed out that tribes on Prince of Wales Island have spent over 10 years restoring the habitat in the watersheds, but the stocks are down so much that they look at this as the only option. The tribes have restored the habitat to reintroduce the fish that are gone that have not come back for decades.

MR. ASHTON stated there would not be any feeding [under HB 107]. He said he helped write this bill in collaboration with ADFG and very conservative regulations were looked at to ensure that this policy could not be abused. The wild stocks and the nature of the wild stocks must be protected. What is being proposed in HB 107 is absolutely different than taking king salmon in the Lower 48 that are incubated, reared in pens, and fed all the way to the smolt stage for a year in a conventional hatchery and then letting them come back.

MR. ASHTON offered his belief that by law the regional planning teams must have ADFG staff on those teams. It is good to question who is going to be approving these things in the regional planning teams, he said, but ADFG serves on those boards.

MR. ASHTON offered his appreciation for Co-Chair Tarr asking that people with concerns submit them in writing. He said ADFG can provide information regarding such concerns as genetic diversity.

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CO-CHAIR JOSEPHSON asked what made [the Bradfield River] a Superfund site and what hurt the habitat on Prince of Wales Island.

MR. ASHTON replied that it is not a Superfund site on the Bradfield River, but he suggested it should be considered one because back in the 1960's and 1970's the U.S. Forest Service oversaw logging where gravel was actually taken out of the river to build the logging roads. He said it was over the entire floodplain within the water system and it simply decimated the watershed. Prince of Wales Island had logging that was right down to the watershed as well, he continued. Great steps have been taken because the communities are close enough to it in collaborating with state and federal agencies. Environmental groups have funded the restoration of that habitat, he noted.

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REPRESENTATIVE BIRCH related that committee members have received a letter of concern from the Kenai River Sport Fishing Association about the biological diversity. He said he will provide this letter to Mr. Ashton so that Mr. Ashton can provide his comments between now and the committee's next meeting.

MR. ASHTON responded that he will provide comment, but suggested the letter also be provided to the genetics lab at ADFG, which has the best genetics policies in the world for protecting the state's stocks of fish.

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REPRESENTATIVE PARISH recalled Mr. Ashton mentioning the possibility of restoring stocks to streams where the salmon are currently not returning. He inquired whether that would be permitted under the bill as it currently stands in that it talks about taking eggs from one set of waters and returning them to the same waters.

MR. ASHTON answered that the watersheds he is referring to actually have a remnant stock, but the stock is so low that it can't be expected to recover for a very, very long time.

[HB 107 was held over.]

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## **ADJOURNMENT**

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:19 p.m.