



### **Andrés Morales**

SERVS Director
Alyeska Pipeline Service Company,
Ship Escort/Response Vessel System (SERVS)



### Prince William Sound: Then & Now

- Regulatory Drivers
- Oversight/Advisory
- United States Coast Guard
- Marine Shipping Companies
- Alyeska Pipeline Service Company/SERVS







### State of Alaska HB567

On June 27, 1990, Alaska enacted House Bill 567, dramatically strengthening the State's oil pollution control laws and mandating new response planning standards and discharge prevention requirements for offshore facilities, crude oil tank vessels, and pipelines.

### Oil Pollution Act of 1990

On August 18, 1990, Congress passed the Oil Pollution Act of 1990 (OPA) which strengthened provisions concerning oil spill prevention, response planning, and financial responsibility for offshore facilities, crude oil tank vessels, and pipelines.

300,000 Barrels in 72 Hours Best Available Technology







### Alaska Department of Environmental Conservation

The Alaska Department of Environmental Conservation is an organization setup to enforce Alaska state law and "to conserve, improve, and protect [Alaska's] natural resources and environment and control water, land, and air pollution, in order to enhance the health, safety, and welfare of the people of the state and their overall economic and social well being."

### United States Coast Guard

"The main responsibilities for Station Valdez include Homeland Defense, Search & Rescue, Law enforcement, and Waterborne security for the Alyeska Pipeline Terminal."

### Prince William Sound Regional Citizen's Advisory Council

"The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is an independent non-profit corporation guided by its mission: citizens promoting environmentally safe operation of the Alyeska Pipeline marine terminal in Valdez and the oil tankers that use it."



## United States Coast Guard Today

- Enhanced Radar Coverage
- Ice Radar (Columbia Glacier)
- Automated Identification System (AIS)
- Radio Check-ins
- Closed Circuit Video Surveillance
- Additional Manning (2 Watchstanders & Chief of Vessel Traffic System)





## Marine Shipping Companies Today

- Tanker Fleet Improvements:
  - All 15 TAPS tankers are double hulled
  - 9 of 15 tankers also have redundant propulsion and rudder systems
- Speed Limits in Prince William Sound (PWS)
- Alcohol Screening
- Weather Restrictions
- Pilotage to and from Bligh Reef
- Each tanker equipped with PWS Towing Package

[ 10 Knots in Port]

[ 6 Knots in Narrows ]

[8 Knots to Buoy 9]

[ 10 Knots to Precautionary Area ]

[ 12 Knots in Mid-Sound ]

[ 10 Knots in Entrance ]





### **Alyeska Pipeline Service Company 1989**

- 2 Invader Class Tugs: Stalwart
   & Bulwark
- 1 Seaswift Class Tug: Pathfinder
- 1 Deck Barge: BR126
- 13 Skimmers
- Approximately 12,000+ Barrel
   Total On-Water Storage Capacity
- Approximately 5 Miles of Boom







### Ship Escort/Response Vessel System (SERVS)

**Mission:** To maintain a constant state of readiness to assist tankers in the safe navigation through Prince William Sound and to provide oil spill response services to the TAPS Marine Oil Shippers, Valdez Marine Terminal and Pipeline in accordance with oil spill response agreements and plans.

- Prevention
- Response





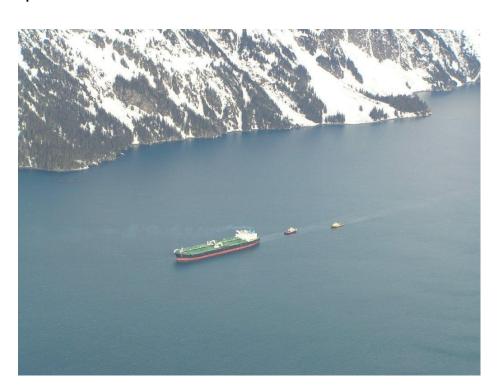
#### Alyeska Pipeline Service Company Today

### Ship <u>Escort</u>/Response Vessel System (S<u>E</u>RVS)

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Alyeska pipeline





## Alyeska Pipeline Service Company Today

### Ship Escort/Response Vessel System (SERVS)

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- 3 Prevention & Response Tugs:
   Attentive, Aware, & Alert
- 2 Enhanced Tractor Tugs:
   Nanuq & Tan'erliq
- 3 Invader Class Tugs: Hunter, Stalwart, & Bulwark
- 1 Seaswift Class Tug: Guardian
- 1 Theriot Class Ocean Tug:
   Sea Voyager
- 1 Utility (Tug/Supply) Vessel:
   Endurance
- 1 Self-Propelled Skimmer:
   Valdez Star

















# SERVS Oil Recovery Barges

- 5 TransRec Barges
   450-1, 450-3, 450-6, 450-8 & Mineral Creek
- 1 Nearshore Barge500-2
- 1 Lightering Barge450-7
- 1 Inland-Tank Barge
   Allison Creek
- 1 Storage Barge
   Sawmill Creek

108 Individual Skimming Units 59,000+ Barrels per hour 900,000+ of On-Water Storage Capacity

9 total

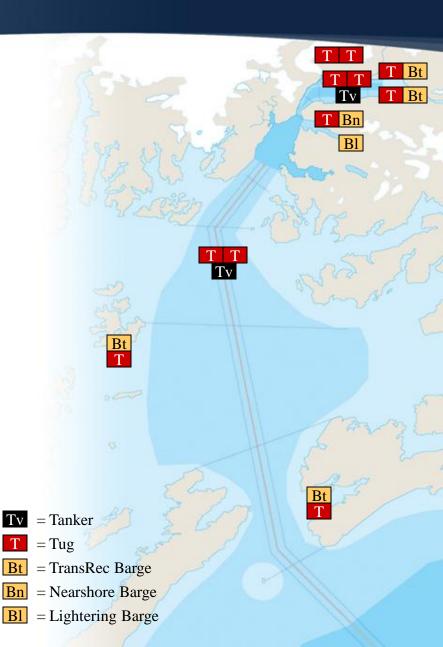






### **SERVS Tanker Escort**







### **SERVS Duty Office**

- Automated Identification
   System (AIS)
- Ice Radar (Columbia Glacier)
- PWS Radio Coverage
- IMT call-out software
- Manned 24/7







# SERVS Hatchery Protection

Cannery Creek

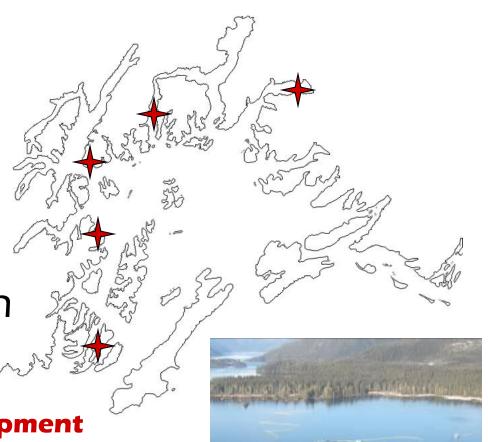
Chenega Bay

Lake Bay

Main Bay

Solomon Gulch

Pre-positioned Equipment
Over 50,000 ft of Protective
Boom







- Chenega Bay
- Cordova
- Tatitlek
- Valdez
- Whittier

**Boom** 

**Pre-positioned Equipment** Over 45,000 ft of Protective







# SERVS Fishing Vessel Program

#### Tier I Vessels

- 0-6 hours to be underway
- Rapid Response- Four vessels underway in 1 hour
- HAZWOPER and Respirator Trained
- Need: 50 +4 (PWS based)

#### Tier II Vessels

- 0-24 hours to be underway
- HAZWOPER Trained
- Need: 225 (PWS and outside based)
  - 40 underway in 0-18 hours

#### Tier III Vessels

Vessels of Opportunity



400+ Vessels under contract
1500+ Participants
Ready work boats
Local knowledge
Fishing Vessel Administrators in each community





- Annual Shipper Drills
- Annual Spring & Fall Fishing Vessel Training
- Incident Command System Training
- Security Exercises
- Hatchery Deployments
- Geographic Response Strategy Deployments
- Valdez Marine Terminal Drills
- IMT Call out Drills
- Pipeline Drills



**Yearly Average Total: 70** 





- Stronger Laws & Regulations
- Additional & Stronger Oversight
- Stronger USCG Presence
- Improved, Modern Tanker Fleet
   & Shipping Regulations
- Ship Escort/Response Vessel System
  - Superior Tug Fleet (11)
  - Oil Recovery Barges (9)
  - Hatchery Protection Sites (5)
  - Response Centers (5)
  - Fishing Vessel Training Program (400+ Vessels & 1500+ Participants)







**300,000 Barrels in 72 Hours** 

**108 Skimming Units** 

49.7 Miles of Boom

59,000+ Barrels per hour

900,000+ Barrels of On-Water Storage Capacity

**Pre-positioned Equipment** 

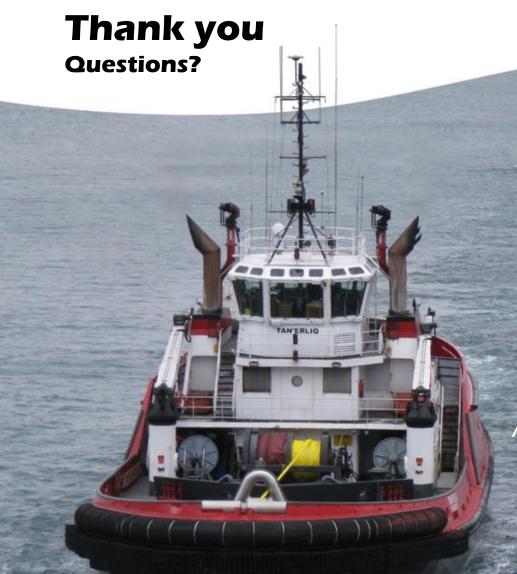
Fishing Vessel Program (400+ Vessels & 1500 Participants)

2 Escorts for all laden tankers





Then	Now
	300,000 Barrels in 72 Hours
5 Miles of Boom	49.7 Miles of Boom
13 Skimming Units	108 Skimming Units
141 Barrels Recovery Capacity	59,000+ Barrels per hour
12,000+ Barrels of On-Water Storage	900,000+ Barrels of On-Water Storage
Capacity	Capacity
	Pre-positioned Equipment Throughout PWS
	Fishing Vessel Program (400+ Vessels & 1500 Participants)
1 Escort for laden tankers Through the Narrows	2 Escorts for laden tankers Throughout PWS





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