

◦Results of Radioactive Material Monitoring of Aquatic Organisms Lake Inawashiro(north lakeside) • 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 temperature (degrees C)	Sediment			Other		
	Latitude	Longitude	Date	Time (water)	Time (sediment)		Property	Color	Contaminants	Water depth (m)	Secchi disk depth (m)	
I-1	37.5053°	140.1140°	2014/10/22	9:10	9:27	15.2	13.9	Ooze	7.5Y2/1	Plant	13.7	4.2
I-2	37.5004°	140.1412°		—	8:53	—	14.2	Ooze	7.5Y5/2	Plant	—	—
I-3	37.5090°	140.0268°		10:08	10:16	15.1	15.1	Ooze	7.5Y3/2	None	7.0	7.0 (Drifting to the bottom)
I-4	37.5152°	140.1020°		—	9:40	—	14.5	Gravel	7.5Y5/3	Vallisneria densescrullata	—	—
J-1	37.4203°	140.1007°		8:14	8:24	15.3	15.3	Sand	7.5Y5/3	None	4.8	4.8 (Drifting to the bottom)

< 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)
	Latitude	Longitude	Date	Time												
I-1 (Surface layer)	37.5053°	140.1140°	2014/10/22	9:10	7.5	<0.5	1.8	9.5	11.1	0.06	0.7	2	1.2	0.0056	0.017	—
I-1 (Deep layer)					7.2	0.6	1.7	10.0	11.1	0.06	0.7	1	0.8	0.0056	0.015	0.00096
I-3 (Surface layer)	37.5090°	140.0268°		10:08	7.2	<0.5	1.6	10.1	11.0	0.06	0.7	1	0.6	0.0054	0.015	—
I-3 (Deep layer)					7.1	<0.5	1.5	10.2	11.1	0.06	0.7	<1	0.5	0.0047	0.017	—
J-1 (Surface layer)	37.4203°	140.1007°		8:14	7.2	0.7	2.2	10.0	11.1	0.06	0.9	1	0.8	0.0046	0.014	—
J-1 (Deep layer)			7.2		0.6	2.2	8.9	11.0	0.06	1.6	1	0.6	0.0068	0.014	—	

< 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 E _{SHE} (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)	
	Latitude	Longitude	Date	Time							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)
I-1	37.5053°	140.1140°	2014/10/22	9:27	6.8	86	73.4	8.1	14.6	2.585	0.5	0.4	6.7	53.8	15.6	23.0	0.12	9.5	210	680	0.28
I-2				8:53	7.0	159	70.3	7.9	17.8	2.583	0.2	1.0	2.5	32.5	39.3	24.5	0.037	4.75	170	540	—
I-3				10:16	7.2	198	72.8	9.9	23.3	2.586	0.0	0.1	1.1	17.0	50.5	31.3	0.019	2	29	83	—
I-4				9:40	6.8	238	27.1	1.6	2.3	2.731	17.4	16.6	54.6	10.6	0.4	0.4	0.59	19	24	65	—
J-1				8:24	7.2	192	30.2	2.0	3.2	2.665	0.2	4.6	75.9	17.6	0.9	0.8	0.33	9.5	71	260	—

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

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

Location	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)		
	Latitude	Longitude										Growth stage	Stomach contents	Measurement site					
I-1 I-2 (north lakeside)	-	37.5053° 37.5004°	140.1140° 140.1412°	2014/10/22	Coarse particulate organic matters (CPOMs)	-	-	-	—	Fallen leaves	Considerable number	0.25	—	—	—	5.6	16	—	
				2014/11/15	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.35	Mature fish (3-year-old)	Many unknown content	Viscera removed	9.2	31	—	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	3	1.0	Mature fish (5-year-old)	Many unknown content	Viscera removed	6.8	21	0.49	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	<i>Hemibarbus barbus</i>	2	1.0	Mature fish (4-year-old)	Many unknown content	Viscera removed	7.2	24	0.40	
Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	4	3.1	Mature fish	Empty stomach, fish	Viscera removed	43	140	0.13						
J-1 (south lakeside)	-	37.4203°	140.1007°	2014/10/22	Algae/plant	-	-	-	—	Plankton(singular plankton)	Considerable number	0.014	—	—	—	N.D.(3.0)	N.D.(3.5)	—	
					Angiospermae	Dicotyledoneae	Nymphaeales	Nymphaeaceae	<i>Nuphar japonicum</i>	Cow lily	Considerable number	1.9	—	—	—	—	0.87	2.6	—
					Magnoliophyta	Magnoliopsida	Solanales	Menyanthaceae	<i>Nymphoides peltata</i>	Fringed water-lily	Considerable number	1.5	—	—	—	—	0.69	2.1	—
					Arthropod	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>	20	0.022	Larva (dragonfly larva)	—	—	—	N.D.(2.4)	2.4	—
					Arthropod	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	104	0.056	Imago	—	—	—	1.4	3.7	—
					Mollusca	Gastropoda	Sorbeoconcha	Pleuroceridae	<i>Semisulcospira libertina</i>	<i>Semisulcospira libertina</i>	55	0.035	Imago	—	—	Molluscan body	N.D.(1.9)	3.4	—
					Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Bellamyia chinensis laeta</i>	Mud-snail	70	0.38	Imago	—	—	Molluscan body	0.88	2.0	—
					Vertebrata	Amphibia	Anura	-	-	-	24	0.027	Larva (tadpoles)	—	—	—	2.7	6.8	—
					Vertebrata	Amphibia	Anura	Ranidae	<i>Rana rugosa</i>	Wrinkled Frog	27	0.10	Imago	—	—	—	N.D.(0.64)	1.2	—
				2014/10/25	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	2	0.97	Mature fish (6-year-old)	Many unknown content	Viscera removed	5.9	19	—	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	<i>Hemibarbus barbus</i>	3	1.4	Mature fish	Many unknown content	Viscera removed	7.3	24	0.40	
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	5	2.2	Mature fish (2-year-old)	Empty stomach, lake smelt	Viscera removed	12	36	0.29	
				2014/10/30	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	9	1.4	Mature fish (3-year-old)	Many unknown content	Viscera removed	13	39	0.23	
				2014/11/4	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Zacco platypus</i>	Pale chub	10	0.15	Mature fish	Many unknown content	Viscera removed	4.2	12	—	
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	1	1.1	Mature fish	Empty stomach	Viscera removed	39	120	0.099	

*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.