

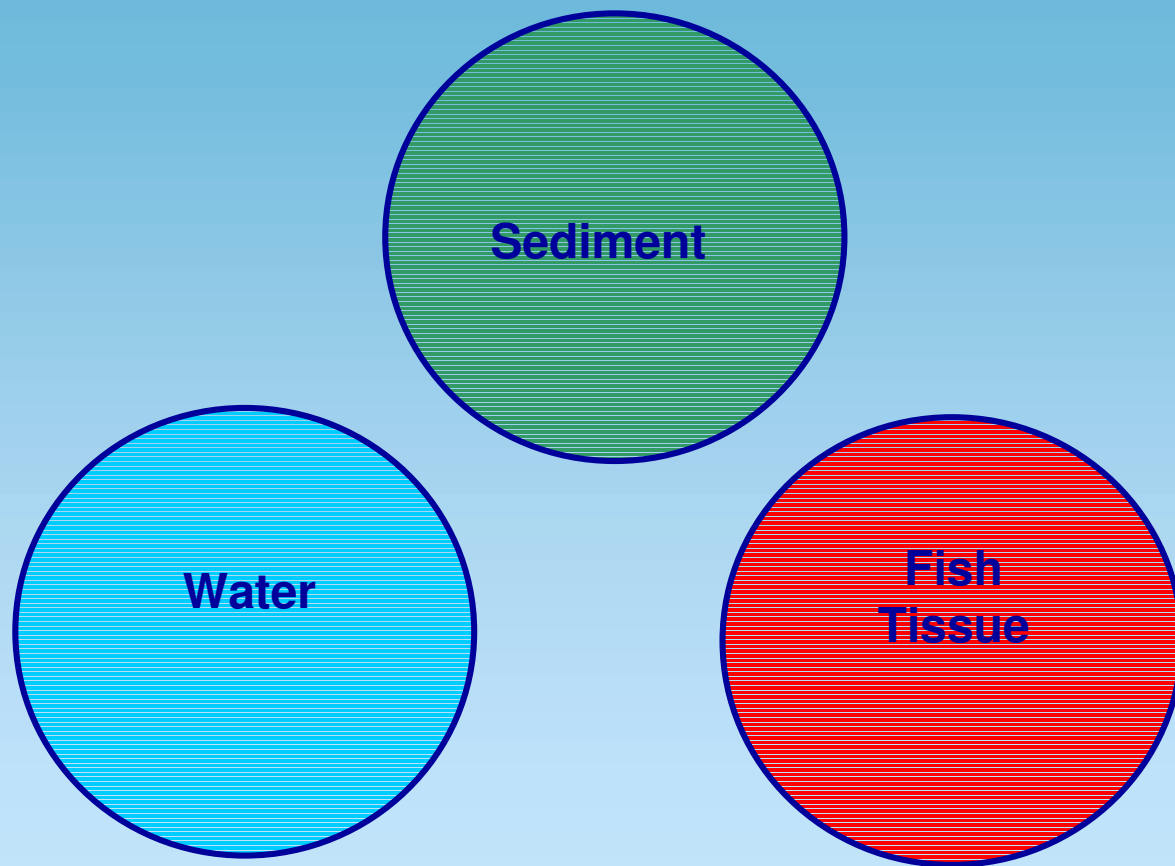
Dominguez Channel and greater Harbor Toxics TMDLs

Draft
Numeric Targets

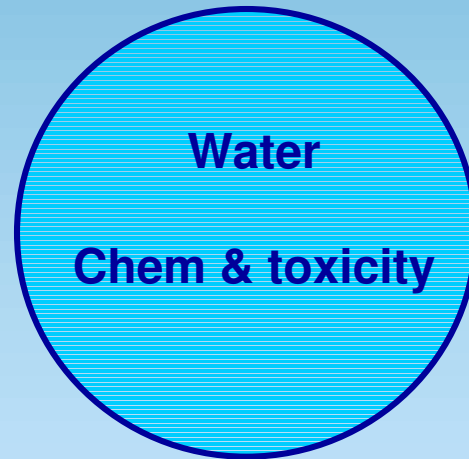
9 May 2006



Assessment data



Assessment data



Dominguez Channel freshwater

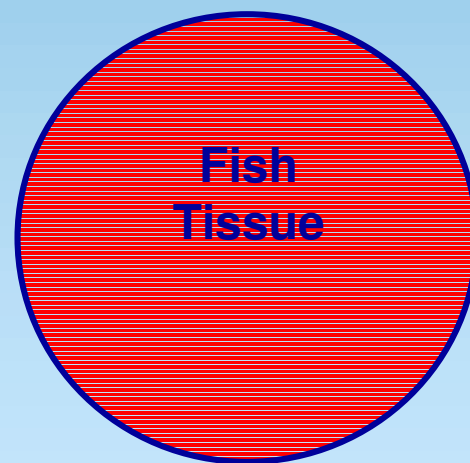
	2002-03 # exceed	2003-04 # exceed	2004-05 # exceed
Copper	4/6	4/6	1/5
Lead	1/6	2/6	0/5
Zinc	4/6	2/6	2/5
toxicity	2	4	?

Dissolved metal results

Assessment data

Sediment

Water



Harbor fish tissue results

Composite results (skin-on filet)	Range (conc.)	# exceed	Screening value
DDT –OEHHA	92 – 397	3 / 4	100 ppb
DDT –WWTP	22 – 6514	36 / 40	100 ppb
PCBs –OEHHA	98 – 294	4 / 4	20 ppb
PCBs –WWTP	10 – 1000	36 / 40	20 ppb

OEHHA 1999-00; Terminal Island WWTP 99-04

more fish tissue results

Composite results (skin-off / skin-on)	Range (conc.)	# exceed	Screening value
Hg – OEHHA	0.04 – 0.06	0 / 4	0.3 ppm
Hg – WWTP	0.01 – 0.11	0 / 30	0.3 ppm
Chlordane – OEHHA	2.3 – 17	0 / 4	30 ppb
Chlordane – WWTP	0.3 – 3.0	0 / 30	30 ppb
Hg – ConSlip	0.05 – 0.13	0 / 8	0.3 ppm
Chlordane – ConSlip	1 – 8.2	0 / 8	30 ppb

OEHHA 99-00; WWTP 99-04; POLA/AMEC 2002

PRELIMINARY ASSESSMENT RESULTS

freshwater:
metals , toxicity

DomCh estuary:
metals, organics,
benthic community effects ,
sed toxicity

ConSlip:
More metals,
More organics,
benthic comm.,
sed toxicity

LAR estuary:
sed. toxicity,
organics

SGR estuary:
metals

Fish:
metals, organics,
benthic comm.,
sed toxicity

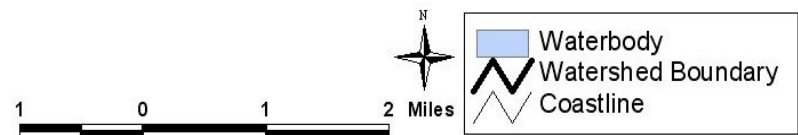
Inner Harbor:
metals, organics,
sediment toxicity
benthic comm .

Cabrillo Marina:
metals, organics

Outer Harbor:
sed. toxicity
organics

San Pedro Bay:
sed toxicity,
organics

Inner Beach:
organics



Aquatic Life Use impairments

- Water and sediment toxicity
- Metals, Chlordane, individual PAHs

Targets

- CTR fresh and saltwater values
- ERL values for Sediment
- toxicity = 1 TUC

Human Health impairments

- DDT, PCBs, Toxaphene in tissue
- DDT, PCBs in sediment and water

Targets

- CTR Human Health values for water
- low Sediment values
- Tissue Threshold Residue Levels for fish
- Wildlife residue values

Fish Tissue targets

Pollutant	CTR Human Health Criteria (µg/L)	BCF [#] (L/kg)	TTRL Edible tissue conc. (ug/kg wet)	OEHHA Values (ug/kg wet)
Total DDT				100
4,4-DDT	0.00059	53600	32	
4,4-DDE	0.00059	53600	32	
4,4-DDD	0.00084	53600	45	
Total PCBs	0.00017	31200	5.3 [*]	20
Toxaphene	0.00075	13100	9.8	30

[#]BCF values from EPA 1980 Water Quality Criteria for each constituent.

^{*}PCB total value applies to sum of all congener or isomer or homolog or Arochlor analyses.

Sediment targets options for DDT

- ERL/TEL/LRM values
- back calculation approach
 - water/sed ratios
 - literature vs. site specific
 - Koc & organic carbon values

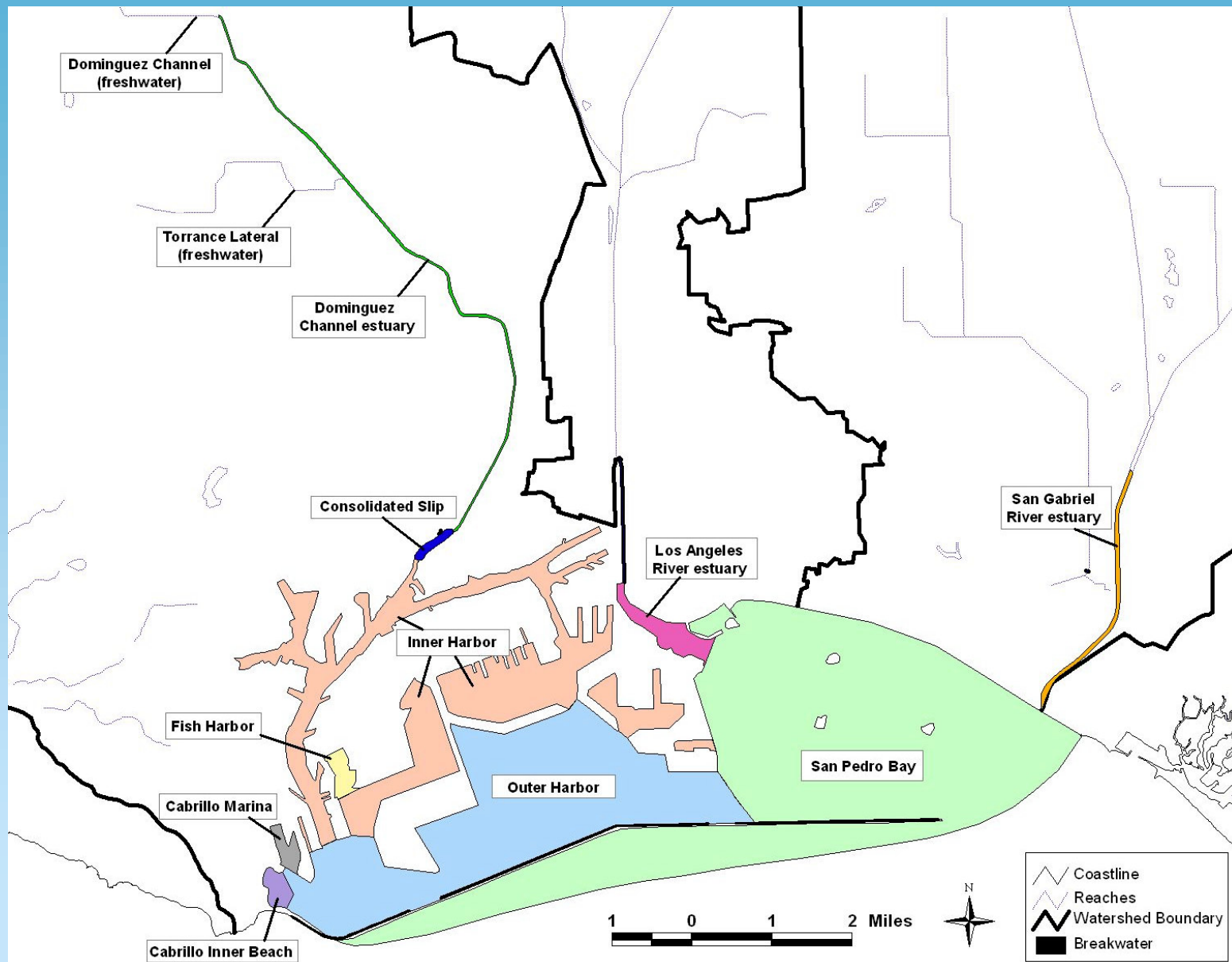
perhaps focus on DDE as prominent compound

— weighted average

Considerations on Sediment targets

- Low Sediment targets for restoring BUs
 - Long term goals
 - Not necessarily action or clean-up levels
-
- SQOs are being developed by SWRCB

2006 Waterbody names



303(d) list

- The 303(d) list: Clean Water Act
 - the basis of TMDLs
- 2006 draft list ID some changes
- Waterbody area changes
- PAHs evaluated as individual compounds
- Impaired segment clarification
 - organics in DomChannel estuary (not freshwater)

Assessment procedures

- Builds on 2006 draft list contents
- Uses benchmarks provided in State Listing policy
- Weight of evidence approach
 - Multiple lines of evidence
 - Data age
- All data rec'd QA/QC review

California Regional Water Quality Control Board, Los Angeles Region

LB Nye:

Lnye@waterboards.ca.gov

(213) 576-6785

Rebecca Christmann:

Rchristmann@waterboards.ca.gov

(213) 576-6757

US Environmental Protection Agency, Region 9

Peter Kozelka:

Kozelka.Peter@epa.gov

(415) 972-3448

Dave Smith:

Smith.DavidW@epa.gov

(415) 972-3416

SMW Mussels in ConSlip

