Oil Spill - Rapid Assessment





William Whitmore, PhD NOAA Scientific Support Coordinator NOAA Office of Response and Restoration william.whitmore@noaa.gov



Presentation outline

- What is Rapid Assessment?
- What information to gather
- A few details

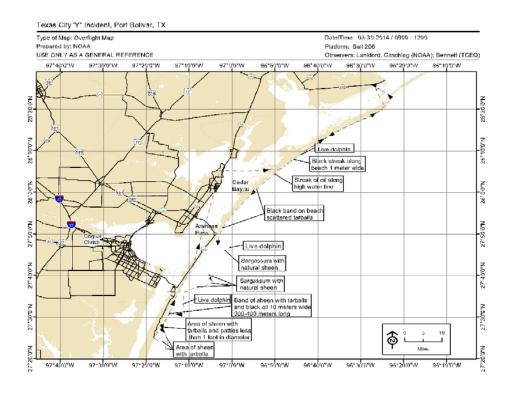






What is Rapid Assessment

- A first look! (Maybe all that's needed)
- NOT full-on SCAT
- Reporting from on-scene
- Could be from land, air, boat, etc.







What do you want to know?... You've got one shot...



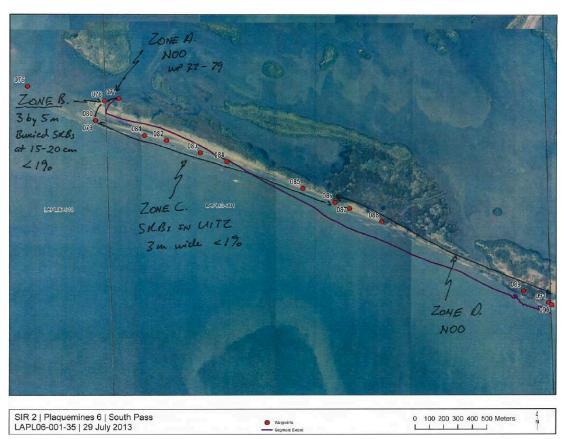
- Where is the oil? Where it is not!
- How much oil is there?
 - (Hint: don't say "a lot")
- What is the environment like?
- High priority areas?
- Any cleanup ideas?



Before you go... Do you have what you need?

- Camera and photo scale
- Map (print it out!!!)
- · GPS
- Job Aids
- Sampling materials?







First question – Is that actually oil?







Do you see a source?



Other hints?



Does it smell?



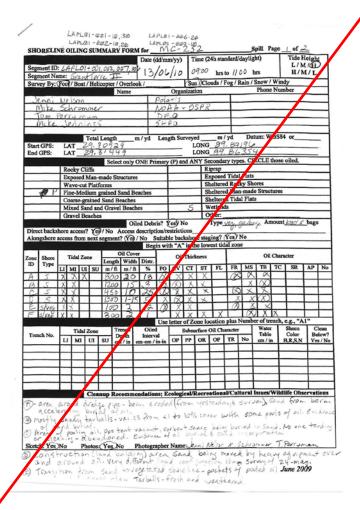
Watch for false positives





What information am I getting?

- Where are you? (lat/long)
 - Multiple waypoints if necessary
- Background information
 - Time/Weather/Tides/Currents
 - Helpful for trajectories
- Environment
 - Shoreline type?
- Describe Oiling as best you can
 - Cover, Thickness, Character





A map and some photos are worth 1,000 words



"Representative" photos

Maps and pictures need each other!





Bonus information...

- Responder access
 - Parking and gear staging?
- Other issues
 - Wildlife
 - Human use (heavily populated area, etc)
- Cleanup recommendations
 - Is it recoverable?
 - Priority? How does this area compare to others you have seen?
 - Manual or machine?



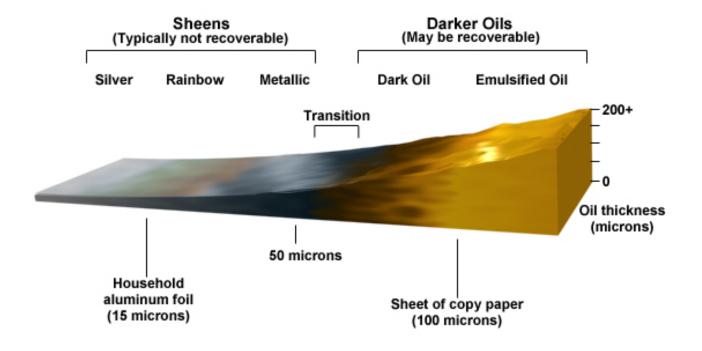


Describe It- Coverage, Thickness, Character



Sheens... It's RARELY just one

Relationship Between Thickness and Color for Oil on Water





"Did you see a lot of oil?"

Step 1		Width of Oiled Area				
		Wide >6 m	Medium >3 m to 6 m	Narrow >0.5 m to 3 m	Very Narrow <0.5 m	
Oil Distribution	Continuous 91 – 100%	Heavy	Heavy	Moderate	Light	
	Broken 51 – 90%	Heavy	Heavy	Moderate	Light	
	Patchy 11 – 50%	Moderate	Moderate	Light	Very Light	
	Sporadic 1 – 10%	Light	Light	Very Light	Very Light	
	Trace < 1%	Very Light	Very Light	Very Light	Very Light	

Step 2		Initial Categorization of Surface Oil				
		Heavy	Moderate	Light	Very Light	
Average Thickness	Pooled Oil > 1 cm	Heavy	Heavy	Moderate	Light	
	Cover 0.1 – 1.0 cm	Heavy	Heavy	Moderate	Light	
	Coat 0.01 – 0.1 cm	Moderate	Moderate	Light	Very Light	
	Stain/Film < 0.01 cm	Light	Light	Very Light	Very Light	



Summary

- Rapid Assessment is a first look
- Think what your supervisor will want to know
- Do your best can be overwhelming sometimes
- . Be prepared before you go out
- Photos and maps are key
- Get whatever else you can





Questions?

