

# NATIONAL STEEL AND SHIPBUILDING COMPANY'S OPENING STATEMENT

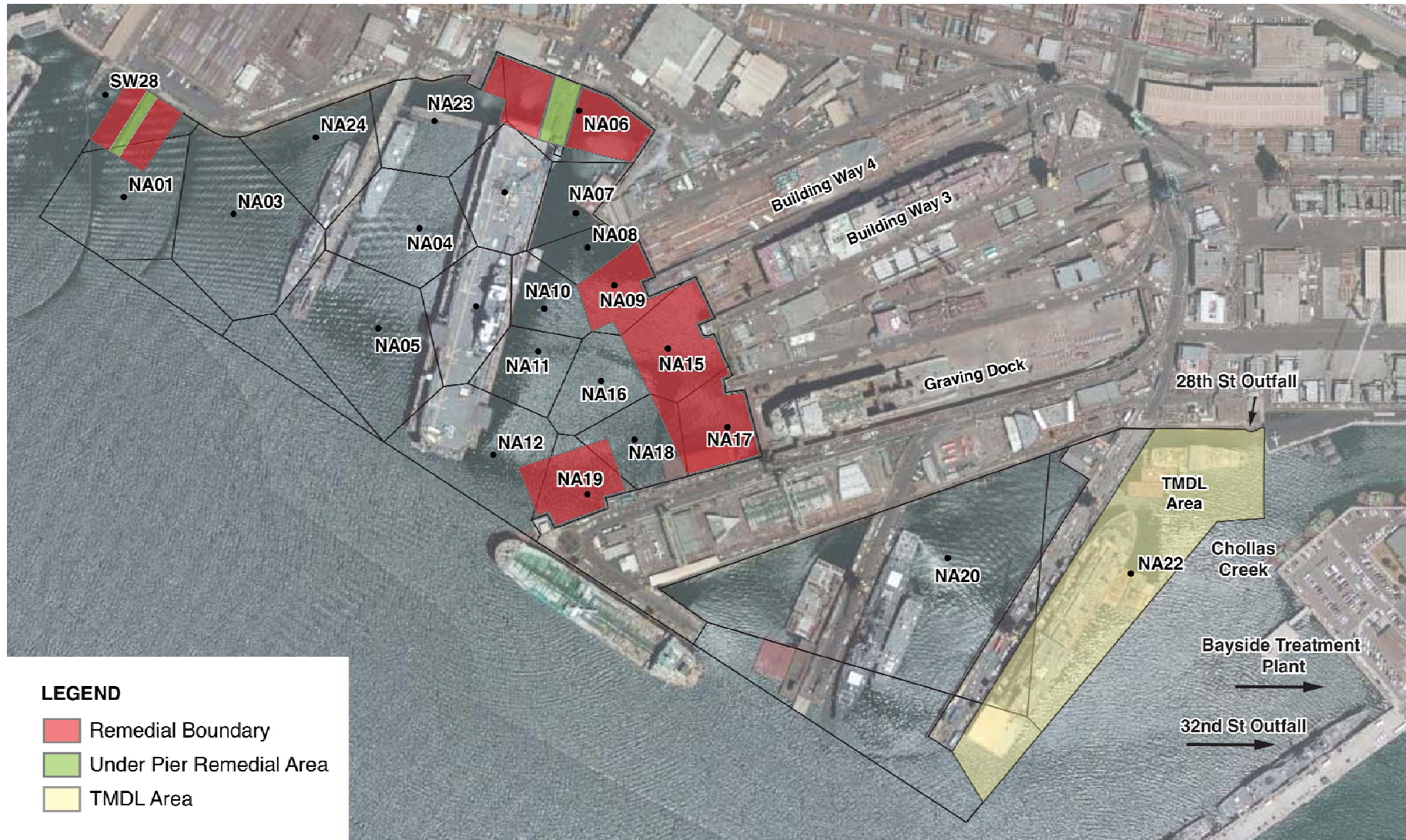
**In the Matter of Tentative Cleanup and  
Abatement Order No. R9-2011-0001 (Shipyard  
Sediment Cleanup)**

**Kelly E. Richardson**

**November 9, 2011**

**LATHAM & WATKINS<sup>LLP</sup>**

# NASSCO Shipyard Site



# Roadmap to a Final Order

- Long road to get here today
  - 10+ years
  - Emotionally/Politically Charged
  - Hearings in 2000/01
    - Allegations of “dead zone”
  - Study in 2001/02
    - Photographic evidence
    - Testing data
    - 253 fish caught
    - *Confirms thriving ecosystem*
  - Analysis and preliminary orders 2005-08
  - Mediation 2008-present
- Purpose of this hearing is to hear and weigh the evidence
  - Look at the science; not sound bites
- Arguments you will hear vs. what the scientific evidence demonstrates

# NASSCO's Position

- NASSCO supports a healthy bay
- NASSCO agrees with CUT that the order is very conservative
  - No significant impairment to beneficial uses
  - Extremely conservative/protective assumptions in order
- Cleanup levels are unprecedented
- Natural attenuation is occurring

# Who is NASSCO?

- NASSCO is the largest private employer in San Diego, providing 3,000+ jobs to San Diego workers
- NASSCO has 50 years of history in San Diego
- NASSCO is the only remaining shipyard on the West Coast devoted to the construction of large commercial and military vessels
- NASSCO also conducts ship repair work essential to Navy readiness and national defense

# Millions Invested in Environmental Stewardship

- Millions invested to make NASSCO a “zero discharge” facility by 2000
- First commercial shipyard in the country to be ISO-14001 certified for Environmental Management System
- All employees participate in ongoing pollution prevention training programs to establish and maintain high standards of environmental awareness

# RWQCB Recognition of NASSCO's Environmental Stewardship



NATIONAL STEEL AND SHIPBUILDING COMPANY  
A GENERAL DYNAMICS COMPANY

September 2, 2004

John Robertus  
California Regional Water Quality Control Board  
Executive Officer  
9174 Sky Park Court Suite 100  
San Diego, CA 92123-4340

Subject: NASSCO 3rd Quarter Environmental Newsletter

I'm enclosing a copy of our environmental newsletter for the third quarter. The articles cover a variety of environmental topics that apply both within our facility and within San Diego County. We want our employees to be well-informed on environmental issues in the shipyard as well as in our community.

If you or someone else from your organization would like to submit an article for a future issue please send it to me via mail or e-mail at [kchrist1@nassco.com](mailto:kchrist1@nassco.com). The deadline for submitting articles for our next newsletter is November 12, 2004.

Additionally, I would welcome any feedback you may have for making it better. If you'd like to discuss this newsletter, please call me at (619) 544-7963.

Sincerely,

*Kacey Christie*  
Kacey Christie  
Environmental Engineering Specialist

03-066.02

2798 HARBOR DRIVE • SAN DIEGO, CA 92113 • PO. BOX 85278 • SAN DIEGO, CA 92188-5278  
TELEPHONE (619) 544-3400

03-066.02 *11/9*

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*JK 9/3  
mike m 9/6  
John P. 9/8  
SEP - 3 P 12:  
LET'S  
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NO EO REPORT  
ITEM!  
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# Balance: Incremental Benefit Justifies Incremental Cost

- Resolution 92-49
- \$72 million cleanup ~ 1,000+ waterfront jobs
- Balance all values – social, economic, environmental
- Loss of competitiveness of local industry
- Impacts ALL of us
  - Funding by City of San Diego, U.S. Government, Port District, Regulated Utility
- Thus, need balance; ensure benefit obtained for each additional \$ spent on cleanup



# Overview of Beneficial Uses

AQUATIC LIFE	AQUATIC-DEPENDENT WILDLIFE	HUMAN HEALTH
<p>Small organisms that live in Bay sediment:</p> <ul style="list-style-type: none"><li>• Worms</li><li>• Clams and mussels</li><li>• Snails</li><li>• Shrimps</li><li>• Shellfish</li><li>• Larvae</li><li>• Fish</li></ul>	<p>Larger organisms that forage in the Bay:</p> <ul style="list-style-type: none"><li>• Birds</li><li>• Turtles</li><li>• Sea lions</li></ul>	<p>Humans that eat fish from the Bay:</p> <ul style="list-style-type: none"><li>• Recreational fishers</li><li>• Subsistence fishers</li></ul>

# Aquatic Life Data Results

## 93 Same or Better Than Background



# Aquatic Life Data Results

**93 of 98 Same or Better Than Background**



# Is There Risk of Human Health Impairment at NASSCO?

## **NO.** The DTR's Finding Depends Upon All of the Following Unrealistic Assumptions:

1. Anglers fish daily at the Shipyard.
  - Despite security measures, including booms, Navy patrols, 24/7/365 military restrictions
2. Anglers eat fish from the Shipyard every day for 30 to 70 years.
3. Subsistence anglers eat the entire fish.
  - Eyes, skin, bones, guts, etc.
4. Anglers consume nothing other than the fish species with the highest chemical concentration.
  - Never catch other species with lower concentrations
5. All fish contain the maximum observed chemical concentration found in any single fish.
  - No variability

# NASSCO Shipyard Security



# So...Is There Risk of Human Health Impairment at NASSCO?

**NO. Using realistic but conservative assumptions:**

- 1. Anglers *sometimes* fish at the Shipyard.**
- 2. Anglers eat fish from the Shipyard for 30 years.**
- 3. Subsistence anglers *sometimes* eat the entire fish.**

**THEN, no significant risk to human health**

# So...Is There Risk of Human Health Impairment at NASSCO?

## NO. EVEN UNDER DTR'S DATA

“The 2004 U.S. EPA advisory recommends that people avoid eating fish and shellfish with the highest levels of mercury... Fish listed as having lower levels of mercury include... light canned tuna (0.12 mg/kg).”  
DTR at p. 28-18

DTR Table 28-9	Inside NASSCO
Mercury (total, mg/kg)	0.12

Q EPA recommends eating... fish with lower levels of mercury such as light canned tuna with concentrations of .12 milligrams per kilogram, is that correct?

A Yes

Q Mr Alo isn't that precisely the data for the fish fillets within the NASSCO leasehold?

A Yes

*(Deposition of Tom Alo, 116:8-16)*

Q. [F]or the PCB congeners... wouldn't you agree that inside the leasehold fish fillets are at a safer level than they are at the reference areas?...

THE WITNESS: Yes.

*(Deposition of Tom Alo, 116:25-117:12)*

# Aquatic-Dependent Wildlife Assumptions



## ORDER'S ASSUMPTIONS

1. *Receptor species obtain 100% of diet from fish in the Shipyard*

## IS THE ASSUMPTION REALISTIC?

**NO** Should be calculated for each species based on evidence of habitat, home range and foraging habits.



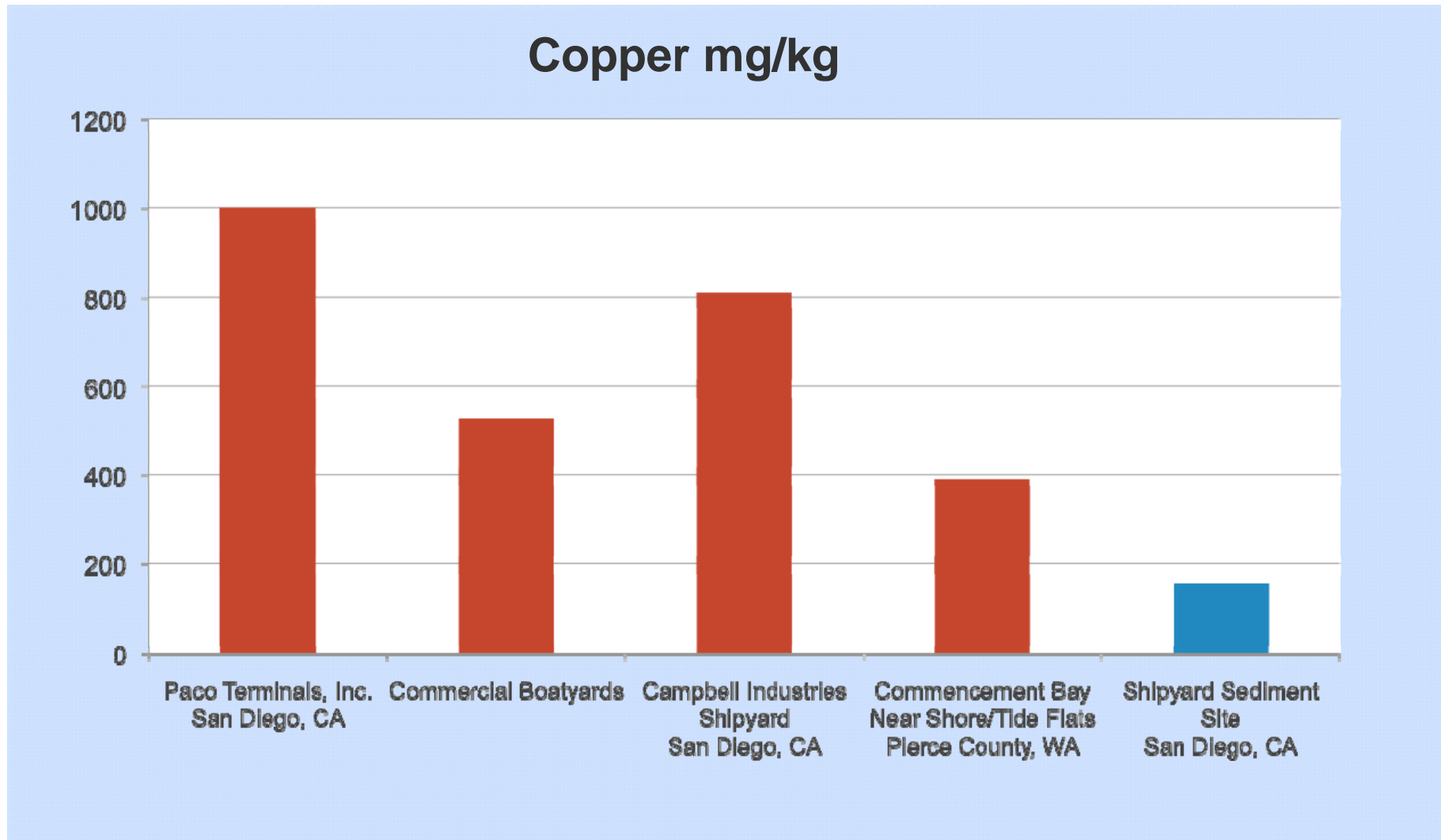
2. *Any exposure above no adverse effect level is "significant."*

**NO** Risk is not shown unless theoretical exposure exceeds lowest level at which adverse effects are observed.

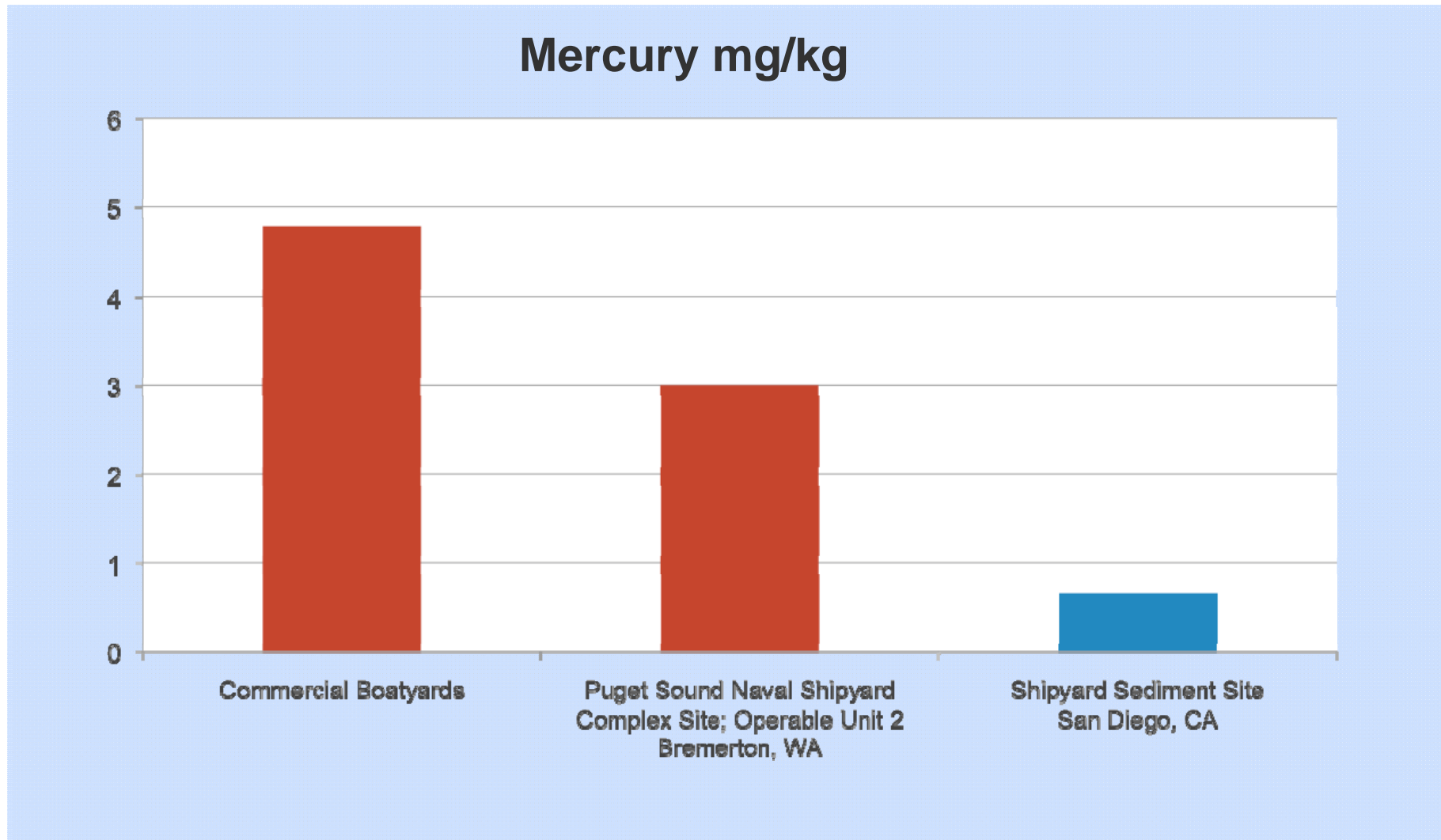




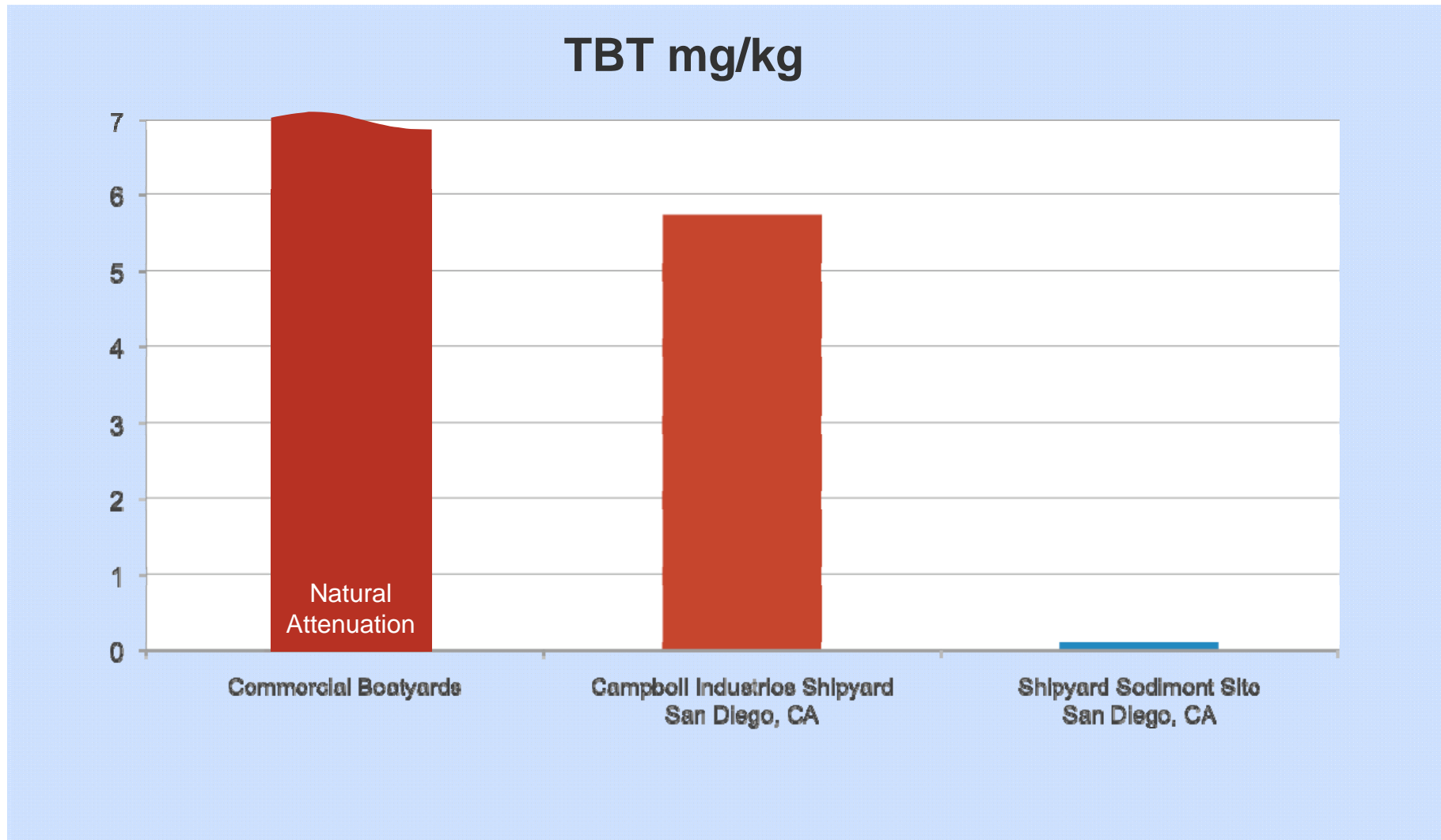
# NASSCO Cleanup Levels Are Unprecedented



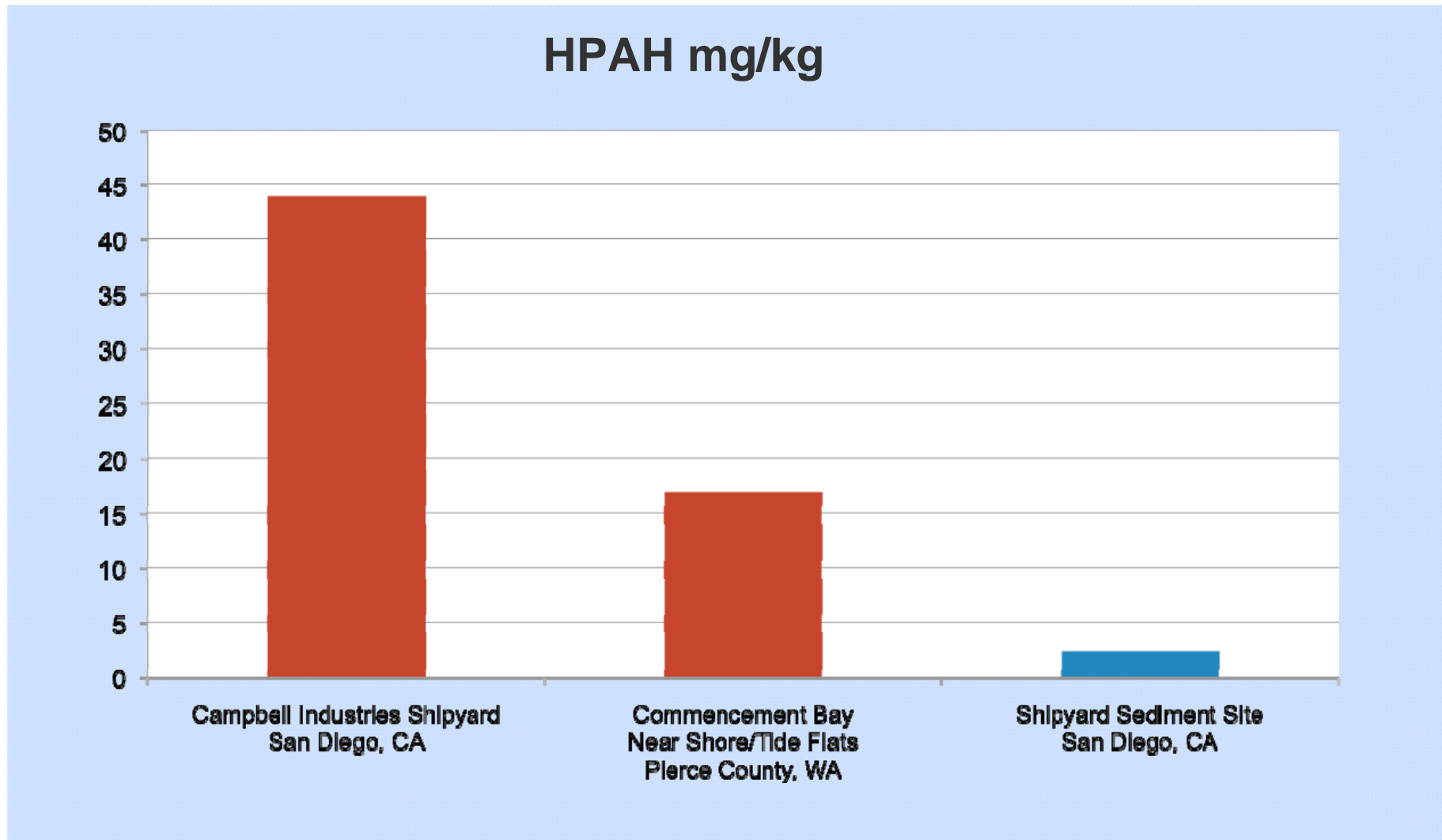
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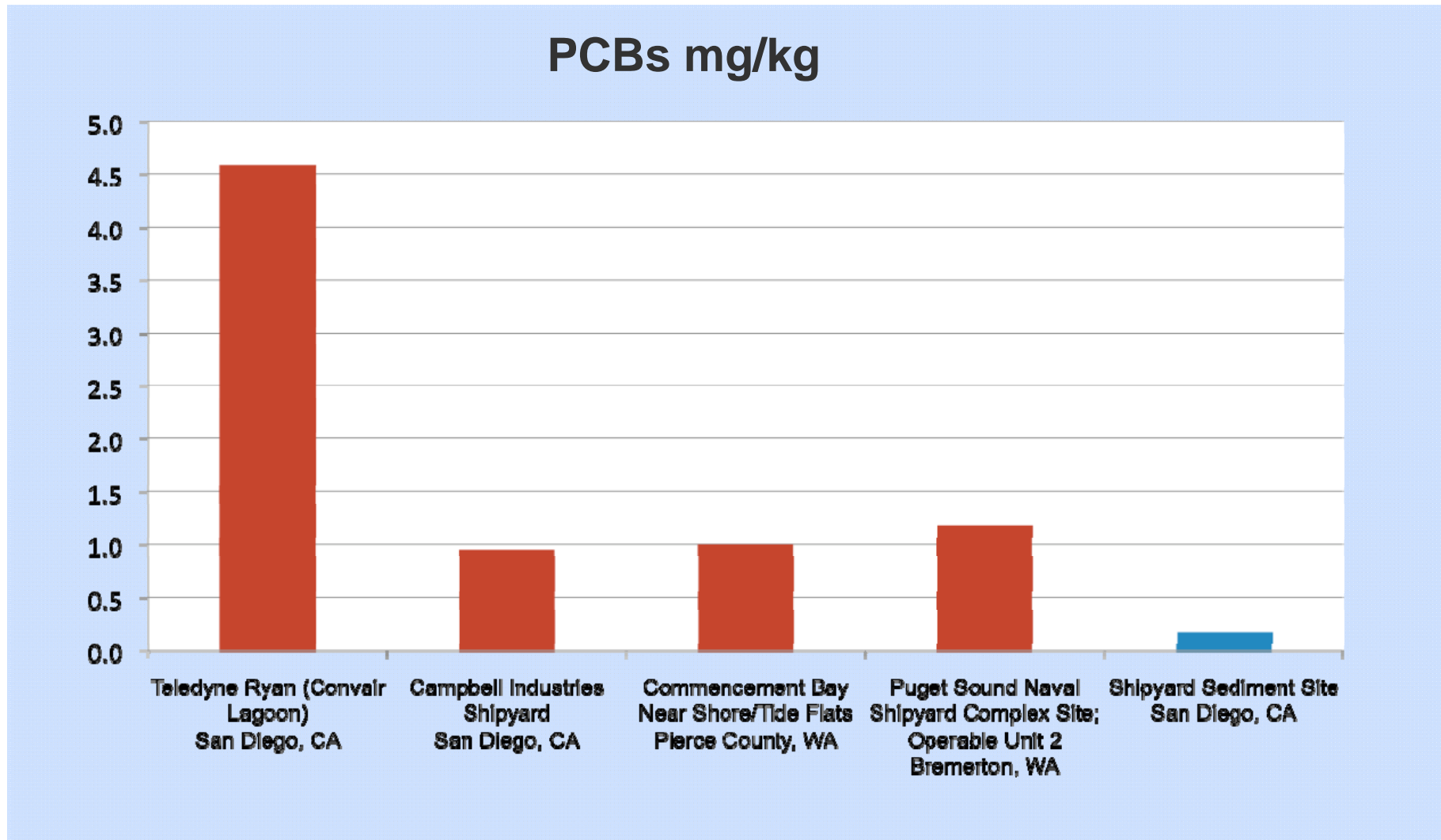
# NASSCO Cleanup Levels Are Unprecedented



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# NASSCO Cleanup Levels Are Unprecedented



# The Law Requires Similar Sites To Be Treated Similarly

- The “*Regional Water Board shall: . . .*

*[p]rescribe cleanup levels which are consistent with appropriate levels set by the Regional Water Board for analogous discharges that involve similar wastes, site characteristics, and water quality considerations.”*

Regulation: State Water Board Resolution No. 92-49, at II.A.9.

# The Order Treats NASSCO Differently Than Other Similar Sites

- NASSCO cleanup levels are “the most stringent selected for any sediment remediation ever conducted in San Diego Bay.”  
*Cleanup Team’s RFA Responses to BAE, at No. 56.*
- The Board “has approved sediment cleanup levels at other sites less stringent than the tentative cleanup levels.”  
*Cleanup Team’s RFA Responses to NASSCO, at No. 21.*
- The Board “has never required remediation of background sediment quality levels for any other site within San Diego Bay.”  
*Cleanup Team’s RFA Responses to NASSCO, at No. 20.*

# The Order Treats NASSCO Differently Than Other Similar Sites

- NASSCO cleanup levels are substantially more stringent than those at Campbell, even though the sites:
  - are in the same water body;
  - are less than one mile apart;
  - have the same type of sediment, historic uses, beneficial uses, and receptors of concern; and
  - have similar operations, NPDES permits, discharges, and wastes.

*Deposition of David Barker, at 354:20-363:10, 365:8-23.*



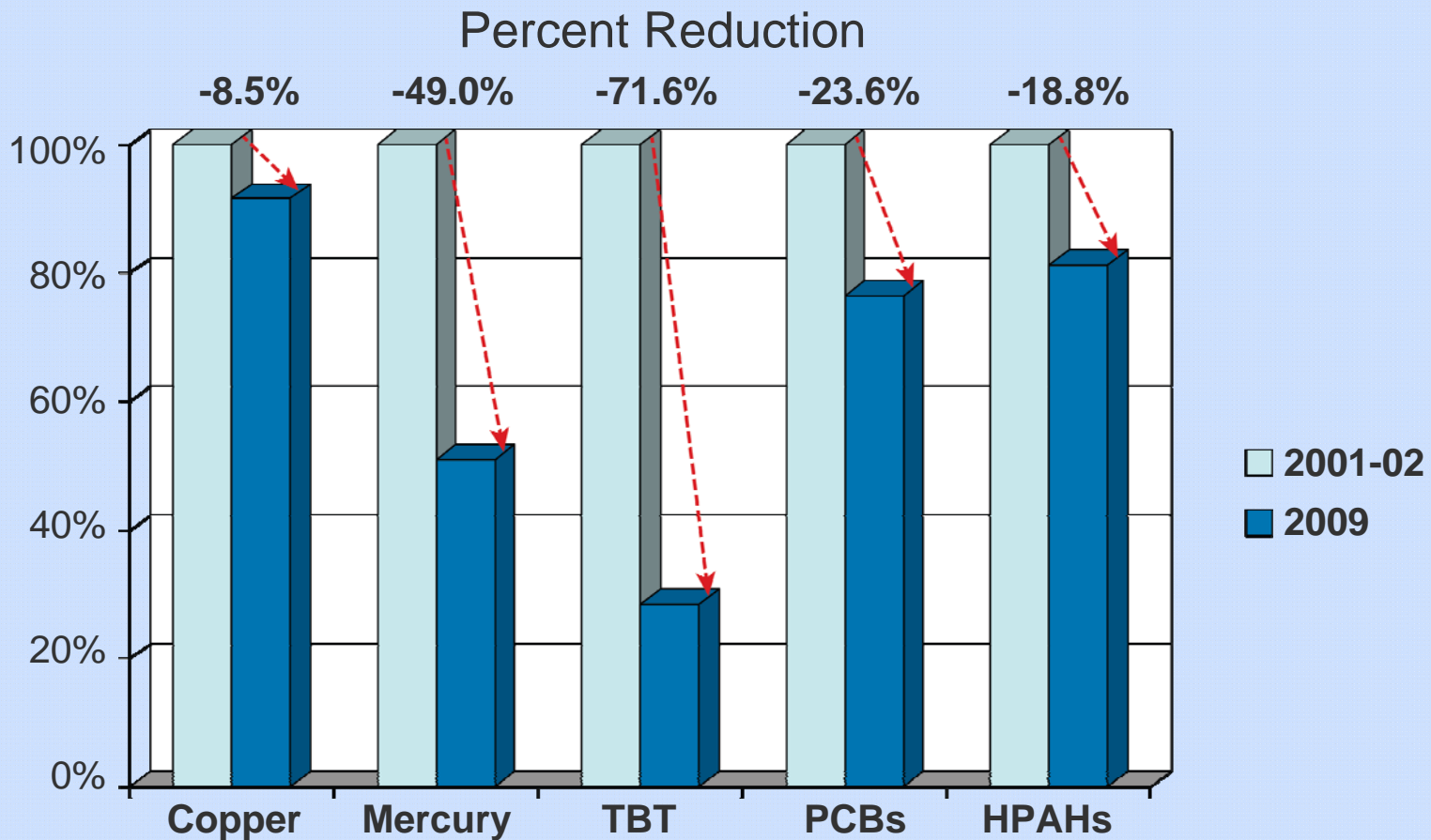
# Cleanup Levels at NASSCO and Campbell Shipyard Sites

<b>Pollutants of Concern</b>	<b>NASSCO Shipyard Sediment Site</b>	<b>Campbell Shipyard Site</b>
Copper	159 mg/kg	810 mg/kg
Mercury	0.68 mg/kg	None Specified
TBT	110 ug/kg	5,750 ug/kg
HPAH	2,451 ug/kg	44,000 ug/kg
PCBS	194 ug/kg	950 ug/kg

# Remediating to Extremely Low Cleanup Levels

- Purpose of dredging: create conditions for recolonization of a mature benthic community
- BUT, mature benthic community already exists
  - Photographs (SPI), and
  - ALL benthic community analyses were equivalent to SD background conditions
- **Therefore, this order will require the dredging/destruction of a mature, thriving benthic community in order to hopefully, eventually create a new, mature benthic community.**

# Natural Attenuation is Occurring



Comparing 2001/02 and 2009 sampling results from NA23, NA24, SW06, SW19, SW30

# NASSCO Shipyard Sediment Site Chronology



# NASSCO Shipyard Sediment Site Chronology

1900 ————— 1965

**SITE USED FOR INDUSTRIAL ACTIVITIES UNRELATED TO NASSCO**  
Including Lumber, Canning, Fish Processing, Metalwork & Ship Building

1888 ————— 1943

**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls



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**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls

**BAYSIDE**  
**TREATMENT PLANT**



1943

**Bayside  
Treatment Plant**

Effluent is discharged from 32nd Street outfall through 1963. Plant is subject to frequent overflows of raw sewage.

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**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls

**BAYSIDE TREATMENT PLANT**



**1943**

**Bayside Treatment Plant**  
Closures  
discharged from  
32nd Street outfall  
through 1953.  
Plant is closed  
& frequent  
overflows of  
raw sewage.

**1951**

**Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7' THICK SLUDGE BEDS**  
Navy complains sewage discharges are causing corrosion to ship hulls. Martinolich Shipbuilding Co. is reprimanded for dumping sandblast grit to the Bay.

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**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls

**BAYSIDE TREATMENT PLANT**

'88 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040

**1943**

**Bayside Treatment Plant** Closures are discharged from 32nd Street outfall through 1953. Plant is closed & frequent overflows of raw sewage.

**1951**

**Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7' THICK SLUDGE BEDS**  
Navy complains sewage discharges are causing concern with public. Mendelich Shipbuilding Co. is recommended for dumping sediment pit to the Bay.

**1955**

**Bay is Declared Contaminated & Quarantined**



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**BAYSIDE TREATMENT PLANT**

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**1943**

**Bayside Treatment Plant** Closes. Sewage discharged from 32nd Street outfall through 1953. Plant is closed to frequent overflows of raw sewage.

**1951**

**Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7' THICK SLUDGE BEDS**  
Navy complains sewage discharges are causing concern with public. Mendocino Shipbuilding Co. is recommended for dumping sediment pit to the Bay.

**1960**

**NASSCO First Occupies Site**

**1955**

**Bay Is Declared Contaminated & Quarantined**

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**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls

**BAYSIDE TREATMENT PLANT**

1963  
Sewage discharges diverted to Point Loma plant

'88 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040

**1943**  
Bayside Treatment Plant Chlorine is discharged from 32nd Street outfall through 1953. Plant is closed to frequent overflows of raw sewage.

**1951**  
Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7' THICK SLUDGE BEDS. Navy complains sewage discharges are causing cancer in shellfish. Mendocino Shipbuilding Co. is recommended for dumping shellfish sp. to the Bay.

**1960**  
NASSCO First Occupies Site

**1955**  
Bay Is Declared Contaminated & Quarantined

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**RAW SEWAGE DISCHARGED**  
28th Street & 32nd Street Outfalls

**BAYSIDE TREATMENT PLANT**

**1963**  
Sewage discharges diverted to Park Lane plant.



**1943**  
Bayside Treatment Plant Effluent is discharged from 32nd Street outfall through 1963. Plant is subject to frequent overflows of raw sewage.

**1951**  
Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7" THICK SLUDGE BEDS. Navy complains sewage discharges are causing concern with public. Maryland Shipbuilding Co. is recommended for dumping sludge to the Bay.

**1960**  
NASSCO First Occupies Site

**1974**  
NASSCO receives NPDES Permit

**1955**  
Bay Is Declared Contaminated & Quarantined

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**1955**  
Bay Is Declared Contaminated & Quarantined

**1960**  
NASSCO First Occupies Site

**1974**  
NASSCO receives NPDES Permit.

**Early 1990s**  
NASSCO installs first-flush stormwater capture system for portions of the facility

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Sewage discharges diverted to Point Loma plant.

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**1955**  
Bay Is Declared Contaminated & Quarantined

**1960**  
NASSCO First Occupies Site

**1974**  
NASSCO receives NPDES Permit.

**Early 1990s**  
NASSCO installs first fish stormwater capture system for activities at the facility.

**1997**  
NASSCO's stormwater capture system is expanded

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**1943**  
Bayside Treatment Plant Effluent is discharged from 32nd Street outfall through 1953. Plant is closed to frequent overflows of raw sewage.

**1951**  
Agencies Sample Site Sediments & Find "DEAD ZONE" DUE TO 7" THICK SLUDGE BEDS. Navy complains sewage discharges are causing concern with a local fisherman. Meridolph Shipbuilding Co. is recommended for dumping sludge to the Bay.

**1955**  
Bay Is Declared Contaminated & Quarantined

**1960**  
NASSCO First Occupies Site

**1974**  
NASSCO receives NPDES Permit.

**Early 1990s**  
NASSCO installs first fish aquaculture system for production of tilapia.

**1997**  
NASSCO's aquaculture system is expanded.

**1999**  
RWQCB issues initial cleanup resolutions for site.

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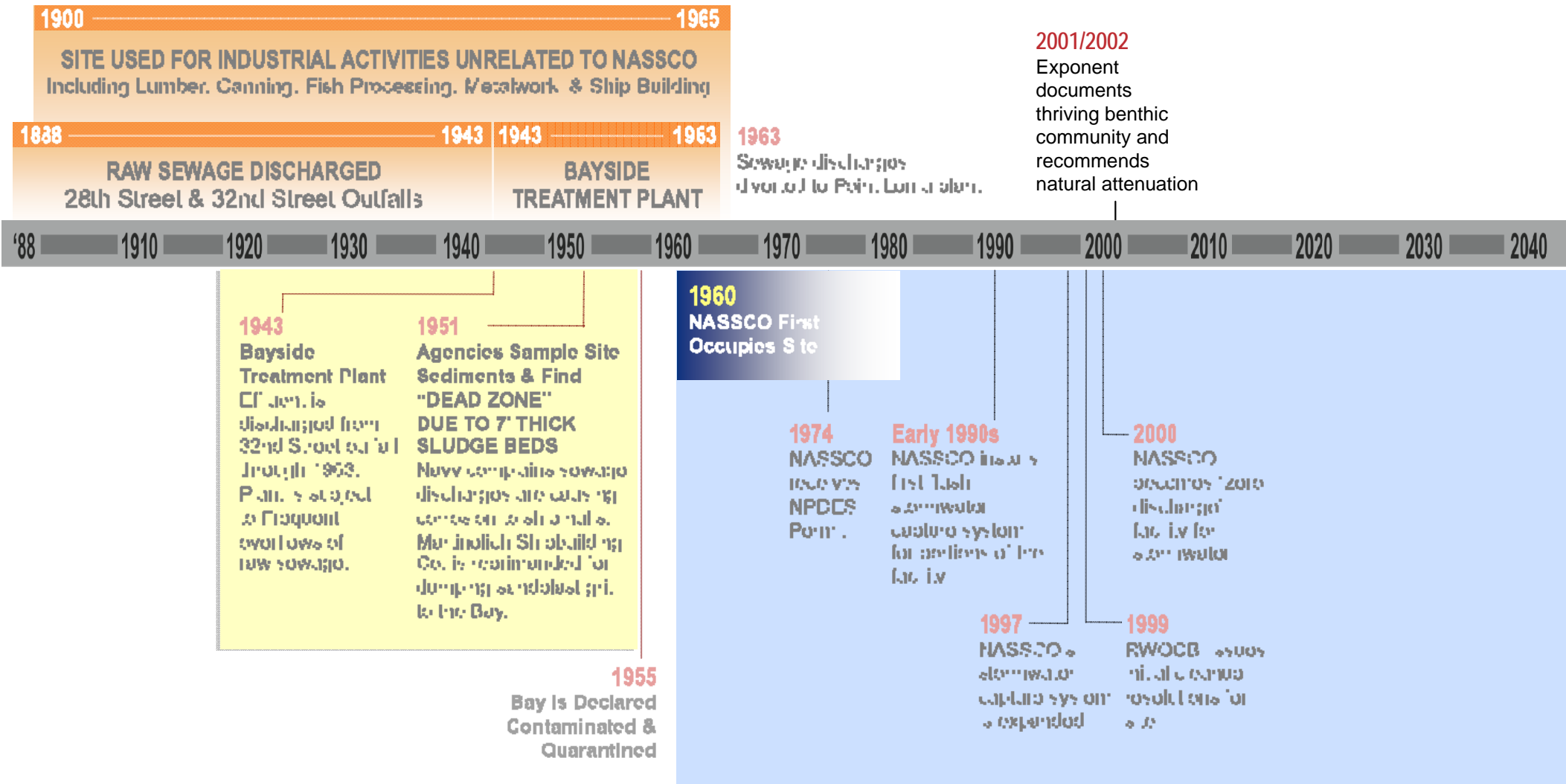
**Early 1990s**  
NASSCO installs first fish wastewater culture system for culture of Pacific halibut.

**1997**  
NASSCO's stormwater capture system is expanded.

**1999**  
RWOCB issues final cleanup resolution for site.

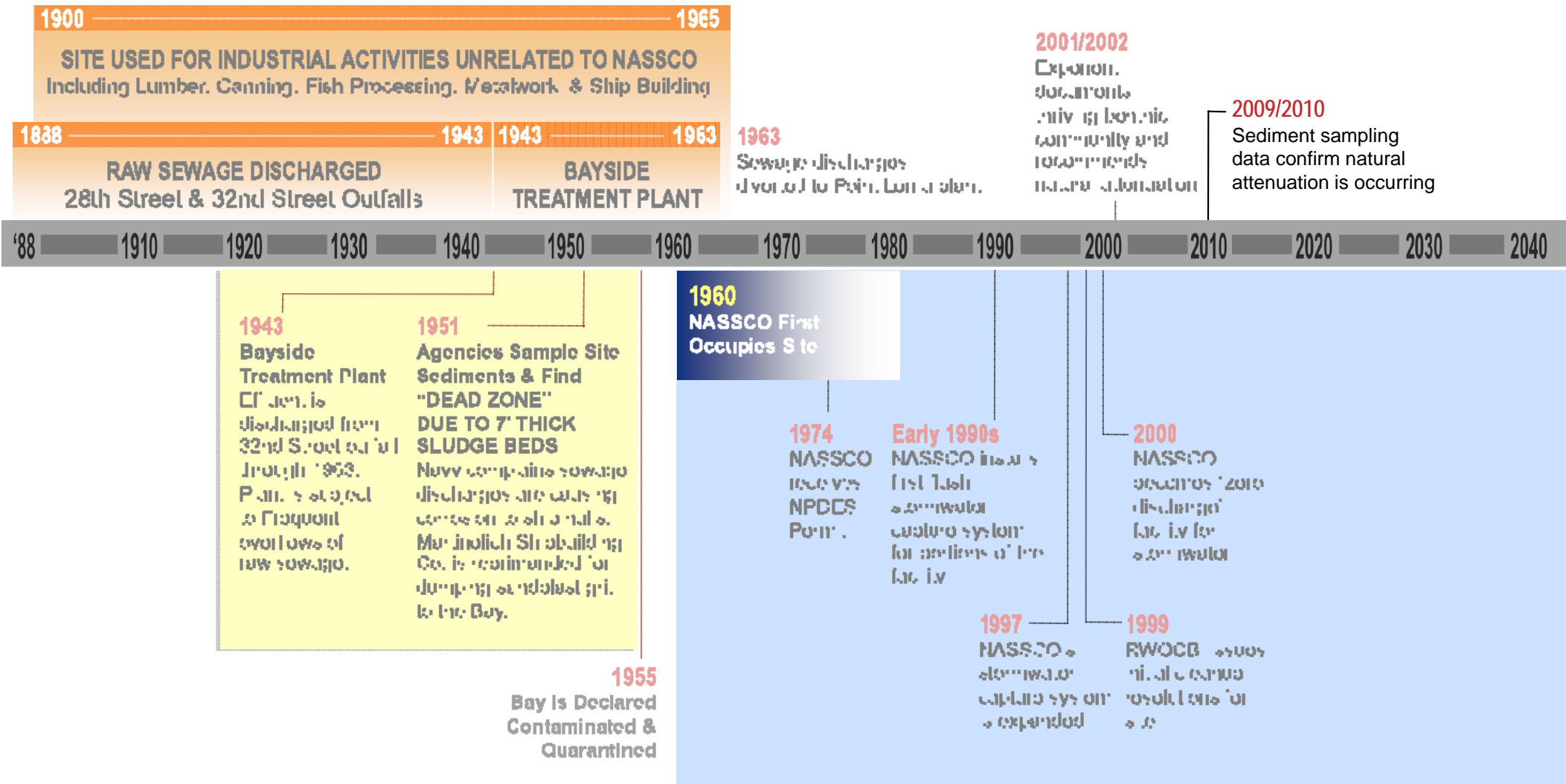
**2000**  
NASSCO becomes "zero discharge" facility for stormwater.

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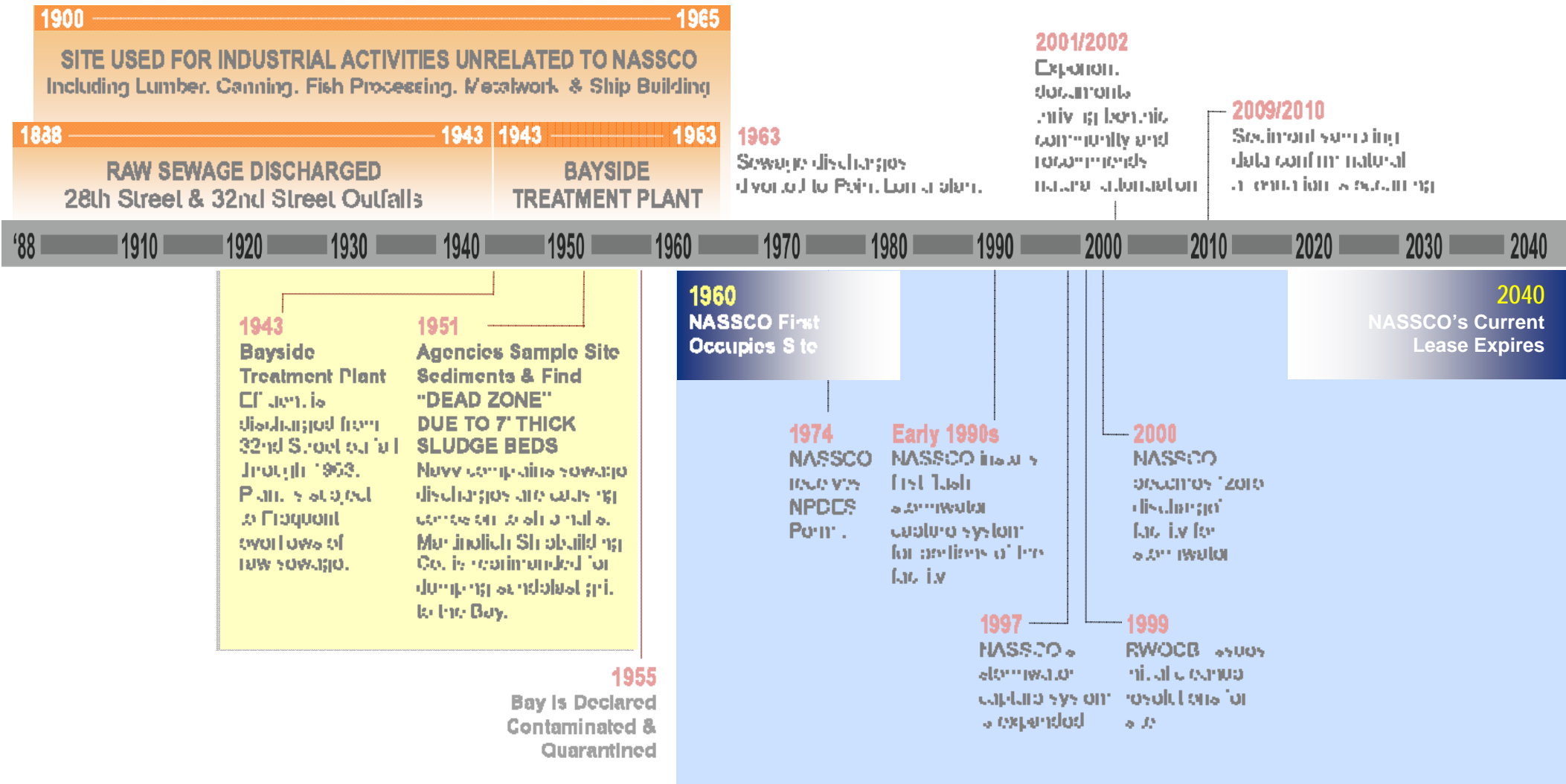




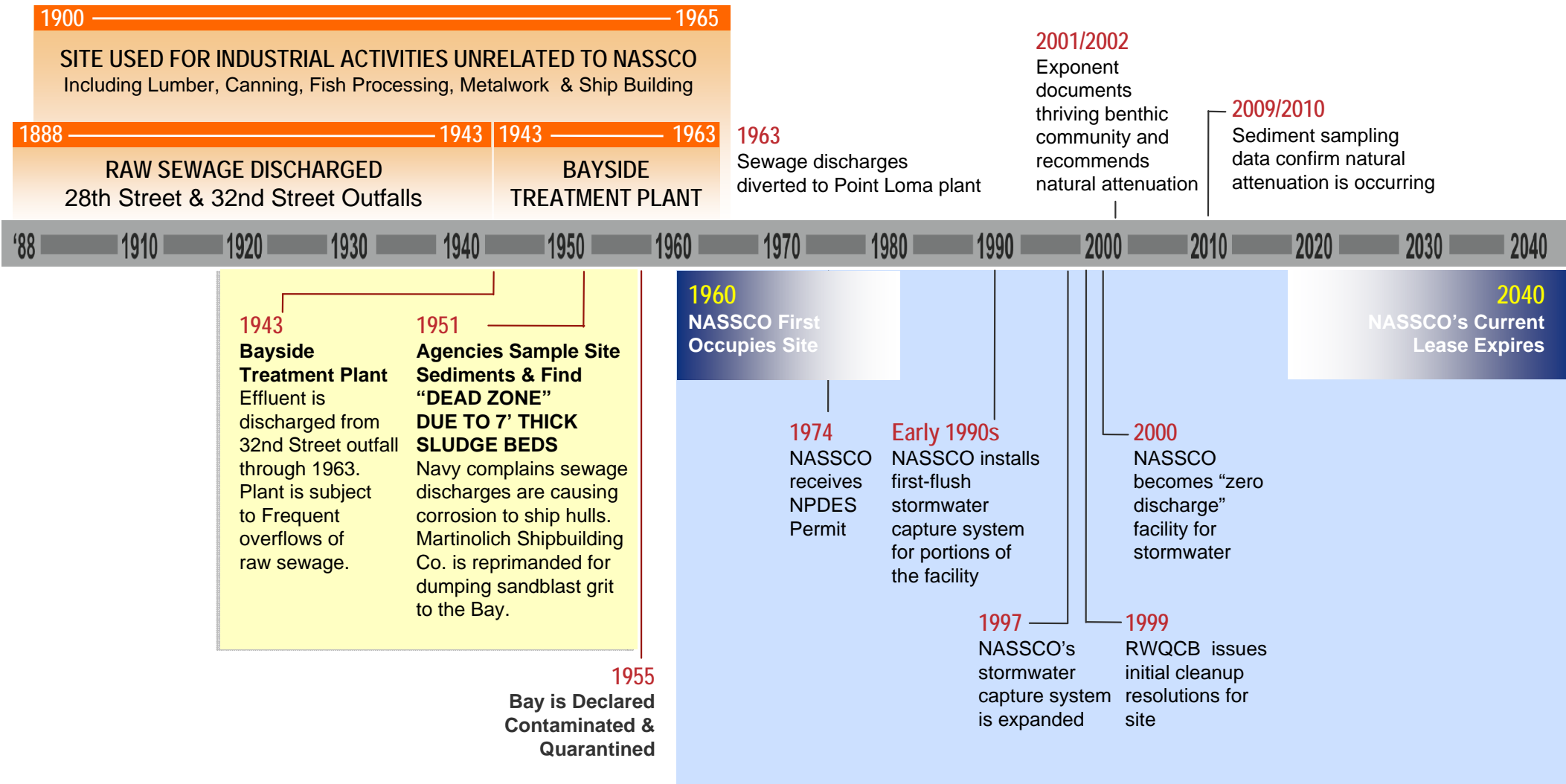
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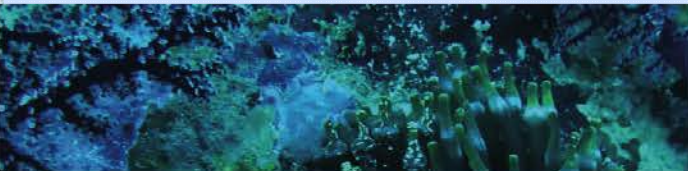
# NASSCO Shipyard Sediment Site Chronology



# Conclusion: Significant Cost (\$72 Million) to Public and Private Entities for Limited Environment Benefit

## No Aquatic Life Impairment

- 93 of 98 Test Results Are Same as Reference
- Thriving Benthic Community that dredging will destroy; Recommend Natural Attenuation



## No Aquatic-Dependant Wildlife Impairment

- Reasonable Foraging Areas Per Species. "No Mascot"
- No Exceedances of Lowest Effect Level



## No Human Health Risk

- No Fishing - 24/7/365 Military Restrictions
- Anglers Don't Consume Whole Fish



## Natural Attenuation is Occurring

Thriving Benthic Community - Monitoring Will Detect Changes

