

○ Results of Radioactive Material Monitoring of Aquatic Organisms Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J

< Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J: Samples collected >

Locations	General items		Radioactive materials			
	Water	Sediment	Water(Cs)	Water(Sr)	Sediment(Cs)	Sediment(Sr)
I-1	○	○	○	○	○	○
I-2	-	○	-	-	○	-
I-3	○	○	○	-	○	-
I-4	-	○	-	-	○	-
J-1	○	○	○	-	○	-

< Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J: Site measurement item >

Locations	Latitude and longitude of the location		Survey date and time		Water		Sediment			Other			
	Scheduled latitude	Scheduled longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth(m)	Transparency (m)	
I-1(Surface layer)	37.5047°	140.1143°	2015/8/27	8:45	8:56	22.0	13.8	Ooze	7.5Y 4/1	Plant	10.0	>10.0	
I-1(Deep layer)	37.5047°	140.1143°		8:45	-	22.0	-	-	-	-	-	-	-
I-2	37.4995°	140.1409°		8:28	8:28	14.7	-	Ooze	7.5Y 4/3	Plant	-	-	-
I-3(Surface layer)	37.5077°	140.0263°		9:35	9:43	22.1	21.7	Ooze	7.5Y 5/3	None	6.5	>6.5	-
I-3(Deep layer)	37.5077°	140.0263°		9:35	-	22.0	-	-	-	-	-	-	-
I-4	37.5160°	140.1092°		-	9:14	-	22.0	Sand gravel	7.5Y 5/3	None	-	-	-
J-1(Surface layer)	37.4203°	140.1008°		7:50	-	22.0	21.9	Sand	7.5Y 5/3	Freshwater clams	4.6	>4.6	-
J-1(Deep layer)	37.4203°	140.1008°		7:50	8:03	21.8	-	-	-	-	-	-	-

< Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J: General survey items/Analysis of radioactive materials Water >

Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Scheduled latitude	Scheduled longitude	Date	Time (water)												
I-1(Surface layer)	37.5047°	140.1143°	2015/8/27	8:45	7.2	<0.5	1.4	8.3	11.3	0.06	0.7	1	0.6	0.0026	0.013	-
I-1(Deep layer)	37.5047°	140.1143°		8:45	7.0	<0.5	1.4	8.4	11.4	0.06	0.7	<1	0.4	0.0032	0.013	0.0011
I-3(Surface layer)	37.5077°	140.0263°		9:35	7.0	<0.5	1.6	8.4	11.4	0.06	0.7	2	1.0	0.0035	0.014	-
I-3(Deep layer)	37.5077°	140.0263°		9:35	7.0	<0.5	1.5	8.3	11.4	0.06	0.7	1	0.8	0.0036	0.014	-
J-1(Surface layer)	37.4203°	140.1008°		7:50	7.0	<0.5	1.9	8.9	11.4	0.06	0.8	1	0.8	0.0029	0.012	-
J-1(Deep layer)	37.4203°	140.1008°		7:50	7.0	<0.5	1.6	8.2	11.4	0.06	0.7	<1	0.5	0.0036	0.012	-

< Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J: General survey items/Analysis of radioactive materials Sediment >

Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential EN.H.E (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm3)	Grain size distribution								Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
	Scheduled latitude	Scheduled longitude	Date	Time (sediment)							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter	Maximum grain diameter			
I-1	37.5047°	140.1143°	2015/8/27	8:56	6.9	-23	78.3	10.3	33.5	2.542	0.0	0.4	4.7	30.8	41.1	23.0	0.037	2.0	180	660	N.D.(0.25)
I-2	37.4995°	140.1409°		8:28	6.9	-22	71.8	9.2	22.6	2.567	0.0	0.0	0.5	20.4	54.2	24.9	0.035	2.0	140	530	-
I-3	37.5077°	140.0263°		9:43	6.6	39	64.7	8.4	27.1	2.676	0.0	0.2	5.9	28.1	38.8	27.0	0.036	2.0	6.8	36	-
I-4	37.5160°	140.1092°		9:14	6.3	361	21.7	1.5	2.3	2.767	26.0	17.8	44.9	9.4	0.5	1.4	0.73	19	13	51	-
J-1	37.4203°	140.1008°		8:03	6.4	223	32.1	1.7	2.7	2.672	0.6	3.9	82.5	12.1	0.1	0.8	0.34	4.8	46	200	-

< Lake Inawashiro (north lakeside) I / Lake Inawashiro (south lakeside) J: Analysis items Aquatic organisms >

Location	Sampling point	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note		Radioactive cesium(Bq/kg-wet)	Sr-90 (Bq/kg-wet)				
		Latitude	Longitude										Growth stage	Stomach contents						
I-1 I-2 (north lakeside)	-	37.5047° 37.4995°	140.1143° 140.1409°	2015/8/26	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius sp.</i>	Carassius auratus langsdorffii	8	3.1	Mature fish (6-year-old)	Empty stomach	Viscera removed	5.5	22	0.44		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius sp.</i>	Carassius auratus langsdorffii	98	0.63	Immature fish (1-year-old)	-	-	-	1.9	7.1	-	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus	79	1.3	Mature fish (3-year-old)	-	-	-	1.5	7.4	0.44	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	36	2.0	Mature fish (1-year-old)	Detritus	Viscera removed	7.2	28	0.26		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	123	2.2	Mature fish (1-year-old)	-	Viscera removed	2.9	13	0.21		
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	7	2.8	Mature fish (2.3-year-old)	Pond Smelt, Japanese surfperch	Viscera removed	19	85	0.19		
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu dolomieu</i>	Small mouth bass	3	1.3	Mature fish (3-year-old)	Fish, Common prawn, Amur goby	Viscera removed	11	47	0.33		
					Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.17	-	-	-	-	-	8.2	34	-
					Phycohyta	-	-	-	-	Plankton (Planktonic algae)	-	0.016	-	-	-	-	-	N.D.(1.7)	1.6	-
					Angiospermae	-	-	-	-	Cow lily	-	0.32	-	-	-	-	-	N.D.(0.35)	1.6	-
Angiospermae	-	-	-	-	<i>Nymphaoides peltata</i>	-	0.30	-	-	-	-	-	N.D.(0.34)	0.89	-					
J-1 (south lakeside)	-	37.4203°	140.1008°	2015/8/26	Mollusca	Gastropoda	Archaeogastropoda	Viviparidae	<i>Cipangopaludina chinensis laeta</i>	Mud-snail	23	0.14	Imago	-	Molluscan body	N.D.(0.61)	1.6	-		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsarichthys platypus</i>	Zacco platypus	11	0.12	Mature fish (1-year-old)	-	-	-	2.9	12	-	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus	180	2.7	Mature fish (2-year-old)	-	-	-	2.2	9.1	0.46	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius sp.</i>	Carassius auratus langsdorffii	36	2.6	Mature fish (3-year-old)	-	-	-	6.1	24	-	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	20	2.3	Mature fish (3-year-old)	-	-	-	2.3	8.8	0.33	
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	17	0.066	Mature fish	-	-	-	N.D.(0.72)	1.0	-	
					Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	2	0.0063	Immature fish (0-year-old)	-	-	-	N.D.(4.9)	N.D.(4.7)	-	
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	6	0.017	Mature fish	-	-	-	N.D.(2.9)	3.2	-	
					Vertebrata	Amphibia	Anura	Ramidae	<i>Glandirana rugosa</i>	Wrinkled Frog	14	0.12	Imago	-	-	-	N.D.(0.73)	0.70	-	
					Vertebrata	Amphibia	Caudata	Salamandridae	<i>Cynops pyrrhogaster</i>	Cynops pyrrhogaster	5	0.025	Imago	-	-	-	N.D.(2.3)	1.9	-	

*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 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: A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.

*6: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

*7: 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.

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

*9: Activity concentrations include counting errors, but the details are omitted here.