What is ERMA?

ERMA is an online mapping tool for visualizing environmental information relevant to oil spills and natural disasters.
Where is ERMA?
Standard ERMA Data Sets

- **Base Mapping**
  - Google aerial, terrain, roads
  - Nautical charts
  - Remote-sensing imagery

- **Incident Information**
  - Trajectories
  - Real time resource tracking
  - Shoreline oiling
  - Sampling data
  - Area Contingency Plans

- **Weather & Buoys**
  - Hurricane/Storm tracking
  - Tides/Currents

- **Resources at Risk**
  - NOAA ESI data layers
  - Local habitat and species
  - Seafood safety

- **Documents, Photos, & Links**
  - ESI and GRP .pdfs
  - Attached to layers
  - Field photos
Response Phase

- Connects responders, regardless of location

- Provides situational awareness for spill managers
  - Oil trajectories & observations
  - Tracking clean-up assets
  - Status of protection strategies for resources at risk

- Command briefings

- Section 7 consultation on dispersant use
  - Identifying areas where use may be prohibited.
Natural Resource Damage Assessment (NRDA) Phase

• Connects NRDA practitioners, regardless of location

• Strategize where investigations should take place
  - Areas with known or observed resources at risk
  - Where oiling has occurred or might occur

• ESI Spatial Query Tool

• Development of habitat conceptual models

• Disseminate where sampling efforts will take place

• Track field crews in real time
Trajectory Models
Trajectory Models
Trajectory Models
Trajectory Models

Trajectory Forecast for 15 May 2016 1200hrs (THIS IS A DRILL)

- FORECASTHEAVY
- FORECASTMEDIUM
- FORECASTLIGHT
- FORECASTUNCERTAINTY
Trajectory Models
Trajectory Models
Trajectory Models
Charts, Bathymetry, Ship Tracking

ERMA | Environmental Response Management Application
Arctic

NOAA Navigation Charts
Raster Nautical Charts

Bathymetry
NOS Hydrographic Surveys – Hillshaded Bathymetry (BAG format) (NOAA, NGDC)

Vessels - All (NAIS equipped)
NAIS - All Vessels
- General
- Response
- Research
- Summer
- Government
- Source Operations

Vessel Traffic Zones & Shipping Lanes
- Circumpolar Shipping Routes (Arctic Council, 2004)
- US Shipping Routes (Arctic Council, 2004)
Alaska ShoreZone.org
Standalone ERMA

- Allows the set-up of ERMA in a command post, ship or remote location without an internet connection

- Synchronization capability with ERMA Live
  - “Standalone Phone Home”

- Arctic Shield 2013 & 2014
  - onboard *USCGC Healy*

- Dutch Harbor PREP Drill 2014
Demo
Thank You

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Questions?