

Alaska Department of Environmental Conservation
Division of Water



Module 3A

Permitting the APDES Seafood Processing Sector

2012 SEAFOOD PROCESSING WASTE PERMITTING & COMPLIANCE WORKSHOP

Anchorage, Alaska • February 28-29, 2012

Module 3A – Permitting the APDES Seafood Processing Sector

MODULE 3A



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Module 3A – OBJECTIVES

MODULE 3A



- **Briefly review** the current permitting status of the Seafood Sector
- **Identify** key issues affecting future permit decisions for the Seafood Sector

Module 3A – What You Will Learn

MODULE 3A



- Why there are so many general permits
- Why is location information so important
- Why future permits will require sampling
- What will happen with this information

Permitting Issues Today

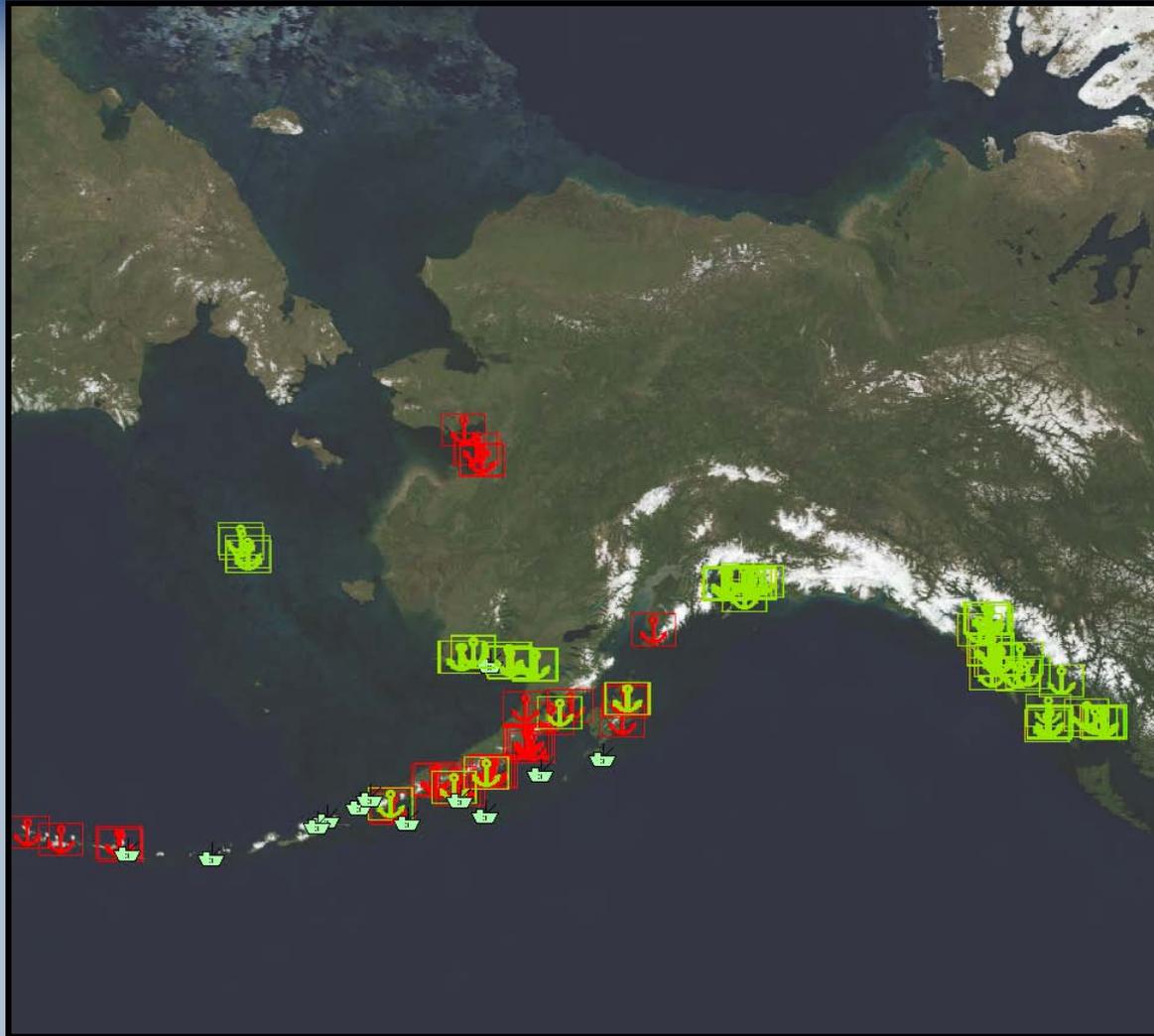
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- Why are there so many permits?
 - Number of Facilities-Facility Universe
 - Environmental Concerns

The Facility Universe

MODULE 3A



The Facility Universe

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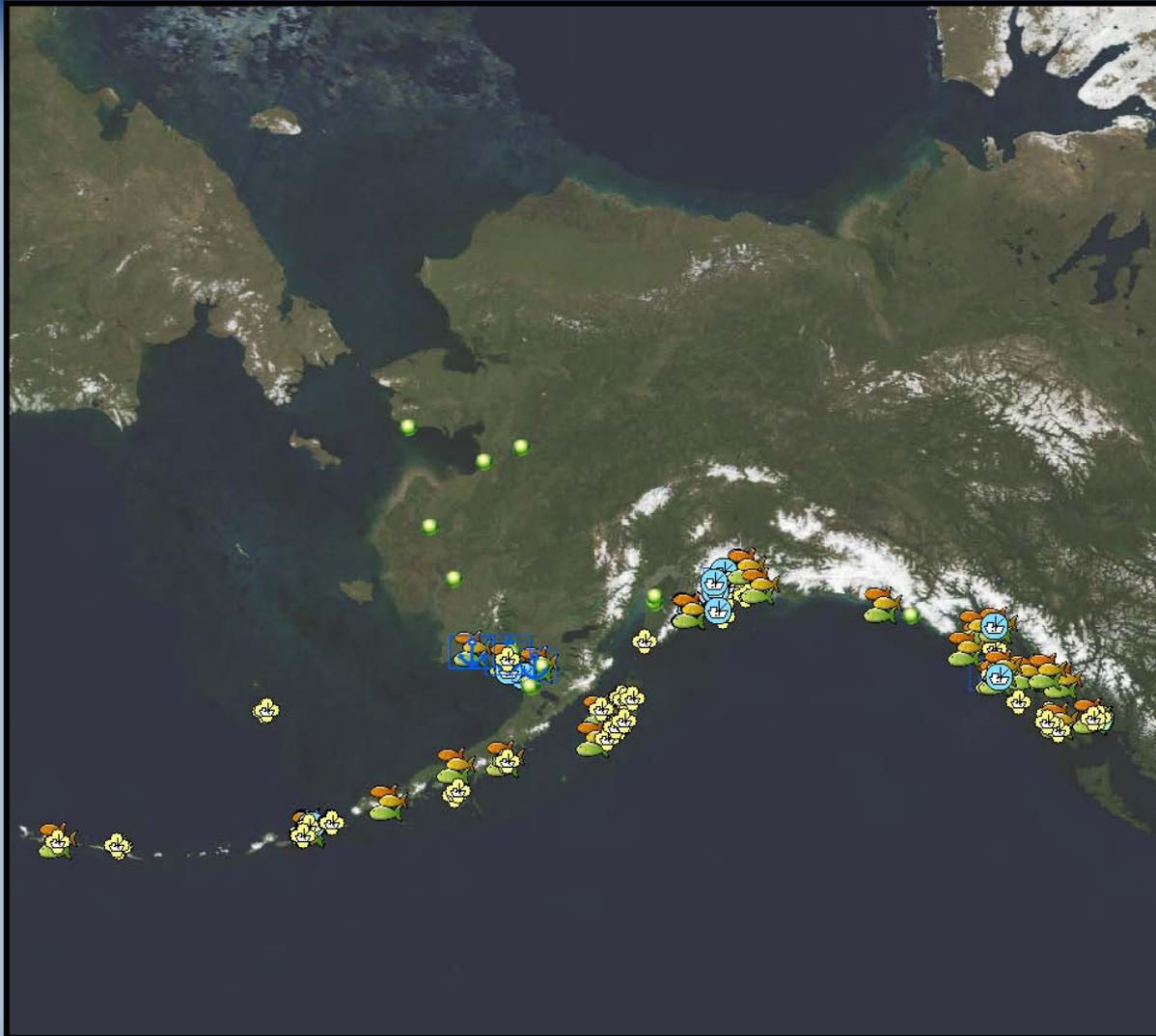


Vessels

- Processing beyond 3 NM from Shore or Baseline, whichever is greater (AKG524000) - *85 vessels*
- Processing between 3 NM from shore or baseline and 0.5 NM from shore (AKG523000) - *30 vessels*
- Processing between 0.5 NM from shore and moored vessels - *10 vessels*

The Facility Universe

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The Facility Universe

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Shore-based

- Shore-based facilities discharging to marine water. Includes smaller facilities not previously permitted.

65 previously permitted

40-50 possible previously un-permitted

- Facilities constructed on land discharging to fresh water or estuaries – 35
- ‘Non-Remote’ or ‘Processing Centers’ – *currently 8* facilities in Kodiak ‘Processing Center’

The Permit Universe

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General Permit Universe - Historic

- AKG520000 Seafood Processor GP
- AKG528000 Kodiak GP
- AKG527000 Pribilof GP

The Permit Universe

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Individual Permit Universe

- 5 Shorebased facilities and 1 Vessel discharging to Impaired Waters (not eligible for coverage under a GP)
- 1 Shorebased and 3 Vessels to waters around the Pribilofs (not enough current facilities for a GP)

The Permit Universe

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- AKG520000 'Seafood Processors General Permit'
- Expired/Administratively Extended (2006)
- Divided regulated facilities into 4 categories
 - **Offshore processors (beyond 1 nm from shore)**
 - **Nearshore (0.5 to 1.0 nm from shore)**
 - Shore-based (included facilities discharging to freshwater and vessels less than 0.5 nm from shore)
 - At-Sea dumping for shorebased facilities (beyond 1 nm from shore)

The Permit Universe

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- AKG520000 Split in 2008
 - AKG524000 for offshore and nearshore vessels (processors discharging more than 0.5 nm from shore)
 - Issued in 2009.
 - Only for offshore vessels beyond 3 nm from shore or baseline (whichever is greater)
 - “Federal” Waters
 - NPDES Permit
 - Administered by EPA

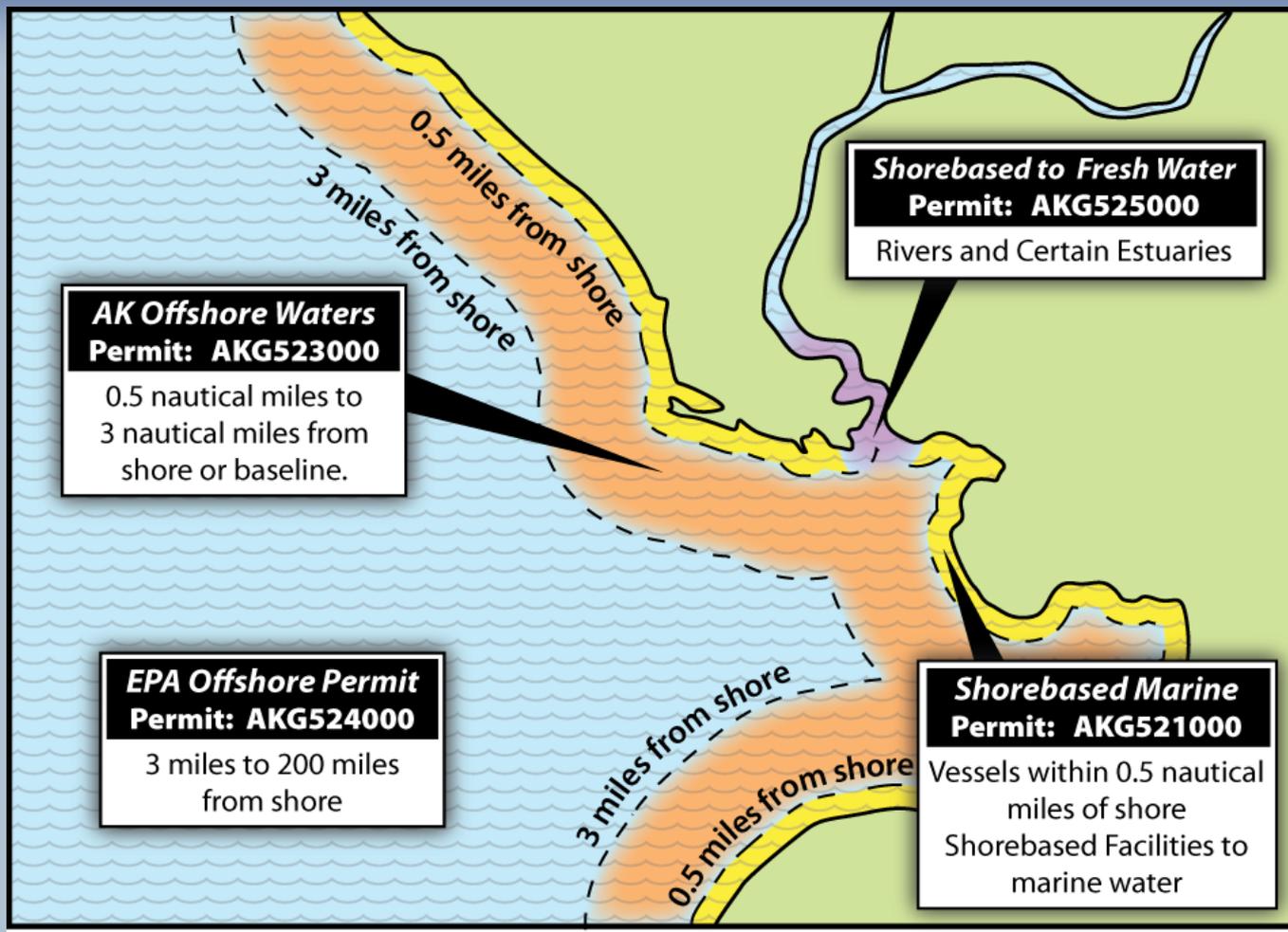
The Permit Universe

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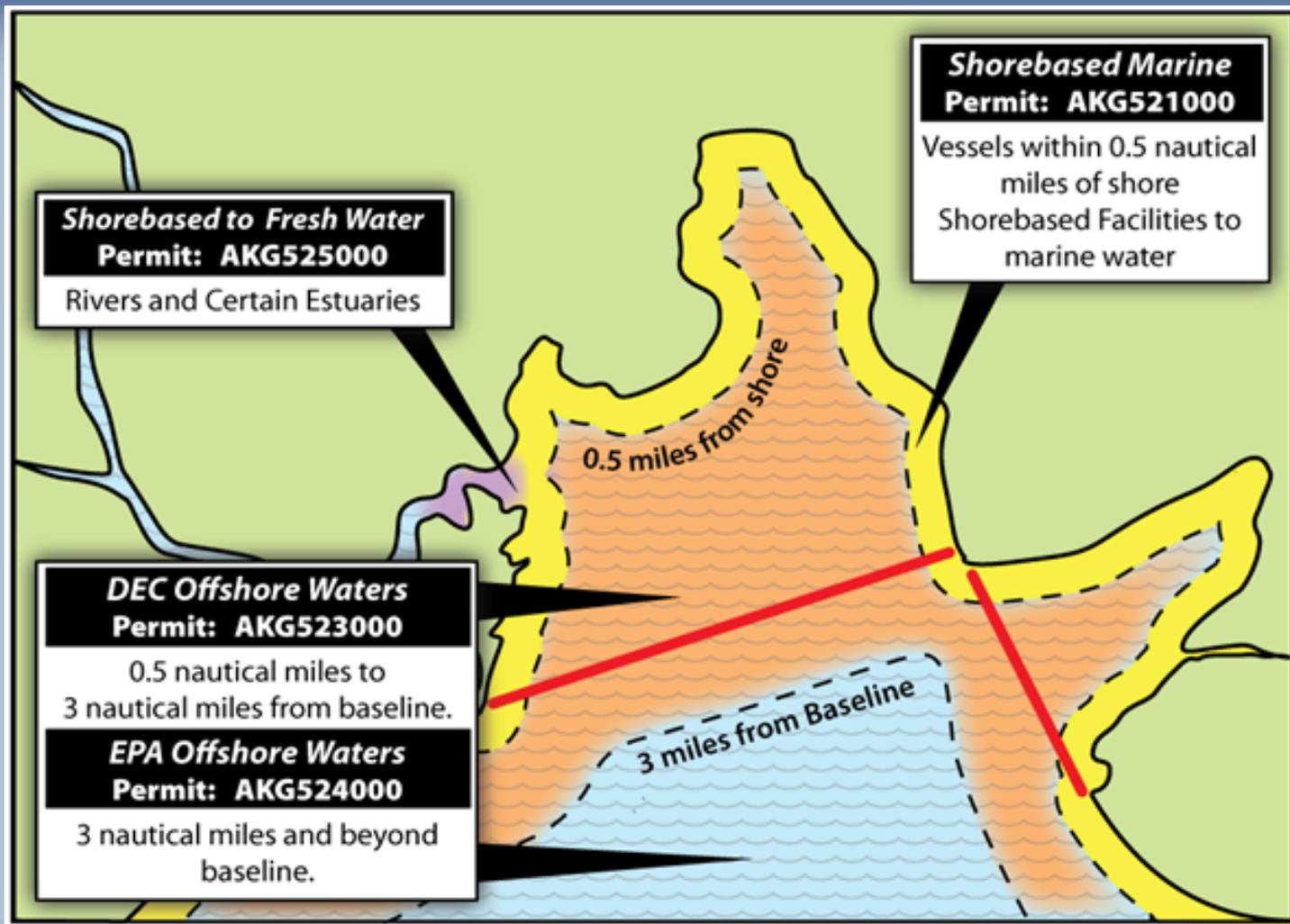


- AKG520000 Split in 2008
 - AKG523000 for offshore and nearshore vessels (0.5 nm from shore to 3 nm from shore or baseline)
 - Separated from AKG524000 coverage area after DEC assumed primacy
 - Issued in May 2011
 - APDES Permit
 - Administered by DEC

The Permit Universe



The Permit Universe



The Permit Universe

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- Baseline
 - What is it?
 - Who determines the baseline?
 - How does it affect you as a permittee?

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- Baseline
 - **What is it?**
 - Generally, the baseline consists of the mainland low-water line and any offshore islands and additional features that are applicable to the U.S. coast, such as river mouths, bays, and enclosed harbors from which the breadth of the territorial sea is measured.
 - When not the low water line often referred to as a closing line
 - http://www.thsoa.org/hy07/11_01.pdf

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- Baseline
 - Who determines the baseline?
 - U.S. Baseline Committee
 - An interagency committee
 - Established in 1970
 - Chaired by the U.S. Department of State
 - NOAA responsible for charts depicting baseline

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- Baseline

How does it affect you as a permittee?

- EPA NPDES Permit/DEC APDES Permit
- Ocean Discharge Criteria Evaluation required
- Ocean Dumping

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- AKG520000 Split in 2008
 - Remaining categories
 - Shorebased (including discharges to freshwater)
 - **At-Sea Dumping**

At-Sea Dumping

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- The Marine Protection, Research, and Sanctuaries Act (MPRSA), also known as the Ocean Dumping Act, prohibits the dumping of material into the ocean that would unreasonably degrade or endanger human health or the marine environment.
- Regulated by EPA but not under Clean Water Act/NPDES program.
- <http://www.epa.gov/history/topics/mprsa/>

At-Sea Dumping

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- Ocean begins at the baseline
 - Coastline
 - Closing Line

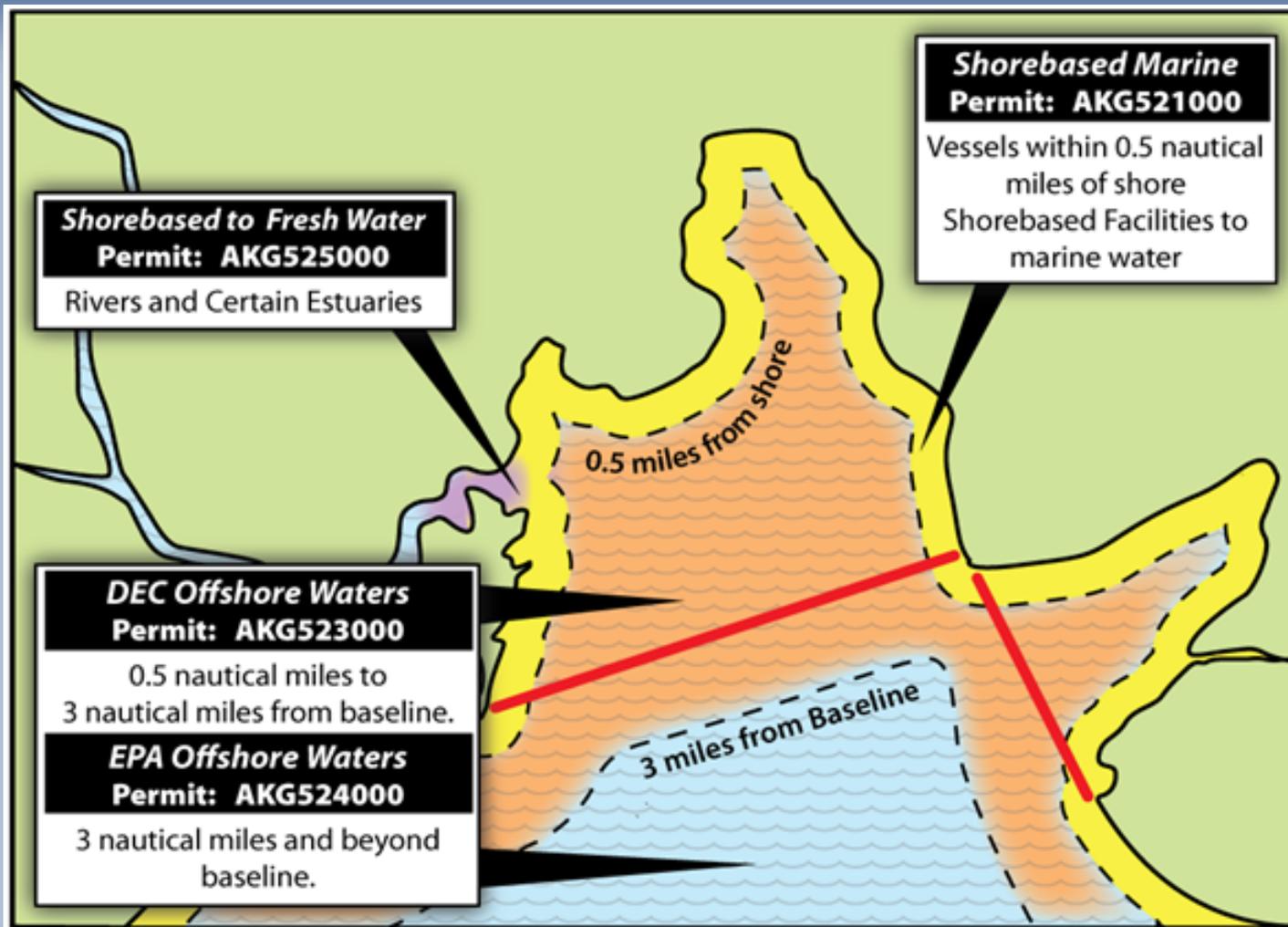
At-Sea Dumping

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- Inland Waters
 - Land side of a baseline
 - At-sea **discharges**
- Ocean Water
 - Water side of a baseline
 - At-sea **dumping**

At-Sea Dumping



At-Sea Dumping

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At-Sea Dumping Alaska Contact

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At-Sea Dumping

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- Location of dumping activity
- Information about dumping site
- Material to be dumped
- Practices that will be employed to protect the environment while dumping
- One time activity – contaminated seafood
- Regular or usual practice – discharge restrictions at facility site

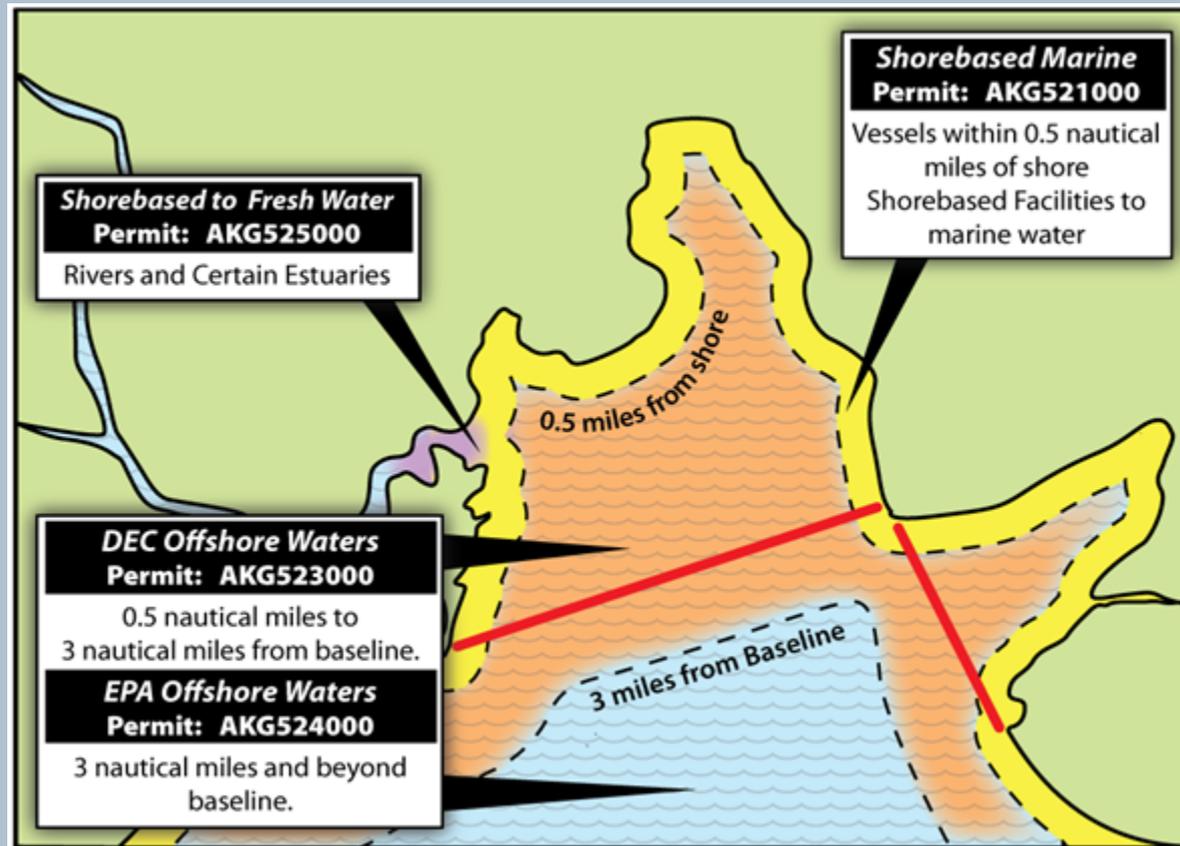
At-Sea Discharges

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- Landward side of baseline
- Regulated under the Clean Water Act APDES permit program
- AKG523000 permit may be an appropriate APDES permit for that activity

At-Sea Discharges



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- AKG520000 Split in 2008
 - Remaining categories
 - **Shorebased (including discharges to freshwater)**
 - At-Sea Dumping

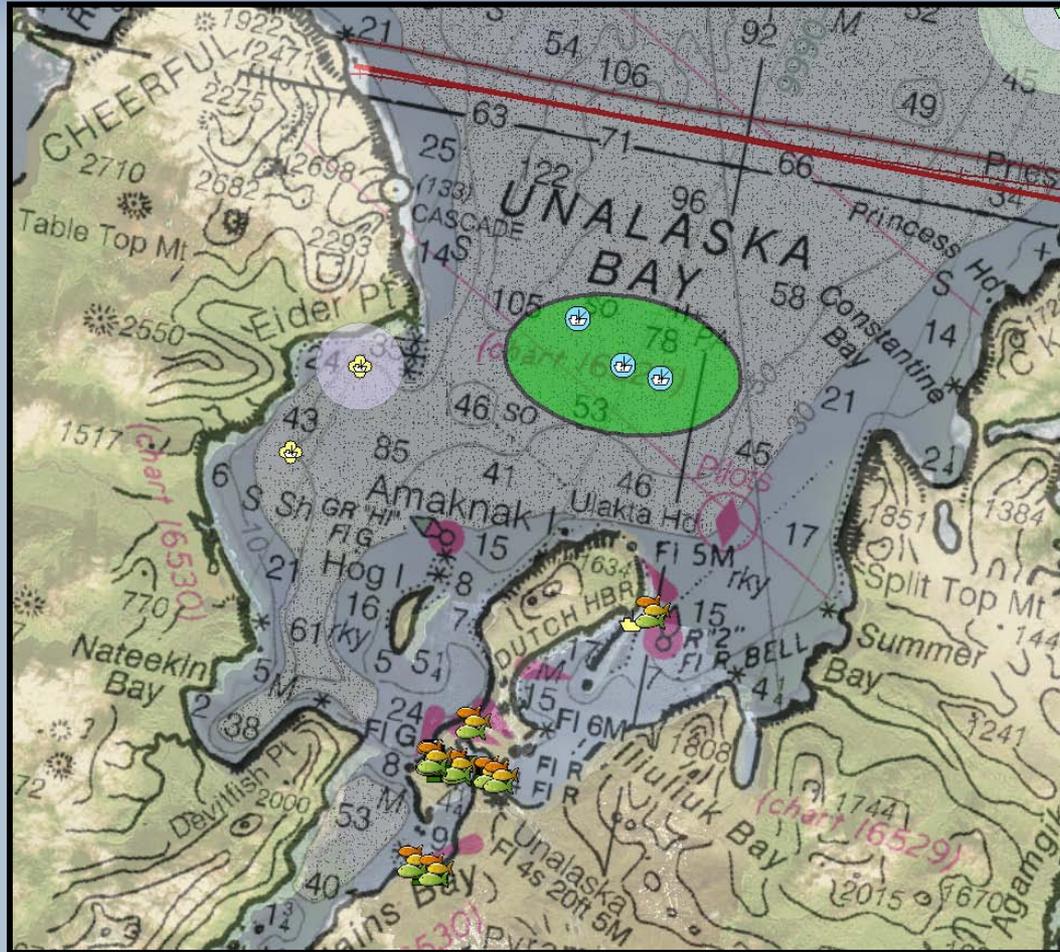
Shorebased Facilities

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- Shorebased facilities
 - Plants Constructed on Land
 - Discharge to Fresh Water
 - Discharge to Marine Water
 - Vessels that discharge less than 0.5 nm from shore

Shorebased Facilities



Shorebased Facilities



General Permit



- 18 AAC 83.205 authorizes DEC to issue a general permit to categories or subcategories of discharges within an area when the sources within a covered category or subcategory
 - Involve the same or substantially similar types of operations;
 - discharge the same types of wastes;
 - require the same effluent limitations or operating conditions;
 - require the same or similar monitoring requirements; and
 - in the opinion of ADEC, are more appropriately controlled under a general permit than under individual permits.

Future General Permits

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AKG521000

Coastal Fish Waste Discharges to Marine Water

AKG525000

Fish Waste Discharge to Fresh Water

AKG521000 Facilities

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- Vessels operating less than 0.5 nautical miles from shore and moored vessels
- Shorebased processors that discharge to marine water
- Other facilities that produce fish waste that are not processors
- Grinders maintained by a local government in several locations to serve local fisherman or 'small' processors
- Other producers of fish waste that discharge to a surface water

AKG521000 Issues

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- Vessels operating less than 0.5 nm from shore
 - Mobile – multiple discharge locations
- Environmental Sensitivity of Receiving Water
 - Multiple uses of the receiving water
 - National Wildlife Refuges, Critical Habitat Areas, 1 nautical buffer zones
 - High value, sensitive, threatened and endangered species
 - Data regarding impacts/non-impacts

AKG521000 Issues

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- Mixing zones
 - Appropriate Size
 - Data to justify size
 - Modeling
 - Appropriate Public Notice

Mixing Zones

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- Mixing Zones
 - Small as ‘practicable’
 - Highest level of treatment economically achievable
 - Elevated public interest in mixing zones

AKG521000 Issues

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- Zones of Deposit
 - Appropriate Size
 - Data to justify size
 - Modeling 1 acre maximum area allowed
 - Impacts from a zone of deposit
 - Appropriate Public Notice

AKG525000

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- Facilities discharging to fresh water and estuaries
- Which estuaries defined in the permit
- Other facilities that produce fish waste that are not processors
- Grinders maintained by a local government in several locations to serve local fisherman or 'small' processors
- Other producers of fish waste that discharge to a surface water

AKG525000 Issues

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- Discharges to lakes, rivers, streams were excluded from coverage under AKG520000, unless a waiver was granted.
- Zones of deposit are for 'seafloors' not river bottoms.
- How to conduct a 'Seafloor' survey in a fast flowing river

Freshwater Mixing Zone Limitations

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- Mixing zones can't be authorized in:
 - Spawning areas for anadromous fish
 - Resident fish spawning redds for
 - Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon.

Freshwater Mixing Zone Limitations

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Additional Mixing Zone Issues

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- AKG520000 authorized a 100 foot radius circular mixing zone for dissolved gas, oil and grease, pH, temperature, color, turbidity, residues, fecal coliform bacteria, and total residual chlorine in all waters, marine and fresh
- Lack of monitoring data to validate the 100 foot size determination and compliance with water quality standards at the boundary of the mixing zone

Anti-degradation



(1) existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected;

(2) if the quality of a water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected unless the department, in its discretion, upon application, and after compliance the regulatory requirements, allows the reduction of water quality

Anti-degradation

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- An applicant has to provide evidence in order for the department to allow a reduction in water quality
- Currently 5 requirements have to be satisfied

Anti-degradation



1. Necessary to accommodate important economic or social development in the area
2. Reducing water quality will not violate water quality criteria
3. Water quality will be adequate to protect existing uses
4. The methods of pollution prevention, control and treatment be the most effective and reasonable and will be applied to all wastes and substances discharged
5. All wastes will be treated and controlled to the highest statutory and regulatory requirements

Anti-degradation

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Anti-degradation Implementation Guidance Workgroup

<http://dec.alaska.gov/water/wqsar/Antidegradation/index.html>

Anti-degradation Policy found at 18 AAC 70.015

The Permit Universe Today

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General Permit Universe

Current Permits

- AKG523000 DEC Offshore Seafood Processors
- AKG524000 EPA Offshore Seafood Processors

Future

- AKG521000 Coastal Fish Waste Discharge to Marine
- AKG525000 Fish Waste Discharges to Fresh Water

The Permit Universe Today

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General Permit Universe

Potential Future

- Processing Center General Permit
 - Convert the Kodiak GP to a 'Processing Center' GP
 - Dependent upon EPA decision regarding Seafood Processing Effluent Limit Guideline

Permit Status

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AKG520000 status upon issuance of the
AKG521000 and AKG525000 permits

- Facilities eligible for coverage under one of the new permits will have to:
 - Receive coverage under the appropriate effect general permit or
 - Apply for an individual permit

Permit Status

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AKG520000 status upon issuance of the
AKG521000 and AKG525000 permits

- AKG520000 will retire once all current facilities are covered under the appropriate new general permit or individual permits are issued for non-general permit eligible facilities

Individual Permit

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- Individual permit coverage needs
 - Everybody else who does not meet the eligibility requirements of a general permit
 - Impaired waters
 - Receiving waters that require in-depth review and consideration

Seafood Sector Processing

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This general permit cycle will be used to gather data to inform future permit decisions

- Supplement Historic Data
- Supplement data from facilities with Individual Permits (screened discharges)
- May include special studies not required by a permit

Seafood Sector Processing

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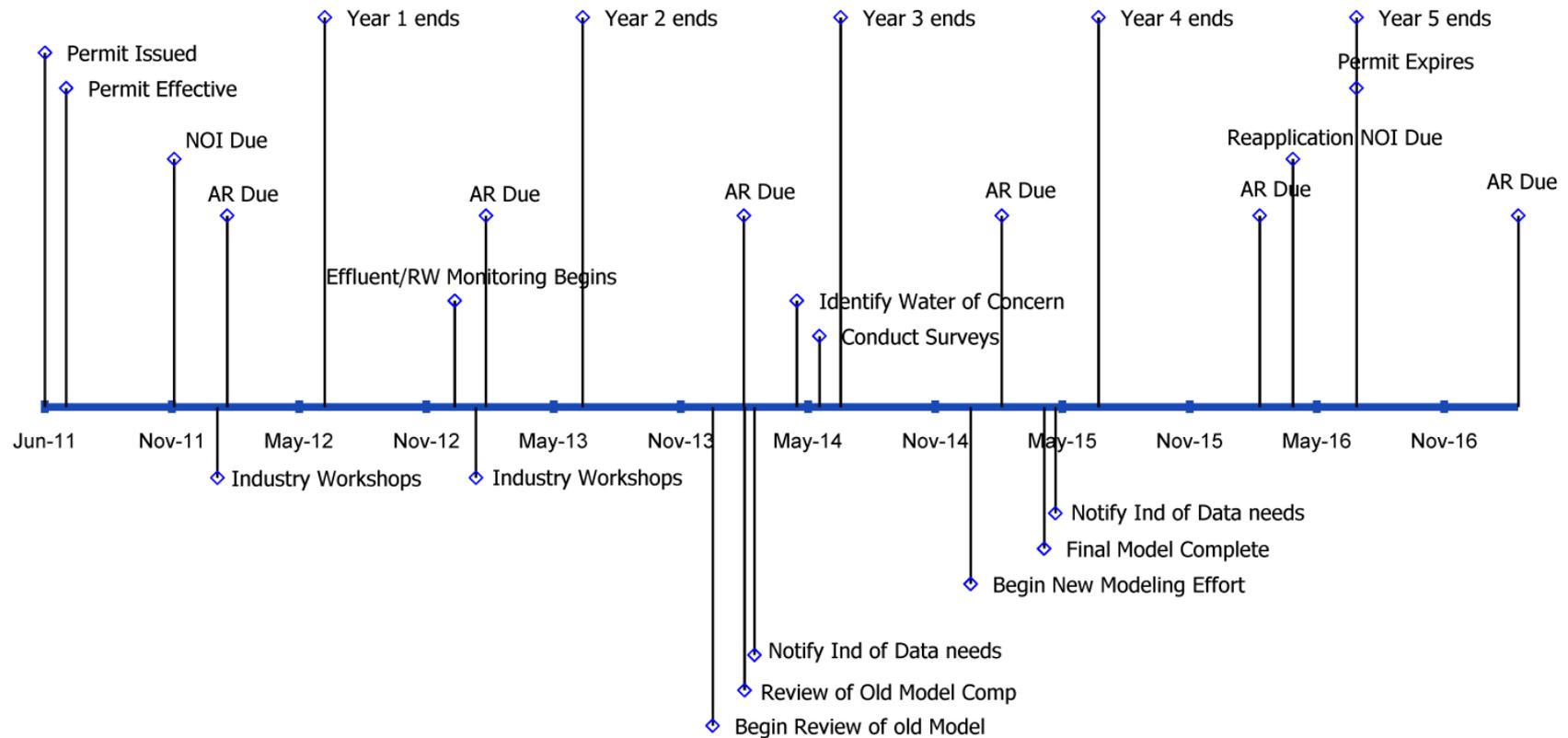
Additional information may be required to be collected and submitted with a Re-application Notice of Intent (NOI)

- 4.5 years from general permit effective date
- DEC will notify permittees if additional information is required to be collected
- DEC will provide sufficient time to collect data

AKG523000 Offshore GP Timeline



AKG523000 Final Offshore GP Timeline



Seafood Sector Processing

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- Data collected will be used to
 - Determine/Validate appropriate mixing zone sizes
 - Determine/Validate appropriate zone of deposit areas
 - Determine if there are areas of concern being impacted by seafood processing waste discharges
 - Determine if there are areas where seafood processing waste discharges are not impacting

End of Module 3A

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Summary

- Why there are so many general permits
- Why is location information so important
- Why future permits will require sampling
- What will happen with this information