

○ Results (water)

Locations			2021 October - November 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°	7.6	1.1	4.0	9.7	18.7	0.09	1.7	6	3.6	N.D.(0.0014)	0.0069	0.0012
	A-1(Bottom layer)	37.6210°	140.5218°	7.6	1.0	4.4	10.0	18.9	0.09	1.8	7	3.9	N.D.(0.0015)	0.0059	-
	A-2	37.5673°	140.3946°	7.6	<0.5	2.8	10.4	12.2	0.06	1.0	4	2.6	N.D.(0.0015)	0.0077	-
	B-2	37.8121°	140.5058°	7.6	0.6	4.2	10.3	17.2	0.09	1.8	9	5.0	N.D.(0.0016)	0.026	-
	B-3	37.8182°	140.4679°	7.8	<0.5	3.3	11.0	9.9	0.05	1.4	4	2.2	N.D.(0.0015)	0.0067	-
Uda River	C-6	37.7764°	140.8877°	7.5	<0.5	1.8	11.0	9.8	0.05	0.8	<1	0.8	N.D.(0.0014)	0.0033	0.00054
Mano River	D-4 a	37.7308°	140.9081°	7.2	<0.5	2.4	10.6	10.1	0.05	1.1	1	1.2	N.D.(0.0015)	0.0087	0.00098
Niida River	E-2 a	37.6640°	140.9447°	7.4	<0.5	3.3	10.8	7.0	0.04	1.1	16	12.3	0.0040	0.12	0.0014
Ota River	F-1	37.5975°	140.9252°	7.4	<0.5	2.3	10.3	5.2	0.03	0.9	<1	0.9	0.0022	0.077	0.0023
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7348°	140.8102°	7.2	1.2	3.6	8.5	7.2	0.04	1.7	2	2.0	N.D.(0.0014)	0.013	-
	G-1(Bottom layer)	37.7348°	140.8102°	7.2	0.5	3.2	8.6	7.5	0.04	1.7	2	1.5	N.D.(0.0014)	0.0079	0.00067
	G-2(Surface layer)	37.7267°	140.8223°	7.3	<0.5	3.2	8.1	7.6	0.04	1.7	2	1.7	N.D.(0.0015)	0.0098	-
	G-2(Bottom layer)	37.7267°	140.8223°	7.2	0.5	3.3	8.2	7.7	0.04	1.9	2	1.7	N.D.(0.0016)	0.014	-
	G-4	37.7382°	140.8035°	7.5	<0.5	2.2	10.8	7.5	0.04	1.0	2	0.8	N.D.(0.0014)	0.0052	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	7.1	<0.5	3.5	8.5	5.4	0.03	1.5	1	1.3	N.D.(0.0015)	0.0068	-
	H-1(Bottom layer)	37.6575°	140.1264°	6.5	0.5	4.4	2.1	4.9	0.03	1.7	6	4.4	N.D.(0.0015)	0.021	0.0012
	H-2(Surface layer)	37.6616°	140.1226°	7.1	<0.5	3.4	8.3	5.7	0.03	1.4	6	3.7	N.D.(0.0015)	0.016	-
	H-2(Bottom layer)	37.6616°	140.1226°	7.0	<0.5	4.2	8.3	5.8	0.04	1.5	14	7.8	N.D.(0.0016)	0.024	-
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	7.3	<0.5	1.6	9.4	11.5	0.06	0.8	<1	0.4	N.D.(0.0014)	0.0054	-
	J-1(Bottom layer)	37.4203°	140.1008°	7.0	<0.5	2.2	9.8	11.8	0.06	1.0	<1	0.6	N.D.(0.0014)	0.0055	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	0.5	1.5	7.7	4900	31.99	1.0	2	1.2	N.D.(0.0014)	0.0038	-
	K-3(Bottom layer)	38.0458°	140.9518°	8.0	<0.5	1.7	7.9	4900	33.60	1.1	4	1.5	N.D.(0.0015)	0.0046	0.00084
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.1	0.6	1.8	8.9	4830	32.50	1.2	3	1.8	N.D.(0.0015)	0.017	0.00080
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.1	<0.5	1.7	8.1	4980	33.83	1.4	2	0.8	N.D.(0.0016)	0.0044	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.1	<0.5	1.3	7.5	5160	34.04	1.1	2	0.8	N.D.(0.0014)	0.0030	0.00082

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

○ Results (sediments)

Locations			2021 October - November Survey																	
Location	Latitude	Longitude	pH	Redox potential E <sub>NHE</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°	7.1	2	47.6	10.6	31.0	2.544	0.0	0.0	0.7	6.9	58.2	34.2	0.012	2.0	26	660	0.47
	A-2	37.5673°	140.3946°	7.2	128	19.6	3.0	5.7	2.716	21.8	32.0	26.0	8.2	4.2	7.8	0.94	9.5	7.2	200	-
	B-2	37.8121°	140.5058°	7.4	425	21.7	1.5	2.7	2.766	0.0	1.0	72.0	23.0	0.7	3.3	0.33	2.0	2.3	69	-
	B-3	37.8182°	140.4679°	7.5	399	13.8	1.1	1.2	2.631	43.1	29.9	11.8	6.6	5.4	3.2	1.7	9.5	0.97	39	-
Uda River	C-6	37.7764°	140.8877°	7.8	460	18.1	1.1	0.9	2.659	32.3	50.9	8.4	1.3	3.9	3.2	1.5	9.5	1.2	36	0.33
Mano River	D-4 a	37.7308°	140.9081°	7.6	411	19.5	2.1	2.6	2.698	28.8	36.0	23.9	4.0	4.7	2.6	1.2	9.5	6.5	140	0.72
Niida River	E-2 a	37.6640°	140.9447°	7.5	478	21.7	1.2	1.7	2.662	1.1	15.2	72.5	6.6	1.4	3.2	0.58	4.8	9.8	260	0.15
Ota River	F-1	37.5975°	140.9252°	7.5	484	17.8	0.8	1.0	2.645	23.0	36.7	27.7	4.5	4.3	3.8	1.1	9.5	8.0	230	0.20
Lake Hayama (Mano Dam)	G-1	37.7348°	140.8102°	7.2	187	33.7	6.1	7.9	2.612	2.8	6.7	32.4	19.8	27.1	11.2	0.16	9.5	27	700	1.6
	G-2	37.7267°	140.8223°	7.0	150	25.6	5.2	8.7	2.606	9.3	5.5	13.5	23.1	28.6	20.0	0.083	27	22	580	-
	G-4	37.7382°	140.8035°	7.8	452	26.2	2.6	2.0	2.676	0.1	2.2	39.5	43.2	9.6	5.4	0.21	4.8	9.6	240	-
Lake Akimoto	H-1	37.6575°	140.1264°	6.8	67	55.1	9.1	26.7	2.531	0.0	0.1	0.0	0.3	61.1	38.5	0.0088	2.0	74	2200	1.1
	H-2	37.6616°	140.1226°	6.8	23	62.8	13.3	44.7	2.451	1.5	0.6	1.4	1.2	46.6	48.7	0.0053	9.5	77	2100	-
Lake Inawashiro	J-1	37.4203°	140.1008°	6.6	390	24.1	1.0	2.1	2.831	0.3	0.7	61.6	32.0	1.0	4.4	0.29	4.8	2.7	49	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°	7.7	239	32.9	4.5	8.6	2.668	0.0	0.0	0.7	33.0	51.9	14.4	0.050	2.0	6.3	160	N.D.(0.12)
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	7.7	234	22.2	1.7	3.9	2.711	0.4	1.3	40.7	43.3	5.0	9.3	0.21	4.8	2.9	73	N.D.(0.13)
Off Iwaki City (Hisanohama)	M-2	37.1996°	141.0853°	7.7	330	23.3	1.9	1.6	2.744	1.0	0.4	2.0	88.0	4.5	4.1	0.15	4.8	1.3	31	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	2021/10/17	Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Neocaridina sp.</i>	Neocaridina	228	0.049	Juvenile,Imago	-	-	2.8	N.D.(0.88)	2.8	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	19	0.30	Immature fish,Mature fish	-	-	5.8	N.D.(0.60)	5.8	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	<u>Japanese brown frog</u>	7	0.043	Imago	-	-	34	N.D.(2.7)	34	-
				Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	American bullfrog									
	A-2	Harase River	2021/10/17	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0096	-	-	-	69	N.D.(8.4)	69	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	65	0.052	Larva(Dragonfly larva)	-	-	9.3	N.D.(1.2)	9.3	-
				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									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace									
	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	6	0.11	Immature fish	-	-	6.5	N.D.(1.4)	6.5	-			
	B-2	The main stream of the Abukuma River	2021/10/16	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.95	Mature fish	Obscure digesta	Viscera removed	3.6	N.D.(0.60)	3.6	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbuis</i>	Hemibarbus barbuis	3	3.9	Mature fish	Obscure digesta	Viscera removed	6.5	N.D.(0.82)	6.5	-
	B-3	Surikami River	2021/10/27	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.027	-	-	-	42	N.D.(3.4)	42	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	1070	0.054	Larva	-	-	7.5	N.D.(0.67)	7.5	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	473	0.086	Larva	-	-	7.8	N.D.(0.80)	7.8	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	12	0.040	Immature fish	-	-	2.9	N.D.(1.3)	2.9	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbuis</i>	Hemibarbus barbuis	3	0.020	Immature fish	-	-	2.1	N.D.(2.0)	2.1	-
Vertebrata				Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	1	0.58	Mature fish	Obscure digesta	Viscera removed	0.80	N.D.(0.61)	0.80	-	

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

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\*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	2021/10/19	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0021	-	-	-	120	N.D.(15)	120	-	
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly	22	0.023	Larva	-	-	-	19	N.D.(1.5)	19	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimura tibialis</i>	<u>Kamimura tibialis</u>	99	0.0059	Larva	-	-	-	N.D.	N.D.(4.6)	N.D.(3.3)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Paragnetina sp.</i>	Paragnetina										
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Neoperla sp.</i>	Neoperla										
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	128	0.031	Larva(Dragonfly larva)	-	-	-	2.9	N.D.(1.3)	2.9	-
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii										
				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>Boyeria maclachlani</i>	Boyeria maclachlani										
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	4	0.029	Immature fish	-	-	-	3.4	N.D.(1.2)	3.4	-
Vertebrata	Amphibia	Anura	-	-	-	34	0.027	Larva(Tadpole)	-	-	-	33.1	2.1	31	-				
Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	American bullfrog	30	0.34	Larva(Tadpole)	-	-	-	35.5	1.5	34	-				
Mano River	D-3	The main stream of the Mano River	2021/10/20	Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	2	0.018	Imago	-	-	-	7.8	N.D.(2.5)	7.8	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus reinii</i>	Sculpin	1	0.025	Immature fish	-	-	-	5.3	N.D.(2.9)	5.3	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.033	Immature fish	-	-	-	2.5	N.D.(1.4)	2.5	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	3	0.073	Immature fish,Mature fish	-	-	-	18	N.D.(2.1)	18	-
				Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	American bullfrog	2	0.020	Larva(Tadpole)	-	-	-	50	N.D.(2.3)	50	-
	D-4 b	The main stream of the Mano River	2021/10/20	Algae/plant	-	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0037	-	-	-	200	N.D.(11)	200	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes sp.</i>	Parachauliodes	41	0.019	Larva	-	-	-	4.5	N.D.(2.0)	4.5	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>										
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	7	0.017	Imago	-	-	-	10	N.D.(2.2)	10	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	17	0.38	Immature fish,Mature fish	-	-	-	9.9	N.D.(1.3)	9.9	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	6	0.33	Immature fish	Fish	Viscera removed	-	8.3	N.D.(1.2)	8.3	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	7	0.023	Immature fish,Mature fish	-	-	-	10	N.D.(2.8)	10	-
	Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	<u>Rhinogobius nagoyae</u>													
D-5	The main stream of the Mano River	2021/10/20	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	105	1.1	Immature fish	-	-	-	9.2	N.D.(0.87)	9.2	0.17	
			Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	2	0.030	Immature fish	-	-	-	5.3	N.D.(2.6)	5.3	-	

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											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137											
Niida River	E-2 b	The main stream of the Niida River	2021/10/20	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0039	-	-	-	180	N.D.(20)	180	-										
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	<i>Semisulcospira libertina</i>	30	0.019	Juvenile,Imago	-	Molluscos part	17	N.D.(4.2)	17	-									
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	3	0.62	Immature fish,Mature fish	Empty stomach	Viscera removed	28	N.D.(1.2)	28	-									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	19	0.42	Immature fish,Mature fish	-	-	24	N.D.(1.4)	24	-									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	2	0.23	Immature fish	-	-	13	N.D.(1.4)	13	-									
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.11	Immature fish	Freshwater shrimp	Viscera removed	14	N.D.(1.6)	14	-									
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	3	0.018	Imago	-	-	35	N.D.(4.9)	35	-									
Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog																						
Niida River	E-3	The main stream of the Niida River	2021/10/20	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	2	0.49	Immature fish,Mature fish	Fish	Viscera removed	23	N.D.(1.2)	23	-									
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	22	0.82	Immature fish,Mature fish	-	-	35	N.D.(1.4)	35	-									
Ota River	F-1	The main stream of the Ota River	2021/10/21	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.014	-	-	-	54	N.D.(7.8)	54	-										
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<i>Oyamia lugubris</i>	124	0.032	Larva	-	-	13	N.D.(3.4)	13	-									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<i>Stenopsyche marmorata</i>	228	0.045	Larva	-	-	75	N.D.(5.2)	75	-									
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	98	0.029	Larva(Dragonfly larva)	-	-	27	N.D.(3.7)	27	-									
				Arthropoda	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>																		
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	<i>Stylogomphus suzukii</i>																		
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	<i>Melligomphus viridicostus</i>																		
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<i>Sieboldius albardae</i>																		
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<i>Davidius</i>																		
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	<i>Asiagomphus melaenops</i>																		
				Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<i>Boyeria maclachlani</i>																		
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn										35	0.049	Juvenile,Imago	-	-	78	N.D.(5.0)	78	-
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel										2	0.31	Mature fish	Obscure digesta	Viscera removed	84.6	2.6	82	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	4	0.11	Immature fish	-	-	125.5	5.5	120	-									
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	8	0.095	Imago	-	-	54	N.D.(2.8)	54	-									
				Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog																		
				Ota River	F-5	The main stream of the Ota River	2021/10/20	Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	3	0.028	Imago	-	-	30	N.D.(4.5)	30	-					
Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae					<i>Cottus reinii</i>	Sculpin	8	0.13	Immature fish	-	-	34	N.D.(2.4)	34	-									
Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Tribolodon hakonensis</i>	Japanese dace	5	0.11	Immature fish,Mature fish	-	-	36.0	2.0	34	-									
Vertebrata	Osteichthyes	Salmoniformes	Osmeridae					<i>Plecoglossus altivelis altivelis</i>	Sweetfish	8	0.30	Immature fish,Mature fish	-	-	154.8	4.8	150	-									

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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	2021/10/25	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.014	-	-	-	2.0	N.D.(2.4)	2.0	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	2	0.99	Mature fish	Obscure digesta	Viscera removed	44	N.D.(2.3)	44	0.78	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorfii</i>	2	2.7	Mature fish	Obscure digesta	Viscera removed	19	N.D.(1.5)	19	0.93	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	2	2.4	Mature fish	Obscure digesta	Viscera removed	15	N.D.(1.4)	15	0.41	
	G-4	Inflowing rivers	2021/10/25	Algae/plant	-	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0040	-	-	-	70	N.D.(20)	70	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	147	0.065	Larva(Dragonfly larva)	-	-	9.8	N.D.(2.7)	9.8	-	
				Arthropoda	Insecta	Odonata	Cordulegastridae	<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>Planaeschna milnei milnei</i>	Planaeschna milnei milnei	21	0.017	Larva	-	-	5.3	N.D.(2.0)	5.3	-	
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes sp.</i>	Parachauliodes										
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis										
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	27	0.013	Juvenile,Imago	-	Molluscos part	14	N.D.(2.9)	14	-	
Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	60	0.28	Immature fish	-	-	8.2	N.D.(1.3)	8.2	-					
Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	6	0.068	Immature fish	-	-	13	N.D.(2.5)	13	-					
Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius flumineus</i>	Rhinogobius flumineus	8	0.012	Immature fish,Mature fish	-	-	7.4	N.D.(2.8)	7.4	-					
Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.90	Mature fish	Empty stomach	Viscera removed	104.2	4.2	100	-					
Lake Akimoto	H-1 H-2 H-3	In the lake	2021/10/18	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0080	-	-	-	N.D.	N.D.(4.0)	N.D.(2.8)	-	
			2021/10/19	Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	7	0.41	Imago	-	-	19	N.D.(1.2)	19	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	6	0.97	Mature fish	Obscure digesta	Viscera removed	22	N.D.(1.1)	22	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorfii</i>	3	2.7	Mature fish	Obscure digesta	Viscera removed	26	N.D.(1.3)	26	0.84	
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	36	0.25	Mature fish	-	-	11	N.D.(0.87)	11	-	
Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	1	0.73	Immature fish	Japanese smelt	Viscera removed	22.4	1.4	21	-					
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2021/10/17	Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	7	0.13	Juvenile,Imago	-	-	12	N.D.(0.65)	12	-	
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	1	0.55	Mature fish	Empty stomach	Viscera removed	22	N.D.(1.4)	22	-	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius kurodai</i>	<u>Rhinogobius kurodai</u>	51	0.021	Immature fish,Mature fish	-	-	2.4	N.D.(1.4)	2.4	-	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius sp.</i>	Rhinogobius										
	J-1 (south lakeside)	Within the lake and around the Oninuma	2021/10/18	Algae/plant	-	-	-	-	-	Plankton (Planktonic algae)	-	0.0068	-	-	-	N.D.	N.D.(4.7)	N.D.(2.6)	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorfii</i>	3	0.021	Immature fish	-	-	10	N.D.(2.1)	10	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	1	0.014	Mature fish	-	-	5.5	N.D.(2.3)	5.5	-	
Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Lepomis macrochirus</i>	Bluegill	4	0.052	Immature fish	-	-	7.9	N.D.(1.8)	7.9	-					

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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	2021/10/25	Vertebrata	Osteichthyes	Scorpaeniformes	Platycephalidae	<i>Platycephalus sp.</i>	Flathead	1	0.46	Mature fish	Mantis shrimp,	Viscera removed	0.41	N.D.(0.24)	0.41	-
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronectes yokohamae</i>	Marbled sole	2	0.21	Immature fish	Empty stomach	Viscera removed	N.D.	N.D.(0.30)	N.D.(0.30)	-
Off Soma City	L-1 L-2 L-3	Matsukawaura Lagoon	2021/10/21	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.013	-	-	-	14	N.D.(2.8)	14	-
			2021/10/25	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Crassostrea gigas</i>	Oyster	10	0.19	Juvenile,Imago	-	Molluscos part	0.33	N.D.(0.40)	0.33	-
				Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	30	0.11	Imago	-	Molluscos part	0.80	N.D.(0.40)	0.80	-
			2021/10/21	Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	<i>Hexagrammos otakii</i>	Fat greenling	1	0.030	Immature fish	Shrimp	Viscera removed	N.D.	N.D.(1.6)	N.D.(1.2)	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Scorpaenidae	<i>Sebastes cheni</i>	Rockfish	11	0.12	Immature fish	-	-	0.64	N.D.(0.44)	0.64	-
				Vertebrata	Osteichthyes	Perciformes	Mugilidae	<i>Mugil cephalus cephalus</i>	Flathead mullet	15	0.15	Immature fish	-	-	9.14	0.44	8.7	-
Vertebrata	Osteichthyes	Perciformes	Sebastidae	<i>Sebastes schlegelii</i>	Black rockfish	1	0.19	Immature fish	Crab	Viscera removed	0.70	N.D.(0.35)	0.70	-				
Off Iwaki City	M-4	Hisanohama Coastal areas	2021/10/26	Algae/plant	Phaeophyceae	Laminariales	Laminariaceae	<i>Eisenia bicyclis</i>	Eisenia bicyclis	-	0.30	-	-	-	0.44	N.D.(0.24)	0.44	-
				Mollusca	Gastropoda	Archaeogastropoda	Haliotidae	<i>Haliotis sp.</i>	Abalone	3	0.22	Juvenile,Imago	-	Molluscos part	N.D.	N.D.(0.26)	N.D.(0.25)	-
				Echinodermata	Echinoidea	Echinoidea	Strongylocentrotidae	<i>Strongylocentrotus nudus</i>	Northern sea urchin	6	0.68	Imago	-	-	0.40	N.D.(0.22)	0.40	-
				Vertebrata	Osteichthyes	Tetraodontiformes	Tetraodontidae	<i>Takifugu niphobles</i>	Takifugu niphobles	24	0.11	Immature fish	-	-	0.39	N.D.(0.35)	0.39	-

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