Department of Environmental Conservation

Commissioner Jason Brune

Deputy Commissioner Emma Pokon

February 26, 2021

DEC's Mission

Conserving, improving, and protecting Alaska's natural resources and environment to enhance the health, safety, economic, and social well-being of Alaskans.





Our Values

We make Objective decisions, based on science and facts.

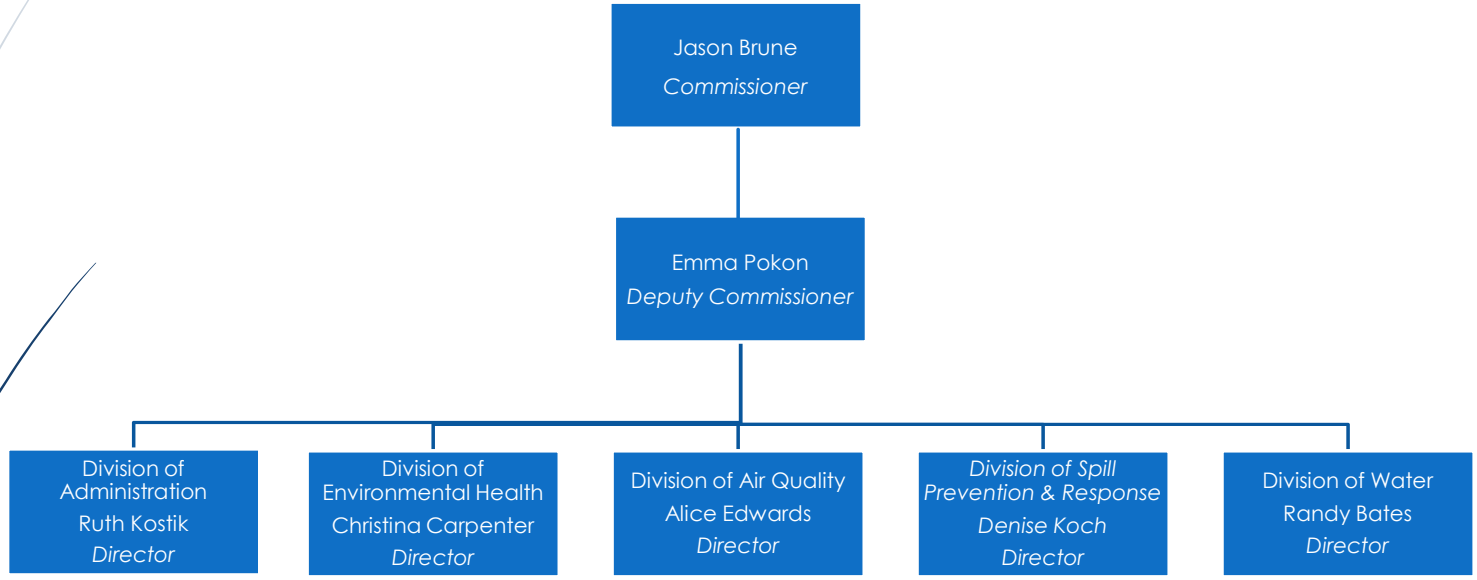
We are Accountable for our actions and stand proudly behind our work, as individuals and as an organization.

We perform to the highest ethical standards, and produce transparent and consistent regulatory actions to show our Integrity.

We support and encourage Collaboration across programs and partners to meet challenges and further our collective mission.

We strive to provide excellent Customer Service both inside and outside of the organization by being professional, responsive, reliable, and respectful.

DEC Leadership Team



Over 100 years of state service!

What does DEC do?

AIR QUALITY

- Permit industrial air emissions
- Monitor & assess air quality
- Address small & mobile air pollution sources
- Conduct inspections & ensure compliance

SPILL PREVENTION & RESPONSE

- Respond to spills
- Require spill prevention & response plans
- Evaluate response drills
- Manage cleanup of contamination
- Conduct inspections & ensure compliance

WATER QUALITY

- Permit water discharges
- Oversee water quality standards, assessment & restoration
- Technical assistance & financing
- Conduct inspections & ensure compliance

ENVIRONMENTAL HEALTH

- Ensure safe food & drinking water
- Oversee landfills & pesticide applicators
- Provide animal care & importation standards
- Conduct analytical testing
- Conduct inspections & ensure compliance

"Alaska is Open for Business"

- Protection of human health and the environment and resource extraction are NOT mutually exclusive
- Predictable, science-based, timely permitting process
- Strong partnerships with local and tribal governments, ANCs, businesses, and other organizations

2021 DEC Goals

- Protect human health and the environment by controlling water, land, and air pollution
- Improve employee retention and develop our employees
- Leverage technology and workflow improvements to create efficiencies, reduce our environmental footprint, and increase the transparency and visibility of DEC's efforts

2021 DEC Hot Topics

- COVID
- Air
  - Fairbanks Air Quality PM 2.5
  - Greenhouse Gas Inventory
- SPAR
  - PFAS
  - Prevention Account
- Water
  - Village Safe Water
  - Integrated Report
  - Tier 3 Waters
  - Transboundary Waters
  - Commercial Passenger Vessels
- Environmental Health
  - Invasive Species
  - Yuck Line
  - Lab: Dairy Safety/Mariculture

COVID Impacts

- 75% of DEC staff currently teleworking
- Fieldwork safety guidelines
- Reasonable accommodation to permittees
  - Enforcement discretion
  - Increased communication
- Virtual inspections
- Lending workforce, expertise, and supplies to other agencies
- Piloted surveillance testing of wastewater with UAA
- Online public comment system (statewide)
- Digitizing files

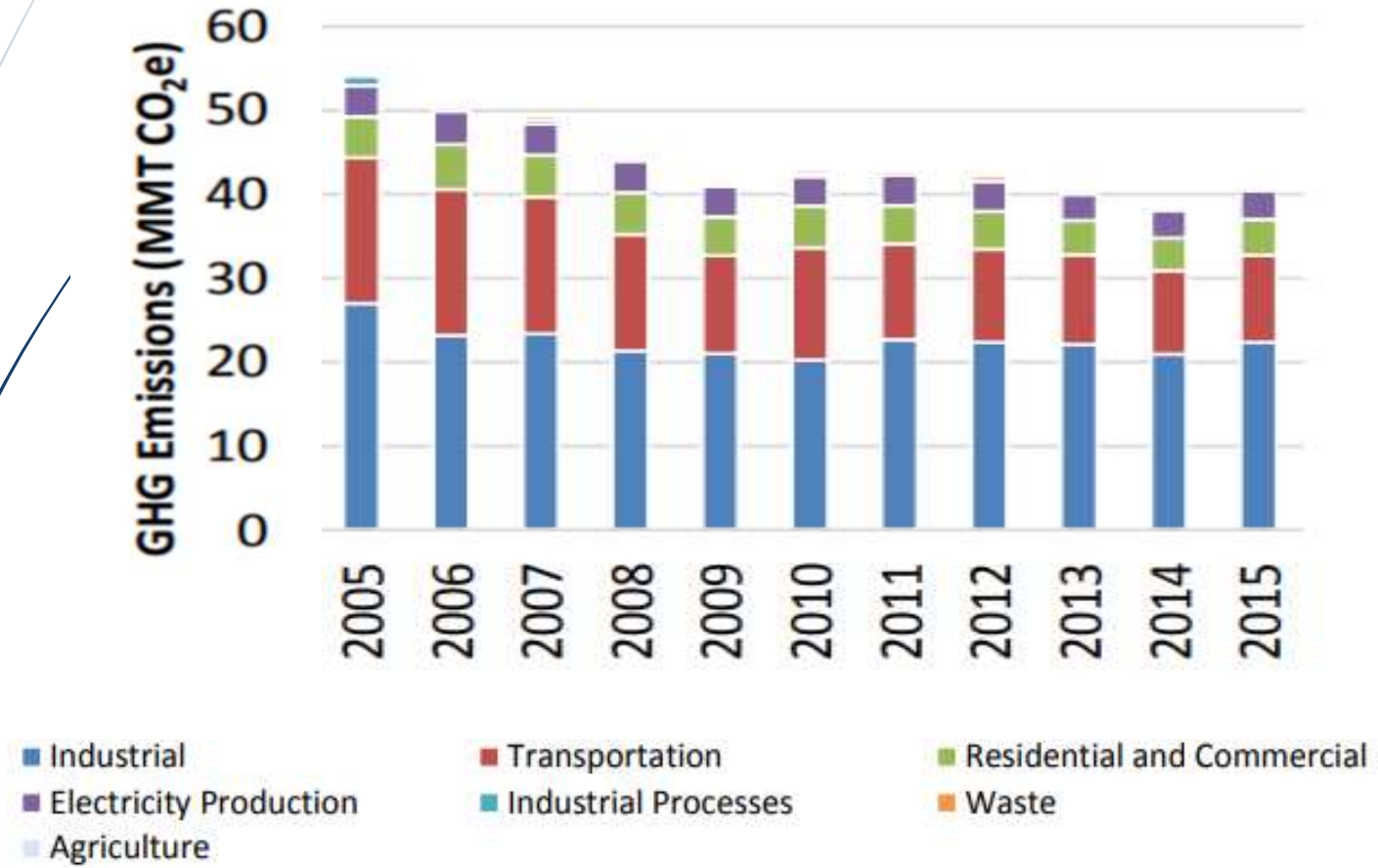
Air: Supporting Primacy Under the Clean Air Act

- State has had primacy for air quality programs under the Clean Air Act since the 1970s (nearly 50 years)
- Programs assess air quality, prevent deterioration of air quality, and address pollution problems within Alaska
- Alaska Air Quality Control Plan (or State Implementation Plan) developed and maintained to meet federal requirements
- Primacy benefits Alaskan residents and businesses
  - Alaskans are responsible for managing our air quality
  - Air permits and compliance activities conducted by staff with expertise and understanding of building and operating industrial sources in Alaska conditions – remote locations and extreme climate regimes

Improving Fairbanks Air Quality

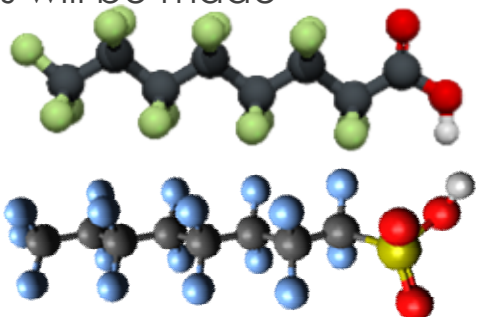
- Continue implementing air quality control programs following 2018 ballot initiative that prevented Borough from meeting federal air quality commitments.
- Worked with local government and stakeholders to finalize and submit to EPA the Serious State Implementation Plan by December 2019.
- Followed up with the next required Plan update reflecting 5% emission reductions per year and projected attainment in 2024. Amendments to the Plan were finalized in November 2020.

Alaska Greenhouse Gas Inventory



Responding to PFAS

- DEC in line with EPA approach
  - Lifetime Health Advisory of 70 ppt for PFOS and PFOA
  - Testing for 18 to 25 PFAS using EPA method 537.1 or 533
    - All data being placed on DEC website: http://dec.alaska.gov/spar/csp/pfas/sample-results/
- Modified air permit with additional controls/monitoring for remediating PFAS contaminated soil at Moose Creek (NRC Alaska/US Ecology, formerly OIT)
  - Preliminary results show 99.99% of PFAS destroyed in soil and minute amounts released into air
  - Additional tests have been done in conjunction with EPA's Office of Research and Development. Results will be made public as soon as possible.
  - ***Local solutions for local problems!***



Responding to PFAS

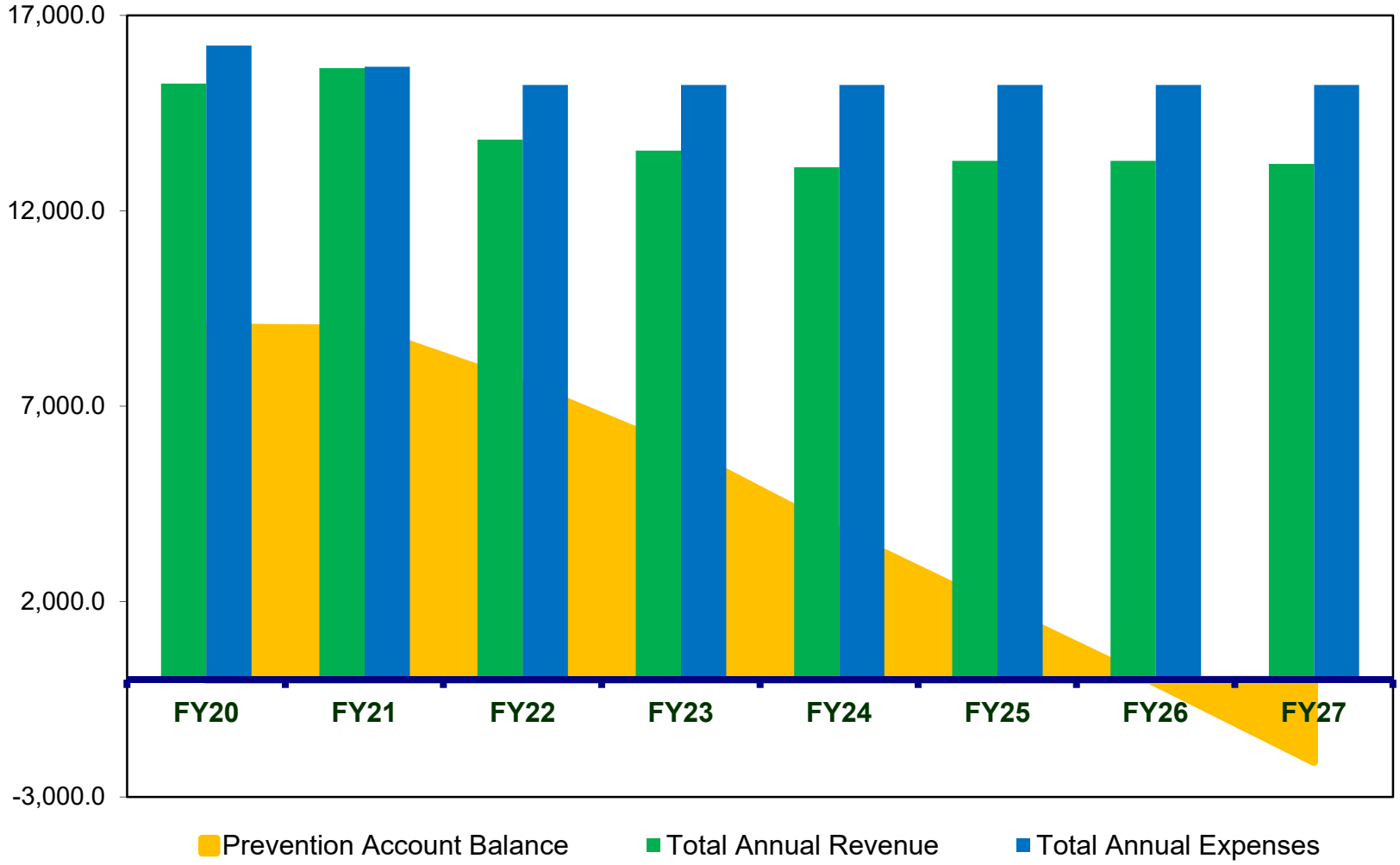
- DEC, with support from DOT&PF and DHSS, prioritized sampling drinking water wells at risk of PFAS contamination. Finished sampling at high-risk airports and currently testing at medium risk sites.
- The Department required drinking water sampling and ensured alternative drinking water was provided to people with wells contaminated by PFAS.
- DEC aligned its policies with EPA's non-regulatory lifetime health advisories for action levels for provision of alternative water.
- The Department is providing engineering plan reviews and approvals to public water systems installing PFAS treatment, as well as for the extension of the public water distribution systems into affected areas (GHU into Fairbanks Airport area and North Pole Utilities into the Moose Creek area).

Spill Prevention and Response

An ounce of prevention is worth more than 260,000 barrels of response

- Following the Exxon Valdez oil spill, weaknesses in spill prevention and response requirements were addressed
  - Contingency plans now require greater detail, better response capabilities, and apply to more entities
  - Creation of the Oil and Hazardous Substance Release Prevention and Response Fund
- DEC's day-to-day prevention work includes:
  - Contingency plan reviews
  - Oversight of plan holder's ability to respond, including regular inspections, drills, and exercises
- And is funded by:
  - $0.04 per barrel of crude oil produced
  - $0.0095 per gallon of refined fuel

Prevention Account Deficit



Water: Supporting Primacy Through APDES

- DEC has authority for compliance and enforcement of portions of EPA's Clean Water Act in Alaska.
- Primacy gives DEC the ability to take into account Alaska's unique circumstances when applying the Clean Water Act requirements.
- The Alaska Pollutant Discharge Elimination Systems (APDES) Program provides permits to all major industries in Alaska.
- Maintaining primacy requires DEC to meet certain thresholds for compliance oversight and permit review quality to meet Clean Water Act standards.

Village Safe Water

DEC's Water Division:

- Funds planning, design and construction of water, wastewater and solid waste projects
  - $350 - $750 thousand per/home to provide first time piped service
  - 5-10 years to complete planning, design and construction of a project
- Provides project management and oversight for grant funded projects
- Works with partners to support communities in their efforts to build technical, financial, and managerial capacity
- Provides water and wastewater system operator training and certification
- Remote Maintenance Workers
  - Emergency response and support
  - 15 Remote Maintenance Workers at DEC and regional health corporations provide onsite training and technical assistance to approximately 200 rural water and wastewater systems
  - Funded through federal grants from EPA and USDA and associated state match in the operating budget

Integrated Report and KTN Beaches

- DRAFT 2020 Alaska Integrated Water Quality Monitoring and Assessment Report (Integrated Report) is out for public comment through March 22, 2021.
  - Determines the condition of Alaska's waters as required by the Clean Water Act. Waters placed into categories based on attainment of WQS.

Categories 1 and 2	Waters for which there is enough information to determine that water quality standards are attained for all or some of their designated uses.
Category 3	Waters for which there is not enough information to determine their status.
Category 4	Waters that are impaired, but have one of several different types of waterbody recovery plans.
Category 5	Waters that are impaired and do not yet have waterbody recovery plans. Also known as 303(d) list impaired waters.

- Eleven Ketchikan beaches are recommend for placement into Category 5 (impaired).
  - 13 beaches sampled since 2017, 11 show persistent bacteria exceedances (fecal and enterococci).

Tier 3 Water Bodies

- Policy enacted at the end of the previous administration to require the passage of legislation to designate a Tier 3 water body
- Same policy remains in effect today
- Letters have been sent to 5 nominations that have been submitted to DEC indicating this process
- Attempts to codify this process in 31st Legislature's SB 51 and HB 138
- Without codifying this process, future DEC commissioner could change at any point

Transboundary Bilateral Working Group

- 2015 Memorandum of Understanding and Statement of Cooperation (Agreement) signed by the Governor of Alaska and Premier of British Columbia.
- A collaborative effort to examine water quality in the Stikine, Taku and Unuk transboundary watersheds.
- Reviewed existing environmental data, implemented a joint water sampling program, partnered with area Indigenous Nations, industries, and environmental groups.
- The sampling program included physical habitat assessments, physical and chemical analyses of water and sediment, and chemical analyses of fish and invertebrates collected in the Taku, Stikine, and Unuk watersheds.
- The final reports released February 25, 2021 conclude that these rivers continue to support and sustain aquatic life in conjunction with mining and other land use activities.

Commercial Passenger Vessels Environmental Oversight

- DEC's Water, Air Quality, and Spill Prevention and Response Divisions have authority and funding to regulate cruise ship emissions and discharges in place for the 2021 cruise season.
- The ocean rangers are observers, not trained inspectors. Over 12 years, only 6 of the 259 notices of violation DEC issued were from ocean ranger observations.
- DEC is working to replace the ocean rangers with tools that more effectively protect Alaska's environment.
- Parts of the new program will take effect this cruise season.

COVID & Cruise Ship Seasons

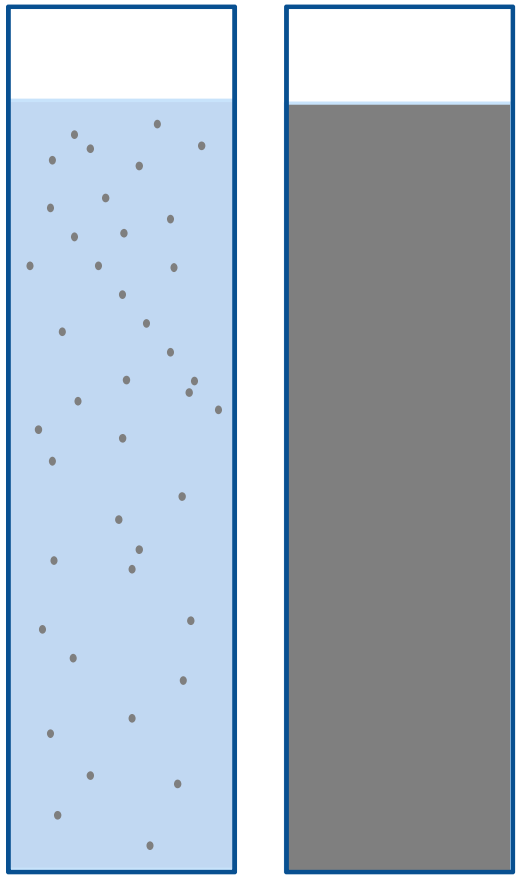
- 2020 season saw one small cruise ship (100% inspection rate!)
  - Conducted baseline ambient water quality sampling in port communities and common corridors
  - Set up new air quality sensors in Juneau and Ketchikan to get baseline data
  - Lost revenue ~$7.6 million to the Commercial Passenger Vessel Environmental Compliance (CPVEC) Fund
  - $4.5 million appropriation from the CPVEC Fund to DCCED for port communities to prepare for COVID
- 2021 season remains uncertain
  - Canada's ban on cruise ships could stop all large vessels
  - May see a limited season for U.S. flagged small vessels
- If there is no, or a very limited season, the CPVEC Fund is projected to run a deficit in FY2021

Ambient Water Quality Testing

- Sampling conducted June-September 2020
- 16 ports from Nome to Ketchikan
- 20 sampling sites along major shipping/traffic lanes throughout Southeast
- Sites represent variety of potential pollution sources
  - Small boat harbors
  - Cruise ship berths
  - Municipal stormwater
  - Commercial shipping and passenger vessels
- COVID meant a baseline without cruise ships

Holding Everyone to the Same High Standards

- Large cruise ship permit allows up to 40 fecal coliform bacteria in 100 ml
- Local waste water treatment facility permit allows up to 1.5 million fecal coliform bacteria in 100 ml.



Multi-Agency Response to Invasive Species

- DEC created general pesticide permits to strengthen the State's ability to rapidly respond to invasive species, such as elodea and Northern Pike.
- The general permit will allow the Departments of Natural Resources and Fish and Game to start work within 15 days, compared to the average of 70 days previously required to issue an individual permit.

Improving Food Safety Complaint Process - Yuck Line

- DEC, with DH&SS and Municipality of Anchorage, implemented a cell phone number which can take calls, texts, photos and videos, and also created an online submission form.
- This has increased the number of submitted complaints, helping the program identify unsafe and unsanitary conditions that could cause foodborne illness in Alaska.

Environmental Health Laboratory Capacity

- The Environmental Health Laboratory provides analytical testing and services in support of DEC regulatory programs
  - Dairy Safety
  - Shellfish
  - Food Safety
  - Animal Health
  - Drinking Water
- Excess capacity is spent on non-regulatory programs in support of public health, federally funded grants, or other partner funded work
  - Fish Tissue Monitoring program
  - FDA Cooperative Agreements
  - Shellfish sampling for inorganic arsenic or PSP research
  - Audit/certification of marijuana testing labs

Telling Our Story

- Why does DEC matter?
- Starting in December 2019 we increased our social media presence
  - Facebook: AlaskaDEC
  - Twitter: @AlaskaDEC

If we're not telling our story, someone else will, and we may not like the narrative.