Nonylpheno	Other Metals	Ammonia	Fipronil	Current Use	PFOS	PBDEs	CECs	Cyanide	Other CTR	Benthos	Toxicity	Dioxins a	Dieldrin	Chlordanes	DDTs	PAHs	Copper	Selenium	PCBs	Mercury	Methylmercury		
enol	etals	3		Jse Pesticides					R Pollutants			and Furans		les				٦			ercury		
				S														×	×		×	Baywide Comparison to Objective	Spc
																						Segment Comparison to Objective	Sport Fish
												×	×	×	×			×	×		×	Baywide Long-term Trend	ish
																						Segment Long-term Trend	
												×	×	×	×				×			Site Long-term Trend	
					×	×	×					×						×	×		×	Baywide Long-term Trend	Bird
					×	×	×					×						×	×		×	Segment Long-term Trend	l Eggs
					×	×	×					×						×	×		×	Site Long-term Trend	
×						×	×									×		?				Baywide Long-term Trend	Bivalves
×						×	×									×		٠,				Segment Long-term Trend	alve
						×	×									×		٠,				Site Long-term Trend	
	×	X						×	×		×	×	×	×	×	×		×				Baywide Comparison to Objective	Water
											×						×	×				Segment Comparison to Objective or Trigger	er
×			×	×			×											×				Baywide Long-term Trend	
×			×	×			×										×	×				Segment Long-term Trend	
	×	×						×	×			×	×	×	×	×						Reasonable Potential Analysis	
				×			×															(Comparison of Pathway to Ambient)	
										×	×											Baywide Comparison to Objective	Sec
										X	×											Segment Comparison to Objective	dime
×					×	×	×			×	×					×	×		×	×		Baywide Long-term Trend	Sediment (Open Bay)
×					×	×	×			×	×					×	×		×	×		Segment Long-term Trend	
												×	×	×	×	×			×	×		Dredged Material Testing Thresholds	n Ba
				×			×															(Comparison of Pathway Particles to Ambient)	ay)

Table 1. Metrics explicitly used in regulatory decision-making (blue) and others that are also high priorities for consideration in decision-making.

Table 2. Monitoring frequency for analytes in the existing Status and Trends program. A=every round, B=mid-level, C=minimal screening (e.g., every 8 yr at 3 sites for water)

	Sport Fish	Bird Eggs	Bivalves (reduced number of sites?)	-> Water	Sediment - Open Bay
Methylmercury	Α	Α			С
Mercury	Α	Α		С	С
PCBs	Α	Α	С	С	С
Selenium	Α	Α	?	А	С
Copper				Α	С
PAHs			Α	С	В
DDTs				С	С
Chlordanes				С	С
Dieldrin				С	C C
Dioxins and Furans	Α	Α		С	С
Toxicity				В	С
Benthos (dry only)					С
Other CTR Pollutants				С	
Cyanide				Α	
CECs		В	С	В	В
PBDEs	A*	A*	A*		B*
PFOS	Α	Α			В
Current Use Pesticide	S			В	
Fipronil				А	С
Ammonia				Α	
Other Metals				А	С
Nonylphenol			A*	A*	B*

^{*} Continue for a limited period to track expected decline.

WATER

Pesticides, THg at 22 sites ² \$14,535 sites ² \$6,893 \$7,643 RPA, long-term trends	Г			WAT	EK		T.
Analytical coosts Se, Cu,CN, at 22 sites							
See Cu, CN, See Se		Old Design	Cost/Yr	New Design	Cost/ Yr	Savings/Yr	Decision-Making
Every 2 yr at 22 Stess S	,						
Se, Cu, CN, and 22 States S14,810 No change S14,810 States S14,810	COSIS	Every 2 yr					
### Studies Second Comment	Se. Cu.CN.						Cu/ CN - SSO: So - TMDI:
Every 2 yr at 22 MeHg sites S4,000 No change S4,000 S0 food web trends. Every 2 yr at 22 Other metals Sites Included PCBs, PAHs, Every 4 yr at 22 sites S1,4535 sites S5,005 None S0 S5,005 No monitoring Every 4 yr at 22 sites S5,005 None S0 S5,005 No monitoring Current Use Pesticides Special CUPs) Every 5 yr Every 4 yr at 29 studies Special TBD Studies Special TBD Studies Special TBD Special Studies TBD Special Studies TBD Special Speci		_	\$1// 810	No change	\$14.810	Śn	
Every 2 yr at 22 Stess S4,000 No change S4,000 Stood web trends. Every 2 yr at 22 Other metals Studes Section Sec	aricillar y	31103	714,010	140 change	714,010	70	CIN. NI A
Every 2 yr at 22 Stess S4,000 No change S4,000 Stood web trends. Every 2 yr at 22 Other metals Studes Section Sec							
Every 2 yr at 22 Stess S4,000 No change S4,000 Stood web trends. Every 2 yr at 22 Other metals Studes Section Sec							
Every 2 yr at 22 Stess S4,000 No change S4,000 Stood web trends. Every 2 yr at 22 Other metals Studes Section Sec							
Every 2 yr at 22 Stess S4,000 No change S4,000 Stood web trends. Every 2 yr at 22 Other metals Studes Section Sec							
Every 2 yr at 22 sites S4,000 No change S4,000 S5,005 S5,005 S7,643							_
MeHg		Every 2 yr					•
Sites Severy 2 yr at 22 Severy 2 yr at 22 Severy 4 yr							
Every 2 yr at 22 Sites S	Molia	_	¢4.000	No change	¢4.000	ćo	_
According Second Se	ivieng		\$4,000	No change	\$4,000	ŞU	1000 web trenus.
Other metals ³ sites ² Included PCBs, PAHs, Pesticides, THg at 22 sites ² \$14,535 sites ² \$6,893 \$7,643 RPA, long-term trends Every 4 yr PBDEs at 22 sites ² \$5,005 None \$0 \$5,005 No monitoring Current Use Pesticides (CUPs) studies TBD CEC identification and prioritization Assessment of the at 9 sites \$1,400 sites ² \$1,750 \$4,535 and prioritization Assessment of the narrative Special studies TBD CTR Pollutants Pipronil Special Monitor in ND in Bay samples Special studies TBD CTR Pollutants TBD Special Monitor in ND in Bay samples Special studies TBD CTR, RPA Conduct effluent monitoring to evaluate sources Logistics Every 2 yr Vessel and at 22 Fieldwork sites ² \$66,000 sites ² \$66,000 sites ² \$66,000 sites ² \$1,500 See, Cu, CN, Special at 22 Fieldwork sites ² \$66,000 sites ² \$1,500 See, Cu, CN, Special sites ² \$9,000 Sites ³ \$9,000 S							
PCBs, PAHs, Pesticides, THg at 22 sites ² \$14,535 sites ² \$56,893 \$7,643 RPA, long-term trends Every 4 yr PBDEs at 22 sites ² \$5,005 None \$0 \$5,005 No monitoring Current Use Pesticides Special (CUPs) studies TBD CCEC identification and prioritization Assessment of the narrative Special studies TBD Assessment of the narrative Special studies TBD CTR PBDILotants ? Every 5 yr Toxicity at 9 sites Special studies TBD CTR PBDILotants ? Every 8 yrs; 3 sites TBD CTR PSPOINT Special Monitor in Nonylphenoi ⁵ studies TBD CTR PBD Special Studies TBD CTR RPA Conduct effluent monitoring to evaluate sources Logistics Vessel and Studies Seeing Special Studies Special Special Studies Sp	Other metals ³		Included				
Pesticides, THg at 22 sites ² \$14,535 sites ² \$6,893 \$7,643 RPA, long-term trends Every 4 yr	Other metals	Sites	meraaca				
Pesticides, THg at 22 sites ² \$14,535 sites ² \$6,893 \$7,643 RPA, long-term trends Every 4 yr							
Every 4 yr at 22 sites 2 \$5,005 None \$0 \$5,005 No monitoring Current Use Pesticides (CUPs) studies TBD CEC identification and prioritization Every 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr Every 4 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr at 9 \$1,750 \$5,005 No monitoring EVERY 5 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 6 yr at 9 \$1,750 \$5,005 No monitoring EVERY 8 yr at 18 PEVERY 9 Yr ASSESSMENT of the marrative EVERY 8 yr at 22 \$66,000 Sites 2 \$66,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	PCBs, PAHs,						CTR, TMDLs (PCB/Hg),
PBDES	Pesticides, THg	at 22 sites ²	\$14,535	sites ²	\$6,893	\$7,643	RPA, long-term trends
PBDES							
Current Use Pesticides (CUPs) studies							
Pesticides (CUPs) studies studies	PBDEs	at 22 sites ²	\$5,005	None	\$0	\$5,005	No monitoring
Pesticides (CUPs) studies studies	Command Han						
CCUPs Studies TBD Prioritization Stevery 5 yr at 9 Assessment of the at 9 sites \$1,400 sites \$1,400 sites \$1,750 -\$350 narrative Assessment of the at 9 sites \$1,400 sites \$1,750 -\$350 narrative \$1,750 Special Studies TBD CTR Fightonia Special Monitor in ND in Bay samples Special studies TBD Special study if any. CTR, RPA Special studies TBD CTR, RPA Special studies Speci		Special					CEC identification and
Every 5 yr at 9 Special Specia		-		TRD			
Toxicity at 9 sites \$1,400 sites² \$1,750 -\$350 narrative Special Special TBD CTR Pollutants Pipronil' Special Monitor in ND in Bay samples Nonylphenol's Studies TBD Special study if any. CTR, RPA CTR, RPA Conduct effluent Monitorin Special study if any. CTR, RPA CTR, RPA Conduct effluent Monitorin Special study if any. CTR, RPA Conduct effluent Monitorin Special study if any. CTR, RPA Conduct effluent Monitorin Special study if any. CTR, RPA Conduct effluent Monitorin Special study if any. CTR, RPA CTR, RPA CTR, RPA CTR, RPA CTR, RPA Special study if any. CTR, RPA Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 3 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 3 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 2 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 4 yr at 22 Special study if any. Every 5 yr at 22 Special study if any. Every 6 yr at 22 Special study if any. Every 8 yr at 22 Special study if any. Every 8 yr at 22 Special study if any. Every 8 yr at 22 Special study if any. Every 8 yr at 22 Special study if any. Every 8 yr at 22 Special study if an	(0013)						
Special studies Other CTR Pollutants ? Every 8 yrs; 3 sites TBD CTR Fipronil' Special Monitor in ND in Bay samples Nonylphenol ⁵ studies Furans studies Furans Special TBD CTR, RPA Conduct effluent monitoring to evaluate sources Logistics Vessel and at 22 Fieldwork sites ² \$66,000 sites ² \$66,000 sites ² \$66,000 \$0 Data Management Data Management Se, Cu, CN, ancilliary, sites ² \$9,000 \$8,000 Every 2 yr at 22 Severy 2 yr at 22 Severy 2 yr at 22 Severy 8 yr 8 Severy 8 yr \$8,000 \$8,000	Toxicity		\$1,400	1 1	\$1.750	-\$350	
CECS studies TBD Other CTR Pollutants ? Every 8 yrs; 3 sites TBD CTR Fipronil" Special Monitor in ND in Bay samples Nonylphenol studies TBD Special study if any. Furans studies TBD CTR, RPA Conduct effluent monitoring to evaluate sources Logistics Every 2 yr at 22 Fieldwork sites \$66,000 sites \$566,000 sites \$2 \$66,000 \$165,000 sites \$2 \$66,000 sites \$2 \$66,	· oxioity		ψ±).00	5.005	ψ1,700	φοσο	THE
Pollutants Pipronil' Special Monitor in ND in Bay samples Nonylphenol Studies TBD Special Studies Stud	CECs	-		TBD			
Fipronil Special Monitor in ND in Bay samples Nonylphenol studies TBD Special study if any. Furans Studies TBD CTR, RPA Conduct effluent monitoring to evaluate sources Logistics Vessel and at 22 Fieldwork Stesse \$66,000 sites \$2 \$66,000 \$0 Every 2 yr at 22 Fieldwork Sites \$66,000 sites \$2 \$66,000 \$0 Data Management See, Cu, CN, ancilliary, ancilliary, ancilliary, PCBs, PAHs, Pesticides, Tox, PAHs,	Other CTR						
Nonylphenol studies TBD special study if any. Furans studies TBD CTR, RPA CONDUCT effluent monitoring to evaluate sources Logistics Every 2 yr at 22 sites studies evaluate sources Every 2 yr at 22 sites studies Every 2 yr at 22 sites studies Every 8 yr at 22 sites studies See, Cu, CN, ancilliary, at 22 sites studies Every 2 yr at 22 sites studies See, Cu, CN, ancilliary, at 22 sites studies Every 2 yr at 22 sites studies See, Cu, CN, ancilliary, at 22 sites studies Every 2 yr at 22 sites studies See, Cu, CN, ancilliary, at 22 sites studies Every 2 yr at 22 sites studies See, Cu, CN, and Cu design. Does not sites studies See, Cu, CN, sites studies See, Cu, CN, and Cu design. Does not sites studies See, Cu, CN, sites studies studies See, Cu, CN, sites studies See, Cu, CN, sites studies See, Cu, CN	Pollutants				TBD		
Furans studies TBD CTR, RPA Conduct effluent monitoring to evaluate sources Logistics Vessel and Fieldwork sites \$66,000 sites \$566,000 sites \$2 \$66,000 sites \$2 \$60,000 sites \$2 \$66,000 sit							
Conduct effluent monitoring to evaluate sources Logistics Vessel and at 22 sites² \$66,000 sites² \$66,000 \$0 Every 2 yr at 22 sites² \$66,000 sites² \$16,500 Data Management Se, Cu, CN, ancilliary, at 22 sites² \$9,000 sites² \$9,000 sites² \$16,500 Every 2 yr at 22 sites² \$16,000 sites² \$16,500 Assumes no change in Se and Cu design. Does not probable of the control of the contr	Nonylphenol						
Special studies evaluate sources Logistics Vessel and sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 8 yr at 22 Fieldwork sites² \$16,500 Data Management Se, Cu, CN, at 22 MeHg & CUPs sites² \$9,000 sites² \$16,500 Every 2 yr at 22 Assumes no change in Se and Cu design. Does not sites² \$16,000 \$16,000 \$10,	Furans	studies		TBD			CTR, RPA
Special studies evaluate sources Logistics Vessel and sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 8 yr at 22 Fieldwork sites² \$16,500 Data Management Se, Cu, CN, at 22 MeHg & CUPs sites² \$9,000 sites² \$16,500 Every 2 yr at 22 Assumes no change in Se and Cu design. Does not sites² \$16,000 \$16,000 \$10,							
Special studies evaluate sources Logistics Vessel and sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 2 yr at 22 Fieldwork sites² \$66,000 \$16,500 Every 8 yr at 22 Fieldwork sites² \$16,500 Data Management Se, Cu, CN, at 22 MeHg & CUPs sites² \$9,000 sites² \$16,500 Every 2 yr at 22 Assumes no change in Se and Cu design. Does not sites² \$16,000 \$16,000 \$10,				Conduct offluent			
Every 2 yr at 22 Every 8 yr		Special					
Every 2 yr at 22 Every 8 yr	PEOS			_			
Every 2 yr at 22 Every 2 yr at 22 Every 2 yr at 22				2.3.0000 3001003			
Fieldwork sites² \$66,000 sites² \$66,000 \$0 Every 2 yr at 22 Fieldwork sites² \$66,000 sites² \$16,500 Data Management Se, Cu, CN, arcilliary, at 22 sites² \$9,000 sites² \$16,000 sites² \$10,500 Every 2 yr at 22 and Cu design. Does not sites² \$10,000 sites² \$10,		Every 2 yr					
Every 2 yr at 22 Every 8 yr at 22 \$16,500	Vessel and						
Every 2 yr at 22 Every 8 yr at 22 \$16,500	Fieldwork	sites ²	\$66,000	sites ²	\$66,000	\$0	
Fieldwork sites² \$66,000 sites² \$16,500 Data Management Se, Cu, CN, at 22 sites² \$9,000 sites² \$16,500 Every 2 yr at 22 and Cu design. Does not sites² \$9,000 sites² \$0 include CUPs-TBD Every 4 yr at 22 sites² \$16,000 Every 8 yr \$8,000 \$8,000		Every 2 yr					
Data Management Se, Cu, CN, at 22 grat 22 grat 22 and Cu design. Does not sites 99,000 sites 90 include CUPs-TBD PCBs, PAHs, Pesticides, Tox, Hg at 22 sites \$16,000 Every 8 yr \$8,000 \$8,000	Vessel and						
Management Se, Cu, CN, Every 2 yr at 22 and Cu design. Does not sites² \$9,000 sites² \$0 include CUPs- TBD PCBs, PAHs, Pesticides, Tox, Hg at 22 sites² \$16,000 Every 8 yr \$8,000 \$8,000	Fieldwork	sites ²	\$66,000	sites ²	\$16,500		
Management Se, Cu, CN, Every 2 yr at 22 and Cu design. Does not sites² \$9,000 sites² \$0 include CUPs- TBD PCBs, PAHs, Pesticides, Tox, Hg at 22 sites² \$16,000 Every 8 yr \$8,000 \$8,000							
Se, Cu, CN, at 22 sites Series							
ancilliary, Amount of the High Structure at 22 sites² Every 2 yr at 22 sites² and Cu design. Does not include CUPs- TBD PCBs, PAHs, Pesticides, Tox, High Structure Every 4 yr at 22 sites² \$16,000 Every 8 yr \$8,000	iviariagement						
ancilliary, Amount of the High Structure at 22 sites² Every 2 yr at 22 sites² and Cu design. Does not include CUPs- TBD PCBs, PAHs, Pesticides, Tox, High Structure Every 4 yr at 22 sites² \$16,000 Every 8 yr \$8,000							
ancilliary, Amount of the High Structure at 22 sites² Every 2 yr at 22 sites² and Cu design. Does not include CUPs- TBD PCBs, PAHs, Pesticides, Tox, High Structure Every 4 yr at 22 sites² \$16,000 Every 8 yr \$8,000							
ancilliary, at 22 sites 2 Every 2 yr at 22 and Cu design. Does not include CUPs- TBD Every 4 yr at 22 sites 3 \$16,000 Every 8 yr \$8,000 \$8,000	Se, Cu, CN,	Every 2 yr					Assumes no change in Se
MeHg & CUPs sites² \$9,000 sites² \$0 include CUPs- TBD PCBs, PAHs, Pesticides, Tox, Hg Every 4 yr at 22 sites² \$16,000 Every 8 yr \$8,000 \$8,000	ancilliary,	at 22		Every 2 yr at 22			
PCBs, PAHs, Pesticides, Tox, Hg at 22 sites ² \$16,000 Every 8 yr \$8,000 \$8,000	MeHg & CUPs	sites ²	\$9,000	sites ²		\$0	_
Pesticides, Tox, Every 4 yr	PCBs, PAHs,						
Hg at 22 sites ² \$16,000 Every 8 yr \$8,000 \$8,000	Pesticides, Tox,	Every 4 yr					
Total \$20,298	Hg	at 22 sites ²	\$16,000	Every 8 yr	\$8,000		
	Total					\$20,298	

¹ Ancilliary analyses include SSC, chlorophyll a, hardness, ammonia, DOC and POC, etc. Cu and Se analyses ² 22 Stations includes 17 random and 5 historic ³ Copper analyses include Cd, Co, Ni, Pb, and Zn. Selenium analyses include Ar and Ag. ⁴ Fiproni was monitored in Bay water in 2013 and largely ND

⁵ Nonylphenol monitor in effluent? Bay?

⁶ Indicates 2014 rates.

SEDIMENT

	1		SEDIME	• •	1	Uses of Data in Davisian
	0115	0 . //				Uses of Data in Decision-
Sediment	Old Design	Cost/Yr	New Design	Cost/ Yr	Savings	Making
Analytical costs	Every 2 yr ;	1			ı	
	sites					
	dependent on		- 4 27			
1	season ²	4	Every 4 yr; 27			Valuable for interpretation
Ancilliary ¹	season Every 2 yr;	\$5,288	sites; alt seasons	\$2,228	\$3,060	of results and modeling
	sites					
	dependent on		Every 4 yr; 27			Dredging based on sediment
PAHs, PCBs and Hg	season*	\$27,935	sites; alt seasons	\$10,193	\$17,743	data; TMDL (PCB/Hg)
	Every 2 yr ;					
	sites					
	dependent on		Every 4 yr; 27			Two more round and then
PBDEs	season ²	\$12,950	sites; alt seasons	\$4,725	\$8,225	consider dropping BDEs
			Every 8 yr; 27			
	Every 2 yr at		sites; dry			
Pesticides (includin	27 sites ²	\$11,563	seasons	\$2,109	\$9,453	Long-term trends
	Every 2 yr ;	1				
1	sites		Every 8 yr; 27			
	dependent on		sites; dry			
Copper and other r	season ²	\$3,330	seasons	\$608	\$2,723	Long-term trends
	Every 2 yr ;					9
	sites		Every 8 yr; 27			
	dependent on		sites; dry			
Selenium and arser	season ²	\$4.662	seasons	\$861	\$3.801	TMDL- Se
Current Use Pestici		Ų 1,002	None	, , , , , , , , , , , , , , , , , , ,	\$5,001	Focus on margins
Current Osc restici	Special stadies		None			r ocus on margins
	Every 2 yr at 27		Every 4 yr; 27			
Toxicity	sites ²	\$25,000	sites; alt seasons	\$12,500	\$12 500	Comparison to SQO
TOXICITY	Sites	\$25,000	Every 8 yr; 27	712,500	Ç12,500	comparison to sigo
	Every 2 yr at 27		sites; dry			
Benthos	sites ²	\$25,000		\$6,250	\$18 750	Comparison to SQO
Dioxin and Furans	Special studies	Ş23,000	TBD	70,230	ÿ10,730	Long-term trends
DIOXIII dila i di dila	Special stadies		100			CEC identification and
CECs	Special studies		TBD			prioritization
CLC3	Special stadies		100			Pyrethroids in Bay largely
	Every 2 yr at					ND (93%); most detects <
Pyrethroids	27 sites ²	\$6,500	None; focus on r	\$6,500	Śn	1.0 ppb (82%)
Nonylphenol	Special studies	\$0,500	TBD	\$0,500	ÇÜ	1.0 pps (0270)
Nonyiphenoi	Every 2 yr at 20		100			
PFOS	sites ²	1	None, focus on m	argine		
Logistics	31153		ivolie, locus on fr	argiiis		
LUBISLICS	Every 2 yr;					I
	sites vary					
	depending on		Fuoru 4 vm 27			
		475	Every 4 yr; 27	425	640.655	
Vessel and Fieldwo	season ⁻	\$75,000	sites; alt seasons	\$35,000	\$40,000	
Data Management	Every 2 yr;					T
	sites vary					
Ancilliary, PAHs,	depending on					
PCBs, PBDEs	season ²	\$16,000	Every 4 years	\$8,000	\$8,000	
Pesticide, Cu and	Every 2 yr:					
other metals, Hg,	Every 2 yr;					
Me Hg, Se, As,	sites vary					
toxicity, and	depending on					
benthos	season ²	\$24,000	Every 8 years	\$8,000	\$16,000	
Total					\$140,255	

¹ Ancilliary analyses include grainsize, total organic carbon, total solids, etc.
² Alternating wet and dry seasons. Dry seasons - 47 stations (40 random, 7 fixed); wet season 27 sites (20 random, 7 fixed)

³ The following metals are included in the analysis of copper: Al, Ag, Cd, Fe, Pb, Mn, Ni, & Zn

BIVALVES

		I	T			
						Uses of Data in
Bivalve	Old Design	Cost/Yr	New Design	Cost/ Yr	Savings/Yr	Decision-Making
Analytical costs	1			1	1	
						PAH best food web
						indicator (PAHs not
	Every 2 yr;		Every 2 yr; 6			metabolized); long
PAHs and PBDEs	11 sites	\$8,400	sites	\$4,900	\$3,500	term trends
	Every 2 yr ;		Every 8 yrs; 6			Long-term trend
PCBs	11 sites	\$6,000	sites	\$1,750	\$4,250	(infrequent check-in)
	Every 2 yr;					
Pesticides	11 sites	\$4,800	None	\$0	\$4,800	None
	Every 6 yr ;					
Metals	11 sites	\$1,080	None	\$0	\$1,080	
	Every 2 yr ;					
Selenium	11 sites	\$510	TBD	\$149	\$361	Trends; TMDL
	Special					CEC prioritization and
CECs	studies		TBD			identification
Logistics						
Vessel and	Fuoru 2 vm 11					
	Every 2 yr; 11		F	¢20.250	¢c 750	
Fieldwork	sites	\$27,000	Every 2 yrs; 6 site	\$20,250	\$6,750	
Data						
Management						
ivianagement						
	Every 2 yr; 11					
PAHs	sites		Every 2 yrs; 6 site	\$6,000	\$2,000	
17413	3,103	70,000		, 50,000	72,000	
PCBs, PBDEs,						
Pesticides,	Every 2 yr; 11		Every 4 yrs; 6			
Metals, and Se	sites	\$12,000		\$9,000	\$3,000	
Total	5.665	712,000	3,003	75,000	\$25,741	
	1			1	723,741	

SUMMARY

D	2011	2017	2015	2017		IVIAKY	2022	2024	2022	2022	0
Program	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Comments?
Water		l	l l		ı			1			
Cu, CN, Se,											
Ancilliary,											
MeHg		Х		Х		Х		Х		Х	22 sites
PCB, PAHs,											
Pesticides,											Every 8 years; last
Hg								X			conducted in 2013
Water											Every 8 years; last
Toxicity				X				X		X	conducted in 2011
CTR		Х								Х	Every 10 years
CECs		Х		Х		Χ		Х			TBD
PBDEs											Drop
Sediment											
Anicillary,											
PAHs, PCBs,											
Hg	X- Dry				X-Wet				X- Dry		27 sites in the Bay?
PBDEs	X- Dry				X-Wet						Drop after 2018?
Metals, Se,	<u>, </u>										
Ar,											
pesticides	X- Dry								X- Dry		
Toxicity	,				X-Wet				X- Dry		
									,		Part of SQO -
											needs to be
											coupled with
Benthos									X- Dry		chemistry
Dentilos									х Біу		chemistry
											Drop for Bay;
Pyrethroids											monitor in margins
CECs - NP,											monitor in margins
PFOS, etc.	PFOS		?		?		?		?		TBD
F1 03, etc.	F1 03						•		:		TDD
											Will need ancillary,
											pyrethroids?,
Margins		X	Х		X		Х		Х		CECs?
Margins Bivalves		Χ	Χ		X		Х		Х		CECS?
Bivaives		I	I		<u> </u>			l			Reduce from 11 to
PAHs	V		V		V		V		V		
All other	Х		Х		Х		Х		Х		6 sites
	V				V				V		to alcode a DDDE-
analytes	Х				X				Х		Includes PBDEs
CECs											TBD
Sportfish		I	I								
Suite of						_					
Analytes ¹	Χ					Х					Every 5 yr
Pesticides											Drop
Bird Eggs		ı	ı								
Suite of											
Analytes ²		Х			Χ			X			Every 3 yr
Pesticides											Drop
USGS											
Cruises											
											Cloern/
1	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Schoelhammer

¹ Sportfish will be analyzed for the following in 2014: PCBs, PBDEs, Hg, Se, dioxin, and PFCs.
² Cormorant eggs are analyzed for the following: PCBs, PBDEs, Hg, PFCs, and Se. Tern eggs are analyzed for Hg, PBDEs, and Se.

MARGINS SAMPLING DESIGN

Analyte	Comments	Cost/Year	New Design	Cost/Year	Optional Components
Methyl- mercury	TMDL priority		2 yr; Wet:Dry - 20 random	\$2,100	
Mercury	TMDL priority		2 yr; Wet:Dry - 20 random	\$1,050	
PCBs	TMDL priority		2 yr; Wet:Dry - 20 random	\$7,750	
Selenium	TMDL priority		2 yr; Wet:Dry - 20 random	\$2,520	
Copper	includes other metals		2 yr; Wet:Dry - 20 random	\$1,800	
PAHs	needed if SQO		2 yr; Wet:Dry - 20 random		\$4,250
DDTs/Chlorda ne/ Dieldrin			2 yr; Wet:Dry - 20 random	\$6,250	
Dioxins and Furans	optional - if needed for TMDL		2 yr; Wet:Dry - 20 random		\$7,500
Toxicity	optional - needed if SQO		2 yr; Wet:Dry - 20 random		\$25,000
Benthos	optional - needed if SQO		2 yr; Wet:Dry - 20 random		\$25,000
CECs	from archives as needed?			TBD	
PBDEs	tracking dist & trends		2 yr; Wet:Dry - 20 random	\$7,000	
PFOS	from archives as needed?				\$0
Current Use Pesticides			2 yr; Wet:Dry - 20 random	TBD depending on analytes	
Pyrethroids	2 yr; 20 random, 7 fixed	\$4,820	None - focus on margins	\$6,500	
Fipronil	included w/ EBMUD legacy pest analysis		2 yr; Wet:Dry - 20 random		
Nonyl-phenol	from archives as needed?		2 yr; Wet:Dry - 20 random	TBD	
Ancilliary			2 yr; Wet:Dry - 20 random	\$5,288	
Other Metals			2 yr; Wet:Dry - 20 random		
TOTAL				\$40,258	\$61,750