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
  - Very limited public access
- Sensitive Biological Receptors and Critical Habitats
- Unique River Morphology
Whooping Crane

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

Sandhill Cranes

(500,000-800,000)

1 crane every 2 people living in the KC metro area
This aint your Daddy’s oil spill.....
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!

*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