The Decision to Remediate Sediments to Meet TMDLs: Prioritizing Impacts, Benefits, and Fiscal Responsibilities

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Why Should Dredgers Care?

This is a storm water issue, right?

Why Should Dredgers Care?

- This TMDL focuses on the removal of contaminated sediments
  - Potentially 38 million cubic yards = $9B
- Potential to turn all dredge projects into remedial dredging programs
- Could be a precedent for other TMDLs
- Lines between regulatory programs are getting blurred

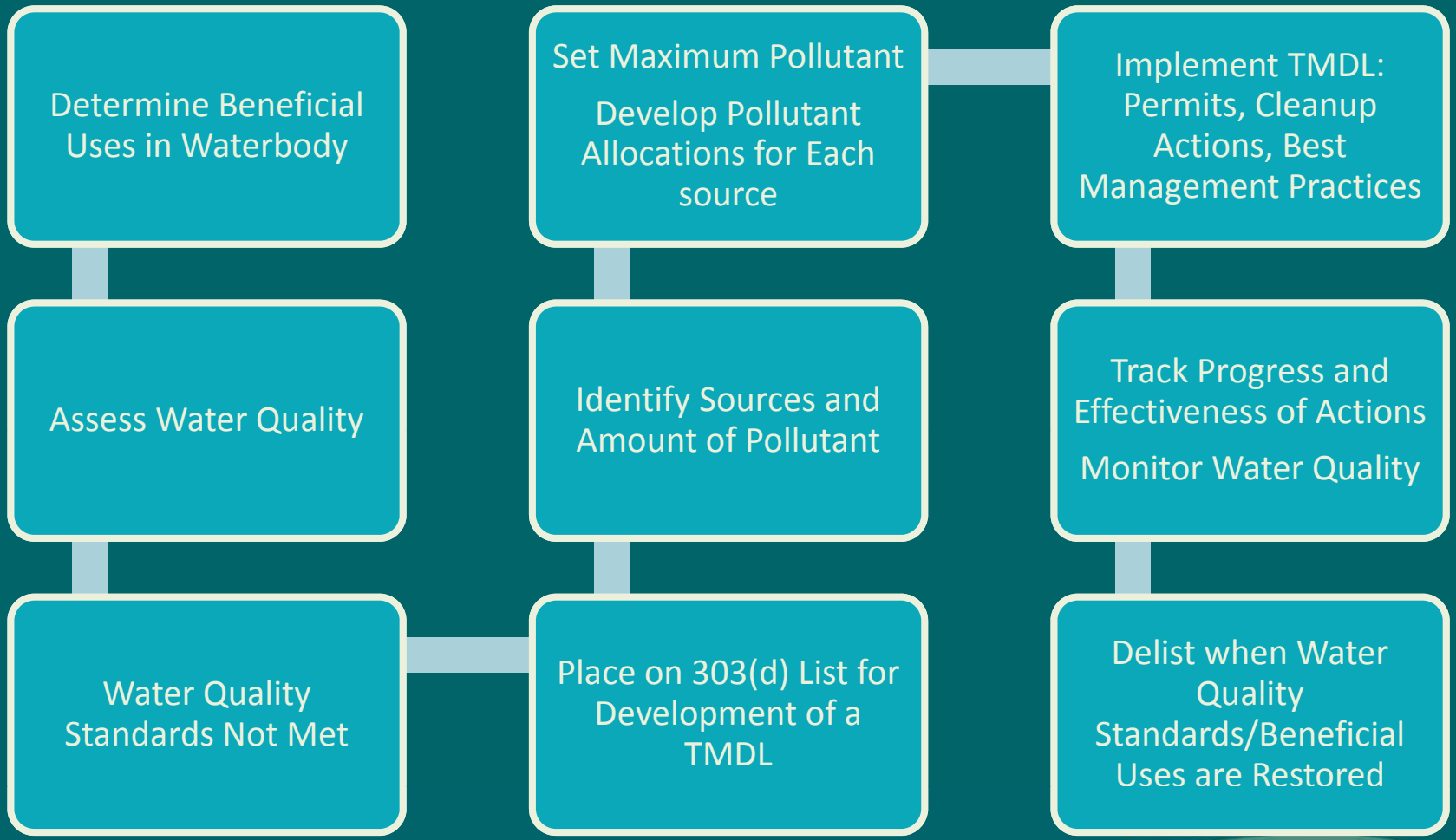
Presentation Outline

- What is a TMDL?
- What is the Dominguez Channel Toxics TMDL?
- What is our approach to manage sediments responsibly?
- Where are we going?

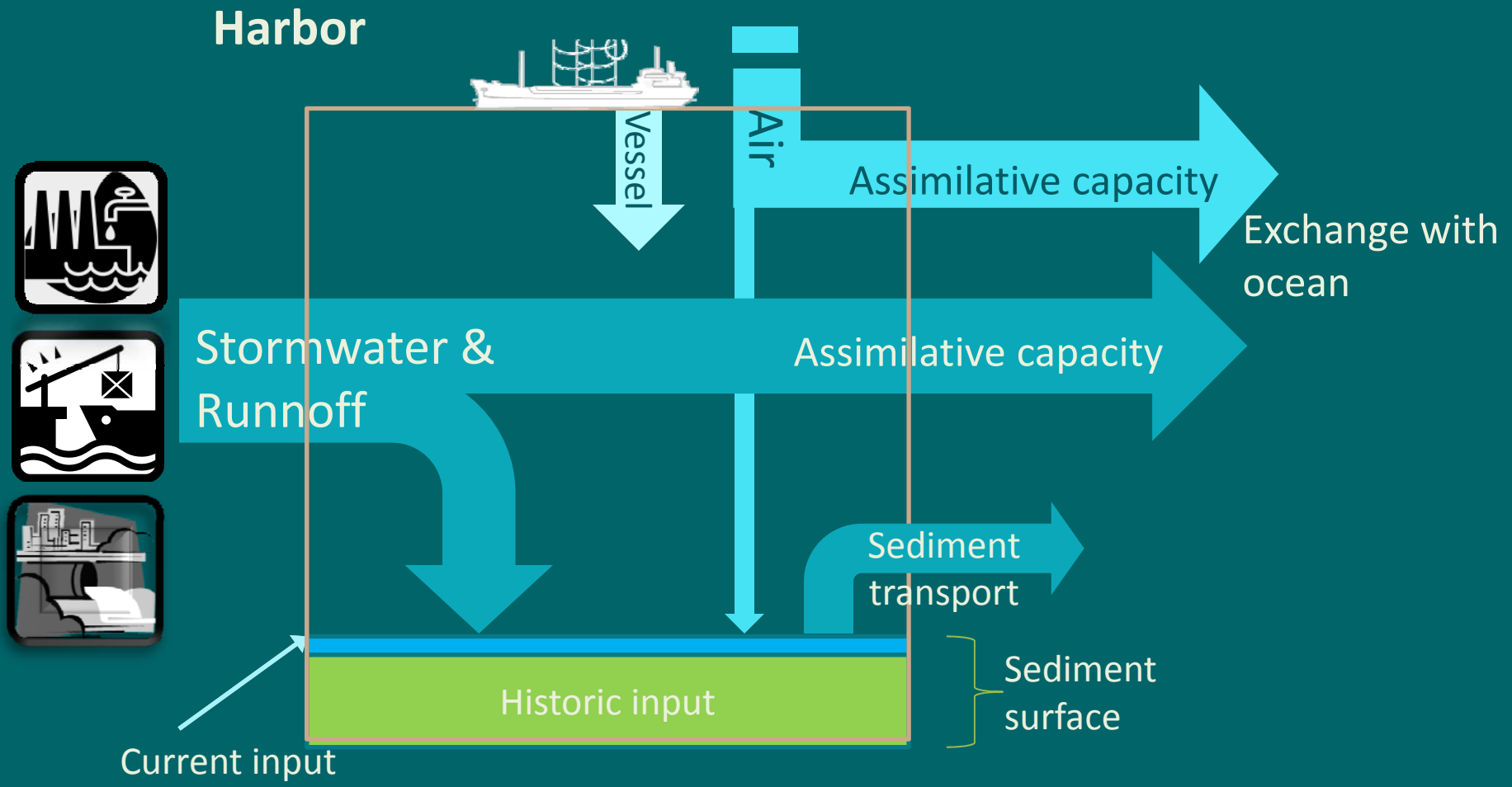
TMDL = Total Maximum Daily Load

- A regulatory term in the Clean Water Act that describes the maximum amount of a pollutant that a body of water can receive and still meet water quality standards.

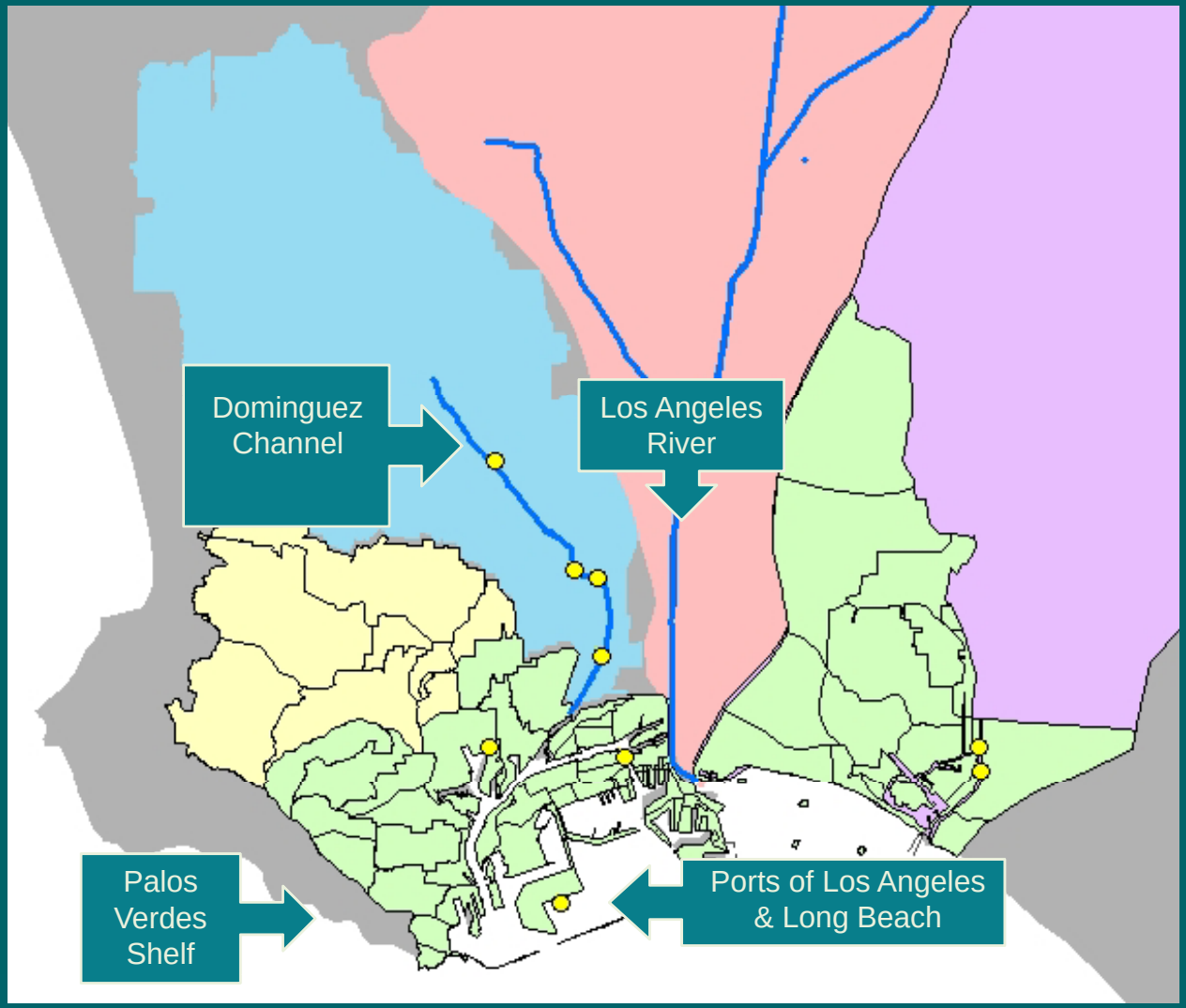
TMDL Process



Contaminant Flow Conception Model

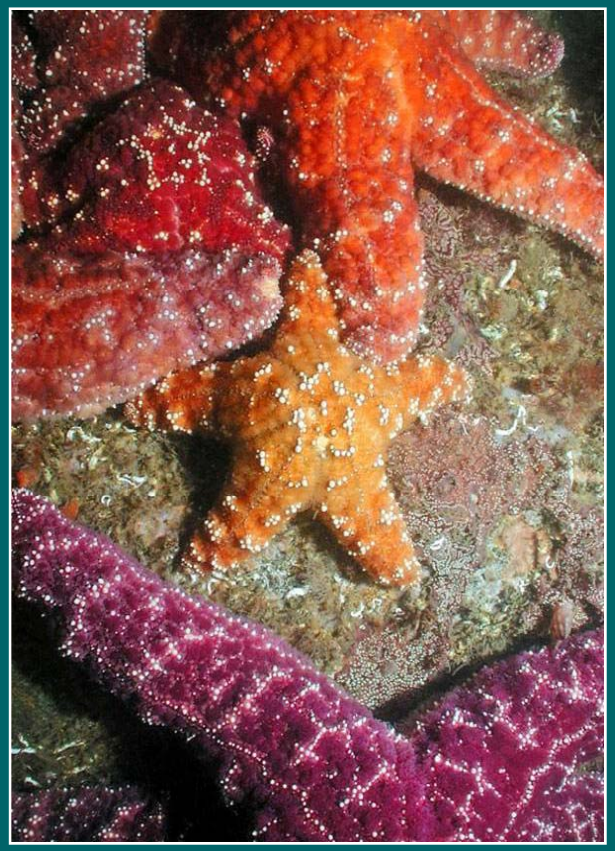


Geographic Setting



Sediment Quality 303(d) Listings for Harbor Waters

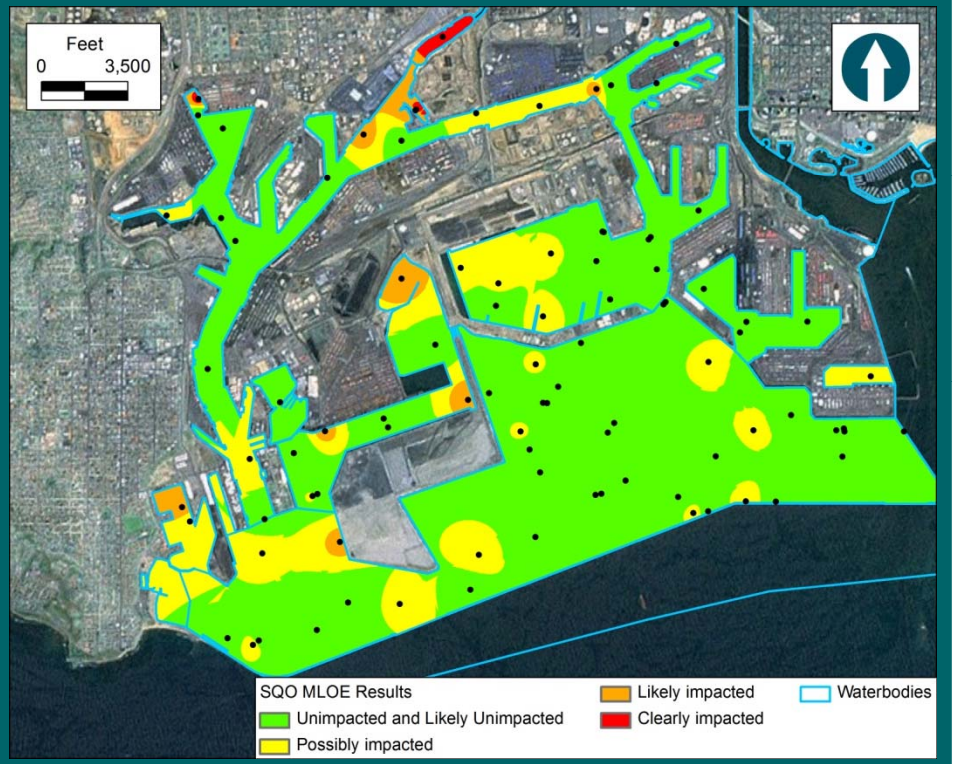
- Sediment Quality
  - Sediment toxicity
  - Sediment bound contaminants
    - Metals, PAHs, pesticides
  - Benthic health
- Fish Tissue Quality
  - Fish Tissue and sediment
    - PCBs and DDTs



Sediment Quality Compliance

ERL Sediment Target

SWRCB's SQO Assessment



Fish Tissue Compliance: FCG

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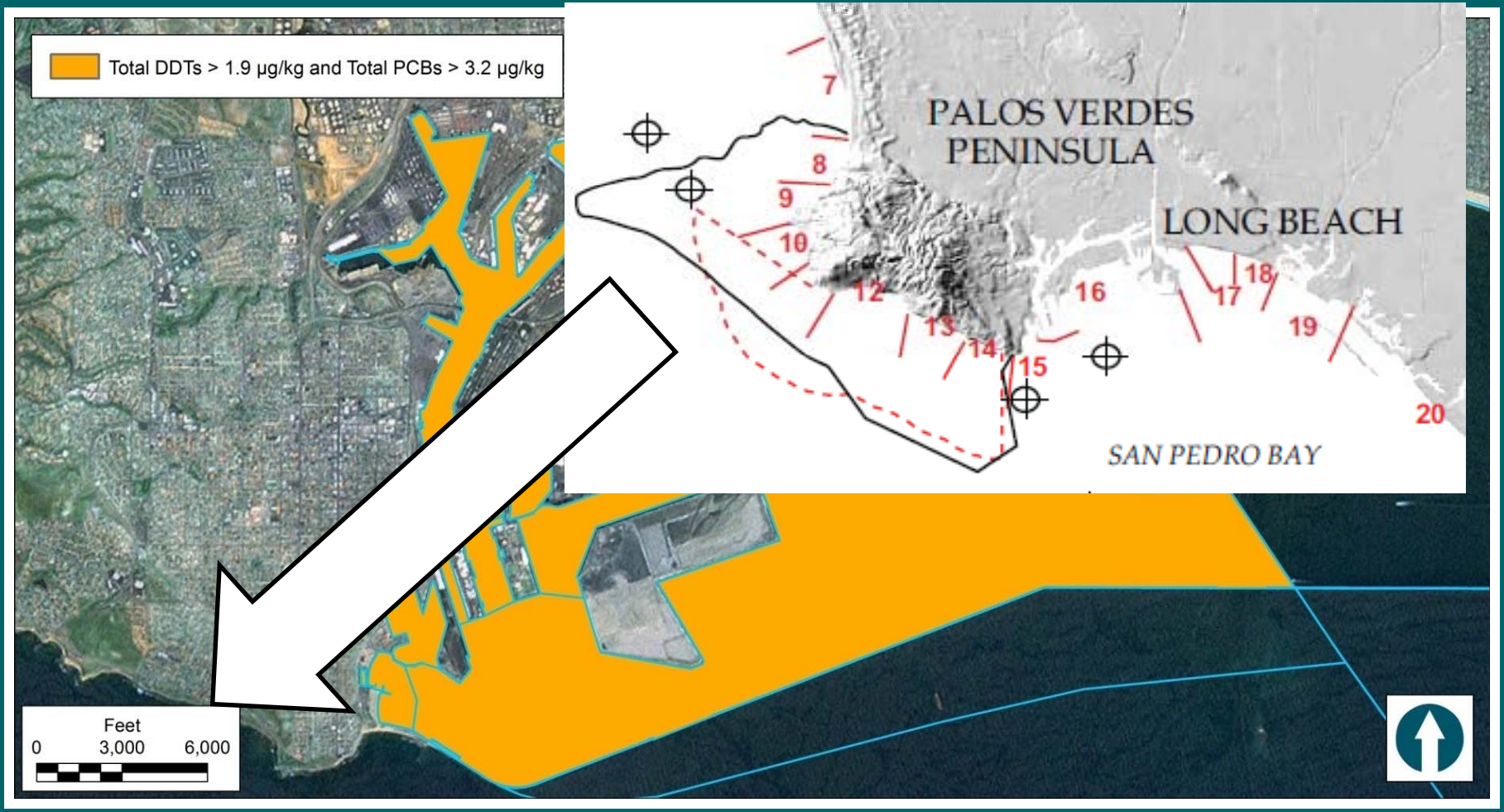


PV Shelf Fish Tissue Compliance

Balancing Port Operations and Environmental Stewardship

Ecosystem Health	Fiscal Responsibility	Harbor Beneficial Uses	Logistics
Marine Life	Cost Effective	Port	Source Control
Chemical Loading	Port Operations	Sensitive Habitat	Magnitude of Impact
Water Quality	Future Needs	Fishing	Adaptive Mgmt

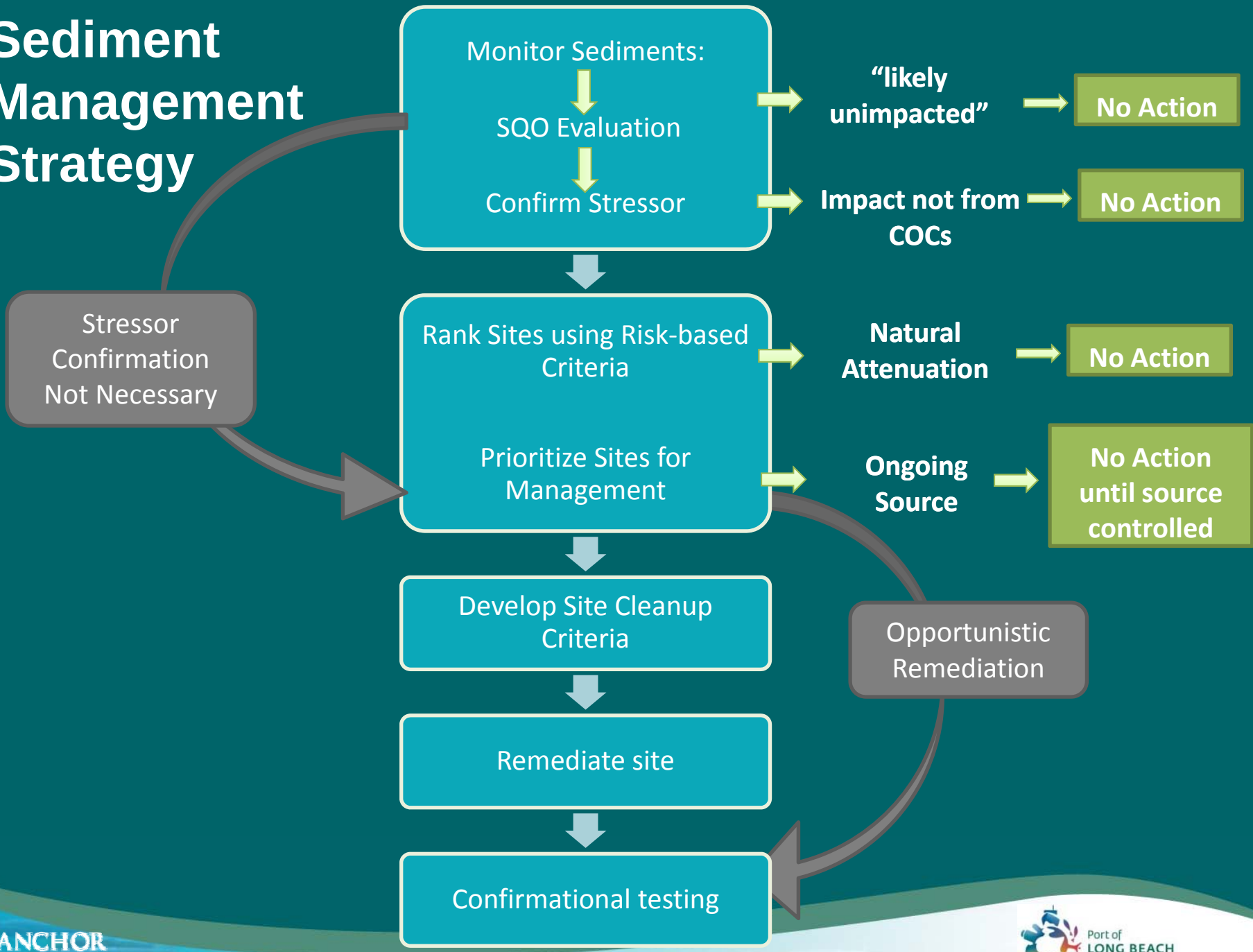
Sediment Management Plan: Pathway to Responsible Remediation

- To ensure management actions are:
  - Environmentally beneficial
  - Ecologically meaningful
  - Logistically feasible
  - Economically responsible

Prioritize Management Actions

- Risked-based ranking
  - High levels of impairment
  - Sensitive habitat/species
  - Bioaccumulative contaminants
  - High contaminant mobility
- Economically responsible
  - Alignment with ongoing port development project
  - Low recontamination
  - Measurable improvement
- Logistically feasible

Sediment Management Strategy



ANCHOR QEA

Port of LONG BEACH
The Green Port

Where are we?

- Ports believe the final TMDL is both economically and technically infeasible and can create more environmental harm than good.
- We submitted over 5,000 pages of comments over the technical merits of the TMDL.
- Have been focusing on the alternative means of compliance.

Moving Forward

- Continue engagement throughout adoption process
- Conduct studies to prepare for TMDL re-opener in 2017
- Comply with implementation and monitoring requirements
- Continue to push for regional solutions to this regional problem

What Should Dredgers Do?

- Be prepared for routine dredging projects to be turned into remedial actions
- Incorporate risk based decision making into dredging programs to meet TMDLs
- Use your sediment expertise and get involved early in TMDL development

Contact Information

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