

# Total Maximum Daily Loads:

What are they and how can they impact ports, harbors, and coastal communities?

Introduction by  
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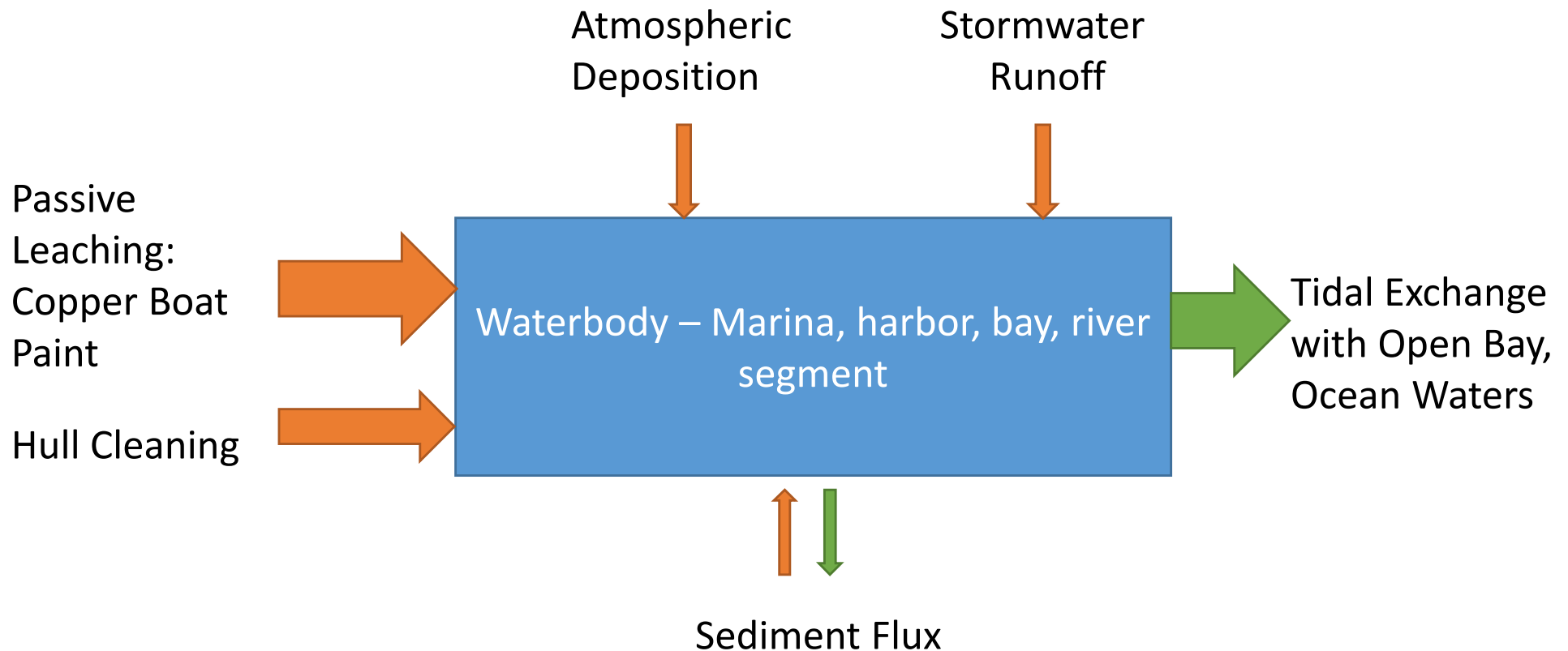
# What is a TMDL?

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

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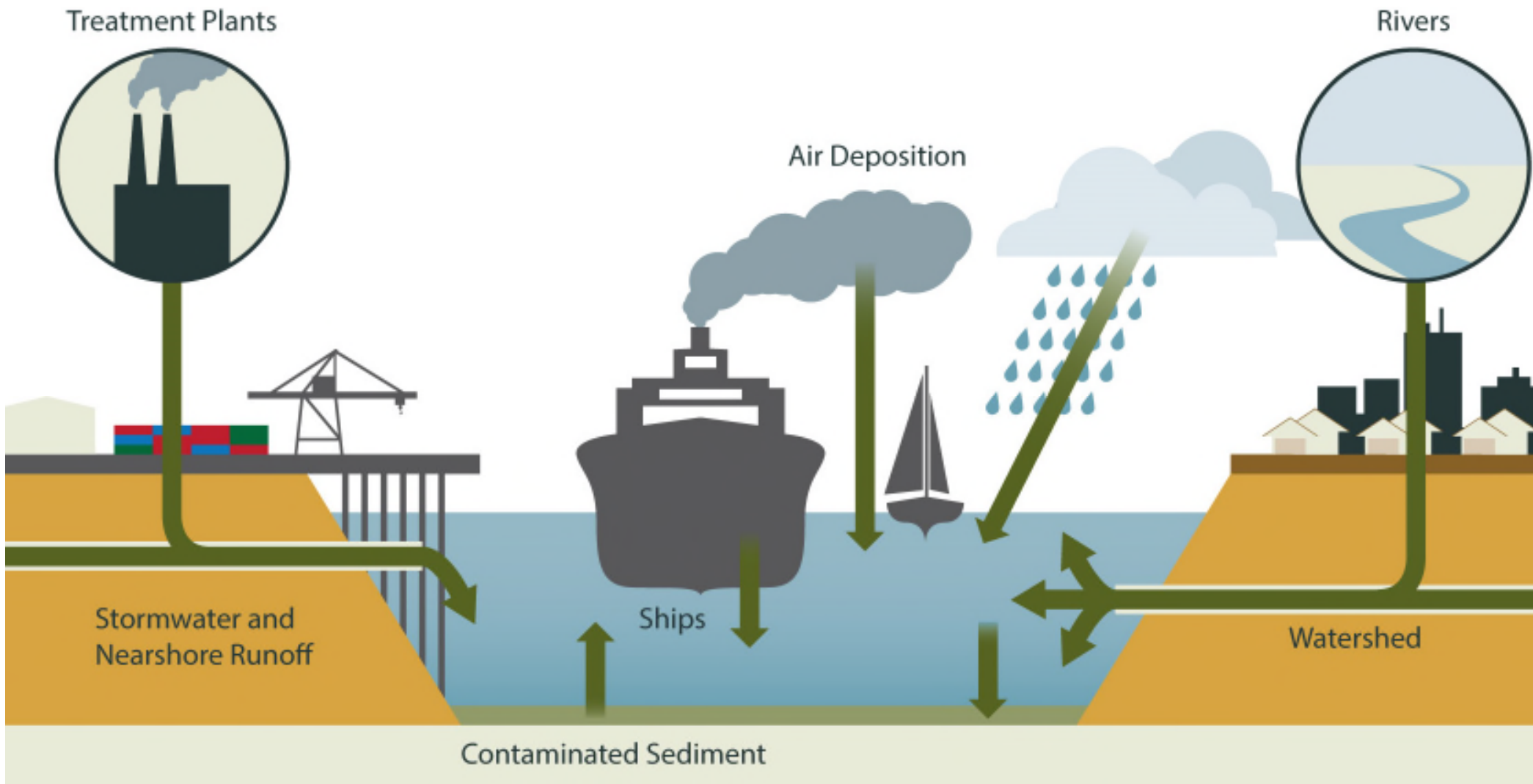
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Example Issue – Copper TMDLs assumed sources and sinks

# Potential Sources of Pollutants



# Impairments in Coastal Marine Waters

- Water quality
  - Chemicals, nutrients, sediments
  - Toxicity
  - Bacteria
- Sediment quality
  - Sediment-bound contaminants
  - Benthic health
  - Sediment toxicity
- Fish tissue quality
  - Fish tissue and sediment
- Trash





# Coastal Impaired Waters in Southern California

<b>Water Body Type</b>	<b># of Impairments</b>
Coastal and Bay Shoreline	233
Bay and Harbor	185
Estuary	129
Wetland, Tidal	25
Total	572

<b>Pollutant Category</b>	<b># of Impairments</b>
Fecal Indicator Bacteria	176
Metals	86
Trash	27
Benthic Community Effects	14
Total	303

# The Intersection Between Marine Construction and TMDLs

- Water quality testing to fill data gaps
- Confirm post-dredge surface
- Enforcing anti-degradation policy
- Define approach to maintenance versus new work projects
- Set expectations for regulators and contractors
- Incorporate sediment management planning into dredging projects



# TMDL Panel

- LA County – Trash TMDL
  - Bruce Hamamoto, Kara Plourde
- Port of San Diego - Dissolved Copper TMDL
  - Karen Holman
- Presentations
  - History of the TMDL
  - Compliance requirements
  - Efforts to date to reach compliance
  - Challenges to be compliant as the TMDL is written
  - Unique circumstances
  - Future effort
- Discussion

# Questions



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