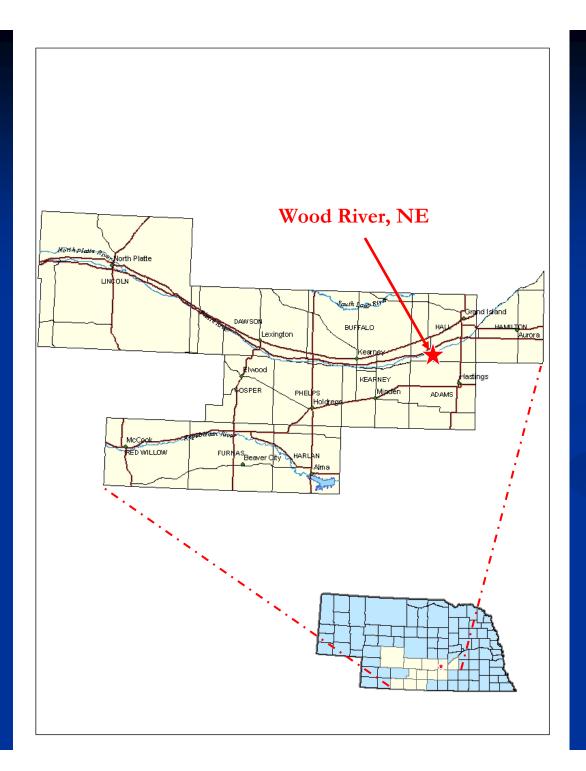
US ERA ARCHIVE DOCUMENT

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

Platte River Whooping Crane Maintenance Trust Wood River, NE

August 26-27, 2008



### So what, another boom training class....

True, but this is about building partnerships

#### ATTENDEES

- EPA
- USFWS
- NDEQ
- NE Game and Parks
- 72<sup>nd</sup> 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



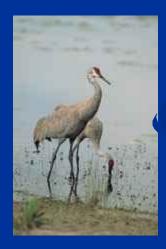
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Whooping Crane

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



Sandhill Cranes

(500,000-200

1 crane for each control of the cont



### 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

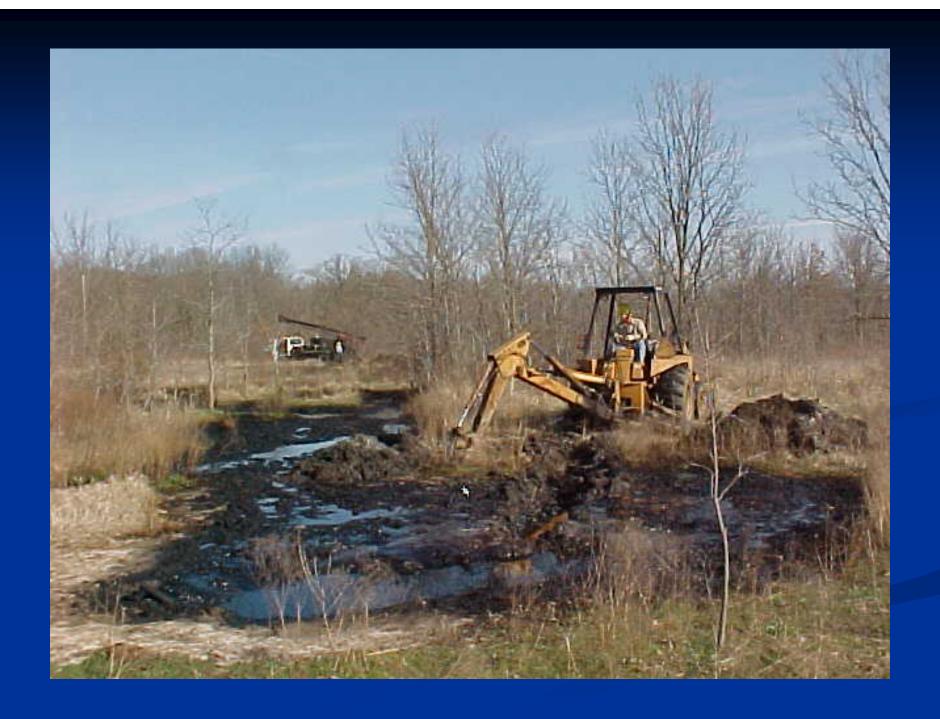
#### What else?

- 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







### When Containment Booming Won't Work



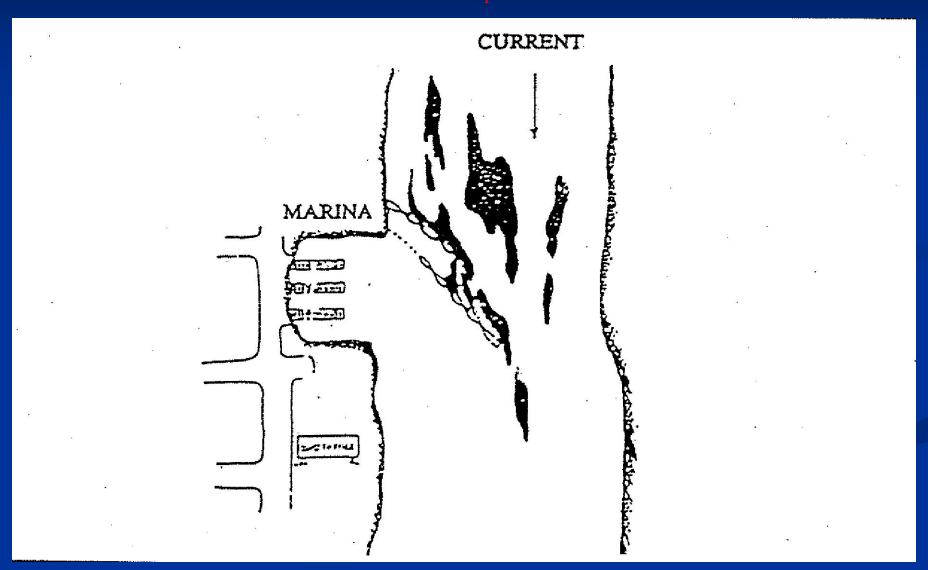
Loading and Entrainment

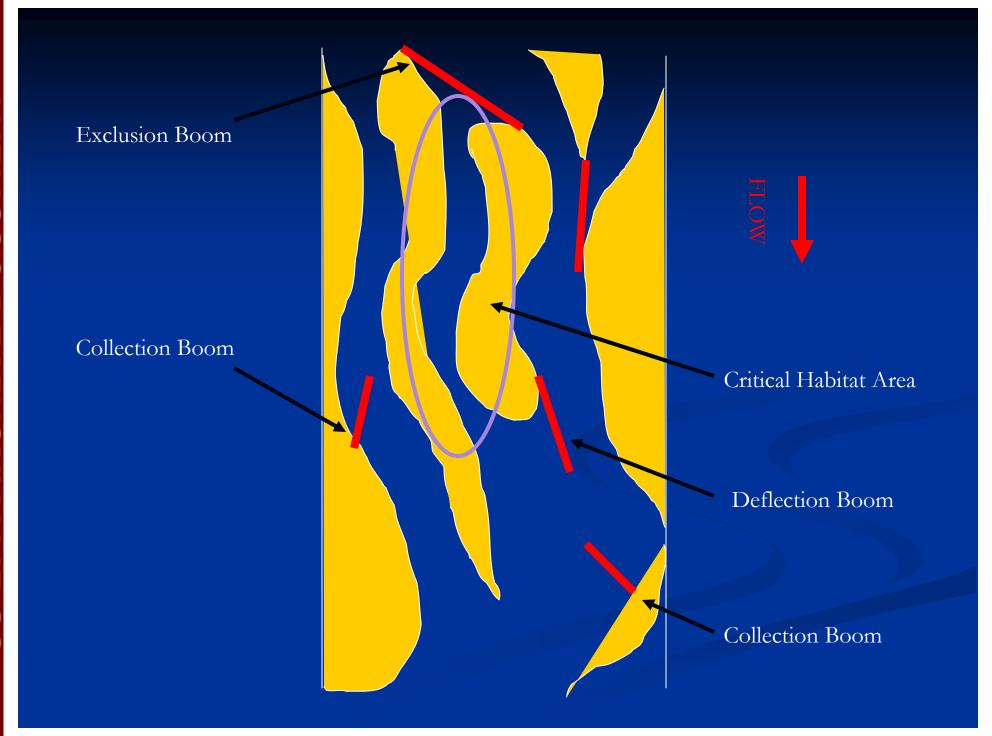
#### Spill Minimization/Containment

- Containment Booming
- Diversion
- Exclusion
- Deflection Booming

#### DEFLECTION/EXCLUSION BOOM ING

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

