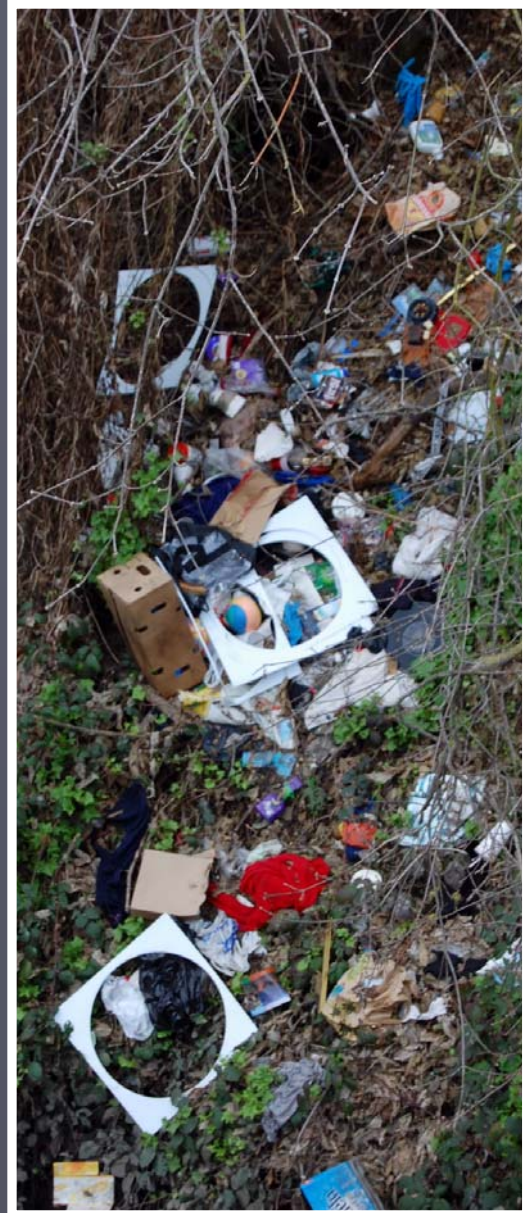


# WATER QUALITY ASSESSMENT AND 2008 303(d) LIST OF IMPAIRED WATER BODIES

Adoption Hearing

February 11, 2009

Richard Looker



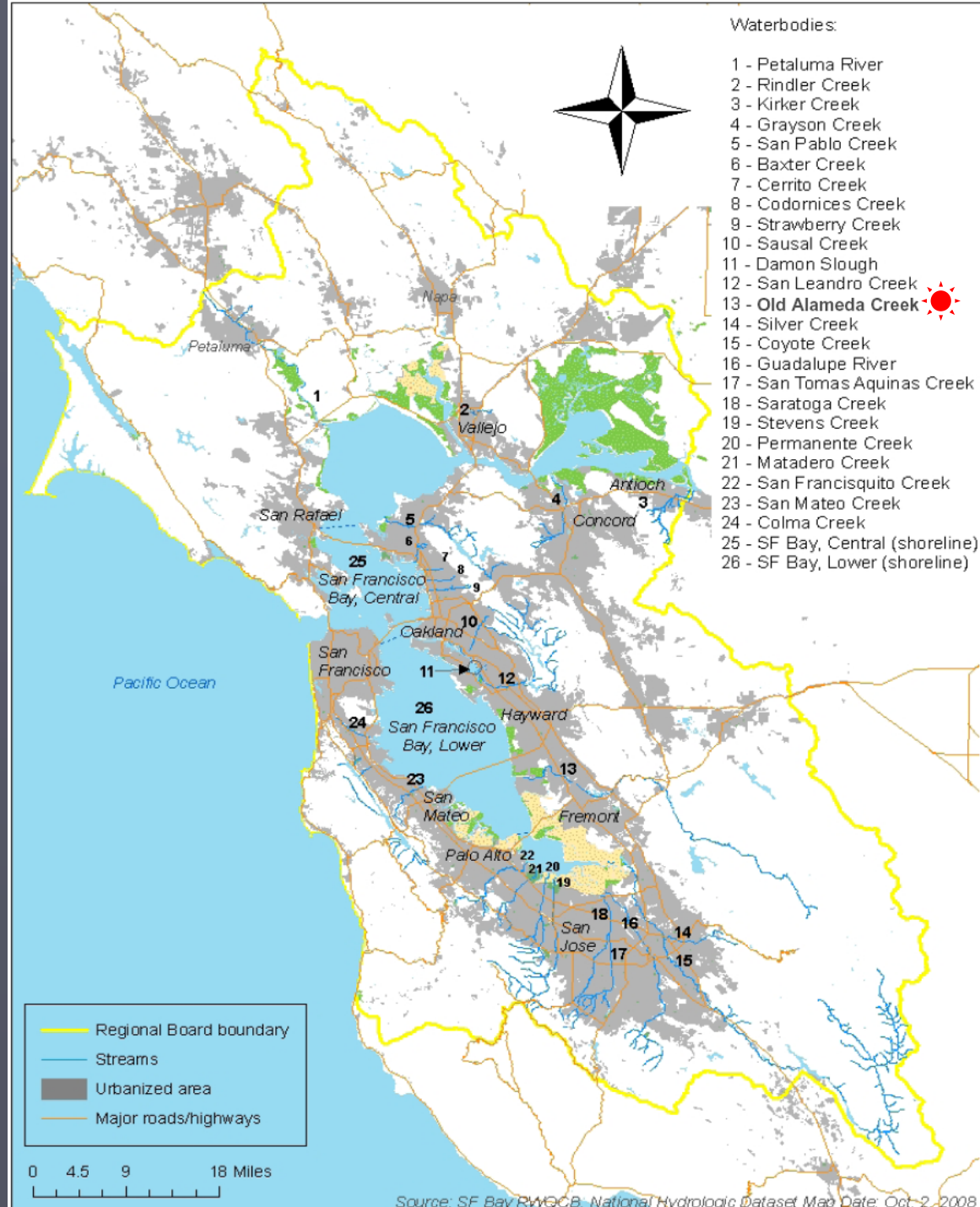
# 2008 303(d) Chronology

- ❖ Public solicitation (December '06)
  - 16 submittals (February '07)
- ❖ Draft Report (October '08)
  - 26 comment letters (December '08)
- ❖ Testimony Hearing (January 2009)
- ❖ **Report revisions, response to comments, and Board approval (today)**
- ❖ State Board action (later in 2009)

# Additions to 303(d) List

## 26 Trash Listings

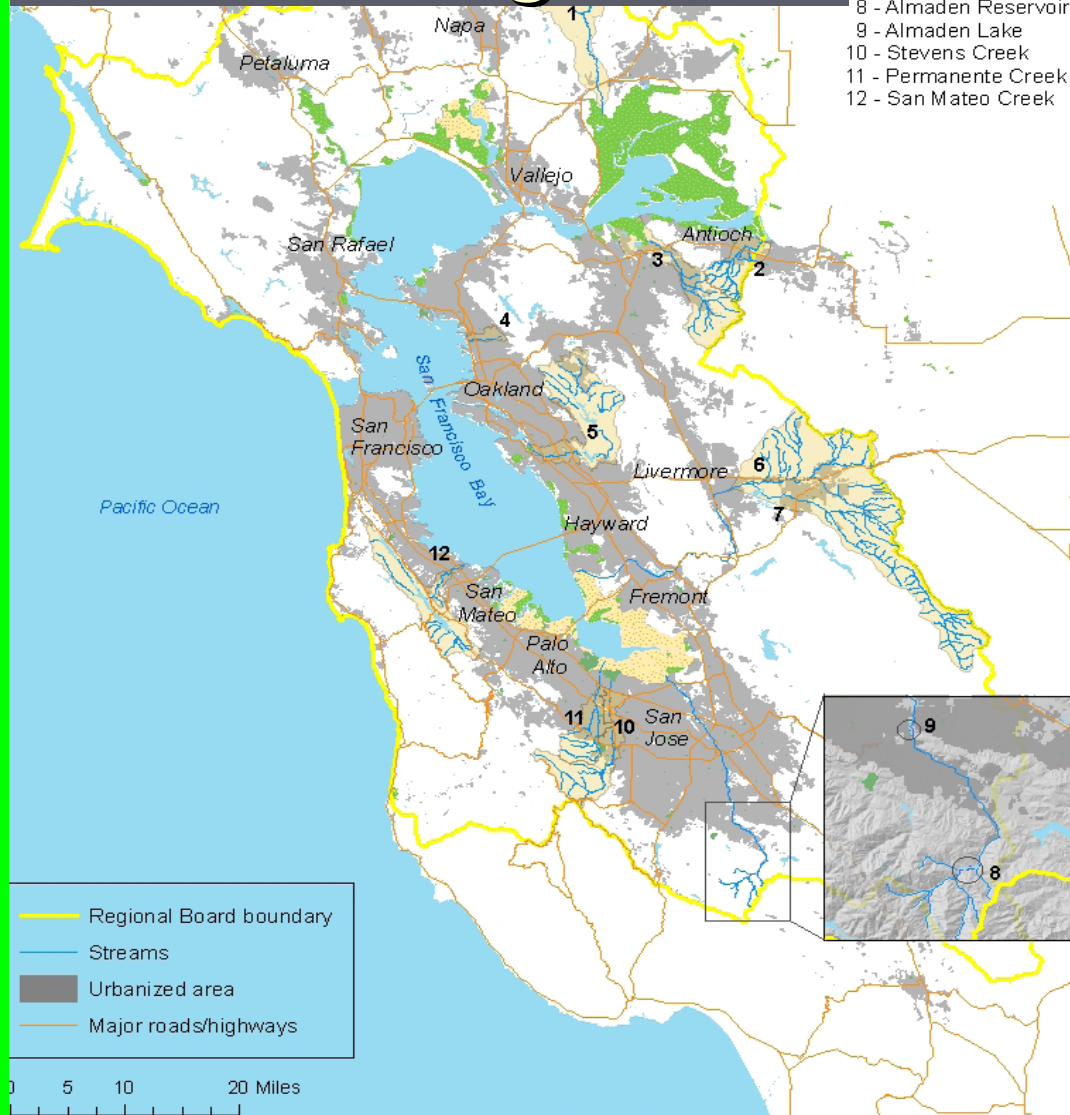
- 24 streams
- 2 shoreline areas



# 14 Non-Trash Listings

## Waterbodies

- 1 - Suisun Creek
- 2 - Kirker Creek
- 3 - Mt. Diablo Creek
- 4 - Codornices Creek
- ~~5 - San Leandro Creek~~
- 6 - Arroyo Las Positas
- 7 - Arroyo Mocho Creek
- 8 - Almaden Reservoir
- 9 - Almaden Lake
- 10 - Stevens Creek
- 11 - Permanente Creek
- 12 - San Mateo Creek



Source: SF Bay RWQCB, National Hydrologic Dataset Map Date: 06

Solano County:

Suisun - **dissolved oxygen, temperature**

Contra Costa County:

Mt. Diablo - **water toxicity**

Kirker –

**water toxicity/pyrethroids**

Alameda County:

Codornices - **temperature**

~~San Leandro - **chromium VI**~~

Arroyo Las Positas -  
**eutrophication**

Arroyo Mocho - **temperature**

Santa Clara County:

Almaden Lake & Reservoir -  
**mercury**

Stevens - **temperature**

Permanente - **selenium, water toxicity**

San Mateo County:

San Mateo - **sediment toxicity**

# Key Comments

- ❖ Spatial Representation of (Trash) Data
- ❖ Need a Trash Sampling Plan
- ❖ Photographic Evidence for Trash
- ❖ Scientific Integrity of Trash Assessment
- ❖ Trash Control Underway, No Need to List

# Spatial Representation of Data

- ❖ Nearly all listings based on evidence at multiple locations
- ❖ Listing does not mean that every inch is impaired, but...
  - ❖ Trash is often transported from upstream locations, and
  - ❖ Likely upstream impacted locations not surveyed
- ❖ Listing only where data available now (e.g., discrete 100-foot creek sections) not practical
- ❖ Refine listings in future as data become available

# Must Have Sampling Plan

- ❖ Listing Policy provides guidance to identify high quality data
- ❖ Sampling plan is not required
- ❖ Trash assessment method supported by ample documentation:
  - ❖ Detailed method description
  - ❖ Case studies
  - ❖ Testing and validation
  - ❖ Peer review

# Photo Evidence for Trash

- ❖ Systematic application of quantitative trash assessment to photos to determine impairment
- ❖ This procedure produces quantifiable data
- ❖ Therefore, assessed photos legitimate primary line of evidence



# Scientific Integrity of Trash Method

- ❖ Trash assessments are reflection of conditions in creeks and shoreline areas
- ❖ SWAMP trash assessment evaluated for objectivity, reproducibility, and sensitivity
- ❖ Assessment method was peer reviewed
- ❖ Trash above high water line impacts beneficial uses, and is transportable

# Trash Control Already Underway

- ❖ We identified impaired waters based on available data
- ❖ We cannot speculate about future conditions
- ❖ We cannot defer evaluation until control measures take effect
- ❖ Improved conditions can be demonstrated in next listing cycle

# Staff Recommendations

- ❖ New Listings (26 trash + 14 non-trash listings)
- ❖ De-listing of Nickel
  - ❖ Sacramento-San Joaquin Delta, San Pablo Bay and Suisun Bay
- ❖ Revision of List
  - ❖ Castro Cove sediment hot-spot addressed by action other than TMDL