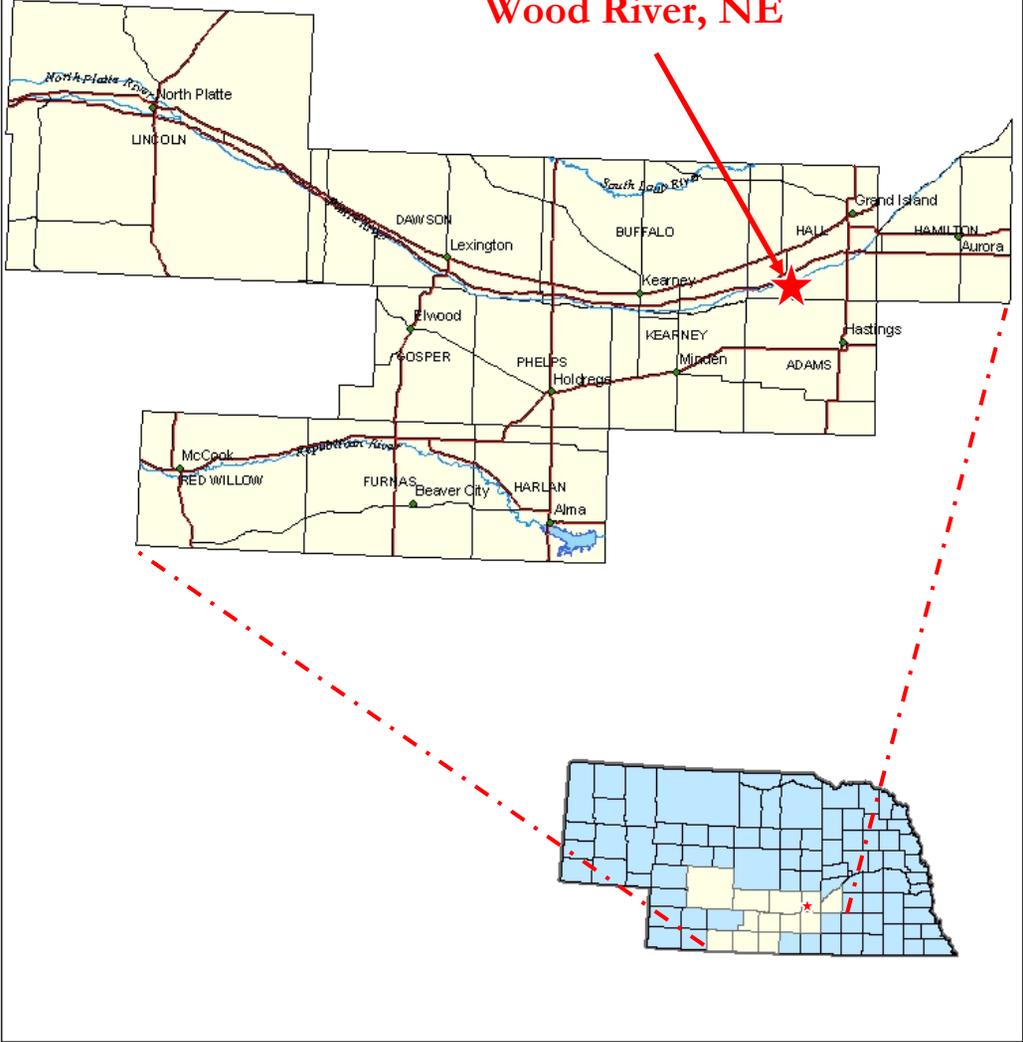


Shallow Water Spill Containment and Boom Deployment Training (A case study)

Platte River Whooping Crane Maintenance Trust
Wood River, NE

August 26-27, 2008

Wood River, NE



So what, another boom training class....

True, but this is about building
partnerships

ATTENDEES

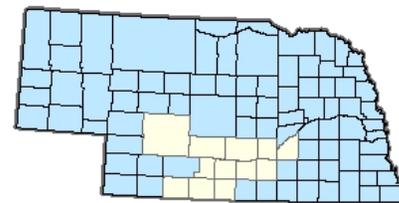
- EPA
- USFWS
- NDEQ
- NE Game and Parks
- 72nd CST
- Dawson & Cass County EMS
- Grand Island FD
- Kinder Morgan Pipeline
- Jayhawk Pipeline
- Platte River Whooping Crane Maintenance Trust
- Nature Conservancy
- Audubon Society
- Headwaters Corp.
- Ecosolutions

**Why on earth would you
need partners in Central
Nebraska?**

Several reasons....

- Remote location/Lack of Local Resources
- Private landownership
 - Very limited public access
- Sensitive Biological Receptors and Critical Habitats
- Unique River Morphology

South Central NE Contingency Plan



Several reasons....

- Remote location/Lack of Local Resources
- Private landownership
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Whooping Crane

(523 total; 377 wild; 266 migrate through NE)



Sandhill Cranes

(500,000-800,000)

1 crane \approx every 2 people living in the
KC metro area

This aint your Daddy's oil spill.....



© 2008 Tele Atlas

Image © 2008 DigitalGlobe

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780 ft
Pointer 40°46'34.93" N 98°28'50.11" W elev 1916 ft Streaming ||||| 100%

Eye alt 4610 ft

**So what, just throw
down some boom**

You said it was shallow...probably
don't even need a boat



**What, you don't have
an airboat?**

No problem.....



**Point is....a spill here will
suck, so let's keep the
Genie in the bottle!**

How?

#1 Objective

■ Spill Prevention

- EPA SPCC plans and inspections
 - Containment systems
 - Best Management Practices (BMPs)
 - Close and lock valves, security lights/fence, maintenance
- FRP Exercises/Inspections
- DOT - Pipeline Inspections

What else?

- Contingency Planning/Preparedness
 - What do we do if there is a spill?
 - Are we prepared to take an action?
 - Preplan actions and train for them

What if the Genie gets out....

- NO, you don't get three wishes
- Stop the Source of Release



Second Objective

- Stop a spill before it reaches the river

How to stop a spill?

Take advantage of existing
features.....



Construct underflow structures

Can be done in a ditch, tributary, or in a braided channel





What if the Genie gets out....

- Stop the Source of Release
- Stop flow prior to entering the water
- **Contain the spill on water**

Spill Minimization/Containment

- Containment Booming





Sometimes you use what you got.....



When Containment Booming Won't Work!



Loading and Entrainment

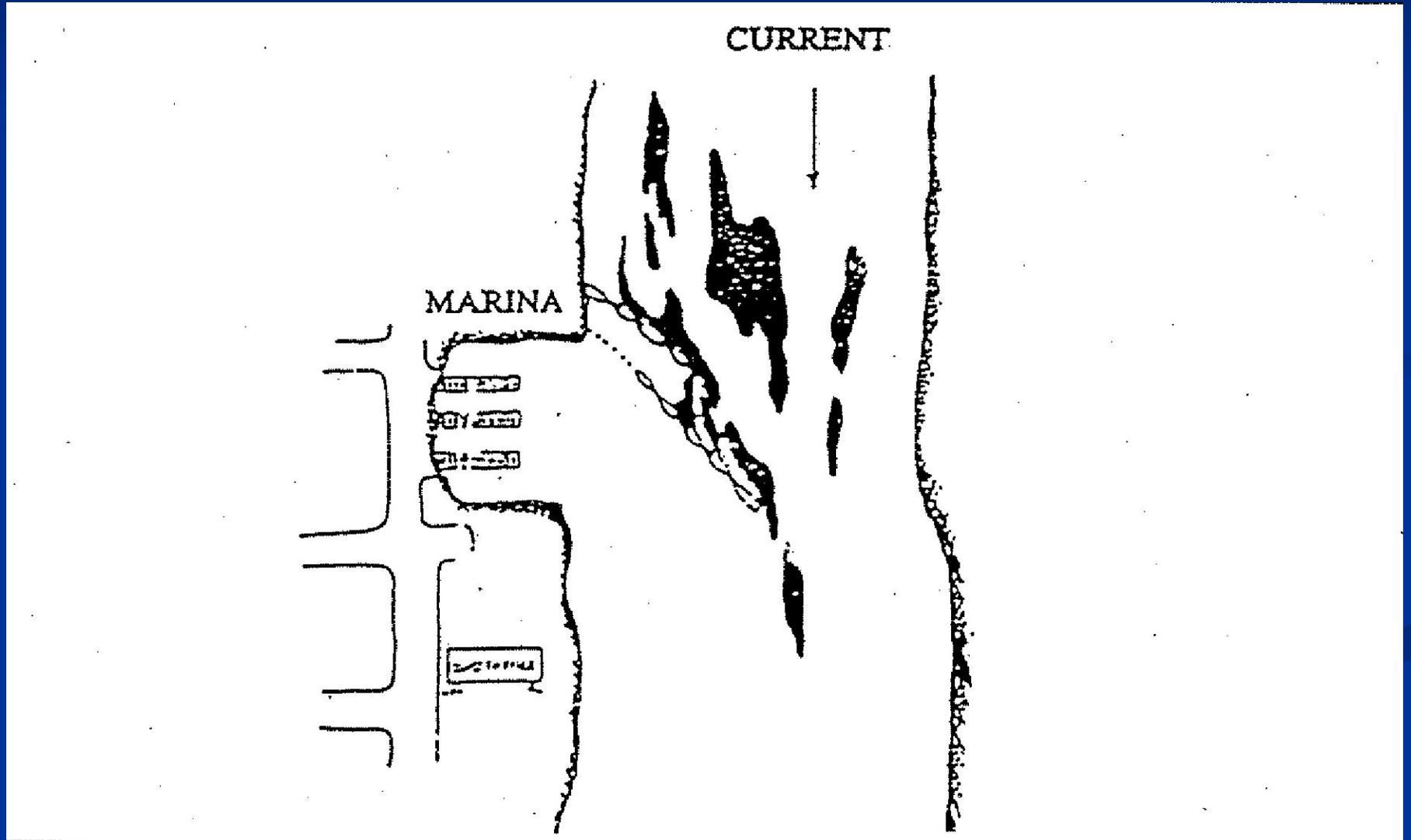
*Copied off the Internet

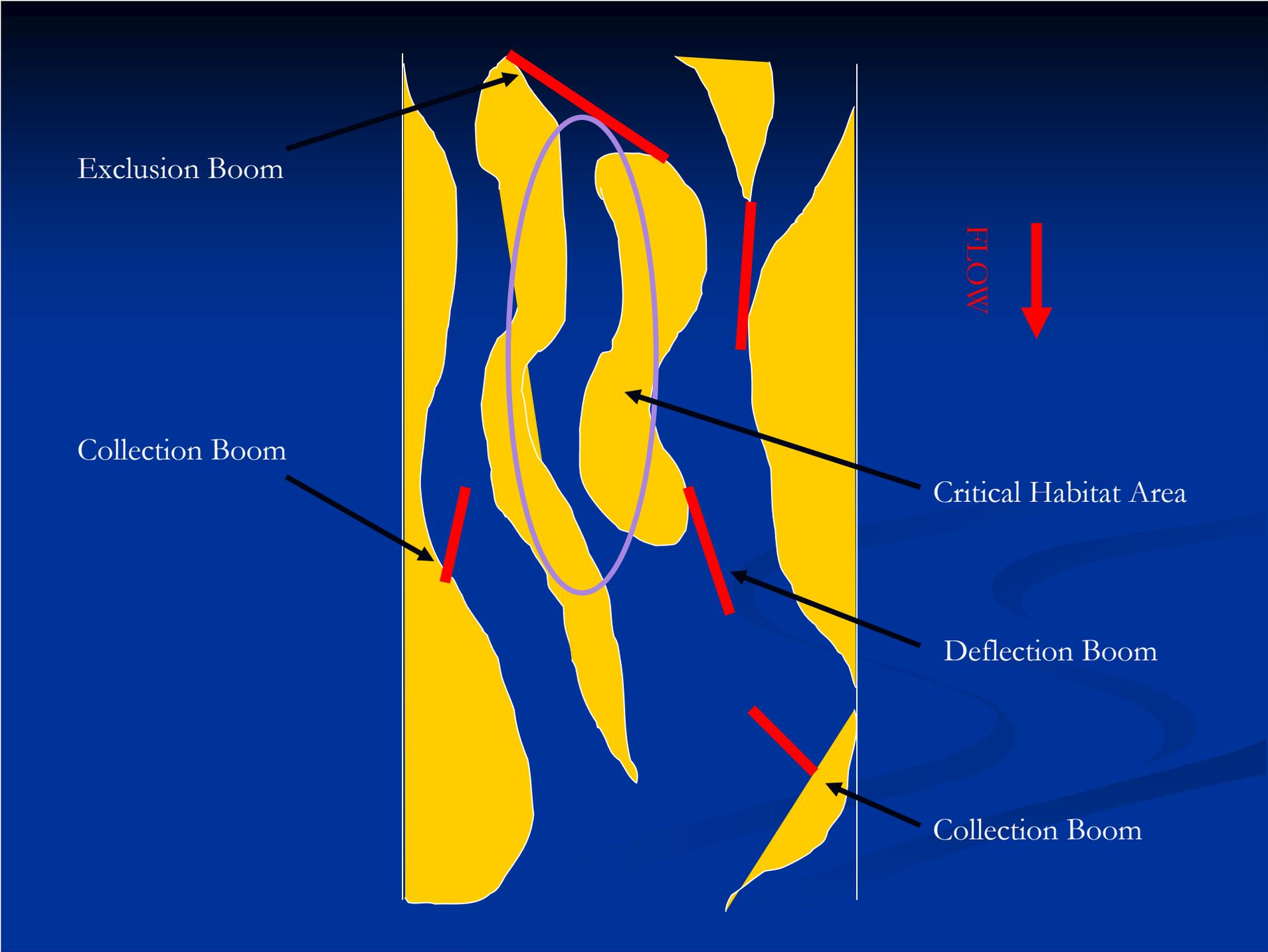
Spill Minimization/Containment

- Containment Booming
- Diversion
- Exclusion
- Deflection Booming

DEFLECTION/EXCLUSION BOOMING

Either direct oil or protect an area

















Lessons Learned

- Challenging to Boom a Braided Stream
 - Various Currents and Depth
 - Limited River Access
 - Extensive shoreline and vegetation to protect/clean
- Limited Response Equipment in Central NE
- Response Agencies/Contractors Not Close
- Better to Prevent or Contain Spill Prior to Entering River

