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## APPENDIX 1: SELECTED PUBLICATIONS OF THE MUSSEL WATCH PROGRAM

The concept of environmental monitoring and characterization using bivalve mollusks as the sentinel organisms has a long history dating back at least to 1895. The references provided below contain information about all aspects of NOAA's Mussel Watch Program that has been actively quantifying contaminants in the nation's coastal and estuarine water since 1986. A more comprehensive list of publications and the related electronic files can be found at our website: <http://www8.nos.noaa.gov/nccos/ccma/publications.aspx>. For a larger perspective of this kind of work performed internationally, including the earliest work alluded to above, see our publication "World Mussel Watch Database" found at: <http://www.ccma.nos.noaa.gov/publications/tm109.pdf>

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# APPENDIX 2: RESULTS BY STATE



## ALASKA (AK)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
KTMP	55.2938	-131.5480	Ketchikan	Mountain Point
NBES	59.4533	-135.3365	Nahku Bay	East Side
PVMC	61.1328	-146.4610	Port Valdez	Mineral Creek Flats
UI SB	60.9608	-147.6460	Unakwit Inlet	Siwash Bay
CIHS	59.6145	-151.4442	Cook Inlet	Homer Spit

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
KTMP	M	11		●		7.1	●	●		7				0.06				1.2				0.59				0				97			
NBES	M	9.2				5.4	●	●	▲	6				0.1				2				2.1	●			0				72			
PVMC	M	12	●	●		3.5		●		27	●			0.09				8.9	●	●		3	●	●		0.18				89			▼
UI SB	M	12	●	●		2.6				33	●			0.11				7.4	●			2				1.4	●	●		108			
CIHS	M	12	●	●		1.7				10				0.12				3.4				1.3				0				105			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
KTMP	M	2.1				0.47				1.4				0.58				152				3.5			
NBES	M	3.7				2.7				2.2				0.98				316				7.7			
PVMC	M	7.3				2.6				1.7				0.31				441				6.4			
UI SB	M	1.7				0.87				0.38				0.56				176				3.7			
CIHS	M	4.4				1.1				0.3				0.42				250				11			



# APPENDIX 2: RESULTS BY STATE



## ALABAMA (AL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High  
**Status (s)**  
**National Status**  
 ● Medium  
 ● High  
**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
MBDR	30.5917	-88.0398	Mobile Bay	Dog River
MBCP	30.3155	-88.1338	Mobile Bay	Cedar Point Reef

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
MBDR	0	5.7				3.7	●	●		287	●	●		0.11	●			2.8	●			0.23				0.27	●	●		4410	●	●	
MBCP	0	7.1				2.4				86				0.07	●			1.5				0.29				0.16				876			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
MBDR	0	106	●	●		9.5		●		202	●	●		6.8		●		1187		●		125		●	
MBCP	0	20			▼	3.1			▼	45		●	▼	3.5			▼	190			▼	36			▼

# APPENDIX 2: RESULTS BY STATE



## CALIFORNIA (CA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
IBNJ	32.5877	-117.1335	Imperial Beach	North Jetty
SDCB	32.6865	-117.1592	San Diego Bay	Coronado Bridge
PLLH	32.6805	-117.2488	Point Loma	Lighthouse
SDHI	32.7247	-117.1947	San Diego Bay	Harbor Island
MBVB	32.7675	-117.2420	Mission Bay	Ventura Bridge
LJLJ	32.8515	-117.2738	La Jolla	Point La Jolla
OSBJ	33.2017	-117.3937	Oceanside	Municipal Beach Jetty
SCBR	33.4517	-118.4873	South Catalina Island	Bird Rock
NBWJ	33.5910	-117.8900	Newport Beach	West Jetty

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
IBNJ	M	9.2				0.78				7.6				0.05			▼	0.54				1.5				0				146	●		
SDCB	M	6.7				2.5			▼	14			▼	0.12			▼	1.1				2.5	●			0.21			▼	196	●		▼
PLLH	M	27	●	●		2.3				9.9				0.25	●	●		3.8				2.6	●			0				320	●		
SDHI	M	7.5				2.7			▼	15				0.12				1				1.9			▼	0.25	●	●		187	●		▼
MBVB	M	8				1.4			▼	5.9				0.04				0.66				0.8				0				133			
LJLJ	M	15	●	●	▼	1.6				7.4				0.07			▼	1.5				1.7				0				148	●		
OSBJ	M	12	●	●		2.6				7.6				0.05				1				1.3				0.06				203	●		
SCBR	M	15	●	●	▼	5	●	●		6.9				0.08				2.5				1.4				0				130			
NBWJ	M	11	●			1.3				6.8				0			▼	0.9				4.7	●	●		0.14				125			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
IBNJ	M	20				3.6			▼	58			▼	2			▼	268				99			
SDCB	M	81	●	●	▼	12			●	▼	54			1.7				1811	●	●	▼	571	●	●	
PLLH	M	16			▼	6.8			▼	12			▼	2.8				268				50			▼
SDHI	M	133	●	●		23	●	●	▼	97	●			3				3762	●	●	▼	642	●	●	
MBVB	M	18			▼	5.9			▼	14			▼	1.1				297			▼	40			▼
LJLJ	M	14				11			●	▼	14			4.5			●	133				20			
OSBJ	M	30				25	●	●		177	●	●		22	●	●		195				129			
SCBR	M	5.1				0.85			▼	8.9			▼	0.23			▼	63				16			
NBWJ	M	8.4			▼	8.2				61				3.6				96				31			

# APPENDIX 2: RESULTS BY STATE



## CALIFORNIA (CA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
ABWJ	33.7335	-118.1010	Anaheim Bay	West Jetty
LBBW	33.7232	-118.1735	Long Beach	Breakwater
SPFP	33.7067	-118.2742	San Pedro Harbor	Fishing Pier
PVRP	33.7170	-118.3227	Palos Verdes	Royal Palms State Pk.
RBMJ	33.8320	-118.3928	Redondo Beach	Municipal Jetty
MDSJ	33.9618	-118.4580	Marina Del Rey	South Jetty
TBSM	34.0390	-118.5972	Las Tunas Beach	Santa Monica Bay
PDPD	34.0010	-118.8088	Point Dume	Point Dume
SCFP	34.0580	-119.9203	Santa Cruz Island	Fraser Point

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
ABWJ	M	8.7				0.59				7.7			▼	0			▼	1				1.4			▼	0.1				82			
LBBW	M	7.3				0.57				7.9				0.06				1.1				3	●	●		0				127			▼
SPFP	M	9.5				0.71				13				0				1.9				1.7			0.55	●	●		99			▼	
PVRP	M	14	●	●	▼	1.4				8.9				0.07			▼	1.4			▼	1.1			0.14				93			▼	
RBMJ	M	9.6				0.62				8.6			▼	0.1				1.9				3.2	●	●		0			114				
MDSJ	M	8.4				1.4				9.5			▼	0.07			▼	1				4.7	●	●	▼	0.26	●	●		86			▼
TBSM	M	7.7				0.96				9.4				0.08			▼	2.5				2.5		●		0.12				108			
PDPD	M	7.9			▼	1.6				8				0			▼	1.4				2			0.14				88				
SCFP	M	18	●	●	▼	5.5	●	●		6.5				0.05				1.8				0.83			0				204	●			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
ABWJ	M	13			▼	17	●	●	▼	175	●	●	▼	2.5			▼	522				107			▼
LBBW	M	44		●	▼	25	●	●		286	●	●		14	●	●		222				104			
SPFP	M	75	●	●	▼	5.5			▼	452	●	●	▼	1.8				4434	●	●		94			▼
PVRP	M	13			▼	5.9			▼	462	●	●	▼	1.9			▼	90			▼	44			▼
RBMJ	M	18			▼	15		●		152	●	●		6.6		●		278				58			
MDSJ	M	11			▼	37	●	●	▼	96	●	●	▼	12	●	●		2093	●	●		75			
TBSM	M	6.7				15		●		77	●	●	▼	5.6		●		347				35			
PDPD	M	6.3			▼	4.7			▼	57			▼	1.9				69				20			
SCFP	M	3.5				6.2				12			▼	3.4				121				15			

# APPENDIX 2: RESULTS BY STATE

## CALIFORNIA (CA)



**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
SBSB	34.3957	-119.7275	Point Santa Barbara	Point Santa Barbara
PCPC	34.4438	-120.4570	Point Conception	Point Conception
SLSL	35.1607	-120.7558	San Luis Obispo Bay	Point San Luis
SSSS	35.6347	-121.1947	San Simeon Point	San Simeon Point
PGLP	36.6272	-121.9165	Pacific Grove	Lovers Point
MBML	36.8012	-121.7897	Monterey Bay	Moss Landing
MBES	36.8098	-121.7852	Monterey Bay	Elkhorn Slough
MBSC	36.9542	-122.0247	Monterey Bay	Point Santa Cruz
SFSM	37.5780	-122.2537	San Francisco Bay	San Mateo Bridge

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SBSB	M	8.6				1.3				6.7				0				1.5				0.68				0				68			
PCPC	M	12	●	●	▼	6.8	●	●		6.6				0.15	●			2.7				1.9				0.17				126			
SLSL	M	11				5.7	●	●		10				0.08				1.9				0.61			▼	0				107			
SSSS	M	17	●	●	▼	7.6	●	●		11			▲	0.3	●	●		9.2	●	●		1.6				0				157	●		
PGLP	M	13	●	●	▼	8.4	●	●		7.8				0.08				1.7				5.5	●	●		0				166	●		
MBML	M	8.5				13	●	●		8.1				0.04				1.7				0.98				0				145	●		
MBES	M	8.1				11	●	●		8.7				0.04				1.5				0.6				0				110			
MBSC	M	10			▼	4.5	●	●		7.4				0.06				1.6				1.5				0				111			▼
SFSM	M	7.2				3.7	●	●	▼	11				0.21	●	●		5.6	●			1.4				0.11				114			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SBSB	M	3.2			▼	7.9			▲	18			▼	2.7				112				18			
PCPC	M	4.1				3.3				26				1.5				247				17			
SLSL	M	7.3			▼	7.5			▼	101	●			6.8		●		348				72			
SSSS	M	2			▼	14			●	15				5.3			●	117				17			
PGLP	M	3.6				17	●	●		33				11	●	●		131				23			
MBML	M	6.9			▼	9.6			●	250	●	●		34	●	●		218				27			
MBES	M	16				17	●	●		520	●	●		95	●	●		174				46			
MBSC	M	4.9			▼	16	●	●		91	●			19	●	●		193				13			
SFSM	M	38			▼	11			●	56				6.6			▼	834				257	●		▼

# APPENDIX 2: RESULTS BY STATE

## CALIFORNIA (CA)



**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
SFYB	37.8152	-122.3715	San Francisco Bay	Yerba Buena Island
SFDB	37.5027	-122.1213	San Francisco Bay	Dumbarton Bridge
TBSR	38.1495	-122.9040	Tomaes Bay	Spenger's Residence
BBBE	38.3050	-123.0660	Bodega Bay	Bodega Bay Entrance
PALH	38.9530	-123.7430	Point Arena	Lighthouse
PDSC	40.0225	-124.0733	Point Delgada	Shelter Cove
HMBJ	40.7642	-124.2375	Eureka	Humboldt Bay Jetty
EUSB	40.8215	-124.1713	Eureka	Samoa Bridge
SGSG	41.7478	-124.2077	Crescent	Point St. George

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SFYB	M	6.6				3.2	●			13				0.34	●	●		5				2.8	●	●		0.14				197	●		
SFDB	M	4.9				3.6	●	●	▼	7.2				0.19	●	●	▼	3.7				0.88				0				92			
TBSR	M	7.4				5.3	●	●		4.9				0.19	●	●		3.7				0.46				0				94			
BBBE	M	11	●			11	●	●		8.1				0.12				2.7				3.5	●	●		0				142	●		
PALH	M	15	●	●		7.7	●	●		7.9			▲	0.18	●	●		3.4				1				0				139			
PDSC	M	11	●	●		5.1	●	●		8.2			▲	0.11				1.2			▲	1.7				0				161	●		
HMBJ	M	10				7.3	●	●		8.4				0.06				2.9				1.7				0				180	●		
EUSB	M	8.2				4.6	●	●		8.4				0.14		●		6.2	●			0.81				0				146	●		
SGSG	M	13	●	●		8.5	●	●		36	●			0.17		●	●	14	●	●		1.6				0.85	●	●		155	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SFYB	M	87	●	●		7.2				56				7.9	●							153	●		
SFDB	M	12			▼	14		●		75	●		▼	6.2	●	▼		831				259	●		
TBSR	M	4.7				2.8				13				1.2				424				13			
BBBE	M	5.8				16	●	●		24				14	●	●		125				68			
PALH	M	4.7				14		●		68	●		▼	11	●	●	▼	159				100			
PDSC	M	2.2				5.8				3.6				6.4	●			184			▲	4.4			
HMBJ	M	1.2				2.7				2				4.7	●	▲		169				6.9			
EUSB	M	19			▼	1.9				5.3				0.68				721				23			
SGSG	M	1.9				8.2				4.8				6.5	●			172				7.3			

# APPENDIX 2: RESULTS BY STATE



## CONNECTICUT (CT)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High  
**Status (s)**  
**National Status**  
 ● Medium  
 ● High  
**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
LICR	41.3183	-72.3583	Long Island Sound	Connecticut River
LISI	41.0527	-73.4173	Long Island Sound	Sheffield Island

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
LICR	M	9.2				1.4				19	●			0.13				3.9				2.6	●			0.28	●	●		103			
LISI	M	8.2				1.5				18	●			0.15	●			2.9				4.5	●	●		0.25	●	●		82			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
LICR	M	10			▼	6.8			▼	26			▼	1.6			▼	439				117			
LISI	M	14				9	●		▼	30			▼	3.5			▼	1069				126			▼

# APPENDIX 2: RESULTS BY STATE



## DELAWARE (DE)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High  
**Status (s)**  
**National Status**  
 ● Medium  
 ● High  
**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
DBKI	39.2032	-75.3590	Delaware Bay	Kelly Island
DBCH	38.7835	-75.1205	Delaware Bay	Cape Henlopen

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
DBKI	O	9				4.3	●	●		201	●			0.12	●			3.2	●			1.4	●			0.28	●	●		4980	●	●	
DBCH	M	9.8				0.76				8.8				0.19	●	●		2.7				2.3	●			0.23	●	●		112			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
DBKI	O	49				6.2				75	●	●	▼	8.5	●		▼	207				69	●		▼
DBCH	M	17				2.2			▼	22			▼	1.5				241				37			▼

# APPENDIX 2: RESULTS BY STATE



## FLORIDA (FL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
SJCB	30.3810	-81.4400	St. Johns River	Chicopit Bay
MRCB	29.7640	-81.2618	Matanzas River	Crescent Beach
IRSR	27.8295	-80.4743	Indian River	Sebastian River
NMML	25.9377	-80.1497	North Miami	Maule Lake
BBGC	25.5333	-80.3232	Biscayne Bay	Gould's Canal
FBJB	25.2122	-80.5340	Florida Bay	Joe Bay
FBFO	25.1412	-80.9237	Florida Bay	Flamingo
EVFU	25.9023	-81.5123	Everglades	Faka Union Bay
RBHC	26.0270	-81.7388	Rookery Bay	Henderson Creek

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SJCB	0	20	●	●		1.6			▲	71				0.1	●			1.8	●			0.49	●			0			▼	2010			▼
MRCB	0	16	●	●		1.9				89				0.19	●	●		1.8	●			0.38			▲	0				2560		●	
IRSR	0	7.3				1.2				374	●	●		0.08	●			0.81				0.67	●			0				2910		●	
NMML	0	8.3				0.81				984	●	●		0.06				1				1.7	●			0.63	●	●		4690	●	●	
BBGC	0	9.5				0.25				572	●	●	▲	0.15	●	●		0.72				0.29				0.24	●	●		4180	●	●	
FBJB	0	7.5				1.5				44				0.32	●	●		1.9	●			0.5	●			0.32	●	●		994			
FBFO	0	17	●	●		1.7				52				0.16	●	●		0.91				0.53	●			0.16				1210			
EVFU	0	7.9				1.8			▼	91				0.21	●	●		1.5				0.44				0.13				1660			
RBHC	0	12	●	●		2.9				121				0.16	●	●	▼	1.2				0.38				0.11				1180			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SJCB	0	70	●		▼	2.5				6.6				1.1				638				34			
MRCB	0	23				0.86				2.4				0				234				13			
IRSR	0	113	●	●		55	●	●		42	●			3.4				875		●		68	●		
NMML	0	876	●	●		6.6			▼	25				1.7				1598	●	●		109	●		
BBGC	0	288	●	●		4.6				13				0.58				2280	●	●		33			
FBJB	0	6.5				1.3				1.1				0.09				244				15			
FBFO	0	6.7			▼	0.79				3.5			▼	0			▼	371			▼	20			
EVFU	0	18				0.72			▼	1.4			▼	0.09				591				19			
RBHC	0	27			▼	2.3				3			▼	0.36				286				20			



# APPENDIX 2: RESULTS BY STATE



## FLORIDA (FL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
NBNB	26.1118	-81.7852	Naples Bay	Naples Bay
CBBI	26.5143	-82.0345	Charlotte Harbor	Bird Island
TBCB	27.6810	-82.5177	Tampa Bay	Cockroach Bay
TBHB	27.8548	-82.3947	Tampa Bay	Hillsborough Bay
TBKA	27.9097	-82.4538	Tampa Bay	Peter O. Knight Airport
TBOT	28.0237	-82.6328	Tampa Bay	Old Tampa Bay
TBPB	27.8443	-82.6115	Tampa Bay	Papys Bayou
TBMK	27.6208	-82.7265	Tampa Bay	Mullet Key Bayou
TBNP	27.7872	-82.7540	Tampa Bay	Navarez Park
CKBP	29.2067	-83.0695	Cedar Key	Black Point

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
NBNB	0	12	●	●		1.1			▼	1400	●	●	▲	0.11	●			1.1				0.63	●			0.41	●	●	▼	6300	●	●	
CBBI	0	10			▼	2.2				256	●	●	▲	0.24	●	●		1.1				0.49	●			0				4930	●	●	▲
TBCB	0	7.3				3				92				0.16	●	●		1.6	●			0.55	●			0.11				1550			
TBHB	0	6.3				2.6				81				0.08	●			1.1				0.71	●	▼	0.36	●	●		2490		●		
TBKA	0	6.5				2.2				234	●	●		0.09	●			1.2				1.6	●		0.52	●	●		4460	●	●		
TBOT	0	4.2				3.1				229	●	●		0.33	●	●	▼	1.6				1.1	●		0.22	●	●		6450	●	●		
TBPB	0	7.2				1.7			▼	72				0.12	●		▼	1.4				1.6	●		0.21	●	●		1650			▼	
TBMK	0	15	●	●		2.7				23				0.14	●	●		1.5				1.2	●		0.15				374				
TBNP	0	37	●	●		1.3				99				0.08	●			1				1	●		0.2	●			1970				
CKBP	0	17	●	●		1			▼	14				0.1	●		▼	0.74				0.18			0				364				

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t	
NBNB	0	87	●		▼	12		●		7.1			▼	3.9				1443	●	●		27				
CBBI	0	46				2.7			▼	3.8			▼	0.62				▼	217				6.5			
TBCB	0	8.8			▼	10		●	▼	20			▼	0.39				▼	228				21			
TBHB	0	67	●			7.5		●		14				1.3				993		●		49	●			
TBKA	0	134	●	●		37		●	●	62		●	▼	4				▼	507			▼	126	●	▼	
TBOT	0	5.9				14		●		19				1.1				637				44	●			
TBPB	0	9.9				21		●	●	12			▼	2.3				628				32				
TBMK	0	1.5				5.5			▼	3.1			▼	0.61				▼	115			▼	19			
TBNP	0	15				20		●	●	14			▼	2.4				375			▼	32			▼	
CKBP	0	5.8				1.7			▼	1.8			▼	0.34				▼	138				3.9			

# APPENDIX 2: RESULTS BY STATE



## FLORIDA (FL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
SRWP	29.3292	-83.1742	Suwannee River	West Pass
AESP	30.0633	-84.3220	Apalachee Bay	Spring Creek
APCP	29.7242	-84.8842	Apalachicola Bay	Cat Point Bar
APDB	29.6725	-85.0657	Apalachicola Bay	Dry Bar
SAWB	30.1425	-85.6322	St. Andrew Bay	Watson Bayou
PCMP	30.1512	-85.6630	Panama City	Municipal Pier
PCLO	30.2513	-85.6810	Panama City	Little Oyster Bar
CBSR	30.4120	-86.2037	Choctawhatchee Bay	Off Santa Rosa

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SRWP	0	35	●	●		1.7				16				0.17	●	●		0.93				0.14				0.25	●	●		819			
AESP	0	15	●	●		2.6				24				0.1	●			0.89				0.27				0				381			
APCP	0	15	●	●		2.1				45				0.08	●			1.4				0.23				0				356			
APDB	0	15	●	●		2.2			▼	36			▼	0.08	●			1.5				0.24				0				322			
SAWB	0	31	●	●	▲	1				266	●	●		0.08	●			0.78				0.69	●		0.09				2530	●		▼	
PCMP	0	36	●	●	▲	1.4				308	●	●		0.1	●			0.82				0.49	●	▼	0				2050				
PCLO	0	22	●	●	▲	1.2				38				0.06				0.7				0.32			0				1580			▼	
CBSR	0	11		●		2.3				61				0.25	●	●		1.3				1.3	●		0.21	●			2030				

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SRWP	0	5.7				2.3				1.7				0.19								3.9			
AESP	0	8.3			▼	2.1				7.7			▼	0.27			▼	194				5.1			▼
APCP	0	5.2			▼	4.1			▼	11			▼	2.5			▼	340			▼	10			
APDB	0	5.7				5			▼	14			▼	3.7			▼	342				11			
SAWB	0	79	●			11		●	▼	52		●	▼	1.8			▼	1202		●		103	●		▼
PCMP	0	110	●	●	▼	10		●		52		●	▼	1.2			▼	1374	●	●		66	●		
PCLO	0	8.4			▼	4.3			▼	77	●	●	▼	1.4				359				23			
CBSR	0	14				13		●		138	●	●		9.8	●	●		479				43	●		

# APPENDIX 2: RESULTS BY STATE



## FLORIDA (FL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
CBPP	30.4823	-86.4793	Choctawhatchee Bay	Postil Point
CBJB	30.4108	-86.4908	Choctawhatchee Bay	Joe's Bayou
PBSP	30.3498	-87.1547	Pensacola Bay	Sabine Point
PBIB	30.5167	-87.1117	Pensacola Bay	Indian Bayou
PBPH	30.4137	-87.1913	Pensacola Bay	Public Harbor

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CBPP	0	12	●	●	▲	2.4				79				0.24	●	●		1				0.84	●			0.11				2540	●		
CBJB	0	17	●	●		3.5	●	●		821	●	●	▲	0.16	●	●	▼	1.1				0.64	●		▼	0.23	●	●		7710	●	●	
PBSP	0	17	●	●	▲	2.7				52				0.17	●	●		1.7	●			0.54	●			0.17				1010			▼
PBIB	0	13	●	●		2.2				41				0.1	●			2.1	●			0.36				0				739			
PBPH	0	12	●	●		2.8				84				0.17	●	●		1.4				0.75	●			0.13				3200	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CBPP	0	14				13	●			138	●	●	▼	9.2	●			451			▼	38			
CBJB	0	42			▼	6.5			▼	26			▼	1.9			▼	2372	●	●		45	●		
PBSP	0	8.1				3.2				7.9				1.7				187				28			
PBIB	0	1.7			▼	3.2			▼	9.9			▼	1.7			▼	142				83	●		▼
PBPH	0	8.1			▼	11	●		▼	20			▼	9.5	●	●		360			▼	58	●		▼

# APPENDIX 2: RESULTS BY STATE



## GEORGIA (GA)

**Regional (r)**  
**Mussels (M)**  
● Medium  
● High

**Status (s)**  
**National Status**  
● Medium  
● High

**Trend (t)**  
**National Trend**  
▼ Decreasing  
▲ Increasing

**Zebra Mussels (ZM)**  
● Medium  
● High

**Oysters (O)**  
● Medium  
● High

Site	Latitude	Longitude	General Location	Location
SRTI	32.0165	-80.8825	Savannah River Estuary	Tybee Island
SSSI	31.3928	-81.2880	Sapelo Sound	Sapelo Island
ARWI	31.3242	-81.3108	Altamaha River	Wolfe Island

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SRTI	0	20	●	●		2.5				87				0.08	●			2.2	●			0.43				0				1530			
SSSI	0	19	●	●		1.7				51				0.1	●			1.8	●			0.41				0				969			
ARWI	0	21	●	●		1.8				54			▼	0.08	●			1.7	●			0.18				0				947			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SRTI	0	101	●	●		2.1			▼	4.3			▼	0			▼	561			▼	10			
SSSI	0	8.8				0.77			▼	2.7			▼	0.62			▼	175				5.8			
ARWI	0	8.7				1.8				4.2				0.8				192				11			

# APPENDIX 2: RESULTS BY STATE



## ILLINOIS (IL)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
LMNC	42.3047	-87.8273	Lake Michigan	North Chicago

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t	
LMNC	ZM	6.8	●			5	●	●		31	●			0.05	●			30	●	●		18	●	●		0.25		●			149	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
LMNC	ZM	15		●		3.1			▼	45	●			6.2		●	▼	1120		●		90			

# APPENDIX 2: RESULTS BY STATE



## INDIANA (IN)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
LMHM	41.6987	-87.5083	Lake Michigan	Hammod Marina

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
LMHM	ZM	4				2.4				19				0.05	●			12		●		2.9	●	●		0.27		●		91	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t			
LMHM	ZM	21		●		4.5				18				6		●								128		●		

# APPENDIX 2: RESULTS BY STATE



## LOUISIANA (LA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
LPNO	30.0363	-90.0413	Lake Pontchartrain	New Orleans
LBGO	29.9448	-89.8353	Lake Borgne	Gulf Outlet
LBMP	29.8670	-89.6785	Lake Borgne	Malheureux Point
BSBG	29.5980	-89.6208	Breton Sound	Bay Gardene
BSSI	29.4057	-89.4838	Breton Sound	Sable Island
BBMB	29.2767	-89.9420	Barataria Bay	Middle Bank
BBSD	29.4048	-89.9988	Barataria Bay	Bayou Saint Denis
TBLF	29.2642	-90.3982	Terrebonne Bay	Lake Felicity
TBLB	29.2595	-90.5943	Terrebonne Bay	Lake Barre
CLCL	29.2532	-90.9267	Caillou Lake	Caillou Lake

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
LPNO	0	4.7				9.4	●	●		636	●	●		0				4.1	●			0.63	●			0.28	●	●		6440	●	●	
LBGO	0	7.2				7.9	●	●		300	●	●		0.08	●			2.5	●			0.41				0.17				4260	●	●	
LBMP	0	6				9.9	●	●		238	●	●		0.06				3	●			0.93	●			0.11				3210	●		
BSBG	0	3.5			▼	3.7	●	●		93				0.09	●			2.9	●	▲		0.94	●	▲		0.12				1350			
BSSI	0	6.7				12	●	●		211	●			0				2.7	●			0.81	●			0.17				2600	●		
BBMB	0	6.4				1.5				45				0.09	●			1.5				0.46				0.14				1170			▼
BBSD	0	7.5				1.4				39				0.09	●			1.9	●			0.31				0				969			
TBLF	0	7.2				2.6				93				0			▼	2	●			0.61	●			0				1890			
TBLB	0	6.9				2.3				79				0				2.1	●			0.62	●			0				1380			
CLCL	0	5.6				4.2	●	●		152				0.05			▲	2.9	●	▲		0.47				0				1970			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
LPNO	0	76	●		▼	40	●	●		28				5				828			▼	96	●		▼
LBGO	0	13				4				4.5				1.8				350				24			
LBMP	0	11				1.5			▼	4			▼	1.5			▼	291				23			
BSBG	0	4.8				0.49			▼	2			▼	0.54			▼	177			▼	18			
BSSI	0	22				9.4	●			32				6.2	●		▼	550			▼	62	●		
BBMB	0	79	●		▼	0.83			▼	5.1			▼	1.3			▼	703				14			
BBSD	0	45				1			▼	3.7			▼	0.85			▼	437				12			
TBLF	0	1.9			▼	0.09			▼	2.8			▼	0.13			▼	171				13			
TBLB	0	2.4				0.36			▼	1.5			▼	0.26			▼	220				21			
CLCL	0	6.3				1.5			▼	3.5			▼	0.43			▼	249				17			

# APPENDIX 2: RESULTS BY STATE



## LOUISIANA (LA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
ABOB	29.2555	-91.1362	Atchafalaya Bay	Oyster Bayou
VBSP	29.5795	-92.0510	Vermilion Bay	Southwest Pass
JHJH	29.6368	-92.7668	Joseph Harbor Bayou	Joseph Harbor Bayou
CLSJ	29.8290	-93.3840	Calcasieu Lake	St. Johns Island
CLLC	30.0587	-93.3075	Calcasieu Lake	Lake Charles
SLBB	29.7908	-93.9063	Sabine Lake	Blue Buck Point

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
ABOB	0	5.3			▼	2.9			▼	77				0.09	●			2.6	●			0.39			▼	0				1430			▼
VBSP	0	6.5				9	●	●		545	●	●		0.07				2.7	●			0.81	●			0				3260		●	
JHJH	0	5.7				6.3	●	●		250	●	●		0.06				2.1	●			0.33			▼	0				2000			
CLSJ	0	5.1			▼	4.7	●	●		252	●	●		0.22	●	●		3.3	●	▲		0.71	●			0				3230		●	
CLLC	0	4.2				6.4	●	●		382	●	●		0.24	●	●	▲	3.5	●			1.3	●			0.18				5220	●	●	
SLBB	0	4.3				4.7	●	●		257	●	●		0.11	●			2.9	●			0.25				0				3810	●	●	

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
ABOB	0	10				0.99			▼	5.6			▼	0			▼	250				31			
VBSP	0	3.7			▼	2.5			▼	25				2.3			▼	295				34			
JHJH	0	13				1.3			▼	31				1.8			▼	932		●		54		●	
CLSJ	0	38				1.6				6.4			▼	0.84			▼	465				23			
CLLC	0	97	●	●		2.7			▼	6.5			▼	1.5				950		●		36			
SLBB	0	65	●			4.2				7.8			▼	1.5			▼	551				30			



# APPENDIX 2: RESULTS BY STATE



## MAINE (ME)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
PBPI	44.2648	-68.7337	Penobscot Bay	Pickering Island
PBSI	44.4567	-68.8832	Penobscot Bay	Sears Island
MSSP	43.7578	-69.9977	Merriconeag Sound	Stover Point
CAKP	43.3453	-70.4743	Cape Arundel	Kennebunkport

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
PBPI	M	7.8				1.1				5.3				0.09				0.92				0.89				0				81			
PBSI	M	8.5				0.75				5.2				0.12				1.1				1				0				78			
MSSP	M	9.5				0.8				6.4				0.11				1				1.3				0				79			
CAKP	M	11	●			1.4				6.7				0.17	●			1.5				2.4	●			0				104			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
PBPI	M	1.3				1.6				7.4				1.2				202				17			
PBSI	M	6				1.4				10				0.89				995				19			
MSSP	M	3.2				1.7				8				0.79				256				24			
CAKP	M	11				1.7				15				0.64				507				22			

# APPENDIX 2: RESULTS BY STATE



## MARYLAND (MD)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
CBBO	39.1573	-76.4048	Chesapeake Bay	Bodkin Point
CBHP	38.9695	-76.4147	Chesapeake Bay	Hackett Point Bar
CBCP	38.6073	-76.1200	Chesapeake Bay	Choptank River
CBHG	38.3123	-76.3978	Chesapeake Bay	Hog Point
PRSP	38.2817	-76.9337	Potomac River	Swan Point

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CBBO	O	7.4				14	●	●		867	●	●		0.07				3.7	●		▼	0.33				0.44	●	●		12000	●	●	
CBHP	O	7.2				6.4	●	●		301	●	●		0.03				4.7	●		▼	0.24				0.25	●	●		4570	●	●	
CBCP	O	5.7				3.9	●	●		121				0.04				3.4	●			0.12			0				2170				
CBHG	O	6.4				4.1	●	●		96				0.03				3.6	●			0.22			0.11				2550	●			
PRSP	O	5.9				3.2	●	●		141				0.07				3.3	●			0.2			0				2660	●			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CBBO	O	366	●	●	▼	12			▼	29			▼	6.9	●			481				79	●		▼
CBHP	O	297	●	●		11			▼	29			▼	6.6	●		▼					64	●		
CBCP	O	22				6			▼	14			▼	6.9	●			306				23			
CBHG	O	112	●	●		5.7			▼	13			▼	3.9			▼					21			
PRSP	O	76	●			9.6			▼	27			▼	5.2				266				60	●		

# APPENDIX 2: RESULTS BY STATE



## MASSACHUSETTS (MA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

Site	Latitude	Longitude	General Location	Location
CAGH	42.6577	-70.5973	Cape Ann	Gap Head
SHFP	42.5135	-70.8442	Salem Harbor	Folger Point
MBNB	42.4198	-70.9072	Massachusetts Bay	Nahant Bay
BHDI	42.3573	-70.9730	Boston Harbor	Deer Island
BHDB	42.3022	-71.0363	Boston Harbor	Dorchester Bay
BHHB	42.2760	-70.8833	Boston Harbor	Hingham Bay
BHBI	42.3432	-70.8783	Boston Harbor	Brewster Island
MBNR	42.1603	-70.7425	Massachusetts Bay	North River
DBCI	42.0137	-70.6365	Duxbury Bay	Clarks Island

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CAGH	M	14	●	●		1				7.1			▼	0.13				2.8				1.8			▼	0.16				148	●		
SHFP	M	14	●	●	▲	1.2				9.1				0.35	●	●		1.9				10	●	●		0.17				115			
MBNB	M	10				1.7				7.9				0.33	●	●		1.6				3.6	●	●		0				128			
BHDI	M	11			▲	1.4				7.7			▼	0.19	●	●	▼	1				4.6	●	●		0.13				91			▼
BHDB	M	11			▲	1.6				9.9			▼	0.28	●	●		1.5				11	●	●	▼	0.23	●	●	▼	172	●		
BHHB	M	8.8				1.1				9				0.26	●	●		1.1				7.3	●	●		0.12				121			
BHBI	M	13	●	●		1				6.4				0.25	●	●		1.3				3.9	●	●	▼	0			▼	110			
MBNR	M	11			●	1.2				6.5				0.33	●	●		1.1				2.9	●	●	▼	0				86			
DBCI	M	8.5				0.81				6.6			▼	0.18	●	●		0.81				2.6	●	●		0				94			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CAGH	M	7.9				3.2				7.6			▼	0.73			▼	284				23			
SHFP	M	57	●	●		11	●			51			▼	1.4			▼	671				121			▼
MBNB	M	16				3.8			▼	15			▼	0.83				557				85			
BHDI	M	81	●	●	▼	9.1	●	▼		52			▼	2.2				2089	●	●	▼	390	●	●	
BHDB	M	108	●	●		11	●	▼		59			▼	2.2			▼	2752	●	●	▼	478	●	●	▼
BHHB	M	55			●	6.4			▼	34			▼	1.7				956			▼	231	●		
BHBI	M	12				5.4			▼	24			▼	1			▼	959			▼	162	●		
MBNR	M	20				7			▼	46				2.6				1764	●	●		159	●		
DBCI	M	10				3.9			▼	23			▼	1.9			▼	407				102			

# APPENDIX 2: RESULTS BY STATE



## MASSACHUSETTS (MA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
CCNH	41.7958	-69.9462	Cape Cod	Nauset Harbor
BBWF	41.6067	-70.6528	Buzzards Bay	West Falmouth
BBCC	41.7402	-70.6157	Buzzards Bay	Cape Cod Canal
BBAR	41.5797	-70.8590	Buzzards Bay	Angelica Rock
BBRH	41.5397	-70.9283	Buzzards Bay	Round Hill
BBGN	41.4817	-71.0373	Buzzards Bay	Goosebury Neck

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CCNH	M	10				0.68				7.5				0.09				0.62				1.1				0				95			
BBWF	M	19	●	●		1.4				9.7				0.13		▲		2.1		▲		1.3				0				95			
BBCC	M	15	●	●		0.94				7.3				0.16	●			1.6		▲		3.8	●	●	▲	0				77			
BBAR	M	14	●	●		0.86			▼	7.9				0.1				1.4				1.9				0				88			▼
BBRH	M	16	●	●		1.1				8.4				0.16	●	▲		1.7				2.2	●			0				109			
BBGN	M	16	●	●		1				7.6			▼	0.16	●			2.2		▲		1.8				0			▼	102			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CCNH	M	7.4				3.2			▼	13				1.5			▼	252				33			
BBWF	M	6.9			▼	4.9				13				3.1			▼	198				163	●		
BBCC	M	6.7			▼	4.2				14				3.8				238				105			
BBAR	M	17			▼	2.7			▼	47			▼	2.9				780				1413	●	●	
BBRH	M	9.4			▼	1.5			▼	22				1.2			▼	662			▼	632	●	●	
BBGN	M	5.6			▼	0.97			▼	7.8			▼	1.5			▼	305				126			

# APPENDIX 2: RESULTS BY STATE



## MICHIGAN (MI)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
LMHB	42.7732	-86.2150	Lake Michigan	Holland Breakwater
LMMU	43.2258	-86.3470	Lake Michigan	Muskegon
TBLL	45.2057	-85.5368	Traverse Bay	Leelanau State Park
LHTB	44.9222	-83.4135	Lake Huron	Thunder Bay
SBSR	43.6735	-83.8367	Saginaw Bay	Saginaw River
SBSP	43.9098	-83.4002	Saginaw Bay	Sandpoint
LHBR	43.0443	-82.4387	Lake Huron	Black River Canal
LESP	41.9587	-83.2330	Lake Erie	Stony Point
LERB	41.6745	-83.2262	Lake Erie	Reno Beach

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
LMHB	ZM	5.6				3.8	●	●		11				0.06	●			25	●	●		0.44				0.08				114	●		
LMMU	ZM	4.9			▼	3.6	●	●	▼	9.1				0.05	●			14	●			0.7				0.09				101	●		▼
TBLL	ZM	7.1	●			4.1	●	●		23				0.11	●			18	●			0.39				0.09				101	●		
LHTB	ZM	5.1				12	●	●		26	●			0.09	●			33	●	●		0.49				0.09				140	●		
SBSR	ZM	6.9	●			0.95				18				0.05	●			24	●	●		2.1	●	●		0.2				113	●		
SBSP	ZM	3.1			▼	2				33	●			0.06	●			16	●			0.95				0.74	●	●		81			
LHBR	ZM	7.5	●			11	●	●		31	●			0.11	●			41	●	●		0.99				0.08				117	●		
LESP	ZM	5.1			▼	2.2				16				0.06	●			16	●			3.2	●	●		0.3	●			77			▼
LERB	ZM	6.4	●			3.3	●	●	▼	21				0.05	●			17	●			2.4	●	●		0.36	●			67			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
LMHB	ZM	19			●	15			●	68	●	●	▼	12	●	●	▼	745		●		266	●	●	▼
LMMU	ZM	7.8				22	●	●	▼	67	●	●	▼	16	●	●		960		●	▼	154	●	●	▼
TBLL	ZM	14			●	1.7				3.2				5.4			●	128				20			
LHTB	ZM	8.3				1.4				3.5				2.3				205				17			
SBSR	ZM	6.2			▼	9.7			●	26				1			▼	730		●	▼	119	●		
SBSP	ZM	11				3.1				4.9			▼	1.9			▼	173				25			
LHBR	ZM	7.6				4.8				4.1				2.9			●	235				17			
LESP	ZM	12			●	13			●	57		●		2.4				1595	●	●	▼	424	●	●	
LERB	ZM	7.2				4.7				12				5.7			●	607		●		96	●		

# APPENDIX 2: RESULTS BY STATE



## MISSISSIPPI (MS)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
MSPB	30.3360	-88.5892	Mississippi Sound	Pascagoula Bay
MSBB	30.3925	-88.8575	Mississippi Sound	Biloxi Bay
MSPC	30.3023	-89.3272	Mississippi Sound	Pass Christian

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
MSPB	0	11				2.3				133				0.15	●	●		2	●			0.89	●			0.4	●	●		3070		●	
MSBB	0	7.6				3.6	●	●		373	●	●	▲	0.11	●			1.6	●			0.66	●			0.16				6660	●	●	
MSPC	0	5.8				8.2	●	●		232	●	●		0.19	●	●		1.8	●			0.57	●			0				5020	●	●	

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
MSPB	0	83	●		▼	2.6			▼	11			▼	1.4			▼	373				30			▼
MSBB	0	62	●		▼	15	●		▼	22			▼	6.5	●		▼	928	●			72	●		▼
MSPC	0	5.8			▼	5.7				16				2				596				24			

# APPENDIX 2: RESULTS BY STATE



## NORTH CAROLINA (NC)

Regional (r) Status (s) Trend (t)  
**Mussels (M)**  
 ● Medium ● National Status ● Medium  
 ● High ● High  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
RSJC	35.8898	-75.6337	Roanoke Sound	John Creek
PSWB	35.4123	-76.0397	Pamlico Sound	Wysocking Bay
PSPR	35.2960	-76.4392	Pamlico Sound	Pungo River
PSNR	35.0897	-76.5290	Pamlico Sound	Neuse River
PSCH	35.2028	-75.7162	Pamlico Sound	Cape Hatteras
BIPI	34.7183	-76.6755	Beaufort Inlet	Pivers Island
CFBI	33.9158	-78.0035	Cape Fear	Battery Island

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
RSJC	0	6.2				2.9				178	●			0.08	●			2.1	●			0.41				0				4400	●	●	▲
PSWB	0	8.2				3.8	●	●	▼	86				0.09	●			3.1	●			0.36				0				1260			
PSPR	0	6.6				2.5			▼	59				0.07	●			1.8	●		▼	0.2			▼	0		▼	2870	●			
PSNR	0	8.3				3				72				0.09	●			2.5	●			0.23				0				1880			
PSCH	0	15	●	●		2				52				0.2	●	●		2	●			0.68	●		0.11				1470				
BIPI	0	47	●	●		1.2			▲	136			▲	0.11	●			1.7	●			0.62	●		0.16				2320	●			
CFBI	0	32	●	●	▼	1.6				78				0.13	●			2.3	●			0.44			0.16				1910				

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
RSJC	0	53				2.7			▼	5.3			▼	0.88				856			●	13			
PSWB	0	7.2				2			▼	4.5			▼	1.5			▼	190				150	●	●	
PSPR	0	5				2.6				11				1.6			▼	183			▲	14			
PSNR	0	5.1				2.6				8.9			▼	2.1			▼	168				96		●	
PSCH	0	6.8			▼	2.6				6.8				1				333			▼	31			
BIPI	0	29			▼	3				15				0.94				1543	●	●		18			
CFBI	0	17			▼	1.2			▼	3			▼	0.57			▼	152				13			

# APPENDIX 2: RESULTS BY STATE



## NEW HAMPSHIRE (NH)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
GBDP	43.1207	-70.8265	Great Bay	Dover Point

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
GBDP	M	11	●			1.3				6.7				0.34	●	●		1.9				2.7	●			0.14				111			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
GBDP	M	50	●			2.5				14				1.2								70			



# APPENDIX 2: RESULTS BY STATE



## NEW JERSEY (NJ)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
NYSH	40.4875	-74.0333	New York Bight	Sandy Hook
NYLB	40.2948	-73.9787	New York Bight	Long Branch
NYSR	40.1870	-74.0090	New York Bight	Shark River
BIBL	39.7617	-74.0950	Barnegat Inlet	Barnegat Light
AIAC	39.3672	-74.4112	Absecon Inlet	Atlantic City
DBCM	38.9822	-74.9613	Delaware Bay	Cape May
DBBD	39.2523	-75.3028	Delaware Bay	Ben Davis Pt. Shoal
DBAP	39.3833	-75.4500	Delaware Bay	Arnolds Point Shoal
DBHC	39.4267	-75.4933	Delaware Bay	Hope Creek

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
NYSH	M	8.2				1.5			▼	15				0.25	●	●		3.3				8.3	●	●		1.1	●	●	▲	148	●		
NYLB	M	11	●			0.88			▼	13				0.16	●			2.3				1.7				0.31	●	●		158	●		
NYSR	M	10			▲	0.79			▼	12				0.16	●	●		2.3				2.2	●			0.35	●	●		143	●		
BIBL	M	8.9				0.74				10				0.25	●	●		3.1				4.3	●	●		0.38	●	●		100			
AIAC	M	9.3				1.2				13				0.33	●	●		3.6				5.1	●	●		0.28	●	●		165	●		
DBCM	M	10				1				18	●			0.22	●	●		4.5				4	●	●		0.47	●	●		118			▼
DBBD	O	8.1			▲	5.4	●	●		498	●	●		0.14	●	●		4	●		▼	1.3	●			0.39	●	●		9165	●	●	
DBAP	O	5.1				15	●	●		1660	●	●	▲	0.24	●	●	▲	4.9	●			1.4	●			0.28	●	●	▲	18950	●	●	
DBHC	O	4.3				20	●	●		857	●	●		0.2	●	●		4.4				0.72				0.17				11500	●	●	

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
NYSH	M	143	●	●		11			▼	80	●		▼	4.6		●		3014	●	●		331	●	●	▼
NYLB	M	160	●	●		13			▼	50			▼	4			▼	2026	●	●		195	●		▼
NYSR	M	158	●	●		13			▼	48			▼	4.4		●		1928	●	●		186	●		
BIBL	M	20				2.1			▼	13			▼	0.68			▼	761				59			▼
AIAC	M	18				1.8				11			▼	0.86			▼	1508	●	●		56			
DBCM	M	35				1			▼	16				0.81			▼	622				38			▼
DBBD	O	92	●	●		12			▼	105	●	●	▼	13	●	●	▼	368				105	●		▼
DBAP	O	129	●	●		11			▼	87	●	●	▼	10	●	●		701				94	●		
DBHC	M	184	●	●		27	●	●		219	●	●		24	●	●						225	●		

# APPENDIX 2: RESULTS BY STATE



## NEW YORK (NY)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
LIMR	40.9418	-73.7032	Long Island Sound	Mamaroneck
LITN	40.8167	-73.7983	Long Island Sound	Throgs Neck
LIHH	40.8558	-73.6753	Long Island Sound	Hempstead Harbor
LIHU	40.9220	-73.4285	Long Island Sound	Huntington Harbor
LIPJ	40.9573	-73.0937	Long Island Sound	Port Jefferson
LIGB	40.9982	-72.1162	Long Island	Gardiners Bay
MBTH	40.7767	-72.7558	Moriches Bay	Tuthill Point
LIFI	40.6252	-73.2795	Long Island	Fire Island Inlet
HRJB	40.5667	-73.8953	Hudson/Raritan Estuary	Jamaica Bay

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
LIMR	M	5.2				1.8				15				0.11				2.4				6	●	●		0.26	●	●		97			
LITN	M	8				2.2				16				0.15	●			2.7				7.6	●	●		0.4	●	●		138			
LIHH	M	6.5				1.8				12				0.11				2.5				3.7	●	●		0.18				109			
LIHU	M	5.1				1.9				11				0.11				2.3				2.9	●	●		0.14			▼	100			
LIPJ	M	8.3			▲	2.1				11				0.16	●	▲		2.9				2				0.12			▼	107			
LIGB	M	9.4				1.4				9.7				0.15	●			3.2				1.6				0				90			
MBTH	M	17	●	●		0.77				10				0.2	●	●		2.8		▲		3.9	●	●		0.31	●	●	▲	119			
LIFI	M	9.7				1.2				12				0.28	●	●		2.4				3.5	●	●		0.33	●	●		105			
HRJB	M	9.1				1.3				15			▲	0.27	●	●		2.8				5	●	●		0.52	●	●		127			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
LIMR	M	25				22	●	●	▼	50			▼	6.5	●	▼		635				143	●		▼
LITN	M	25				32	●	●	▼	81	●		▼	7.9	●			2868	●	●		337	●	●	
LIHH	M	16				20	●	●	▼	47			▼	6.8	●	▼		699				169	●		
LIHU	M	13			▼	6.4			▼	21			▼	2.5			▼	342				93			
LIPJ	M	18			▼	4.5			▼	16			▼	1.7			▼	352				69			▼
LIGB	M	7.1			▼	1.2			▼	12			▼	0.85				759				31			
MBTH	M	8.7				2.6			▼	11			▼	0.8			▼	324				38			▼
LIFI	M	15				2.5			▼	11				1.1				7561	●	●		36			▼
HRJB	M	64	●	●	▼	11		●	▼	44			▼	4.2				2921	●	●		201	●		▼

# APPENDIX 2: RESULTS BY STATE



## NEW YORK (NY)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
HRUB	40.6893	-74.0432	Hudson/Raritan Estuary	Upper Bay
HRLB	40.5660	-74.0508	Hudson/Raritan Estuary	Lower Bay
HRRB	40.5190	-74.1845	Hudson/Raritan Estuary	Raritan Bay
LEDK	42.5292	-79.2777	Lake Erie	Dunkirk
LOOC	43.3553	-78.6867	Lake Ontario	Olcott
LORC	43.2578	-77.4953	Lake Ontario	Rochester
LOOS	43.4528	-76.5508	Lake Ontario	Oswego
LOCV	44.1442	-76.3247	Lake Ontario	Cape Vincent
HRCI	42.0338	-73.9293	Hudson River	Cruger Island

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
HRUB	M	5.6				2.5			▼	26	●			0.29	●	●	▼	8.1	●			13	●	●	▼	1.9	●	●		143	●		
HRLB	M	8.1				1.5			▼	13				0.22	●	●		2.6				3.5	●	●	▼	0.49	●	●		113			
HRRB	M	7				1.9				17	●			0.22	●	●		7	●			13	●	●		1.7	●	●		203	●		
LEDK	ZM	9.9	●			3.8	●	●		13				0.04				14	●			1.5				0.16				56			
LOOC	ZM	6.6	●			1.6				35	●			0.05	●			13	●			3.2	●	●		0.38	●			67			
LORC	ZM	9.3	●			1.2				16				0.04				15	●			4.1	●	●		0.58	●			66			
LOOS	ZM	8.4	●			1.2			▼	27	●			0.05	●			14	●	▼		0.38				2.3	●	●		56		▼	
LOCV	ZM	8.5	●			1.9				70	●			0.04				16	●			2.5	●	●		3.2	●	●		65			
HRCI	ZM	2.7				0.98				51	●			0.05	●		▼	12	●			3.8	●	●		1.4	●	●		109	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
HRUB	M	281	●	●		12			▼	86	●		▼	5.9			▼					422	●	●	▼
HRLB	M	156	●	●		12			▼	78	●		▼	4.6				2873	●	●		338	●	●	▼
HRRB	M	85	●	●		15				112	●			5.6			▼					202	●		
LEDK	ZM	2.8				3.9				7.3				2.6			▼	389			▼	42			
LOOC	ZM	5.1				10			▼	19				3.9				569			▼	73			
LORC	ZM	4.3				4.9				13			▼	3			▼	844			▼	34			
LOOS	ZM	0				4.9				12				4.4				290				65			
LOCV	ZM	4				2.7			▼	2.4				1.9			▼	166				15			
HRCI	ZM	44		●														606			▼				

# APPENDIX 2: RESULTS BY STATE



## OHIO (OH)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
SBPP	41.6597	-82.8250	Lake Erie	Peach Orchard Pt.
LEOW	41.3850	-82.5187	Lake Erie	Old Woman Creek
LELR	41.4612	-82.2070	Lake Erie	Lorain
LEAB	41.9247	-80.7183	Lake Erie	Ashtabula

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
SBPP	ZM	6.1	●			2.8	●			20				0.08	●			17	●			3.2	●	●		0.47	●			69			
LEOW	ZM	5			▼	2				39	●			0.03				17	●			1.5				1.9	●	●		84			
LELR	ZM	6.8	●			3	●			19				0.05	●			17	●			2.9	●	●		0.53	●			76			
LEAB	ZM	7.3	●		▼	2.7	●			41	●			0.05	●			20	●	●		3.2	●	●		1.1	●	●		70			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
SBPP	ZM	14			●	5.7				14				3.1	●		▼	624	●			198	●	●	
LEOW	ZM	4.2				7.2				13				5.8	●			558	●			51			
LELR	ZM	8.4				10			●	11				4.2	●			1047	●			64			
LEAB	ZM	4.9				5.7			▼	9.1				3.1	●		▼	598	●			108	●		

# APPENDIX 2: RESULTS BY STATE



## OREGON (OR)

Regional (r) Status (s) Trend (t)  
**Mussels (M)**  
 ● Medium      ● Medium  
 ● High        ● High  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
CBCH	43.3500	-124.3308	Coos Bay	Coos Head
CBRP	43.4313	-124.2212	Coos Bay	Russell Point
YBOP	44.5752	-123.9890	Yaquina Bay	Oneatta Point
YHFC	44.8370	-124.0520	Yaquina Bay	Fogarty Creek
TBHP	45.5472	-123.9075	Tillamook Bay	Hobsonville Point
CRSJ	46.2287	-124.0232	Columbia River	South Jetty

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CBCH	M	8.7				2.9				7.1				0.07				1.7				0.7				0			▼	92			
CBRP	M	10				4.2	●	●		13				0.2	●	●	▲	3.4				1.6				0.12				231	●		
YBOP	M	5.3				2.2				6.1			▼	0.08				1.7				0.28				0				96			
YHFC	M	7.7				4.3	●	●		7.4				0.06				2.1				0.52				0				96			
TBHP	M	7.3				4.4	●	●		39	●			0.07				13	●	●		1.1				1.6	●	●		96			▼
CRSJ	M	9.7				3				9.8				0.08				2.6				0.87				0.06				115			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CBCH	M	1.6			▼	2.7			▼	2.6			▼	3.7				96				14			
CBRP	M	9.8			▼	0.24			▼	2.6			▼	0.21			▼	441				21			
YBOP	M	10			▼	0.89				5.4			▼	0.29			▼	1187				30			
YHFC	M	3.3				6.6				4.1				3.8				78				11			
TBHP	M	6			▼	0.34			▼	2.4				0.24				298				14			
CRSJ	M	25				1.8				23				1.1				380				33			

# APPENDIX 2: RESULTS BY STATE



## RHODE ISLAND (RI)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
NBDI	41.6048	-71.3052	Narragansett Bay	Dyer Island
NBPI	41.6523	-71.3567	Narragansett Bay	Patience Island
NBDU	41.5013	-71.3928	Narragansett Bay	Dutch Island
BIBI	41.1982	-71.5922	Block Island Sound	Block Island

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
NBDI	M	9.9				0.94				9.7				0.12				1.1				2.9	●	●		0.16				132			
NBPI	M	8				0.4				10				0.06				0				0.82				0				48			▼
NBDU	M	13	●	●		1				8.4			▼	0.12				1.8				2				0				117			
BIBI	M	11		●	▼	1.3				8.9				0.12				1.8				1.4				0				150	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
NBDI	M	50		●		8			▼	26				6.4		●		1540	●	●		239	●		
NBPI	M	12			▼	6.1			▼	27			▼	20	●	●	▼					141	●		
NBDU	M	14			▼	4.5			▼	14				4.6		●		520				102			
BIBI	M	13				1.8			▼	4.3			▼	0.87			▼	285				24			

# APPENDIX 2: RESULTS BY STATE



## SOUTH CAROLINA (SC)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

Site	Latitude	Longitude	General Location	Location
WBLB	33.2433	-79.1972	Winyah Bay	Lower Bay
SRNB	33.1683	-79.2417	Santee River	North Bay
CHFJ	32.7505	-79.9003	Charleston Harbor	Fort Johnson
CHSF	32.7735	-79.9122	Charleston Harbor	Shutes Folly Island

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
WBLB	0	45	●	●		1.9				97				0.13	●			1.8	●			0.57	●	▲		0.34	●	●		1460			
SRNB	0	34	●	●		1.5				77				0.08	●			3.3	●			0.41		▲		0.6	●	●		783			
CHFJ	0	31	●	●		1.7				221	●	●		0.07				1.4			▼	1.2	●	▲		0.39	●	●		2840	●		
CHSF	0	31	●	●		1.9				188	●			0.07				1.2				0.3				0.28	●	●		3160	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
WBLB	0	5.9				1.2				3.1			▼	0.7				122				14			
SRNB	0	3.2				1.2				4.7				0.65				162				15			
CHFJ	0	72	●			6			▼	9.4			▼	0.96			▼	1013			●	23			
CHSF	0	127	●	●	▼	2.4			▼	5.6			▼	0.74			▼	885			●	19			

# APPENDIX 2: RESULTS BY STATE



## TEXAS (TX)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
GBHR	29.4803	-94.7418	Galveston Bay	Hanna Reef
GBYC	29.6220	-94.9958	Galveston Bay	Yacht Club
GBTD	29.5030	-94.8960	Galveston Bay	Todd's Dump
GBOB	29.2840	-94.8363	Galveston Bay	Offatts Bayou
GBCR	29.2633	-94.9163	Galveston Bay	Confederate Reef
BRFS	28.9212	-95.3395	Brazos River	Freeport Surfside
BRCL	28.8580	-95.4647	Brazos River	Cedar Lakes
MBEM	28.7112	-95.8833	Matagorda Bay	East Matagorda
MBTP	28.6663	-96.2335	Matagorda Bay	Tres Palacios Bay

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
GBHR	0	4.7				3.8	●	●		117				0.04			▼	3.5	●	▲		0.5	●			0				1440			
GBYC	0	4.5				3.4	●	●	▼	185	●			0.06				3.1	●			0.47				0.25	●	●		4220	●	●	
GBTD	0	4.9				3.2			▼	145				0.03				3.1	●			0.67	●			0.08				2250			
GBOB	0	6.2				0.67				287	●	●		0.03				1.5				1.2	●			0.08		▼		12700	●	●	▲
GBCR	0	5.8				2.7				111				0.1	●			2.7	●			0.6	●			0				1450			
BRFS	0	6.7				2.3				171				0.06				2.5	●			0.8	●			0.16				2320	●		
BRCL	0	6.4				3.7	●	●		237	●	●		0.09	●			3.3	●			1.4	●			0.08				1960			
MBEM	0	9.8				5.5	●	●		142				0.06				2.5	●			0.58	●			0.11				809			▼
MBTP	0	4			▼	2.9			▼	95			▼	0.05				3.1	●			0.61	●			0				1080			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
GBHR	0	36				3.7				6.7			▼	1.7				447				22			
GBYC	0	251	●	●		31	●	●		55	●			15	●	●		2511	●	●		144	●	●	
GBTD	0	66	●		▼	11	●			14				6	●			1640	●	●		48	●		
GBOB	0	21			▼	20	●	●		9.1			▼	4.1				1250	●			28			
GBCR	0	55			▼	1.8			▼	3.4			▼	0.52			▼	588			▼	21			▼
BRFS	0	123	●	●		8.8	●			182	●	●		65	●	●		1399	●	●		87	●		
BRCL	0	34				5.7				73	●	●		30	●	●		972	●			42	●		
MBEM	0	133	●	●		1.9			▼	6.3			▼	1.3			▼	221			▼	9.9			▼
MBTP	0	5.6				1.4			▼	43	●			0.56			▼	259				8.6			



# APPENDIX 2: RESULTS BY STATE



## TEXAS (TX)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
MBCB	28.6650	-96.3830	Matagorda Bay	Carancahua Bay
MBGP	28.5788	-96.5630	Matagorda Bay	Gallinipper Point
ESBD	28.4118	-96.4490	Espiritu Santo	Bill Days Reef
ESSP	28.2982	-96.6220	Espiritu Santo	South Pass Reef
SAMP	28.3440	-96.7123	San Antonio Bay	Mosquito Point
SAPP	28.2323	-96.7082	San Antonio Bay	Panther Point Reef
MBAR	28.1730	-96.8350	Mesquite Bay	Ayres Reef
ABLR	28.0548	-96.9512	Aransas Bay	Long Reef

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
MBCB	0	5.2				3.5	●	●		126			▼	0.11	●			2.3	●			0.6	●			0				1370			
MBGP	0	5.3			▼	3.8	●	●		155				0.2	●	●		3	●			0.51	●			0				1780			
ESBD	0	11	●	●		3.2	●	●	▼	110				0.09	●		▼	3.4	●			1.3	●			0				924			
ESSP	0	9.6				4.7	●	●		139				0.11	●			2.8	●			2.2	●	●		0				1070			
SAMP	0	4.6				4	●	●		68				0				3.2	●			1.4	●		1.9	●	●		562				
SAPP	0	5.4			▼	6.3	●	●		200	●			0.1	●			3.1	●			1.8	●		0				1150				
MBAR	0	4.7				3.9	●	●		104				0.09	●			2.8	●			0.48	●		0				690				
ABLR	0	8.2				3			▼	80				0.15	●	●		2.9	●			0.51	●		0				682				

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dioldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
MBCB	0	7				2.2			▼	26				1.8			▼	217				13			
MBGP	0	32			▼	1			▼	25				1.2				248				14			
ESBD	0	13			▼	0.98				8.1				0.57			▼	171				19			
ESSP	0	4.1				0.43			▼	1.6				0.1			▼	93				9.7			
SAMP	0	3.4				1.6				6.4				1.3				171				31			
SAPP	0	4.4				0.25			▼	2.2			▼	0.34			▼	153				14			
MBAR	0	9.4				0.84			▼	2.3			▼	0.66			▼	113				9.1			▼
ABLR	0	5.5				0.73			▼	1.8			▼	0.11			▼	100				8.9			

# APPENDIX 2: RESULTS BY STATE



## TEXAS (TX)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
CBCR	28.1420	-97.1280	Copano Bay	Copano Reef
CCNB	27.8522	-97.3598	Corpus Christi	Nueces Bay
LMAC	26.2825	-97.2853	Lower Laguna Madre	Arroyo Colorado
LMPI	26.0748	-97.1995	Lower Laguna Madre	Port Isabel
LMSB	26.0432	-97.1760	Lower Laguna Madre	South Bay

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
CBCR	0	7.9				8	●	●		322	●	●		0.11	●		▼	2.9	●			1.3	●			0				1330			
CCNB	0	8.6				4.2	●	●		141				0.11	●			1.8	●			1.6	●	▲		1.1	●	●		5070	●	●	
LMAC	0	18	●	●		1.9				43				0.12	●			1.4				0.82	●			0				898			
LMPI	0	16	●	●		1.1				402	●	●		0.1	●			1.3		▲		0.85	●			0.17				6260	●	●	
LMSB	0	13	●	●		2.1				134				0.17	●	●		1.3				0.67	●			0				2180			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
CBCR	0	3.4				1.3				7.1			▼	0.37			▼	123				19			
CCNB	0	25				2			▼	6.6			▼	0.49			▼	553				24			▼
LMAC	0	3.1				1.1				7.9				0.91				117				12			
LMPI	0	115	●	●	▼	0.39				3.6				0.04			▼	780				31			
LMSB	0	24				0			▼	0.88			▼	0			▼	47				11			

# APPENDIX 2: RESULTS BY STATE



## VIRGINIA (VA)

Regional (r) Status (s) Trend (t)  
**Mussels (M)** National Status National Trend  
 ● Medium ● Medium ▼ Decreasing  
 ● High ● High ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
PRMC	38.2233	-76.9615	Potomac River	Mattox Creek
RRRR	37.9020	-76.7878	Rappahannock River	Ross Rock
CBDP	37.0983	-76.2948	Chesapeake Bay	Dandy Point
CBJR	37.0653	-76.6322	Chesapeake Bay	James River
CBCC	37.2845	-76.0153	Chesapeake Bay	Cape Charles
CBCI	37.9385	-75.3758	Chincoteague Bay	Chincoteague Inlet
QIUB	37.5250	-75.7138	Quinby Inlet	Upshur Bay

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
PRMC	0	5.3				4.8	●	●		308	●	●		0.05				2.8	●			0.26				0.15				3770	●	●	
RRRR	0	5.4				4.8	●	●		285	●	●		0.06		▲		2.8	●			0.15				0				2720	●		
CBDP	0	9.3				1.3				77				0.11	●			1.9	●			0.67	●			0				3200	●		
CBJR	0	4.3			▼	10	●	●		1460	●	●		0.15	●	●		3.8	●			0.39				0.1				8110	●	●	
CBCC	0	10				1.2				43				0.07				1.7	●			0.34				0				1340			
CBCI	0	10				2.6				66				0.21	●	●	▲	2	●			0.7	●		▲	0				2230			
QIUB	0	11	●			2.4				552	●	●		0.22	●	●		2.5	●			1.3	●		▲	0				4750	●	●	

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
PRMC	0	119	●	●		12		●		26				4.8				207				57	●		
RRRR	0	24				3.8			▼	8.1			▼	0.92			▼	200				21			▼
CBDP	0	62	●		▼	9.3		●	▼	34				2.9			▼	1583	●	●		50	●		
CBJR	0	65	●		▼	3.6			▼	13			▼	0				232				157	●	●	
CBCC	0	14			▼	3.9			▼	30				4.1				307			▼	21			
CBCI	0	6.8				2.8			▼	14			▼	0.99			▼	315				25			▼
QIUB	0	6.9				0			▼	12			▼	0				10717	●	●		14			

# APPENDIX 2: RESULTS BY STATE



## WASHINGTON (WA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
WBNA	46.4992	-124.0272	Willapa Bay	Nahcotta
GHWJ	46.9097	-124.1177	Gray's Harbor	Westport Jetty
JFCF	48.3825	-124.7280	Strait of Juan de Fuca	Cape Flattery
PSPA	48.1397	-123.4202	Puget Sound	Port Angeles
PSHC	47.8318	-122.6883	Puget Sound	Hood Canal
SSBI	47.0993	-122.8942	South Puget Sound	Budd Inlet
CBTP	47.3312	-122.5043	Commencement Bay	Tahlequah Point
EBDH	47.5958	-122.3867	Elliott Bay	Duwamish Head

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
WBNA	M	6.9				3.8	●	●		7.5				0.18	●	●		2.5				0.55				0				176	●		
GHWJ	M	11	●			6.9	●	●		12				0.07				2.9				0.89				0.28	●	●		162	●		
JFCF	M	16	●	●		11	●	●		14				0.25	●	●		4.6				1.1				0			▼	186	●		
PSPA	M	8.1				5.6	●	●		13				0.07				0.91				0.62				0			▼	142	●		
PSHC	M	8.3				4	●	●		6.5				0.11				1.7				0.73		▲		0				156	●		
SSBI	M	5.3				2.1				5.6			▼	0.09				0.88				0.83				0				118			
CBTP	M	7.9				2.8				18	●			0.09				7	●			1.3				0				174	●		
EBDH	M	6.8				2.2				8.9				0.07				3.1				2.6	●			0.19				160	●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
WBNA	M	13				0.87				4.1				0.46				617				15			▲
GHWJ	M	15			▼	2.9				9				4.9	●			167				20			
JFCF	M	5.4			▼	6.4				1.6				4.2				134				12			
PSPA	M	10				1.3				4.6			▼	0.81				471			▼	27			
PSHC	M	16				0.83				2.3				0.55				528				16			
SSBI	M	9.6			▼	3.1			▼	6.7			▼	1.9				1502	●	●		62			
CBTP	M	14			▼	2.7			▼	8				1				2214	●	●		48			
EBDH	M	36			▼	4.4				16			▼	1.3				3277	●	●		131			

# APPENDIX 2: RESULTS BY STATE



## WASHINGTON (WA)

**Regional (r)**  
**Mussels (M)**  
 ● Medium  
 ● High

**Status (s)**  
**National Status**  
 ● Medium  
 ● High

**Trend (t)**  
**National Trend**  
 ▼ Decreasing  
 ▲ Increasing

**Zebra Mussels (ZM)**  
 ● Medium  
 ● High

**Oysters (O)**  
 ● Medium  
 ● High

Site	Latitude	Longitude	General Location	Location
EBFR	47.6388	-122.4138	Elliott Bay	Four-Mile Rock
SIWP	47.5852	-122.5708	Sinclair Inlet	Waterman Point
PSEF	47.8140	-122.3823	Puget Sound	Edmonds Ferry
PSMF	47.9497	-122.3016	Puget Sound	Mukilteo
WIPP	47.9053	-122.3770	Whidbey Island	Possession Point
PSEH	47.9727	-122.2303	Puget Sound	Everett Harbor
BBSM	48.7522	-122.4978	Bellingham Bay	Squalicum Marina Jet.
PRPR	48.9903	-123.0883	Point Roberts	Point Roberts

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t
EBFR	M	7.7				2.2			▼	12				0.1				4.2			▲	2.4		●		0.38	●	●		204	●		
SIWP	M	11				3.6	●	●		16				1.3	●	●		2.2				2.4		●		0.33	●	●		257	●		
PSEF	M	8.4				3.7	●	●		8.1				0.09				2.3				3.1	●	●		0.13				183	●		
PSMF	M	8.4				2.6				14				0.07				44	●	●		4.7	●	●		0.6	●	●		172	●		
WIPP	M	8.1				2.7				14				0.15		●		3.5				1.3				0.14				201	●		
PSEH	M	7.4				3.3		●		13				0.13				4.1			▲	7.6	●	●		0.16				187	●		
BBSM	M	9.1				4	●	●		18	●			0.21	●	●		8.9	●	●		1.4				0.44	●	●		238	●		
PRPR	M	6.2				2.7				20	●			0.1				4.2				1.8			▲	0.37	●	●		126			

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t
EBFR	M	39			▼	4.2				29				1.2				6962	●	●		144	●		
SIWP	M	11			▼	49	●	●		15				82	●	●		2397	●	●		82			
PSEF	M	15				3.6				13				1.3								45			
PSMF	M					5.8				15				2.1								53			
WIPP	M	25				0.8				4.7				0.94				2329	●	●		33			
PSEH	M	9.4			▼	1.9				4				1.8				1445	●	●		30			
BBSM	M	106	●	●	▼	3			▼	8.5				1.5				2586	●	●		40			
PRPR	M	11			▼	0.32				1.9			▼	0.28			▼	364				14			

# APPENDIX 2: RESULTS BY STATE



## WISCONSIN (WI)

**Regional (r)**  
**Mussels (M)**  
● Medium  
● High  
**Status (s)**  
**National Status**  
● Medium  
● High  
**Trend (t)**  
**National Trend**  
▼ Decreasing  
▲ Increasing

Site	Latitude	Longitude	General Location	Location
GBBS	44.6370	-87.8082	Green Bay	Bayshore Park
LMMB	43.0322	-87.8952	Lake Michigan	Milwaukee Bay

**Zebra Mussels (ZM)**  
● Medium  
● High

**Oysters (O)**  
● Medium  
● High

Concentrations derived from 2004-2005 data.

Markers represent the Regional Species Characterization (r), National Characterization (s) and National Trends maps (t).

### METALS (ppm)

Site	Spec	AS	r	s	t	CD	r	s	t	CU	r	s	t	HG	r	s	t	NI	r	s	t	PB	r	s	t	SN	r	s	t	ZN	r	s	t								
GBBS	ZM	5.4				0.75				18				▲	0.1			●			15				●			1.1				0.11				141			●		
LMMB	ZM	4.4				1.2				11					0.04						11				●			1.6				0.18				140			●		

### ORGANICS (ppb)

Sites	Spec	Butyltins	r	s	t	Chlordanes	r	s	t	DDTs	r	s	t	Dieldrins	r	s	t	PAHs	r	s	t	PCBs	r	s	t						
GBBS	ZM	21				2.4				16				0.99				▼	387				▼	213			●	●	▼		
LMMB	ZM	21				23				148				15				▼	6519				●	●	▼	924			●	●	



# APPENDIX 3: RESULTS



## HAWAII (HI)



Site	Latitude	Longitude	General Location	Location
HHKL	21.3167	-157.8860	Honolulu Hrb.	Keehi Lagoon
BPBP	21.3203	-158.1200	Barber's Point	Barber's Pt. Harbor
HHKB	21.4118	-157.7790	Hawaii	Kaneohe Bay
KAUI	21.9567	-159.3560	Kauai	Nawiliwili Harbor

## METALS

Site	Year	AS	CD	CU	HG	NI	PB	SN	ZN
HHKL	2004	15	0.41	2510	0.28	2.6	6.2	0.79	970
HHKL	2002	14	2.26	2280	0.36	1.3	1.8	3.1	909
HHKL	2000	0	0.00	2280	0.23	2.7	1.6	2.1	834
HHKL	1998	19	0.64	3460	0.27	19.8	2.6	1.7	1090
HHKL	1996	16	0.87	2456	0.20	4.9	8.4	0.9	1061
HHKL	1994	16	0.30	3100	0.33	3.1	5.5	3.2	1000
HHKL	1992	21	0.41	2500	0.29	5.2	33.7	2.9	1400
HHKL	1990	14	0.33	1600	0.24	3.1	13.0	3.0	890
HHKL	1989	12	0.30	2100	0.21	2.2	6.8	5.1	1100
HHKL	1988	23	0.50	2600	0.37	2.1	9.7	5.6	1100
BPBP	2002	11	0.47	1610	0.05	1.3	5.3	0.36	742
BPBP	2000	0	0.00	2390	0.00	2.7	1.7	1.6	608
BPBP	1998	9	0.43	2840	0.18	4.6	1.5	0.7	1010
BPBP	1992	18	0.86	1700	0.11	9.6	1.4	2.6	3800
BPBP	1990	17	0.49	1900	0.08	4.1	0.6	3.3	990
BPBP	1989	21	0.65	1800	0.10	2.1	0.6	1.9	730
BPBP	1988	13	0.66	640	0.09	3.8	0.8	1.6	720
BPBP	1986	18	2.50	950	0.21	1.5	0.7	0.00	940
HHKB	2004	16	0.76	724	0.12	1.9	0.8	0.23	1450
HHKB	2002	14	0.65	1150	0.15	1.8	0.8	0.26	1590
HHKB	2000	11	0.59	1010	0.10	1.6	0.4	0.00	1270
HHKB	1998	9	0.50	884	0.14	2.1	0.6	0.00	1400
HHKB	1996	12	0.48	665	0.08	0.6	0.2	0.07	1012
KAUI	1986	6	0.28	840	0.16	38.0	0.7	2.0	690



## APPENDIX 3: RESULTS

### HAWAI'I (HI)



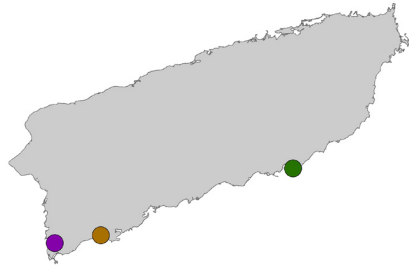
The Hawaiian oyster (*Ostrea sandvicensis*) unlike most of the other bivalves found in the saline waters of the US has no close relatives in the Mussel Watch Program. These oysters grow in clusters on rocks and pilings and are a dominant element on the reefs in Kaneohe Bay, Oahu.

#### ORGANICS

Sites	Year	Butyltins	Chlordanes	DDTs	Dieldrins	PAHs	PCBs
HHKL	2004	247	34	47	12	14200	115
HHKL	2002	723	11	12	5.6	1163	68
HHKL	2000	1963	13	14	5.1	5254	84
HHKL	1998	1605	14	15	5.4	4553	116
HHKL	1996	2531	32	50	10	15105	149
HHKL	1994	141	39	39	38	6101	84
HHKL	1992	1501	8.4	9.2	3.5		80
HHKL	1990	2862	68	40	45		147
HHKL	1989		41	28	13		135
HHKL	1988		18	20	4.4		
BPBP	2002	1386	1.5	1.7	0.2		32
BPBP	2000	1066	0.3	1.2	0.2		54
BPBP	1996	198	1.5	0.8	0.0		16
BPBP	1994	1774	0.0	0.0	0.0		7.2
BPBP	1992	1584	2.7	2.1	0.0		19
BPBP	1990		1.9	2.0	1.6		22
BPBP	1989		27	29	11.5		
HHKB	2004	6	233	20	314	677	119
HHKB	2002	19	55	15	125	124	55
HHKB	2000	28	11	6.0	5.1	79	31
HHKB	1998	30	64	14	62	292	68
HHKB	1996	48	274	44	114	896	163
KAUI	1986		13	36	1.5		113

## APPENDIX 4: RESULTS

### PUERTO RICO (PR)



Site	Latitude	Longitude	General Location	Location
PRBB	18.0078	-67.1752	Puerto Rico	Bahia de Boqueron
PRBJ	17.9391	-66.1813	Puerto Rico	Bahia de Jobos
PRBM	17.9710	-66.9895	Puerto Rico	Bahia Montalva

### METALS

Site	Year	AS	CD	CU	HG	NI	PB	SN	ZN
PRBB	2002	18	0.35	55	0.09	1.4	0.33	0.41	807
PRBB	2000	8	0.32	28	0.04	1.2	0.10	0.07	414
PRBB	1998	8	0.40	39	0.05	2.9	0.22	0.00	522
PRBB	1996	18	0.25	37	0.08	2.2	0.10	0.20	1187
PRBB	1994	9	0.44	53	0.08	1.8	0.28	1.3	907
PRBB	1992	10	0.41	51	0.09	1.8	0.09	0.04	631
PRBJ	2002	14	0.66	190	0.09	0.7	0.37	0.28	2260
PRBJ	2000	18	0.44	129	0.08	0.7	0.13	0.00	1200
PRBJ	1998	11	0.74	155	0.07	1.2	0.35	0.00	971
PRBJ	1996	12	0.65	141	0.11	0.8	0.20	0.18	960
PRBJ	1994	12	0.95	121	0.10	0.7	0.28	0.00	689
PRBJ	1992	14	0.75	141	0.09	1.1	0.16	0.00	708
PRBM	2004	13	0.83	225	0.12	1.6	0.35	0.33	2810
PRBM	2002	16	0.50	155	0.10	1.4	0.21	0.27	2130
PRBM	2000	16	0.73	333	0.15	1.3	0.17	0.70	3680
PRBM	1998	13	0.64	358	0.11	1.7	0.30	0.00	3100
PRBM	1994	13	0.53	189	0.10	0.9	0.23	0.00	2334
PRBM	1992	15	0.65	266	0.16	1.3	0.22	0.00	2803

## APPENDIX 4: RESULTS

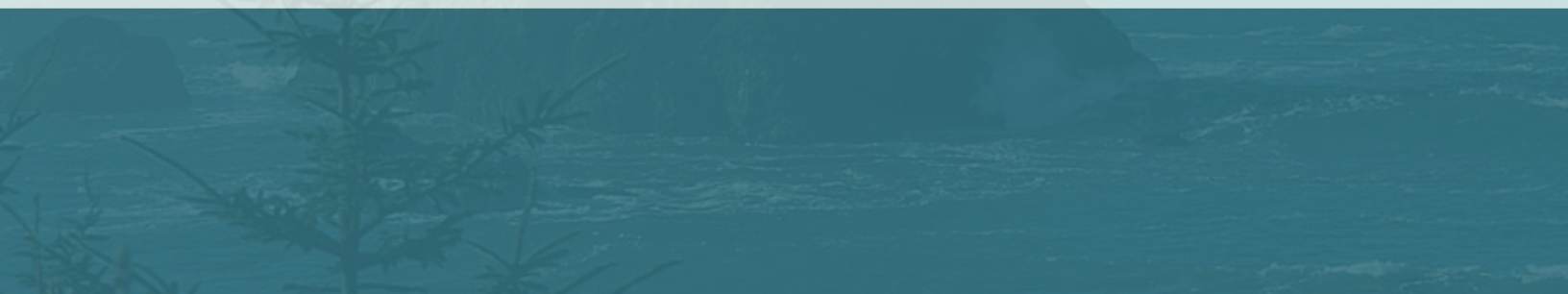
### PUERTO RICO (PR)



The Caribbean oyster (*Crassostrea rhizophorae*) is collected at the three sites in Puerto Rico. Unlike the common oyster (*Crassostrea virginica*) which is found in oyster beds or attached to other hard substrates the Caribbean oyster is found attached to mangrove roots.

#### ORGANICS

Sites	Year	Butyltins	Chlordanes	DDTs	Dieldrins	PAHs	PCBs
PRBB	2002	66	0.16	1.5	0.00	245	5
PRBB	2000	44	0.28	0.56	0.09	63	4
PRBB	1998	44	2.52	2.1	0.11	92	9
PRBB	1996	291	0.83	3.0	0.85	227	25
PRBB	1994	191				459	
PRBB	1992	236	0.53	2.1	0.81	164	5
PRBJ	2002	24	0.27	0.91	0.39	379	21
PRBJ	2000	12	0.54	0.76	0.11	41	9
PRBJ	1998	28	0.61	2.6	0.91	123	8
PRBJ	1996		0.89	1.4	0.77	127	14
PRBJ	1994	165				389	
PRBJ	1992	15	0.91	1.8	1.0	149	8
PRBM	2004	31	0.14	3.2	0.00	324	28
PRBM	2002	88	0.47	4.4	0.00	88	31
PRBM	2000	314	0.61	2.4	0.12	76	22
PRBM	1998	11	1.62	6.5	0.35	140	59
PRBM	1994	59				424	
PRBM	1992	10	0.94	5.8	0.89	181	19



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