

California's Ballast Water Management and Control Program

Maurya B. Falkner
California State Lands Commission

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Ballast Water Management for Control of Nonindigenous Species

- **Signed into law October 8, 1999**
- **Effective January 1, 2000**
- **Sunsets in January 2004**

Established:

- **Mandatory, Statewide, Multi-Agency
Ballast Water Management and Control Program
Emphasizing Research and Development**
- **Applies to all vessels that enter CA waters after
operating outside the West Coast EEZ.**

Federal Program versus California Program

	<u>USCG</u>	<u>AB703</u>
BW Management <i>- Retention, mid-ocean exch, alt. treatment (ship or shore)</i>	Voluntary	Mandatory
BW Reporting Form	Mandatory	Mandatory
BW Management Plan	Voluntary	Mandatory
Fee Collected per Vessel Voyage <i>- Exotic Species Control Fund</i>	No	Yes
Baseline Biological Inventory	No	Yes
Research Alternatives Tech.	No	Yes
Civil Penalties	No	Yes

Agency Responsibilities

- ***Board Of Equalization***

Collect per Vessel Voyage Fee

- ***California Department of Fish & Game***

Conduct Baseline Biological Inventory

Prepare Report to Legislature

- ***State Water Resources Control Board***

Evaluate Alternatives to Mid-Ocean Exchange

Prepare Report to Legislature

- ***California State Lands Commission***

Establish per Vessel Voyage Fee

Implement an Inspection and Monitoring Program

Prepare Report to Legislature

Board of Equalization

Fund Status and Projections

<u>Costs</u>	<u>PY's</u>	<u>Program Totals</u> (Jan 1, 2000 - Dec 31, 2003)
CSLC	5.2	\$4,216,000
BOE*	4.7	
CDFG	2.8	\$2,655,500
SWRCB	0.9	\$ 749,000
Totals	13.6	\$7,620,500

** Included in CSLC budget*

Assumptions used to set Fee in 2000 (\$400/vessel voyage):

Estimated - 6000 Qualifying Voyages annually

75% Fee Submission

Assumptions used to reset Fee in 2002 (\$200/vessel voyage):

Actual - 6000 Qualifying Voyages

98% Fee Submission

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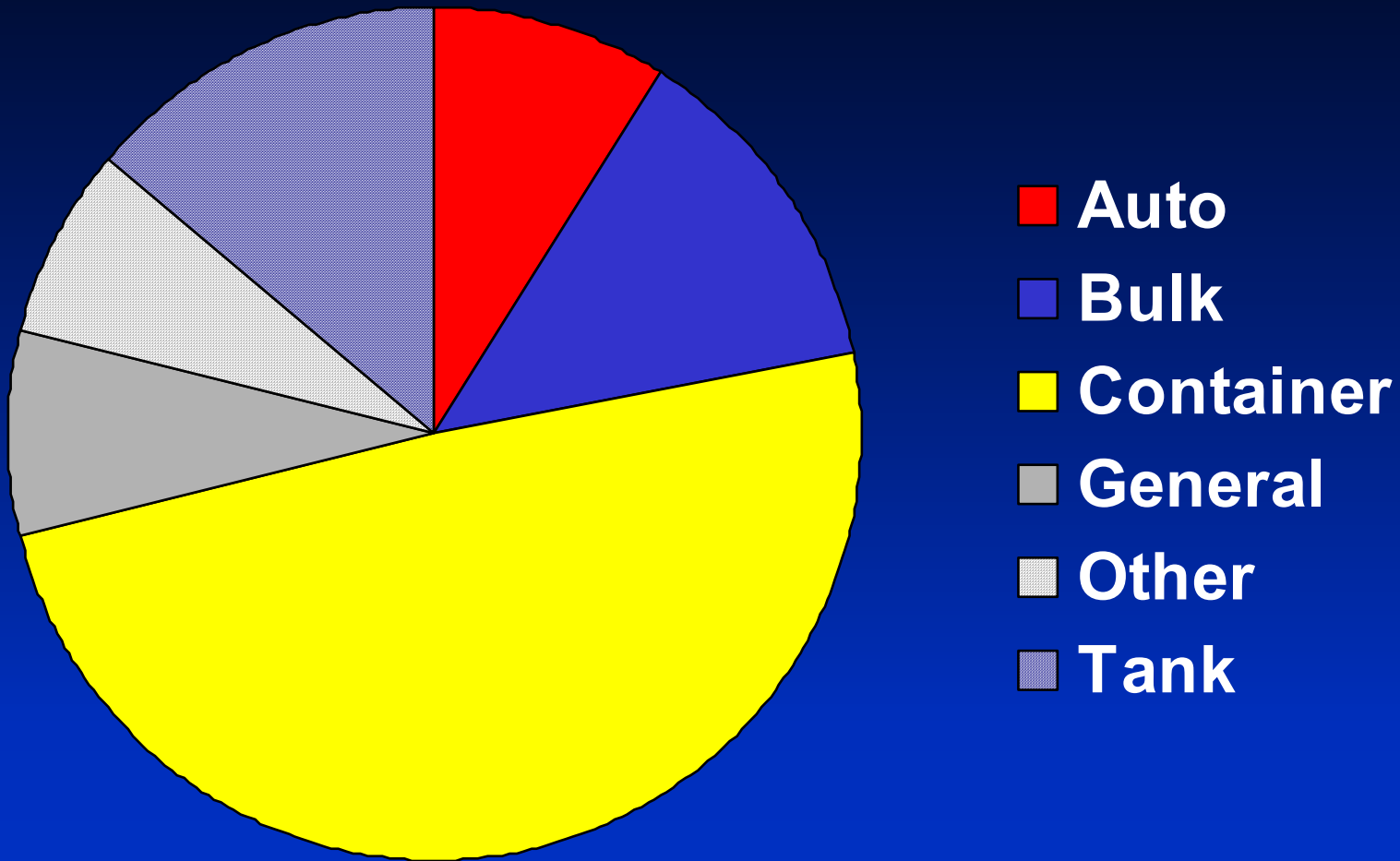
Marine Facilities Division

- **Establish fee amount/TAG - \$200/voyage**
based on \$7.6 million budget over 4 years
- **Data gathering & compilation**
BW reports, Inspections, Literature Review
- **Vessel inspection program**
2 offices, 16 Insp. ~25% coverage
**Targeted inspections*
- **Research**
Ship-Board Technology, BWE efficacy,
Verification Technology
- **Outreach/Education/Collaboration**
Public Meetings, Web page, etc.
- **Report due to Legislature January 31, 2003.**

Summary Stats - Form Submission

CA Port	Yr 2000 QVs (% Compliance)	Yr 2001 QVs (% Compliance)
Humboldt	24 (69)	13 (100)
Sacramento	57(82)	50 (96)
Stockton	103 (90)	108 (97)
Carquinez	224 (89)	264 (94)
Richmond	169 (89)	153 (93)
Oakland	571 (88)	542 (96)
San Francisco	95 (87)	72 (93)
Redwood	24 (72)	24 (96)
Hueneme	266 (97)	268 (92)
LA-LB	4868 (90)	4620 (94)
San Diego	309 (95)	231 (97)
Total	6710 (90)	6345 (94)

Vessels by Type - Statewide



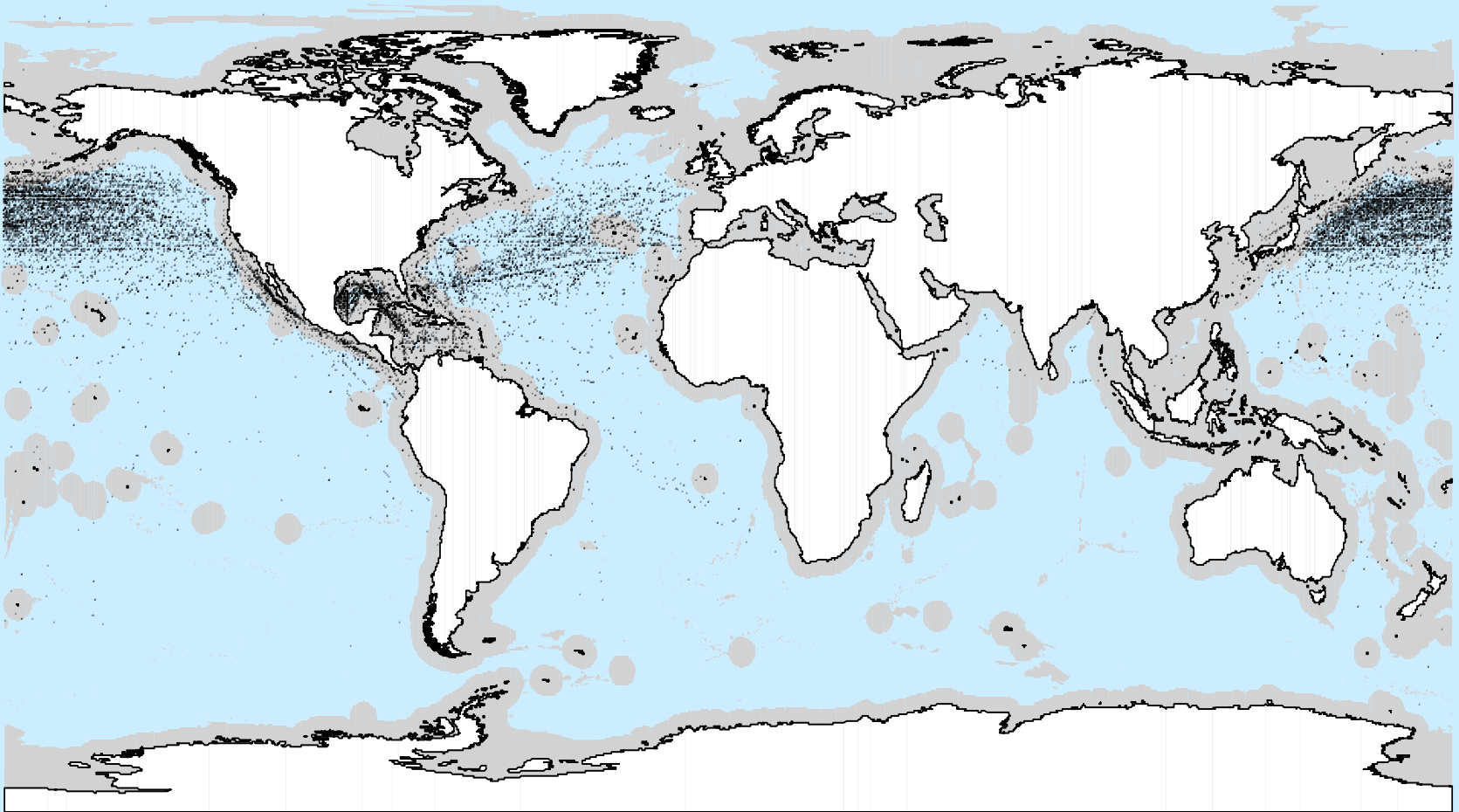
Summary Stats - Vessel Origin

Last Port of Call - Region	Yr 2000	Yr 2001
Asia	2023	2115
US West Coast	1403	1638
Mexico	897	976
Canada	414	391
South America	357	342
Central America	307	286
Hawaii	237	279
Pacific Islands	121	104
US Gulf Coast	69	70
Caribbean	49	71
New Zealand	48	58
Europe	40	55
Australia	32	51
Middle East	21	43
US East Coast	18	20
Pacific Lightering Zone	1	46
Africa	1	10

Summary Stats - Discharge Amounts

Dicharges by Port by Year

Port	BW Discharged (MT) Yr 2000	BW Discharged (MT) Yr 2001
Carquinez	377925.72	454656.20
Hueneme	20281.30	9966.24
Humboldt	42451.30	101286.99
LA-LB	5577384.81	5160090.36
Oakland	575093.85	724675.16
Redwood City	24468.13	60695.22
Richmond	126657.98	193893.05
Sacramento	371826.53	224179.38
San Diego	154544.15	178582.04
San Francisco	509357.70	830980.92
Stockton	118846.33	160271.83
Total	7,898,837.80	8,099,277.39



- Reported ballast water exchange locations
- Depth < 2000 m or within 200 nm coastal boundary

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Marine Facilities Division

Field Inspection Program

- **Offices in Hercules & Long Beach**
- **15 Inspectors or Specialists**

Vessel Compliance Monitoring

- **Coordinate with USCG**
- **Inspect ~25% of Vessel Calls**
- **Check Paper work**
- **Interview Crew**
- **Sample Ballast Water (Salinity)**
- **Outreach/Education**

RESEARCH

- **Alternative Treatment Systems**

Shipside

Filtration

Thermal

Ultraviolet Light

Anti-Fouling Coatings

Chemical Biocides - Chlorine, Ozone,
SeaKleen, Glutaraldehyde, Deoxygenation

Shoreside

Partnerships

- **Advanced Approval Process - USCG**
Joint evaluation of treatment technology
- **Efficacy Studies - Oakland-SERC**
Evaluation of BWE on container vessels
- **Characterize BW arriving in SF Estuary - SFSU**
- **Coastwise Vessel Traffic - PBWG**
State regulators, shipping industry, scientist
- **BW Outreach - USCG-SERC**
Assist USCG/SERC with outreach program expected in summer/fall 2002.

CSLC-MFD Partnerships

- **BW Technical Advisory Group**
Regulators and Regulated - Coordination/Outreach
- **US Coast Guard**
Coordination, data sharing & research
- **Pacific Ballast Water Group**
Regional coordination of management & research
- **West Coast Ballast Outreach Project**
Coordinate research & management for West Coast
- **Scientific Community**
Sharing data & vessel access
- **Technology Developers**
Evaluation of alternatives treatment technologies

Future

- **CA State Program**

(Reauthorization - 2003 Legislative Session)

Recommendations - Preliminary

- Continuation of state program
- Continued fee based program
- Application to all vessels (coastal and foreign)
- Standardize approval process for new technologies
- Standards development
- Research on appropriate indicators
- Continued research on treatment technology & compliance verification
- Continued periodic biological monitoring
- Continued field inspection program

Points of Contact

Maurya Falkner - Project Manager
(562) 499-6312 falknem@slc.ca.gov

Gary Gregory - Chief, Marine Facilities Division
(562) 499-6312 gregorg@slc.ca.gov

***CSLC Web Page: <http://www.slc.ca.gov>**