Environmental Response Data Collection

What is NOAA doing now?

Can this workshop provide a better direction for our future?

Ian Zelo

Durham, NH – September 25, 2007

Overview

ORR Field Tool Project

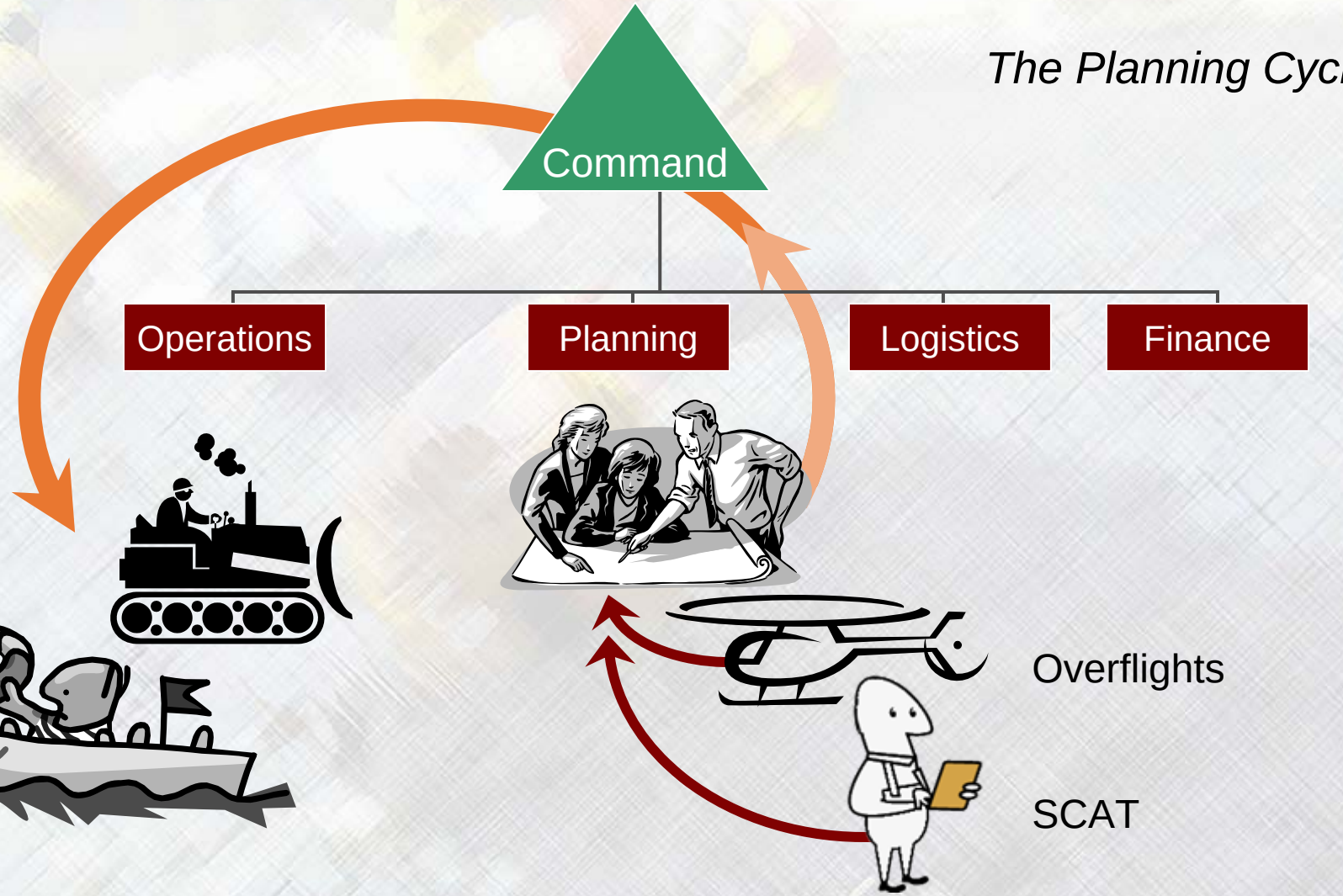
- Beginnings
- Goals
- Current direction
- Partnership with Marine Debris and CRRC

Goal of the Workshop

- What we hope to accomplish this week
- Where we hope to go in the future

Information Flow On-Scene

The Planning Cycle



Problems

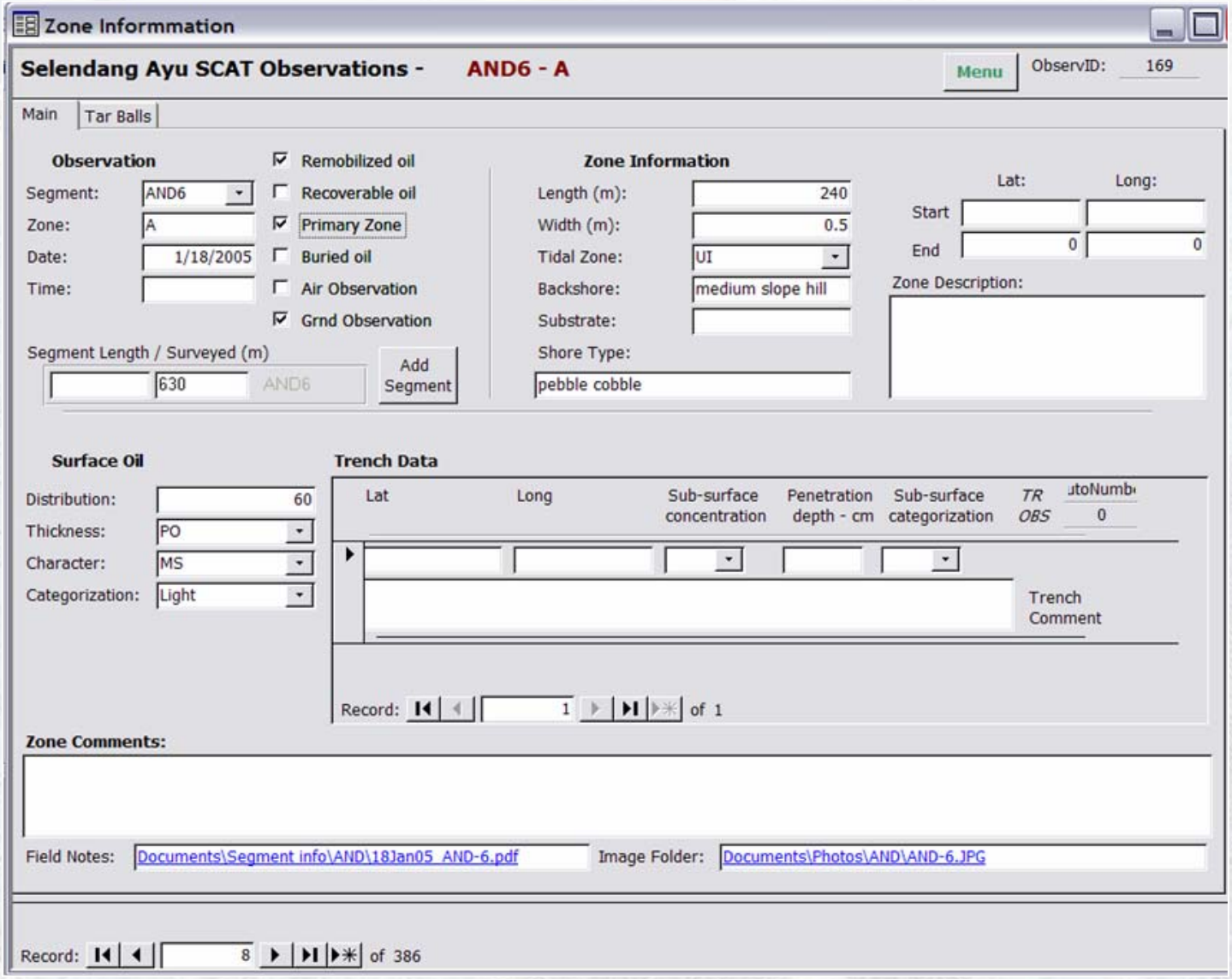
- Slow data flow to planning
- Keeping lots of data organized
- Integrating data across missions
- Digital Photo Management

NOAA Background

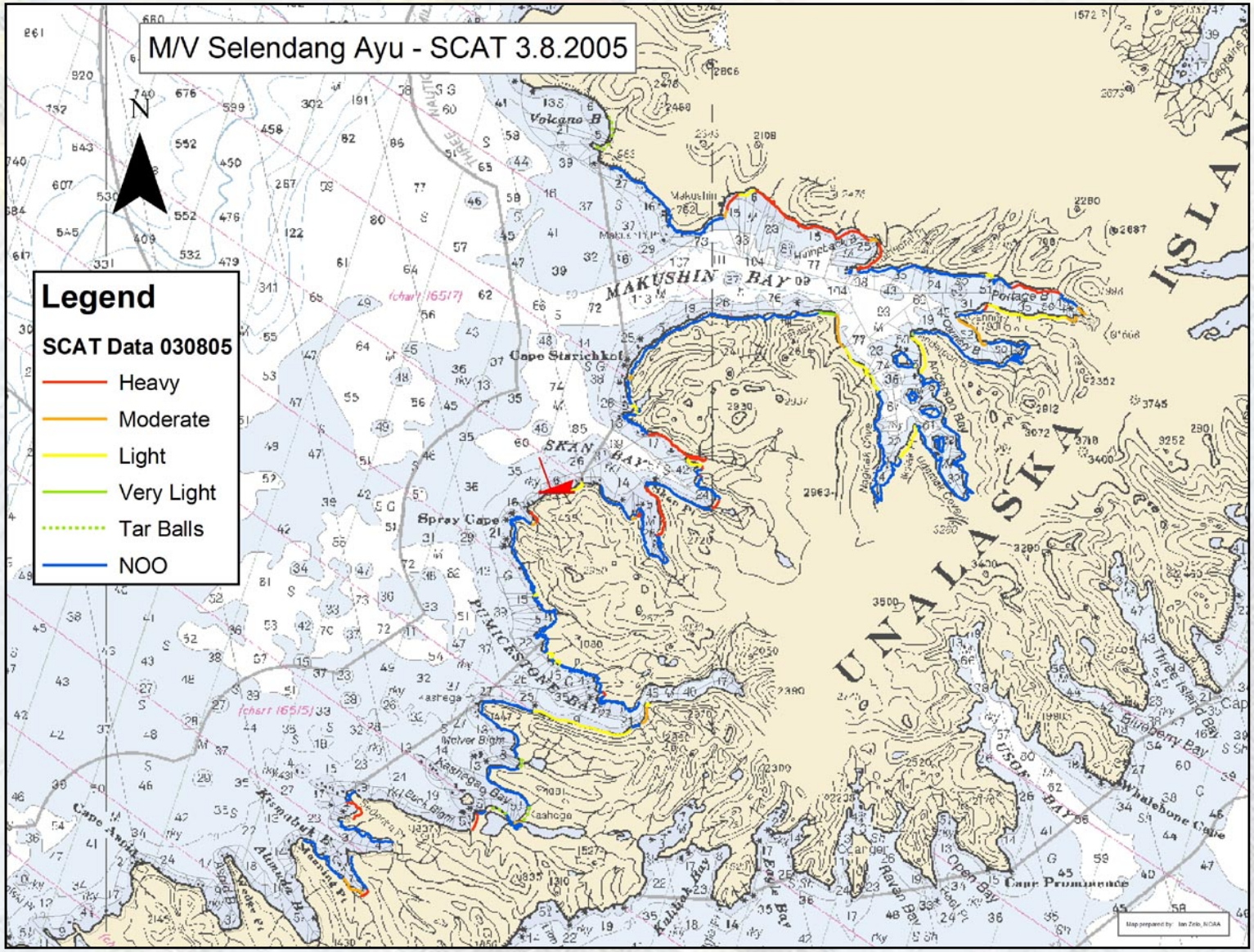
Selendang Ayu – Spray Cape, Unalaska

Selendang SCAT Database

NOAA's National Ocean Service / Office of Response & Restoration



SCAT Map


M/V Selendang Ayu - SCAT 3.8.2005
N
Legend
SCAT Data 030805
Heavy
Moderate
Light
Very Light
Tar Balls
NOO
MAKUSHIN BAY
SKAN BAY
PUMICESTONE BAY
UNALASKA ISLAND
Volcano B
Cape Starichkof
Spray Cape
Cape Aspid
Cape Prominence
Whalebone Cape
Three Island Bay
Blueberry Bay
Usof Bay
Open Bay
Raven Bay
Egg Bay
Portage B

FTT Goals

- Improve our data collection with digital tools
- Build tools that are easily distributable
- Build tools that are customizable
- Unification through SCAT community
- Integration across other disciplines

NOAA Field Tool Team

Improve Methods

- Faster, more accurate data collection
- More consistent data between groups
- Rapid incorporation of data into planning cycle and response

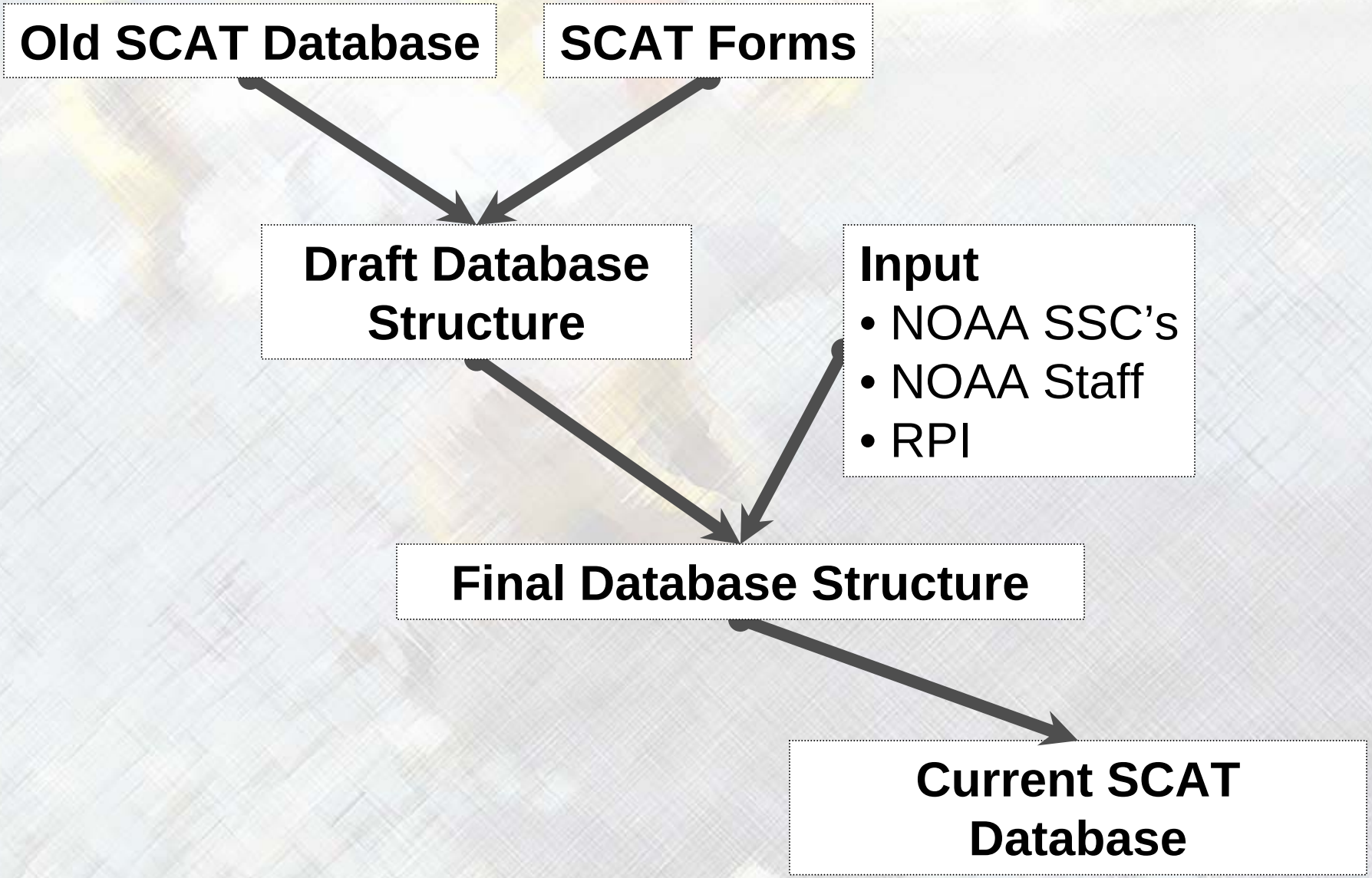
Customizable & Distributable

- Adjust for different response or different purpose
- Low cost tools
- Accessible software
- Ease of use (less training)

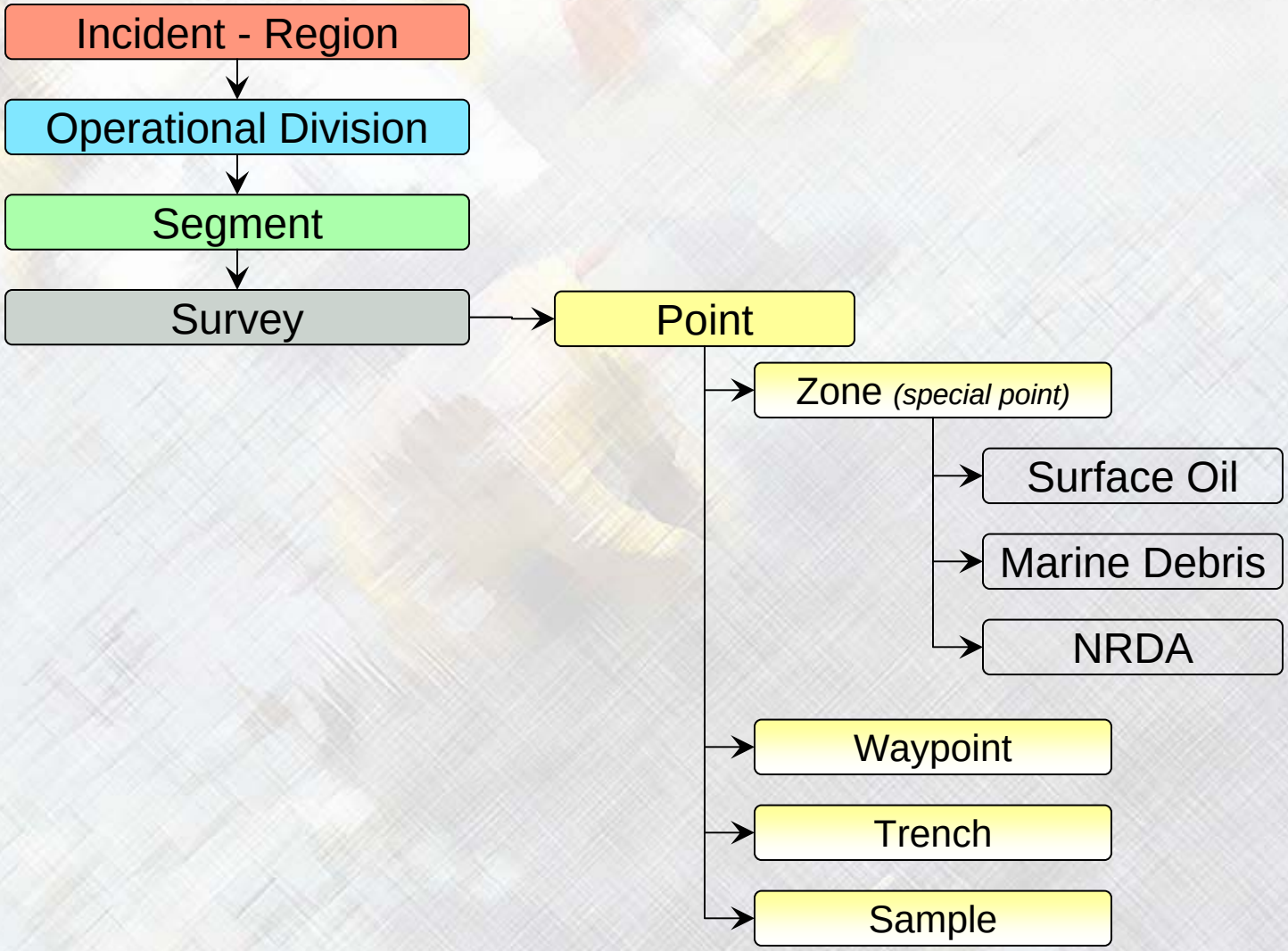
Unification & Integration

- Unified tools and methods through the SCAT community
- Integrate tools / methods / data through other response missions
  - Marine Debris
  - Natural Resource Damage Assessment
  - Wildlife for Response
- Integrate across other field collected data
  - Intertidal Monitoring
  - Biological Observations
  - Cultural / Human Use Surveys

SCAT Database



Current SCAT Structure



SCAT Database

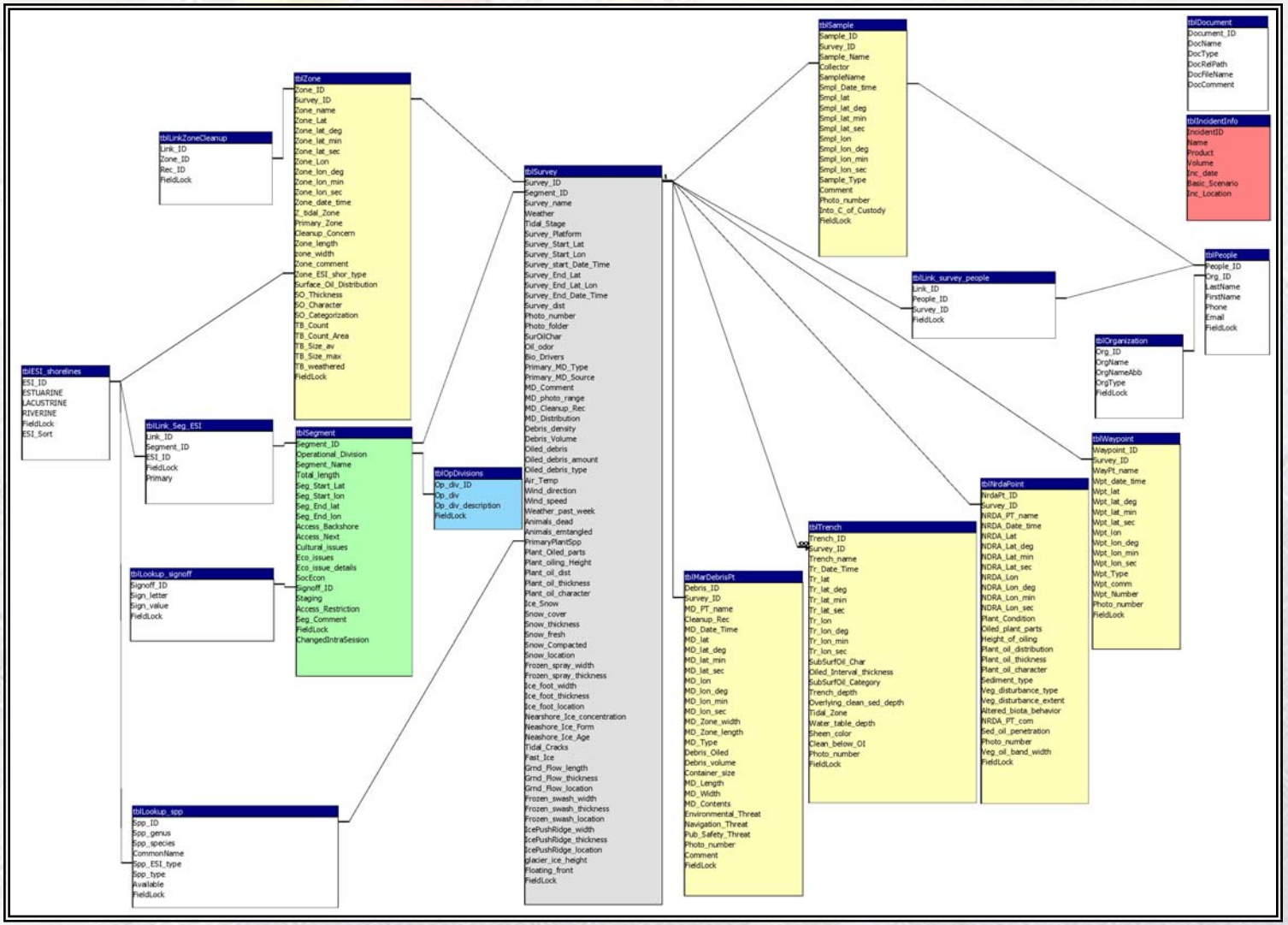
Region

Division

Segment

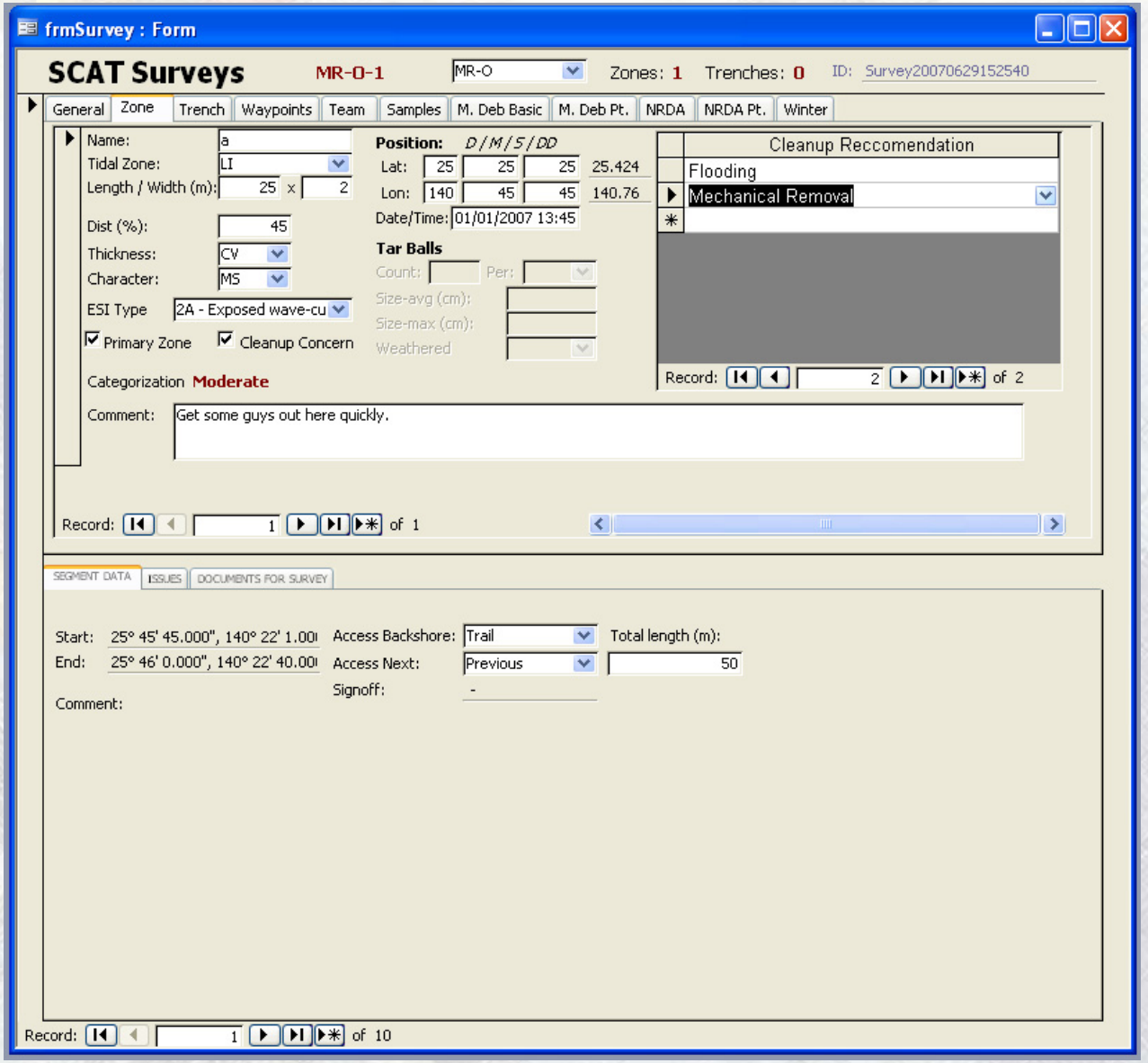
Survey

Point



SCAT Database

- Organized
- GIS Integrated
- PDA or
- Paper Forms
- Searchable
- Imports & Exports
- Standard Products



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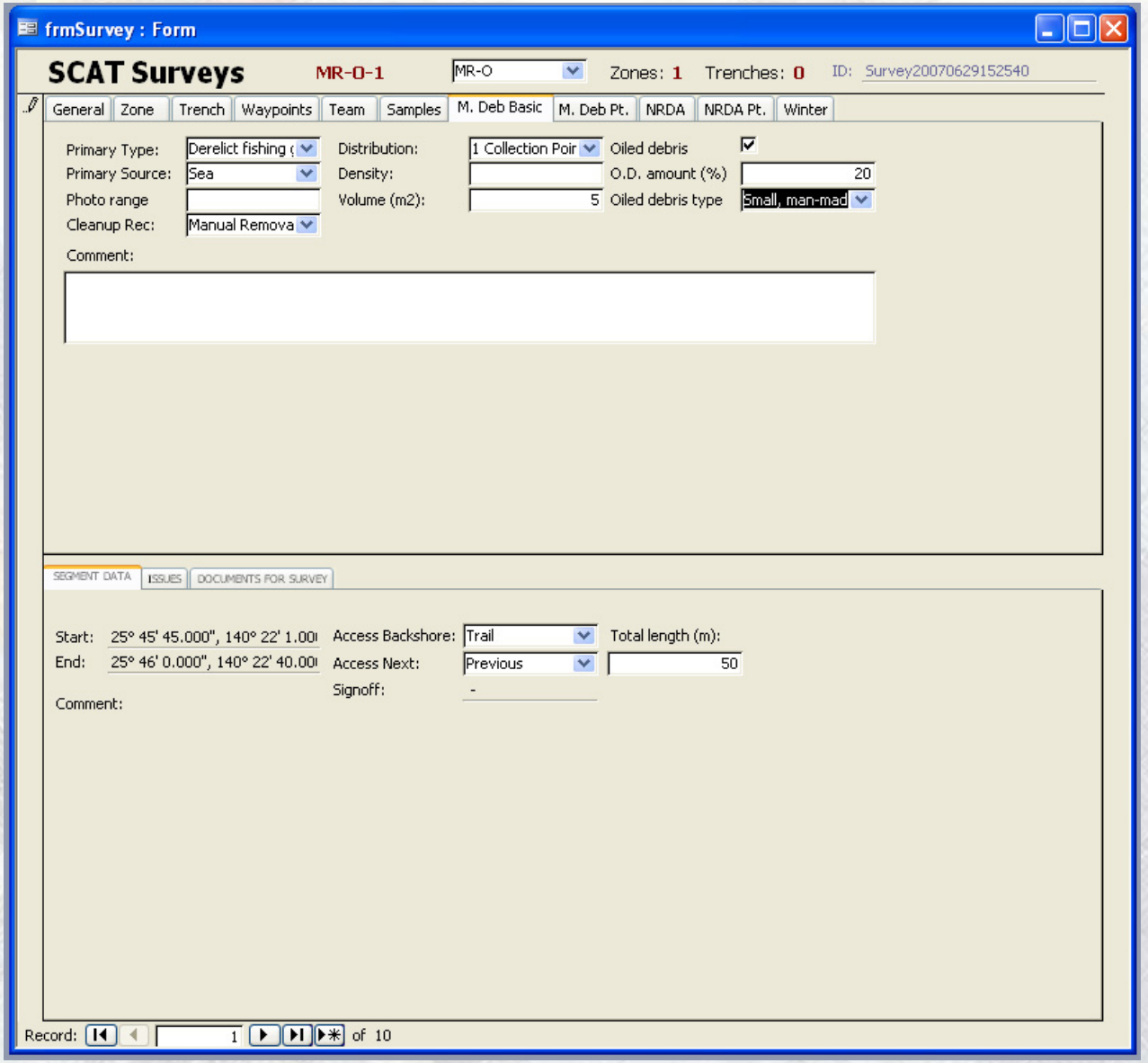

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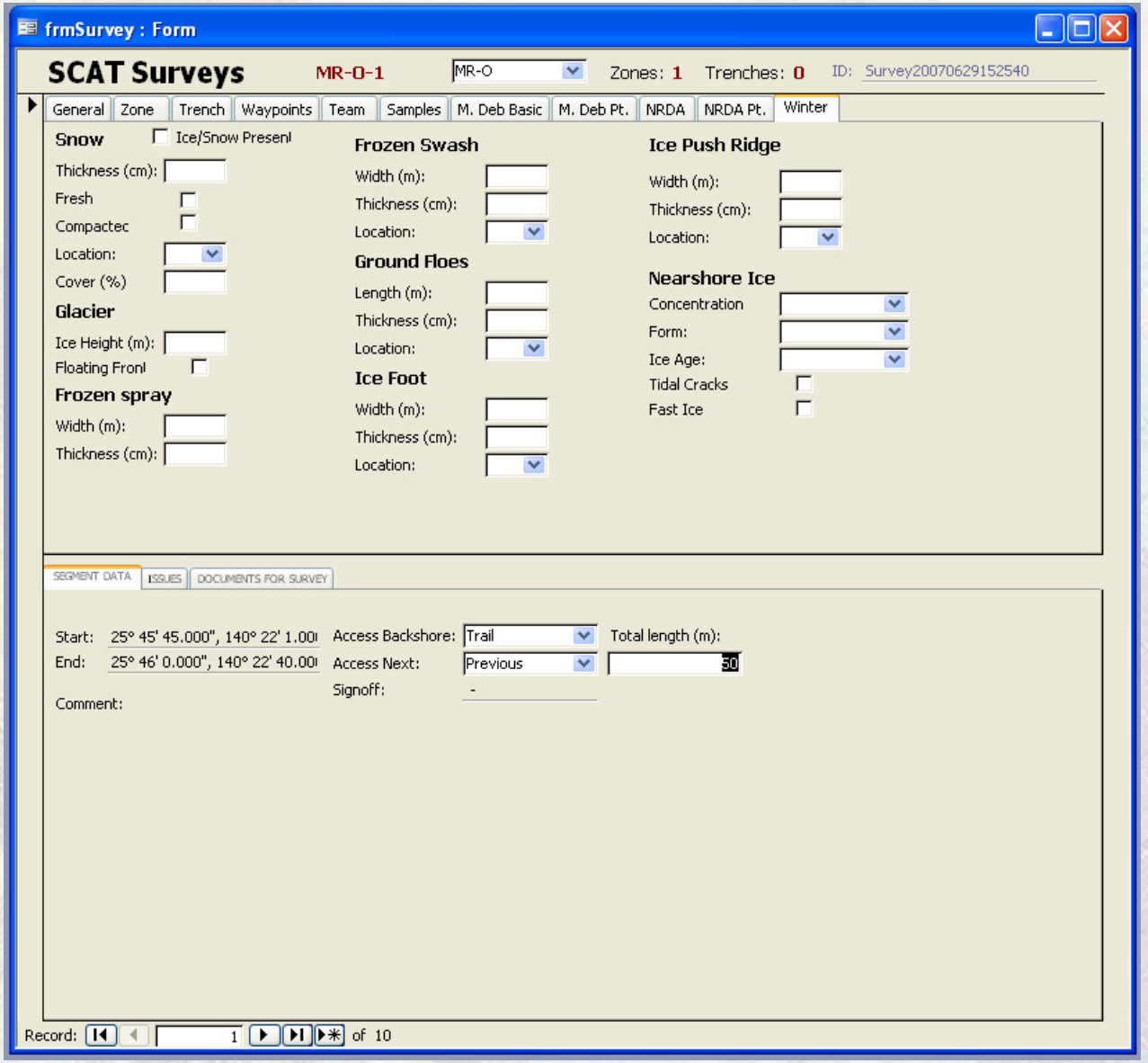


Electronic SCAT Tool (eSCAT)

Benefits:

- Enforced quality control
- Improved consistency
- Spatial data
- Rapid product generation
- Easily distributable
- Customizable

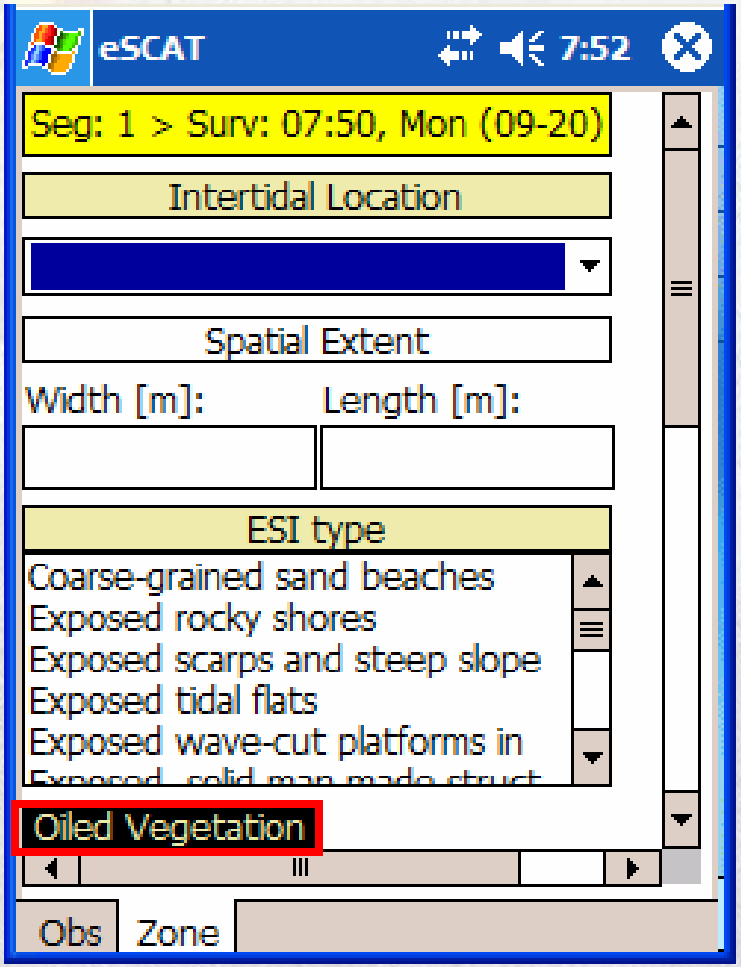
eSCAT: Adding a Surface Oiling Zone

Zone Spatial Info

Zone Oiling Info

Oil Distribution Visual Help

Cleanup Recommendations



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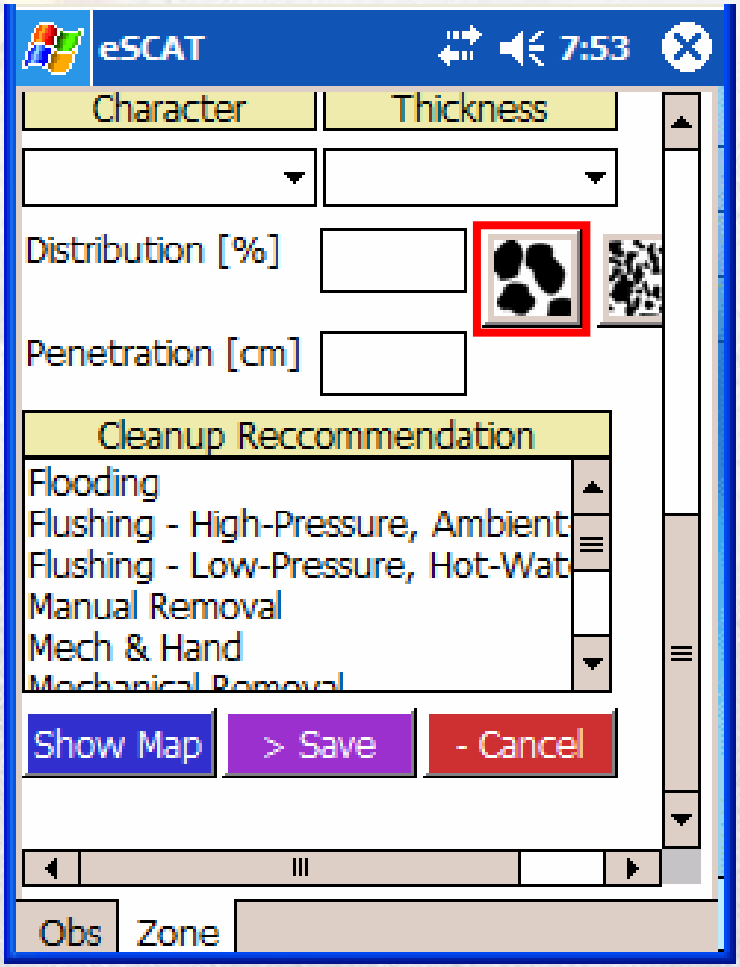

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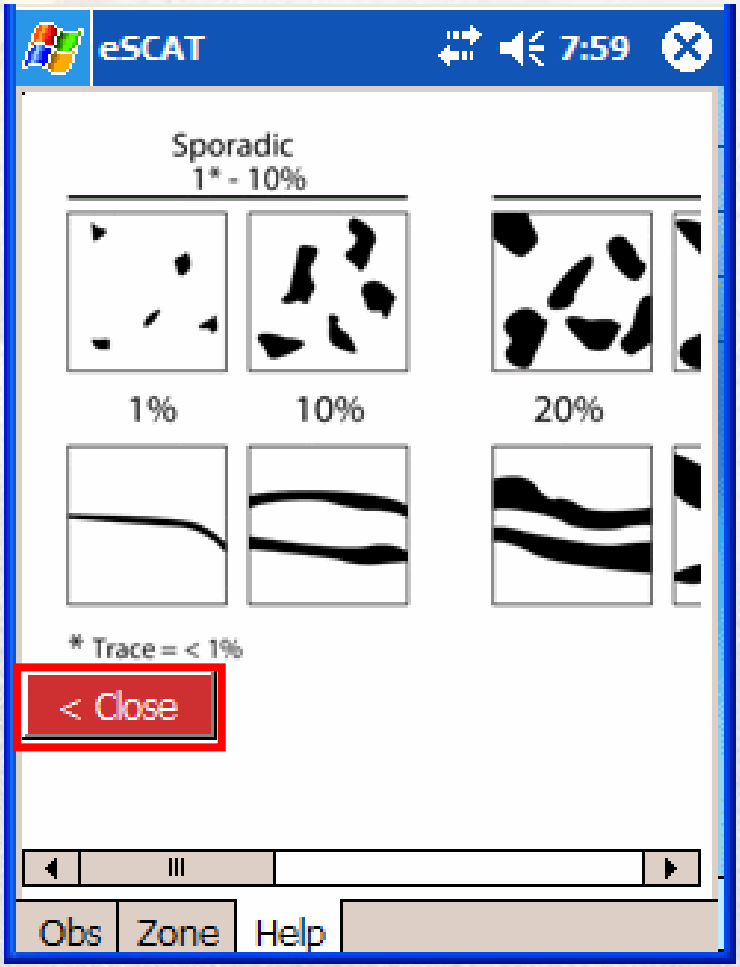

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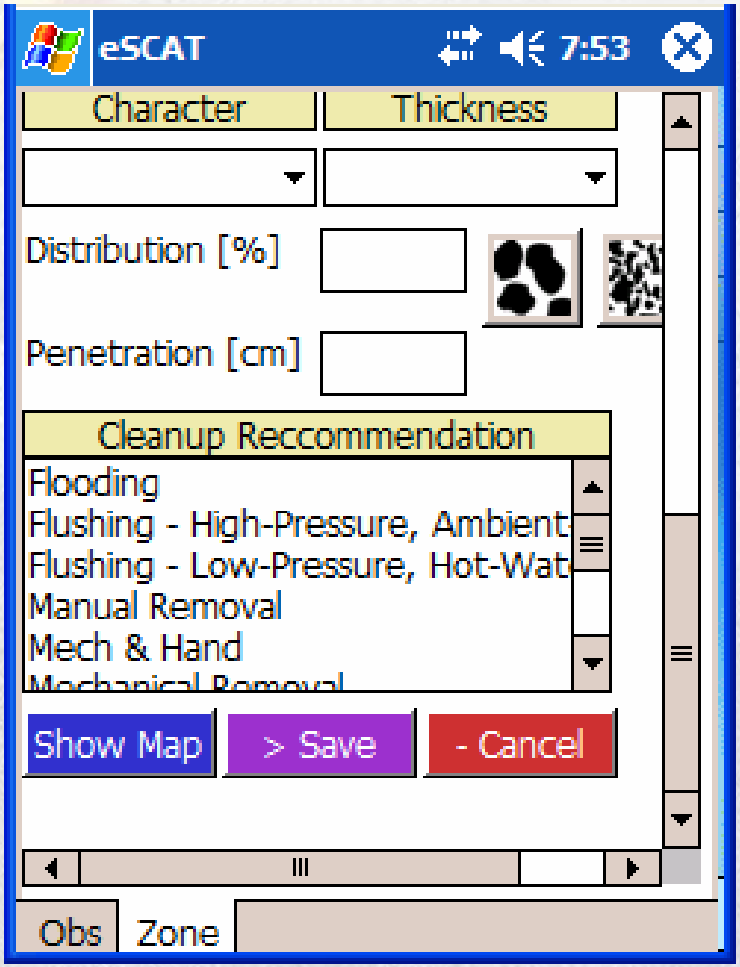
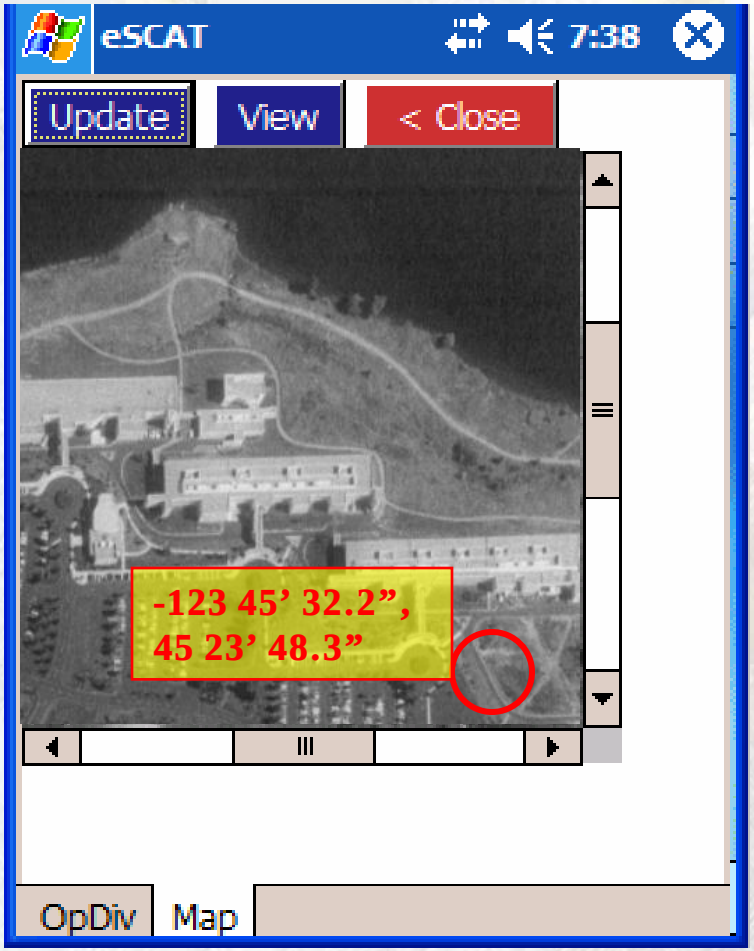


eSCAT: Field Map



Overlays:

- Current GPS position
- GPS Track
- SCAT related waypoints

Base-layers & other available data:

- Segments
- Points of interest
- Previously observed oiling zones
- Other maps: ESI, NOAA charts,...

Key functionality:

- Allows collection of current and distant locations

(you can make an observation about a point you can see but can't get to)

eSCAT Data Transfer

Currently:

- Email from laptop with wireless card
- Download at the command post

Soon:

- Email from laptop with satellite modem

Eventually:

- Direct communication from handheld to command?

Broadening the Horizons

Partnerships

- University of New Hampshire
- NOAA Marine Debris Program
- NOAA Assessment & Restoration Division

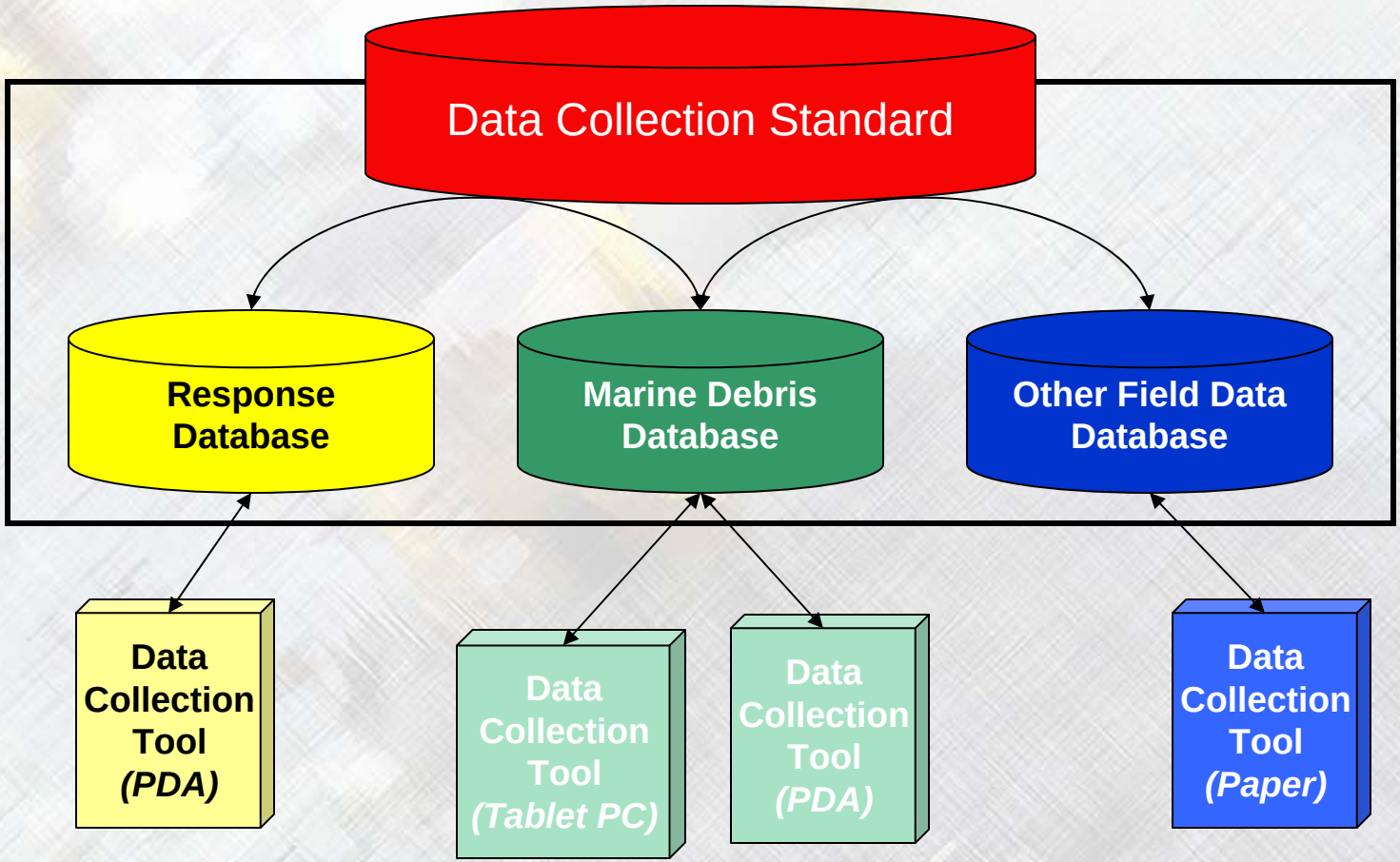
Outside Interest

- Polaris, Entrix
- International Whaling Commission

Related Subjects

Data Standard Model

(Field Collected Shoreline Data)



What Does the Standard Look Like?

I don't know but hopefully you do….

You are the stakeholders

Goals of the Workshop

- Understand needs and goals
- Use them to consider a path for the future
- Develop some ideas on how to get there
- Build consensus and buy in

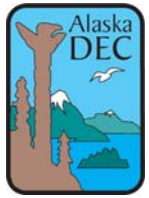
Workshop Goals

My bottom line:

- Tap the strength of those in the room
- Consider old ideas and new possibilities
- Stay grounded in what can be done
- Maximize the benefit of the work that NOAA and our partners are doing

Attending Today.....

A rare opportunity for so many to be in one place



Sheavly
Consultants

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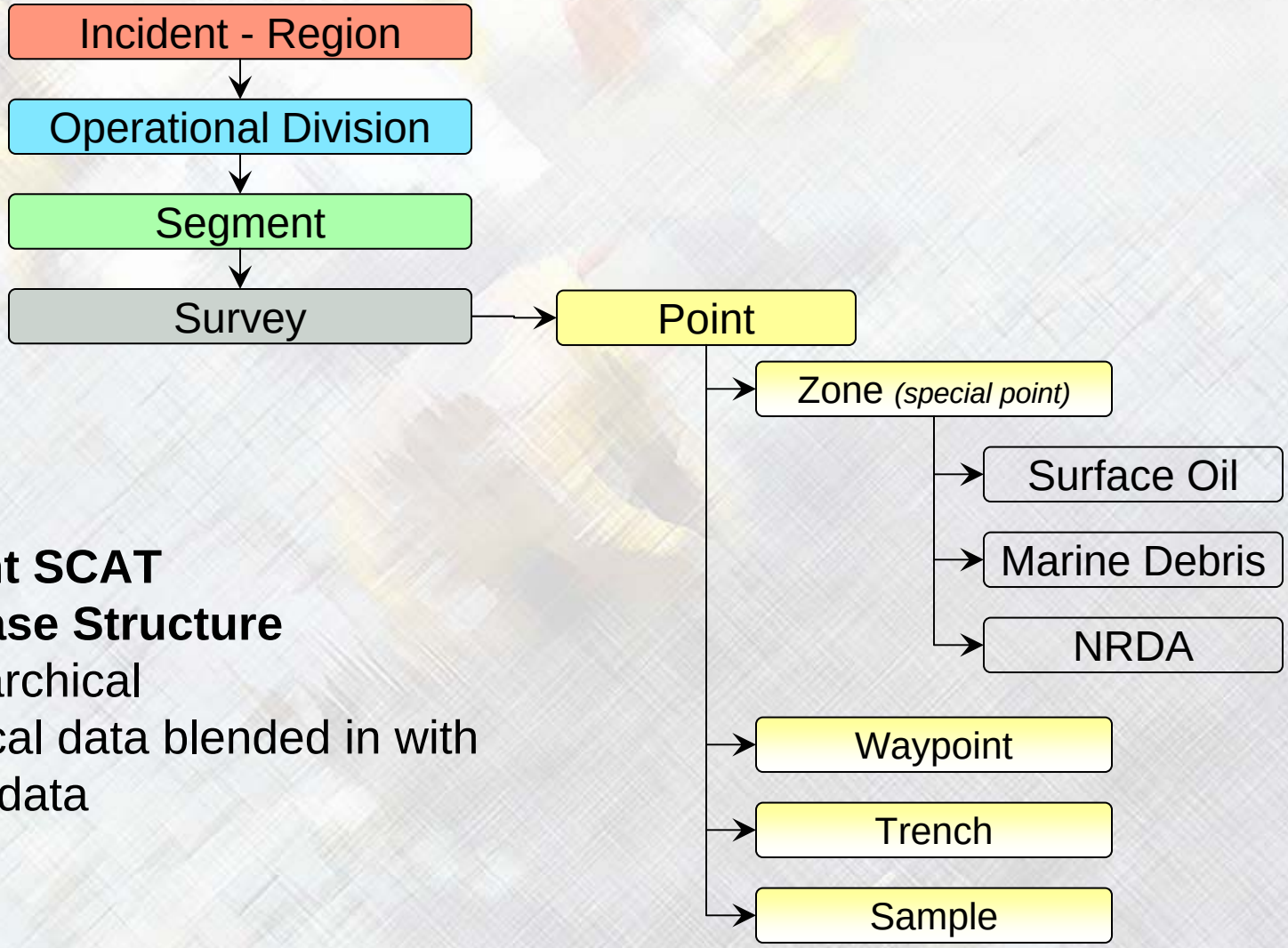
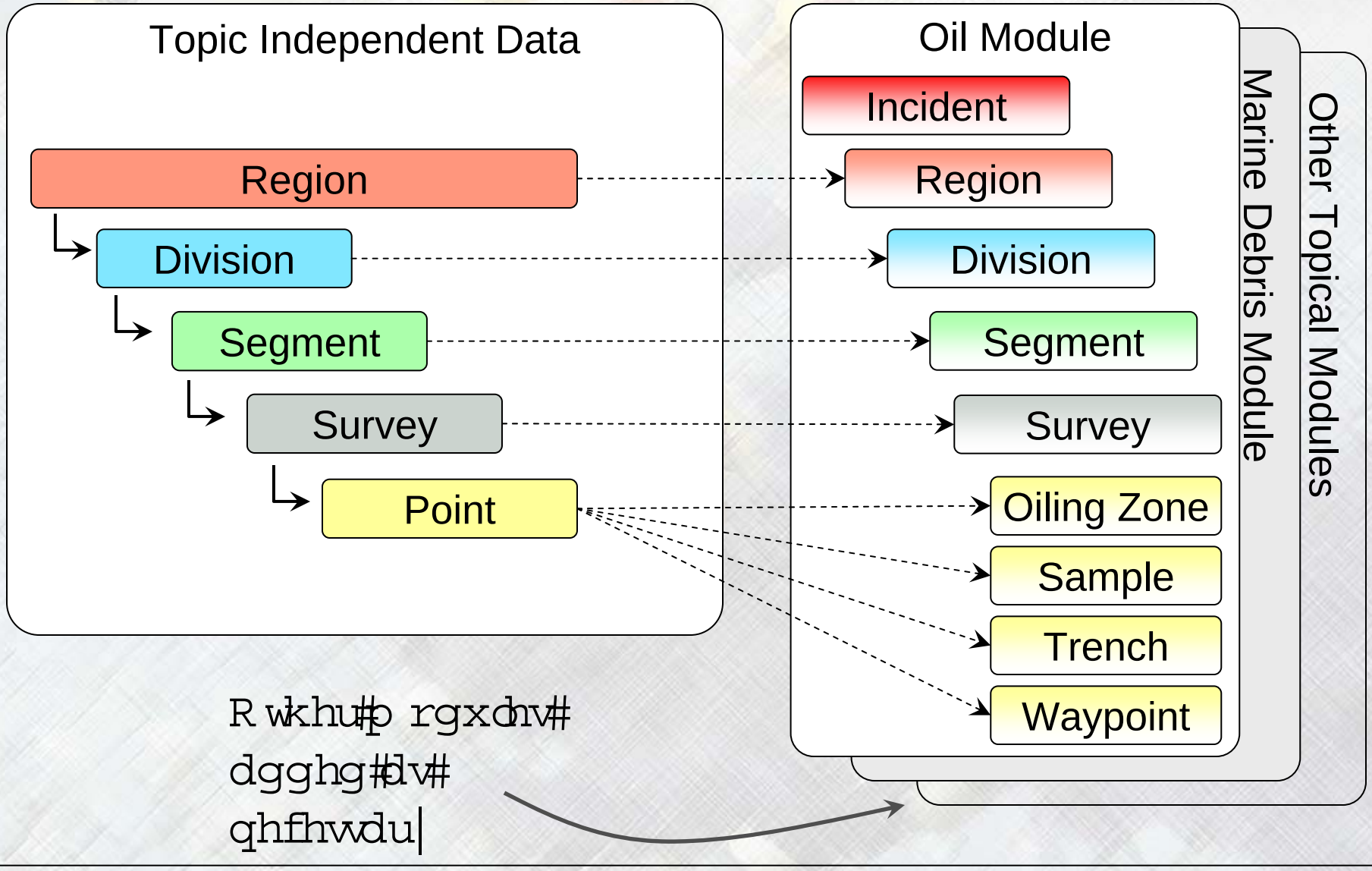
One New Possibility: Modularity



Current SCAT Database Structure

- Hierarchical
- Topical data blended in with core data

Future SCAT Structure?



Questions?

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