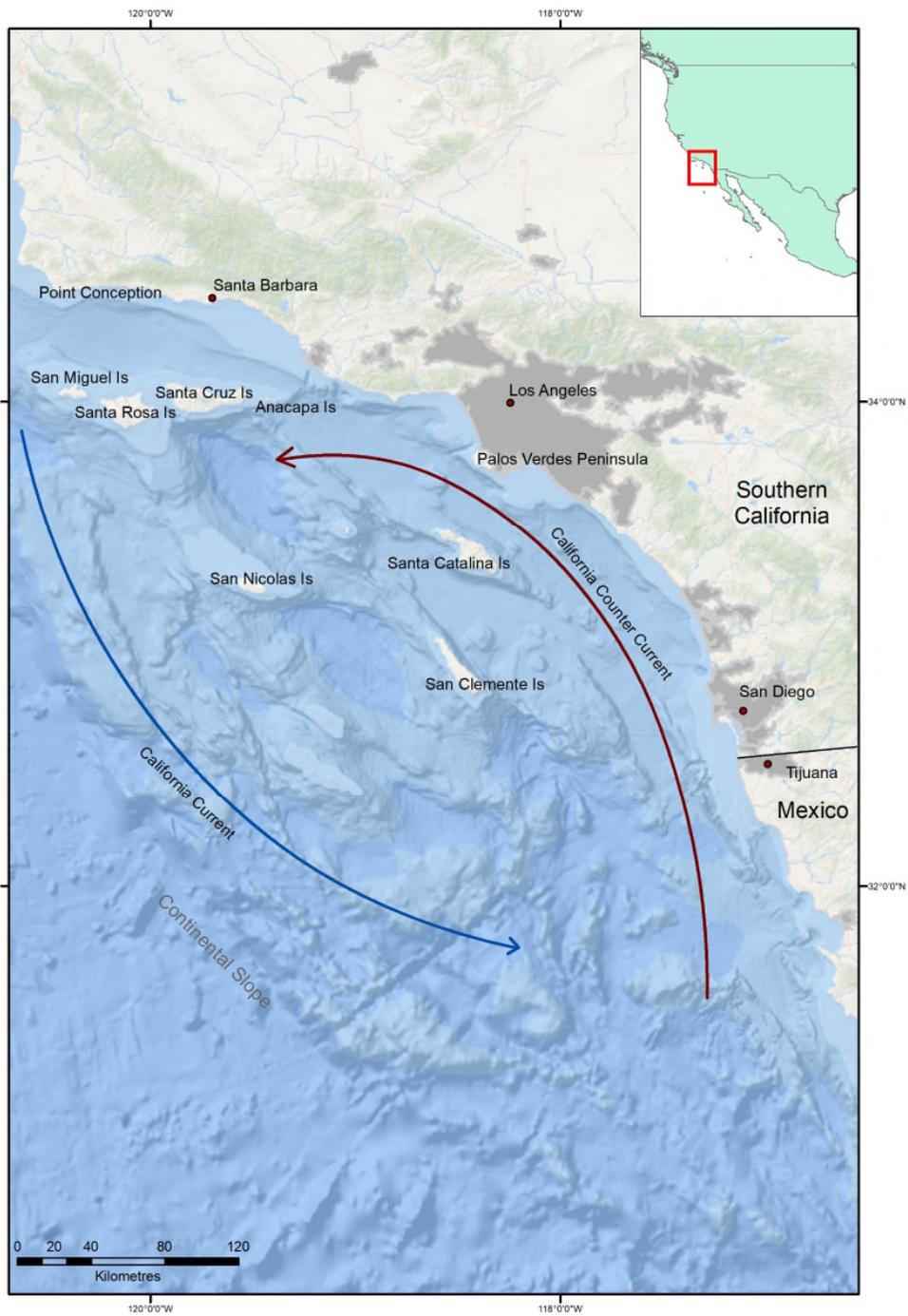


Southern California Bight Regional Monitoring: 25 Years Overcoming Challenges

Ken Schiff

www.sccwrp.org



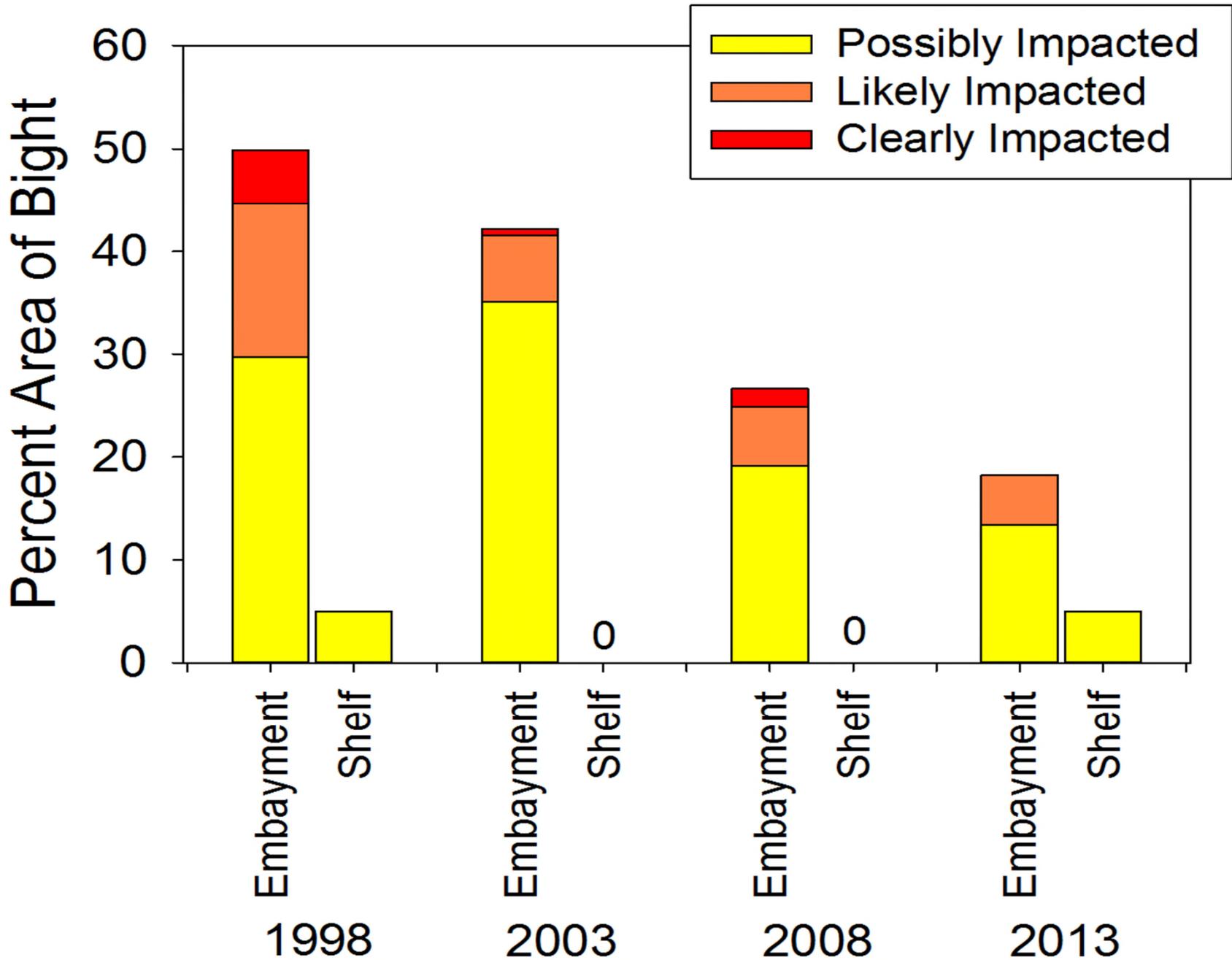


The “Bight Program”

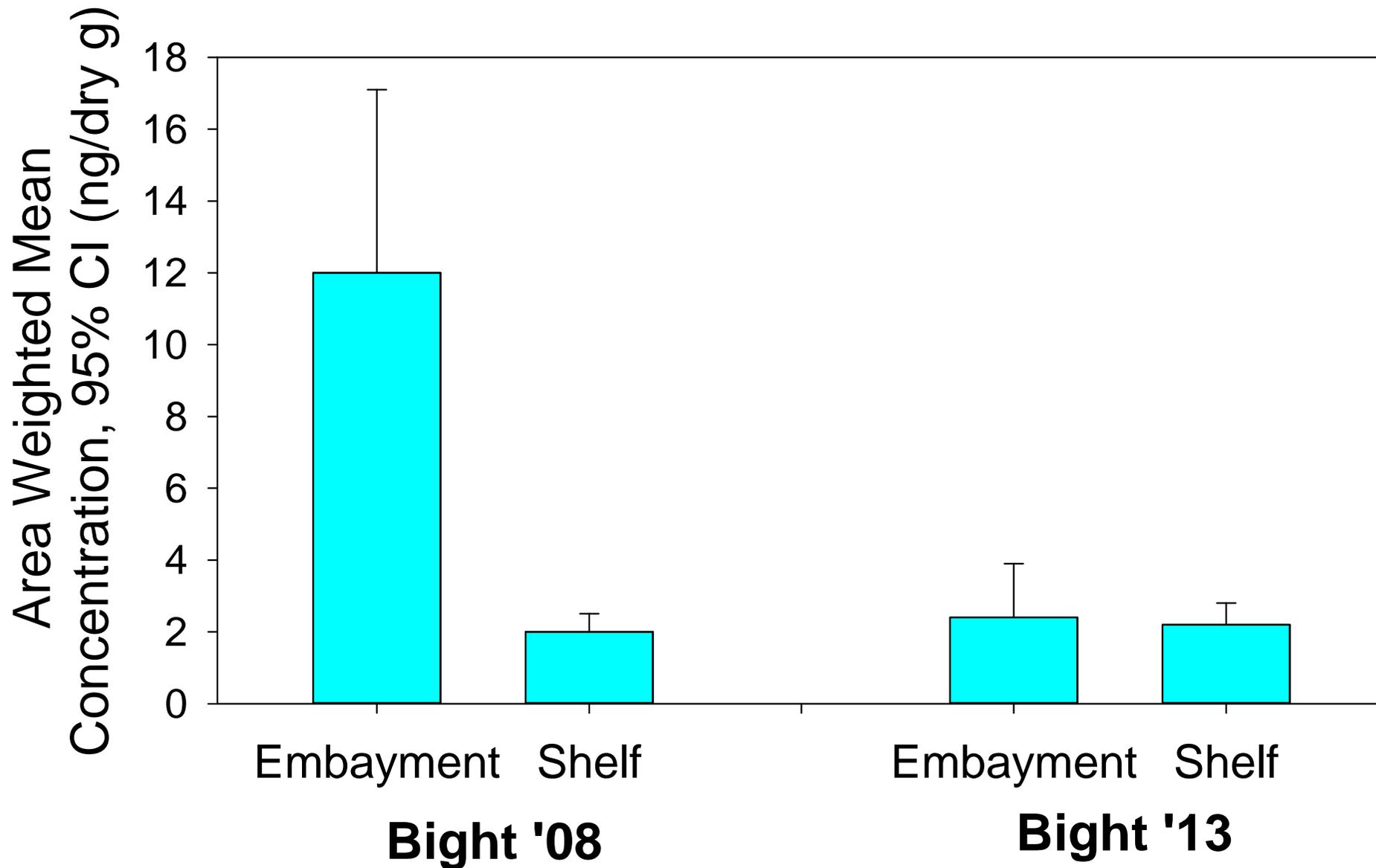
- **Started in 1994 with 12 agencies**
 - Repeats about every 5 years, now over 100 agencies
- **Integrated, coordinated monitoring**
- **Its not just a regulatory mandate, regional monitoring helps identify and document solutions**
 - Contaminated sediment
 - Trash and debris
 - Shoreline water quality
 - Ocean acidification

Contaminated Sediment

- **Some of the most contaminated sediments are located in embayments**
- **Focused regulators on stormwater, nonpoint sources**
- **Focused source control efforts**
- **Focused away from non-issues**



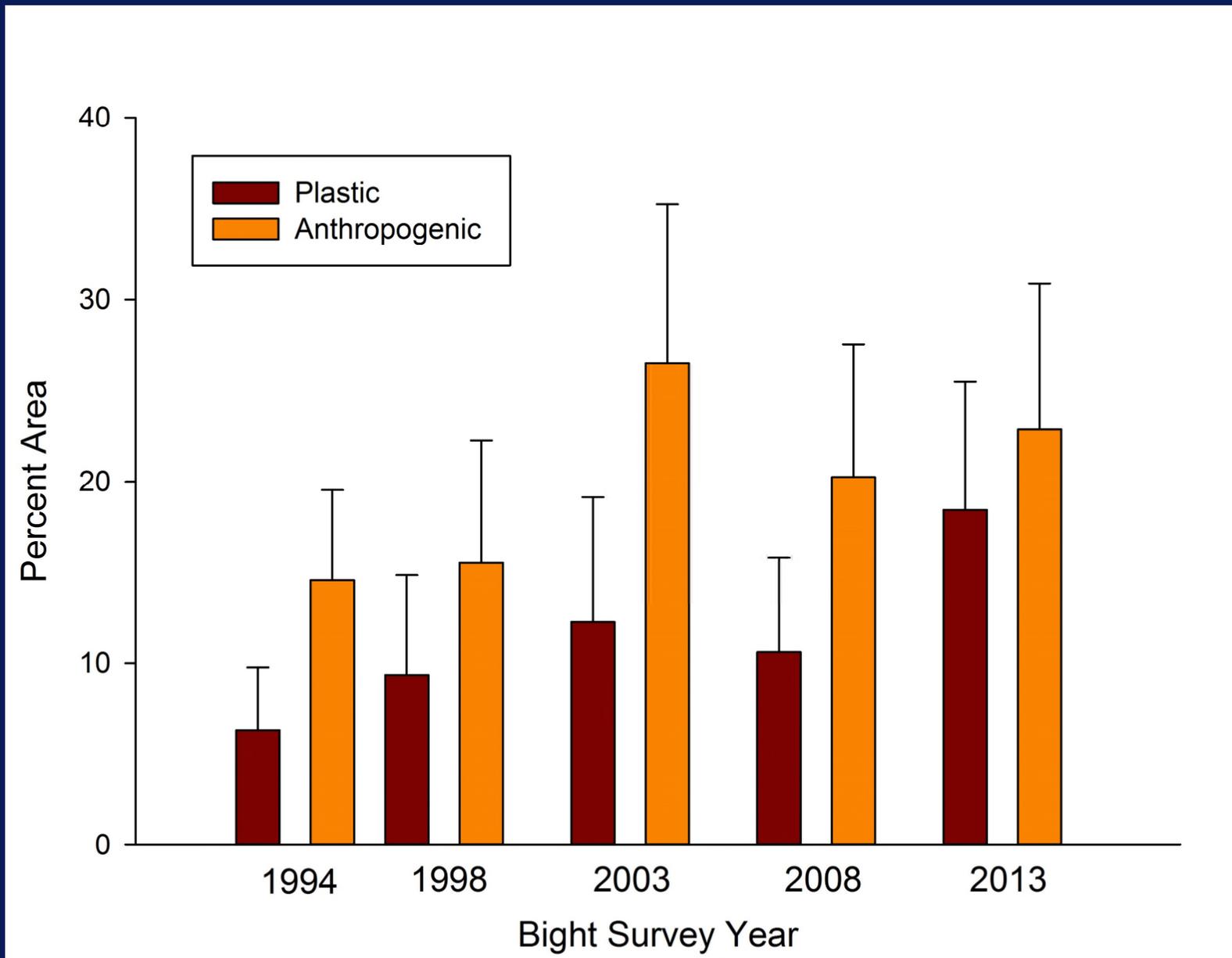
Changes in PBDE Concentrations



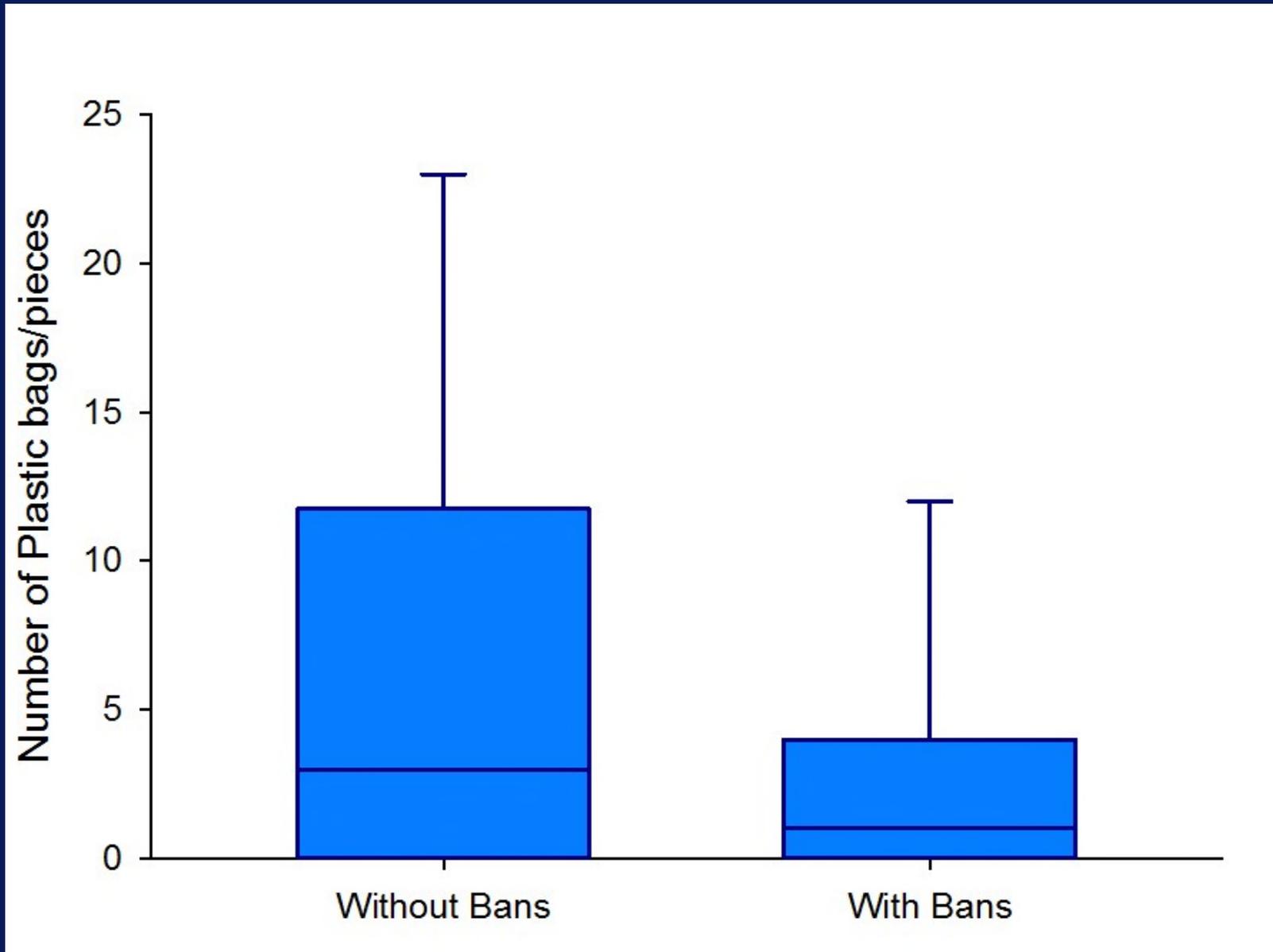
Trash and Plastic Debris

- **Bight Program documented a large extent of anthropogenic debris on the near-coastal seafloor**
 - Majority is plastic
- **The amount of debris has been increasing over the last 20 years**
- **Source control is reducing the amount of plastic available for ocean discharge**

Extent of Anthropogenic Debris on the Seafloor



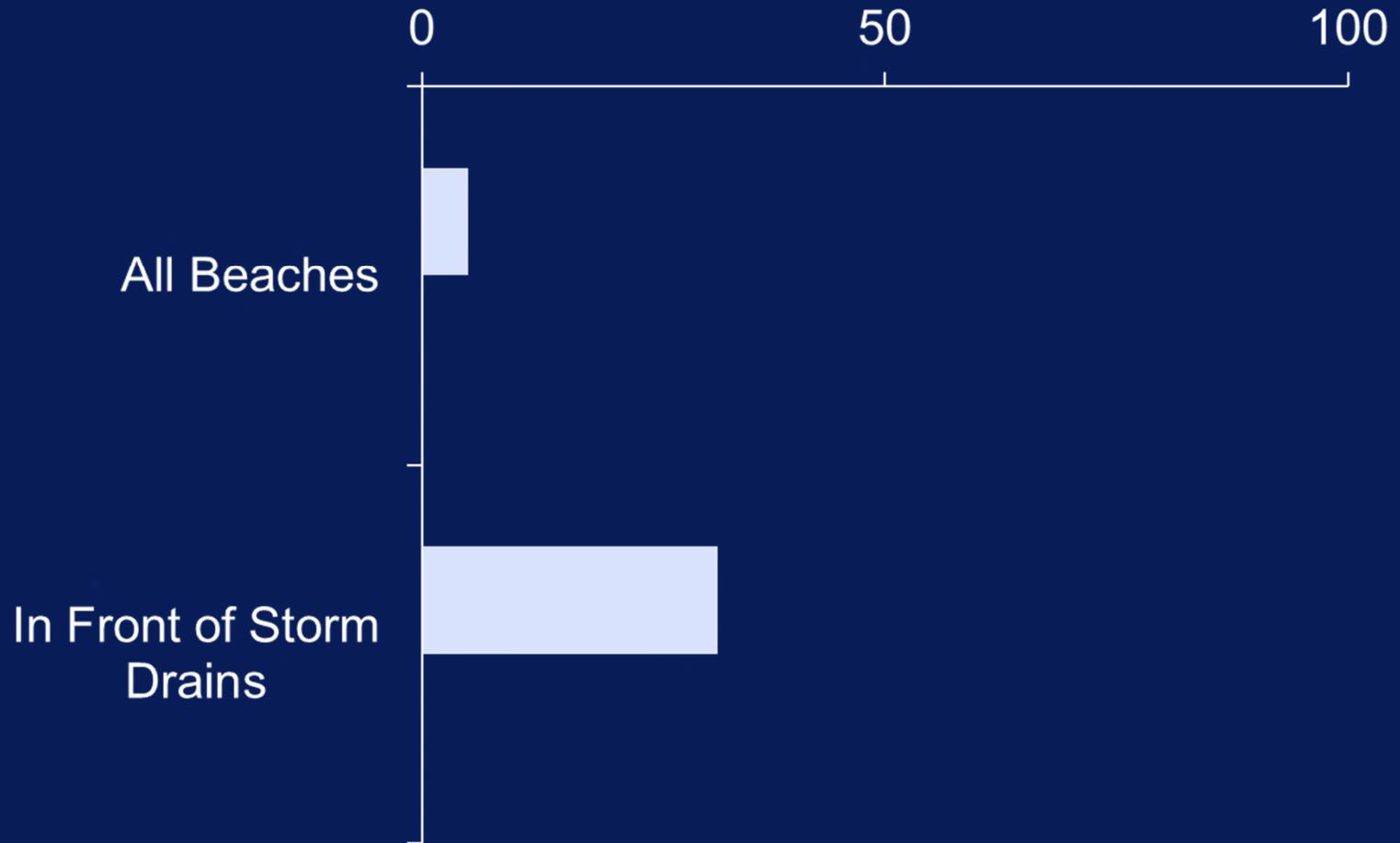
Changes in Plastic Bag Abundance (# per 100m Reach)



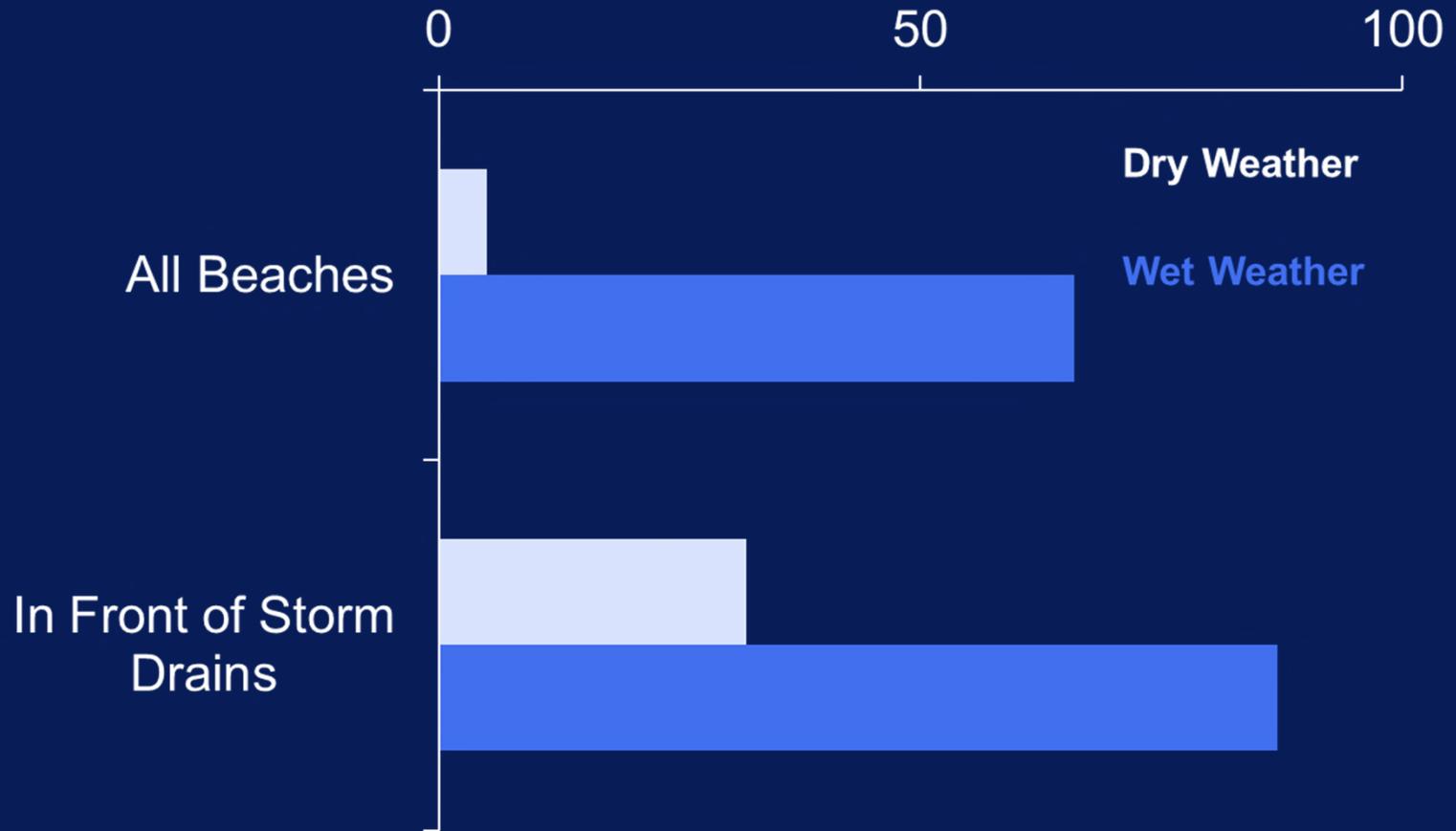
So Cal Beach Water Quality Facts

- **Almost 200 million beachgoers every year**
 - Estimated \$41M in beach tourism
- **Over 90,000 analyses per year for monitoring public health**
 - Most focused on “hot spots”
- **Bight Program illustrated beach water quality is pretty good in dry weather**
 - Wet weather is a different story

Percent of Beach Mile-Days Exceeding Water Quality Objectives



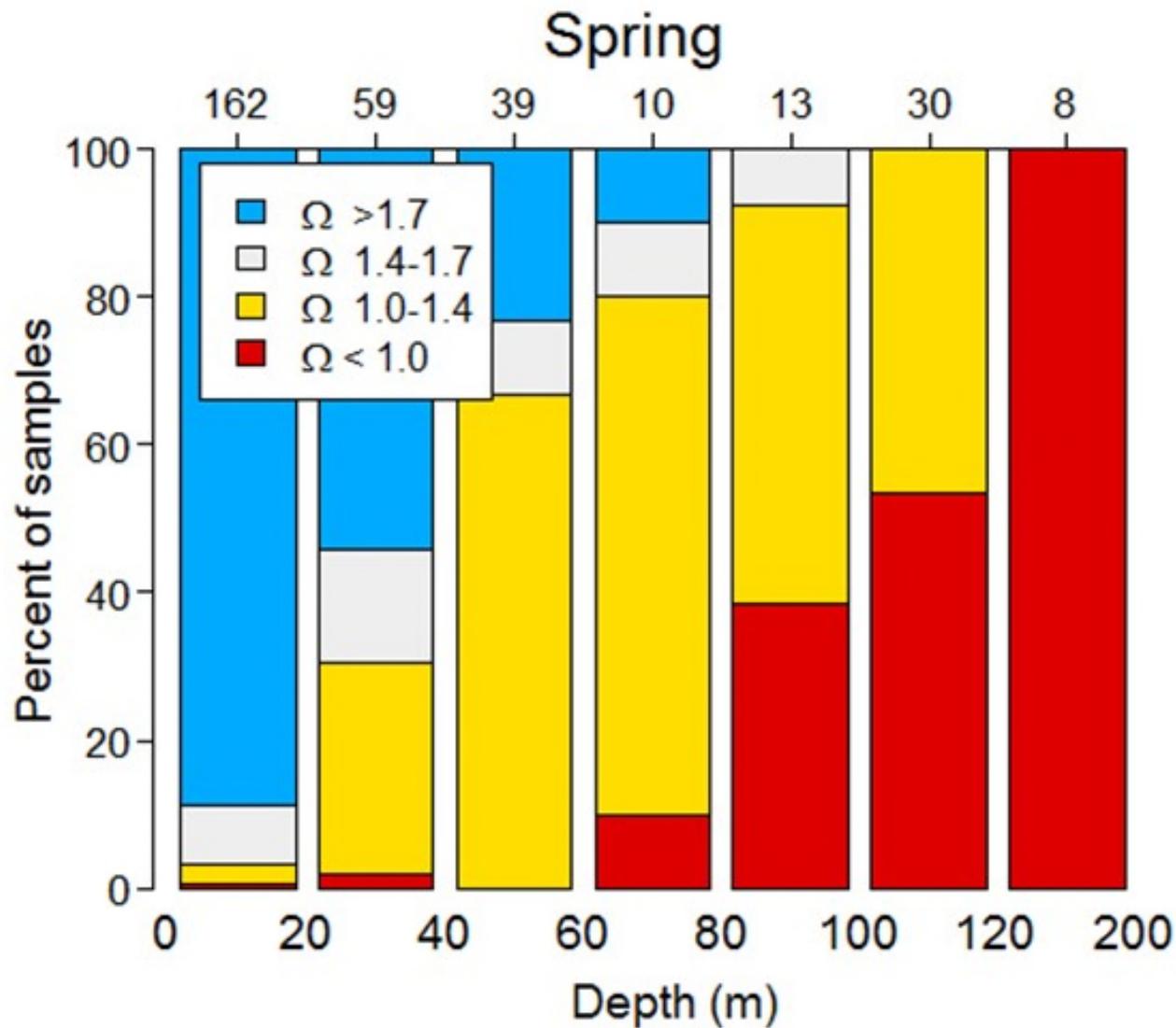
Percent of Beach Mile-Days Exceeding Water Quality Objectives



Ocean Acidification

- Perhaps the biggest environmental challenge of the current generation
- How “big” is this problem?
- What can we do about it?

Aragonite Saturation State on the Coastal Shelf



Overcoming Challenges

- **Regional monitoring can highlight priority issues that need addressing**
 - **Minimize wasted effort on lower priority issues**
- **Regional monitoring provides documentation for successful management actions**
- **Regional monitoring identifies potential issues that local managers could find no other way**