ERMA™

Environmental **R**esponse **M**anagement **A**pplication: The Next Generation

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2009 NRT/RRT Co-Chairs Meeting
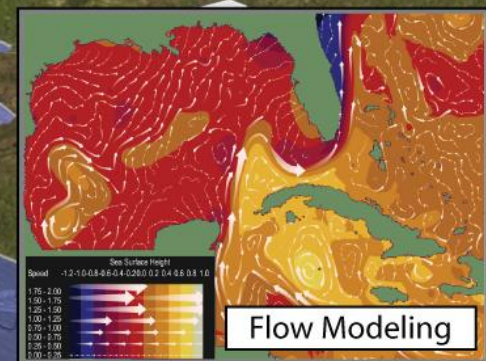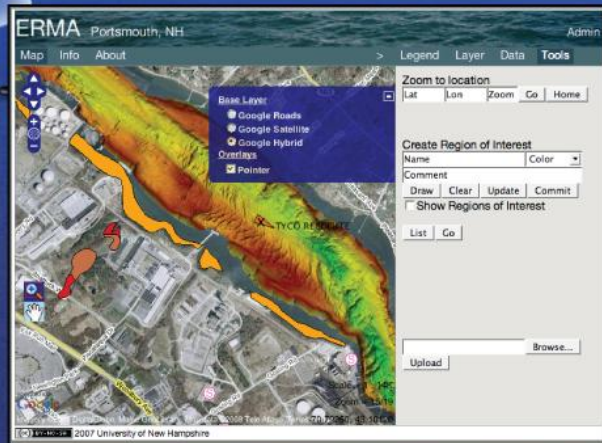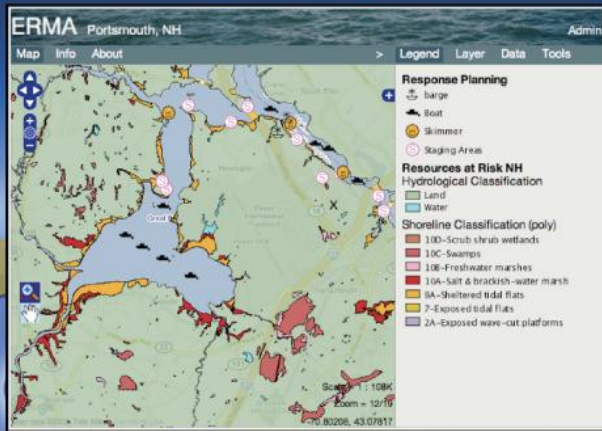Charleston, SC
March 4th, 2009

Coastal Response Research Center
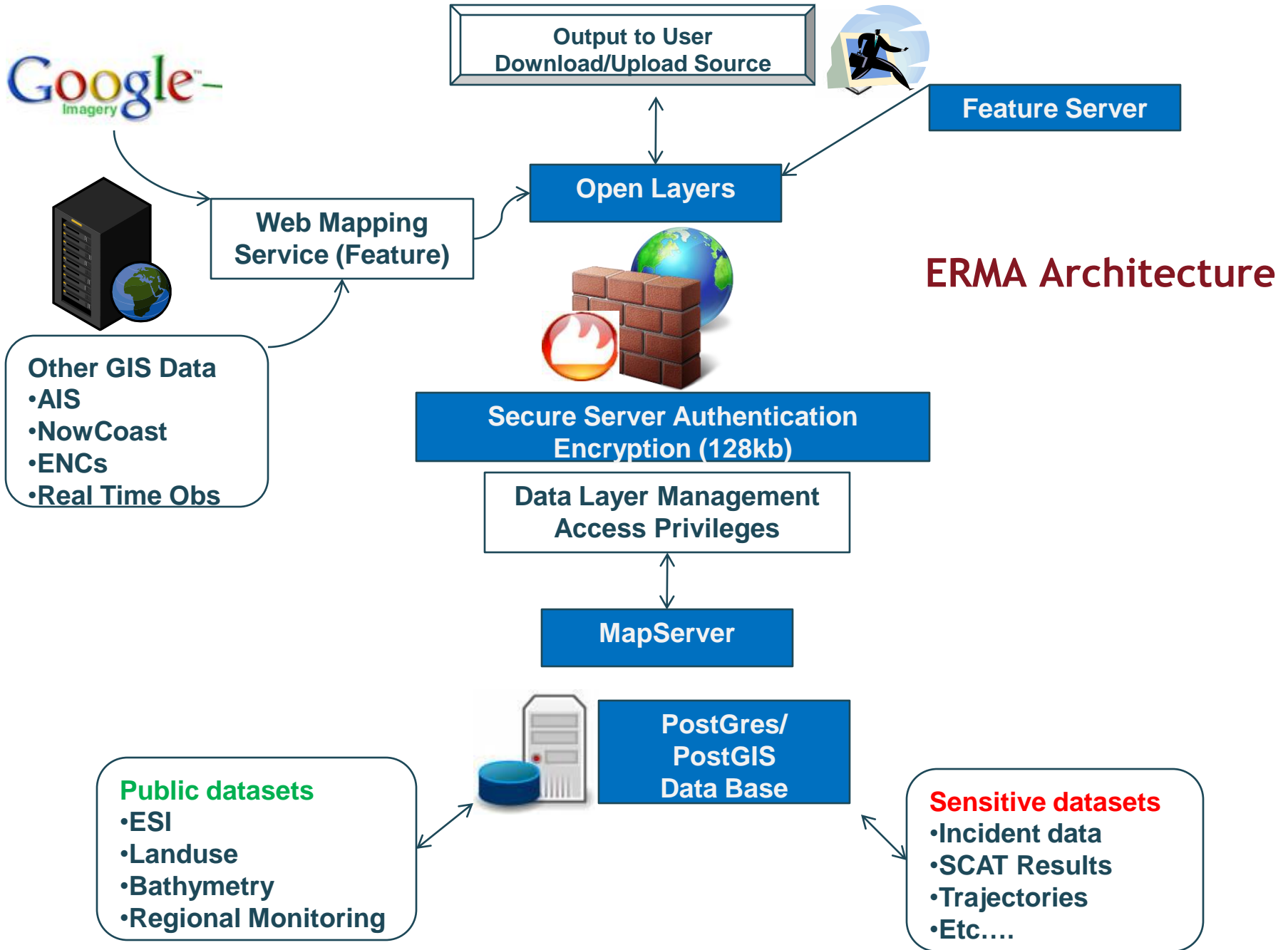
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Concept for ERMA

- **Take advantage of open-source, web-based mapping tools**
- **Integrate and synthesize various types of information (static and real-time)**
- **Provide fast visualization of current information**
- **Improve communication and coordination among responders and stakeholders**
- **Provide integrated and timely information to improve decision-making**

Coastal Response Research Center

Environmental Response Management Application (ERMA)

Field Response

Local Command

nowCOAST

ERMA Data Center

FlowVis2D

Moored Sensors

Flow Modeling

Kurt Schwehr
CCOM/JHC

ERMA Architecture

Output to User
Download/Upload Source

Feature Server

Open Layers

Web Mapping
Service (Feature)

Google Imagery

Other GIS Data
•AIS
•NowCoast
•ENCs
•Real Time Obs

Secure Server Authentication
Encryption (128kb)

Data Layer Management
Access Privileges

MapServer

PostGres/
PostGIS
Data Base

Public datasets
•ESI
•Landuse
•Bathymetry
•Regional Monitoring

Sensitive datasets
•Incident data
•SCAT Results
•Trajectories
•Etc….

ArcMap Projects Being Assembled

Secure Easy to Access Data Types

Critical Datasets for Environmental Response
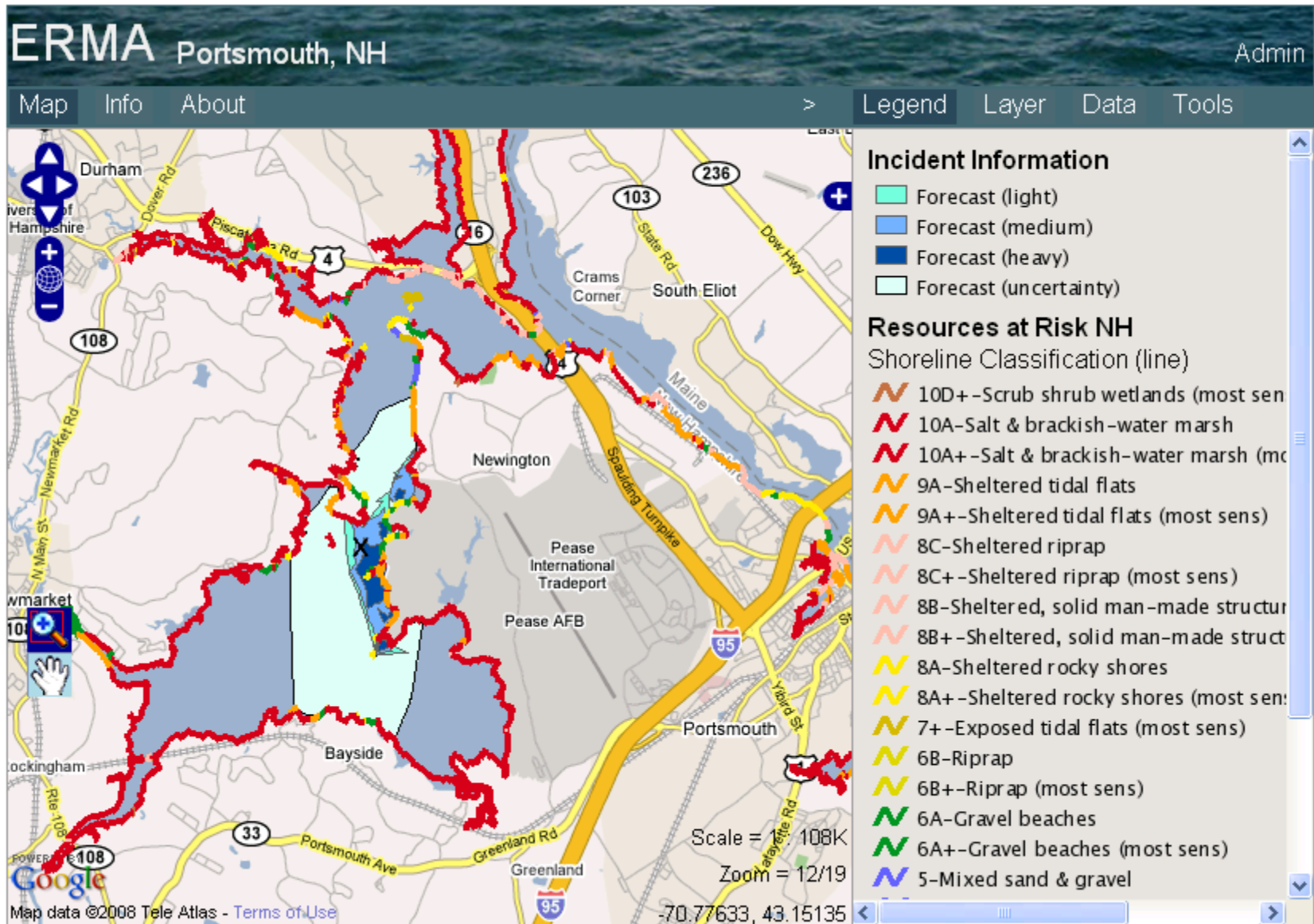
Real-time vessel traffic from AIS
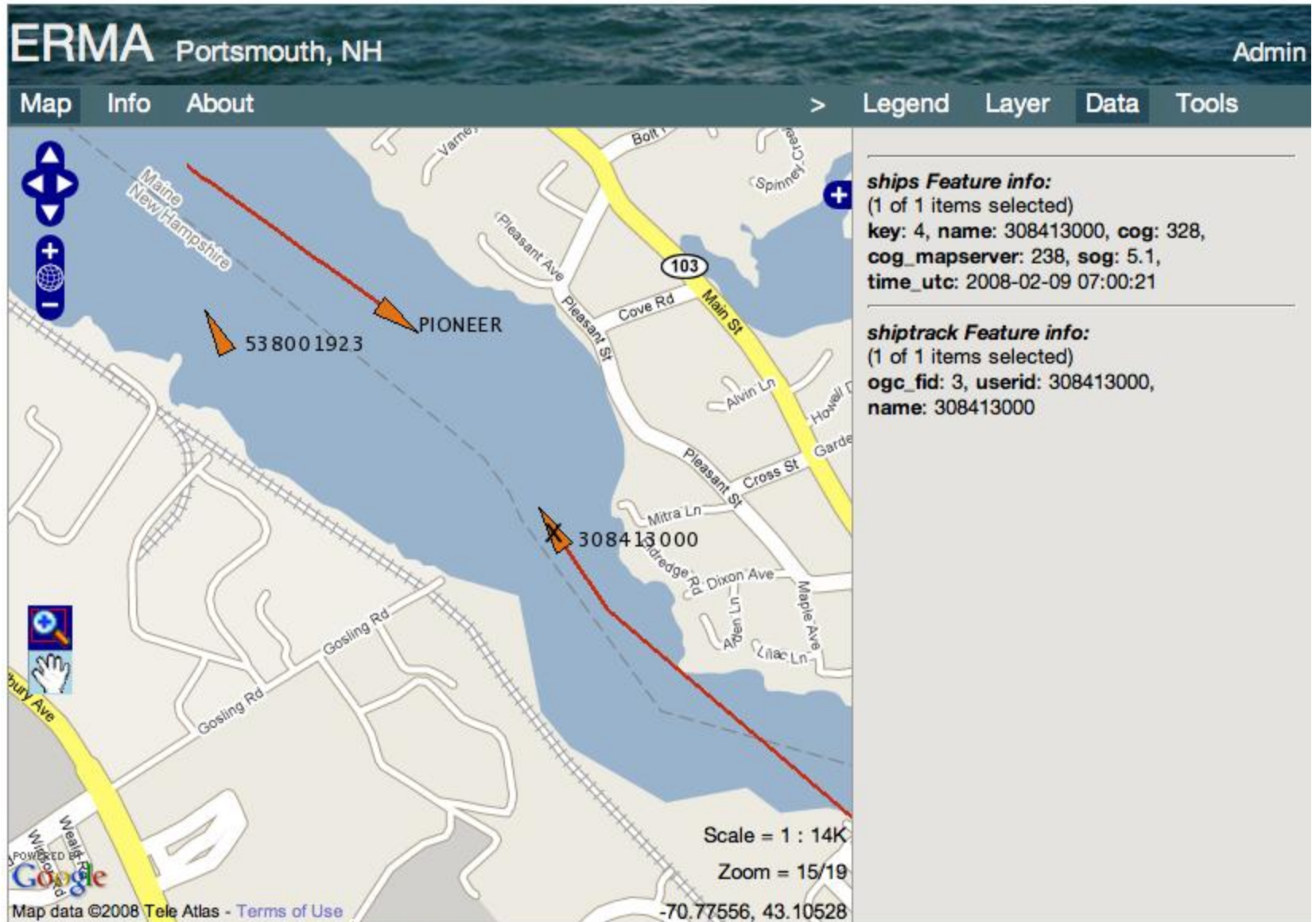
Weather and Buoy Observations

Interactive Tools

Interactive Tools