Table 7-3
Number of Samples Collected/Number of Samples Targeted
PDI Data Summary Report
Grasse River Study Area, Massena, NY

Resident Fish Species	Grasse River Stretch					
	Background	Upper	Middle	Lower	St. Lawrence River	Power Canal
Adult Smallmouth Bass	5 / 5	17 / 17	17 / 17	17 / 17	5 / 5	17 / 17
Adult Brown Bullhead	5 / 5	18 / 18	18 / 18	18 / 18	5 / 5	not targeted

Resident Fish Species	Grasse River Location						
	Background	Near Outfall 001	Near Transect 27	Near Unnamed Tributary	Near Transect 50	Near Mouth of River (North)	Near Mouth of River (South)
Young-of-Year Spottail Shiner	3 / 3	3 / 3	3 / 3	3 / 3	3 / 3	1 / 3	1 / 3

Table 7-4
Adult Resident Fish Collection Field and Laboratory Data - Smallmouth Bass and Brown Bullhead

Pre-Design Investigation Data Summary Report
Grasse River Study Area, Massena, New York

Sample Area	Species	Sample ID	Date Collected	Length (cm)	Weight (g)	Lipid (%)	PCB (mg/kg wet)	PCB (mg/kg lipid)
Background Stretch	Smallmouth bass	FS1-1432-SB	8/28/14	40.1	844	0.75	0.28	37
		FS1-1433-SB	8/28/14	32.5	523	1.30	ND	1
		FS1-1434-SB	8/28/14	29.5	333	0.97	0.07	7
		FS1-1435-SB	8/28/14	29.8	352	1.73	ND	1
		FS1-1436-SB	8/28/14	29.1	460	2.15	ND	1
	Brown bullhead	FS1-1437-BB	8/28/14	24.0	161	0.90	ND	1
		FS1-1438-BB	8/28/14	25.0	180	1.07	ND	1
		FS1-1457-BB	9/4/14	26.1	243	0.96	ND	1
		FS1-1458-BB	9/4/14	26.5	246	1.14	ND	1
		FS1-1459-BB	9/4/14	27.0	273	0.68	ND	2
Upper Stretch	Smallmouth bass	FS2-1298-SB	8/25/14	37.4	733	0.80	3.88	484
		FS2-1299-SB	8/25/14	31.0	388	1.01	1.03	102
		FS2-1300-SB	8/25/14	30.3	389	0.94	1.21	128
		FS2-1301-SB	8/25/14	32.5	492	1.05	1.25	119
		FS2-1302-SB	8/25/14	33.1	544	0.91	0.75	83
		FS2-1303-SB	8/25/14	29.5	361	1.34	3.65	272
		FS2-1304-SB	8/25/14	32.5	515	0.31	0.51	165
		FS2-1305-SB	8/25/14	30.4	355	0.76	1.67	218
		FS2-1306-SB	8/25/14	32.7	500	1.58	5.07	321
		FS2-1307-SB	8/25/14	37.3	792	1.58	1.79	113
		FS2-1308-SB	8/25/14	40.3	1016	1.78	1.04	58
		FS2-1309-SB	8/25/14	36.6	720	1.54	0.71	46
		FS2-1310-SB	8/25/14	40.8	1097	1.03	1.54	150
		FS2-1311-SB	8/25/14	35.8	674	0.76	1.62	215
		FS2-1312-SB	8/25/14	36.0	712	1.06	1.97	186
		FS2-1313-SB	8/25/14	37.5	823	0.62	1.78	288
		FS2-1314-SB	8/25/14	30.3	383	1.39	1.20	86
	Brown bullhead	FS2-1315-BB	8/25/14	34.5	519	1.08	0.29	26
		FS2-1316-BB	8/25/14	28.3	293	1.31	0.32	24
		FS2-1317-BB	8/25/14	30.5	384	0.82	0.08	10
		FS2-1318-BB	8/25/14	29.0	370	1.17	0.56	48
		FS2-1319-BB	8/25/14	33.9	561	1.62	1.35	83
		FS2-1320-BB	8/25/14	35.8	705	1.35	0.79	58
		FS2-1321-BB	8/25/14	25.0	187	1.37	0.32	23
		FS2-1322-BB	8/25/14	36.2	671	2.29	1.28	56
		FS2-1323-BB	8/25/14	37.6	694	1.18	0.84	71
		FS2-1324-BB	8/25/14	29.5	339	1.29	0.30	23
		FS2-1384-BB	8/27/14	30.9	402	0.69	0.46	66
		FS2-1385-BB	8/27/14	26.8	254	0.37	0.18	48
		FS2-1386-BB	8/27/14	36.5	642	1.51	2.09	139
		FS2-1387-BB	8/27/14	26.4	241	0.30	0.77	257
		FS2-1388-BB	8/27/14	35.3	604	1.41	0.36	26
		FS2-1389-BB	8/27/14	30.4	378	0.68	0.52	77
		FS2-1390-BB	8/27/14	33.9	594	0.86	1.19	139
		FS2-1391-BB	8/27/14	37.1	742	0.95	0.43	45
Middle Stretch	Smallmouth bass	FS3-1325-SB	8/26/14	30.2	442	2.10	0.65	31
		FS3-1326-SB	8/26/14	33.1	596	0.90	0.45	50
		FS3-1327-SB	8/26/14	31.5	424	0.42	0.45	106
		FS3-1328-SB	8/26/14	28.6	393	1.46	0.97	66

Notes provided on page 3 of 3

Table 7-4
Adult Resident Fish Collection Field and Laboratory Data - Smallmouth Bass and Brown Bullhead

Pre-Design Investigation Data Summary Report
Grasse River Study Area, Massena, New York

Sample Area	Species	Sample ID	Date Collected	Length (cm)	Weight (g)	Lipid (%)	PCB (mg/kg wet)	PCB (mg/kg lipid)
Middle Stretch (continued)	Smallmouth bass	FS3-1329-SB	8/26/14	34.4	644	1.36	1.09	80
		FS3-1330-SB	8/26/14	31.5	460	0.51	0.35	68
		FS3-1331-SB	8/26/14	36.0	754	0.98	0.58	59
		FS3-1332-SB	8/26/14	38.4	913	0.31	0.30	98
		FS3-1333-SB	8/26/14	32.5	479	1.14	0.58	51
		FS3-1334-SB	8/26/14	39.9	945	1.40	1.06	75
		FS3-1335-SB	8/26/14	34.6	599	1.45	0.80	55
		FS3-1336-SB	8/26/14	32.6	594	0.76	0.67	89
		FS3-1337-SB	8/26/14	29.0	396	1.16	0.91	79
		FS3-1338-SB	8/26/14	35.5	768	1.22	0.67	55
		FS3-1339-SB	8/26/14	30.0	352	0.55	0.73	133
		FS3-1340-SB	8/26/14	30.5	410	1.83	1.26	69
		FS3-1341-SB	8/26/14	28.3	327	1.57	0.53	34
	Brown bullhead	FS3-1342-BB	8/26/14	27.0	260	0.60	0.42	70
		FS3-1343-BB	8/26/14	33.1	516	1.21	0.54	44
		FS3-1344-BB	8/26/14	33.0	511	1.20	0.38	31
		FS3-1345-BB	8/26/14	35.4	481	0.67	1.63	243
		FS3-1346-BB	8/26/14	32.0	435	1.07	0.64	60
		FS3-1347-BB	8/26/14	36.2	614	0.80	0.30	37
		FS3-1348-BB	8/26/14	34.9	613	1.13	0.36	32
		FS3-1349-BB	8/26/14	37.5	867	1.37	0.66	48
		FS3-1350-BB	8/26/14	35.3	695	1.06	0.77	72
		FS3-1351-BB	8/26/14	36.9	656	0.74	0.48	64
		FS3-1352-BB	8/26/14	31.8	426	1.20	0.50	42
		FS3-1353-BB	8/26/14	35.0	625	0.74	1.01	135
		FS3-1354-BB	8/26/14	32.0	467	1.60	1.38	86
		FS3-1355-BB	8/26/14	31.1	423	0.93	0.35	37
		FS3-1356-BB	8/26/14	35.3	609	0.48	0.49	102
		FS3-1357-BB	8/26/14	32.3	466	1.65	0.65	39
		FS3-1358-BB	8/26/14	34.5	609	0.72	0.50	70
		FS3-1359-BB	8/26/14	27.0	252	1.10	0.32	29
Lower Stretch	Smallmouth bass	FS4-1363-SB	8/26/14	46.0	1260	0.54	1.24	231
		FS4-1364-SB	8/26/14	31.5	464	1.30	0.56	43
		FS4-1365-SB	8/26/14	31.7	408	0.61	0.56	93
		FS4-1366-SB	8/26/14	38.5	862	1.16	1.60	138
		FS4-1367-SB	8/26/14	37.2	824	1.92	1.99	103
		FS4-1368-SB	8/26/14	36.9	756	2.96	1.90	64
		FS4-1369-SB	8/26/14	36.8	814	2.35	1.60	68
		FS4-1370-SB	8/26/14	34.6	644	1.43	0.74	52
		FS4-1371-SB	8/26/14	30.2	396	0.59	0.44	74
		FS4-1372-SB	8/26/14	29.3	361	1.35	0.66	49
		FS4-1373-SB	8/26/14	28.3	305	0.67	0.76	113
		FS4-1395-SB	8/27/14	32.9	572	1.40	0.69	50
		FS4-1396-SB	8/27/14	31.8	483	0.98	0.41	42
		FS4-1397-SB	8/27/14	28.4	359	1.40	1.49	107
		FS4-1398-SB	8/27/14	27.3	268	1.06	0.78	74
		FS4-1445-SB	9/3/14	30.0	373	1.11	1.01	91
		FS4-1446-SB	9/3/14	28.2	276	0.83	0.66	79

Notes provided on page 3 of 3

Table 7-4
Adult Resident Fish Collection Field and Laboratory Data - Smallmouth Bass and Brown Bullhead

Pre-Design Investigation Data Summary Report
Grasse River Study Area, Massena, New York

Sample Area	Species	Sample ID	Date Collected	Length (cm)	Weight (g)	Lipid (%)	PCB (mg/kg wet)	PCB (mg/kg lipid)
Lower Stretch (continued)	Brown bullhead	FS4-1374-BB	8/26/14	38.3	642	0.30	0.33	110
		FS4-1375-BB	8/26/14	36.2	625	0.97	0.48	49
		FS4-1376-BB	8/26/14	32.8	586	1.49	0.69	47
		FS4-1377-BB	8/26/14	25.0	179	0.30	0.20	66
		FS4-1378-BB	8/26/14	34.7	610	0.86	0.47	55
		FS4-1379-BB	8/26/14	31.3	500	1.13	0.43	38
		FS4-1380-BB	8/26/14	31.1	445	0.80	0.19	24
		FS4-1381-BB	8/26/14	25.2	201	0.30	ND	4
		FS4-1382-BB	8/26/14	36.0	672	1.61	1.59	99
		FS4-1383-BB	8/26/14	34.9	638	1.00	0.34	34
		FS4-1399-BB	8/27/14	36.0	732	1.50	1.20	80
		FS4-1400-BB	8/27/14	35.4	472	0.52	0.82	157
		FS4-1401-BB	8/27/14	32.3	496	1.01	0.37	37
		FS4-1402-BB	8/27/14	25.5	243	0.65	0.22	33
		FS4-1403-BB	8/27/14	34.1	549	2.25	0.42	19
		FS4-1404-BB	8/27/14	35.0	612	1.26	0.81	65
		FS4-1405-BB	8/27/14	37.4	725	1.45	0.95	65
		FS4-1406-BB	8/27/14	28.8	357	0.53	0.21	39
St. Lawrence River	Smallmouth bass	FS5-1407-SB	8/27/14	35.4	718	2.05	0.97	47
		FS5-1408-SB	8/27/14	33.9	582	2.32	1.09	47
		FS5-1409-SB	8/27/14	27.3	309	1.56	0.90	58
		FS5-1447-SB	9/3/14	41.8	1272	1.93	1.22	63
		FS5-1448-SB	9/3/14	45.8	1730	2.88	1.36	47
	Brown bullhead	FS5-1410-BB	8/27/14	33.8	545	1.64	0.47	29
		FS5-1411-BB	8/27/14	34.5	519	0.61	0.24	40
		FS5-1412-BB	8/27/14	34.2	610	0.69	0.12	17
		FS5-1413-BB	8/27/14	35.2	565	0.52	0.34	65
		FS5-1414-BB	8/27/14	30.5	426	1.36	0.19	14
Power Canal	Smallmouth bass	FS6-1415-SB	8/28/14	28.7	286	1.20	ND	1
		FS6-1416-SB	8/28/14	34.9	604	1.35	0.05	4
		FS6-1417-SB	8/28/14	27.2	235	1.34	0.30	22
		FS6-1418-SB	8/28/14	29.9	303	1.38	0.14	10
		FS6-1419-SB	8/28/14	28.7	292	1.33	0.05	4
		FS6-1420-SB	8/28/14	30.4	359	0.62	ND	2
		FS6-1421-SB	8/28/14	32.0	434	1.49	0.11	8
		FS6-1422-SB	8/28/14	36.0	636	0.68	0.21	31
		FS6-1423-SB	8/28/14	28.4	334	1.54	0.20	13
		FS6-1424-SB	8/28/14	25.5	206	1.46	0.06	4
		FS6-1425-SB	8/28/14	29.3	302	1.42	0.14	10
		FS6-1426-SB	8/28/14	29.2	315	1.29	0.15	12
		FS6-1427-SB	8/28/14	33.6	469	0.47	0.05	11
		FS6-1428-SB	8/28/14	26.0	229	1.01	ND	1
		FS6-1429-SB	8/28/14	30.5	353	0.94	0.06	7
		FS6-1430-SB	8/28/14	29.1	286	0.55	0.09	17
		FS6-1431-SB	8/28/14	33.2	427	1.03	0.19	19

Notes:
1. Units: cm = centimeter, g = gram, mg/kg = milligrams per kilogram, PCB = Polychlorinated Biphenyl
2. ND = not detected; The detection limit is approximately 0.05 mg/kg for non-detected samples.
3. PCB concentrations quantified on an Aroclor basis.
4. If PCB concentration was not detected, PCB concentration on a wet weight basis was set to half the detection limit prior to computing PCB concentration on a lipid basis.
5. Smallmouth bass fillets - skin-on, scales-off; brown bullhead fillets - skin-off.
6. Sampling locations shown on Figures 7-10 and 7-11.

Table 7-5
Resident Fish Collection Field and Laboratory Data - Young-of-Year Spottail Shiner

Pre-Design Investigation Data Summary Report
Grasse River Study Area, Massena, New York

Species	Sample Area	Shorline	Sample ID	Date Collected	Fish per Sample	Length Range (cm)	Weight (g)	Lipid (%)	PCB (mg/kg wet)	PCB (mg/kg lipid)
Spottail Shiner	Background Stretch	North	FS1-1442-SS	8/28/14	27	4.4 - 5.3	22.4	4.81	ND	0.3
			FS1-1443-SS	8/28/14	27	4.7 - 5.8	22.5	4.31	ND	0.5
			FS1-1444-SS	8/28/14	27	4.5 - 5.4	21.5	4.54	ND	0.4
	Outfall 001 (Upper Stretch)	North	FS2-1392-SS	8/27/14	25	4.5 - 5.5	19.5	3.91	0.93	23.8
			FS2-1393-SS	8/27/14	25	4.5 - 5.6	19.3	3.33	0.82	24.7
			FS2-1394-SS	8/27/14	25	4.6 - 5.7	20.0	3.34	0.83	24.8
	Approx. T27 (Middle Stretch)	South	FS3-1451-SS	9/3/14	22	4.8 - 5.7	21.7	4.03	0.73	18.2
			FS3-1452-SS	9/3/14	22	4.7 - 5.6	21.8	4.57	0.95	20.8
			FS3-1453-SS	9/3/14	23	4.9 - 5.7	22.5	3.9	0.95	24.2
	Unnamed Tributary (Middle Stretch)	North	FS3-1360-SS	8/26/14	26	4.9 - 5.6	22.2	4.26	0.85	20.0
			FS3-1361-SS	8/26/14	26	4.8 - 5.6	24.1	3.15	0.60	19.1
			FS3-1362-SS	8/26/14	26	4.9 - 5.7	22.7	5.57	0.68	12.1
	Approx. T50 (Lower Stretch)	South	FS4-1455-SS	9/3/14	20	4.8 - 6.5	20.3	4.79	0.83	17.2
			FS4-1461-SS	9/4/14	23	4.8 - 5.8	22.5	4.85	0.77	15.8
			FS4-1462-SS	9/4/14	23	5.0 - 5.8	23.5	4.68	0.75	16.0
	Grasse R. Mouth	North	FS5-1454-SS	9/3/14	8	5.1 - 6.5	11.0	3.81	0.47	12.3
			FS5-1468-SS	10/2/14	22	4.8 - 5.9	21.9	5.2	1.33	25.5
			FS5-1469-SS	10/2/14	22	4.8 - 5.4	23.1	4.82	1.07	22.2
	Grasse R. Mouth	South	FS5-1449-SS	9/3/14	14	5.2 - 6.5	20.4	4.82	0.54	11.2
			FS5-1450-SS	9/3/14	20	4.9 - 5.4	20.2	4.09	0.47	11.5
			FS5-1460-SS	9/4/14	20	4.9 - 6.0	22.5	4.26	0.63	14.9

Notes:
1. Units: cm = centimeters, g = grams, mg/kg = milligrams per kilogram, PCB = Polychlorinated Biphenyl
2. ND = not detected; PCB concentrations quantified on an Aroclor basis.
3. If PCB concentration was not detected, PCB concentration on a wet weight basis was set to half the detection limit prior to computing PCB concentration on a lipid basis.
4. Spottail shiner - whole-body composites.
5. Sampling locations shown on Figure 7-12.