

O Results (water)

Locations			2020 October 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°	7.3	1.0	3.7	10.0	17.7	0.09	1.6	6	3.7	N.D.(0.0012)	0.0061	0.0010
	A-1(Bottom layer)	37.6210°	140.5218°	7.4	1.2	4.0	10.1	18.2	0.09	1.6	7	3.7	0.0014	0.018	-
	A-2	37.5673°	140.3946°	7.4	<0.5	2.2	10.9	10.9	0.06	0.9	1	1.1	N.D.(0.0011)	0.0046	-
	B-2	37.8121°	140.5058°	7.4	<0.5	3.5	11.0	19.3	0.10	1.6	4	3.2	N.D.(0.0013)	0.022	-
	B-3	37.8182°	140.4679°	8.3	<0.5	3.0	12.0	8.6	0.05	1.3	5	3.1	N.D.(0.00097)	0.0043	-
Uda River	C-6	37.7764°	140.8877°	7.5	<0.5	1.6	10.9	9.6	0.05	0.7	<1	0.9	N.D.(0.0012)	0.0044	0.00054
Mano River	D-4 a	37.7308°	140.9081°	7.3	<0.5	1.7	11.4	10.5	0.06	0.9	<1	0.6	N.D.(0.0012)	0.0044	0.00072
Niida River	E-2 a	37.6640°	140.9447°	7.4	<0.5	2.1	11.2	7.3	0.04	0.8	2	1.8	N.D.(0.0014)	0.015	0.0014
Ota River	F-1	37.5975°	140.9252°	7.3	<0.5	2.1	10.8	5.2	0.03	0.9	<1	0.9	0.0065	0.10	0.0030
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7348°	140.8102°	7.3	<0.5	3.4	9.3	7.1	0.04	1.6	3	2.4	N.D.(0.0011)	0.018	-
	G-1(Bottom layer)	37.7348°	140.8102°	7.3	<0.5	2.8	9.7	7.6	0.04	1.5	1	1.7	0.0011	0.020	0.00062
	G-2(Surface layer)	37.7267°	140.8223°	7.3	0.5	3.4	8.8	7.2	0.04	1.7	2	2.2	N.D.(0.0013)	0.0098	-
	G-2(Bottom layer)	37.7267°	140.8223°	7.3	0.8	3.8	8.8	7.3	0.04	2.0	2	2.2	N.D.(0.0013)	0.011	-
	G-4	37.7382°	140.8035°	7.4	<0.5	2.1	10.5	7.6	0.04	1.2	<1	0.5	N.D.(0.0013)	0.0086	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	7.2	0.7	3.9	9.0	5.5	0.03	1.5	2	1.0	N.D.(0.0011)	0.0078	-
	H-1(Bottom layer)	37.6575°	140.1264°	7.0	<0.5	3.3	8.2	5.4	0.03	1.4	3	2.0	N.D.(0.0011)	0.0052	0.00092
	H-2(Surface layer)	37.6616°	140.1226°	7.0	0.8	3.7	9.2	5.9	0.03	1.9	3	2.4	N.D.(0.0011)	0.0087	-
	H-2(Bottom layer)	37.6616°	140.1226°	7.0	<0.5	3.7	8.6	5.5	0.03	1.6	4	3.1	N.D.(0.0013)	0.018	-
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	7.2	<0.5	1.6	9.6	11.0	0.06	0.9	<1	0.4	N.D.(0.0011)	0.0038	-
	J-1(Bottom layer)	37.4203°	140.1008°	7.2	0.6	1.7	9.3	11.2	0.06	0.9	<1	0.5	N.D.(0.0012)	0.0041	0.00083
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	0.7	1.8	8.3	4250	27.19	1.1	4	2.1	N.D.(0.0012)	0.0077	-
	K-3(Bottom layer)	38.0458°	140.9518°	8.0	0.7	1.2	7.5	4950	33.26	1.1	16	6.1	N.D.(0.0012)	0.0080	0.00084
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.0	0.6	2.0	8.6	4440	28.46	1.2	7	2.6	N.D.(0.0014)	0.0087	0.00088
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.1	0.7	1.4	7.9	5070	33.06	1.0	2	0.9	N.D.(0.0011)	0.0040	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.1	0.5	1.4	7.4	5170	33.61	0.9	2	0.8	N.D.(0.0011)	0.0024	0.00083

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

○ Results (sediments)

Locations		2020 October 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)
Abukuma River System	A-1	37.6210°	140.5218°	7.1	10	43.7	5.2	16.8	2.667	0.0	0.2	27.5	27.7	24.6	20.0	0.12	4.8	25	450	0.21
	A-2	37.5673°	140.3946°	7.5	380	19.0	1.6	2.7	2.735	20.7	35.8	38.4	3.8	1.3		0.98	9.5	4.4	85	-
	B-2	37.8121°	140.5058°	7.4	315	24.2	1.9	2.3	2.712	0.3	1.5	52.0	38.9	3.5	3.8	0.26	9.5	6.2	96	-
	B-3	37.8182°	140.4679°	7.6	415	18.1	1.2	2.1	2.633	43.1	43.6	12.9	0.3	0.1		1.8	9.5	1.9	42	-
Uda River	C-6	37.7764°	140.8877°	7.6	421	43.8	0.8	1.9	2.704	35.6	41.1	21.9	1.0	0.4		1.5	4.8	2.1	42	0.30
Mano River	D-4 a	37.7308°	140.9081°	7.5	419	18.7	1.8	3.7	2.717	22.0	36.0	38.5	2.2	1.3		1.0	9.5	6.4	110	0.65
Niida River	E-2 a	37.6640°	140.9447°	7.2	336	15.5	1.6	2.9	2.687	19.2	32.3	35.2	9.0	1.5	2.8	0.88	4.8	16	340	0.17
Ota River	F-1	37.5975°	140.9252°	7.3	343	21.4	1.8	2.9	2.659	2.9	7.9	69.1	14.6	2.0	3.5	0.41	4.8	28	570	0.82
Lake Hayama (Mano Dam)	G-1	37.7348°	140.8102°	7.3	83	50.8	10.8	29.1	2.618	-	0.0	1.7	35.9	44.5	17.9	0.053	2.0	70	1400	2.2
	G-2	37.7267°	140.8223°	7.1	96	39.1	7.0	17.8	2.636	2.1	4.9	21.5	25.0	29.1	17.4	0.094	9.5	77	1600	-
	G-4	37.7382°	140.8035°	7.6	407	24.7	2.9	2.4	2.707	12.0	47.2	32.9	4.6	0.8	2.5	1.0	9.5	15	300	-
Lake Akimoto	H-1	37.6575°	140.1264°	6.7	41	64.8	9.1	31.7	2.564	-	0.0	0.1	0.2	54.6	45.1	0.0062	2.0	30	700	1.2
	H-2	37.6616°	140.1226°	6.7	10	74.0	12.0	43.5	2.486	0.0	0.1	0.1	0.5	37.4	61.9	0.0024	4.8	36	660	-
Lake Inawashiro	J-1	37.4203°	140.1008°	6.2	391	23.2	0.8	2.3	2.753	0.3	1.0	65.3	32.3	1.1		0.30	9.5	1.8	32	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°	7.7	215	30.5	3.8	5.1	2.705	-	0.1	0.7	51.7	36.2	11.3	0.080	2.0	6.6	120	N.D.(0.13)
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	7.7	213	22.8	2.4	4.0	2.704	0.8	2.3	46.4	38.0	7.3	5.2	0.25	4.8	4.2	87	N.D.(0.12)
Off Iwaki City (Hisanozama)	M-2	37.1996°	141.0853°	7.8	290	22.1	1.8	1.7	2.771	-	1.1	2.4	93.1	0.9	2.5	0.16	2.0	1.4	25	N.D.(0.13)

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

O 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	2020/10/22	Vertebrata	Osteichthyes	Siluriformes	Ictaluridae	<i>Ictalurus punctatus</i>	Channel catfish	7	3.6	Immature fish	Empty stomach	Viscera removed	7.6	N.D.(1.3)	7.6	-
		Harase River		Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.016	-	-	-	71	N.D.(4.7)	71	-
		2020/10/21	Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris	18	0.0059	Larva	-	-	N.D.	N.D.(3.4)	N.D.(1.9)	-	
			Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	93	0.044	Larva(Dragonfly larva)	-	-	12	N.D.(2.3)	12	-	
			Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogester 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	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis			Larva	-	-	3.8	N.D.(3.8)	3.8	-	
			Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	2	0.49	Mature fish	Empty stomach	Viscera removed	15	N.D.(1.3)	15	-	
	B-2	The main stream of the Abukuma River	2020/10/21	Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.24	-	-	-	9.0	N.D.(1.7)	9.0	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	8	2.4	Mature fish	Obscure digesta	Viscera removed	5.9	N.D.(1.3)	5.9	0.22
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	5.1	Mature fish	Obscure digesta	Viscera removed	6.5	N.D.(0.99)	6.5	0.38
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	2	0.27	Mature fish	-	-	3.0	N.D.(1.0)	3.0	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus salmoides</i>	Largemouth bass	1	0.056	Immature fish	-	-	7.3	N.D.(3.0)	7.3	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	3	4.2	Mature fish	Empty stomach	Viscera removed	7.7	N.D.(1.4)	7.7	0.18
	B-3	Surikami River	2020/10/23	Vertebrata	Osteichthyes	Siluriformes	Ictaluridae	<i>Ictalurus punctatus</i>	Channel catfish	2	5.1	Mature fish	Empty stomach	Viscera removed	7.6	N.D.(1.3)	7.6	-
				Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.020	-	-	-	51	N.D.(5.4)	51	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	148	0.032	Larva	-	-	10	N.D.(3.4)	10	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	12	0.10	Immature fish	-	-	3.2	N.D.(1.4)	3.2	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	13	0.089	Immature fish,Mature fish	-	-	2.5	N.D.(1.4)	2.5	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	2.6	Mature fish	Obscure digesta	Viscera removed	6.3	N.D.(1.5)	6.3	0.34
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	1	0.020	Immature fish	-	-	4.8	N.D.(2.0)	4.8	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.021	Immature fish	-	-	1.4	N.D.(2.1)	1.4	-
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	4.1	N.D.(1.7)	4.1	-

*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 material (inel. clastic) are silt, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.

*6: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, e

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

Location	Sampling point	Sampling date	Division	Class	Order	Family	Scientific name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (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	2020/10/24	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0038	-	-	-	150	N.D.(12)	150	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.16	Immature fish,Mature fish	-	-	3.3	N.D.(0.98)	3.3	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	1	0.012	Immature fish	-	-	28	N.D.(5.0)	28	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.0084	Immature fish	-	-	13	N.D.(8.6)	13	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	20	0.079	Immature fish,Mature fish	-	-	3.8	N.D.(2.4)	3.8	-
				Coarse Particulate Organic Matter	-	-	-	Bottom fallen leaves	-	0.20	-	-	-	8.3	N.D.(0.76)	8.3	-	
Mano River	D-3	The main stream of the Mano River	2020/10/24	Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	2	0.066	Imago	-	-	10	N.D.(1.8)	10	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.050	Immature fish	Obscure digesta	Viscera removed	4.1	N.D.(2.3)	4.1	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Tridentiger brevispinis</i>	Dusky tripletooth goby	1	0.014	Mature fish	-	-	7.7	N.D.(3.5)	7.7	-
	D-4 b	The main stream of the Mano River	2020/10/24	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0075	-	-	-	85	N.D.(6.3)	85	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	20	0.092	Immature fish	-	-	13.3	1.3	12	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus esocinus	2	0.019	Immature fish,Mature fish	-	-	9.3	N.D.(2.5)	9.3	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus keta</i>	Salmon	1	3.0	Mature fish	Empty stomach	Viscera removed	N.D.	N.D.(0.33)	N.D.(0.30)	0.030
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	8	0.12	Immature fish	-	-	8.7	N.D.(1.6)	8.7	-
	Coarse Particulate Organic Matter	-	-	Bottom fallen leaves	-	0.21	-	-	-	-	-	-	-	27.2	1.2	26	-	
D-5	The main stream of the Mano River	2020/10/24	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	3	0.16	Mature fish	Obscure digesta	Viscera removed	8.5	N.D.(1.7)	8.5	-	
			Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	2	0.053	Immature fish	-	-	11	N.D.(1.8)	11	-	
Niida River	E-2 b	The main stream of the Niida River	2020/10/24	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0086	-	-	-	536	26	510	-	
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	88	0.026	Larva(Dragonfly larva)	-	-	19	N.D.(3.3)	19	-
				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>	<u>Davidius</u>									
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops									
				Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	1	0.017	Imago	-	-	25	N.D.(5.6)	25	-
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	82	0.018	Juvenile,Imago	-	-	32	N.D.(5.8)	32	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	11	0.14	Immature fish,Mature fish	-	-	22	N.D.(2.1)	22	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	13	0.10	Immature fish,Mature fish	-	-	16	N.D.(1.5)	16	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	1	0.078	Mature fish	Obscure digesta	Viscera removed	22	N.D.(2.2)	22	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.097	Immature fish	Obscure digesta	Viscera removed	19	N.D.(3.1)	19	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	7	0.034	Immature fish,Mature fish	-	-	16	N.D.(3.9)	16	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.067	Immature fish	Empty stomach	Viscera removed	19	N.D.(3.6)	19	-
	Coarse Particulate Organic Matter	-	-	Bottom fallen leaves	-	0.24	-	-	-	-	-	-	-	61.4	2.4	59	-	
E-3	The main stream of the Niida River	2020/10/24	Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	11	0.34	Immature fish,Mature fish	-	-	50.4	2.4	48	-	

*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)			
											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
Ota River	F-1	The main stream of the Ota River	2020/10/25	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0047	-	-	-	383	23	360	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris	394	0.020	Larva	-	23	N.D.(5.8)	23	-
				Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimura tibialis</i>	Kamimura tibialis								
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena								
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogester sieboldii								
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii								
				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 macclachlani</i>	Boyeria macclachlani	36	0.013	Larva(Dragonfly larva)	-	72	N.D.(7.2)	72	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis								
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp								
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace								
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis								
				Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	American bullfrog								
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves								
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp								
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish								
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel								
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	2020/10/24	0.55	Mature fish	Obscure digesta	Viscera removed	42.8	2.8	40
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii								
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp								
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish								
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Common prawn								

*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)				
											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137		
Lake Hayama	G-1 G-2 G-3	In the lake	2020/10/26	Algae/plant	-	-	-	Plankton (Planktonic algae)	-	0.026	-	-	-	N.D.	N.D.(1.6)	N.D.(1.6)	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	9	0.012	Immature fish	-	-	9.6	N.D.(6.8)	9.6	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Lepomis macrochirus</i>	Bluegill	1	0.11	Mature fish	Midge,Polyzoan dormant bud	Viscera removed	15	N.D.(1.6)	15	-
	G-4	Inflowing rivers	2020/10/26	Algae/plant	-	-	-	Riverbed Deposits (Include algae)	-	0.0033	-	-	-	71	N.D.(16)	71	-	
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	32	0.0071	Larva(Dragonfly larva)	-	31	N.D.(9.4)	31	-	
				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	Aeshnidae	<i>Boyeria macclachlani</i>	Boyeria macclachlani									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	20	0.33	Immature fish,Mature fish	-	-	16	N.D.(0.95)	16	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	2	0.73	Immature fish	Empty stomach	Viscera removed	29.3	1.3	28	-
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana ornativentris</i>	Montane brown frog	4	0.12	Imago	-	-	61.0	4.0	57	-
	H-1 H-2 H-3	In the lake	2020/10/23	Coarse Particulate Organic Matter	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	15	N.D.(1.2)	15	-	
				Algae/plant	-	-	-	Plankton (Planktonic algae)	-	0.019	-	-	-	N.D.	N.D.(2.2)	N.D.(2.1)	-	
			2020/10/30	Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	10	0.45	Imago	-	-	16	N.D.(1.7)	16	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	10	1.6	Mature fish	Obscure digesta	Viscera removed	18.2	1.2	17	0.58
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	5	2.1	Mature fish	Obscure digesta	Viscera removed	16	N.D.(1.2)	16	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	4	2.7	Mature fish	Obscure digesta	Viscera removed	64.8	2.8	62	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	30	0.15	Immature fish,Mature fish	-	-	14	N.D.(0.90)	14	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenoides</i>	Char	2	0.32	Mature fish	Empty stomach	Viscera removed	9.5	N.D.(1.1)	9.5	-
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	2	0.79	Immature fish	Terrestrial insect	Viscera removed	23.3	1.3	22	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	8	1.7	Immature fish	Caterpillar	Viscera removed	35.6	1.6	34	-
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	2	1.1	Mature fish	Empty stomach	Viscera removed	39.9	1.9	38	0.74
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2020/10/22	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudorasbora parva</i>	Stone moroko	124	0.22	Immature fish,Mature fish	-	-	3.1	N.D.(1.6)	3.1	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	1	0.011	Immature fish	-	-	7.8	N.D.(6.4)	7.8	-
	J-1 (south lakeside)	Within the lake and around the Oninuma	2020/10/22	Algae/plant	-	-	-	Plankton (Planktonic algae)	-	0.021	-	-	-	N.D.	N.D.(2.1)	N.D.(1.8)	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	13	0.33	Immature fish,Mature fish	-	-	1.6	N.D.(0.89)	1.6	-
			2020/10/23	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenoides</i>	Char	2	1.3	Mature fish	Japanese smelt	Viscera removed	27	N.D.(1.8)	27	0.12
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	3	1.6	Immature fish	Empty stomach	Viscera removed	24	N.D.(1.1)	24	0.081
			2020/10/22	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	18	0.41	Immature fish	Salmon roe,Fish,Worm,Lepidoptera(larva)	Viscera removed	1.4	N.D.(0.67)	1.4	-
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	12	0.11	Immature fish	-	-	8.3	N.D.(1.5)	8.3	-
			2020/10/23	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	2	1.7	Mature fish	Fish	Viscera removed	23	N.D.(1.3)	23	0.34
			2020/10/22	Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	4	0.086	Imago	-	-	3.4	N.D.(0.94)	3.4	-
				Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog									

*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		
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	2020/10/27	Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronichthys cornutus</i>	Ridged-eye flounder	2	0.36	Immature fish	Empty stomach	Viscera removed	0.53	N.D.(0.33)	0.53	-
				Vertebrata	Osteichthyes	Zeiformes	Zeidae	<i>Zeus faber</i>	John dory	1	0.78	Mature fish	Fish	Viscera removed	13.50	0.50	13	-
Off Soma City	L-1 L-2 L-3	Matsukawaura Lagoon	2020/10/24	Mollusca	Bivalvia	Ostroidea	Ostreidae	<i>Crassostrea gigas</i>	Oyster	12	0.20	Imago	-	Molluscous part	0.57	N.D.(0.45)	0.57	-
				Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	30	0.12	Imago	-	Molluscous part	1.1	N.D.(0.61)	1.1	-
		2020/10/25	Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	<i>Hexagrammos otakii</i>		Fat greenling	4	0.15	Immature fish	Crab,Shrimp,Ragworm,Shellfish	Viscera removed	0.67	N.D.(0.44)	0.67	-
Off Iwaki City	M-1 M-2 M-3	Offshore of Hisanohama	2020/10/20	Mollusca	Cephalopoda	Decapodiformes	Loliginidae	<i>Loligo japonica</i>	Japanese squid	60	0.23	Juvenile	-	-	N.D.	N.D.(0.31)	N.D.(0.29)	-
				Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Pagrus major</i>	Red seabream	2	2.1	Immature fish,Mature fish	Empty stomach	Viscera removed	0.84	N.D.(0.34)	0.84	-
	M-4	Hisanohama Coastal areas	2020/11/25	Algae/plant	Phaeophyceae	Laminariales	Laminariaceae	<i>Eisenia bicyclis</i>	<i>Eisenia bicyclis</i>	-	0.30	-	-	-	N.D.	N.D.(0.26)	N.D.(0.22)	-
				Mollusca	Gastropoda	Archaeogastropoda	Haliotidae	<i>Haliotis sp.</i>	Abalone	3	0.33	Imago	-	Molluscous part	0.86	N.D.(0.37)	0.86	-
			2020/11/18	Echinodermata	Echinoidea	Echinidae	Strongylocentrotidae	<i>Strongylocentrotus nudus</i>	Northern sea urchin	5	0.76	Imago	-	-	1.7	N.D.(0.48)	1.7	-

*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.

-

-

-

-