

○ Results (water)

Locations				2017 December Survey											
		Latitude	Longitude	pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electric 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)	37.6210°	140.5218°	7.4	1.3	3.4	12.0	18.0	0.10	1.5	2	1.5	N.D.(0.0010)	0.0083	0.0012
	A-1(Bottom layer)	37.6210°	140.5218°	7.4	1.4	3.6	12.2	20.8	0.10	1.5	2	1.7	0.0014	0.0074	-
	A-2	37.5673°	140.3946°	7.4	<0.5	1.9	13.0	9.9	0.06	0.6	2	1.0	0.0011	0.0067	-
	B-2	37.8121°	140.5058°	7.4	0.9	3.0	12.7	15.3	0.08	1.2	4	1.7	0.0028	0.019	-
	B-3	37.8182°	140.4679°	7.4	<0.5	2.8	12.4	8.8	0.05	1.1	3	1.2	N.D.(0.00093)	0.0046	-
Uda River	C-6	37.7764°	140.8877°	7.3	<0.5	1.7	12.1	10.7	0.06	0.7	<1	0.4	N.D.(0.0011)	0.0037	0.00058
Mano River	D-4 a	37.7308°	140.9081°	7.1	0.5	2.1	11.9	9.1	0.05	1.0	<1	0.6	N.D.(0.0012)	0.0096	0.0012
Niida River	E-2 a	37.6640°	140.9447°	7.3	<0.5	2.1	12.9	6.7	0.04	0.9	1	1.1	0.0038	0.028	0.0016
Ota River	F-1	37.5975°	140.9252°	7.4	<0.5	2.1	12.6	4.9	0.03	0.9	<1	0.7	0.022	0.17	0.0034
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7321°	140.8127°	7.4	0.8	3.2	10.4	6.4	0.04	1.6	1	1.3	0.0092	0.080	-
	G-1(Bottom layer)	37.7321°	140.8127°	7.3	0.8	3.3	10.1	6.3	0.04	1.6	1	1.3	0.0022	0.016	0.0010
	G-4	37.7382°	140.8035°	7.4	<0.5	1.8	12.3	6.4	0.05	1.0	<1	0.6	0.0013	0.0097	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	7.1	1.0	3.9	11.2	4.7	0.03	1.8	2	1.5	N.D.(0.0013)	0.0068	-
	H-1(Bottom layer)	37.6575°	140.1264°	7.1	0.5	3.2	11.2	4.6	0.03	1.3	2	1.5	0.0033	0.022	0.00091
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	7.1	<0.5	1.2	11.7	10.5	0.06	0.8	<1	0.3	N.D.(0.0014)	0.0070	-
	J-1(Bottom layer)	37.4203°	140.1008°	6.9	<0.5	2.2	11.1	10.7	0.06	1.0	<1	0.5	N.D.(0.0014)	0.0072	0.00069
Off the mouth of the Abukuma River (Sea Area in front of the mouth of the Abukuma River)	K-3(Surface layer)	38.0458°	140.9518°	8.0	0.6	1.5	8.6	4910	32.67	1.0	2	1.2	0.0011	0.0084	-
	K-3(Bottom layer)	38.0458°	140.9518°	8.0	<0.5	1.5	8.7	4970	33.45	0.9	5	1.3	0.0012	0.013	0.00083
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.1	<0.5	1.4	10.3	4830	32.24	1.0	<1	0.5	0.0012	0.0091	0.00081
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.0	<0.5	0.9	8.6	5020	33.78	0.8	<1	0.4	N.D.(0.0010)	0.0047	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.0	<0.5	1.1	8.4	5040	33.68	0.8	<1	0.4	N.D.(0.00098)	0.0071	0.00090

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

○ Results (sediments)

Locations				2017 December Survey																
		Latitude	Longitude	pH	Redox potential E _{N,H.E} (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm ³)	Grain size distribution								Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
										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)			
Abukuma River System	A-1	37.6210°	140.5218°	7.3	82	38.8	2.9	4.5	2.704	2.8	6.8	41.9	24.5	14.3	9.7	0.26	9.5	25	220	0.14
	A-2	37.5673°	140.3946°	7.3	365	25.0	1.8	1.7	2.658	23.4	44.0	29.5	2.2	0.9		1.2	9.5	12	100	-
	B-2	37.8121°	140.5058°	7.4	353	28.1	1.8	1.5	2.683	0.1	3.1	61.5	32.0	2.4	0.9	0.30	4.8	14	120	-
	B-3	37.8182°	140.4679°	7.4	361	24.1	1.3	1.6	2.660	22.4	40.2	34.4	1.9	1.1		1.1	9.5	13	100	-
Uda River	C-6	37.7764°	140.8877°	7.6	361	20.8	1.1	1.3	2.723	9.6	29.5	55.4	3.9	1.6		0.71	4.8	20	180	0.54
Mano River	D-4 a	37.7308°	140.9081°	7.6	338	19.8	1.4	1.7	2.728	20.0	38.9	35.6	3.6	1.9		1.0	9.5	38	330	0.69
Niida River	E-2 a	37.6640°	140.9447°	7.2	147	57.9	9.8	26.4	2.537	3.5	4.7	18.3	30.7	24.5	18.3	0.12	19	530	4400	1.3
Ota River	F-1	37.5975°	140.9252°	7.4	369	19.8	1.0	1.3	2.619	12.1	32.2	47.8	5.8	1.3	0.8	0.75	19	180	1500	0.63
Lake Hayama (Mano Dam)	G-1	37.7321°	140.8127°	7.2	57	67.8	11.0	32.9	2.554	1.3	7.2	22.5	20.7	27.8	20.5	0.088	9.5	270	2200	2.4
	G-4	37.7382°	140.8035°	7.6	307	27.6	2.5	3.4	2.715	8.6	11.6	42.2	21.3	6.6	9.7	0.38	19	82	680	-
Lake Akimoto	H-1	37.6575°	140.1264°	6.7	35	62.5	9.8	19.4	2.479	0.0	0.1	0.4	1.1	61.9	36.5	0.0080	2.0	170	1300	0.78
Lake Inawashiro	J-1	37.4203°	140.1008°	6.1	341	28.5	1.5	2.3	2.740	2.2	5.1	47.7	37.4	4.8	2.8	0.27	9.5	7.6	55	N.D.(0.12)
Off the mouth of the Abukuma River (Sea Area in front of the mouth of the Abukuma River)	K-3	38.0458°	140.9518°	7.7	200	45.3	4.5	5.9	2.654	0.0	0.1	1.1	34.3	52.4	12.1	0.059	2.0	24	200	N.D.(0.13)
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	7.7	264	24.6	1.4	1.4	2.673	0.0	1.5	48.8	45.1	2.9	1.7	0.25	2.0	3.4	29	N.D.(0.14)
Off Iwaki City (Hisanohama)	M-2	37.1996°	141.0853°	7.8	216	25.9	1.9	1.8	2.741	0.8	0.9	3.0	90.4	2.5	2.4	0.15	4.8	2.8	26	N.D.(0.14)

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

○ Results (aquatic organisms)

Location		Sampling point	Sampling date	Division	Class	Order	Family	Scientific 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	2017/12/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.022	-	-	-	51.2	5.2	46	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	65	0.0062	Larva	-	-	13	N.D.(6.8)	13	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana rugosa</i>	Wrinkled Frog	3	0.0072	Imago	-	-	6.1	N.D.(5.7)	6.1	-
	B-2	The main stream of the Abukuma River	2017/12/7	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	4	7.5	Mature fish	Empty stomach	Viscera removed	32.3	3.3	29	0.34
	B-3	Surikami River	2017/12/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.013	-	-	-	34.4	2.4	32	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	520	0.056	Larva	-	-	26.6	2.6	24	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	Kamimura tibialis	108	0.010	Larva	-	-	N.D.	N.D.(5.0)	N.D.(4.2)	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	169	0.048	Larva	-	-	7.6	N.D.(1.3)	7.6	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	59	0.068	Larva	-	-	1.8	N.D.(0.89)	1.8	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	25	0.0050	Juvenile,Imago	-	Molluscous part	78	N.D.(11)	78	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.018	Immature fish	Stenopsyche marmorata	Viscera removed	2.3	N.D.(2.9)	2.3	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana rugosa</i>	Wrinkled Frog	2	0.019	Imago	-	-	3.5	N.D.(3.8)	3.5	-
Uda River	C-6	The main stream of the Uda River	2017/12/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.017	-	-	-	55.2	6.2	49	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	Ephemera japonica	267	0.0087	Larva	-	-	31.8	4.8	27	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	<u>Mont mayfly</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria uenoi</i>	Kamimuria uenoi Kohno	504	0.022	Larva	-	-	N.D.	N.D.(2.0)	N.D.(1.7)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimura tibialis</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Paragnetina suzukii</i>	Paragnetina suzukii Okamoto									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Neoperla sp.</i>	Neoperla									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Niponiella limbatella Klapalek</i>	Niponiella limbatella Klapalek									
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii	29	0.0066	Larva (Dragonfly larva)	-	-	8.2	N.D.(5.9)	8.2	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae									
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius</u>									
				Arthropoda	Insecta	Odonata	Epiophlebiidae	<i>Epiophlebia superstes</i>	Epiophlebia superstes									
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	6	0.0074	Imago	-	-	7.0	N.D.(5.9)	7.0	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	17	0.24	Immature fish,Mature fish	-	-	9.6	1.3	8.3	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.047	Immature fish	Empty stomach	Viscera removed	8.0	N.D.(1.4)	8.0	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius sp. CB</i>	Rhinogobius nagoyae	5	0.019	Mature fish	-	-	11	N.D.(2.6)	11	-

*1: Organisms were collected in or around the targeted water areas.

*2: When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

*3: For a sample made of multiple types of aquatic organisms, the English name of the dominant one largest in number is underlined.

*4: Basically, measurement was conducted for all organism samples. Viscera (stomach and bowels) were removed for the measurement when possible so that undigested food and sediments, etc. in the digestive system would be excluded.

*5: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40μm-mesh).

*6: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.

*7: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

*8: Activity concentrations include counting errors, but the details are omitted here.

Location		Sampling point	Sampling date	Division	Class	Order	Family	Scientific 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-3	The main stream of the Mano River	2017/12/6	Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	1	0.022	Imago	-	-	13	N.D.(2.6)	13	-
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	0.033	Immature fish	Obscure digesta	Viscera removed	15.8	1.8	14	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus reinii</i>	Sculpin	5	0.073	Immature fish	Freshwater shrimp	Viscera removed	9.7	1.7	8.0	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorfii	1	0.010	Immature fish	-	-	11	N.D.(4.8)	11	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	7	0.14	Immature fish	Freshwater shrimp,Algae	Viscera removed	7.57	0.77	6.8	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudorasbora parva</i>	Stone moroko	5	0.013	Mature fish	-	-	8.1	N.D.(2.6)	8.1	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana catesbeiana</i>	American Bullfrog	60	0.38	Larva (Tadpole)	-	-	112	12	100	-
	D-4b	The main stream of the Mano River	2017/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.018	-	-	-	147	17	130	-
			2017/12/6	Algae/plant	Monocotyledoneae	Poales	Poaceae	<i>Phragmites australis</i>	Common reed	-	0.11	-	-	-	16.8	1.8	15	-
			2017/12/5	Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia japonica</i>	<u>Isonychia japonica</u>	282	0.012	Larva	-	-	81.3	7.3	74	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	<u>Ephemera japonica</u>									
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	<u>Mont mayfly</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria uenoi</i>	<u>Kamimuria uenoi Kohno</u>	179	0.011	Larva	-	-	3.6	N.D.(4.1)	3.6	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<u>Oyamia lugubris</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimura tibialis</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Neoperla sp.</i>	<u>Neoperla</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Niponiella limbatella Klapalek</i>	<u>Niponiella limbatella Klapalek</u>									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<u>Stenopsyche marmorata</u>	163	0.045	Larva	-	-	50.9	5.9	45	-
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	4	0.12	Juvenile	-	-	36.5	3.5	33	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	14	0.16	Immature fish	-	-	14.2	2.2	12	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.037	Immature fish	Stenopsyche marmorata	Viscera removed	8.0	1.2	6.8	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius sp. CB</i>	<u>Rhinogobius nagoyae</u>	30	0.027	Immature fish,Mature fish	-	-	15.0	2.0	13	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius kurodai</i>	<u>Rhinogobius kurodai</u>									
Niida River	E-2b	The main stream of the Niida River	2017/12/3	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.021	-	-	-	374	44	330	-
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia japonica</i>	<u>Isonychia japonica</u>	261	0.0092	Larva	-	-	43.7	5.7	38	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria uenoi</i>	<u>Kamimuria uenoi Kohno</u>	280	0.018	Larva	-	-	3.9	N.D.(1.9)	3.9	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<u>Oyamia lugubris</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimura tibialis</u>									
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Neoperla geniculata</i>	<u>Neoperla geniculata</u>									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<u>Stenopsyche marmorata</u>	103	0.021	Larva	-	-	131	11	120	-
				Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	6	0.030	Juvenile,Imago	-	-	35.4	4.4	31	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	<u>Semisulcospira libertina</u>	30	0.025	Imago	-	Molluscouous part	22.9	2.9	20	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Sarcocheilichthys variegatus variegatus</i>	<u>Sarcocheilichthys variegatus variegatus</u>	3	0.037	Immature fish,Mature fish	-	-	22.2	3.2	19	-

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Location		Sampling point	Sampling date	Division	Class	Order	Family	Scientific 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	The main stream of the Ota River	2017/12/6	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.026	-	-	-	1220	120	1100	-
				Algae/plant	Monocotyledoneae	Poales	Poaceae	<i>Phragmites australis</i>	Common reed	-	0.16	-	-	-	76.6	9.6	67	-
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia japonica</i>	Isonychia japonica	366	0.016	Larva	-	-	283	33	250	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	149	0.0042	Larva	-	-	611	61	550	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	50	0.0045	Larva	-	-	722	82	640	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>	8	0.0036	Larva	-	-	148	18	130	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes japonicus</i>	Parachauliodes japonicus									
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	16	0.025	Imago	-	-	368	48	320	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	11	0.035	Immature fish	-	-	368	38	330	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	4.8	Mature fish	Obscure digesta	Viscera removed	471	51	420	4.2
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	3	0.0074	Mature fish	-	-	314	34	280	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana catesbeiana</i>	<u>American Bullfrog</u>	3	0.55	Imago	-	-	103.6	8.6	95	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana ornativentris</i>	Montane brown frog									
	F-5	The main stream of the Ota River	2017/12/6	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	5	0.48	Immature fish	Freshwater shrimp, Fish,Plant pieces	Viscera removed	121	11	110	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.052	Immature fish	Chironomus(Pupa stage)	Viscera removed	12.5	1.5	11	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana catesbeiana</i>	American Bullfrog	1	0.062	Imago	-	-	54.1	5.1	49	-
Lake Hayama	G-1 G-2 G-3	In the lake	2017/12/4	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.018	-	-	-	5.1	N.D.(1.7)	5.1	-
			2017/12/7	Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	109	0.064	Immature fish	-	-	36.0	6.0	30	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.021	Immature fish	Baetidae,Bee	Viscera removed	64.6	6.6	58	-
	G-4	Inflowing rivers	2017/12/4	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0087	-	-	-	62.1	7.1	55	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera orientalis</i>	Ephemera orientalis	566	0.020	Larva	-	-	98.7	8.7	90	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	Ephemera japonica									
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	<u>Mont mayfly</u>									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	89	0.20	Immature fish	-	-	34.1	4.1	30	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	8	0.013	Immature fish,Mature fish	-	-	18	N.D.(2.7)	18	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	1	0.046	Immature fish	Geophilids, Lepidoptera(larva), Tiger beetle, Beetle(larva)	Viscera removed	44.0	5.0	39	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	10	0.13	Immature fish	Locust, Beetle(larva/imago) ,Ant,Lepidoptera, Diptera(imago), Spiders,Stink bug(larva)	Viscera removed	51.4	5.4	46	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana ornativentris</i>	Montane brown frog	9	0.20	Imago	-	-	439	49	390	-

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Location		Sampling point	Sampling date	Division	Class	Order	Family	Scientific 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	H-1 H-2 H-3	In the lake	2017/12/1	Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	10	0.40	Imago	-	-	21.6	2.6	19	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	2	0.67	Mature fish	Algae	Viscera removed	39.1	4.1	35	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	5.4	Mature fish	Obscure digesta	Viscera removed	41.5	4.5	37	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	4	1.2	Mature fish	Japanese smelt	Viscera removed	34.8	3.8	31	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	3	0.72	Immature fish	Empty stomach	Viscera removed	36.7	3.7	33	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.98	Mature fish	Empty stomach	Viscera removed	52.4	5.4	47	-
	H-4	Within the lake and rivers in the vicinity	2017/12/1	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.013	-	-	-	N.D.	N.D.(2.2)	N.D.(2.2)	-
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2017/12/1	Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	0.54	N.D.(0.48)	0.54	-
				Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.021	-	-	-	N.D.	N.D.(1.6)	N.D.(1.6)	-
	J-1 (south lakeside)	Within the lake and around the Oninuma	2017/12/1	Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Bellamya japonica</i>	Japanese mysterysnail	5	0.017	Imago	-	Molluscouous part	N.D.	N.D.(3.7)	N.D.(3.1)	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	84	0.038	Immature fish,Mature fish	Obscure digesta	Viscera removed	1.6	N.D.(1.7)	1.6	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	8	0.012	Immature fish	-	-	9.3	N.D.(4.4)	9.3	-
				Vertebrata	Amphibia	Anura	-	-	Frog	132	0.055	Larva (Tadpole)	-	-	7.1	N.D.(1.6)	7.1	-

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												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	Sea area in front of the Abukuma River Estuary	2017/12/4	Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Ovalipes punctatus</i>	Ovalipes punctatus	2	0.22	Imago	-	-	0.53	N.D.(0.36)	0.53	-
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Kareius bicoloratus</i>	Stone flounder	1	0.55	Immature fish	Crab	Viscera removed	N.D.	N.D.(0.48)	N.D.(0.49)	-
				Vertebrata	Osteichthyes	Zeiformes	Zeidae	<i>Zeus faber</i>	John Dory	1	0.72	Mature fish	Obscure digesta	Viscera removed	N.D.	N.D.(0.46)	N.D.(0.44)	-
Off Soma City	L-1 L-2 L-3	Matsukawaura Lagoon	2017/12/3	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.013	-	-	-	10	N.D.(2.8)	10	-
			2017/12/7	Algae/plant	Monocotyledoneae	Najadales	Zosteraceae	<i>Zostera marina</i>	Eel grass	-	0.27	-	-	-	0.67	N.D.(0.58)	0.67	-
			2017/12/3	Arthropoda	Malacostraca	Mysida	Mysidae	<i>Mysidae</i>	Mysidae	-	0.29	Imago	-	-	0.72	N.D.(0.32)	0.72	-
				Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Alpheidae</i>	Alpheidae	37	0.038	Juvenile,Imago	-	-	2.6	N.D.(1.4)	2.6	-
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon macrodactylus</i>	Palaemon macrodactylus	190	0.047	Juvenile,Imago	-	-	1.9	N.D.(1.3)	1.9	-
			2017/12/4	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Crassostrea gigas</i>	Oyster	13	0.31	Imago	-	Molluscou	0.68	N.D.(0.39)	0.68	-
				Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	50	0.26	Imago	-	Molluscou	N.D.	N.D.(0.48)	N.D.(0.57)	-
Off Iwaki City	M-1 M-2 M-3	Offshore of Hisanohama	2017/12/2	Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	<i>Hexagrammos otakii</i>	Fat greenling	2	0.11	Immature fish	Ragworm,Shrimp	Viscera removed	1.2	N.D.(0.59)	1.2	-
				Mollusca	Cephalopoda	Octopoda	Octopodidae	<i>Octopus vulgaris</i>	Common octopus	1	1.2	Imago	-	-	N.D.	N.D.(0.46)	N.D.(0.58)	-
				Echinodermata	Echinoidea	Phymosomatoida	Phymosomatidae	<i>Glyptocidaris crenularis</i>	Sea urchin	9	0.61	Imago	-	-	9.9	1.1	8.8	-
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	1	2.3	Mature fish	Congridae	Viscera removed	1.2	N.D.(0.35)	1.2	-
				Vertebrata	Osteichthyes	Tetraodontiformes	Monacanthidae	<i>Thamnaconus modestus</i>	Filefish	1	0.27	Immature fish	-	-	N.D.	N.D.(0.48)	N.D.(0.52)	-
				Vertebrata	Chondrichthyes	Rajiformes	Rajidae	<i>Okamejei kenojei</i>	Common Skete	2	1.5	Immature fish	Shrimp	Viscera removed	4.37	0.57	3.8	-

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