○ Results (water)

Location				FY2014 October-November Survey											
		Latitude	Longitude	pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
Abukuma River System	A-1 (Surface layer)	37.6209°	140.5220°	7.6	0.7	2.9	10.4	15.5	0.08	1.2	5	3.5	0.0050	0.014	0.0012
	A-1 (Deep layer)			7.7	0.8	2.5	10.1	15.9	0.08	1.3	6	3.5	0.0050	0.017	—
	A-2	37.5655°	140.3943°	7.5	<0.5	1.9	10.2	10.6	0.05	1.0	1	1.6	0.0090	0.026	—
	B-1	37.7847°	140.4921°	7.7	0.7	2.4	10.0	15.8	0.08	1.2	6	3.7	0.0072	0.020	—
	B-2	37.8120°	140.5058°	7.6	0.6	2.1	10.1	13.5	0.07	1.1	3	3.2	0.0040	0.016	—
	B-3	37.8164°	140.4719°	7.5	<0.5	2.1	11.0	9.0	0.05	1.1	2	1.6	0.0063	0.017	—
Uda River	C-1	37.7956°	140.7457°	7.4	0.5	3.7	10.2	8.2	0.05	1.4	3	1.4	0.020	0.056	—
	C-2	37.7710°	140.7277°	7.1	1.0	7.2	8.8	9.2	0.05	3.3	12	7.5	0.071	0.21	—
	C-3	37.7791°	140.8041°	7.5	0.7	4.1	10.6	8.0	0.05	1.6	10	7.8	0.066	0.19	—
	C-4	37.7693°	140.8442°	7.6	<0.5	3.2	10.6	7.7	0.04	1.2	3	1.9	0.029	0.091	0.0010
	C-5	37.7645°	140.8604°	7.7	<0.5	3.3	10.4	7.9	0.04	1.3	4	3.3	0.022	0.064	—
	C-6	37.7764°	140.8876°	7.7	<0.5	2.9	9.9	8.7	0.05	1.3	3	2.3	0.014	0.045	—
Mano River	D-1	37.7332°	140.9253°	7.4	<0.5	2.6	10.8	9.9	0.06	1.2	2	1.2	0.017	0.045	0.0012
	D-2	37.7095°	140.9566°	7.3	<0.5	3.3	10.4	11.3	0.06	1.6	3	1.9	0.014	0.044	—
	D-3	37.7051°	140.9622°	7.2	<0.5	2.8	10.0	11.3	0.06	1.4	2	1.7	0.013	0.038	—
	D-4 a	37.7309°	140.9081°	7.5	<0.5	2.6	10.0	9.8	0.05	1.2	1	1.0	0.017	0.052	—
	D-4 b	37.7312°	140.9095°	7.5	<0.5	2.6	9.9	9.6	0.05	1.1	2	0.9	0.022	0.061	—
	D-5	37.7217°	140.8898°	7.6	<0.5	2.5	10.3	8.8	0.05	1.2	<1	0.6	0.016	0.047	—
Niida River	E-1	37.6615°	140.9114°	7.5	<0.5	2.9	10.8	6.4	0.04	1.2	3	1.9	0.037	0.10	0.0021
	E-2 a	37.6643°	140.9454°	7.4	<0.5	3.3	10.9	6.8	0.04	1.3	5	2.8	0.084	0.25	—
	E-2 b	37.6640°	140.9458°	7.4	<0.5	3.0	11.0	6.7	0.04	1.3	4	2.4	0.037	0.11	—
	E-3	37.6446°	141.0017°	7.3	<0.5	2.7	10.1	8.7	0.05	1.1	2	1.6	0.030	0.091	—
	E-4	37.6463°	140.9657°	7.4	<0.5	2.8	10.4	7.5	0.04	1.2	3	1.8	0.054	0.15	—
	E-5	37.6652°	140.9175°	7.5	<0.5	2.8	11.1	6.7	0.04	1.1	3	1.8	0.036	0.11	—
Ota River	F-1	37.5974°	140.9249°	7.3	<0.5	2.5	10.6	4.9	0.03	1.1	1	0.7	0.11	0.33	—
	F-2	37.6015°	140.9436°	7.2	<0.5	2.7	9.7	5.5	0.03	1.1	1	0.7	0.11	0.32	0.0038
	F-3	37.6046°	140.9641°	7.3	<0.5	2.4	10.0	5.8	0.03	1.0	1	0.7	0.086	0.25	—
	F-4	37.6071°	140.9721°	7.1	<0.5	2.1	9.6	6.2	0.04	0.9	<1	0.6	0.068	0.21	—
	F-5	37.6023°	140.9874°	7.2	<0.5	2.2	9.9	6.7	0.04	1.0	1	0.7	0.063	0.18	—
	F-6	37.5955°	141.0126°	7.1	0.5	2.9	10.1	11.6	0.06	1.4	6	1.7	0.056	0.17	—

○ Results (water)

Location				FY2014 October-November Survey											
		Latitude	Longitude	pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
Lake Hayama (Mano Dam)	G-1 (Surface layer)	37.7342°	140.8098°	7.8	1.8	5.0	11.3	6.4	0.04	2.1	4	2.1	0.023	0.070	—
	G-1 (Deep layer)			7.5	0.8	4.5	9.4	6.6	0.04	2.0	3	1.6	0.025	0.073	0.0012
	G-3 (Surface layer)	37.7290°	140.8316°	7.6	1.9	5.7	10.3	6.6	0.04	2.2	4	1.6	0.021	0.060	—
	G-3 (Deep layer)			7.4	0.9	4.1	8.8	6.7	0.04	2.2	2	1.4	0.020	0.060	—
	G-5 (Surface layer)	37.7345°	140.8088°	7.6	1.7	4.9	10.2	6.6	0.04	2.0	4	1.9	0.021	0.057	—
	G-5 (Deep layer)			7.4	0.7	3.7	9.2	6.6	0.04	1.9	2	1.5	0.017	0.052	—
Lake Akimoto	H-1 (Surface layer)	37.6579°	140.1277°	7.5	0.8	3.8	9.8	5.0	0.03	1.8	1	1.6	0.0041	0.014	—
	H-1 (Deep layer)			7.2	0.7	3.2	8.5	5.1	0.03	1.7	1	1.8	0.0092	0.029	—
	H-3 (Surface layer)	37.6644°	140.1308°	7.4	1.5	4.3	9.7	5.8	0.03	2.1	4	2.2	0.016	0.050	—
	H-3 (Deep layer)			7.3	0.8	3.8	9.1	5.0	0.03	1.8	2	1.7	0.0092	0.027	0.0014
	H-5 (Surface layer)	37.6532°	140.1537°	7.3	1.6	4.8	8.7	5.3	0.03	2.9	2	1.8	0.011	0.034	—
	H-5 (Deep layer)			7.1	1.1	4.1	8.4	5.2	0.04	2.3	2	2.0	0.0049	0.019	—
Lake Inawashiro	I-1 (Surface layer)	37.5053°	140.1140°	7.5	<0.5	1.8	9.5	11.1	0.06	0.7	2	1.2	0.0056	0.017	—
	I-1 (Deep layer)			7.2	0.6	1.7	10.0	11.1	0.06	0.7	1	0.8	0.0056	0.015	0.00096
	I-3 (Surface layer)	37.5090°	140.0268°	7.2	<0.5	1.6	10.1	11.0	0.06	0.7	1	0.6	0.0054	0.015	—
	I-3 (Deep layer)			7.1	<0.5	1.5	10.2	11.1	0.06	0.7	<1	0.5	0.0047	0.017	—
	J-1 (Surface layer)	37.4203°	140.1007°	7.2	0.7	2.2	10.0	11.1	0.06	0.9	1	0.8	0.0046	0.014	—
	J-1 (Deep layer)			7.2	0.6	2.2	8.9	11.0	0.06	1.6	1	0.6	0.0068	0.014	—
Off the mouth of the Abukuma River (Off Watari Town)	K-2 (Surface layer)	38.0455°	140.9401°	8.2	<0.5	1.3	8.6	4,230	28.58	1.0	3	1.1	0.0025	0.0083	—
	K-2 (Deep layer)			8.1	<0.5	1.2	6.5	5,180	33.48	0.9	5	1.0	0.0026	0.011	0.00077
Off Soma City (Matsukawaura)	L-2	37.8157°	140.9764°	8.1	0.5	1.5	8.2	5,040	32.09	1.1	4	1.6	0.0068	0.021	0.0012
	L-3	37.8217°	140.9765°	8.1	1.0	1.7	8.4	5,060	32.09	1.3	6	2.5	0.012	0.036	—
Off Iwaki City (Hisanohama)	M-2 (Surface layer)	37.1992°	141.0863°	8.1	<0.5	1.4	8.2	5,080	33.02	0.9	5	1.0	0.0037	0.012	—
	M-2 (Deep layer)			8.0	<0.5	1.2	7.7	5,240	33.60	0.8	6	0.9	0.0041	0.014	0.00088

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

○ Results (sediments)

Location		Latitude	Longitude	FY2014 October-November Survey																
										Grain size distribution								Cs-134	Cs-137	Sr-90
				pH	Redox potential $E_{N.H.E}$ (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm3)	Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
Abukuma River System	A-1	37.6209°	140.5220°	7.0	233	38.4	4.0	9.1	2.779	0.3	0.6	24.9	46.4	11.7	16.1	0.17	4.75	730	2,400	0.36
	A-2	37.5655°	140.3943°	7.1	369	24.3	2.1	2.1	2.725	8.6	56.1	30.5	3.0	0.8	1.0	1.1	4.75	43	160	—
	B-1	37.7847°	140.4921°	7.1	281	21.5	1.5	1.7	2.756	16.1	17.1	35.4	27.5	2.0	1.9	0.36	9.5	44	150	—
	B-2	37.8120°	140.5058°	7.1	366	27.1	1.7	1.2	2.735	0.0	0.6	54.9	42.1	1.1	1.3	0.27	2	57	190	—
	B-3	37.8164°	140.4719°	7.2	362	19.0	1.3	1.4	2.695	27.1	40.2	30.4	1.5	0.4	0.4	1.2	19	40	120	—
Uda River	C-1	37.7956°	140.7457°	7.0	269	29.1	3.3	3.9	2.745	26.1	36.6	26.9	6.9	1.6	1.9	1.2	19	330	1,100	—
	C-2	37.7710°	140.7277°	7.0	248	28.1	3.8	6.0	2.772	16.6	27.9	28.0	10.9	7.4	9.2	0.70	9.5	190	620	—
	C-4	37.7693°	140.8442°	7.1	235	23.1	1.6	1.3	2.727	18.6	34.5	42.9	3.3	0.4	0.3	0.91	9.5	200	670	0.65
	C-5	37.7645°	140.8604°	7.2	232	21.0	1.4	1.3	2.711	39.7	44.3	13.8	1.7	0.3	0.2	1.7	9.5	130	420	—
	C-6	37.7764°	140.8876°	7.2	258	26.5	2.0	1.2	2.750	2.1	22.1	61.5	11.7	1.5	1.1	0.55	4.75	170	510	—
Mano River	D-1	37.7332°	140.9253°	7.2	266	18.4	1.7	2.1	2.699	31.7	42.1	17.9	6.6	0.8	0.9	1.4	19	300	910	1.1
	D-2	37.7095°	140.9566°	7.2	272	17.8	1.3	1.6	2.708	20.0	36.0	39.0	3.6	0.8	0.6	0.96	4.75	170	560	—
	D-3	37.7051°	140.9622°	7.2	280	22.6	1.6	1.8	2.703	4.9	15.3	60.9	16.0	1.4	1.5	0.43	4.75	43	170	—
	D-4 a	37.7309°	140.9081°	7.2	287	19.6	1.8	2.2	2.744	15.5	31.3	44.3	7.0	1.0	0.9	0.80	4.75	400	1,200	—
	D-5	37.7217°	140.8898°	7.3	234	19.5	1.8	1.9	2.694	25.2	60.0	13.2	0.8	0.4	0.4	1.4	9.5	150	420	—
Niida River	E-1	37.6615°	140.9114°	7.0	379	15.7	0.7	1.6	2.674	33.5	48.9	16.2	0.7	0.7		1.5	19	260	780	0.21
	E-2 a	37.6643°	140.9454°	7.1	214	48.5	13.6	46.4	2.572	35.1	15.7	12.0	8.8	10.4	18.0	0.90	19	3,700	12,000	—
	E-3	37.6446°	141.0017°	7.1	272	18.7	1.1	2.0	2.676	13.8	31.3	44.9	7.8	0.3	1.9	0.76	9.5	150	470	—
	E-4	37.6463°	140.9657°	7.0	296	22.2	0.9	1.8	2.674	3.9	21.2	69.2	4.5	1.2		0.61	4.75	130	400	—
	E-5	37.6652°	140.9175°	6.9	308	17.5	1.7	3.4	2.681	35.3	32.1	24.4	5.7	0.9	1.6	1.4	9.5	530	1,700	—
Ota River	F-1	37.5974°	140.9249°	6.7	342	18.6	1.5	2.6	2.665	39.5	31.1	13.0	9.6	2.9	3.9	1.6	9.5	2,700	8,400	—
	F-2	37.6015°	140.9436°	6.7	328	14.3	0.6	1.5	2.655	47.8	42.9	8.4	0.3	0.6		1.9	9.5	1,100	3,500	0.31
	F-3	37.6046°	140.9641°	6.7	356	18.4	0.9	1.4	2.647	36.2	43.8	13.9	4.1	0.5	1.5	1.6	19	930	2,900	—
	F-4	37.6071°	140.9721°	6.7	366	16.0	0.7	1.8	2.646	39.2	28.9	24.3	6.5	1.1		1.6	19	1,000	3,200	—
	F-5	37.6023°	140.9874°	6.8	373	20.7	0.8	1.9	2.649	2.7	25.6	68.5	2.0	1.2		0.64	9.5	500	1,600	—
Lake Hayama (Mano Dam)	G-1	37.7342°	140.8098°	6.7	237	82.2	13.0	34.0	2.447	0.0	0.6	4.6	13.5	44.6	36.7	0.012	2	3,400	10,000	4.1
	G-2	37.7254°	140.8215°	6.9	157	77.6	14.6	41.5	2.551	0.3	0.2	0.2	0.5	46.4	52.4	0.0041	4.75	1,800	5,700	—
	G-3	37.7290°	140.8316°	7.1	224	50.3	7.0	23.6	2.651	15.1	9.6	15.1	13.4	18.4	28.4	0.12	19	860	2,700	—
	G-4	37.7381°	140.8041°	7.0	238	35.1	4.8	12.2	2.682	9.9	14.7	40.4	14.9	9.6	10.5	0.40	19	1,100	3,200	—
	G-5	37.7345°	140.8088°	6.8	238	57.6	9.0	15.9	2.610	0.0	7.1	44.4	14.9	10.0	23.6	0.26	2	1,700	5,200	—
Lake Akimoto	H-1	37.6579°	140.1277°	6.8	210	63.9	8.8	21.6	2.594	0.0	0.3	0.1	0.3	58.3	41.0	0.0079	2	3.8	24	—
	H-2	37.6623°	140.1227°	6.8	197	74.8	13.8	47.7	2.457	0.0	0.0	0.3	0.1	46.7	52.9	0.0044	2	200	710	—
	H-3	37.6644°	140.1308°	6.5	206	74.6	16.7	61.8	2.427	0.0	0.1	0.2	11.8	59.6	28.3	0.018	2	740	2,200	1.7
	H-4	37.6540°	140.1181°	6.8	202	66.7	8.9	28.0	2.565	0.0	0.2	0.5	4.1	43.2	52.0	0.0043	2	150	490	—
	H-5	37.6532°	140.1537°	6.7	212	51.4	5.8	13.0	2.646	0.0	0.1	7.0	42.6	32.1	18.2	0.074	2	91	220	—
Lake Inawashiro	I-1	37.5053°	140.1140°	6.8	86	73.4	8.1	14.6	2.585	0.5	0.4	6.7	53.8	15.6	23.0	0.12	9.5	210	680	0.28
	I-2	37.5004°	140.1412°	7.0	159	70.3	7.9	17.8	2.583	0.2	1.0	2.5	32.5	39.3	24.5	0.037	4.75	170	540	—
	I-3	37.5090°	140.0268°	7.2	198	72.8	9.9	23.3	2.586	0.0	0.1	1.1	17.0	50.5	31.3	0.019	2	29	83	—
	I-4	37.5152°	140.1020°	6.8	238	27.1	1.6	2.3	2.731	17.4	16.6	54.6	10.6	0.4	0.4	0.59	19	24	65	—
	J-1	37.4203°	140.1007°	7.2	192	30.2	2.0	3.2	2.665	0.2	4.6	75.9	17.6	0.9	0.8	0.33	9.5	71	260	—
Lake Inawashiro	K-1	38.0456°	140.9282°	7.7	280	23.8	1.3	1.4	2.845	0.0	0.4	13.4	74.2	5.5	6.5	0.16	2	19	66	—
	K-2	38.0455°	140.9401°	7.5	182	45.4	5.8	10.6	2.712	0.0	0.1	0.2	15.6	57.3	26.8	0.053	2	130	480	N.D.(0.17)
	K-3	38.0456°	140.9519°	7.6	139	59.7	7.2	18.1	2.682	0.0	0.1	0.1	4.4	58.4	37.0	0.017	2	310	950	—
Off Soma City (Matsukawaura)	L-1	37.8209°	140.9607°	7.7	259	31.0	3.1	7.0	2.696	2.3	5.0	17.8	48.6	11.0	15.3	0.15	9.5	38	130	—
	L-2	37.8157°	140.9764°	8.1	280	17.6	0.9	2.2	2.729	0.2	2.8	71.4	23.8	1.1	0.7	0.33	4.75	6.7	16	N.D.(0.21)
	L-3	37.8217°	140.9765°	8.2	275	21.1	1.2	2.1	2.721	0.0	0.5	56.8	39.2	1.8	1.7	0.27	2	9.3	30	—
Off Iwaki City (Hisanohama)	M-1	37.1734°	141.0785°	8.0	276	27.8	1.8	1.8	2.755	0.0	0.2	1.3	91.0	4.3	3.2	0.16	2	9.1	35	—
	M-2	37.1992°	141.0863°	8.3	269	25.6	1.8	2.1	2.811	1.9	1.0	2.5	89.1	3.2	2.3	0.16	9.5	10	50	N.D.(0.16)
	M-3	37.2321°	141.0939°	8.2	267	24.0	1.8	2.9	2.784	0.0	1.1	3.0	91.4	3.0	1.5	0.16	2	16	48	—

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

Results of Radionuclide Analysis of Aquatic Organisms, Radioactive Material Monitoring in the Water Environment (2014 October-November Survey)

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Abukuma River System	A-2	Harase River	2014/10/23	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.076	—	—	—	172	42	130	—
				Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	54	0.062	Larva (dragonfly larva)	—	—	75	19	56	—
				Arthropoda	Malacostraca	Decapoda	Potamidae	*Geothelphusa dehaani*	Japanese Freshwater Crab	20	0.013	Imago	—	—	27.8	6.8	21	—
				Arthropod	Malacostraca	Decapoda	Atyidae	*Neocaridina sp.*	Neocaridina sp.	1,527	0.17	Imago	—	—	30.0	8.0	22	—
				Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	52	0.055	Imago	—	Molluscan body	23.1	7.1	16	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Phoxinus lagowskii steindachneri*	Amur Minnow	28	0.078	Mature fish	—	—	17.0	4.0	13	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	53	0.35	Mature fish	—	—	23.4	5.4	18	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Nipponocypris temminckii*	Dark chub	7	0.065	Mature fish	—	—	21.2	5.2	16	—
				coarse particulate organic matters (CPOMs)	—	—	—	—	fallen leaves	Considerable number	0.28	—	—	—	237	57	180	—
	B-3	Surikami River	2014/11/1	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.076	—	—	—	119	27	92	—
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	1,080	0.035	Larva	—	—	108	29	79	—
				Arthropod	Insecta	Plecoptera	Perlidae	*Paragnetina tinctipennis*	Paragnetina tinctipennis	376	0.018	Larva	—	—	N.D.	N.D.(4.1)	N.D.(3.5)	—
				Arthropoda	Insecta	Plecoptera	Ephemeroptero	*Kamimuria tibialis*	Kamimura tibialis									
				Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	952	0.13	Larva	—	—	59	14	45	—
				Arthropod	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	271	0.066	Larva (dragonfly larva)	—	—	13.2	3.3	9.9	—
				Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii									
				Arthropod	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Onychogomphus viridicostus									
				Arthropod	Insecta	Odenata	Gomphidae	*Sieboldius albardae*	albardae									
				Arthropod	Insecta	Odonata	Gomphidae	*Davidius nanus*	Davidius nanus									
				Arthropod	Insecta	Odonata	Gomphidae	*Davidius sp.*	Davidius									
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Misgurnus anguillicaudatus*	Oriental weatherfish	38	0.039	Immature fish/mature fish	—	—	16.6	4.6	12	—
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou*	Yamame trout	11	0.31	Mature fish (1-year-old)	—	—	14.1	3.1	11	—
				Vertebrata	Amphibia	Anura	—	—	Frogs	22	0.015	Larva (tadpoles)	—	—	163	43	120	—
				coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.57	—	—	—	78	18	60	—

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Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Uda River	C-6	—	2014/10/30	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.061	—	—	—	199	49	150	—
				Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche sauteri*	Parastenopsyche sauteri	177	0.013	Larva	—	—	114	27	87	—
				Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata									
				Arthropod	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	111	0.024	Larva (dragonfly larva)	—	—	18.6	4.6	14	—
				Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii									
				Arthropod	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Onychogomphus viridicostus									
				Arthropod	Insecta	odonata	Gomphidae	*Sieboldius albardae*	albardae									
				Arthropod	Insecta	Odonata	Gomphidae	*Davidius nanus*	Davidius nanus									
				Arthropod	Insecta	Odonata	Gomphidae	*Davidius sp.*	Davidius									
				Arthropod	Insecta	Odonata	Gomphidae	*Sinogomphus flavolimbatus*	Sinogomphus flavolimbatus									
				Arthropod	Insecta	Odonata	Aeshnidae	*Boyeria maclachlani*	Boyeria maclachlani									
				Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	28	0.017	Larva	—	—	12	N.D.(3.1)	12	—
				Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	940	0.13	Imago	—	—	23.9	5.9	18	—
				Arthropod	Malacostraca	Decapoda	Grapsidae	*Eriocheir japonica*	Japanese mitten crab	18	0.31	Imago	—	—	28.7	6.7	22	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	5	0.024	Immature fish/mature fish	—	—	45	10	35	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	36	0.24	Immature fish/mature fish	—	—	35.8	7.8	28	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Nipponocypris temminckii*	Dark chub	9	0.044	Mature fish	—	—	20.8	4.8	16	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius sp.*	R. sp. CB	49	0.13	Immature fish/mature fish	—	—	36	10	26	—
				Vertebrata	Amphibia	Anura	Ranidae	*Rana rugosa*	Wrinkled Frog	2	0.019	Imago	—	—	8.7	N.D.(2.2)	8.7	—
				coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.20	—	—	—	32.6	8.6	24	—

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Mano River	D-4a D-4b	—	2014/10/26 2014/10/31	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.063	—	—	—	103	26	77	—
				Arthropod	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	albardae	41	0.029	Larva (dragonfly larva)	—	—	26.0	6.0	20	—
				Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	44	0.030	Larva	—	—	31.5	9.5	22	—
				Arthropod	Malacostraca	Decapoda	Procambarus	*Procambarus clarkii*	Red swamp crawfish	3	0.036	Imago	—	—	89	21	68	—
				Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	350	0.063	Imago	—	—	83	22	61	—
				Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	58	0.097	Imago	—	Molluscan body	104	28	76	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	5	0.051	Mature fish (2-year-old)	Many unknown content	Viscera removed	66	17	49	—
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou*	Yamame trout	1	0.060	Mature fish (1-year-old)	Insects (many)	Viscera removed	61	15	46	—
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	2	0.032	Immature fish	Some (details unknown)	Viscera removed	91	21	70	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius sp.*	R. sp. CB	19	0.060	Mature fish	—	—	126	32	94	—
				coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.26	—	aquatic insects	—	116	27	89	—

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Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Nitda River	E-2a E-2b	—	2014/10/23 2014/10/24 2014/10/29	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.025	—	—	—	172	42	130	—
				Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Epeorus curvatulus*	Epeorus curvatulus	437	0.011	Larva	—	—	550	130	420	—
				Arthropod	Insecta	Ephemeroptera	Schistonota	Heptageniidae	Heptagenioidea									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia gibba*	Oyamia lugubris	1,410	0.049	Larva	—	—	25.0	6.0	19	—
				Arthropoda	Insecta	Plecoptera	Ephemeroptero	*Kamimuria tibialis*	Kamimura tibialis									
				Arthropod	Insecta	Plecoptera	Perlidae	*Neoperla sp.*	Neoperla geniculata									
				Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	177	0.028	Larva	—	—	540	120	420	—
				Arthropod	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Onychogomphus viridicostus	82	0.027	Larva (dragonfly larva)	—	—	103	25	78	—
				Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	17	0.011	Larva	—	—	63	16	47	—
				Arthropod	Malacostraca	Decapoda	Procambarus	*Procambarus clarkii*	Red swamp crawfish	23	0.16	Imago	—	—	162	42	120	—
				Arthropod	Malacostraca	Decapoda	Atyidae	Atyidae	Freshwater shrimp	131	0.023	Imago	—	—	187	47	140	—
				Arthropod	Malacostraca	Decapoda	Grapsidae	*Eriocheir japonica*	Japanese mitten crab	14	0.20	Imago	—	—	169	39	130	—
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	3	1.1	Mature fish (6-year-old)	Some (details unknown)	Viscera removed	280	70	210	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	10	0.041	Mature fish	—	—	228	58	170	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	8	0.24	Mature fish	Detritus	Viscera removed	229	59	170	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	4	0.13	Immature fish	—	—	163	43	120	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius sp.*	R. sp. CB	13	0.057	Mature fish	—	—	256	66	190	—
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.18	Mature fish (2-year-old)	Some (details unknown)	Viscera removed	119	29	90	—
				Vertebrata	Amphibia	Anura	Ranidae	*Rana rugosa*	Wrinkled Frog	5	0.012	Imago	—	—	43	10	33	—
				coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.24	—	—	—	1,180	290	890	—

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Ota River	F-1	—	2014/10/23 2014/10/25	Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.066	—	—	—	1,860	460	1,400	—
				Arthropod	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	103	0.031	Larva (dragonfly larva)	—	—	480	110	370	—
				Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii									
				Arthropod	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Onychogomphus viridicostus									
				Arthropod	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	albardae									
				Arthropod	Insecta	Odonata	Gomphidae	*Davidius sp.*	Davidius									
				Arthropod	Insecta	Odonata	Gomphidae	*Asiagomphus melaenops*	Asiagomphus melaenops									
				Arthropod	Insecta	Odonata	Aeshnidae	*Boyeria maclachlani*	Boyeria maclachlani									
				Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	33	0.015	Larva	—	—	288	68	220	—
				Arthropoda	Insecta	Neuroptera	Corydalidae	*Parachauliodes japonicus ,*	Parachauliodes japonicus									
				Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	295	0.080	Imago	—	—	890	210	680	—
				Arthropod	Malacostraca	Decapoda	Grapsidae	*Eriocheir japonica*	Japanese mitten crab	4	0.040	Imago	—	—	1,010	250	760	—
				Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	61	0.054	Imago	—	Molluscan body	404	94	310	—
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	4	1.5	Mature fish (9-year-old)	Some (details unknown)	Viscera removed	201	51	150	0.36
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	6	0.010	Immature fish	—	—	1,030	280	750	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	18	0.15	Mature fish	—	—	650	170	480	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Nipponocypris temminckii*	Dark chub	6	0.060	Mature fish	—	—	470	110	360	—
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Cobitis biwae*	Cobitis biwae	5	0.012	Mature fish	—	—	900	240	660	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius sp.*	R. sp. CB	5	0.024	Mature fish	—	—	1,830	430	1,400	—
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.29	Mature fish (4-year-old)	Some (details unknown)	Viscera removed	118	29	89	—
				coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.29	—	—	—	1,040	250	790	—

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Lake Hayama		Inflowing rivers		Algae/plant	—	—	—	—	River bottom materials (incl. algae)	Considerable number	0.038	—	—	—	367	87	280	—
		Inflowing rivers		Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	607	0.015	Larva	—	—	600	150	450	—
		Inflowing rivers		Arthropoda	Insecta	Plecoptera	Ephemeropterd	*Kamimurai sp.*	Kamimura stonefly genus	366	0.014	Larva	—	—	13	N.D.(4.0)	13	—
		Inflowing rivers		Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	342	0.062	Larva (dragonfly larva)	—	—	62	16	46	—
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Stylogomphus suzukii*	Stylogomphus suzukii									
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Onychogomphus viridicostus*	Onychogomphus viridicostus									
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Davidius fujiama*	Davidius fujiama									
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	albardae									
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Davidius nanus*	Davidius nanus									
	G-4	Inflowing rivers	2014/10/28	Arthropod	Insecta	Odonata	Gomphidae	*Davidius sp.*	Davidius									
		Inflowing rivers		Arthropod	Insecta	Odonata	Gomphidae	*Sinogomphus flavolimbatus*	Sinogomphus flavolimbatus									
		Inflowing rivers		Arthropod	Insecta	Odonata	Aeshnidae	*Boyeria maclachlani*	Boyeria maclachlani									
		Inflowing rivers		Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	41	0.025	Larva	—	—	57	15	42	—
		Inflowing rivers		Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	157	0.029	Larva	—	—	141	41	100	—
		Inflowing rivers		Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	20	0.017	Imature fish (under 1-year-old)	—	—	105	29	76	—
		Inflowing rivers		Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou*	Seema	1	1.3	Mature fish (3-year-old)	Empty stomach	Viscera removed	590	140	450	0.33
		Inflowing rivers		Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou*	Yamame trout	2	0.042	Mature fish (1-year-old)	Many unknown content	Viscera removed	61	14	47	—
		Inflowing rivers		Vertebrata	Osteichthyes	Perciformes	Gobioidei	*Rhinogobius flumineus*	Rhinogobius flumineus	12	0.025	Mature fish	—	—	55	12	43	—
		Inflowing rivers		coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.11	—	—	—	120	29	91	—
	G-1	In the lake	2014/10/27	Algae/plant	—	—	—	—	Plankton	Considerable number	0.036	—	—	—	22.6	5.6	17	—
	G-2	In the lake	2014/10/28	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	2	0.64	Mature fish (3-year-old)	Many unknown content	Viscera removed	348	88	260	—
	G-3	In the lake		Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	1	0.44	Mature fish (3-year-old)	Many unknown content	Viscera removed	266	66	200	—

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Lake Akimoto		In the lake		Algae/plant	—	—	—	—	Plankton	Considerable number	0.010	—	—	—	32.7	7.7	25	—
		In the lake		Angiospermae	Monocotyledoneae	Hydrocharitales	Hydrocharitace	*Elodea nuttallii*	Western Waterweed	Considerable number	0.19	—	—	—	7.7	1.8	5.9	—
		Inflowing rivers		Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera japonica*	Ephemera japonica McLachlan	489	0.026	Larva	—	—	122	29	93	—
		Inflowing rivers		Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly									
		In the lake		Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	96	0.12	Larva (dragonfly larva)	—	—	28.0	7.0	21	—
		In the lake		Arthropod	Malacostraca	Decapoda	Astacidae	*Pacifastacus leniusculus trowbridgii*	Signal crayfish	43	2.1	Imago	—	—	36.9	8.9	28	7.8
		In the lake		Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	210	0.15	Imago	—	Molluscan body	28.9	6.9	22	—
		In the lake		Vertebrata	Osteichthyes	Osmeriformes	Osmeridae	*Hypomesus nipponensis*	Japanese smelt	101	0.34	Mature fish	—	—	20.8	4.8	16	—
		In the lake		Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Phoxinus lagowskii steindachneri*	Amur Minnow	42	0.058	Mature fish	—	—	12.9	3.2	9.7	—
		In the lake		Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	20	4.8	Mature fish	Green algae	Viscera removed	74	17	57	0.73
		In the lake		Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	12	1.7	Mature fish (5-year-old)	—	Viscera removed	56	14	42	1.3
		In the lake		Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	4	2.7	Mature fish (4-year-old)	—	Viscera removed	29.5	6.5	23	1.2
		In the lake		Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Salvelinus leucomaenis*	Char	5	1.7	Mature fish (4-year-old)	Fish	Viscera removed	44	10	34	—
		In the lake		Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	8	3.2	Mature fish (3-year-old)	Cordulegasteridae	Viscera removed	58	13	45	1.0
		In the lake		Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Lepomis macrochirus*	Bluegill	6	0.46	Mature fish (3-year-old)	Ephemeroptera	Viscera removed	32.6	7.6	25	—
		In the lake		Vertebrata	Amphibia	Anura	Ranidae	*Rana rugosa*	Wrinkled Frog	5	0.026	Imago	—	—	15.2	3.2	12	—
		In the lake		Vertebrata	Amphibia	Caudata	Salamandridae	*Cynops pyrrhogaster*	Cynops pyrrhogaster	3	0.015	Imago	—	—	8.5	2.8	5.7	—
		Inflowing rivers		coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.14	—	—	—	72	17	55	—

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Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Lake Inawashiro	I-1 I-2 (north lakeside)	—	2014/10/22	coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.25	—	—	—	21.6	5.6	16	—
			2014/11/15	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	5	0.35	Mature fish (3-year-old)	Many unknown content	Viscera removed	40.2	9.2	31	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	3	1.0	Mature fish (5-year-old)	Many unknown content	Viscera removed	27.8	6.8	21	0.49
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	2	1.0	Mature fish (4-year-old)	Many unknown content	Viscera removed	31.2	7.2	24	0.40
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Salvelinus leucomaenis*	Char	4	3.1	Mature fish	Empty stomach, fish	Viscera removed	183	43	140	0.13
	J-1 (south lakeside)	—	2014/10/22	Algae/plant	—	—	—	—	Plankton	Considerable number	0.014	—	—	—	N.D.	N.D.(3.0)	N.D.(3.5)	—
				Angiospermae	Dicotyledoneae	Nymphaeales	Nymphaeaceae	*Nuphar japonicum*	Cow lily	Considerable number	1.9	—	—	—	3.47	0.87	2.6	—
				Magnoliophyta	Magnoliopsida	Solanales	Menyanthaceae	*Nymphoides peltata*	Fringed water-lily	Considerable number	1.5	—	—	—	2.79	0.69	2.1	—
				Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	20	0.022	Larva (dragonfly larva)	—	—	2.4	N.D.(2.4)	2.4	—
				Arthropod	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	104	0.056	Imago	—	—	5.1	1.4	3.7	—
				Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	55	0.035	Imago	—	Molluscan body	3.4	N.D.(1.9)	3.4	—
				Mollusca	Gastropoda	Architaenioglos	Viviparidae	*Bellamya chinensis laeta*	Mud-snail	70	0.38	Imago	—	Molluscan body	2.88	0.88	2.0	—
				Vertebrata	Amphibia	Anura	—	—	Frogs	24	0.027	Larva (tadpoles)	—	—	9.5	2.7	6.8	—
				Vertebrata	Amphibia	Anura	Ranidae	*Rana rugosa*	Wrinkled Frog	27	0.10	Imago	—	—	1.2	N.D.(0.64)	1.2	—
			2014/10/25	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	2	0.97	Mature fish (6-year-old)	Many unknown content	Viscera removed	24.9	5.9	19	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	3	1.4	Mature fish	Many unknown content	Viscera removed	31.3	7.3	24	0.40
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	5	2.2	Mature fish (2-year-old)	Empty stomach, lake smelt	Viscera removed	48	12	36	0.29
			2014/10/30	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	9	1.4	Mature fish (3-year-old)	Many unknown content	Viscera removed	52	13	39	0.23
			2014/11/4	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Zacco platypus*	Pale chub	10	0.15	Mature fish	Many unknown content	Viscera removed	16.2	4.2	12	—
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Salvelinus leucomaenis*	Char	1	1.1	Mature fish	Empty stomach	Viscera removed	159	39	120	0.099

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Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Off the mouth of the Abukuma River	Surrounding water area off the mouth of the Abukuma River	—	2014/10/30	Arthropod	Malacostraca	Decapoda	Portunidae	*Portunus trituberculatus*	Japanese blue crab	5	1.3	Imago	—	—	0.28	N.D. (0.29)	0.28	0.050
				Vertebrata	Osteichthyes	Pleuronectiform	Pleuronectiform	*Pleuronectes yokohamae*	Marbled sole	7	2.8	Mature fish (5-year-old)	Shrimps	Viscera removed	1.46	0.36	1.1	N.D.(0.012)
				Vertebrata	Osteichthyes	Pleuronectiform	Paralichthyidae	*Paralichthys olivaceus*	Bastard halibut	4	3.2	Mature fish (3-year-old)	Shrimps, fish	Viscera removed	0.43	N.D. (0.61)	0.43	N.D.(0.012)
				Vertebrata	Osteichthyes	Perciformes	Sparidae	*Evynnis japonica*	Crimson sea-bream	7	3.0	Mature fish (5-year-old)	Crabs	Viscera removed	0.73	N.D. (0.37)	0.73	0.015
				Vertebrata	Osteichthyes	Zeiformes	Zeidae	*Zeus faber*	John dory	3	2.8	Mature fish (4-year-old)	Flatfish, fish	Viscera removed	1.10	0.29	0.81	N.D.(0.018)

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Off Soma City	L-1 L-2 L-3	Matsukawaura	2014/10/29	Algae/plant	—	—	—	—	Plankton	Considerable number	0.014	—	—	—	690	170	520	—
				Angiospermae	Monocotyledoneae	Najadales	Zosteraceae	*Zostera marina*	eel grass	Considerable number	1.1	—	—	—	0.46	N.D.(0.36)	0.46	—
				Chlorophyta	Ulvophyceae	Ulvales	Ulvaceae	*Ulva pertusa*	Ulva pertusa	Considerable number	0.29	—	—	—	3.29	0.79	2.5	—
				Arthropod	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Palaemon	146	0.051	Imago	—	—	8.6	2.3	6.3	—
				Arthropoda	Malacostraca	Decapoda	Varunidae	*Hemigrapsus sp.*	Hemigrapsus	170	0.21	Imago	—	—	7.3	1.8	5.5	—
				Mollusca	Bivalvia	Pterioida	Ostreidae	*Crassostrea gigas*	Japanese oyster	49	6.0	Imago	—	Molluscan body	3.67	0.87	2.8	—
				Mollusca	Bivalvia	Veneridae	Veneridae	*Ruditapes philippinarum*	Japanese littleneck	67	1.8	Imago	—	Molluscan body	3.91	0.91	3.0	—
				Vertebrata	Osteichthyes	Scorpaeniforme	Hexagrammida	*Hexagrammos otakii*	Fat greenling	6	0.64	Mature fish	Crabs	Viscera removed	2.55	0.55	2.0	—
				Vertebrata	Osteichthyes	Scorpaeniforme	Scorpaenidae	*Sebastes cheni*	Japanese rockfish	2	0.050	Mature fish (1-year-old)	Mysid shrimps	Viscera removed	2.3	N.D.(1.1)	2.3	—
				Vertebrata	Osteichthyes	Perciformes	Pholidae	*Pholis crassispina*	Tidepool gunnel	21	0.046	Mature fish	—	—	2.3	N.D.(1.5)	2.3	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	Gobiidae	Gobiidae	37	0.040	Mature fish	—	—	3.6	1.1	2.5	—

Location			Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)
												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Off Iwaki City	M-1 M-2 M-3 M-4	Hisanohama Coastal areas	2014/10/29	Phaeophyta	Phaeophyceae	Laminariales	Alariaceae	*Undaria undariodes*	Undaria undarioides (Yendo)	Considerable number	1.1	—	—	—	2.17	0.47	1.7	—
		Hisanohama Coastal areas		Echinoderm	Echinoidea	Echinoida	Strongylocentro	*Strongylocentrotus nudus*	Northern sea urchin	35	3.1	Imago	—	—	3.42	0.92	2.5	4.4
		Offshore of Hisanohama		Echinodermata	Asteroidea	Forcipulatida	Asteriidae	*Distolasterias nipon*	Japan starfish	4	1.6	Imago	—	—	N.D.	N.D.(0.29)	N.D.(0.27)	—
		Offshore of Hisanohama		Arthropod	Malacostraca	Decapoda	Portunidae	*Portunus trituberculatus*	Japanese blue crab	3	1.1	Imago	—	—	1.66	0.56	1.1	—
		Hisanohama Coastal areas		Mollusca	Gastropoda	Archaeogastrop	Haliotis asinina	*Haliotis discus*	Abalone	6	1.5	Imago	—	Molluscan body	0.53	N.D.(0.40)	0.53	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Scorpaeniforme	Triglidae	*Lepidotrigla microptera*	Gurnard	12	1.5	Mature fish (3-year-old)	Shrimps, crabs, immature octopus	Viscera removed	1.69	0.49	1.2	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Scorpaeniforme	Triglidae	*Chelidonichthys spinosus*	Gurnard(Small)	3	0.44	Mature fish (2-year-old)	Shrimps, amphipod	Viscera removed	1.84	0.44	1.4	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Scorpaeniforme	Triglidae	*Chelidonichthys spinosus*	Gurnard(Large)	5	2.0	Mature fish (4-year-old)	Shrimps	Viscera removed	2.53	0.73	1.8	N.D.(0.018)
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Pleuronectiform	Pleuronectiform	*Kareius bicoloratus*	Stone flounder	2	0.82	Mature fish (5-year-old)	Isopoda	Viscera removed	2.84	0.64	2.2	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Pleuronectiform	Pleuronectidae	*Pleuronichthys sp.*	Finespotted flounder	5	0.47	Mature fish	Sandworms, crustaceans	Viscera removed	2.42	0.62	1.8	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Pleuronectiform	Pleuronectiform	*Pleuronectes yokohamae*	Marbled sole	5	3.2	Mature fish (4-year-old)	Sandworms, amphipod	Viscera removed	7.4	1.7	5.7	0.049
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Pleuronectiform	Paralichthyidae	*Paralichthys olivaceus*	Bastard halibut	3	3.8	Mature fish (5-year-old)	Many unknown content	Viscera removed	2.25	0.55	1.7	N.D.(0.019)
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Perciformes	Sparidae	*Evynnis japonica*	Crimson sea-bream	8	0.48	Mature fish (2-year-old)	Gammaridea	Viscera removed	4.8	1.1	3.7	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Perciformes	Sparidae	*Evynnis japonica*	Crimson sea-bream	3	1.1	Mature fish (4-year-old)	Clams, crabs	Viscera removed	2.22	0.52	1.7	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Perciformes	Sparidae	*Pagrus major*	Red seabream	1	1.3	Mature fish (4-year-old)	Clams, snails	Viscera removed	2.85	0.65	2.2	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Perciformes	Sciaenidae	*Pennahia argentata*	White croaker	11	1.6	Mature fish (3-year-old)	Fish	Viscera removed	1.1	N.D.(0.30)	1.1	—
		Offshore of Hisanohama		Vertebrata	Osteichthyes	Zeiformes	Zeidae	*Zeus faber*	John dory	5	3.0	Mature fish (4-year-old)	Fish, shrimps	Viscera removed	0.65	N.D.(0.39)	0.65	N.D.(0.018)
		Offshore of Hisanohama		Vertebrata	Chondrichthyes	Squatiniformes	Squatinidae	*Squatina japonica*	Japanese angelshark	1	2.3	Mature fish	Some (details unknown)	Viscera removed	8.9	2.2	6.7	0.027
		Offshore of Hisanohama		Vertebrata	Chondrichthyes	Rajiformes	Rajidae	*Okamejei kenojei*	Skate	6	3.5	Mature fish	Shrimps, fish	Viscera removed	12.4	3.1	9.3	0.16
		Offshore of Hisanohama		Vertebrata	Chondrichthyes	Carcharhinifor	Triakidae	*Mustelus manazo*	Starspotted smooth-hound	3	2.9	Mature fish	Crabs, echiuroid, squillas	Viscera removed	2.63	0.83	1.8	N.D.(0.017)

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