

Data Documentation

Dataset Information

Dataset Title:

NCCOS Assessment: Assessment of organic and inorganic chemical contaminants in the sediments of the Salt River Bay National Historical Park and Ecological Preserve, St. Croix, US Virgin Islands, 2018-09-04 to 2018-09-06

Description:

This dataset contains results from the analysis of sediments for chemical contaminants including organic contaminants like hydrocarbons and pesticides, and inorganic contaminants like metals, along with an assessment of the benthic infaunal community in Salt River Bay National Historical Park and Ecological Preserve (SARI), St. Croix, US Virgin Islands (USVI). The data is contained in a series of tables in a .CSV format.

Purpose:

This dataset provides results from the analysis of sediments for chemical contaminants from the SARI in a readily accessible format that can be viewed and analyzed by others interested in the subject matter.

The project was developed to provide local resource managers in the SARI with detailed information on chemical contaminants in sediments, along with an analysis of the benthic infaunal community. The project was requested by partners including the USVI Department of Planning and Natural Resources, and the National Park Service to better understand the condition of the SARI, in terms of the presence and effects of chemical contaminants.

Methods:

In consultation with local partners, a stratified-random sampling design was developed for sampling the sediments. A stratified-random design allows for the statistical comparison of contaminant concentrations between strata. The strata developed included Sugar Bay, Marina, Triton Bay, and Mangrove Lagoon. The strata were set up to sample those areas in the SARI more likely to have finer grain sediments that would accumulate chemical contaminants if present, such as might be found in Sugar and Triton Bays.

The sampling of sediments in the SARI took place in September 2018 aboard a National Park Service boat, piloted by a member of NCCOS Biogeography Branch. A total of 13 sediment samples were collected from the Sugar Bay, Triton Bay, Mangrove Lagoon and Marina strata, and were analyzed for chemical contaminants, sediment toxicity, and the benthic infaunal community. In addition, a sediment core was taken in the Sugar Bay stratum to look at chemical contaminants present in older, deeper sediments.

A series of water parameters (dissolved oxygen, temperature, salinity, and conductivity) were measured at each site, using a YSI® salinity/conductivity/temperature meter. The instrument probe was submerged to a depth of approximately 0.5 meter (m) for the surface measurement, and within a meter of the sediment for the bottom measurement.

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

At each site, the PONAR sediment grab was deployed to collect the sediment samples. Sediments were collected using standard NOAA National Status and Trends (NS&T) protocols (Apeti et al., 2012). The NS&T Program within NCCOS monitors the Nation's estuarine and coastal waters for contaminants in bivalve mollusk tissues and sediments. The top 3 cm of sediment were collected from the PONAR grab using a stainless steel sediment scoop. This top layer of sediment is referred to as surficial sediment, and is typically indicative of more recent deposition. The PONAR was deployed using a pulley and davit, and retrieved by hand. Rocks and bits of seagrass were removed from the PONAR sample. If a particular grab did not result in 200-300 g of sediment, a second grab was made and composited with material from the first.

A series of protocols (Apeti et al., 2012) were used to avoid contamination of the sediment samples by equipment and cross contamination between samples and sites. Personnel handling the samples wore disposable nitrile gloves. All equipment was rinsed with site water and then wiped down with alcohol wipes, and finally rinsed with distilled water, just prior to use at a site.

At one site, a sediment core was taken, in order to look at chemical contaminant concentrations in deeper, older sediments. The corer was a standard design (Aquatic Research Instruments) for collection of undisturbed cores of the sediment and mud-water interface. The corer drove a 7-cm-diameter polycarbonate tube into the sediment with a hand-held weight. Once the sediment corer was retrieved, the core was capped and 2-cm sections were extruded by means of a plunger provided with the corer.

The sediment samples collected were analyzed for a suite of over 270 organic (e.g., hydrocarbons and pesticides) and for major and trace element (e.g., metals) contaminants by TDI-Brooks International, using protocols established by the NS&T Program. The 64 polycyclic aromatic hydrocarbons (PAHs) were analyzed using gas chromatography/mass spectrometry in the selected ion monitoring mode. The 33 organochlorine pesticides and 157 polychlorinated biphenyls (PCBs) were analyzed using gas chromatography/electron capture detection. The four butyltins were analyzed using gas chromatography/flame photometric detection after derivatization. The 16 major and trace elements were analyzed using inductively coupled plasma mass spectrometry and atomic-fluorescence spectroscopy. Detailed descriptions of the NS&T protocols, including quality assurance/quality control (QA/QC) used in the analysis of the organic contaminants, can be found in Kimbrough et al. (2006); for inorganic analyses, Kimbrough and Lauenstein (2006).

Cited Publications:

- Apeti, D.A., S.I. Hartwell, W.E. Johnson and G.G. Lauenstein. 2012. National Status and Trends Bioeffects Program: Field methods. NOAA National Centers for Coastal Ocean Science, Center for Coastal Monitoring and Assessment. NOAA NCCOS Technical Memorandum 135. Silver Spring, MD. 27pp. <https://repository.library.noaa.gov/view/noaa/2721>
- Kimbrough, K. L., and G. G. Lauenstein (Eds). 2006. Major and trace element analytical methods of the National Status and Trends Program: 2000-2006. Silver Spring, MD. NOAA Technical Memorandum NOS NCCOS 29. 19pp. <https://repository.library.noaa.gov/view/noaa/17784>
- Kimbrough, K. L., G. G. Lauenstein and W. E. Johnson (Eds). 2006. Organic contaminant analytical methods of the National Status and Trends Program: Update 2000-2006. NOAA Technical Memorandum NOS NCCOS 30. 137pp. <https://repository.library.noaa.gov/view/noaa/17783>

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

People & Projects

Dataset Authors:

- Pait, Anthony; Hartwell, Ian; Apeti, Dennis

Principal Investigator:

- Tony Pait, tony.pait@noaa.gov, US DOC; NOAA; NOS; National Centers for Coastal Ocean Science (NCCOS)

Additional Principal Investigators:

- Ian Hartwell, ian.hartwell@noaa.gov, NCCOS
- Dennis Apeti, dennis.apeti@noaa.gov, NCCOS
- Andrew Mason, andrew.mason@noaa.gov, NCCOS

Primary Point of Contact:

- Tony Pait, tony.pait@noaa.gov, NCCOS
- NCCOS Data Manager, nccos.data@noaa.gov, NCCOS

Collaborators:

- Leslie Henderson, US DOC; NOAA; NOS; NOAA Coral Reef Conservation Program
- Matt Kendall, NCCOS
- Ashley Ruffo, US DOC; NOAA; NMFS; Southeast Regional Office (SERO); Habitat Conservation Division
- Clayton Pollock, US DOI; National Park Service (NPS)

Partners:

- USVI Department of Planning and Natural Resources (DPNR)

Funding:

- US DOC; NOAA; NOS; National Centers for Coastal Ocean Science (NCCOS)
- US DOC; NOAA; NOS; NOAA Coral Reef Conservation Program

Associated Online Resources:

- NCCOS News Item, "Scientists Assess Contaminants, Fish Populations in Salt River Bay, St. Croix," <https://coastalscience.noaa.gov/news/scientists-assess-contaminants-fish-populations-in-salt-river-bay-st-croix/>
- CRCP Project #31213, "Assessment of Chemical Contaminants in the Sediments of Salt River Bay"

Extents

Start Date: 2018-09-04
End Date: 2018-09-06

Northern Boundary: 17.783445
Southern Boundary: 17.766954
Western Boundary: -64.762413
Eastern Boundary: -64.749435

Keywords

- Caribbean Sea
- Salt River Bay
- Salt River Bay National Historical Park and Ecological Preserve
- Triton Bay
- Sugar Bay
- Mangrove Lagoon

NCCOS Keywords:

- NCCOS Research Priority > Stressor Impacts and Mitigation
- NCCOS Research Topic > Biological Effects of Contaminants and Nutrients
- NCCOS Research Location > Region > Caribbean Sea
- NCCOS Research Location > U.S. States and Territories > U.S. Virgin Islands
- NCCOS Research Data Type > Field observations
- NCCOS Research Data Type > Derived Data Product

CoRIS Keywords:

- CoRIS Discovery Thesaurus:
 - Numeric Data Sets > Chemical Contaminants
- CoRIS Theme Thesaurus:
 - EARTH SCIENCE > Hydrosphere > Water Quality > Contaminants > Chemical
- CoRIS Place Country/Territory Keywords:
 - COUNTRY/TERRITORY > United States of America > U. S. Virgin Islands > St. Croix > Salt River Bay (17N064W0022)
- CoRIS Place Ocean/Seas Keywords:
 - OCEAN BASIN > Atlantic Ocean > Caribbean Sea > Virgin Islands > St. Croix > Salt River Bay (17N064W0022)

File Information

Total File Size: 553 KB, 13 files in 1 folder (507 KB zipped)
Data File Format(s): Comma-separated value (.CSV)
Data File Compression: N/A

Data Files:

- Table_1_Site_Characteristics_Salt_River_sediment_sites.csv
- Table_2_Total_Organic_Carbon_Salt_River_sediments.csv
- Table_3_Grain_Size_Salt_River_sediments.csv
- Table_4_PAHs_in_Salt_River_sediments.csv
- Table_5_Alkylated_PAHs_in_Salt_River_sediments.csv
- Table_6_Organochlorines_in_Salt_River_sediments.csv
- Table_7_PCBs_in_Salt_River_sediments.csv
- Table_8_Butyltins_in_Salt_River_sediments.csv
- Table_9_Trace_and_Major_Elements_in_Salt_River_sediments.csv
- Table_10_Clostridium_perfringens_in_Salt_River_sediments.csv
- Table_11_Benthic_Infaunal_Counts_Salt_River_sediments.csv

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Documentation Files:

- Browse_Graphic.JPG
- DataDocumentation.PDF

Table 1. Data dictionary for Salt River Sediment site characteristics

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Stratum	Text	Sampling stratum	N/A	N/A
3	Date	Date	Date of sample	Date	N/A
4	Depth (m)	Decimal number	Depth of water	meters	0-5
5	Latitude (DD)	Decimal number	Latitude of site	Decimal degrees	N/A
6	Longitude (DD)	Decimal number	Longitude of site	Decimal degrees	N/A
7	Surface Temperature (°C)	Decimal number	Temperature of water 1/2 m below surface	Degrees Celsius	
8	Bottom Temperature (°C)	Decimal number	Temperature of water within 1 m of bottom	Degrees Celsius	30-33
9	Surface Salinity (psu)	Decimal number	Salinity near surface	PSU (practical salinity unit)	33-37
10	Bottom Salinity (psu)	Decimal number	Salinity near bottom	PSU (practical salinity unit)	33-37
11	Surface DO (mg/L)	Decimal number	Dissolved oxygen concentration near surface	mg/L	2-7
12	Bottom DO (mg/L)	Decimal number	Dissolved oxygen concentration near bottom	mg/L	2-7

Table 2. Data dictionary for total organic carbon in Salt River sediments

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Total carbon (%TC)	Decimal number	Total carbon content of sediment sample	%	0-15
3	Total organic carbon (%TOC)	Decimal number	Total organic carbon content of sediment sample	%	N/A
4	Total inorganic carbon (%TIC)	Decimal number	Total inorganic carbon content of sediment sample	%	0-5

Table 3. Data dictionary for grain size of Salt River sediments

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	% Gravel	Decimal number	Percent gravel content of sediment sample	%	0-30
3	% Sand	Decimal number	Percent sand content of sediment sample	%	10-75
4	% Silt	Decimal number	Percent silt content of sediment sample	%	5-75
5	% Clay	Decimal number	Percent clay content of sediment sample	%	5-40

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 4. Polycyclic aromatic hydrocarbons in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	cis/trans Decalin	Decimal number	Concentration of cis/trans Decalin in sediment sample	ng/g	0 - 1,000
3	C1-Decalins	Decimal number	Concentration of C1-Decalins in sediment sample	ng/g	0 - 1,000
4	C2-Decalins	Decimal number	Concentration of C2-Decalins in sediment sample	ng/g	0 - 1,000
5	C3-Decalins	Decimal number	Concentration of C3-Decalins in sediment sample	ng/g	0 - 1,000
6	C4-Decalins	Decimal number	Concentration of C4-Decalins in sediment sample	ng/g	0 - 1,000
7	Naphthalene	Decimal number	Concentration of Naphthalene in sediment sample	ng/g	0 - 1,000
8	C1-Naphthalenes	Decimal number	Concentration of C1-Naphthalenes in sediment sample	ng/g	0 - 1,000
9	C2-Naphthalenes	Decimal number	Concentration of C2-Naphthalenes in sediment sample	ng/g	0 - 1,000
10	C3-Naphthalenes	Decimal number	Concentration of C3-Naphthalenes in sediment sample	ng/g	0 - 1,000
11	C4-Naphthalenes	Decimal number	Concentration of C4-Naphthalenes in sediment sample	ng/g	0 - 1,000
12	Benzothiophene	Decimal number	Concentration of Benzothiophene in sediment sample	ng/g	0 - 1,000
13	C1-Benzothiophenes	Decimal number	Concentration of C1-Benzothiophenes in sediment sample	ng/g	0 - 1,000
14	C2-Benzothiophenes	Decimal number	Concentration of C2-Benzothiophenes in sediment sample	ng/g	0 - 1,000
15	C3-Benzothiophenes	Decimal number	Concentration of C3-Benzothiophenes in sediment sample	ng/g	0 - 1,000
16	C4-Benzothiophenes	Decimal number	Concentration of C4-Benzothiophenes in sediment sample	ng/g	0 - 1,000
17	Biphenyl	Decimal number	Concentration of Biphenyl in sediment sample	ng/g	0 - 1,000
18	Acenaphthylene	Decimal number	Concentration of Acenaphthylene in sediment sample	ng/g	0 - 1,000
19	Acenaphthene	Decimal number	Concentration of Acenaphthene in sediment sample	ng/g	0 - 1,000
20	Dibenzofuran	Decimal number	Concentration of Dibenzofuran in sediment sample	ng/g	0 - 1,000
21	Fluorene	Decimal number	Concentration of Fluorene in sediment sample	ng/g	0 - 1,000
22	C1-Fluorenes	Decimal number	Concentration of C1-Fluorenes in sediment sample	ng/g	0 - 1,000
23	C2-Fluorenes	Decimal number	Concentration of C2-Fluorenes in sediment sample	ng/g	0 - 1,000
24	C3-Fluorenes	Decimal number	Concentration of C3-Fluorenes in sediment sample	ng/g	0 - 1,000
25	Carbazole	Decimal number	Concentration of Carbazole in sediment sample	ng/g	0 - 1,000
26	Anthracene	Decimal number	Concentration of Anthracene in sediment sample	ng/g	0 - 1,000
27	Phenanthrene	Decimal number	Concentration of Phenanthrene in sediment sample	ng/g	0 - 1,000
28	C1-Phenanthrenes/Anthracenes	Decimal number	Concentration of C1-Phenanthrenes/Anthracenes in sediment sample	ng/g	0 - 1,000
29	C2-Phenanthrenes/Anthracenes	Decimal number	Concentration of C2-Phenanthrenes/Anthracenes in sediment sample	ng/g	0 - 1,000
30	C3-Phenanthrenes/Anthracenes	Decimal number	Concentration of C3-Phenanthrenes/Anthracenes in sediment sample	ng/g	0 - 1,000
31	C4-Phenanthrenes/Anthracenes	Decimal number	Concentration of C4-Phenanthrenes/Anthracenes in sediment sample	ng/g	0 - 1,000
32	Dibenzothiophene	Decimal number	Concentration of Dibenzothiophene in sediment sample	ng/g	0 - 1,000
33	C1-Dibenzothiophenes	Decimal number	Concentration of C1-Dibenzothiophenes in sediment sample	ng/g	0 - 1,000
34	C2-Dibenzothiophenes	Decimal number	Concentration of C2-Dibenzothiophenes in sediment sample	ng/g	0 - 1,000
35	C3-Dibenzothiophenes	Decimal number	Concentration of C3-Dibenzothiophenes in sediment sample	ng/g	0 - 1,000
36	C4-Dibenzothiophenes	Decimal number	Concentration of C4-Dibenzothiophenes in sediment sample	ng/g	0 - 1,000
37	Fluoranthene	Decimal number	Concentration of Fluoranthene in sediment sample	ng/g	0 - 1,000
38	Pyrene	Decimal number	Concentration of Pyrene in sediment sample	ng/g	0 - 1,000
39	C1-Fluoranthenes/Pyrenes	Decimal number	Concentration of C1-Fluoranthenes/Pyrenes in sediment sample	ng/g	0 - 1,000
40	C2-Fluoranthenes/Pyrenes	Decimal number	Concentration of C2-Fluoranthenes/Pyrenes in sediment sample	ng/g	0 - 1,000
41	C3-Fluoranthenes/Pyrenes	Decimal number	Concentration of C3-Fluoranthenes/Pyrenes in sediment sample	ng/g	0 - 1,000
42	C4-Fluoranthenes/Pyrenes	Decimal number	Concentration of C4-Fluoranthenes/Pyrenes in sediment sample	ng/g	0 - 1,000
43	Naphthobenzothiophene	Decimal number	Concentration of Naphthobenzothiophene in sediment sample	ng/g	0 - 1,000
44	C1-Naphthobenzothiophenes	Decimal number	Concentration of C1-Naphthobenzothiophenes in sediment sample	ng/g	0 - 1,000
45	C2-Naphthobenzothiophenes	Decimal number	Concentration of C2-Naphthobenzothiophenes in sediment sample	ng/g	0 - 1,000
46	C3-Naphthobenzothiophenes	Decimal number	Concentration of C3-Naphthobenzothiophenes in sediment sample	ng/g	0 - 1,000
47	C4-Naphthobenzothiophenes	Decimal number	Concentration of C4-Naphthobenzothiophenes in sediment sample	ng/g	0 - 1,000
48	Benz(a)anthracene	Decimal number	Concentration of Benz(a)anthracene in sediment sample	ng/g	0 - 1,000
49	Chrysene/Triphenylene	Decimal number	Concentration of Chrysene/Triphenylene in sediment sample	ng/g	0 - 1,000
50	C1-Chrysenes	Decimal number	Concentration of C1-Chrysenes in sediment sample	ng/g	0 - 1,000
51	C2-Chrysenes	Decimal number	Concentration of C2-Chrysenes in sediment sample	ng/g	0 - 1,000
52	C3-Chrysenes	Decimal number	Concentration of C3-Chrysenes in sediment sample	ng/g	0 - 1,000
53	C4-Chrysenes	Decimal number	Concentration of C4-Chrysenes in sediment sample	ng/g	0 - 1,000
54	Benzo(b)fluoranthene	Decimal number	Concentration of Benzo(b)fluoranthene in sediment sample	ng/g	0 - 1,000
55	Benzo(k,j)fluoranthene	Decimal number	Concentration of Benzo(k,j)fluoranthene in sediment sample	ng/g	0 - 1,000
56	Benzo(a)fluoranthene	Decimal number	Concentration of Benzo(a)fluoranthene in sediment sample	ng/g	0 - 1,000
57	Benzo(e)pyrene	Decimal number	Concentration of Benzo(e)pyrene in sediment sample	ng/g	0 - 1,000
58	Benzo(a)pyrene	Decimal number	Concentration of Benzo(a)pyrene in sediment sample	ng/g	0 - 1,000
59	Perylene	Decimal number	Concentration of Perylene in sediment sample	ng/g	0 - 1,000
60	Indeno(1,2,3-c,d)pyrene	Decimal number	Concentration of Indeno(1,2,3-c,d)pyrene in sediment sample	ng/g	0 - 1,000
61	Dibenzo(a,h)anthracene	Decimal number	Concentration of Dibenzo(a,h)anthracene in sediment sample	ng/g	0 - 1,000
62	C1-Dibenzo(a,h)anthracenes	Decimal number	Concentration of C1-Dibenzo(a,h)anthracenes in sediment sample	ng/g	0 - 1,000
63	C2-Dibenzo(a,h)anthracenes	Decimal number	Concentration of C2-Dibenzo(a,h)anthracenes in sediment sample	ng/g	0 - 1,000
64	C3-Dibenzo(a,h)anthracenes	Decimal number	Concentration of C3-Dibenzo(a,h)anthracenes in sediment sample	ng/g	0 - 1,000
65	Benzo(g,h,i)perylene	Decimal number	Concentration of Benzo(g,h,i)perylene in sediment sample	ng/g	0 - 1,000
66	Total PAHs	Decimal number	Concentration of Total PAHs in sediment sample	ng/g	0 - 1,000

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 5. Data dictionary for alkylated PAHs in Salt River sediments

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	2-Methylnaphthalene	Decimal number	Concentration of 2-Methylnaphthalene in sediment sample	ng/g	0-5
3	1-Methylnaphthalene	Decimal number	Concentration of 1-Methylnaphthalene in sediment sample	ng/g	0-5
4	2,6-Dimethylnaphthalene	Decimal number	Concentration of 2,6-Dimethylnaphthalene in sediment sample	ng/g	0-5
5	1,6,7-Trimethylnaphthalene	Decimal number	Concentration of 1,6,7-Trimethylnaphthalene in sediment sample	ng/g	0-5
6	1-Methylfluorene	Decimal number	Concentration of 1-Methylfluorene in sediment sample	ng/g	0-5
7	4-Methyldibenzothiophene	Decimal number	Concentration of 4-Methyldibenzothiophene in sediment sample	ng/g	0-5
8	2/3-Methyldibenzothiophene	Decimal number	Concentration of 2/3-Methyldibenzothiophene in sediment sample	ng/g	0-5
9	1-Methyldibenzothiophene	Decimal number	Concentration of 1-Methyldibenzothiophene in sediment sample	ng/g	0-5
10	3-Methylphenanthrene	Decimal number	Concentration of 3-Methylphenanthrene in sediment sample	ng/g	0-5
11	2-Methylphenanthrene	Decimal number	Concentration of 2-Methylphenanthrene in sediment sample	ng/g	0-5
12	2-Methylanthracene	Decimal number	Concentration of 2-Methylanthracene in sediment sample	ng/g	0-5
13	4/9-Methylphenanthrene	Decimal number	Concentration of 4/9-Methylphenanthrene in sediment sample	ng/g	0-5
14	1-Methylphenanthrene	Decimal number	Concentration of 1-Methylphenanthrene in sediment sample	ng/g	0-5
15	3,6-Dimethylphenanthrene	Decimal number	Concentration of 3,6-Dimethylphenanthrene in sediment sample	ng/g	0-5
16	Retene	Decimal number	Concentration of Retene in sediment sample	ng/g	0-5
17	2-Methylfluoranthene	Decimal number	Concentration of 2-Methylfluoranthene in sediment sample	ng/g	0-5
18	Benzo(b)fluorene	Decimal number	Concentration of Benzo(b)fluorene in sediment sample	ng/g	0-5
19	C29-Hopane	Decimal number	Concentration of C29-Hopane in sediment sample	ng/g	0-5
20	18a-Oleanane	Decimal number	Concentration of 18a-Oleanane in sediment sample	ng/g	0-5
21	C30-Hopane	Decimal number	Concentration of C30-Hopane in sediment sample	ng/g	0-200
22	C20-TAS	Decimal number	Concentration of C20-TAS in sediment sample	ng/g	0-5
23	C21-TAS	Decimal number	Concentration of C21-TAS in sediment sample	ng/g	10.0
24	C26(20S)-TAS	Decimal number	Concentration of C26(20S)-TAS in sediment sample	ng/g	20.0
25	C26(20R)/C27(20S)-TAS	Decimal number	Concentration of C26(20R)/C27(20S)-TAS in sediment sample	ng/g	0-100
26	C28(20S)-TAS	Decimal number	Concentration of C28(20S)-TAS in sediment sample	ng/g	0-100
27	C27(20R)-TAS	Decimal number	Concentration of C27(20R)-TAS in sediment sample	ng/g	0-50
28	C28(20R)-TAS	Decimal number	Concentration of C28(20R)-TAS in sediment sample	ng/g	0-50

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 6. Data dictionary for organochlorines in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Aldrin	Decimal number	Concentration of Aldrin in sediment sample	ng/g	0 - 1
3	Dieldrin	Decimal number	Concentration of Dieldrin in sediment sample	ng/g	0 - 1
4	Endrin	Decimal number	Concentration of Endrin in sediment sample	ng/g	0 - 1
5	Endrin Aldehyde	Decimal number	Concentration of Endrin Aldehyde in sediment sample	ng/g	0 - 1
6	Endrin Ketone	Decimal number	Concentration of Endrin Ketone in sediment sample	ng/g	0 - 1
7	Heptachlor	Decimal number	Concentration of Heptachlor in sediment sample	ng/g	0 - 1
8	Heptachlor-Epoxyde	Decimal number	Concentration of Heptachlor-Epoxyde in sediment sample	ng/g	0 - 1
9	Oxychlordane	Decimal number	Concentration of Oxychlordane in sediment sample	ng/g	0 - 1
10	Alpha-Chlordane	Decimal number	Concentration of Alpha-Chlordane in sediment sample	ng/g	0 - 1
11	Gamma-Chlordane	Decimal number	Concentration of Gamma-Chlordane in sediment sample	ng/g	0 - 1
12	Trans-Nonachlor	Decimal number	Concentration of Trans-Nonachlor in sediment sample	ng/g	0 - 1
13	Cis-Nonachlor	Decimal number	Concentration of Cis-Nonachlor in sediment sample	ng/g	0 - 1
14	Alpha-HCH	Decimal number	Concentration of Alpha-HCH in sediment sample	ng/g	0 - 1
15	Beta-HCH	Decimal number	Concentration of Beta-HCH in sediment sample	ng/g	0 - 1
16	Delta-HCH	Decimal number	Concentration of Delta-HCH in sediment sample	ng/g	0 - 1
17	Gamma-HCH	Decimal number	Concentration of Gamma-HCH in sediment sample	ng/g	0 - 1
18	DDMU	Decimal number	Concentration of DDMU in sediment sample	ng/g	0 - 1
19	2,4'-DDD	Decimal number	Concentration of 2,4'-DDD in sediment sample	ng/g	0 - 1
20	4,4'-DDD	Decimal number	Concentration of 4,4'-DDD in sediment sample	ng/g	0 - 1
21	2,4'-DDE	Decimal number	Concentration of 2,4'-DDE in sediment sample	ng/g	0 - 1
22	4,4'-DDE	Decimal number	Concentration of 4,4'-DDE in sediment sample	ng/g	0 - 1
23	2,4'-DDT	Decimal number	Concentration of 2,4'-DDT in sediment sample	ng/g	0 - 1
24	4,4'-DDT	Decimal number	Concentration of 4,4'-DDT in sediment sample	ng/g	0 - 1
25	1,2,3,4-Tetrachlorobenzene	Decimal number	Concentration of 1,2,3,4-Tetrachlorobenzene in sediment sample	ng/g	0 - 1
26	1,2,4,5-Tetrachlorobenzene	Decimal number	Concentration of 1,2,4,5-Tetrachlorobenzene in sediment sample	ng/g	0 - 1
27	Hexachlorobenzene	Decimal number	Concentration of Hexachlorobenzene in sediment sample	ng/g	0 - 1
28	Pentachloroanisole	Decimal number	Concentration of Pentachloroanisole in sediment sample	ng/g	0 - 1
29	Pentachlorobenzene	Decimal number	Concentration of Pentachlorobenzene in sediment sample	ng/g	0 - 1
30	Endosulfan II	Decimal number	Concentration of Endosulfan II in sediment sample	ng/g	0 - 1
31	Endosulfan I	Decimal number	Concentration of Endosulfan I in sediment sample	ng/g	0 - 1
32	Endosulfan Sulfate	Decimal number	Concentration of Endosulfan Sulfate in sediment sample	ng/g	0 - 1
33	Mirex	Decimal number	Concentration of Mirex in sediment sample	ng/g	0 - 1
34	Chlorpyrifos	Decimal number	Concentration of Chlorpyrifos in sediment sample	ng/g	0 - 1
35	Total HCH	Decimal number	Concentration of Total HCH in sediment sample	ng/g	0 - 1
36	Total Chlordane	Decimal number	Concentration of Total Chlordane in sediment sample	ng/g	0 - 1
37	Total DDT	Decimal number	Concentration of Total DDT in sediment sample	ng/g	0 - 1

Data Documentation

Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 7. Data dictionary for polychlorinated biphenyls in Salt River sediments

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	PCB 1	Decimal number	Concentration of PCB 1 in sediment sample	ng/g	0-1
3	PCB 2	Decimal number	Concentration of PCB 2 in sediment sample	ng/g	0-1
4	PCB 3	Decimal number	Concentration of PCB 3 in sediment sample	ng/g	0-1
5	PCB 4/10	Decimal number	Concentration of PCB 4/10 in sediment sample	ng/g	0-1
6	PCB 7/9	Decimal number	Concentration of PCB 7/9 in sediment sample	ng/g	0-1
7	PCB 6	Decimal number	Concentration of PCB 6 in sediment sample	ng/g	0-1
8	PCB 8/5	Decimal number	Concentration of PCB 8/5 in sediment sample	ng/g	0-1
9	PCB 14	Decimal number	Concentration of PCB 14 in sediment sample	ng/g	0-1
10	PCB 11	Decimal number	Concentration of PCB 11 in sediment sample	ng/g	0-1
11	PCB 12	Decimal number	Concentration of PCB 12 in sediment sample	ng/g	0-1
12	PCB 13	Decimal number	Concentration of PCB 13 in sediment sample	ng/g	0-1
13	PCB 15	Decimal number	Concentration of PCB 15 in sediment sample	ng/g	0-1
14	PCB 19	Decimal number	Concentration of PCB 19 in sediment sample	ng/g	0-1
15	PCB 30	Decimal number	Concentration of PCB 30 in sediment sample	ng/g	0-1
16	PCB 18	Decimal number	Concentration of PCB 18 in sediment sample	ng/g	0-1
17	PCB 17	Decimal number	Concentration of PCB 17 in sediment sample	ng/g	0-1
18	PCB 27	Decimal number	Concentration of PCB 27 in sediment sample	ng/g	0-1
19	PCB 24	Decimal number	Concentration of PCB 24 in sediment sample	ng/g	0-1
20	PCB 16/32	Decimal number	Concentration of PCB 16/32 in sediment sample	ng/g	0-1
21	PCB 34	Decimal number	Concentration of PCB 34 in sediment sample	ng/g	0-1
22	PCB 23	Decimal number	Concentration of PCB 23 in sediment sample	ng/g	0-1
23	PCB 29	Decimal number	Concentration of PCB 29 in sediment sample	ng/g	0-1
24	PCB 26	Decimal number	Concentration of PCB 26 in sediment sample	ng/g	0-1
25	PCB 25	Decimal number	Concentration of PCB 25 in sediment sample	ng/g	0-1
26	PCB 28/31	Decimal number	Concentration of PCB 28/31 in sediment sample	ng/g	0-1
27	PCB 21/20/33	Decimal number	Concentration of PCB 21/20/33 in sediment sample	ng/g	0-1
28	PCB 22	Decimal number	Concentration of PCB 22 in sediment sample	ng/g	0-1
29	PCB 36	Decimal number	Concentration of PCB 36 in sediment sample	ng/g	0-1
30	PCB 39	Decimal number	Concentration of PCB 39 in sediment sample	ng/g	0-1
31	PCB 38	Decimal number	Concentration of PCB 38 in sediment sample	ng/g	0-1
32	PCB 35	Decimal number	Concentration of PCB 35 in sediment sample	ng/g	0-1
33	PCB 37	Decimal number	Concentration of PCB 37 in sediment sample	ng/g	0-1
34	PCB 54	Decimal number	Concentration of PCB 54 in sediment sample	ng/g	0-1
35	PCB 50	Decimal number	Concentration of PCB 50 in sediment sample	ng/g	0-1
36	PCB 53	Decimal number	Concentration of PCB 53 in sediment sample	ng/g	0-1
37	PCB 51	Decimal number	Concentration of PCB 51 in sediment sample	ng/g	0-1
38	PCB 45	Decimal number	Concentration of PCB 45 in sediment sample	ng/g	0-1
39	PCB 46/69/73	Decimal number	Concentration of PCB 46/69/73 in sediment sample	ng/g	0-1
40	PCB 52	Decimal number	Concentration of PCB 52 in sediment sample	ng/g	0-2
41	PCB 43	Decimal number	Concentration of PCB 43 in sediment sample	ng/g	0-1
42	PCB 49	Decimal number	Concentration of PCB 49 in sediment sample	ng/g	0-2
43	PCB 48/75/47	Decimal number	Concentration of PCB 48/75/47 in sediment sample	ng/g	0-1
44	PCB 65	Decimal number	Concentration of PCB 65 in sediment sample	ng/g	0-1
45	PCB 62	Decimal number	Concentration of PCB 62 in sediment sample	ng/g	0-1
46	PCB 44	Decimal number	Concentration of PCB 44 in sediment sample	ng/g	0-1
47	PCB 59	Decimal number	Concentration of PCB 59 in sediment sample	ng/g	0-1
48	PCB 42	Decimal number	Concentration of PCB 42 in sediment sample	ng/g	0-1
49	PCB 72	Decimal number	Concentration of PCB 72 in sediment sample	ng/g	0-1
50	PCB 71	Decimal number	Concentration of PCB 71 in sediment sample	ng/g	0-1
51	PCB 68/41/64	Decimal number	Concentration of PCB 68/41/64 in sediment sample	ng/g	0-1
52	PCB 40/57	Decimal number	Concentration of PCB 40/57 in sediment sample	ng/g	0-1
53	PCB 67	Decimal number	Concentration of PCB 67 in sediment sample	ng/g	0-1
54	PCB 58	Decimal number	Concentration of PCB 58 in sediment sample	ng/g	0-1
55	PCB 63	Decimal number	Concentration of PCB 63 in sediment sample	ng/g	0-1
56	PCB 61/74	Decimal number	Concentration of PCB 61/74 in sediment sample	ng/g	0-1
57	PCB 76/70	Decimal number	Concentration of PCB 76/70 in sediment sample	ng/g	0-1
58	PCB 66/80	Decimal number	Concentration of PCB 66/80 in sediment sample	ng/g	0-1
59	PCB 55	Decimal number	Concentration of PCB 55 in sediment sample	ng/g	0-1
60	PCB 56	Decimal number	Concentration of PCB 56 in sediment sample	ng/g	0-1
61	PCB 60	Decimal number	Concentration of PCB 60 in sediment sample	ng/g	0-1
62	PCB 79	Decimal number	Concentration of PCB 79 in sediment sample	ng/g	0-1
63	PCB 78	Decimal number	Concentration of PCB 78 in sediment sample	ng/g	0-1
64	PCB 81	Decimal number	Concentration of PCB 81 in sediment sample	ng/g	0-1
65	PCB 77	Decimal number	Concentration of PCB 77 in sediment sample	ng/g	0-1
66	PCB 104	Decimal number	Concentration of PCB 104 in sediment sample	ng/g	0-1
67	PCB 96/103	Decimal number	Concentration of PCB 96/103 in sediment sample	ng/g	0-1
68	PCB 100	Decimal number	Concentration of PCB 100 in sediment sample	ng/g	0-1
69	PCB 94	Decimal number	Concentration of PCB 94 in sediment sample	ng/g	0-1
70	PCB 102/98	Decimal number	Concentration of PCB 102/98 in sediment sample	ng/g	0-1
71	PCB 121/93/95	Decimal number	Concentration of PCB 121/93/95 in sediment sample	ng/g	0.2
72	PCB 88	Decimal number	Concentration of PCB 88 in sediment sample	ng/g	0.1
73	PCB 91	Decimal number	Concentration of PCB 91 in sediment sample	ng/g	0.1
74	PCB 92	Decimal number	Concentration of PCB 92 in sediment sample	ng/g	0.1
75	PCB 101/84/90	Decimal number	Concentration of PCB 101/84/90 in sediment sample	ng/g	0-5
76	PCB 89/113	Decimal number	Concentration of PCB 89/113 in sediment sample	ng/g	0-1
77	PCB 99	Decimal number	Concentration of PCB 99 in sediment sample	ng/g	0-5
78	PCB 119	Decimal number	Concentration of PCB 119 in sediment sample	ng/g	0-1
79	PCB 112	Decimal number	Concentration of PCB 112 in sediment sample	ng/g	0-1

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 7. Data dictionary for polychlorinated biphenyls in Salt River sediments (cont.)

Column	Variable	Label	Definition	Units	Range
80	PCB 120/83	Decimal number	Concentration of PCB 120/83 in sediment sample	ng/g	0-1
81	PCB 97/125/86	Decimal number	Concentration of PCB 97/125/86 in sediment sample	ng/g	0-1
82	PCB 116/117	Decimal number	Concentration of PCB 116/117 in sediment sample	ng/g	0-1
83	PCB 111/115/87	Decimal number	Concentration of PCB 111/115/87 in sediment sample	ng/g	0-1
84	PCB 109	Decimal number	Concentration of PCB 109 in sediment sample	ng/g	0-1
85	PCB 85	Decimal number	Concentration of PCB 85 in sediment sample	ng/g	0-1
86	PCB 110	Decimal number	Concentration of PCB 110 in sediment sample	ng/g	0-5
87	PCB 82	Decimal number	Concentration of PCB 82 in sediment sample	ng/g	0-1
88	PCB 124	Decimal number	Concentration of PCB 124 in sediment sample	ng/g	0-1
89	PCB 106/107	Decimal number	Concentration of PCB 106/107 in sediment sample	ng/g	0-1
90	PCB 123	Decimal number	Concentration of PCB 123 in sediment sample	ng/g	0-1
91	PCB 118/108	Decimal number	Concentration of PCB 118/108 in sediment sample	ng/g	0-5
92	PCB 114/122	Decimal number	Concentration of PCB 114/122 in sediment sample	ng/g	0-1
93	PCB 105/127	Decimal number	Concentration of PCB 105/127 in sediment sample	ng/g	0-1
94	PCB 126	Decimal number	Concentration of PCB 126 in sediment sample	ng/g	0-1
95	PCB 155	Decimal number	Concentration of PCB 155 in sediment sample	ng/g	0-1
96	PCB 150	Decimal number	Concentration of PCB 150 in sediment sample	ng/g	0-1
97	PCB 152	Decimal number	Concentration of PCB 152 in sediment sample	ng/g	0-1
98	PCB 148/145	Decimal number	Concentration of PCB 148/145 in sediment sample	ng/g	0-1
99	PCB 136/154	Decimal number	Concentration of PCB 136/154 in sediment sample	ng/g	0-1
100	PCB 151	Decimal number	Concentration of PCB 151 in sediment sample	ng/g	0-1
101	PCB 135	Decimal number	Concentration of PCB 135 in sediment sample	ng/g	0-1
102	PCB 144	Decimal number	Concentration of PCB 144 in sediment sample	ng/g	0-1
103	PCB 147	Decimal number	Concentration of PCB 147 in sediment sample	ng/g	0-1
104	PCB 149/139	Decimal number	Concentration of PCB 149/139 in sediment sample	ng/g	0-5
105	PCB 140	Decimal number	Concentration of PCB 140 in sediment sample	ng/g	0-5
106	PCB 143	Decimal number	Concentration of PCB 143 in sediment sample	ng/g	0-1
107	PCB 134/133	Decimal number	Concentration of PCB 134/133 in sediment sample	ng/g	0-1
108	PCB 165/131	Decimal number	Concentration of PCB 165/131 in sediment sample	ng/g	0-1
109	PCB 142/146/16	Decimal number	Concentration of PCB 142/146/161 in sediment sample	ng/g	0-1
110	PCB 153/168	Decimal number	Concentration of PCB 153/168 in sediment sample	ng/g	0-5
111	PCB 132	Decimal number	Concentration of PCB 132 in sediment sample	ng/g	0-2
112	PCB 141	Decimal number	Concentration of PCB 141 in sediment sample	ng/g	0-1
113	PCB 137	Decimal number	Concentration of PCB 137 in sediment sample	ng/g	0-1
114	PCB 130	Decimal number	Concentration of PCB 130 in sediment sample	ng/g	0-1
115	PCB 138/164/16	Decimal number	Concentration of PCB 138/164/163 in sediment sample	ng/g	0-10
116	PCB 160/158	Decimal number	Concentration of PCB 160/158 in sediment sample	ng/g	0-1
117	PCB 129	Decimal number	Concentration of PCB 129 in sediment sample	ng/g	0-1
118	PCB 166	Decimal number	Concentration of PCB 166 in sediment sample	ng/g	0-1
119	PCB 159	Decimal number	Concentration of PCB 159 in sediment sample	ng/g	0-1
120	PCB 162	Decimal number	Concentration of PCB 162 in sediment sample	ng/g	0-1
121	PCB 128/167	Decimal number	Concentration of PCB 128/167 in sediment sample	ng/g	0-1
122	PCB 156	Decimal number	Concentration of PCB 156 in sediment sample	ng/g	0-1
123	PCB 157	Decimal number	Concentration of PCB 157 in sediment sample	ng/g	0-1
124	PCB 169	Decimal number	Concentration of PCB 169 in sediment sample	ng/g	0-1
125	PCB 188	Decimal number	Concentration of PCB 188 in sediment sample	ng/g	0-1
126	PCB 184	Decimal number	Concentration of PCB 184 in sediment sample	ng/g	0-1
127	PCB 179	Decimal number	Concentration of PCB 179 in sediment sample	ng/g	0-1
128	PCB 176	Decimal number	Concentration of PCB 176 in sediment sample	ng/g	0-1
129	PCB 186/178	Decimal number	Concentration of PCB 186/178 in sediment sample	ng/g	0-1
130	PCB 175	Decimal number	Concentration of PCB 175 in sediment sample	ng/g	0-1
131	PCB 187/182	Decimal number	Concentration of PCB 187/182 in sediment sample	ng/g	0-1
132	PCB 183	Decimal number	Concentration of PCB 183 in sediment sample	ng/g	0-1
133	PCB 185	Decimal number	Concentration of PCB 185 in sediment sample	ng/g	0-1
134	PCB 174	Decimal number	Concentration of PCB 174 in sediment sample	ng/g	0-1
135	PCB 181	Decimal number	Concentration of PCB 181 in sediment sample	ng/g	0-1
136	PCB 177	Decimal number	Concentration of PCB 177 in sediment sample	ng/g	0-1
137	PCB 171	Decimal number	Concentration of PCB 171 in sediment sample	ng/g	0-1
138	PCB 173	Decimal number	Concentration of PCB 173 in sediment sample	ng/g	0-1
139	PCB 192/172	Decimal number	Concentration of PCB 192/172 in sediment sample	ng/g	0-1
140	PCB 180/193	Decimal number	Concentration of PCB 180/193 in sediment sample	ng/g	0-2
141	PCB 191	Decimal number	Concentration of PCB 191 in sediment sample	ng/g	0-1
142	PCB 170/190	Decimal number	Concentration of PCB 170/190 in sediment sample	ng/g	0-1
143	PCB 189	Decimal number	Concentration of PCB 189 in sediment sample	ng/g	0-1
144	PCB 202	Decimal number	Concentration of PCB 202 in sediment sample	ng/g	0-1
145	PCB 201	Decimal number	Concentration of PCB 201 in sediment sample	ng/g	0-1
146	PCB 204	Decimal number	Concentration of PCB 204 in sediment sample	ng/g	0-1
147	PCB 197	Decimal number	Concentration of PCB 197 in sediment sample	ng/g	0-1
148	PCB 200	Decimal number	Concentration of PCB 200 in sediment sample	ng/g	0-1
149	PCB 198	Decimal number	Concentration of PCB 198 in sediment sample	ng/g	0-1
150	PCB 199	Decimal number	Concentration of PCB 199 in sediment sample	ng/g	0-1
151	PCB 203/196	Decimal number	Concentration of PCB 203/196 in sediment sample	ng/g	0-1
152	PCB 195	Decimal number	Concentration of PCB 195 in sediment sample	ng/g	0-1
153	PCB 194	Decimal number	Concentration of PCB 194 in sediment sample	ng/g	0-1
154	PCB 205	Decimal number	Concentration of PCB 205 in sediment sample	ng/g	0-1
155	PCB 208	Decimal number	Concentration of PCB 208 in sediment sample	ng/g	0-1
156	PCB 207	Decimal number	Concentration of PCB 207 in sediment sample	ng/g	0-1
157	PCB 206	Decimal number	Concentration of PCB 206 in sediment sample	ng/g	0-1
158	PCB 209	Decimal number	Concentration of PCB 209 in sediment sample	ng/g	0-1
159	Total PCB	Decimal number	Total Concentration of PCB in sediment sample	ng/g	0-50

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 8. Data dictionary for butyltins in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Monobutyltin	Decimal number	Concentration of Monobutyltin in sediment sample	ng/g	0 - 50
3	Dibutyltin	Decimal number	Concentration of Dibutyltin in sediment sample	ng/g	0-20
4	Tributyltin	Decimal number	Concentration of Tributyltin in sediment sample	ng/g	0-50
5	Tetrabutyltin	Decimal number	Concentration of Tetrabutyltin in sediment sample	ng/g	0-1

Table 9. Data dictionary for trace and major elements in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Ag	Decimal number	Concentration of Silver in sediment sample	μg/g	0 - 1
3	Al	Decimal number	Concentration of Aluminum in sediment sample	μg/g	0 - 25,000
4	As	Decimal number	Concentration of Arsenic in sediment sample	μg/g	0 - 20
5	Ba	Decimal number	Concentration of Barium in sediment sample	μg/g	0 - 20
6	Be	Decimal number	Concentration of Beryllium in sediment sample	μg/g	0 - 1
7	Cd	Decimal number	Concentration of Cadmium in sediment sample	μg/g	0 - 1
8	Co	Decimal number	Concentration of Cobalt in sediment sample	μg/g	0 - 20
9	Cr	Decimal number	Concentration of Chromium in sediment sample	μg/g	0 - 50
10	Cu	Decimal number	Concentration of Copper in sediment sample	μg/g	0 - 300
11	Fe	Decimal number	Concentration of Iron in sediment sample	μg/g	0 - 50,000
12	Hg	Decimal number	Concentration of Mercury in sediment sample	μg/g	0 - 1
13	Li	Decimal number	Concentration of Lithium in sediment sample	μg/g	0 - 20
14	Mn	Decimal number	Concentration of Manganese in sediment sample	μg/g	0 - 1,500
15	Ni	Decimal number	Concentration of Nickel in sediment sample	μg/g	0 - 20
16	Pb	Decimal number	Concentration of Lead in sediment sample	μg/g	0 - 20
17	Sb	Decimal number	Concentration of Antimony in sediment sample	μg/g	0 - 1
18	Se	Decimal number	Concentration of Selenium in sediment sample	μg/g	0 - 5
19	Sn	Decimal number	Concentration of Tin in sediment sample	μg/g	0 - 5
20	Tl	Decimal number	Concentration of Thallium in sediment sample	μg/g	0 - 1
21	U	Decimal number	Concentration of Uranium in sediment sample	μg/g	0 - 1
22	V	Decimal number	Concentration of Vanadium in sediment sample	μg/g	0 - 100
23	Zn	Decimal number	Concentration of Zinc in sediment sample	μg/g	0 - 200

Table 10. Data dictionary for *Clostridium perfringens* in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	% sediment	Integer	Sediment content as a percent of sample	%	0 - 1
3	% water	Integer	Water content as a percent of sample	%	0 - 1
4	Colonies/g	Integer	Number of viable colonies per gram wet weight	Colonies/g	0 - 1
5	Cperf dry (CFU/g)	Integer	Number of viable colonies per gram dry weight	CFU/g	0 - 1

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Table 11. Data dictionary for infaunal counts in Salt River sediments.

Column	Variable	Label	Definition	Units	Range
1	Site	Text	ID of sampling site	N/A	N/A
2	Phylum	Text	Phylum of organism	N/A	N/A
3	Class	Text	Class of organism	N/A	N/A
4	Order	Text	Order of organism	N/A	N/A
5	Family	Text	Family of organism	N/A	N/A
6	Taxa	Text	Species of organism	N/A	N/A
7	Count	Integer	Number of organisms of that species in the sample	N/A	0 - 500

Parameter Information

Parameter Description

Parameter: Polychlorinated biphenyls (PCBs)

Property Type: Measured

Units: ng/g

Observation Category: Laboratory analysis

Sampling Instrument: PONAR sediment grab

Sampling and Analyzing Method:

Sediment samples were taken with PONAR sediment grab. Samples were then analyzed by gas chromatograph/electron capture detector in the laboratory.

Data Quality Method:

QA/QC conducted on the results of the analysis by the NOAA contract laboratory TDI-Brooks, Inc., followed by a review by NOAA scientists. Reviewed in house for data outliers, that results of duplicate analysis were within acceptable limits (variation), recovery rates were adequate, and that sample storage and analysis protocols were followed.

Parameter: Polycyclic aromatic hydrocarbons (PAHs)

Property Type: Measured

Units: ng/g

Observation Category: Laboratory analysis

Sampling Instrument: PONAR sediment grab

Sampling and Analyzing Method:

Sediment samples were taken with PONAR sediment grab. Samples then analyzed by gas chromatograph/mass spectrometry in the laboratory.

Data Quality Method:

QA/QC conducted on the results of the analysis by the NOAA contract laboratory TDI-Brooks, Inc., followed by a review by NOAA scientists. Reviewed in house for data outliers, that results of duplicate analysis were within acceptable limits (variation), recovery rates were adequate, and that sample storage and analysis protocols were followed.

Parameter: Butyltins

Property Type: Measured

Units: ng Sn/g

Observation Category: Laboratory analysis

Sampling Instrument: PONAR sediment grab

Data Documentation
Assessment of Chemical Contaminants in Sediments of Salt River, St. Croix

Sampling and Analyzing Method:

Sediment samples were taken with PONAR sediment grab. Samples then analyzed by gas chromatography/fluorescence photometric detection after derivatization in the laboratory.

Data Quality Method:

QA/QC conducted on the results of the analysis by the NOAA contract laboratory TDI-Brooks, Inc., followed by a review by NOAA scientists. Reviewed in house for data outliers, that results of duplicate analysis were within acceptable limits (variation), recovery rates were adequate, and that sample storage and analysis protocols were followed.

Parameter: Major and Trace Elements (Metals)

Property Type: Measured

Units: µg/g

Observation Category: Laboratory analysis

Sampling Instrument: PONAR sediment grab

Sampling and Analyzing Method:

Sediment samples were taken with PONAR sediment grab. Samples were then analyzed using inductively coupled plasma mass spectrometry and atomic-fluorescence spectroscopy in the laboratory.

Data Quality Method:

QA/QC conducted on the results of the analysis by the NOAA contract laboratory TDI-Brooks, Inc., followed by a review by NOAA scientists. Reviewed in house for data outliers, that results of duplicate analysis were within acceptable limits (variation), recovery rates were adequate, and that sample storage and analysis protocols were followed.

Parameter: Benthic Infaunal Counts

Property Type: Measured

Units: Number of organisms by species found in the sample

Observation Category: Laboratory analysis

Sampling Instrument: PONAR sediment grab

Sampling and Analyzing Method:

Sediment samples were taken with PONAR sediment grab. Samples were then fixed in the field and sent out to a contract lab where they were sorted and counted, down to species when possible.

Data Quality Method:

QA/QC conducted on the results of the analysis by the NOAA contract laboratory Vittor & Associates, Inc, followed by a review by NOAA scientists. Reviewed in house for data outliers, and that sample recounts were within standard levels for taxonomy.

Document Information

Date: 2020-09-22

Resource Provider: NCCOS Data Manager, nccos.data@noaa.gov, US DOC; NOAA; NOS; National Centers for Coastal Ocean Science (NCCOS)

Comment: This data documentation describes data files archived as a NOAA NCEI data accession, and is intended to provide dataset-level metadata for the purposes of discovery, use, and understanding.

Use Limitation: NOAA makes no warranty, expressed or implied, regarding these data, nor does the fact of distribution constitute such a warranty. NOAA cannot assume liability for any damages caused by any errors or omissions in these data.