

DRAFT Vital Signs Summary for Boston Harbor Islands National Recreation Area

Vital Sign: Air Quality (Acid Deposition)

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Wet Deposition - Ammonium		TBD	Air Resources Division Air Atlas	Reference: TBD Management: TBD	0	0	NPS Air Resources Division TBD	to
Wet Deposition - Nitrate	3.75	Normalized N, kg/ha/yr	Air Resources Division Air Atlas	Reference: Outside Range Management: Range Not Set	0	3	NPS Air Resources Division TBD	2001 to 2005
Wet Deposition - Sulfate	4.88	Normalized S, kg/ha/yr	Air Resources Division Air Atlas	Reference: Outside Range Management: Range Not Set	0	3	NPS Air Resources Division TBD	2001 to 2005

Vital Sign: Air Quality (Ozone)

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
High Ozone Measure	85.10	ppb (3-yr ave of annual 4th highest 8-hr reading)	Air Resources Division Air Atlas	Reference: Outside Range Management: Range Not Set	0	75	NPS Air Resources Division TBD	2001 to 2005

Vital Sign: Air Quality (Visibility)

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Haze Index - Moderate Days	5.26	Deciviews/yr	Air Resources Division Air Atlas	Reference: Within Range Management: Range Not Set	0	8	NPS Air Resources Division TBD	2001 to 2005

Vital Sign: Breeding Birds (Coastal)

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
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Vital Sign: *Breeding Birds (Coastal)*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
American Oystercatchers	16.00	Number of pairs	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Black-crowned Night Herons	332.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Common Eiders	200.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: TBD	0	0	TBD	2008 to 2008
				Management: TBD	0	0	TBD	
Common Terns	0.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Within Range	0	0	TBD	2009 to 2009
				Management: Within Range	0	0	TBD	
Double-crested Cormorants	1052.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Glossy Ibis	6.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Great Black-backed Gulls	70.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Great Egrets	79.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	
Herring Gulls	272.00	Number of nests	NETN Vital Signs Monitoring Data	Reference: Range Not Set	0	0	TBD	2009 to 2009
				Management: Range Not Set	0	0	TBD	

Vital Sign: *Breeding Birds (Coastal)*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Least Terns	0.00	Number of nests	NETN Vital Signs Monitoring Data	<u>Reference:</u> Within Range <u>Management:</u> Within Range	0	0	TBD	2009 to 2009
Snowy Egrets	51.00	Number of nests	NETN Vital Signs Monitoring Data	<u>Reference:</u> Range Not Set <u>Management:</u> Range Not Set	0	0	TBD	2009 to 2009
Spotted Sandpipers		Number of nests	NETN Vital Signs Monitoring Data	<u>Reference:</u> TBD <u>Management:</u> TBD	0	0	TBD	2009 to 2009
Willetts	4.00	Number of pairs	NETN Vital Signs Monitoring Data	<u>Reference:</u> Range Not Set <u>Management:</u> Range Not Set	0	0	TBD	2009 to 2009

Vital Sign: *Climate*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Climate Metrics TBD		TBD	NPClimate	<u>Reference:</u> TBD <u>Management:</u> TBD	0	0	TBD	to

Vital Sign: *Invasive Animals*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Early Detection Metrics TBD		TBD	NETN / Park Monitoring Data	<u>Reference:</u> TBD <u>Management:</u> TBD	0	0	TBD	to

Vital Sign: *Invasive Plants*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
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Vital Sign: *Invasive Plants*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Early Detection Metrics TBD	TBD		NETN / Park Monitoring Data	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	
EPMT Metrics TBD	TBD		Partner Programs or Agencies	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	

Vital Sign: *Phenology*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Phenology Metrics TBD	TBD		Partner Programs or Agencies	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	

Vital Sign: *Rocky Intertidal*

Metric	Value	Units	Data Source	Comparison to Reference and Management Goals	Min	Max	Source	Period Covered by Data
Environmental Metrics TBD	TBD		NETN Vital Signs Monitoring Data	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	
Motile Invertebrate Metrics TBD	TBD		NETN Vital Signs Monitoring Data	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	
Seaweed Metrics TBD	TBD		NETN Vital Signs Monitoring Data	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	
Sessile Invertebrate Metrics TBD	TBD		NETN Vital Signs Monitoring Data	<u>Reference:</u> TBD	0	0	TBD	to
				<u>Managemen</u> TBD	0	0	TBD	

Vital Sign: *Salt Marsh Vegetation*

<i>Metric</i>	<i>Value</i>	<i>Units</i>	<i>Data Source</i>	<i>Comparison to Reference and Management Goals</i>	<i>Min</i>	<i>Max</i>	<i>Source</i>	<i>Period Covered by Data</i>
Vegetation Metrics TBD	TBD		NETN Vital Signs Monitoring Data	Reference: TBD	0	0	TBD	to
				Managemen TBD	0	0	TBD	