

Environmental Stewardship in Transportation

Reduction in Oil Pollution from Tank Barges

Doug Scheffler

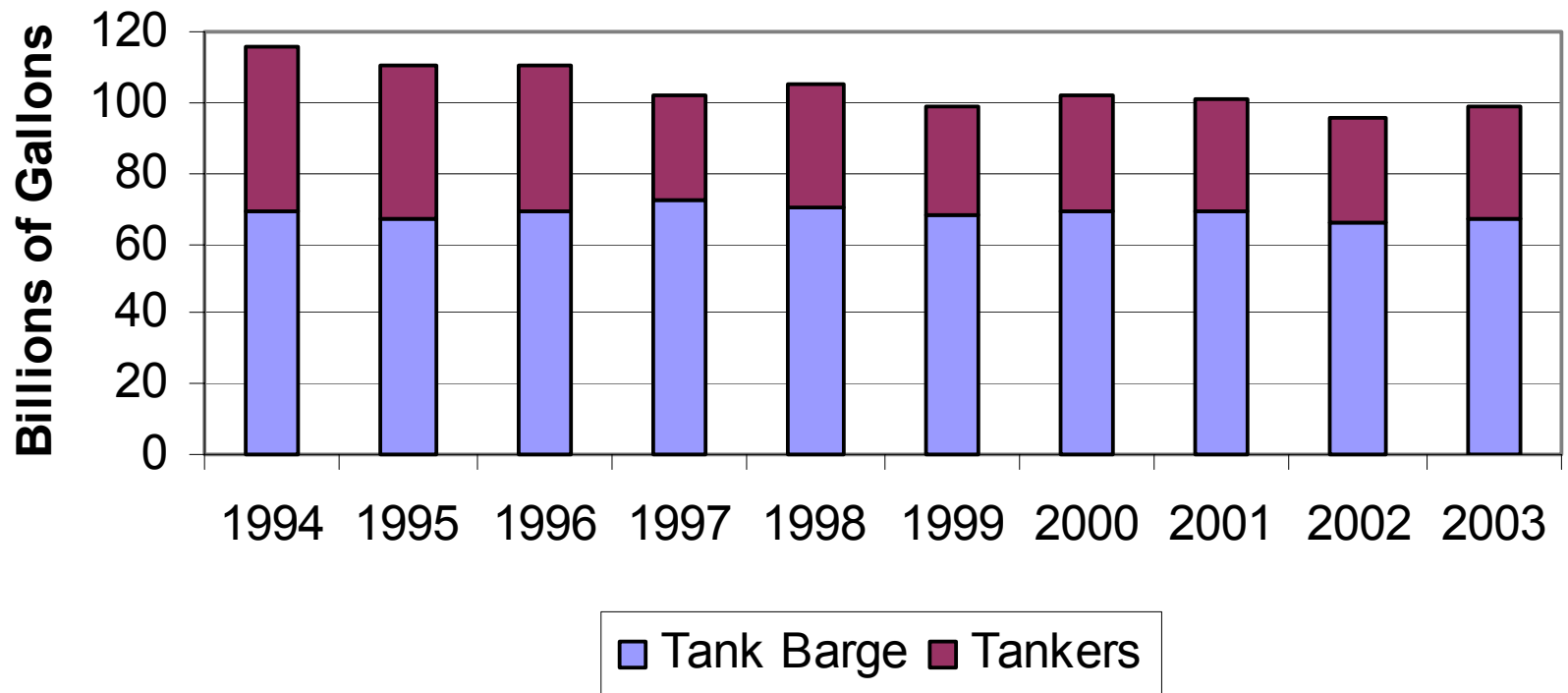
American Waterways Operators

July 19, 2005

Agenda

- Domestic Waterborne Shipments
- Trends in Oil Spills
- Reasons for Reduction:
Legislation, Technology,
Safety Management Systems
- Outlook

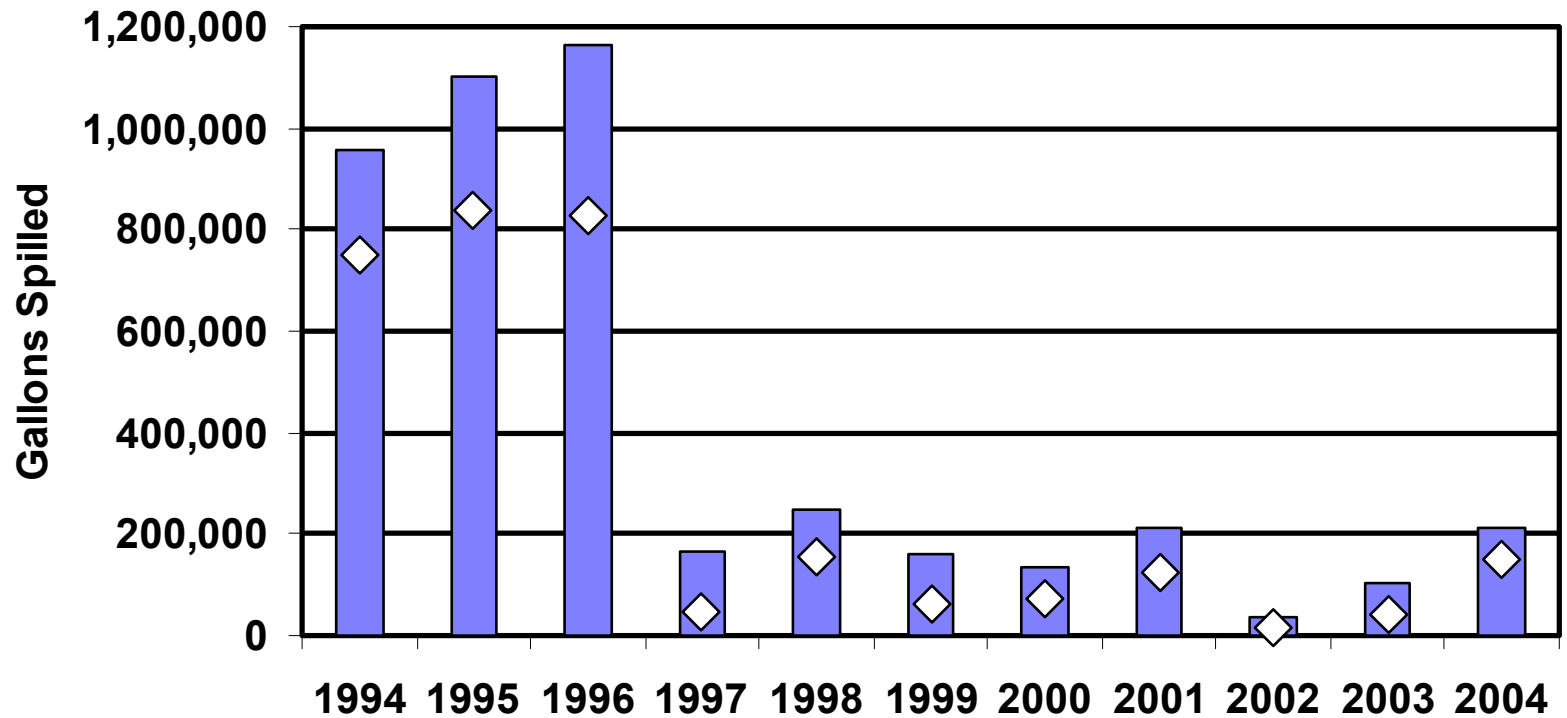
Domestic Waterborne Shipments of Petroleum



Petroleum barges move on both coastal and inland waterways



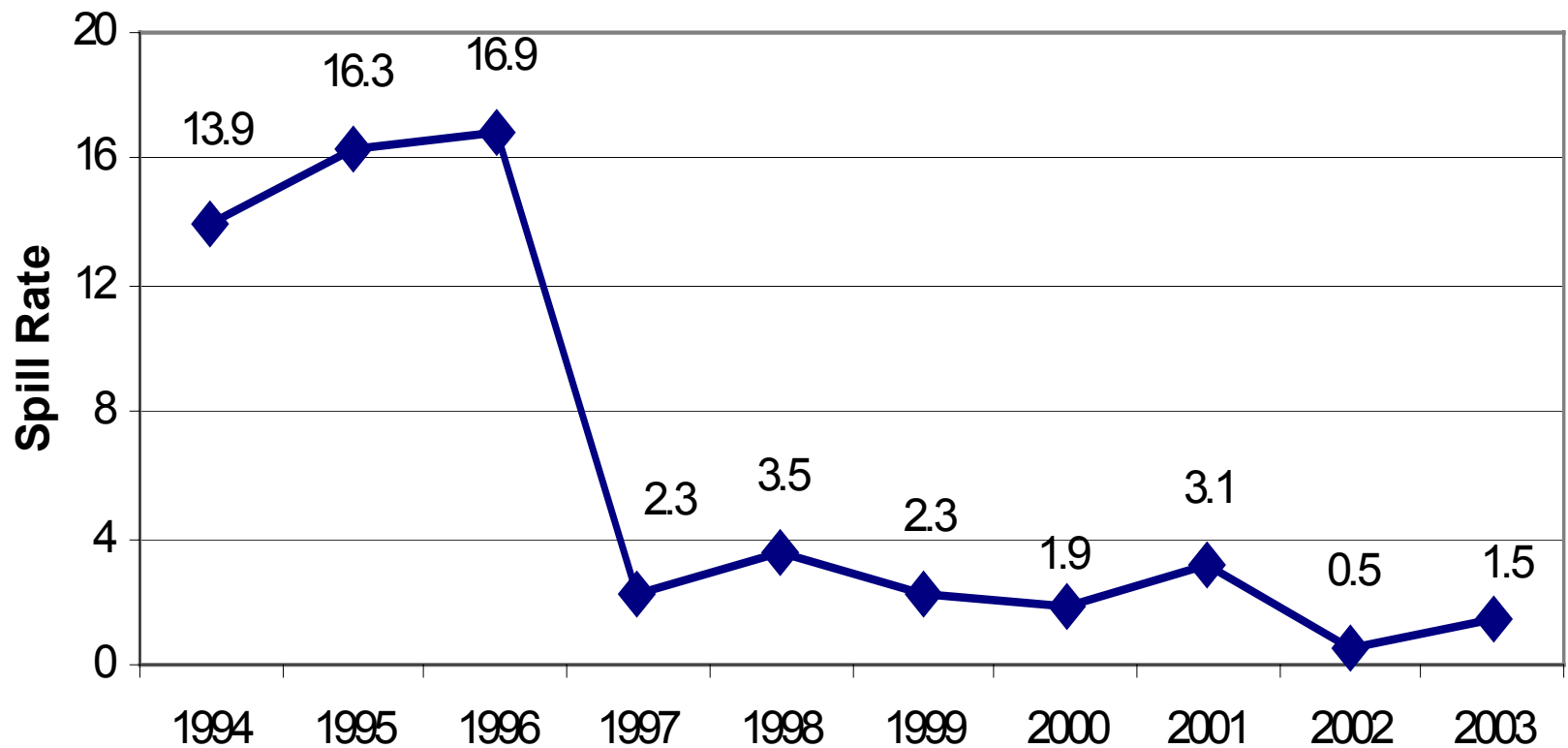
Tank Barge Oil Spills 1994-2004



↓ = Largest Spill Of The Year

Tank Barge Spill Rate 1994-2003

Gallons Spilled per 1 Million Moved



3 Major Factors in Shift

- Legal – Oil Pollution Act of 1990
- Technological Improvements
- Safety Management Systems Mark New Industry Culture

OPA 90

- Prevention: Double hulls by 2015
- Response: Plans mandatory
- Compensation/Liability:
Owner's Liability Insurance
Oil Pollution Trust Fund

Technological Improvements

- Navigation: GPS, Automatic Identification Systems, electronic charts
- Prevention: Alarm systems, full-perimeter spill rails
- Simulator-based training

Seamen's Church Institute Houston & Paducah Centers



Safety Management Systems

- Improve safety, reduce pollution
- Say what you do, do what you say, prove it
- Focus on documented policies and procedures
- Certified by regular audits

Towing Industry SMS

- AWO's Responsible Carrier Program (RCP)
- International Safety Management Code (ISM)
- RCP standard in towing industry

Responsible Carrier Program

- Established in 1994
- Third-party audit added in [check]
- Condition of AWO membership as of 2000

RCP Contents

- Management/Administration
- Equipment and Inspection
- Human Factors

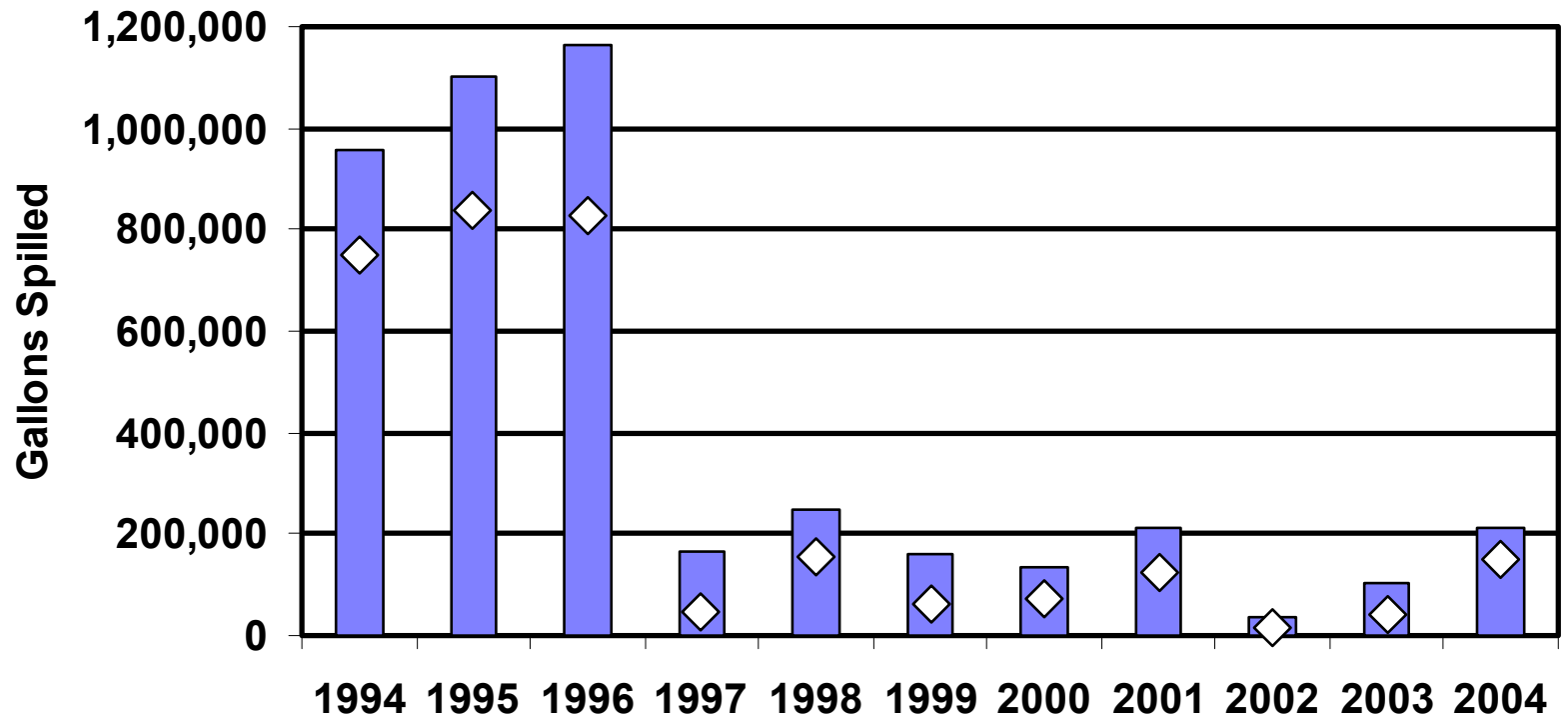
RCP Benefits

- Industry standard, commitment to safety and environmental protection
- Unites regulations, technologies, management policies
- Continuously revised

Outlook for pollution trends

- Goal is zero spills
- RCP serving as foundation for new regulatory system
- Model for other industries

Questions?



↓ = Largest Spill Of The Year