

INLAND WATER
OIL SPILL REMOVAL ORGANIZATIONS
(OSROs)

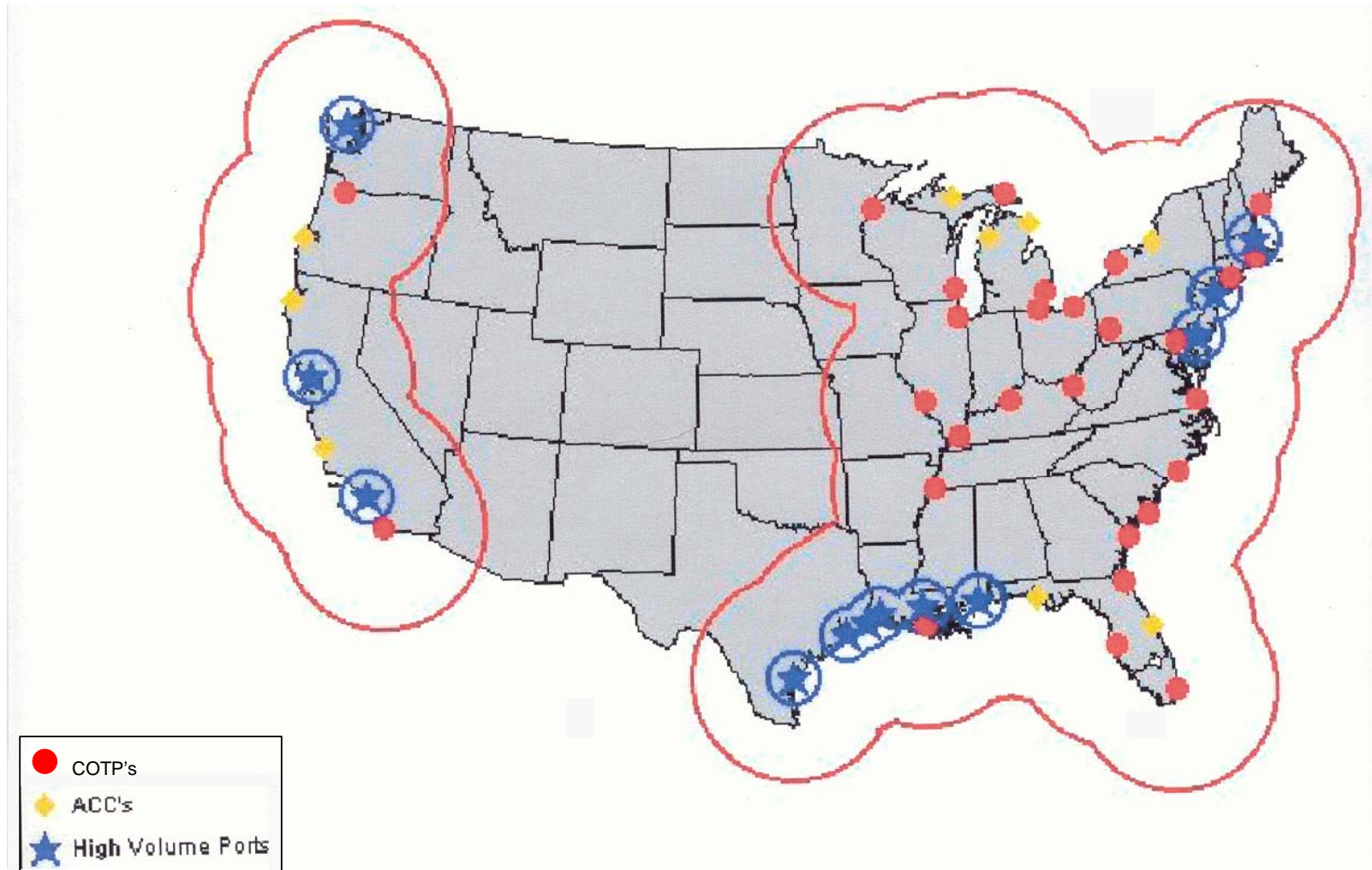
***THE NEED FOR INLAND ENVIRONMENT OSROs
IN THE WESTERN UNITED STATES***

By

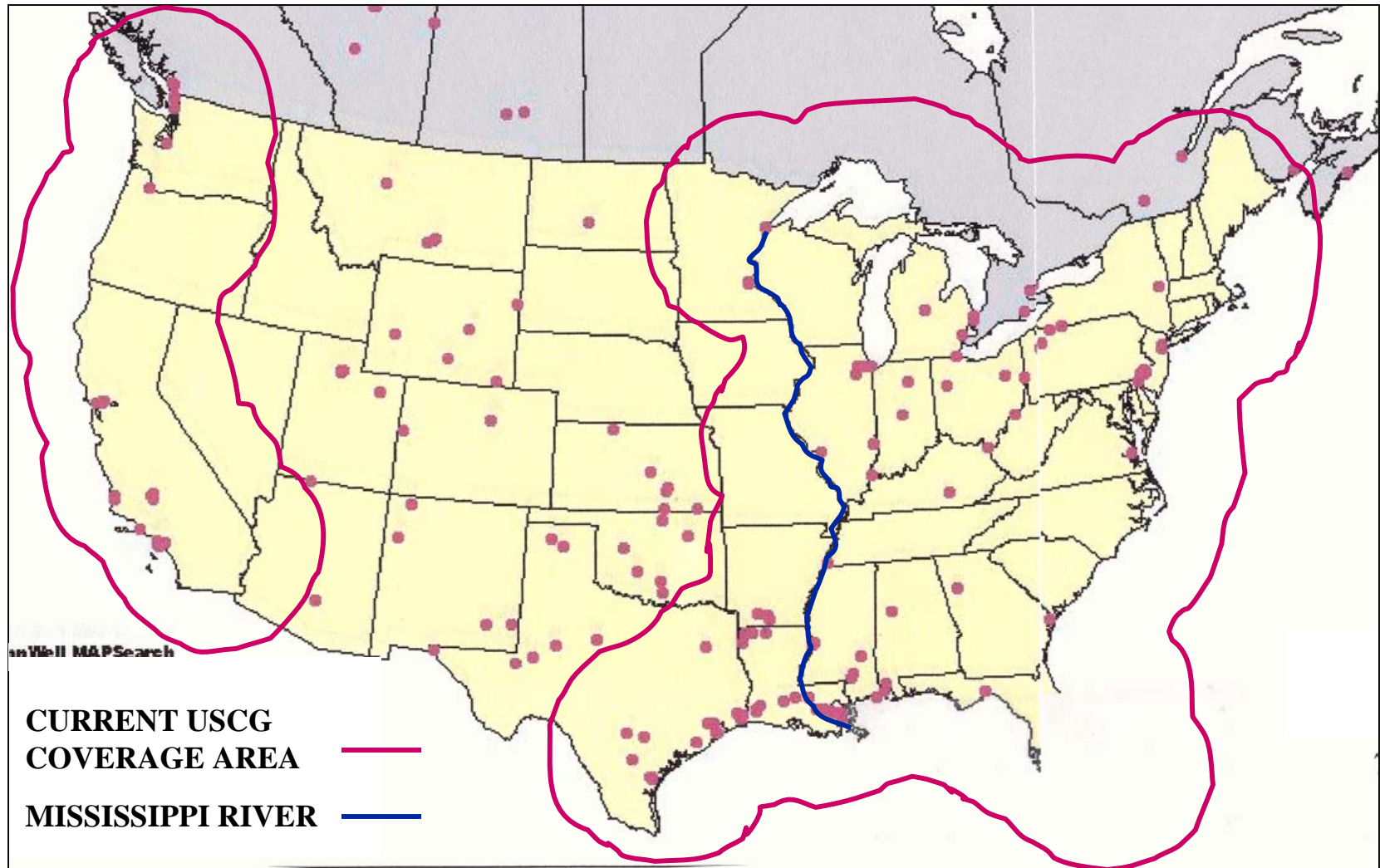
Dee Bradley, DOWCAR Environmental Management, Inc.
Mike Crickard, US Coast Guard National Strike Force Coordination Center

FIGURE 1

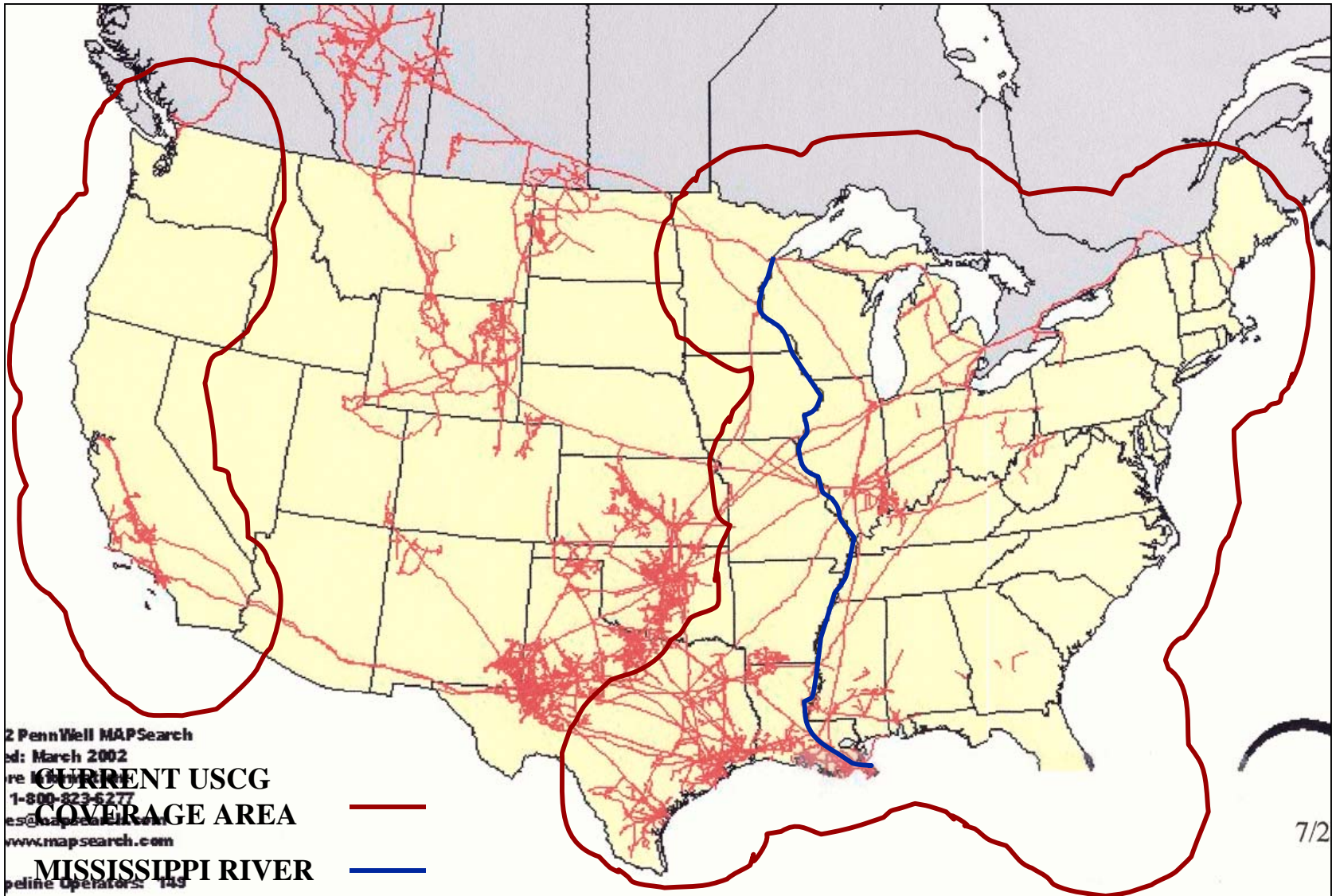
U. S. COAST GUARD COTP AND ACC COVERAGE



REFINERY LOCATIONS IN THE U. S.



CRUDE OIL PIPELINE LOCATIONS IN THE U. S.



U. S. PIPELINES AND FACILITIES

IN 2005

**5.3% OF ALL SPILLS WERE PIPELINES
PIPELINES CARRY 69.3% OF TRANSPORTED OIL**

REASONS FOR PIPELINE FAILURE:

40% STRUCTURAL

29% THIRD PARTY

46% OF PIPELINES ARE OVER 30 YEARS OLD

16% ARE OVER 50 YEARS OLD

2% ARE OVER 70 YEARS OLD

36% OF ALL SPILLS WERE FIXED FACILITIES

VULNERABILITIES

PIPELINE CROSSINGS

INLAND REFINERIES

THIRD PARTY INCIDENTS

NUMBER OF INLAND SPILLS

60% OF ALL SPILLS OCCUR INLAND

NATIONAL TREASURES IN WESTERN U.S.A.

GRAND CANYON

LAKE POWELL

YELLOWSTONE NAT'L PARK

GREAT SALT LAKE

GLACIER NAT'L PARK

ISSUES FACED BY WESTERN COMPANIES
THAT NEED OSROs

LOCATED OUTSIDE COTP/ACC CIRCLES

OSRO RESPONSE TIMEFRAMES ARE TOO LONG

EPA and PHMSA

**REQUIRE A CLASSIFIED OSRO UNDER
CONTRACT AND LISTED IN FRP**

**MUTUAL AID ORGANIZATIONS
PROVIDE LIMITED HELP AND RELIABILITY**

POSSIBLE WAYS TO CREATE
MORE INLAND OSROs

ADD ALTERNATIVE CITIES IN INLAND AREAS

**ENCOURAGE EXISTING CONTRACTORS TO
INVEST IN SPILL RESPONSE EQUIPMENT
AND TRAINING**

**EDUCATE COMPANIES IN THE SELECTION
OF THE CORRECT OSRO FOR THEIR NEEDS**

POSSIBLE ALTERNATIVE CITIES

**UTILIZE CITIES WHERE
THE EPA OR DOT PHMSA
ALREADY HAS A PRESENCE
TO CREATE NEW CLASSIFICATION CITIES
CONTROLLED BY EPA/PHMSA CALLED
ALTERNATIVE CLASSIFICATION CITIES
(ACCs)**

POSSIBLE ALTERNATIVE CLASSIFICATION CITIES

Great Falls, MT

Boise, ID

Casper, WY

Phoenix, AZ

Williston, ND

Salt Lake City, UT

Denver, CO

Amarillo, TX

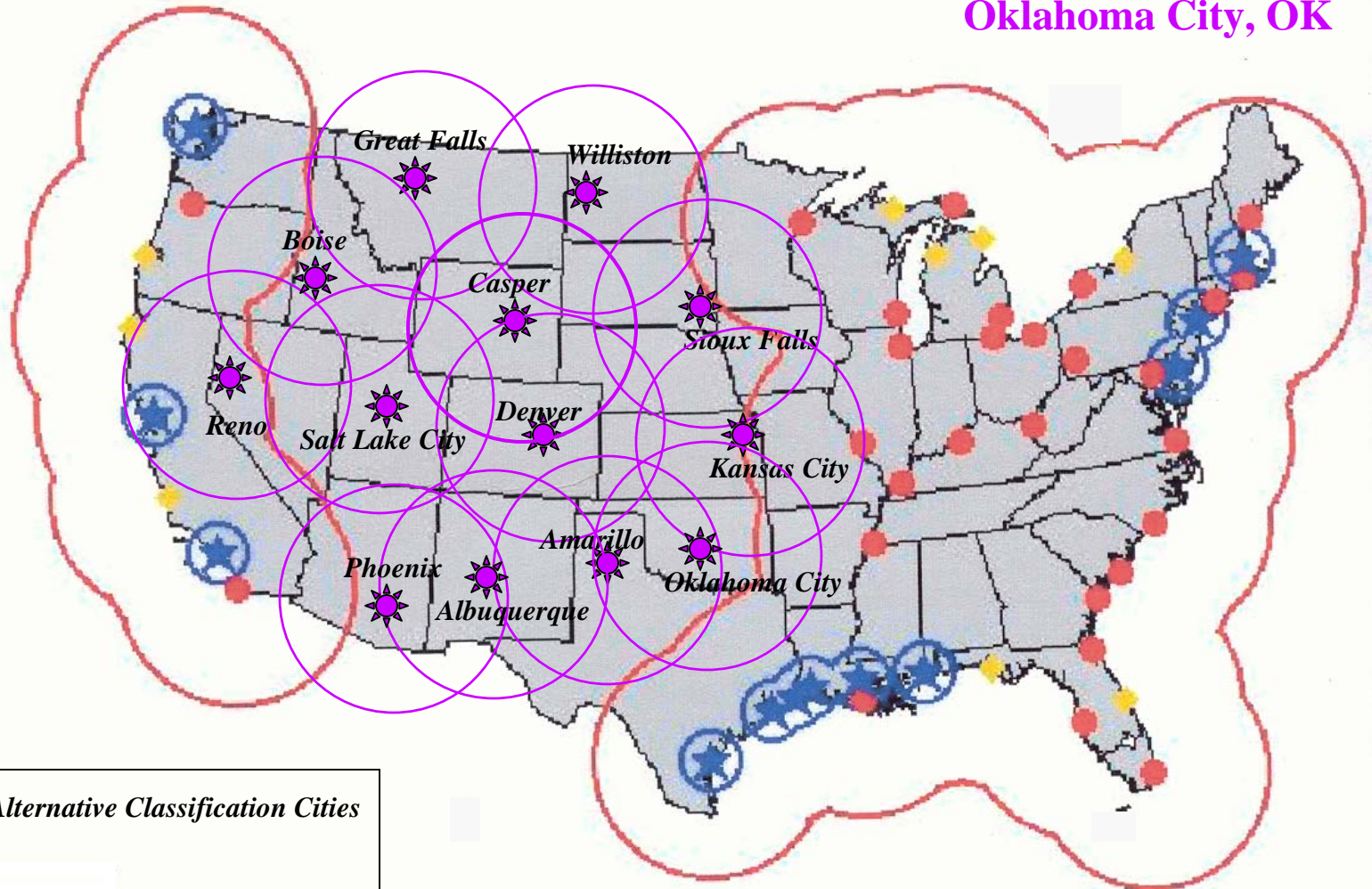
Albuquerque, NM




Kansas City, KS

Sioux Falls, SD

Reno, NV

Oklahoma City, OK



-  Possible Alternative Classification Cities
-  COTPs
-  ACCs
-  High Volume Ports

POSSIBLE WAYS TO CREATE
MORE INLAND OSROs

ENCOURAGE EXISTING CONTRACTORS BY:

DEMONSTRATING THE NEED FOR INLAND OSROs

**HAVE COMPANIES AND POTENTIAL OSROs WORK
TOGETHER TO MEET AN RP's
EQUIPMENT REQUIREMENTS**

AND

**FIND OTHER JOBS THAT CONTRACTORS CAN DO
FOR RP'S TO HELP SUPPORT THE OSRO
INVESTMENT**

INLAND RIVER BOOMING LOCATIONS



ARIZONA

Colorado Salt
 Agua Fria Gila

NEVADA

Colorado
 Truckee

COLORADO

Arkansas Fountain
 Colorado South Platt

UTAH

Weber

NEW MEXICO

Rio Grande

NORTH DAKOTA

Missouri
 Red River

INLAND RIVER BOOMING LOCATIONS (cont.)



OKLAHOMA

Cimarron

WYOMING

Popo Agie

Little Wind

Green

North Platt

Shoshone

Wind

MONTANA

Clark Fork

Cut Bank

Yellowstone

Sun

Teton

Missouri

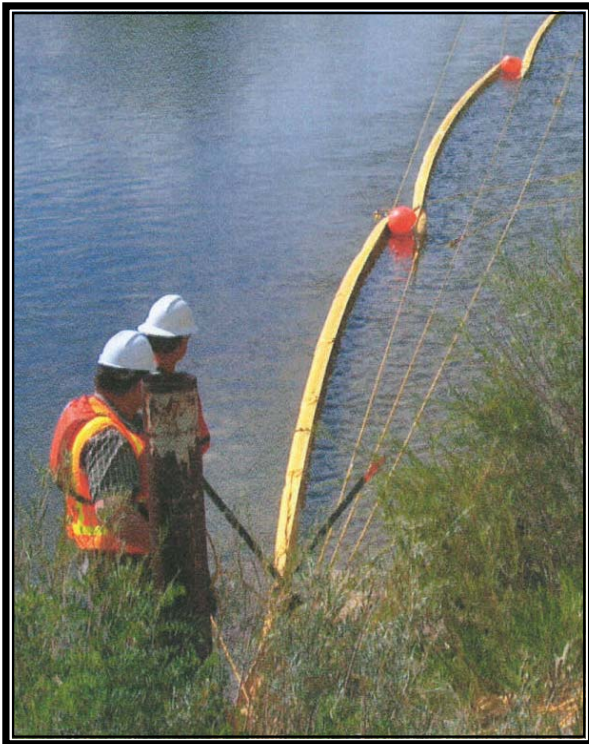
Marias

Bitterroot

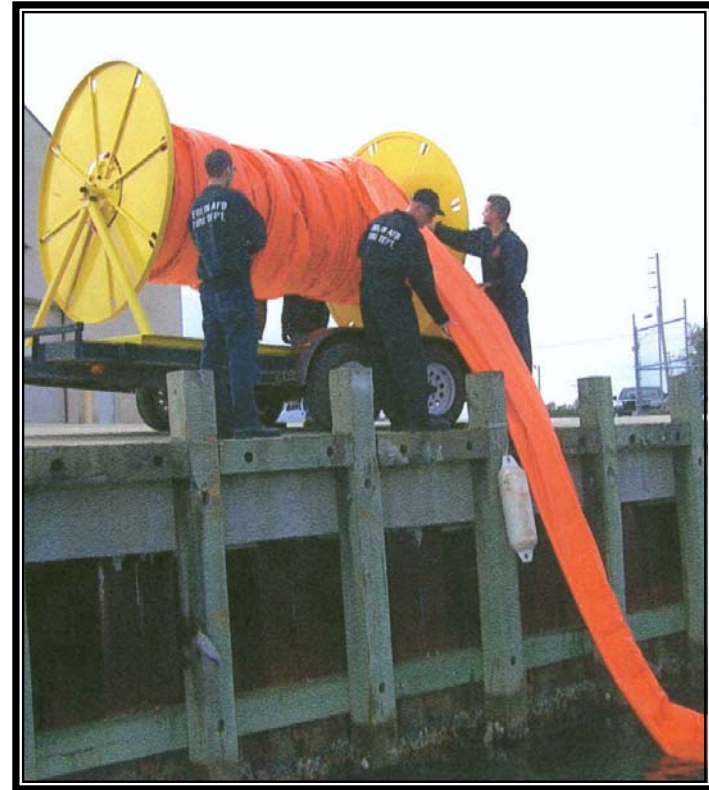
EQUIPMENT DIFFERENCES

INLAND ENVIRONMENTS NEED:

SMALLER BOOM



INLAND



COASTAL

EQUIPMENT DIFFERENCES

INLAND ENVIRONMENTS NEED:

SMALLER SKIMMERS



INLAND



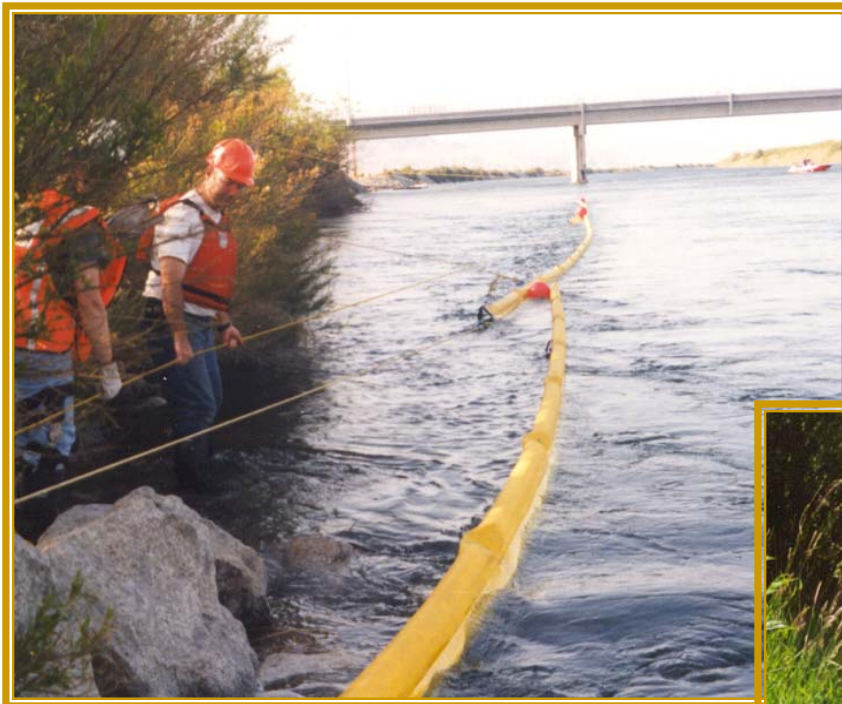
COASTAL

APPROACHES TO INLAND WATER SPILLS

BANK TO BANK CASCADE ANCHOR SYSTEM



APPROACHES TO INLAND WATER SPILLS **BRIDGE TO BANK CASCADE ANCHOR SYSTEM**



APPROACHES TO INLAND WATER SPILLS

BUOY TO BANK CASCADE ANCHOR SYSTEM



OBSERVATIONS

**MANY CURRENT COASTAL OSROs ARE TOO FAR
AWAY TO REACH MANY INLAND
COMPANIES
IN A TIMELY MANNER**

**US COAST GUARD RESPONSIBILITIES
DO NOT INCLUDE
MOST INLAND AREAS**

**UNDER OSRO GUIDELINES,
OSROs CAN BE CLASSIFIED FOR
RIVERS & CANALS WITH
BOOM OF 18" (6" X 12")**

OBSERVATIONS

**BOOM MANUFACTURERS REFER TO
SMALLER BOOM AS
“SWAMP BOOM” OR “CALM WATER” BOOM.**

**THEY DO NOT KNOW HOW TO DEPLOY IT
NOR HAVE THEY SEEN IT DEPLOYED
IN FAST WATER ENVIRONMENTS.**

OBSERVATIONS

**EPA/PHMSA ARE CONTINUING TO USE
USCG OSRO GUIDELINES FOR
*RIVERS, CANALS, AND LAND SPILLS.***

**(INCLUDING NON-NAVIGABLE AND DAMMED
WATERWAYS, AND THOSE WITH NO
COMMERCIAL BOAT TRAFFIC)**

OBSERVATIONS

USCG, EPA AND PHMSA ARE

WORKING TO ESTABLISH

ALTERNATIVE CLASSIFICATION CITIES

TO COVER THE INLAND U. S.

RECOMMENDATIONS

**USCG, EPA AND PHMSA PROVIDE
EDUCATION AND
RECOMMENDATIONS TO
FACILITY RESPONSE PLAN HOLDERS
ON OSRO SELECTION
FOR *RIVERS AND CANALS* AND
*INLAND ENVIRONMENTS.***

RECOMMENDATIONS

**A NUMBER OF COMPANIES CLAIM THAT THEY
ARE OSROs.**

**RP_s NEED TO REQUEST THE
CLASSIFICATION LETTER ISSUED
BY THE US COAST GUARD AND
NOTE THE *LOCATION*,
COMPANY NAME,
*AND TYPE OF EQUIPMENT.***

RECOMMENDATIONS

**COMPANIES DEVELOP
GEOGRAPHICAL RESPONSE PLANS
AS A PART OF
FACILITY RESPONSE PLANS AND
REGIONAL PLANS.**

RECOMMENDATIONS

DEVELOP

“CONSIDERATIONS PAGES”

AS A PART OF

OSRO GUIDELINES

TO AID RPs OBTAIN

EQUIPMENT AND TRAINING

TO MEET THEIR NEEDS

RECOMMENDATIONS

“CONSIDERATIONS PAGES” WOULD INCLUDE:

- 1. CHARACTERIZATION OF A SPECIFIC ENVIRONMENT
(I.E. EXTREME COLD WEATHER)**
- 2. TYPES OF EQUIPMENT RECOMMENDED**
- 3. STANDARD OPERATING PROCEDURES WITH TIE-INS TO
FACILITY RESPONSE PLANS**
- 4. TRAINING NEEDED**
- 5. OTHER ITEMS AS APPROPRIATE**

RECOMMENDATIONS

POSSIBLE “CONSIDERATIONS PAGES” INCLUDE:

FAST CURRENT/SHALLOW WATER ENVIRONMENTS

EXTREME COLD WEATHER

SPILLS ON LAND

PRE-STAGING EQUIPMENT

SINKING OIL

RECOMMENDATIONS

**“CONSIDERATIONS PAGES” NOT BEING
CONSIDERED:**

IN-SITU BURNING

DISPERSANTS

BIODEGRADATION

CONCLUSION

NEED ACCs IN PLACE

**NEED EPA/PHMSA TO TELL RPs WHEN
THEIR OSRO CHOICE IS INCORRECT**

**REDUCE BOOM SIZE TO 12"/10" FOR
RIVER & CANALS OSRO CLASSIFICATION**

**NEED TO DEVELOP GEOGRAPHICAL RESPONSE
PLANS FOR ALL WATERWAYS**

**DEVELOP "CONSIDERATION PAGES" AS PART
OF OSRO GUIDELINES**