# 2006
# Great Lakes
# Ballast Water Management
# Exam Program

# The St. Lawrence Seaway

# Regulatory History in Great Lakes

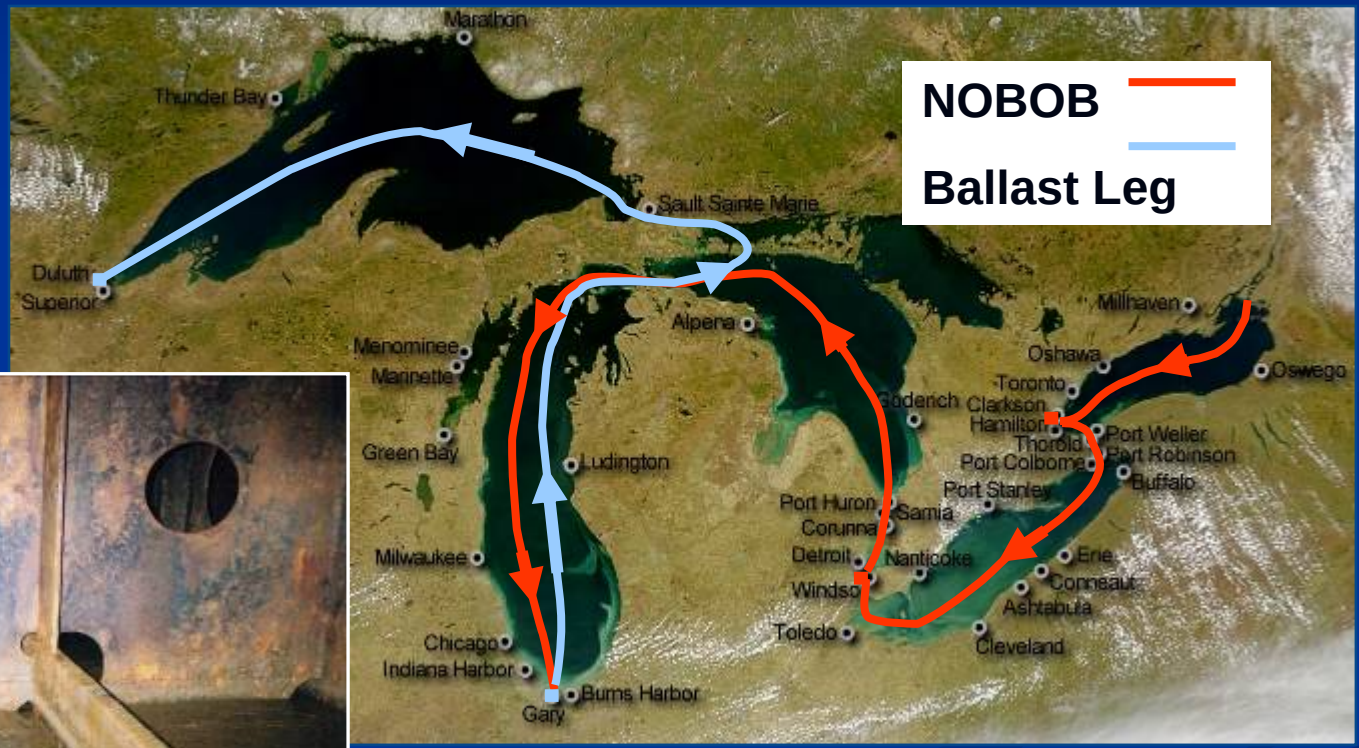
- 1989 Voluntary Best Practices (Canada)
- 1993 Ballast Water Management Regulations(U.S.)
- 1999 Mandatory Ballast Water Reporting (U.S.)
- 2000 National Ballast Water Guidelines (Canada)
- 2004 Civil Penalties for Non Submission (U.S)
- Aug 2005 Best Management Practices for No Ballast On Board (NOBOB) vessels (U.S.)
- June 2006 Ballast Water Regulations including NOBOB requirements (Canada)



# NOBOB Challenges

- NOBOB *No Ballast On Board*
- 2005 NOAA/GLERL Research confirmed the risk of spread of ANS through residual ballast water and sediment in tanks once ballasted then de-ballasted in Great Lakes
- 70-80% of voyages into Great Lakes are NOBOB

# NOBOB does not mean no risk of invasion!

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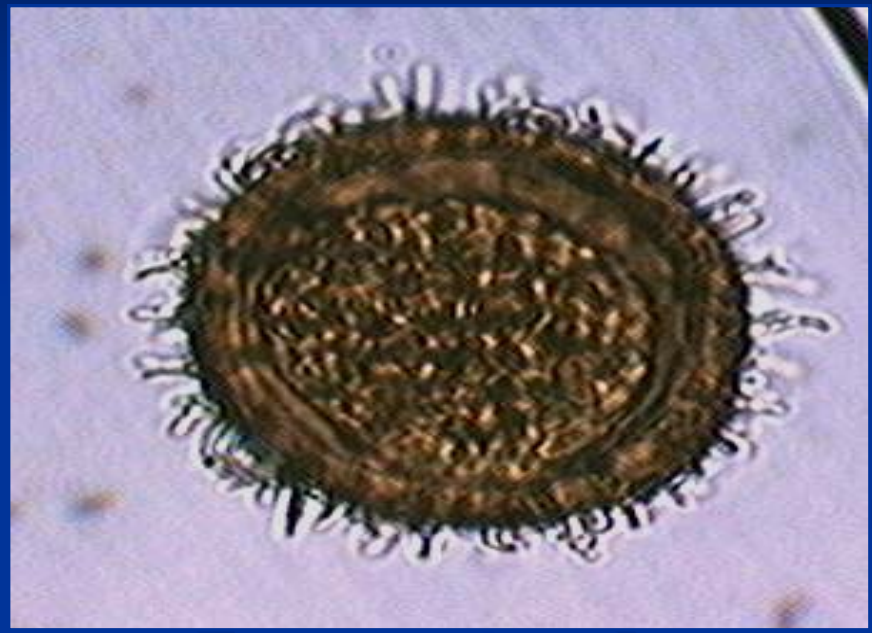
# What are NOBOBs carrying?

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# Great Lakes Ballast Water Working Group

- U.S. Coast Guard
- Transport Canada
- St. Lawrence Seaway Management Corporation
- St. Lawrence Seaway Development Corporation

# Great Lakes Ballast Water Working Group Mission Statement

Reduce the risk of introducing Aquatic Invasive Species into the Great Lakes via ballast water by enforcing existing regulations and educating mariners in Best Management Practices

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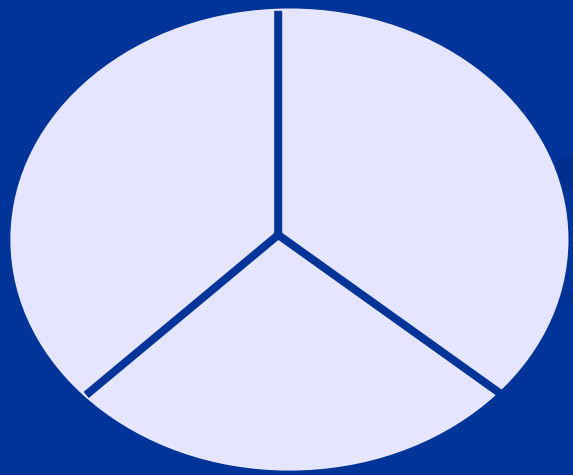
# Joint Ballast Water Management Exam Program

Ballast Water Management Practices



Ballast Water Reporting

Salinity Testing of Tanks

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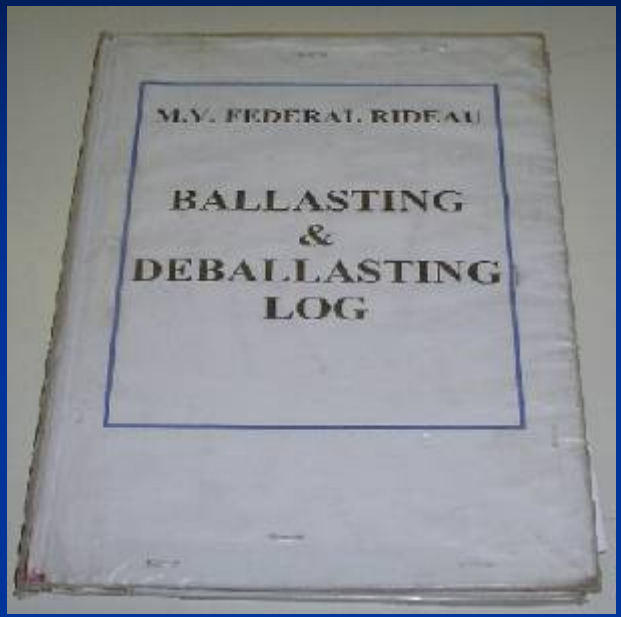
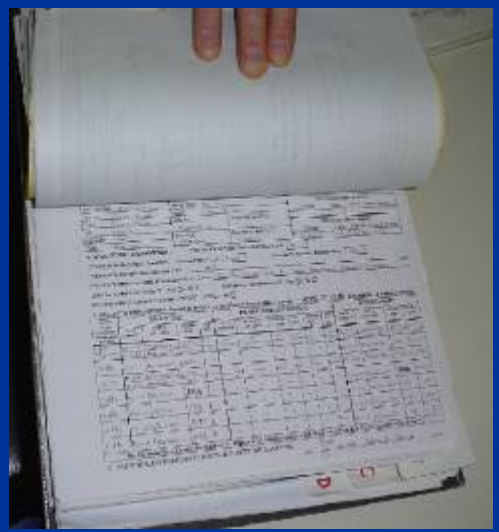
# Ballast Water Management Practices




- Review records, logs
- Interview vessel crew



# Joint Agency BWM Exam Report

- One job-aide is used by all agencies
- Questionnaire includes questions that cover requirements of all 4 jurisdictions
- Agencies share results with each other
- Enforcement rights retained by each agency

# Great Lakes - St. Lawrence Seaway System
## Joint Agency Ballast Water Management Exam Report

*To be filled out by the attending inspectors from*

**Canada, St. Lawrence Seaway Corporations, or United States**

1. SHIP NAME _____ 2. FLAG _____

3. IMO No. _____ 4. LAST PORT OF CALL _____

5. OWNER _____ 6. MANAGER (TECHNICAL) _____

7. ARE COPIES OF THE FOLLOWING PUBLICATIONS ON BOARD?

a) IMO RESOLUTION A 868 (20): YES ☐ NO ☐

b) US 33 CFR 151 SUBPARTS C & D - BALLAST WATER MANAGEMENT FOR CONTROL OF NON INDIGENOUS SPECIES IN THE GREAT LAKES (C) AND WATERS OF THE UNITED STATES (D): YES ☐ NO ☐

c) 70 FEDERAL REGISTER 51831 - BALLAST WATER MANAGEMENT FOR SHIPS ENTERING THE GREAT LAKES THAT DECLARE NO BALLAST ON BOARD: YES ☐ NO ☐

d) CANADA'S BALLAST WATER CONTROL AND MANAGEMENT REGULATIONS: YES ☐ NO ☐

e) TP 13617 E - A GUIDE TO CANADA'S BALLAST WATER CONTROL AND MANAGEMENT REGULATIONS : YES ☐ NO ☐

f) THE SHIPPING FEDERATION CODE OF BEST PRACTICES FOR BALLAST WATER MANAGEMENT: YES ☐ NO ☐

8. IS THERE A BALLAST WATER MANAGEMENT PLAN (BWMP) ON BOARD? (IF NOT PROCEED TO QUESTION 19) YES ☐ NO ☐

9. THE BWMP IS PROVIDED BY: ☐ OWNER ☐ MANAGER ☐ OTHER _____

10. THE BWMP WAS REVIEWED BY: ☐ FLAG STATE _____ ☐ CLASS _____

11. IS THE BWMP SPECIFIC TO THIS SHIP? YES ☐ NO ☐

12. DO THE SENIOR OFFICERS DEMONSTRATE A WORKING KNOWLEDGE OF THE BWMP? YES ☐ NO ☐

13. DOES THE BWMP CONTAIN DETAILED INSTRUCTIONS FOR SUBMITTING BALLAST WATER REPORTS? YES ☐ NO ☐

14. DOES THE BWMP ACKNOWLEDGE SPECIAL REQUIREMENTS FOR GREAT LAKES ENTRY? YES ☐ NO ☐

15. DOES THE BWMP PRESCRIBE BEST MANAGEMENT PRACTICES? YES ☐ NO ☐

16. DOES THE BWMP CONTAIN PROCEDURES FOR FULL EXCHANGE? YES ☐ NO ☐

17. DOES THE BWMP CONTAIN PROCEDURES FOR MID OCEAN FLUSHING OF EMPTY TANKS? YES ☐ NO ☐

# Applicability Section explains different requirements

The following questions are directly related to regulations currently in force:

***United States:***

**33 CFR 151 – Subpart C and D. Ballast Water Management for Control of Non Indigenous Species in the Great Lakes (C) and Waters of the United States (D).**

#'s 8. 11. 12. 13. 14. 15. 16. 18. 21. 22.

***Canada:***

**Ballast Water Control and Management Regulations (2006)**

#'s 8. 10 (for Canadian Ships) 13. 14*. 15*. 16. 17. 18. 19*. 20*. 21*. 22*. 23*. 24*. 25.

**Seaway Practices and Procedures.**

#'s 13. 14. 15*. 16*. 18*. 19*. 20*. 21*. 22*. 23*. 24*.

* By reference to The Shipping Federation of Canada Code of Best Practices for Ballast Water Management

# NOBOB Salinity Testing

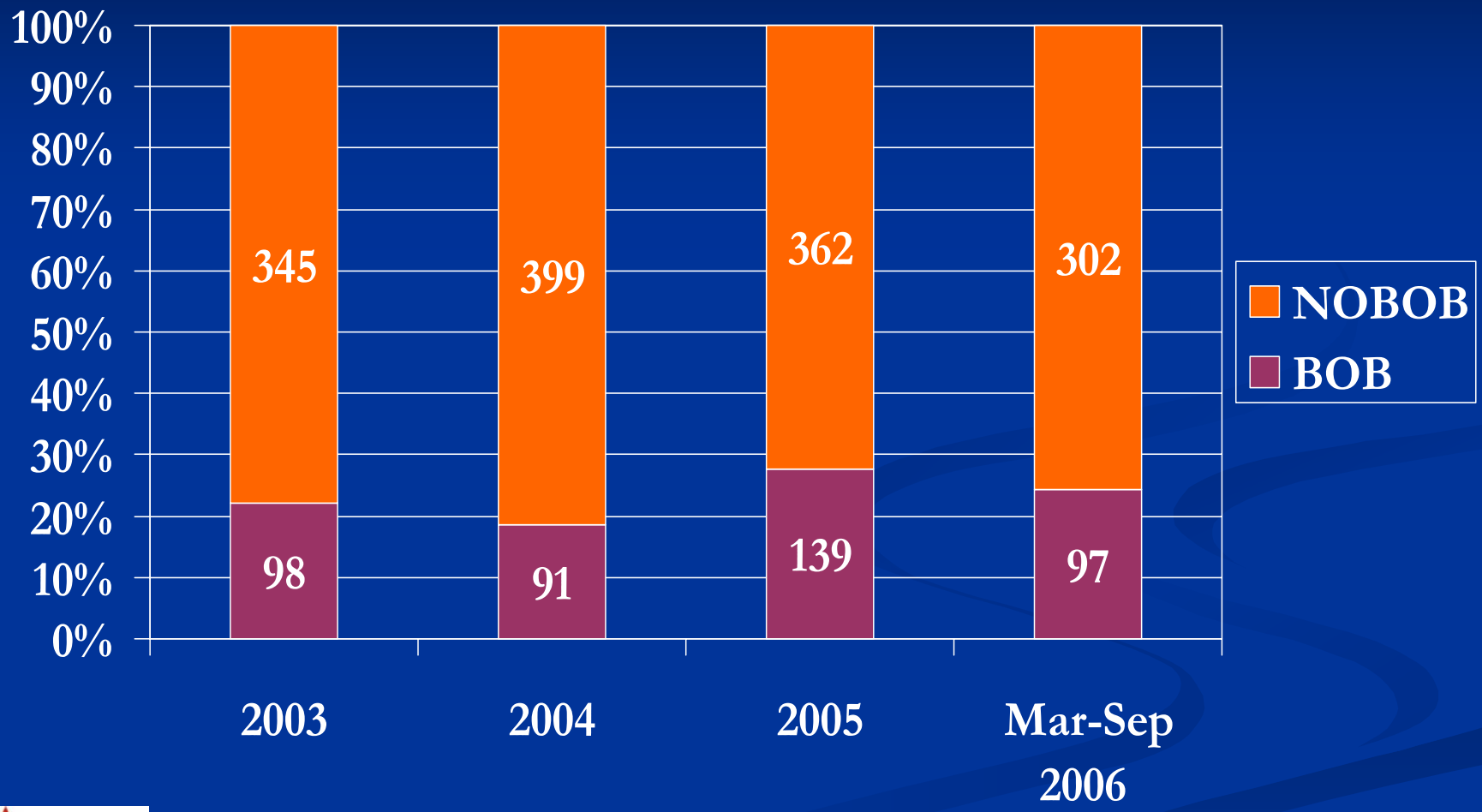
- If enough residual is present, a sample is raised to the deck and sampled for salinity using a refractometer
- Looking for 30 ppt salinity residual water

# Ballast Water Working Group Objectives

- Continue 100% exams of ballasted vessels
- Increase number of NOBOB exams
- Track adherence to Best Management Practices
- Decrease percentage of NOBOB tanks with low salinity residuals
- Increase percent compliance with management requirements

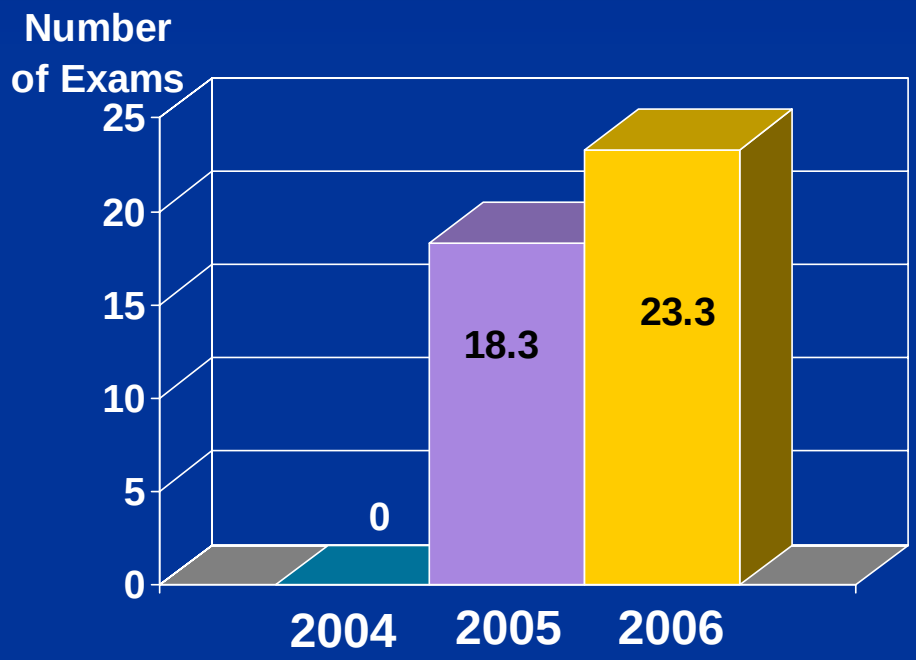


# Ballasted vs. NOBOB



# NOBOB Exams

Goal: Increase the number of NOBOB exams




## 2004

**0 NOBOB Ship Exams**

## 2005

147 NOBOB Ship Exams

**Average 18.3 exams per month**

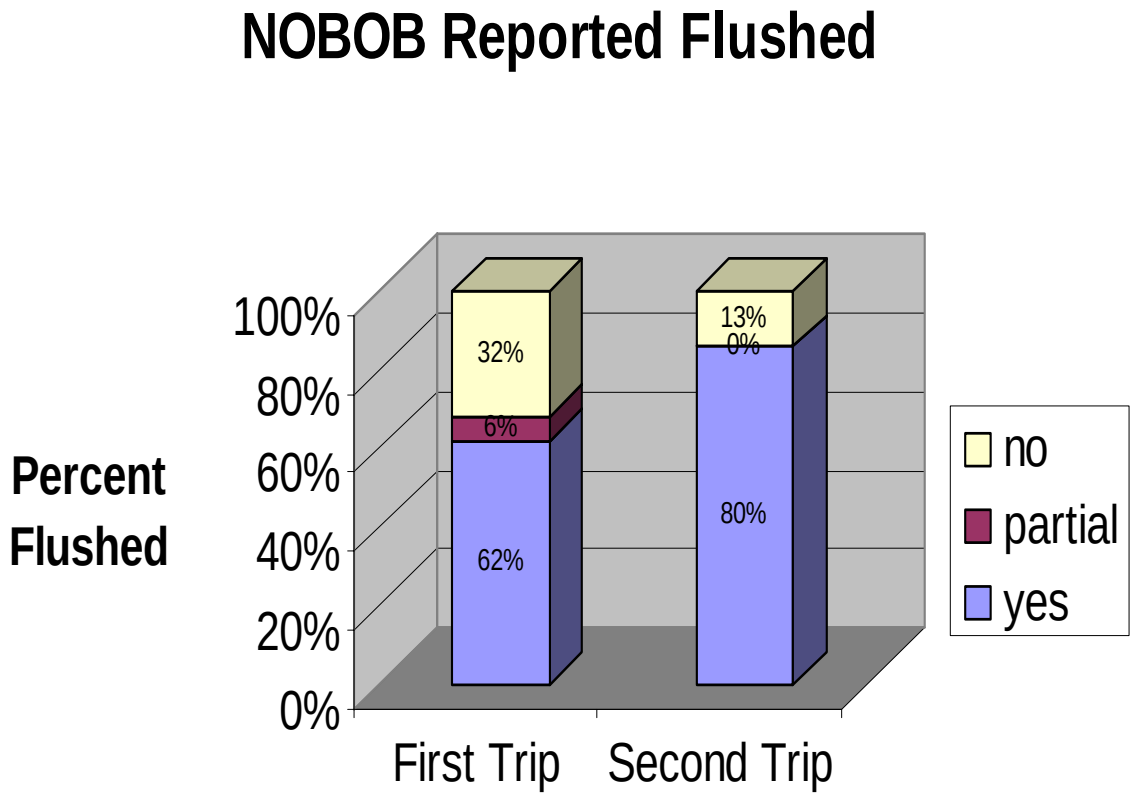
## 2006 Mid-Year Mar- July

140 NOBOB Ship Exams

**Average 23.3 exams per month**

# 2006 NOBOB Exam Results

- Total # NoBOB vessels = 208
- Vessels inspected = 140 (67%)
- Example: M/V Sofia

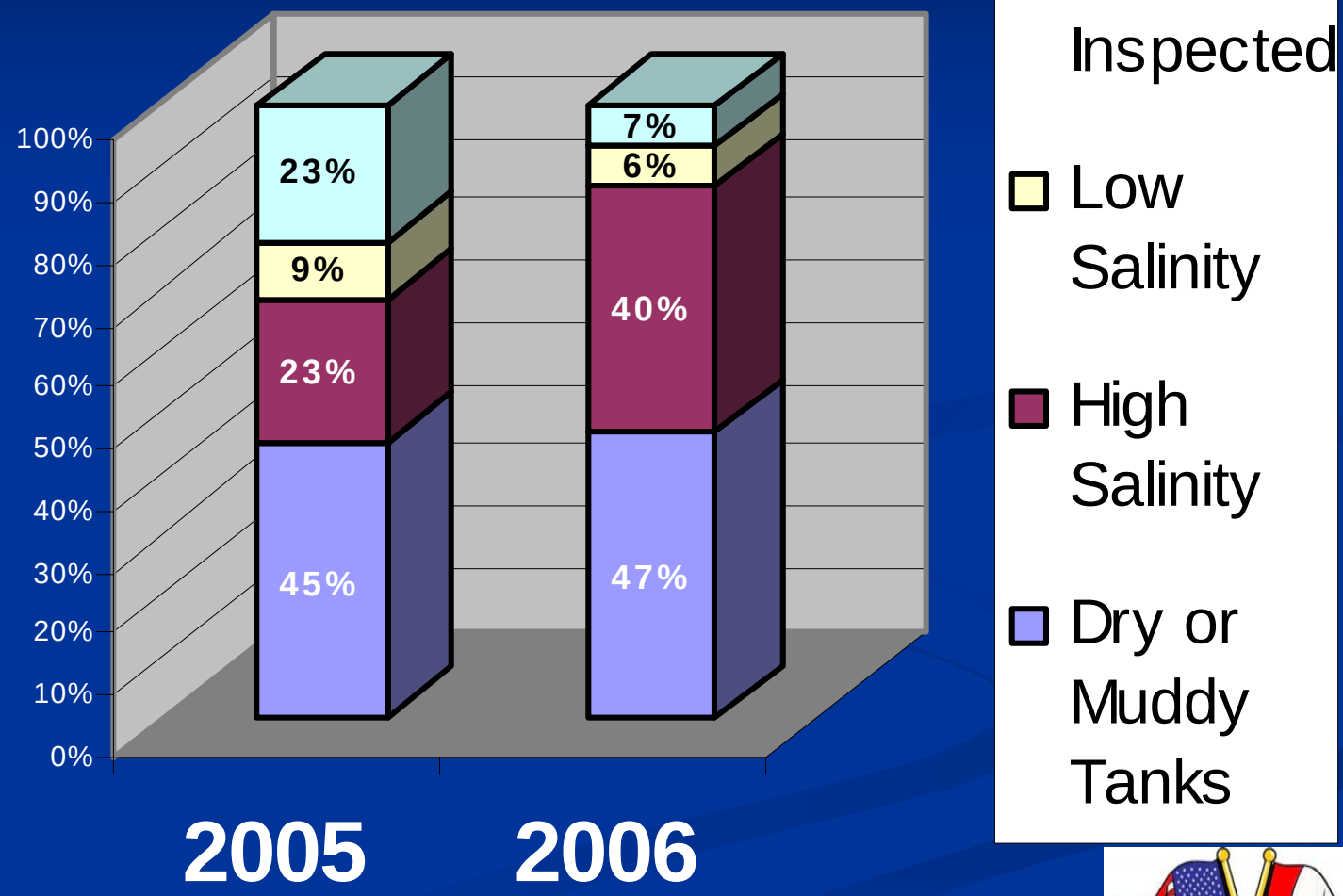


# NOBOB TANK EXAM RESULTS

Goal: Decrease number of untreated tanks

Total # Tanks Inspected:

2005: 3049
2006: 2845



# Ballast Water Management

- Documentation Exam administered by St. Lawrence Seaway on records, logs and plans = 161
  - Percentage with minor deficiencies = 38%
- Enforcement Action issued by USCG for missing plans = 5 (3%)
- Letter of Retention issued by USCG for non-compliant ballast water = 5 (9%)
- Increased outreach & coordination with shipping companies and agents



# Future Plans

Build common data base

Harmonize reporting requirements

Continue Joint Agency Exam Form

Improve vessel targeting and analysis