



ADNR Division of Agriculture's role in food production, inspection, and enhancing local food supply.

*Commonwealth North Food Security Study Group*

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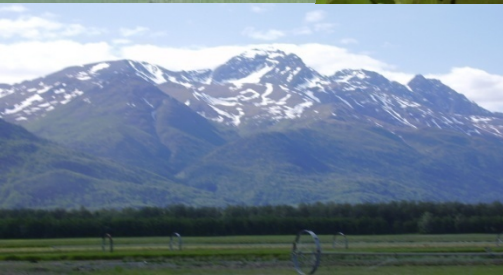
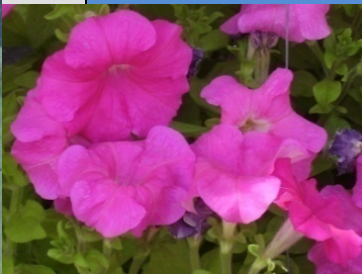
**May 8, 2019**





# Division of Agriculture

- Division Components
- Board Structures and Functions
- Alaska Agriculture



# Division of Agriculture: Components



- Marketing, Education & Inspection Services
- Invasive Species & Pest Detection
- Agriculture Land Sales & Management
- Agriculture Revolving Loan Fund (Ag Loans)
- Plant Materials Center

# DIVISION OF AGRICULTURE AUTHORITY

Resources shall:

(1) AS 03.05.010 (a) The Commissioner of Natural direct, administer, and supervise promotional and experimental work, extension series, and agricultural projects for the **purpose of promoting and developing the agricultural industry** within the state including such fields as horticulture, dairying, cattle raising, fur farming, grain production, vegetable production, and development of other agricultural products;



# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (a) The Commissioner of Natural Resources shall:

(2) procure and preserve all information pertaining to the development of the agricultural industry and disseminate that information to the public;

# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (a) The Commissioner of Natural Resources shall:

(3) assist prospective settlers and others desiring to engage in the agricultural industry in the state with information concerning areas suitable for agriculture and other activities and programs essential to the development of the agricultural industry in the state;



# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (a) The Commissioner of Natural Resources shall:

4) review the marketing, financing, and development of agricultural products inside the state including transportation, with special emphasis upon local production, and negotiate for the marketing of agricultural products of the state with federal and state agencies operating in the state;

# Market Development / Services



1. Market Development
2. Grants
3. Industry Support
4. Education





# Marketing Services – Market Development

## Market Development:

- Farmers Market Support
- Community Supported Ag (CSA) Support
- Farm to Restaurant
- Food and Farm Products Directory (FFPD)
- Cooperative Marketing Program (CMP) grant offerings
- Alaska Grown Program



# Market Services - Grants

## 2. USDA Grants

- Federal-State Marketing Improvement Program (FSMIP)
- Specialty Crop Block Grants (SCBG)





# Marketing Services – Industry Support



## 3. Industry Support

- Director's Newsletter
- Conference Facilitation
- Community outreach
- Speaking at various agriculture related events
- Giving out promotional items



# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (a) The Commissioner of Natural Resources shall:

(5) **regulate and control the entry** into the state and the transportation, sale, or use inside the state of plants, seeds, vegetables, shell eggs, fruits and berries, nursery stock, animal feeds, remedies and mineral supplements, fertilizers, and agricultural chemicals **in order to prevent the spread of pests, diseases, or toxic substances injurious to the public interest, and to protect the agricultural industry against fraud, deception, and misrepresentation**; in this connection the commissioner may require registration, inspection, and testing, and establish procedures and fees;



# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (a) The Commissioner of Natural Resources shall:

(6) regulate the farming of elk in a manner similar to the manner in which the commissioner regulates domestic animals and livestock, to the extent that is appropriate;

# DIVISION OF AGRICULTURE AUTHORITY

AS 03.05.010 (b) To carry out the requirements of this title, the commissioner of natural resources **may issue orders, regulations, quarantines, and embargoes** relating to

- (1) examination and inspection of premises containing products, articles, and commodities carrying pests;
- (2) establishment of quarantines for eradication of pests;
- (3) establishment of standards and labeling requirements pertaining to the sale of agricultural and vegetable seeds;
- (4) tests and analyses which may be made and hearings which may be held to determine whether the commissioner will issue a stop order or quarantine;
- (5) cooperation with federal and other state agencies.

# INSPECTION SERVICES

1. Food Safety Audits: Programs referred to as: Good Handling Practices (GHP) and Good Agricultural Practices (GAP) audit inspections.
2. Export Certification Plant Health Inspections
3. USDA Grade Inspection and Certification
4. Country of Origin Labeling (COOL)





# Inspection Services

1. Conduct Shell Egg Inspections
2. Elk Farm Inspections
3. Plant Quarantine Enforcement
4. Organic Certification Assistance



# Pest Detection - Functions of C.A.P.S

- Confirm the presence or absence of plant pests impacting the domestic and international movement of plants and plant products.
- Provide a distribution profile of plant pests in the U.S. deemed to be of concern to International trade.
- Early detection & rapid response to **Exotic Pest** infestations.
- Maintain a pest information database to support U.S. Agricultural trade.
- Enhance national communication and education on pests, their life cycles, pathways of transport, and control.



## Alaska

### C.A.P.S. Cooperators:



U.S. Customs and  
Border Protection

# Pest Detection Surveys in Alaska

## INSECTS:

- Gypsy Moth (European & Asian)
- Nun Moth
- Pink (Rosy) Gypsy Moth
- Siberian Silk Moth
- Emerald Ash Borer
- Light Brown Apple Moth



## MOLLUSKS:

- Exotic Terrestrial Slugs and Snails



# Pest Detection Surveys in Alaska

## **NEMATODES:**

- Pinewood Nematode associated with the Monochamus wood borer
- Potato Cyst Nematode
- Golden Nematode
- Nematodes vectors of Tobacco Rattle Virus

## **DISEASES:**

- Sudden Oak Death
- Potato Late Blight

## **WEEDS:**

- Purple Loosestrife
- Illyrian Thistle



# INVASIVE PLANT AND AGRICULTURAL PEST PROGRAM

## DOT/PF Right-of-Way

- Canada thistle
- Orange hawkweed

## Weed-Free Forage, Straw and Gravel Program

- Increase availability of certified weed-free products

## Aquatic Invasive Plants

- Elodea crisis

# DOT/PF RIGHT-OF-WAY

Control noxious & injurious  
invasive plants





# WEED-FREE FORAGE AND GRAVEL

There is a growing demand for the use of certified weed-free forage, mulch and gravel as a preventative program.



# AQUATIC INVASIVE PLANTS

We still have the chance to eradicate Elodea from Alaska. Let's work together to prevent damage to Alaska's freshwater resources. Our fisheries, recreational opportunities, and economy are worth protecting!

## Elodea in Alaska

Until recently, Alaska has been free of invasive submerged aquatic plants that greatly impact freshwater resources in other areas of the world where they are not native.

The discovery of Elodea in Chena Slough in Fairbanks in 2010 drew attention to an established population in Eyak Lake and led to the discovery of Elodea in other waterbodies near population centers. Elodea may have been introduced to Alaska's wild waterways by aquarium dumping. Elodea is not native to Alaska and it has the potential to spread by fragments on float planes, boats, trailers, school and home aquariums, and other equipment.

A coordinated effort is underway between state and federal agencies and other management groups to respond to Elodea and inform people of the risk it poses to Alaska's natural resources. Herbicide applications have successfully eradicated Elodea from some lakes in Alaska.

## Identifying Characteristics

- Submerged leaves are densely packed.
- No part of the plant extends above the water's surface.
- Leaves in whorls of 3, or occasionally 4, unlike native species.
- Stems are a lighter green than the leaves and grow in a tangled mass.
- Leaves are 1/4" to 1/2" long and 1/8" wide.



## Other waters at risk

Elodea has a long history as an invasive plant. It is native to North and South America and is often used in aquariums. Elodea was introduced to Great Britain over a century ago, and has since spread to Scandinavia and across Russia to Lake Baikal.

Elodea can spread to new locations and waterbodies through tiny plant fragments carried by float planes, boats, trailers, aquariums, and other equipment. This plant spreads easily because broken fragments can root to form new plants, and it can survive harsh winters under ice.

## Elodea locations in Alaska



### CLEAN:

Remove all visible mud, plants, fish, or animals from equipment.

### DRAIN:

Eliminate water from all equipment before transporting to avoid harboring hitchhikers.

### DRY:

Clean and dry anything that came in contact with water.

To report Elodea or any other invasive species, contact the Invasive Species hotline: 1-877-INVASIV (1-877-468-2748)

# ELODEA CRISIS

Elodea easily  
spreads  
through  
fragmentation



© Alaska Plant Materials Center



UAA ISER



# MANAGEMENT ACTIVITIES

## Preventative actions

- MOU, ADF&G Executive Order

## Outreach and education

- Presentations, signage, pamphlets

## Collaboration

- Interagency task forces

## Active management

- Multiyear projects

# Northern Latitude Plant Materials Center – Palmer (PMC)



- Cultivar Developments
- Research and development for re-vegetation
- Potato Production and development
- Grow grass seeds for DOT

# PMC Mission: To promote Alaskan-produced agricultural crops for use in re-vegetation and seed production

**AS 03.22.020 Purpose of the center. The objectives of the plant materials center, in cooperation with the Institute of Agricultural Sciences, are to:**

1. Assemble, evaluate, select, and increase plant materials needed in soil and water conservation, agriculture, and industry, and maintain genetic purity of these materials;
2. Increase promising plant materials for field scale testing;
3. Test the promising materials in field plantings on sites that represent soil and climatic conditions not found at the center;
4. Maintain and provide for increase of basic seed stocks of plant materials for agricultural and conservation interests;
5. Make seed and plant materials available, for a fee if necessary, in such a manner as to avoid monopolistic control of basic stocks of these materials and encourage the development of a seed industry;
6. Support but not duplicate activities carried on by state or federally funded research programs in the state;
7. Prepare, publish, and disseminate a summary report on all studies as they are completed.



**The primary activities of the PMC are**

- **Conservation Plant Technology**
- **Native Plant Evaluation**
- **Foundation Seed**
  - Grass / Grains / Potatoes / Native Plants
- **Alaska Seed Growers' Assistance**
- **Ethnobotany Research**
- **High Latitude Germplasm**
- **Certified Seed Laboratory**
- **Revegetation / Reclamation**
  - Research and consultations
- **Invasive Species Management**
  - Land and Water Plants



# Plant Materials Center Advisory Board

- Board is comprised of several members differing in background, from farm service providers, research related companies, and farmers.
- Meet together with the PMC staff once a year to review project developments and progress



# Seed Programs and Seed Lab

## ➤ Foundation Seed Program:

- PMC is the only source of initial seed stock for plants native to Alaska

## ➤ Certified Seed Potato Production

- Industry requested and driven
- Provides pathogen-tested seed potatoes to certified seed growers
- Seed is propagated by seed growers and sold to table stock growers

## ➤ State Seed Lab (the only official lab in Alaska)

- Provides testing for germination, purity & disease to:
  - Seed producers
  - Retailers
  - Buyers
  - Agencies



# PMC Programs

## ➤ Advanced Evaluation Plantings

## ➤ Revegetation

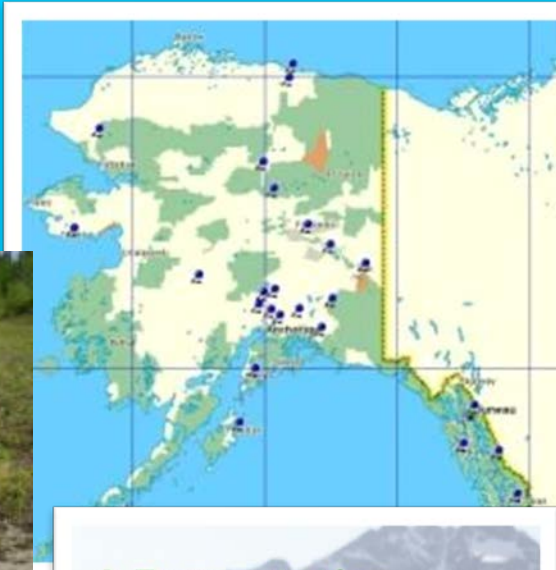
- A Revegetation Manual for Alaska
- Presentations

## ➤ Education

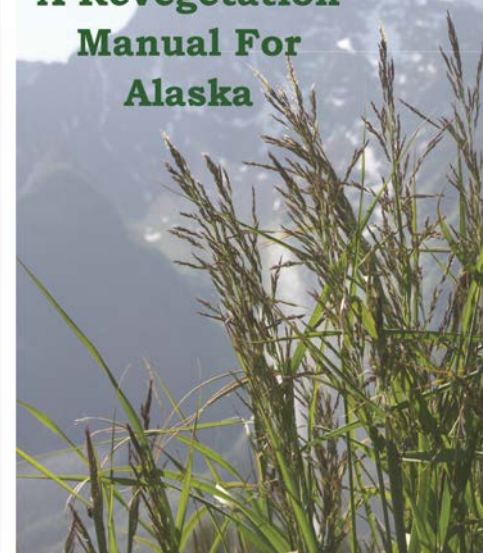
- Teachers
- Children
- Public/Special Groups

## ➤ Website

- Native Plant Directory
- Revegetation Manual
- PMC Publications



**A Revegetation  
Manual For  
Alaska**



# Agricultural Revolving Loan Program

- Objective:
  - Promote the more rapid development of agriculture as an industry throughout the State by means of long-term low-interest loans. ( A.S 03.10.010) Short-term – operating loans
- Loans Available
  - Chattel – to purchase equipment or livestock
  - Farm development – to purchase real property for agricultural development
  - Irrigation – to purchase and install systems
  - Product Processing – to build and equip facilities for processing Alaska Ag products
  - Clearing – for land clearing.
  - Raising/care of animals for the purpose of marketing their fur



# BAC Board Structure and Function

Statutorily established in AS 03.09.010

## Structure:

- 7 members appointed by the Governor
- Varying agriculture experience and background
- Serve staggered 3 year Terms

## Function

- Oversight of the Agriculture Revolving Loan fund
- Authorize the disposal of agricultural property acquired by ARLF
- Approve and administer agricultural loans
- Recommend land suitable for agriculture classification

# Land Management



Land AS 03.05.010 (a) The Commissioner of Natural Resources shall

- (3) assist prospective settlers and others desiring to engage in the agricultural industry in the state with information concerning areas suitable for agriculture and other activities and programs essential to the development of the agricultural industry in the state

# Land Management

## Land Management

- Land Sales
- Grazing Leases
- Mapping



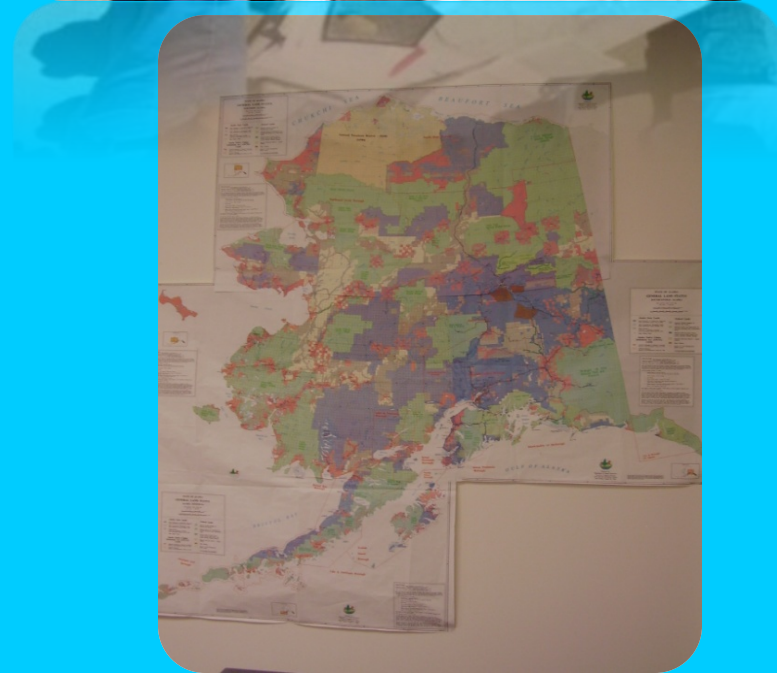
# Land Management – Land Sales

**Strong public interest continues in agriculture land sales**



## **Land Sales**

- **Identify areas suitable for agricultural development**
- **Works cooperatively with other agencies**



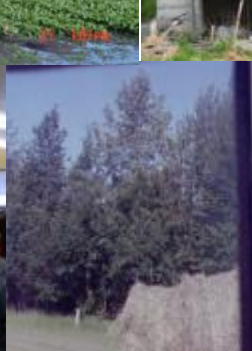


# Land Management –Grazing Management & Mapping

- Grazing Management
  - Work with producers to identify problems
  - Work with NRCS
    - To identify new grazing areas
    - To identify concerns on leases
    - Identify Solutions
- Mapping of grazing lease improvements
- Geographic Information System (GIS)
  - Soil Maps
- Field Investigations
  - Global Positioning System (GPS)



# Alaskan Agriculture





# Crops

## Primary Crops Produced in Alaska

### Root, Tuber and Bulb Crops

- i.e. potatoes, beets, carrots, parsnips, turnips & onions

### Other Crops Include:

- broccoli, cauliflower, celery, corn, barley, oats, rye, & wheat

### Some Fruit Crops Include:

- blueberries, currants, strawberries, gooseberries, raspberries, rhubarb



# Dairy & Eggs



## Available Alaska Dairy and Egg Products

- Cheese - Cow & Goat, Milk – Cow & Goat, Ice cream

Due to high grain and energy costs, it is financially difficult to feasibly operate a dairy operation in AK.

Eggs are available to the public, but typically it is small farm production, where you would purchase at point of production.



# Nursery – Ornamental and Garden Plants

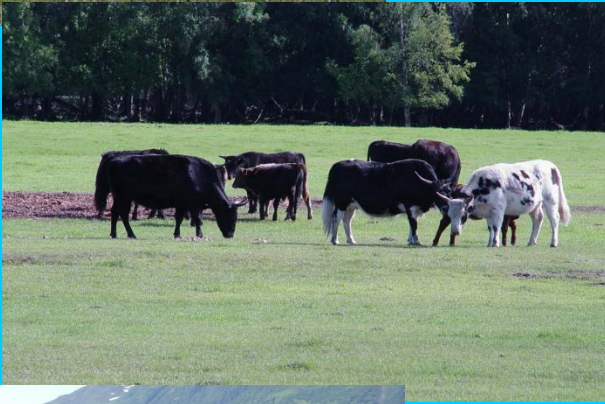
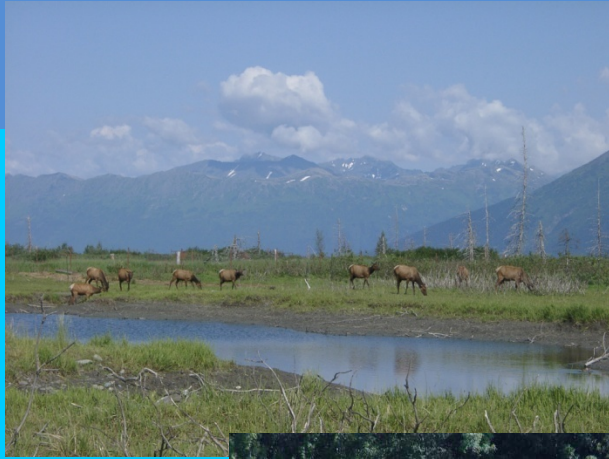
There are many nurseries in Alaska, some large and many smaller that are family run.

You can find nursery products at Farmers Markets or you can visit them directly on their farm.

Nursery crops are most often produced in a greenhouse.



# Livestock



There are several types of livestock grown in Alaska

- Beef
- Elk
- Bison
- Goat
- Lamb
- Pork
- Poultry
- Rabbit
- Reindeer
- Yak

Some livestock is grown for meat, other livestock is grown for byproducts such as wool, pelts, fibers, & antlers.



# Aquaculture



There are 3 Shellfishes that are farmed in Alaska  
– Clams, Mussels & Oysters

This must be done in a natural habitat, but not where wild shellfish exist, and they must be actively farmed.

Kelp production is in early stages of development

# What is “Hemp”?

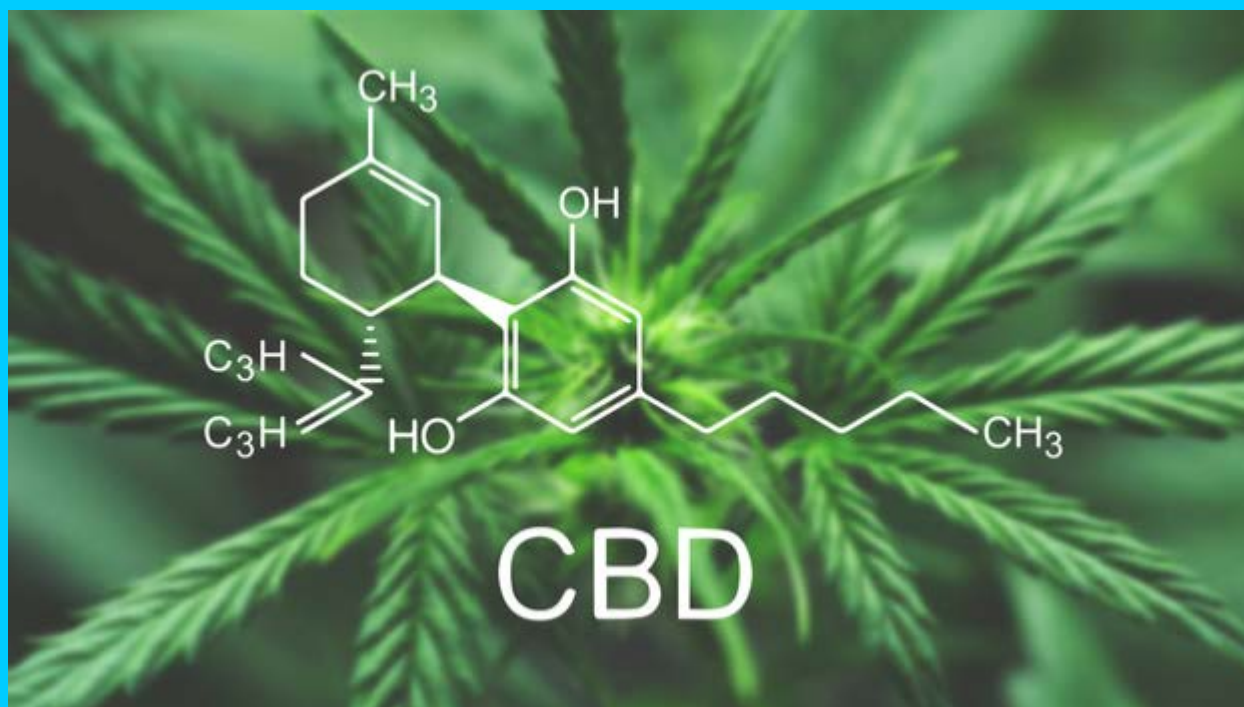
AS 03.05.100 (5), defines industrial hemp as “all parts and varieties of the plant *Cannabis sativa* L. containing not more than 0.3 percent of delta-9-tetrahydrocannabinol (THC).”





# What is “CBD”?

CBD is short for cannabidiol, one of the compounds found in cannabis plants. It can be processed in many different kinds of applications including oils.



# DIVISION OF AGRICULTURE AUTHORITY

## **SB 6 (Ch 5, SLA 2018)**

- 1) To create an Industrial Hemp Pilot Program to research the growth, cultivation, and marketing of industrial hemp
- 2) To promulgate regulations necessary to implement the program



# PROGRAM CHALLENGES -CBD PRODUCTS-

## **CBD- Related Product Manufacturing and Sales**

- The Division of Agriculture has identified over 300 CBD “manufacturers” and over 1000 retail sales establishments in the Anchorage/Mat Su Area. These products are intended for animal and human consumption.
- Getting these processes/products into a legal status will be a top priority.



# PROGRAM CHALLENGES -RESOURCES-

- Division of Ag currently lacks adequate staff to meet all hemp program needs. We would need additional direct services staff for both PMC and regulatory work.
- Division of Ag estimates it will require receipt authority of approximately 500.0 GFPR per year.
- SB6 mandates industry pay for program-related services, requiring Division to have receipt authority.
- The program could start halfway through the fiscal year, then ramp up.



# PROGRAM CHALLENGES

## **Program Coordination**

- This program has elements that need to be coordinated with Law Enforcement and the Marijuana Control Board.

## **Statutory Changes required by 2018 Farm Bill.**

- Alaska statutory changes will be necessary in order for Alaska's program to be federally compliant.



# QUESTIONS?

Thank you on behalf of  
the Division of Agriculture!

