

**Table 38.** Results of bioassay analyses, including the presence or absence of protein phosphatase 2A inhibition, percent and relative standard deviation of bioreporter inhibitors, and presence or absence of estrogenicity, androgenicity, and glucocorticoid receptor activity for environmental and replicate bed-sediment samples collected from the harbors and bays in New Jersey and New York during the Hurricane Sandy reconnaissance study, June–October 2013.

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Site code	Map location number	Sample date	Sample time	PP2A detected	Bioreporter inhibition¹		Estrogenicity detected	Androgenicity detected	Glucocorticoid receptor activity detected
					Percent	Relative standard deviation			
Cape May region									
NCA10-1625/BBC/SJ10	1	8/13/2013	1640	Yes	57	7.5	Yes	Yes	Yes
NCA10-1625/BBC/SJ10	1	10/23/2013	1124	Yes	NA	NA	NA	NA	NA
BBE/SJ13	2	8/13/2013	1130	Yes	60	9.5	No	No	No
BBG/SJ11	3	8/13/2013	1400	Yes	22	5.7	Yes	Yes	No
BBH/SJ12	4	8/13/2013	1530	Yes	56	7.8	No	No	No
BBM/SJ9	5	8/13/2013	0900	Yes	50	9.6	No	No	No
Atlantic City region									
NCA10-1616/BBA/SJ7	6	8/12/2013	1930	Yes	20	8.9	No	No	No
NCA10-1616/BBA/SJ7	6	10/24/2013	0958	Yes	NA	NA	NA	NA	NA
NCA10-1623/BBB/SJ6	7	8/12/2013	1600	Yes	59	7.7	No	No	No
NCA10-1623/BBB/SJ6	7	10/24/2013	1158	Yes	NA	NA	NA	NA	NA
BBL/SJ8	8	8/12/2013	1830	Yes	60	9.9	No	No	No
NCA10-1615	15	10/22/2013	1100	Yes	NA	NA	NA	NA	NA
Great Bay region									
BBD/SJ2	9	8/2/2013	1400	Yes	61	5.9	No	No	No
BBF/SJ1	10	8/2/2013	1545	Yes	62	7.7	No	No	No
BBI/SJ4	11	8/2/2013	1200	Yes	63	6.9	No	No	No
BBJ/SJ3	12	8/12/2013	1300	Yes	82	7.7	No	No	No
BBK/SJ5	13	8/12/2013	1400	No	51	5.8	Yes	Yes	No
NOAA9	14	9/13/2013	1015	Yes	33	7.5	No	No	No
Barnegat Bay region									
BB01	16	7/26/2013	1230	Yes	64	6.8	No	No	No
BB02	17	7/31/2013	1530	No	81	6.9	No	No	No
BB03	18	7/31/2013	1630	Yes	76	9.9	No	No	No
BB05A	19	7/31/2013	1030	Yes	78	6.5	No	No	No
BB06	20	7/31/2013	0930	Yes	72	6.8	No	No	No
BB07A	21	7/31/2013	1200	Yes	78	7.6	No	No	No
BB09	22	7/30/2013	1530	Yes	84	6.7	No	No	No
BB10	23	7/24/2013	1100	Yes	59	5.8	No	No	No
BB11	24	7/29/2013	1615	Yes	61	5.6	No	No	No
BB13	25	7/29/2013	1330	Yes	78	7.5	No	No	No
MANA 1	26	8/8/2013	1130	Yes	81	6.7	No	No	No
MANA 2	27	8/8/2013	1300	Yes	85	7.5	No	No	No
NOAA3	28	8/26/2013	1120	Yes	63	7.8	No	No	No
NOAA3²	28	8/26/2013	1120	Yes	64	6.7	No	No	No
NOAA4	29	8/26/2013	1400	Yes	53	8.7	No	No	No
NOAA10	30	9/13/2013	1230	Yes	51	7.7	No	Yes	No

## 2 Estuarine Bed-Sediment-Quality Data Collected in New Jersey and New York after Hurricane Sandy, 2013

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[Map location number refers to figures 2 and 3. Samples analyzed at the U.S. Geological Survey, Leetown Science Center Kearneysville, West Virginia, for estrogen, androgen, and glucocorticoid activity and at the Organic Geochemistry Research Laboratory, Lawrence, Kansas, for protein phosphatase 2A (PP2A), and are archived in a project database. NA, not analyzed]

Site code	Map location number	Sample date	Sample time	PP2A detected	Bioreporter inhibition <sup>1</sup>		Estrogenicity detected	Androgenicity detected	Glucocorticoid receptor activity detected
					Percent	Relative standard deviation			
Northeast New Jersey shore region									
NAV1	31	8/6/2013	1400	Yes	62	9.8	No	No	No
NAV2	32	8/6/2013	1100	Yes	61	9.6	No	No	No
NOAA 1	33	8/6/2013	1200	Yes	63	6.9	No	No	No
NOAA2	34	8/15/2013	1300	Yes	64	5.5	No	No	No
NOAA2 <sup>2</sup>	34	8/15/2013	1300	Yes	43	5.8	No	No	No
SHARK1	35	8/15/2013	1315	Yes	68	7.8	No	No	No
SHARK1 <sup>2</sup>	35	8/15/2013	1415	Yes	77	5.9	No	No	No
SHREW 1	36	8/7/2013	1030	Yes	60	9.5	No	No	No
SHREW 2	37	8/7/2013	1200	Yes	61	7.6	No	No	No
Lower Harbor/Raritan Bay region									
RB401	38	7/30/2013	1013	Yes	71	9.6	No	No	No
RB402	39	7/18/2013	0918	Yes	59	5.6	No	No	No
RB403	40	8/9/2013	1155	Yes	80	8.8	No	No	No
RB404	41	7/25/2013	1120	Yes	32	8.8	Yes	Yes	No
RB405	42	8/7/2013	1315	Yes	64	6.5	No	No	No
RB406	43	7/29/2013	1110	Yes	38	7.6	Yes	Yes	Yes
RB407	44	7/30/2013	1405	Yes	85	6.7	No	No	No
RB408	45	7/26/2013	1130	Yes	84	7.6	No	No	No
RB409	46	7/18/2013	1230	Yes	59	5.7	Yes	Yes	No
RB410	47	7/31/2013	1257	Yes	69	5.6	No	No	No
RB411	48	8/7/2013	1135	Yes	50	6.5	No	No	No
RB413	49	7/22/2013	1025	Yes	67	5.9	No	No	No
RB414	50	7/17/2013	1205	Yes	32	7.9	Yes	Yes	No
RB416	51	8/1/2013	1000	Yes	64	6.6	No	No	No
RB450	52	7/31/2013	1020	No	66	6.8	No	No	No
RB451	53	7/19/2013	0938	Yes	83	7.7	No	No	No
RB453	54	8/9/2013	1045	Yes	76	6.6	No	No	No
RB454	55	8/1/2013	1230	Yes	62	9.8	No	No	No
RB455	56	7/31/2013	1122	Yes	70	5.8	No	No	No
RB456	57	8/6/2013	1100	Yes	57	6.7	No	No	No
RB457	58	7/17/2013	1005	Yes	89	9.6	No	No	No
RB458	59	7/31/2013	0928	Yes	81	9.5	No	No	No
RB460	60	8/1/2013	1105	No	58	6.9	No	No	No
RB461	61	7/30/2013	1203	Yes	72	7.9	No	No	No
RB462	62	9/25/2013	1220	Yes	NA	NA	NA	NA	NA
RB462 <sup>2</sup>	62	9/25/2013	1235	Yes	NA	NA	NA	NA	NA
RB463	63	7/19/2013	1113	Yes	25	7.6	No	Yes	No
RB464	64	7/29/2013	1330	Yes	44	9.9	No	Yes	No
RB465	65	8/6/2013	1259	Yes	49	6.9	No	No	No

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[Map location number refers to figures 2 and 3. Samples analyzed at the U.S. Geological Survey, Leetown Science Center Kearneysville, West Virginia, for estrogen, androgen, and glucocorticoid activity and at the Organic Geochemistry Research Laboratory, Lawrence, Kansas, for protein phosphatase 2A (PP2A), and are archived in a project database. NA, not analyzed]

Site code	Map location number	Sample date	Sample time	PP2A detected	Bioreporter inhibition <sup>1</sup>		Estrogenicity detected	Androgenicity detected	Glucocorticoid receptor activity detected
					Percent	Relative standard deviation			
Newark Bay region									
NB401	66	8/16/2013	1050	Yes	NA	NA	NA	NA	NA
NB405	67	7/16/2013	1040	Yes	52	8.8	No	Yes	Yes
NB406	68	7/6/2013	1015	Yes	66	7.9	No	Yes	No
NB409	69	8/15/2013	1324	Yes	55	5.5	No	No	No
NB412	71	8/16/2013	0950	Yes	45	9.9	No	No	No
NB416	74	7/11/2013	1125	Yes	62	7.9	No	No	No
NB418	75	8/12/2013	0950	Yes	44	6.8	No	No	No
NB419	76	8/15/2013	1119	Yes	75	5.6	No	No	No
NB423	77	7/10/2013	1033	Yes	68	5.6	No	No	No
NB425	79	7/2/2013	1120	Yes	80	6.8	No	No	No
NB426	80	6/28/2013	1125	Yes	34	5.8	No	Yes	No
NB427	81	7/2/2013	0945	Yes	77	6.9	No	No	No
NB429	82	9/3/2013	1446	Yes	37	6.8	No	No	No
NB431	84	7/10/2013	0920	Yes	60	7.5	No	No	No
NB450	85	9/13/2013	1035	Yes	50	7.9	No	No	No
NB450 <sup>2</sup>	85	9/13/2013	1035	Yes	55	6.8	No	No	No
NB452	86	6/28/2013	1303	Yes	65	8.8	Yes	Yes	No
NB454	88	6/28/2013	1304	Yes	56	6.6	No	Yes	Yes
NB461	92	8/15/2013	1226	Yes	83	6.7	No	No	No
Upper Harbor region									
NB407	93	7/15/2013	1044	Yes	81	7.6	No	No	No
UH401	94	6/27/2013	0904	Yes	81	5.9	No	No	No
UH402	95	7/8/2013	0933	Yes	51	9.6	Yes	Yes	Yes
UH404	96	9/12/2013	1318	Yes	55	9.7	No	No	No
UH408	97	8/29/2013	1000	Yes	20	6.5	Yes	Yes	No
UH409	98	7/18/2013	1053	Yes	72	9.5	No	No	No
UH411	99	9/5/2013	1247	Yes	63	9.9	Yes	Yes	Yes
UH412	100	9/11/2013	1225	Yes	50	6.6	No	No	No
UH413	101	8/29/2013	1300	Yes	56	9.6	No	No	No
UH415	102	7/3/2013	1315	Yes	41	7.5	No	No	No
UH416	103	8/29/2013	1110	Yes	82	9.5	No	No	No
UH451	104	9/6/2013	0952	Yes	33	7.5	No	Yes	No
UH452	105	7/8/2013	1250	Yes	48	5.8	No	No	No
UH455	106	7/9/2013	1132	Yes	35	8.9	Yes	Yes	No
UH456	107	7/1/2013	0930	Yes	47	7.5	No	Yes	No
UH457	108	9/5/2013	1024	Yes	46	7.5	No	No	No
UH459	109	9/6/2013	1042	Yes	67	8.9	No	No	No
UH461	110	9/9/2013	1243	Yes	67	7.7	No	No	No
UH463	111	7/9/2013	1320	Yes	64	5.5	No	No	No
UH465	113	9/10/2013	1106	Yes	66	7.9	No	No	No

#### 4 Estuarine Bed-Sediment-Quality Data Collected in New Jersey and New York after Hurricane Sandy, 2013

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Site code	Map location number	Sample date	Sample time	PP2A detected	Bioreporter inhibition <sup>1</sup>		Estrogenicity detected	Androgenicity detected	Glucocorticoid receptor activity detected
					Percent	Relative standard deviation			
Upper Harbor region—Continued									
UH465 <sup>2</sup>	113	9/10/2013	1106	Yes	67	6.5	No	No	No
UH466	113	7/3/2013	1030	Yes	82	7.7	No	No	No
UH468	114	7/3/2013	0900	Yes	70	9.5	No	No	No
UH469	115	9/12/2013	1110	Yes	33	8.7	Yes	Yes	No
Newark Bay region									
NB410	70	8/14/2013	1048	Yes	62	6.5	No	No	No
NB413	72	7/15/2013	1230	Yes	62	8.8	No	No	No
NB414	73	8/14/2013	1215	Yes	39	6.9	No	No	No
NB424	78	8/14/2013	1400	Yes	76	6.6	No	No	No
NB430	83	9/4/2013	1430	Yes	54	5.6	No	No	No
NB453	87	9/4/2013	1247	Yes	43	5.5	No	Yes	No
NB455	89	8/12/2013	1145	Yes	77	9.9	No	No	No
NB457	90	9/3/2013	1235	Yes	78	5.9	No	No	No
NB459	91	8/12/2013	1328	Yes	5	8.9	No	No	No
Jamaica Bay region									
JB401	116	8/19/2013	1042	Yes	NA	NA	NA	NA	NA
JB403	117	8/23/2013	1210	Yes	47	7.9	Yes	Yes	No
JB404	118	8/27/2013	1102	Yes	54	7.5	No	No	No
JB405	119	8/21/2013	1115	Yes	67	8.5	No	No	No
JB406	120	8/22/2013	1100	Yes	NA	NA	NA	NA	NA
JB407	121	8/23/2013	0955	Yes	49	9.5	No	Yes	No
JB409	122	8/22/2013	1210	Yes	NA	NA	NA	NA	NA
JB410	123	9/26/2013	0930	Yes	NA	NA	NA	NA	NA
JB415	124	8/28/2013	1152	Yes	52	7.5	No	No	No
JB416	125	8/27/2013	1300	Yes	NA	NA	NA	NA	NA
JB417	126	8/26/2013	0937	Yes	38	5.6	No	No	No
JB419	127	8/19/2013	1224	Yes	NA	NA	NA	NA	NA
JB422	128	8/20/2013	1108	Yes	NA	NA	NA	NA	NA
JB423	129	8/20/2013	1305	Yes	NA	NA	NA	NA	NA
JB454	130	8/20/2013	0950	Yes	NA	NA	NA	NA	NA
JB458	131	8/21/2013	0944	Yes	NA	NA	NA	NA	NA
JB459	132	8/28/2013	0916	Yes	44	8.6	No	No	No
JB459 <sup>2</sup>	132	8/28/2013	0916	Yes	29	8.7	No	No	No
JB464	133	7/24/2013	1130	Yes	42	9.7	No	No	No
JB466	134	8/22/2013	0940	Yes	68	5.5	No	No	No
JB467	135	8/20/2013	1414	Yes	NA	NA	NA	NA	NA
JB468	136	8/19/2013	1335	Yes	NA	NA	NA	NA	NA
JB471	137	8/26/2013	1045	Yes	64	9.7	No	No	No
JB472	138	8/27/2013	0940	Yes	NA	NA	NA	NA	NA
JB474	139	8/23/2013	1115	Yes	NA	NA	NA	NA	NA

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Site code	Map location number	Sample date	Sample time	PP2A detected	Bioreporter inhibition <sup>1</sup>		Estrogenicity detected	Androgenicity detected	Glucocorticoid receptor activity detected
					Percent	Relative standard deviation			
Jamaica Bay region—Continued									
JB480	140	8/21/2013	1350	Yes	66	9.7	No	No	No
JB481	141	9/26/2013	1107	Yes	NA	NA	NA	NA	NA
JB486	142	8/19/2013	1126	Yes	NA	NA	NA	NA	NA
JB487	143	8/23/2013	1335	Yes	51	8.5	No	No	No
NOAA5	144	9/4/2013	1200	Yes	26	9.9	Yes	Yes	Yes
NOAA6	145	9/4/2013	1240	Yes	17	6.7	No	No	No
Western Bays region									
BHB01	146	9/5/2013	0930	Yes	82	5.8	No	No	No
BMB01	147	9/12/2013	1200	Yes	83	7.6	No	No	No
HHB01	148	9/9/2013	1400	Yes	80	5.8	No	No	No
HHB01 <sup>2</sup>	148	9/9/2013	1400	Yes	67	9.8	No	No	No
RC01	149	9/5/2013	1235	Yes	83	9.6	No	No	No
RC02	150	9/12/2013	1300	Yes	81	6.5	No	No	No
RC02 <sup>2</sup>	150	9/12/2013	1300	Yes	52	9.7	No	No	No
RC03	151	9/12/2013	0900	Yes	81	9.7	No	No	No
Great South Bay region									
GSB01	152	8/26/2013	0900	Yes	83	6.9	No	No	No
GSB02	153	8/26/2013	1025	Yes	82	7.7	No	No	No
GSB03	154	8/27/2013	0845	Yes	54	5.5	No	No	No
GSB04	155	8/9/2013	0835	Yes	81	6.7	No	No	No
GSB05	156	8/16/2013	1100	Yes	45	5.6	No	No	No
GSB05 <sup>2</sup>	156	8/16/2013	1100	Yes	78	7.9	No	No	No
GSB06	157	8/16/2013	0845	Yes	84	6.9	No	No	No
GSB07	158	8/7/2013	1125	Yes	84	5.8	No	No	No
MB01	159	8/6/2013	1030	No	37	9.9	No	Yes	No
MB02	160	8/6/2013	0900	No	72	7.9	No	No	No
NOAA7	161	9/11/2013	1040	Yes	59	8.9	No	No	No
NOAA8	162	9/11/2013	1230	Yes	79	9.9	No	No	No
SOB01	163	8/7/2013	1000	Yes	78	6.8	No	No	No
Peconic Bay region									
FB01	164	8/2/2013	1100	Yes	61	7.8	No	No	No
FB02	165	8/5/2013	0835	Yes	80	5.6	No	No	No
FB02 <sup>2</sup>	165	8/5/2013	0835	Yes	77	7.5	No	No	No
FB03	166	8/5/2013	1100	No	82	9.7	No	No	No
PB01	167	8/2/2013	0955	Yes	52	5.9	No	No	No

<sup>1</sup>Extract diluted to 1:80.

<sup>2</sup>Field replicate.

