○ Results (water)

Locations				2022 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	1.9	3.6	11.9	21.7	0.11	1.6	5	2.5	N.D.(0.0014)	0.0052	0.00072
	A-1(Bottom layer)	37.6210°	140.5218°	7.5	2.1	3.6	12.1	21.7	0.10	1.6	7	2.8	N.D.(0.0015)	0.021	-
	A-2	37.5673°	140.3946°	7.6	0.6	2.1	12.7	11.6	0.06	0.9	<1	0.6	N.D.(0.0014)	0.0037	-
	B-2	37.8121°	140.5058°	7.5	1.6	3.3	12.6	22.1	0.11	1.4	5	2.4	N.D.(0.0015)	0.0068	-
	B-3	37.8182°	140.4679°	7.7	0.5	2.6	12.5	10.8	0.06	1.2	2	0.9	N.D.(0.0015)	0.0037	-
Uda River	C-6	37.7764°	140.8877°	7.8	0.6	1.8	12.8	10.7	0.06	0.8	<1	0.5	N.D.(0.0016)	0.0022	0.00076
Mano River	D-4 a	37.7308°	140.9081°	7.4	<0.5	2.0	12.3	11.5	0.06	0.9	<1	0.6	N.D.(0.0015)	0.0019	0.00085
Niida River	E-2 a	37.6640°	140.9447°	7.5	<0.5	2.1	12.8	8.2	0.05	0.9	<1	1.0	N.D.(0.0016)	0.034	0.0015
Ota River	F-1	37.5975°	140.9252°	7.4	0.7	2.4	12.3	7.0	0.04	1.1	<1	0.7	0.0017	0.051	0.0027
Ukedo River	N-1	37.4998°	140.9835°	7.1	1.1	2.3	11.1	9.2	0.05	1.5	<1	0.6	0.0025	0.058	0.0020
	N-2	37.5070°	140.9456°	7.3	<0.5	1.8	11.6	7.5	0.04	0.8	<1	0.4	0.0019	0.066	-
	N-3	37.4754°	140.9598°	7.4	0.6	1.8	11.9	7.6	0.04	0.6	2	1.3	N.D.(0.0015)	0.020	-
Tomioka River	O-1	37.3547°	140.9780°	7.4	1.2	2.1	11.3	8.5	0.05	0.8	<1	1.0	N.D.(0.0012)	0.010	0.0010
	O-2	37.3624°	140.9612°	7.6	0.7	1.7	11.2	8.0	0.04	0.7	<1	0.8	N.D.(0.0014)	0.012	-
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7348°	140.8102°	7.2	1.0	3.2	10.5	8.2	0.04	1.7	3	1.7	N.D.(0.0014)	0.011	-
	G-1(Bottom layer)	37.7348°	140.8102°	7.3	0.9	3.1	10.6	8.3	0.05	1.5	3	1.6	N.D.(0.0013)	0.0096	0.00088
	G-2(Surface layer)	37.7267°	140.8223°	7.3	0.8	3.2	9.5	8.0	0.04	1.6	2	1.6	N.D.(0.0016)	0.011	-
	G-2(Bottom layer)	37.7267°	140.8223°	7.3	0.9	3.2	9.6	8.0	0.04	1.6	2	1.5	N.D.(0.0015)	0.014	-
	G-4	37.7382°	140.8035°	7.5	0.9	2.1	12.0	8.4	0.05	0.9	<1	0.5	N.D.(0.0015)	0.0064	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	7.1	0.7	2.9	9.9	5.2	0.03	1.3	4	4.9	N.D.(0.0013)	0.0046	-
	H-1(Bottom layer)	37.6575°	140.1264°	7.1	0.6	2.8	10.1	5.4	0.03	1.3	7	7.0	N.D.(0.0013)	0.0078	0.0011
	H-2(Surface layer)	37.6616°	140.1226°	7.2	0.7	2.9	10.4	5.4	0.03	1.1	7	6.5	N.D.(0.0013)	0.013	-
	H-2(Bottom layer)	37.6616°	140.1226°	7.2	0.6	3.0	10.3	5.5	0.03	1.2	6	6.2	N.D.(0.0014)	0.013	-
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	6.9	<0.5	1.3	11.0	11.7	0.06	0.7	<1	0.3	N.D.(0.0014)	0.0042	-
	J-1(Bottom layer)	37.4203°	140.1008°	6.9	0.9	1.8	10.6	11.9	0.06	1.1	<1	0.5	N.D.(0.0015)	0.0040	0.00086
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	0.8	1.8	8.2	4740	33.13	1.0	3	2.1	N.D.(0.0014)	0.0046	-
	K-3(Bottom layer)	38.0458°	140.9518°	8.0	0.7	2.1	8.3	4780	33.50	1.0	4	2.8	N.D.(0.0015)	0.0054	0.00072
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.0	0.8	2.4	8.5	4680	33.16	1.1	6	3.4	N.D.(0.0016)	0.0076	0.00080
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.1	<0.5	0.7	7.6	4940	34.50	1.0	<1	0.3	N.D.(0.0016)	0.0015	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.1	<0.5	0.7	7.3	4880	34.51	1.0	<1	0.4	N.D.(0.0016)	0.0016	0.00080

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

○ Results (sediments)

Locations				2022 December Survey																
										Grain size distribution								Cs-134	Cs-137	Sr-90
		Latitude	Longitude	pH	Redox potential $E_{N.H.E}$ (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm^3)	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	37.6210°	140.5218°	7.3	54	58.5	12.4	40.3	2.450	0.0	0.0	0.5	2.9	32.0	64.6	0.0026	2.0	14	620	0.44
	A-2	37.5673°	140.3946°	7.4	456	18.8	1.1	2.0	2.750	43.9	33.3	14.3	1.5	2.9	4.1	1.7	19	1.3	55	-
	B-2	37.8121°	140.5058°	7.4	484	26.6	1.8	2.5	2.720	0.0	0.5	42.7	45.1	6.5	5.2	0.22	2.0	2.2	81	-
	B-3	37.8182°	140.4679°	7.5	489	21.3	1.3	1.9	2.610	30.9	36.4	23.0	2.7	3.0	4.0	1.3	4.8	1.2	40	-
Uda River	C-6	37.7764°	140.8877°	7.7	502	14.5	0.7	1.4	2.680	54.5	36.4	1.6	0.5	2.8	4.2	2.2	4.8	0.58	22	0.21
Mano River	D-4 a	37.7308°	140.9081°	7.6	497	18.8	1.8	2.6	2.700	28.5	46.0	14.8	2.8	3.2	4.7	1.4	9.5	2.7	110	0.67
Niida River	E-2 a	37.6640°	140.9447°	7.4	439	19.1	1.1	2.5	2.650	13.5	44.8	37.2	0.6	1.2	2.7	0.98	4.8	5.8	190	0.18
Ota River	F-1	37.5975°	140.9252°	7.3	496	17.5	0.8	1.9	2.640	16.6	44.1	29.0	3.9	4.0	2.4	1.0	4.8	4.8	240	0.26
Ukedo River	N-1	37.4998°	140.9835°	7.0	325	18.5	0.9	1.9	2.630	25.6	27.5	32.5	7.5	2.9	4.0	0.93	19	37	1500	N.D.(0.13)
	N-2	37.5070°	140.9456°	7.2	488	22.7	1.1	1.8	2.650	6.0	16.1	40.4	33.0	1.8	2.7	0.34	4.8	100	4000	-
	N-3	37.4754°	140.9598°	7.4	486	13.9	0.9	1.5	2.640	0.0	8.8	74.8	9.5	4.0	2.9	0.50	2.0	27	1000	-
Tomioka River	O-1	37.3547°	140.9780°	7.2	468	29.2	5.6	19.0	2.610	4.9	6.4	19.7	39.6	20.3	9.1	0.13	4.8	18	780	0.47
	O-2	37.3624°	140.9612°	7.6	503	19.5	1.5	2.0	2.670	21.7	30.1	38.5	4.5	2.2	3.0	0.89	19	3.5	170	-
Lake Hayama (Mano Dam)	G-1	37.7348°	140.8102°	7.1	487	31.7	4.9	9.2	2.660	2.8	8.7	35.1	33.8	10.1	9.5	0.23	4.8	16	590	1.8
	G-2	37.7267°	140.8223°	7.0	147	51.0	12.5	36.1	2.510	0.0	0.4	0.8	5.0	59.5	34.3	0.012	2.0	53	2100	-
	G-4	37.7382°	140.8035°	7.6	498	8.8	1.9	2.6	2.680	20.6	33.9	28.7	8.9	4.1	3.8	0.94	19	4.4	220	-
Lake Akimoto	H-1	37.6575°	140.1264°	7.1	87	54.4	9.6	32.7	2.530	0.0	0.0	0.1	0.3	35.4	64.2	0.0024	2.0	24	1000	1.3
	H-2	37.6616°	140.1226°	6.7	124	58.7	16.7	60.8	2.420	0.0	0.0	0.0	0.1	34.9	65.0	0.0028	2.0	10	360	-
Lake Inawashiro	J-1	37.4203°	140.1008°	6.8	505	20.7	0.8	2.4	2.780	4.9	6.0	52.6	32.6	1.0	2.9	0.30	4.8	0.69	24	N.D.(0.14)
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	356	31.7	4.5	9.2	2.680	0.0	0.2	0.7	45.1	42.7	11.3	0.069	4.8	3.5	130	N.D.(0.13)
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	7.8	284	23.9	2.3	6.0	2.690	0.1	0.5	35.5	47.5	9.8	6.6	0.19	4.8	1.4	61	N.D.(0.12)
Off Iwaki City (Hisanohama)	M-2	37.1996°	141.0853°	7.9	363	23.7	2.1	2.2	2.710	0.0	1.1	1.9	87.6	4.6	4.8	0.15	2.0	1.2	38	N.D.(0.12)

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	2022/12/3	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.013	-	-	-	53	N.D.(9.2)	53	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	9	0.045	Immature fish	-	-	2.8	N.D.(1.0)	2.8	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	11	N.D.(1.5)	11	-
	A-2	Harase River	2022/12/3	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.017	-	-	-	220	N.D.(11)	220	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	163	0.013	Larva	-	-	15	N.D.(3.3)	15	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia lugubris*	*Oyamia lugubris*	59	0.015	Larva	-	-	3.1	N.D.(2.6)	3.1	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	211	0.073	Larva	-	-	7.2	N.D.(0.63)	7.2	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	9	0.030	Immature fish	-	-	4.4	N.D.(1.7)	4.4	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou mssou*	Yamame trout	1	0.014	Immature fish	-	-	2.8	N.D.(2.6)	2.8	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	12	N.D.(1.3)	12	-
	B-2	The main stream of the Abukuma River	2022/12/1	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	*Hemibarbus barbus*	2	2.9	Mature fish	Obscure digesta	Viscera removed	5.5	N.D.(0.98)	5.5	0.49
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus keta*	Salmon	1	3.4	Mature fish	Empty stomach	Viscera removed	N.D.	N.D.(0.29)	N.D.(0.25)	-
	B-3	Surikami River	2022/12/3	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.013	-	-	-	23	N.D.(2.4)	23	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	607	0.040	Larva	-	-	8.5	N.D.(1.1)	8.5	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*	370	0.025	Larva	-	-	N.D.	N.D.(1.7)	N.D.(1.4)	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	*Cottus pollux*	Japanese fluvial sculpin	4	0.044	Immature fish	-	-	1.3	N.D.(1.2)	1.3	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	6.6	N.D.(1.2)	6.6	-

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*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	2022/12/4	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.022	-	-	-	60	N.D.(7.7)	60	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	440	0.033	Larva	-	-	14	N.D.(3.1)	14	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	*Kamimuria uenoi*	662	0.053	Larva	-	-	N.D.	N.D.(1.0)	N.D.(0.91)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina* sp.	Paragnetina									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina suzukii*	*Paragnetina suzukii*									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	36	0.011	Larva	-	-	5.8	N.D.(3.5)	5.8	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	*Protohermes grandis*	38	0.018	Larva	-	-	1.7	N.D.(1.9)	1.7	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	1	0.022	Immature fish	-	-	3.0	N.D.(2.0)	3.0	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	*Rhinogobius fluviatilis*	7	0.021	Immature fish, Mature fish	-	-	4.7	N.D.(2.1)	4.7	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*									
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	2.8	N.D.(0.29)	2.8	-

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*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-4 b	The main stream of the Mano River	2022/12/4	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0081	-	-	-	75	N.D.(13)	75	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	201	0.012	Larva	-	-	19	N.D.(2.8)	19	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*	128	0.0050	Larva	-	-	N.D.	N.D.(5.6)	N.D.(4.1)	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	2	0.032	Immature fish	-	-	3.5	N.D.(1.5)	3.5	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou masou*	Yamame trout	1	0.015	Immature fish	-	-	6.0	N.D.(2.6)	6.0	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	14	N.D.(1.3)	14	-

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*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	
Niida River	E-2 b	The main stream of the Niida River	2022/12/4	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.014	-	-	-	54	N.D.(11)	54	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	193	0.013	Larva	-	-	120	N.D.(13)	120	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*	525	0.031	Larva	-	-	7.0	N.D.(1.2)	7.0	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*	6	0.019	Mature fish	-	-	16	N.D.(2.0)	16	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	42	N.D.(1.4)	42	-

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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	2022/12/6	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.015	-	-	-	363	13	350	-
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	*Isonychia valida*	*Isonychia valida*	230	0.0084	Larva	-	-	60	N.D.(8.3)	60	-
				Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera strigata*	Mont mayfly	600	0.031	Larva	-	-	57	N.D.(6.7)	57	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia lugubris*	*Oyamia lugubris*	232	0.020	Larva	-	-	13	N.D.(2.1)	13	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	309	0.052	Larva	-	-	110	N.D.(4.9)	110	-
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	2	0.39	Mature fish	Empty stomach	Viscera removed	100.7	2.7	98	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	1	0.040	Mature fish	-	-	95	N.D.(5.3)	95	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	1	4.6	Mature fish	Obscure digesta	Viscera removed	184.4	4.4	180	4.6
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	52	N.D.(1.7)	52	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Lake Hayama	G-1 G-2 G-3	In the lake	2022/12/8	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0041	-	-	-	12	N.D.(7.0)	12	-
	G-4	Inflowing rivers	2022/12/6	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0092	-	-	-	66	N.D.(8.9)	66	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	*Kamimuria uenoi*	415	0.039	Larva	-	-	2.4	N.D.(1.1)	2.4	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina tinctipennis*	*Paragnetina tinctipennis*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia lugubris*	*Oyamia lugubris*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina suzukii*	*Paragnetina suzukii*									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	130	0.018	Larva	-	-	25	N.D.(2.8)	25	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	11	0.095	Immature fish	-	-	16	N.D.(1.4)	16	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou masou*	Yamame trout	3	0.098	Immature fish	Obscure digesta	Viscera removed	13	N.D.(1.9)	13	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	1.7	Mature fish	Montane brown frog	Viscera removed	173.8	3.8	170	0.51
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	24	N.D.(1.5)	24	-

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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	2022/12/1	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0069	-	-	-	5.2	N.D.(5.4)	5.2	-
			2022/12/2	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	12	3.2	Mature fish	Obscure digesta	Viscera removed	32	N.D.(1.6)	32	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	*Hemibarbus barbus*	3	2.3	Mature fish	Obscure digesta	Viscera removed	13	N.D.(1.3)	13	1.0
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Hypomesus nipponensis*	Japanese smelt	49	0.30	Mature fish	-	-	4.8	N.D.(0.30)	4.8	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2022/12/2	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	53	3.0	Immature fish, Mature fish	Obscure digesta	Viscera removed	10	N.D.(1.2)	10	0.20
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus langsdorfii*	*Carassius auratus langsdorfii*	12	4.2	Mature fish	Obscure digesta	Viscera removed	8.6	N.D.(0.37)	8.6	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus mykiss*	Rainbow trout	1	0.26	Mature fish	Obscure digesta	Viscera removed	3.0	N.D.(0.39)	3.0	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	1.8	N.D.(0.26)	1.8	-
	J-1 (south lakeside)	Within the lake and around the Oninuma	2022/12/2	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0078	-	-	-	N.D.	N.D.(3.8)	N.D.(3.1)	-

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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	2022/12/8	Vertebrata	Osteichthyes	Scorpaeniformes	Triglidae	*Chelidonichthys spinosus*	Gurnard	1	0.62	Mature fish	Empty stomach	Viscera removed	0.45	N.D.(0.32)	0.45	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Off Soma City	L-1 L-2 L-3	Matsukawaura Lagoon	2022/12/4	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0026	-	-	-	22	N.D.(14)	22	-
			2022/12/1	Algae/plant	Monocotyledoneae	Najadales	Zosteraceae	*Zostera marina*	Eel grass	-	0.27	-	-	-	N.D.	N.D.(0.30)	N.D.(0.29)	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Off Iwaki City	M-1 M-2 M-3	Offshore of Hisanohama	2022/12/13	Vertebrata	Osteichthyes	Perciformes	Sparidae	*Pagrus major*	Red seabream	1	1.2	Mature fish	Shrimp,Shellfish	Viscera removed	1.2	N.D.(0.25)	1.2	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Ukedo River	N-1	The main stream of the Ukedo River	2022/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.021	-	-	-	190	N.D.(9.8)	190	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*	260	0.018	Larva	-	-	12	N.D.(2.8)	12	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	121	0.033	Larva	-	-	200	N.D.(7.5)	200	-
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	*Anguilla japonica*	Japanese eel	1	0.46	Mature fish	Common prawn	Viscera removed	308.3	8.3	300	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	28	1.2	Immature fish, Mature fish	Obscure digesta	Viscera removed	132.6	2.6	130	1.0
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	2	0.24	Immature fish	Obscure digesta	Viscera removed	9.7	N.D.(1.3)	9.7	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Plecoglossus altivelis altivelis*	Sweetfish	16	0.17	Immature fish	-	-	216.0	6.0	210	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.29	Mature fish	Empty stomach	Viscera removed	234.6	4.6	230	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.24	-	-	-	164.3	4.3	160	-
	N-2	The main stream of the Ukedo River	2022/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.036	-	-	-	176.9	6.9	170	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	*Kamimuria uenoi*	232	0.011	Larva	-	-	30	N.D.(3.5)	30	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Paragnetina* sp.	Paragnetina									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	206	0.048	Larva	-	-	278.5	8.5	270	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	9	0.25	Immature fish, Mature fish	-	-	184.0	4.0	180	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus langsdorfii*	*Carassius auratus langsdorfii*	1	0.094	Mature fish	Obscure digesta	Viscera removed	100	N.D.(3.2)	100	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	1	0.085	Immature fish	Obscure digesta	Viscera removed	89	N.D.(2.8)	89	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.93	Mature fish	Stone loach	Viscera removed	1433	33	1400	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	93	N.D.(1.8)	93	-
	N-3	The main stream of the Takase River	2022/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.011	-	-	-	150	N.D.(12)	150	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*	365	0.020	Larva	-	-	7.6	N.D.(2.2)	7.6	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	478	0.10	Larva	-	-	123.7	3.7	120	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*	5	0.010	Mature fish	-	-	37	N.D.(8.9)	37	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	98.8	2.8	96	-

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												Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Tomioka River	O-1	The main stream of the Tomioka River	2022/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.023	-	-	-	79	N.D.(7.4)	79	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	*Kamimuria uenoi*	74	0.0051	Larva	-	-	N.D.	N.D.(6.4)	N.D.(5.6)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Oyamia lugubris*	*Oyamia lugubris*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Arthropoda	Insecta	Plecoptera	Perlidae	*Neoperla* sp.	Neoperla									
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	*Stenopsyche marmorata*	48	0.0073	Larva	-	-	48	N.D.(12)	48	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	7	0.095	Immature fish, Mature fish	-	-	17	N.D.(2.7)	17	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	23	N.D.(1.3)	23	-
	O-2	The main stream of the Tomioka River	2022/12/5	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.015	-	-	-	81	N.D.(9.6)	81	-
				Arthropoda	Insecta	Ephemeroptera	Isonychiidae	*Isonychia valida*	*Isonychia valida*	283	0.015	Larva	-	-	31	N.D.(5.9)	31	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria uenoi*	*Kamimuria uenoi*	205	0.016	Larva	-	-	N.D.	N.D.(2.3)	N.D.(2.1)	-
				Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	*Kamimura tibialis*									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	12	0.19	Immature fish, Mature fish	-	-	21	N.D.(2.3)	21	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	*Rhinogobius nagoyae*	1	0.014	Mature fish	-	-	12	N.D.(2.9)	12	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	63	N.D.(1.7)	63	-

*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.