

○ Results (water)

Locations			2020 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°	7.5	1.4	3.8	11.2	21.3	0.10	1.5	5	4.2	N.D.(0.0011)	0.0037	0.00086
	A-1(Bottom layer)	37.6210°	140.5218°	7.5	1.5	3.8	11.6	21.5	0.10	1.5	5	4.1	N.D.(0.0012)	0.0082	-
	A-2	37.5673°	140.3946°	7.4	0.8	3.2	12.5	11.6	0.06	0.8	10	3.8	0.0015	0.025	-
	B-2	37.8121°	140.5058°	7.7	0.6	3.5	12.4	22.5	0.10	1.4	4	2.8	0.0013	0.011	-
	B-3	37.8182°	140.4679°	8.3	<0.5	2.6	12.8	8.5	0.05	1.1	2	1.8	N.D.(0.0012)	0.0023	-
Uda River	C-6	37.7764°	140.8877°	7.4	<0.5	1.8	12.1	9.7	0.05	0.8	<1	0.4	N.D.(0.0011)	0.0017	0.00066
Mano River	D-4 a	37.7308°	140.9081°	7.1	<0.5	2.0	12.0	10.2	0.06	0.9	<1	0.4	N.D.(0.0013)	0.0038	0.00079
Niida River	E-2 a	37.6640°	140.9447°	7.5	0.7	2.4	12.6	7.0	0.04	0.8	9	3.4	N.D.(0.0013)	0.012	0.0013
Ota River	F-1	37.5975°	140.9252°	7.3	<0.5	2.0	12.0	5.8	0.03	0.8	1	1.2	0.0031	0.057	0.0036
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7348°	140.8102°	7.1	0.9	3.6	10.2	7.4	0.04	1.6	3	2.9	N.D.(0.0013)	0.018	-
	G-1(Bottom layer)	37.7348°	140.8102°	7.2	0.9	3.7	10.2	7.3	0.04	1.6	3	3.0	N.D.(0.0013)	0.018	0.00085
	G-2(Surface layer)	37.7267°	140.8223°	7.2	1.0	4.3	9.4	7.3	0.04	1.9	3	3.0	N.D.(0.0013)	0.019	-
	G-2(Bottom layer)	37.7267°	140.8223°	7.2	0.7	3.4	9.4	7.3	0.04	1.8	3	3.0	0.0030	0.036	-
	G-4	37.7382°	140.8035°	7.4	<0.5	2.1	12.2	7.3	0.04	0.8	<1	0.3	N.D.(0.0011)	0.0026	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	6.9	0.6	3.0	9.6	5.5	0.03	1.3	2	1.6	N.D.(0.0012)	0.0043	-
	H-1(Bottom layer)	37.6575°	140.1264°	7.0	0.5	3.0	10.7	5.5	0.03	1.3	2	1.9	N.D.(0.0012)	0.0067	0.0010
	H-2(Surface layer)	37.6616°	140.1226°	7.1	0.5	4.3	10.7	5.5	0.03	1.3	2	4.2	N.D.(0.0012)	0.0092	-
	H-2(Bottom layer)	37.6616°	140.1226°	7.1	<0.5	3.1	10.6	5.6	0.03	1.2	4	2.5	N.D.(0.0011)	0.0058	-
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	6.8	<0.5	1.6	11.2	11.3	0.06	0.6	<1	0.3	N.D.(0.0012)	0.0039	-
	J-1(Bottom layer)	37.4203°	140.1008°	6.7	<0.5	1.7	11.2	11.2	0.06	0.7	1	0.6	N.D.(0.0013)	0.0037	0.00084
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°	8.1	0.6	1.8	9.2	4830	32.28	1.0	1	1.1	N.D.(0.0013)	0.0031	-
	K-3(Bottom layer)	38.0458°	140.9518°	8.0	<0.5	1.3	9.2	5000	33.59	0.9	2	1.1	N.D.(0.0013)	0.0038	0.00077
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.1	0.5	1.4	9.5	4840	32.83	1.0	1	0.6	N.D.(0.0012)	0.0041	0.00089
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.0	0.6	1.3	8.9	5020	33.66	1.1	3	1.0	N.D.(0.0011)	0.0026	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.0	<0.5	1.0	8.5	5020	33.75	0.9	<1	0.6	N.D.(0.0012)	0.0021	0.00085

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

○ Results (sediments)

Locations			2020 December Survey																	
	Latitude	Longitude	pH	Redox potential E <sub>N,H/E</sub> (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm <sup>3</sup> )	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°	7.2	1	64.6	12.0	41.0	2.561	-	0.0	0.2	13.1	49.8	36.9	0.012	2.0	45	950	0.55
	A-2	37.5673°	140.3946°	7.2	146	26.3	3.9	8.7	2.706	9.4	17.8	37.3	18.2	6.8	10.5	0.40	9.5	20	420	-
	B-2	37.8121°	140.5058°	7.1	157	25.9	2.3	4.5	2.679	0.0	1.2	63.4	31.1	0.7	3.6	0.30	4.8	4.6	110	-
	B-3	37.8182°	140.4679°	7.6	285	18.3	1.1	1.4	2.646	37.8	46.8	14.5	0.6	0.3		1.6	4.8	2.7	39	-
Uda River	C-6	37.7764°	140.8877°	7.8	322	18.6	0.9	1.3	2.718	15.9	29.3	51.6	2.7	0.5		0.78	4.8	2.3	57	0.33
Mano River	D-4 a	37.7308°	140.9081°	7.8	326	18.8	1.9	1.9	2.716	35.6	50.1	12.6	0.8	0.9		1.6	4.8	4.3	120	0.67
Niida River	E-2 a	37.6640°	140.9447°	7.5	341	17.1	1.8	3.4	2.691	24.7	26.9	26.6	12.3	5.7	3.8	0.89	27	27	550	0.22
Ota River	F-1	37.5975°	140.9252°	7.5	353	21.6	1.6	2.6	2.658	0.8	7.3	68.8	17.4	1.9	3.8	0.39	4.8	30	580	0.78
Lake Hayama (Mano Dam)	G-1	37.7348°	140.8102°	7.5	142	35.8	6.7	16.2	2.708	0.4	1.9	30.4	35.8	18.8	12.7	0.16	4.8	38	750	1.7
	G-2	37.7267°	140.8223°	7.3	138	41.6	6.8	18.0	2.659	5.9	3.5	6.3	26.8	34.4	23.1	0.045	19	60	1300	-
	G-4	37.7382°	140.8035°	7.7	329	24.1	2.4	1.9	2.706	5.1	41.0	45.3	5.6	0.2	2.8	0.80	9.5	13	290	-
Lake Akimoto	H-1	37.6575°	140.1264°	6.8	45	64.4	9.4	28.7	2.573	-	0.0	0.1	0.3	60.1	39.5	0.0072	2.0	38	900	1.3
	H-2	37.6616°	140.1226°	6.9	38	75.9	12.2	39.1	2.499	0.2	0.1	0.2	0.2	46.1	53.2	0.0040	4.8	92	2000	-
Lake Inawashiro	J-1	37.4203°	140.1008°	6.8	216	26.1	1.2	5.6	2.740	0.4	0.9	46.2	37.5	9.0	6.0	0.24	9.5	1.8	44	N.D.(0.13)
Off the mouth of the Abukuma River (Sea Area in front of the mouth of the Abukuma River)	K-3	38.0458°	140.9518°	7.8	261	32.6	4.1	5.5	2.702	-	0.1	0.7	46.0	40.1	13.1	0.070	2.0	6.0	130	N.D.(0.13)
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	7.8	284	18.3	1.0	0.9	2.750	1.8	5.9	64.2	26.6	1.5		0.32	4.8	0.49	13	N.D.(0.13)
Off Iwaki City (Hisanohama)	M-2	37.1996°	141.0853°	7.8	287	22.2	1.9	1.7	2.779	3.6	1.3	15.0	76.2	1.1	2.8	0.19	9.5	1.8	36	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-1	The main stream of the Abukuma River	2020/12/2	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	41	0.20	Immature fish	-	-	2.6	N.D.(0.76)	2.6	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	90	0.50	Immature fish, Mature fish	-	-	2.3	N.D.(0.92)	2.3	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	48	0.086	Immature fish	-	-	2.5	N.D.(0.91)	2.5	-	
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	3	0.066	Imago	-	-	9.7	N.D.(2.3)	9.7	-	
	A-2	Harase River	2020/12/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.011	-	-	-	71.0	3.0	68	-	
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	73	0.044	Larva(Dragonfly larva)	-	-	-	4.2	N.D.(1.7)	4.2	-
				Arthropoda	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	Melligomphus viridicostus										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	Davidius										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Anax parthenope julius</i>	Anax parthenope julius										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	Boyeria maclachlani										
				Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	3	0.0050	Juvenile	-	-	6.2	N.D.(5.6)	6.2	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	1	0.040	Mature fish	-	-	9.2	N.D.(2.4)	9.2	-	
				Vertebrata	Amphibia	Anura	-	-	Frog	11	0.011	Larva(Tadpole)	-	-	6.7	N.D.(5.9)	6.7	-	
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	2	0.0073	Imago	-	-	6.7	N.D.(5.2)	6.7	-	
				Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog										
	Vertebrata	Amphibia	Caudata	Salamandridae	<i>Cynops pyrrhogaster</i>	Cynops pyrrhogaster	1	0.0063	Imago	-	-	5.1	N.D.(5.2)	5.1	-				
	Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	8.2	N.D.(0.96)	8.2	-			
	B-3	Surikami River	2020/12/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.038	-	-	-	47	N.D.(4.0)	47	-	
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	392	0.033	Larva	-	-	8.7	N.D.(1.4)	8.7	-	
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	208	0.059	Larva	-	-	4.4	N.D.(1.7)	4.4	-	
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	142	0.048	Larva(Dragonfly larva)	-	-	1.4	N.D.(0.74)	1.4	-	
				Arthropoda	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	Melligomphus viridicostus										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	Davidius										
Vertebrata				Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	23	0.087	Immature fish	-	-	3.7	N.D.(1.3)	3.7	-		
Vertebrata				Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.95	Mature fish	-	-	7.5	N.D.(1.3)	7.5	-		
Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.26	-	-	-	4.0	N.D.(0.97)	4.0	-				

\*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			
Uda River	C-6	The main stream of the Uda River	2020/12/5	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0031	-	-	-	50	N.D.(15)	50	-		
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia valida</i>	<u>Isonychia valida</u>	128	0.0073	Larva	-	-	-	10	N.D.(3.8)	10	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	<u>Mont mayfly</u>										
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimura tibialis</u>	201	0.016	Larva	-	-	-	N.D.	N.D.(2.9)	N.D.(2.4)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Paragnetina sp.</i>	<u>Paragnetina</u>										
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<u>Macromia amphigena</u>	60	0.010	Larva(Dragonfly larva)	-	-	-	5.2	N.D.(4.4)	5.2	-
				Arthropoda	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	<u>Anotogaster sieboldii</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	<u>Stylogomphus suzukii</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<u>Sieboldius albardae</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	<u>Asiagomphus melaenops</u>										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<u>Boyeria maclachlani</u>	15	0.0061	Larva	-	-	-	4.2	N.D.(3.9)	4.2	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes sp.</i>	<u>Parachauliodes</u>										
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>	1	0.0090	Immature fish	-	-	-	4.5	N.D.(4.0)	4.5	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus pollux</i>	<u>Japanese fluvial sculpin</u>										
				Vertebrata	Amphibia	Anura	-	-	<u>Frog</u>	7	0.0039	Larva(Tadpole)	-	-	-	6.6	N.D.(6.9)	6.6	-
Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.24	-	-	-	2.6	N.D.(0.74)	2.6	-				
Mano River	D-4 b	The main stream of the Mano River	2020/12/5	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.013	-	-	-	6.5	N.D.(6.6)	6.5	-		
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia valida</i>	<u>Isonychia valida</u>	113	0.0062	Larva	-	-	-	9.2	N.D.(12)	9.2	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	<u>Mont mayfly</u>	520	0.0030	Larva	-	-	-	24	N.D.(2.5)	24	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<u>Oyamia lugubris</u>	469	0.019	Larva	-	-	-	3.4	N.D.(3.0)	3.4	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimura tibialis</u>										
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<u>Stenopsyche marmorata</u>	75	0.0090	Larva	-	-	-	16	N.D.(3.5)	16	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	<u>Stylogomphus suzukii</u>	122	0.017	Larva(Dragonfly larva)	-	-	-	3.9	N.D.(2.6)	3.9	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	<u>Melligomphus viridicostus</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<u>Sieboldius albardae</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sinogomphus flavolimbatus</i>	<u>Sinogomphus flavolimbatus</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	<u>Asiagomphus melaenops</u>										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<u>Boyeria maclachlani</u>	70	0.033	Larva	-	-	-	6.1	N.D.(2.8)	6.1	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>										
				Mollusca	Bivalvia	Unionoida	Unionidae	<i>Inversiunio jokohamensis</i>	<u>Inversiunio jokohamensis</u>	16	0.048	Juvenile	-	Molluscous part	-	20	N.D.(3.1)	20	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	<u>Japanese dace</u>	99	0.35	Immature fish,Mature fish	-	-	-	11	N.D.(0.71)	11	-
Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	<u>Small mouth bass</u>	26	0.49	Immature fish	Obscure digesta	Viscera removed	-	10	N.D.(1.3)	10	-				
Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.24	-	-	-	4.3	N.D.(0.99)	4.3	-				
D-5	The main stream of the Mano River	2020/12/3	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	3	0.51	Mature fish	Caterpillar,Grasshopper,Rhaphidophoridae	Viscera removed	115.0	5.0	110	-		

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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			
Niida River	E-2 b	The main stream of the Niida River	2020/12/5	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0072	-	-	-	454	24	430	-		
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia valida</i>	Isonychia valida	349	0.011	Larva	-	-	-	52	N.D.(12)	52	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	384	0.026	Larva	-	-	-	165.8	5.8	160	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris	152	0.014	Larva	-	-	-	24	N.D.(4.5)	24	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimuria tibialis</u>										
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	106	0.0099	Larva	-	-	-	180	N.D.(12)	180	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	120	0.020	Larva(Dragonfly larva)	-	-	-	13	N.D.(3.6)	13	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	Melligomphus viridicostus										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius</u>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops	130	0.038	Larva	-	-	-	14	N.D.(2.7)	14	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis										
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.020	Imago	-	-	Molluscos part	13	N.D.(3.7)	13	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Acheilognathus melanogaster</i>	Acheilognathus melanogaster	11	0.013	Immature fish,Mature fish	-	-	-	21	N.D.(7.1)	21	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	5	0.018	Immature fish,Mature fish	-	-	-	22	N.D.(3.7)	22	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	<u>Rhinogobius nagoyae</u>										
				Vertebrata	Amphibia	Anura	Hylidae	<i>Hyla japonica</i>	Japanese tree frog	6	0.014	Imago	-	-	-	11	N.D.(2.8)	11	-
Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	<u>Wrinkled frog</u>														
			Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	70.1	3.1	67	-		
Ota River	F-1	The main stream of the Ota River	2020/12/4	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0024	-	-	-	513	23	490	-		
				Algae/plant	Zygnematophyceae	Zygnematales	Zygnemataceae	<i>Spirogyra sp.</i>	Spirogyra	-	0.10	-	-	-	125.9	5.9	120	-	
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia valida</i>	Isonychia valida	162	0.0085	Larva	-	-	-	110	N.D.(14)	110	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	313	0.020	Larva	-	-	-	120	N.D.(8.0)	120	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris	1076	0.077	Larva	-	-	-	20	N.D.(2.5)	20	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimuria tibialis</u>										
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	8	0.013	Imago	-	-	-	150	N.D.(8.9)	150	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	3	0.098	Immature fish,Mature fish	Empty stomach	Viscera removed	-	249.1	9.1	240	-
			Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	30.4	1.4	29	-		

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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 Hayama	G-1 G-2 G-3	In the lake	2020/12/3	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.019	-	-	-	1.9	N.D.(1.9)	1.9	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	20	0.021	Immature fish	-	-	-	14	N.D.(1.9)	14	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<u>Carassius auratus langsdorfii</u>	Carassius auratus langsdorfii	2	3.0	Mature fish	Obscure digesta	Viscera removed	30	N.D.(1.5)	30	0.79	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	2.2	Mature fish	Obscure digesta	Viscera removed	4.0	N.D.(1.5)	4.0	0.27		
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	2	0.0045	Mature fish	-	-	-	12	N.D.(6.9)	12	-	
	G-4	Inflowing rivers	2020/12/3	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	1	0.013	Immature fish	-	-	-	17	N.D.(9.1)	17	-	
				Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0053	-	-	-	-	59	N.D.(14)	59	-	
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	<u>Ephemera japonica</u>	Ephemera japonica	216	0.012	Larva	-	-	-	55.6	3.6	52	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<u>Oyamia lugubris</u>	Oyamia lugubris	236	0.023	Larva	-	-	-	1.9	N.D.(2.0)	1.9	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<u>Kamimuria tibialis</u>	Kamimuria tibialis										
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Paragnetina sp.</i>	<u>Paragnetina sp.</u>	Paragnetina	51	0.0086	Larva	-	-	-	14	N.D.(4.4)	14	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<u>Stenopsyche marmorata</u>	Stenopsyche marmorata										
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<u>Macromia amphigena amphigena</u>	Macromia amphigena										
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	<u>Anotogaster sieboldii</u>	Anotogaster sieboldii	69	0.019	Larva(Dragonfly larva)	-	-	-	5.5	N.D.(4.9)	5.5	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	<u>Melligomphus viridicostus</u>	Melligomphus viridicostus										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius sp.</u>	Davidius										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<u>Boyeria maclachlani</u>	Boyeria maclachlani										
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>	Protohermes grandis	14	0.011	Larva	-	-	-	6.6	N.D.(5.3)	6.6	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	26	0.021	Immature fish	-	-	-	9.2	N.D.(2.1)	9.2	-	
Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	-	7.8	N.D.(0.50)	7.8	-				
Lake Akimoto	H-1 H-2 H-3	In the lake	2020/12/1	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.023	-	-	-	2.4	N.D.(1.9)	2.4	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.53	Mature fish	Obscure digesta	Viscera removed	21	N.D.(1.4)	21	-		
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	17	0.11	Mature fish	-	-	-	16	N.D.(1.1)	16	-	
	H-4	Within the lake and rivers in the vicinity	2020/12/1	Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	<u>Ephemera japonica</u>	203	0.0086	Larva	-	-	-	11	N.D.(6.8)	11	-	
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	<u>Anotogaster sieboldii</u>	Anotogaster sieboldii	13	0.011	Larva	-	-	-	4.9	N.D.(3.7)	4.9	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<u>Davidius sp.</u>	Davidius										
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<u>Boyeria maclachlani</u>	Boyeria maclachlani	9	0.0066	Imago	-	-	-	8.6	N.D.(9.7)	8.6	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	<u>Semisulcospira libertina</u>	Semisulcospira libertina										
Vertebrata	Amphibia	Anura	Ranidae	<i>Rana ornativentris</i>	<u>Montane brown frog</u>	Montane brown frog														
Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	<u>Wrinkled frog</u>	Wrinkled frog	3	0.057	Imago	-	-	-	13	N.D.(2.8)	13	-				
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2020/12/1	Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	2.9	N.D.(0.81)	2.9	-		
				Algae/plant	-	-	-	-	-	Plankton (Planktonic algae)	-	0.025	-	-	-	-	N.D.	N.D.(1.6)	N.D.(1.4)	-
	J-1 (south lakeside)	Within the lake and around the Oninuma	2020/12/1	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudorasbora parva</i>	Stone moroko	20	0.033	Mature fish	-	-	-	6.4	N.D.(1.5)	6.4	-	
Vertebrata	Osteichthyes	Perciformes	Actinopterygii	<i>Channa argus</i>	Snakehead	2	0.039	Immature fish	-	-	-	9.3	N.D.(1.4)	9.3	-					

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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	
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	2020/12/6	Mollusca	Bivalvia	Veneroidea	Macluridae	<i>Pseudocardium sachalinense</i>	Sakhalin surf clam	2	0.22	Imago	-	Molluscos part	N.D.	N.D.(0.33)	N.D.(0.30)	-
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronectes herzensteini</i>	Yellow striped flounder	5	0.45	Immature fish	Crab	Viscera removed	N.D.	N.D.(0.26)	N.D.(0.25)	-
				Vertebrata	Osteichthyes	Perciformes	Sebastidae	<i>Sebastes schlegelii</i>	Black rockfish	1	0.59	Mature fish	Obscure digesta	Viscera removed	0.50	N.D.(0.41)	0.50	-
Off Soma City	L-1 L-2 L-3	Matsukawaura Lagoon	2020/12/6	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.020	-	-	-	N.D.	N.D.(2.0)	N.D.(1.9)	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	<i>Hexagrammos otakii</i>	Fat greenling	3	0.19	Immature fish	Crab,Shrimp	Viscera removed	0.68	N.D.(0.53)	0.68	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Scorpaenidae	<i>Sebastes cheni</i>	Rockfish	18	0.41	Immature fish	Empty stomach	Viscera removed	0.58	N.D.(0.38)	0.58	-
Off Iwaki City	M-1 M-2 M-3	Offshore of Hisanohama	2020/12/8	Mollusca	Cephalopoda	Decapodiformes	Sepiidae	<i>Sepia andreana</i>	Sepia andreana	3	0.069	Juvenile	-	-	N.D.	N.D.(1.2)	N.D.(1.1)	-
				Mollusca	Cephalopoda	Octopoda	Octopodidae	<i>Octopus vulgaris</i>	Common octopus	1	1.3	Imago	-	-	N.D.	N.D.(0.29)	N.D.(0.27)	-
				Vertebrata	Osteichthyes	Perciformes	Lateolabracidae	<i>Lateolabrax japonicus</i>	Japanese sea bass	1	1.8	Mature fish	Empty stomach	Viscera removed	0.56	N.D.(0.43)	0.56	-

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