

○ Results (water)

Locations			2018 August - September 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	4.2	8.5	16.9	0.10	1.8	7	4.0	N.D.(0.0014)	0.013	0.0014
	A-1(Bottom layer)	37.6210°	140.5218°	7.5	1.4	4.4	8.7	17.8	0.10	1.8	8	4.3	0.0018	0.018	-
	A-2	37.5673°	140.3946°	7.6	0.6	2.4	10.2	12.4	0.07	1.0	2	1.4	N.D.(0.0012)	0.0081	-
	B-2	37.8121°	140.5058°	7.6	0.9	3.6	9.7	16.5	0.09	1.5	6	3.7	0.0020	0.017	-
	B-3	37.8182°	140.4679°	7.8	0.7	3.4	10.7	8.4	0.05	1.4	2	1.3	N.D.(0.0012)	0.0035	-
Uda River	C-6	37.7764°	140.8877°	7.5	0.8	3.4	8.7	9.7	0.06	1.3	2	2.0	N.D.(0.0013)	0.010	0.00084
Mano River	D-4 a	37.7308°	140.9081°	7.2	0.8	3.0	9.2	9.5	0.06	1.3	1	1.1	0.0025	0.023	0.0013
Niida River	E-2 a	37.6640°	140.9447°	7.4	0.5	3.6	9.7	7.8	0.05	1.4	3	2.8	0.0047	0.050	0.0020
Ota River	F-1	37.5975°	140.9252°	7.5	<0.5	3.1	9.5	5.4	0.03	1.1	1	1.0	0.022	0.21	0.0037
Lake Hayama (Mano Dam)	G-1(Surface layer)	37.7321°	140.8127°	7.9	1.2	4.6	10.1	6.5	0.04	2.2	1	1.5	0.0021	0.021	-
	G-1(Bottom layer)	37.7321°	140.8127°	7.0	0.8	4.2	6.3	7.3	0.04	1.8	4	2.6	0.0030	0.034	0.00099
	G-4	37.7382°	140.8035°	7.4	0.7	2.8	9.2	7.3	0.04	1.3	2	0.8	N.D.(0.0018)	0.016	-
Lake Akimoto	H-1(Surface layer)	37.6575°	140.1264°	7.0	1.1	3.7	8.2	4.7	0.03	1.9	1	1.1	N.D.(0.0017)	0.0094	-
	H-1(Bottom layer)	37.6575°	140.1264°	6.6	0.9	3.8	6.6	4.3	0.03	2.0	3	2.4	N.D.(0.0020)	0.015	0.0010
Lake Inawashiro	J-1(Surface layer)	37.4203°	140.1008°	6.9	0.7	1.7	8.6	11.1	0.06	0.7	<1	0.5	N.D.(0.0017)	0.0073	-
	J-1(Bottom layer)	37.4203°	140.1008°	6.9	0.8	2.2	8.2	11.1	0.06	1.0	1	0.8	N.D.(0.0017)	0.0069	0.0010
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	1.2	3.2	8.2	4240	25.50	1.5	3	2.2	N.D.(0.0017)	0.0068	-
	K-3(Bottom layer)	38.0458°	140.9518°	7.9	0.8	2.0	6.0	5030	33.78	1.1	5	3.6	N.D.(0.0015)	0.016	0.00082
Off Soma City (Matsukawaura)	L-2	37.8155°	140.9763°	8.0	1.1	2.2	7.2	4920	32.77	1.4	4	2.2	N.D.(0.0014)	0.013	0.00081
Off Iwaki City (Hisanohama)	M-2(Surface layer)	37.1996°	141.0853°	8.1	0.8	2.2	7.5	5010	33.78	0.9	2	0.7	N.D.(0.0013)	0.0019	-
	M-2(Bottom layer)	37.1996°	141.0853°	8.1	1.1	2.7	7.8	5070	34.03	1.3	3	0.8	N.D.(0.0017)	0.0030	0.00080

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

O Results (sediments)

Locations			2018 August - September Survey																	
		Latitude	Longitude	pH	Redox potential E <sub>NHLE</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)	Se-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 0.0075mm) (%)	Median grain diameter (mm)				Maximum grain diameter (mm)
Abukuma River System	A-1	37.6210°	140.5218°	7.0	86	49.7	6.7	20.0	2.652	5.8	1.6	23.6	17.8	26.3	24.9	0.068	19	63	630	0.31
	A-2	37.5673°	140.3946°	6.7	308	19.7	2.0	3.0	2.727	20.4	42.5	26.2	6.4	1.2	3.3	1.1	9.5	14	150	-
	B-2	37.8121°	140.5058°	7.3	259	22.8	1.8	2.6	2.730	0.8	5.6	65.4	24.1	2.2	1.9	0.34	4.8	14	160	-
	B-3	37.8182°	140.4679°	7.3	282	19.7	1.5	2.2	2.677	29.6	42.0	24.0	3.4	1.0		1.4	9.5	8.6	98	-
Uda River	C-6	37.7764°	140.8877°	7.4	299	20.0	1.6	1.4	2.685	16.6	47.4	34.2	1.0	0.8		1.1	4.8	15	140	0.66
Mano River	D-4 a	37.7308°	140.9081°	7.4	301	17.7	1.6	1.7	2.711	15.7	47.4	33.4	2.5	1.0		1.1	9.5	24	250	0.86
Niida River	E-2 a	37.6640°	140.9447°	7.1	337	13.6	1.5	2.6	2.708	33.6	28.8	23.5	11.5	2.6		1.3	4.8	46	460	0.23
Ota River	F-1	37.5975°	140.9252°	7.4	325	19.4	1.3	1.9	2.646	16.1	28.2	47.1	6.8	1.8		0.75	9.5	150	1600	0.64
Lake Hayama (Mano Dam)	G-1	37.7321°	140.8127°	6.9	356	58.3	14.4	28.6	2.515	0.0	0.0	2.0	41.3	37.1	19.6	0.061	2.0	330	3200	3.2
	G-4	37.7382°	140.8035°	7.3	295	22.2	3.0	3.6	2.690	12.8	23.7	49.8	9.9	0.8	3.0	0.65	19	60	630	-
Lake Akimoto	H-1	37.6575°	140.1264°	6.8	260	65.8	10.1	28.1	2.540	0.0	0.0	0.1	0.1	55.0	44.8	0.0062	2.0	120	1300	1.3
Lake Inawashiro	J-1	37.4203°	140.1008°	6.5	321	22.1	1.1	2.0	2.752	0.8	1.4	80.6	15.5	1.7		0.35	9.5	2.4	38	0.15
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	273	34.3	4.8	7.6	2.703	0.0	0.2	0.2	32.2	54.7	12.7	0.058	4.8	22	230	N.D.(0.12)
Off Soma City (Masukawara)	L-2	37.8155°	140.9763°	7.1	282	19.8	1.2	1.5	2.735	1.0	1.8	74.0	18.9	0.4	3.9	0.33	4.8	1.7	15	N.D.(0.13)
Off Iwaki City (Hasonohama)	M-2	37.1996°	141.0853°	7.8	254	21.6	2.0	2.0	2.785	1.6	1.1	2.3	90.4	0.3	4.3	0.16	9.5	2.7	30	N.D.(0.15)

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	2018/8/21	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	8	0.15	Immature fish	-	-	6.30	0.60	5.7	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	4	0.049	Immature fish,Mature fish	-	-	9.6	1.1	8.5	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	19	0.10	Immature fish,Mature fish	-	-	5.2	N.D.(0.67)	5.2	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Nemacheilus toni</i>	Stone loach	11	0.025	Immature fish	-	-	2.1	N.D.(2.0)	2.1	-	
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus salmoides</i>	Largemouth bass	1	0.0062	Immature fish	-	-	N.D.	N.D.(7.2)	N.D.(6.6)	-	
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	2	0.0087	Immature fish	-	-	4.4	N.D.(3.7)	4.4	-
					Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.030	-	-	75.9	8.9	6.7	-	
					Algae/plant	Zygnematales	Zygnematales	Zygnematales	<i>Spirogyra sp.</i>	Spirogyra	-	0.093	-	-	9.7	N.D.(3.7)	9.7	-	
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	94	0.022	Larva	-	-	19	N.D.(2.4)	19	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	<u>Melligomphus viridicostus</u>									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae	30	0.014	Larva(Dragonfly larva)	-	-	10	N.D.(3.2)	10	-
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaeonops</i>	Asiagomphus melaeonops									
					Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	16	0.0095	Larva	-	-	6.8	N.D.(4.3)	6.8	-
					Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	8	0.024	Juvenile,Imago	-	-	16	N.D.(2.6)	16	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Neocaridina sp.</i>	Neocaridina	658	0.075	Juvenile,Imago	-	-	15.6	1.6	14	-
					Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.023	Imago	-	Molluscos part	14	N.D.(8.9)	14	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Phoxinus lagowskii steindachneri</i>	Amur Minnow	11	0.052	Immature fish,Mature fish	-	-	7.6	1.3	6.3	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	3	0.085	Immature fish,Mature fish	-	-	14.3	1.3	13	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus esocinus	2	0.017	Immature fish	-	-	7.0	N.D.(2.8)	7.0	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia tenminckii</i>	Dark chub	92	0.91	Immature fish,Mature fish	-	-	8.0	1.1	6.9	0.29	
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	25	0.026	Immature fish	-	-	5.3	N.D.(2.1)	5.3	-	
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.21	-	-	-	3.9	N.D.(2.8)	3.9	-	

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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			
Abukuma River System	B-2	The main stream of the Abukuma River	2018/8/20	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	4	1.2	Mature fish	Obscure digesta	Viscera removed	8.86	0.66	8.2	0.18	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	3	3.7	Mature fish	Obscure digesta	Viscera removed	5.93	0.53	5.4	0.49	
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	62	2.2	Immature fish,Mature fish	-	-	19.0	2.0	17	0.13	
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	6	1.3	Immature fish,Mature fish	Stone loach,Shrimp	Viscera removed	10.05	0.95	9.1	0.16	
				Vertebrata	Osteichthyes	Siluriformes	Ictaluridae	<i>Ictalurus punctatus</i>	Channel catfish	4	2.9	Immature fish,Mature fish	Sweetfish,Sphagnum	Viscera removed	17.7	1.7	16	0.31	
				Vertebrata	Osteichthyes	Siluriformes	Bagridae	<i>Tachysurus tokiensis</i>	Cut-tailed bullhead	1	0.12	Mature fish	Platambus fimbriatus,Common prawn	Viscera removed	4.3	N.D.(0.73)	4.3	-	
				Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	3	0.49	Immature fish,Mature fish	Fish	Viscera removed	32.9	3.9	29	-	
	B-3	Surikami River	2018/8/22	Algae/plant	-	-	-	-	Riverbed Deposits (include algae)	-	0.017	-	-	-	23.1	2.1	21	-	
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	185	0.058	Larva	-	-	-	14.3	1.3	13	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	18	0.0088	Larva(Dragonfly larva)	-	-	-	N.D.	N.D.(4.7)	N.D.(4.5)	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	Melligomphus viridicostus			-	-	-	-	-	-	-	-
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae	-	-	-	-	-	-	-	-	-	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	43	0.029	Larva	-	-	-	1.9	N.D.(1.8)	1.9	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.0092	Imago	-	-	Molluscos part	6.0	N.D.(4.0)	6.0	-
				Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus pollux</i>	Japanese fluvial sculpin	40	0.30	Immature fish	-	-	-	3.21	0.41	2.8	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Phoxinus lagowskii steindachneri</i>	Amur Minnow	36	0.18	Immature fish,Mature fish	-	-	-	3.9	N.D.(0.43)	3.9	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	2	0.028	Immature fish,Mature fish	-	-	-	7.6	N.D.(1.5)	7.6	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	2.2	Mature fish	Obscure digesta	Viscera removed	9.31	0.71	8.6	0.70	
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	19	0.046	Immature fish,Mature fish	-	-	-	7.5	1.1	6.4	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Nemacheilus toni</i>	Stone loach	57	0.46	Immature fish	-	-	-	4.62	0.42	4.2	-
Vertebrata	Osteichthyes	Siluriformes	Bagridae	<i>Tachysurus tokiensis</i>	Cut-tailed bullhead	2	0.039	Immature fish,Mature fish	-	-	-	7.2	N.D.(1.7)	7.2	-				
Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	2.5	Mature fish	Fish	Viscera removed	19.7	1.7	18	0.18					
Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled Frog	6	0.043	Imago	-	-	-	5.8	N.D.(1.5)	5.8	-				
Coarse Particulate Organic Matter	-	-	-	-	-	-	Bottom fallen leaves	-	0.14	-	-	-	3.0	N.D.(2.2)	3.0	-			

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											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137			
Uda River	C-6	The main stream of the Uda River	2018/8/25	Algae/plant	-	-	-	-	Riverbed Deposits (include algae)	-	0.0090	-	-	-	67.6	5.6	62	-	
				Algae/plant	Zygnematophyceae	Zygnematales	Zygnemataceae	<i>Spirogyra sp.</i>	<i>Spirogyra</i>	-	0.15	-	-	-	-	3.6	N.D.(2.1)	3.6	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	120	0.016	Larva (Dragonfly larva)	-	-	-	4.0	N.D.(2.4)	4.0	-
				Arthropoda	Insecta	Odonata	Cordulegasteridae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</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	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	1	0.014	Imago	-	-	-	5.5	N.D.(2.9)	5.5	-
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	103	0.061	Imago	-	-	-	6.5	N.D.(3.6)	6.5	-
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	891	0.17	Juvenile	-	-	-	6.7	N.D.(1.7)	6.7	-
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	3	0.029	Juvenile	-	-	-	10	N.D.(1.6)	10	-
				Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	1.4	Mature fish	Empty stomach	Viscera removed	-	51.5	5.5	46	0.076
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	3	0.011	Immature fish	-	-	-	11	N.D.(3.3)	11	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	27	0.16	Immature fish	-	-	-	12	N.D.(2.1)	12	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus esocinus	4	0.038	Immature fish	-	-	-	5.2	N.D.(1.3)	5.2	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	20	0.12	Immature fish	-	-	-	6.4	N.D.(2.2)	6.4	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	2	0.012	Immature fish	-	-	-	4.1	N.D.(3.9)	4.1	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Cobitis biwae</i>	Cobitis biwae	25	0.049	Immature fish, Mature fish	-	-	-	6.3	N.D.(1.4)	6.3	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	6	0.0086	Immature fish	-	-	-	N.D.	N.D.(3.5)	N.D.(3.3)	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	39	0.32	Immature fish	-	-	-	19.4	1.4	18	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	42	0.040	Immature fish, Mature fish	-	-	-	8.4	N.D.(1.3)	8.4	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	<i>Rhinogobius nagoyae</i>										
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Tridentiger brevispinis</i>	Dusky tripletooth goby	2	0.022	Mature fish	-	-	-	13	N.D.(1.9)	13	-
				Vertebrata	Cephalaspidomorphi	Petromyzontiformes	Petromyzontidae	<i>Lethenteron reissneri</i>	Far eastern brook lamprey	9	0.031	Ammocoetes (larva)	-	-	-	4.3	N.D.(1.3)	4.3	-
								Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	12

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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			
Mano River	D-3	The main stream of the Mano River	2018/8/27	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	14	0.20	Immature fish	-	-	7.1	N.D.(2.0)	7.1	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	19	0.27	Immature fish,Mature fish	-	-	4.5	N.D.(1.7)	4.5	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	<u>Gnathopogon elongatus elongatus</u>	62	0.23	Immature fish,Mature fish	-	-	11	N.D.(1.8)	11	-	
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	128	2.7	Immature fish,Mature fish	-	-	19.4	1.4	18	0.12	
	D-4 b	The main stream of the Mano River	2018/8/28	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0066	-	-	-	34	N.D.(24)	34	-	
				Algae/plant	Monocotyledoneae	Najadales	Potamogetonaceae	<i>Potamogeton crispus</i>	Curly-leaf pondweed	-	0.12	-	-	-	-	17.8	2.8	15	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	27	0.012	Larva	-	-	-	16	N.D.(19)	16	-
				Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	3	0.024	Juvenile,Imago	-	-	-	19	N.D.(9.3)	19	-
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	153	0.0099	Juvenile	-	-	-	15	N.D.(17)	15	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.024	Imago	-	Molluscous part	27	N.D.(7.4)	27	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Phoxinus lagowskii steindachneri</i>	Amur Minnow	7	0.0094	Immature fish,Mature fish	-	-	11	N.D.(4.2)	11	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	49	0.12	Immature fish	-	-	21.2	3.2	18	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	6	0.020	Immature fish,Mature fish	-	-	22	N.D.(8.3)	22	-	
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	20	0.12	Immature fish	-	-	36.1	4.1	32	-	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	<u>Rhinogobius fluviatilis</u>	9	0.036	Mature fish	-	-	22	N.D.(4.7)	22	-	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	Rhinogobius nagoyae										
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.20	-	-	-	31.3	3.3	28	-	
	D-5	The main stream of the Mano River	2018/8/27	Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.13	Immature fish	Obscure digesta	Viscera removed	55.0	5.0	50	-	

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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	2018/8/26	Algae/plant	-	-	-	Riverbed Deposits (include algae)	-	0.0085	-	-	-	696	66	630	-		
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	88	0.020	Larva	-	-	-	182	12	170	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	94	0.029	Larva(Dragonfly larva)	-	-	-	52.5	5.5	47	-
				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	8	0.0062	Larva	-	-	-	143	13	130	-
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes japonicus</i>	Parachauliodes japonicus										
				Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	3	0.046	Imago	-	-	-	48.3	4.3	44	-
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	12	0.017	Imago	-	-	-	27	N.D.(11)	27	-
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	430	0.044	Juvenile,Imago	-	-	-	51.3	5.3	46	-
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	10	0.11	Juvenile	-	-	-	52.1	4.1	48	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.029	Imago	-	Molluscous part	-	35.3	3.3	32	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	114	1.9	Immature fish,Mature fish	-	-	-	29.8	2.8	27	0.50
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	33	0.19	Immature fish	-	-	-	29.7	2.7	27	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus esocinus	4	0.10	Immature fish,Mature fish	-	-	-	30.6	3.6	27	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	15	0.094	Immature fish	-	-	-	19.6	2.6	17	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	1	0.018	Immature fish	-	-	-	95	13	82	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	2	0.027	Immature fish	-	-	-	30.2	2.2	28	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Acheilognathus melanogaster</i>	Acheilognathus melanogaster	5	0.012	Immature fish,Mature fish	-	-	-	75.7	8.7	67	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	7	0.038	Immature fish,Mature fish	-	-	-	45.8	5.8	40	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	179	0.54	Immature fish	-	-	-	22.9	1.9	21	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudorasbora parva</i>	Stone moroko	6	0.024	Mature fish	-	-	-	21.3	2.3	19	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	9	0.044	Immature fish,Mature fish	-	-	-	15.5	1.5	14	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	22	0.35	Immature fish,Mature fish	-	-	-	71.2	5.2	66	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	Rhinogobius nagoyae	6	0.021	Mature fish	-	-	-	44.0	4.0	40	-
Vertebrata	Osteichthyes	Siluriformes	Bagridae	<i>Tachysurus tokiensis</i>	Cut-tailed bullhead	12	0.012	Immature fish	-	-	-	16	N.D.(3,5)	16	-				
Vertebrata	Amphibia	Anura	-	-	-	70	0.13	Larva(Tadpole)	-	-	-	695	65	630	-				
				Coarse Particulate Organic Matter	-	-	-	Bottom fallen leaves	-	0.28	-	-	-	186	16	170	-		
	E-4	The main stream of the Niida River	2018/9/1	Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	11	0.30	Immature fish,Mature fish	-	-	-	51.5	4.5	47	-

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											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137			
Ota River	F-1	The main stream of the Ota River	2018/8/29	Algae/plant	-	-	-	-	Riverbed Deposits (include algae)	-	0.0060	-	-	-	256	26	230	-	
				Algae/plant	Zygnematoiphyceae	Zygnematales	Zygnemataceae	<i>Spirogyra sp.</i>	<i>Spirogyra</i>	-	0.33	-	-	-	-	5.6	N.D.(1.4)	5.6	-
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<i>Stenopsyche marmorata</i>	87	0.031	Larva	-	-	-	232	22	210	-
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	38	0.014	Larva(Dragonfly larva)	-	-	-	100	N.D.(14)	100	-
				Arthropoda	Insecta	Odonata	Cordulegasteridae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>										
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	<u><i>Melligomphus viridicostus</i></u>										
				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	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<i>Protohermes grandis</i>										
				Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes japonicus</i>	<u><i>Parachauliodes japonicus</i></u>	11	0.0045	Larva	-	-	-	54	N.D.(32)	54	-
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	7	0.012	Imago	-	-	-	353	23	330	-
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	102	0.014	Juvenile,Imago	-	-	-	170	20	150	-
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	2	0.019	Juvenile	-	-	-	348	38	310	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	8	0.021	Immature fish	-	-	-	249	19	230	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	3	0.011	Immature fish	-	-	-	184	14	170	-
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	9	0.047	Immature fish	-	-	-	152	12	140	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Cobitis biwae</i>	<i>Cobitis biwae</i>	3	0.0055	Mature fish	-	-	-	130	N.D.(21)	130	-
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	2	0.010	Mature fish	-	-	-	89	14	75	-
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	6	0.036	Immature fish	-	-	-	486	36	450	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	<u><i>Rhinogobius fluviatilis</i></u>	8	0.032	Mature fish	-	-	-	578	58	520	-
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	<i>Rhinogobius nagoyae</i>										
								Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.22	-	-	-	251
F-5	The main stream of the Ota River	2018/8/29	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	4.3	Mature fish	Obscure digesta	Viscera removed	69.2	6.2	63	1.3		
			Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	331	0.96	Immature fish	-	-	-	174	14	160	0.60	

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											Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137				
Lake Hanyama	G-1 G-2 G-3	In the lake	2018/8/27	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.012	-	-	-	3.9	N.D.(3.0)	3.9	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	4	0.15	Immature fish,Mature fish	Obscure digesta	Viscera removed	73.2	7.2	66	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	1	1.7	Mature fish	Obscure digesta	Viscera removed	59.1	5.1	54	1.1		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.52	Mature fish	Obscure digesta	Viscera removed	36.9	3.9	33	-		
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus salmoides</i>	Largemouth bass	2	2.4	Mature fish	Obscure digesta	Viscera removed	384	34	350	0.80		
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	4	0.14	Immature fish	Fish,Shrimp	Viscera removed	44.6	2.6	42	-		
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	3	2.0	Mature fish	Obscure digesta	Viscera removed	286	26	260	0.80		
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Lepomis macrochirus</i>	Bluegill	12	0.27	Immature fish	Small pondweed,Chironomus,Caddis-fly	Viscera removed	45.1	5.1	40	-		
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Lepomis macrochirus</i>	Bluegill	5	0.36	Immature fish,Mature fish	Radix auricularia japonica,Small pondweed	Viscera removed	61.7	5.7	56	-		
	Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	1.4	Mature fish	Cicada	Viscera removed	242	22	220	0.47					
	G-4	Inflowing rivers	2018/8/26	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.019	-	-	-	373	33	340	-		
				Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<i>Stenopsyche marmorata</i>	21	0.0052	Larva	-	-	-	110	N.D.(19)	110	-	
				Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	94	0.019	Larva(Dragonfly larva)	-	-	-	31	N.D.(13)	31	-	
				Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>											
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Meligomphus viridicostus</i>	<i>Meligomphus 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	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<i>Protohermes grandis</i>	16	0.0099	Larva	-	-	-	9.6	N.D.(5.9)	9.6	-	
				Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	39	0.0054	Juvenile	-	-	-	21	N.D.(8.9)	21	-	
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	10	0.23	Immature fish,Mature fish	-	-	-	38.1	4.1	34	-	
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	2	0.11	Mature fish	-	-	-	23	N.D.(3.2)	23	-	
				2018/8/27	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	4	0.52	Mature fish	Brachycentridae,Lepidoptera(larva),Ephemera japonica,Millipede,Stink bug	Viscera removed	525	45	480	-	
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	2	0.088	Immature fish	Kamimuria tibialis,Montmayfly,Stenopsyche marmorata,Cincticos tella elongatula,Crane fly(imago)	Viscera removed	36	N.D.(4.1)	36	-	
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius flumineus</i>	Rhinogobius flumineus	9	0.0068	Immature fish	-	-	-	24	N.D.(21)	24	-
				2018/8/26	Coarse Particulate Organic Matter	-	-	-	-	-	Bottom fallen leaves	-	0.19	-	-	-	130	10	120	-

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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 Akino	H-1 H-2 H-3	In the lake	2018/9/28	Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	5	0.34	Imago	-	-	18.6	1.6	17	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorffii	2	1.4	Mature fish	Obscure digesta	Viscera removed	37.7	2.7	35	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	3.2	Mature fish	Obscure digesta	Viscera removed	24.2	2.2	22	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	2	1.5	Mature fish	Obscure digesta	Viscera removed	26.1	2.1	24	-		
				Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Hypomesus nipponensis</i>	Japanese smelt	80	0.42	Mature fish	-	-	8.3	N.D.(1.4)	8.3	-		
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	3	1.0	Mature fish	Empty stomach	Viscera removed	45.5	4.5	41	-		
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou masou</i>	Seema	3	1.3	Immature fish	Japanese smelt	Viscera removed	34.1	3.1	31	-		
	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	2	2.6	Mature fish	Empty stomach	Viscera removed	57.6	4.6	53	1.2					
	H-3	Inflowing rivers	2018/8/30	Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	17.0	2.0	15	-		
	H-4	Within the lake and rivers in the vicinity	2018/8/30	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.011	-	-	-	N.D.	N.D.(2.6)	N.D.(2.7)	-		
				Algae/plant	Monocotyledoneae	Alismatales	Hydrocharitaceae	<i>Elodea nuttallii</i>	Western Waterweed	-	0.33	-	-	-	4.5	N.D.(1.3)	4.5	-		
				Arthropoda	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	<u>Anotogaster sieboldii</u>	-	-	-	-	-	-	-	-	-	-	
				Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops	14	0.010	Larva(Dragonfly larva)	-	-	-	-	N.D.	N.D.(3.1)	N.D.(3.2)	-
				Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	Semisulcospira libertina	30	0.018	Imago	-	Molluscous part	4.6	N.D.(3.1)	4.6	-		
Vertebrata				Osteichthyes	Cypriniformes	Cyprinidae	<i>Phoxinus lagowskii steindachneri</i>	Amur Minnow	25	0.024	Immature fish	-	-	3.3	N.D.(1.9)	3.3	-			
Vertebrata				Osteichthyes	Cypriniformes	Cobitidae	<i>Lefua echigonia</i>	Lefua echigonia	16	0.011	Immature fish,Mature fish	-	-	N.D.	N.D.(4.3)	N.D.(3.8)	-			
Vertebrata	Amphibia	Anura	Ranidae	<i>Rana ornativentris</i>	Montane brown frog	4	0.021	Imago	-	-	4.6	N.D.(3.2)	4.6	-						
Vertebrata	Amphibia	Caudata	Salamandridae	<i>Cynops pyrrhogaster</i>	Cynops pyrrhogaster	4	0.024	Imago	-	-	2.4	N.D.(1.8)	2.4	-						
Lake Inawashiro	I-1 I-2 (north lakeside)	Within the lake and Nagase River	2018/8/21	Coarse Particulate Organic Matter	-	-	-	Bottom fallen leaves	-	0.17	-	-	-	2.2	N.D.(3.1)	2.2	-			
	J-1 (south lakeside)	Within the lake and around the Oninuma	2018/8/21	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.018	-	-	-	N.D.	N.D.(2.2)	N.D.(1.9)	-		
				Algae/plant	Dicotyledoneae	Nymphaeales	Nymphaeaceae	<i>Nuphar japonicum</i>	Cow lily	-	0.29	-	-	-	1.3	N.D.(0.29)	1.3	-		
				Algae/plant	Monocotyledoneae	Alismatales	Hydrocharitaceae	<i>Elodea nuttallii</i>	Western Waterweed	-	0.29	-	-	-	0.71	N.D.(0.28)	0.71	-		
				Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Cipangopaludina japonica</i>	Japanese mysterysnail	13	0.048	Imago	-	Molluscous part	2.5	N.D.(1.9)	2.5	-		
				Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Cipangopaludina chinensis laeta</i>	Mud-snail	42	0.17	Imago	-	Molluscous part	1.5	N.D.(0.66)	1.5	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	3	0.0088	Immature fish	-	-	N.D.	N.D.(4.8)	N.D.(4.3)	-		
				Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Mixgurnus anguillicaudatus</i>	Oriental weatherfish	323	1.2	Immature fish,Mature fish	-	-	2.3	N.D.(2.4)	2.3	0.33		
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	20	0.29	Immature fish,Mature fish	-	-	2.0	N.D.(2.0)	2.0	-		
				Vertebrata	Amphibia	Anura	-	-	-	Frog	4	0.0051	Larva(Tadpole)	-	-	N.D.	N.D.(7.5)	N.D.(7.1)	-	
	Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled Frog	15	0.20	Imago	-	-	1.5	N.D.(0.47)	1.5	-					
Vertebrata	Amphibia	Anura	Pelophylax	<i>Pelophylax porosus porosus</i>	Tokyo Daruma pond frog															
Vertebrata	Amphibia	Caudata	Salamandridae	<i>Cynops pyrrhogaster</i>	Cynops pyrrhogaster	11	0.076	Imago	-	-	1.1	N.D.(0.89)	1.1	-						

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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	2018/8/28	Mollusca	Cephalopoda	Decapodiformes	Loliginidae	<i>Loliolus japonica</i>	Japanese squid	70	0.39	Juvenile	-	-	N.D.	N.D.(0.34)	N.D.(0.34)	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronectes herzensteini</i>	Yellow striped flounder	1	0.35	Mature fish	Empty stomach	Viscera removed	0.44	N.D.(0.43)	0.44	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	2	2.8	Immature fish, Mature fish	Empty stomach	Viscera removed	0.45	N.D.(0.31)	0.45	N.D.(0.018)	
				Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Eynnys japonica</i>	Crimson sea-bream	1	0.32	Immature fish	Empty stomach	Viscera removed	0.42	N.D.(0.28)	0.42	-	
Off Sena City	L-1 L-2 L-3	Matsukawa Lagoon	2018/8/26	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.0096	-	-	-	N.D.	N.D.(3.0)	N.D.(3.1)	-	
				Annelida	Polychaeta	-	-	-	<i>Polychaeta</i>	Polychaeta	124	0.019	Juvenile, Imago	-	-	6.4	N.D.(2.9)	6.4	-
				Arthropoda	Malacostraca	Mysida	Mysidae	<i>Mysidae</i>	Mysidae	-	0.033	Imago	-	-	0.89	N.D.(1.2)	0.89	-	
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Hemigrapsus sp.</i>	Hemigrapsus	95	0.13	Juvenile, Imago	-	-	2.3	N.D.(0.58)	2.3	-	
				Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Portunus trituberculatus</i>	Japanese blue crab	26	0.035	Juvenile	-	-	N.D.	N.D.(1.6)	N.D.(1.5)	-	
				Mollusca	Bivalvia	Veneroidea	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	30	0.068	Imago	-	Molluscos part	2.3	N.D.(0.78)	2.3	-	
				Vertebrata	Osteichthyes	Scorpaeniformes	Platycephalidae	<i>Platycephalus sp.</i>	Flathead	10	0.078	Immature fish	-	-	N.D.	N.D.(4.0)	N.D.(3.8)	-	
				Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Acanthopagrus schlegelii</i>	Japanese black porgy	3	0.011	Immature fish	-	-	N.D.	N.D.(3.7)	N.D.(3.6)	-	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Acanthogobius flavimanus</i>	Yellowfin Goby	3	0.012	Immature fish	-	-	N.D.	N.D.(3.5)	N.D.(3.4)	-	
				Vertebrata	Osteichthyes	Perciformes	Mugilidae	<i>Mugil cephalus cephalus</i>	Flathead mullet	20	0.35	Immature fish	-	-	14.5	1.5	13	-	
Off Iwaki City	M-1 M-2 M-3	Offshore of Hisanohama	2018/8/21	Vertebrata	Osteichthyes	Beloniformes	Belonidae	<i>Strongylura anastomella</i>	Needlefish	1	0.24	Immature fish	Empty stomach	Viscera removed	4.7	N.D.(0.61)	4.7	-	
				Mollusca	Cephalopoda	Octopoda	Octopodidae	<i>Octopus vulgaris</i>	Common octopus	1	0.22	Imago	-	-	N.D.	N.D.(0.39)	N.D.(0.30)	-	
				Echinodermata	Holothuroidea	Aspidochirotrida	Stichopodidae	<i>Apostichopus japonicus</i>	Japanese common sea cucumber	2	0.14	Imago	-	-	N.D.	N.D.(0.42)	N.D.(0.40)	-	
				Vertebrata	Osteichthyes	Scorpaeniformes	Triglidae	<i>Lepidotrigla microptera</i>	Searobin	4	1.0	Mature fish	Shrimp, Crab	Viscera removed	1.8	N.D.(0.38)	1.8	-	
				Vertebrata	Osteichthyes	Scorpaeniformes	Triglidae	<i>Chelidonichthys spinosus</i>	Gurnard	3	1.0	Mature fish	Shrimp, Fish	Viscera removed	0.57	N.D.(0.30)	0.57	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Kareius bicoloratus</i>	Stone flounder	2	0.66	Immature fish	Shellfish	Viscera removed	0.78	N.D.(0.26)	0.78	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronectes yokohamae</i>	Marbled sole	1	0.44	Mature fish	Empty stomach	Viscera removed	5.32	0.62	4.7	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Eopsetta grigorjewi</i>	Shotted halibut	2	0.40	Immature fish	Empty stomach	Viscera removed	1.1	N.D.(0.37)	1.1	-	
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	1	1.7	Mature fish	Empty stomach	Viscera removed	0.65	N.D.(0.50)	0.65	N.D.(0.014)	
				Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Pagrus major</i>	Red seabream	2	3.0	Mature fish	Shellfish	Viscera removed	2.0	N.D.(0.39)	2.0	-	
				Vertebrata	Osteichthyes	Tetraodontiformes	Tetraodontidae	<i>Takifugu Snyderi</i>	Obscure Puffer	5	1.9	Immature fish, Mature fish	Shellfish	Viscera removed	1.3	N.D.(0.34)	1.3	-	
				Vertebrata	Chondrichthyes	Rajiformes	Rajidae	<i>Okamejei kenojei</i>	Common Skete	2	1.4	Immature fish	Shrimp	Viscera removed	3.73	0.53	3.2	-	
Vertebrata	Chondrichthyes	Carcharhiniformes	Triakidae	<i>Mustelus manazo</i>	Starspotted smooth-hound	3	3.3	Immature fish	Crab, Shellfish	Viscera removed	3.06	0.46	2.6	0.015					

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