

○ 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 >

Items 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 >

Items Locations	Latitude and longitude of the location		Survey date and time		Water		Sediment			Other		
	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Secchi disk depth (m)
I-1	37.504683°	140.114333°	2014/6/26	9:33	9:56	19.6	14.6	Sand with mud	7.5Y2/1	Plant	9.5	9.5 (Drifting to the bottom)
I-2	37.499467°	140.140883°		—	10:21	—	10.2	Ooze	5Y4/2	Plant	—	—
I-3	37.507700°	140.026250°		8:33	8:46	19.5	16.2	Ooze	5Y4/2	None	6.5	6.5 (Drifting to the bottom)
I-4	37.515967°	140.109167°		—	9:11	—	19.7	Clay with pebbles	2.5Y5/3	Vallisneria densesemulata	—	—
J-1	37.420333°	140.100833°		10:52	11:06	20.0	19.8	Sand	5Y5/3	Bilvalvia	4.0	4.0 (Drifting to the bottom)

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

Items 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)	37.504683°	140.114333°	2014/6/26	9:33	6.6	<0.5	1.0	9.1	11.6	0.06	0.7	<1	0.4	0.0067	0.017	—
I-1 (Deep layer)					6.1	0.7	2.0	10.6	12.0	0.06	1.2	3	1.0	0.0067	0.018	0.00098
I-3 (Surface layer)					6.7	0.7	1.3	8.7	11.6	0.06	0.9	<1	0.4	0.0060	0.016	—
I-3 (Deep layer)					6.8	1.8	1.8	9.4	11.8	0.06	1.2	<1	0.8	0.0069	0.017	—
J-1 (Surface layer)					6.6	<0.5	1.1	9.5	11.6	0.06	0.8	<1	0.4	0.0072	0.016	—
J-1 (Deep layer)	6.6	0.6	1.2	9.4	11.6	0.06	0.6	1	0.5	0.0067	0.018	—				

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

Items Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential E <sub>SOIL</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)	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	37.504683°	140.114333°	2014/6/26	9:56	7.0	-24	68.8	5.8	11.4	2.604	3.3	4.4	37.9	33.5	6.3	14.6	0.23	9.5	630	1,900	N.D.(0.18)
I-2	37.499467°	140.140883°		10:21	7.0	-50	70.0	7.7	20.1	2.585	0.2	0.7	2.3	33.5	32.6	30.7	0.031	4.75	250	680	—
I-3	37.507700°	140.026250°		8:46	6.9	-49	66.5	8.7	21.5	2.661	0.0	0.4	3.8	28.8	38.4	28.6	0.026	2	23	77	—
I-4	37.515967°	140.109167°		9:11	6.6	82	29.8	1.9	3.9	2.697	24.5	16.7	31.8	7.1	5.1	14.8	0.62	19	23	65	—
J-1	37.420333°	140.100833°		11:06	7.0	85	28.0	1.7	5.5	2.666	0.7	6.6	77.3	14.5	0.3	0.6	0.34	4.75	57	210	—

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

<Lake Inawashiro (north lakeside) 1 / 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								
1-1 1-2 (north lakeside)	—	37.504683° 37.499467°	140.114333° 140.140883°	2014/6/26	Coarse particulate organic matters	—	—	—	—	fallen leaves	Considerable number	0.91	—	—	—	5.7	15	—					
				2014/7/17	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorfii	6	1.9	Mature fish (5,6-year-old)	Some (details unknown)	Viscera removed	15	42	0.47					
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	5	0.36	Immature fish (2-year-old)	Some (details unknown)	Viscera removed	21	31	—					
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	5	2.1	Mature fish (4-year-old)	Some (details unknown)	Viscera removed	12	38	0.42					
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus</i>	Pseudogobio esocinus	17	0.40	Mature fish (1,2,3-year-old)	Larva of aquatic insects	Viscera removed	4.3	13	—					
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	15	0.71	Mature fish (2-year-old)	Larva of aquatic insects	Viscera removed	1.5	43	—					
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	4	0.49	Mature fish (3-year-old)	Larva of aquatic insects	Viscera removed	21	59	—					
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	4	1.1	Mature fish (2-year-old)	Fish	Viscera removed	30	86	—					
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	2	1.2	Mature fish (3,4-year-old)	Fish	Viscera removed	34	97	—					
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Seema	2	0.86	Mature fish (1,2-year-old)	Some (details unknown)	Viscera removed	38	110	—					
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Seema	1	1.1	Mature fish (3-year-old)	Fish	Viscera removed	38	100	—					
					1-1 (south lakeside)	—	37.420333°	140.100833°	2014/6/26	Algae/plant	—	—	—	—	Plankton(singular plankter)	Considerable number	0.015	—	—	—	N.D.(2.3)	3.6	—
										Angiospermae	Dicotyledoneae	Nymphaeales	Nymphaeaceae	<i>Niphar japonicum</i>	Cow lily	Considerable number	1.9	—	—	—	0.36	1.3	—
Magnoliophyta	Magnoliopsida	Solanales	Menyanthaceae	<i>Nymphoides peltata</i>						Fringed water-lily	Considerable number	1.6	—	—	—	—	N.D.(0.36)	0.45	—				
Arthropod	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>						Common prawn	964	0.23	Imago	—	—	—	4.1	12	—				
Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Bellamyia japonica</i>						Japanese mystersnail	16	0.11	Imago	—	—	—	2.4	9.7	—				
Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>						Japanese dace	9	0.32	Mature fish	Some (details unknown)	Viscera removed	23	61	—					
Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>						Oriental weatherfish	22	0.16	Mature fish	—	—	—	0.68	1.2	—				
Vertebrata	Amphibia	Anura	Ranidae	<i>Rana rugosa</i>						Winkled Frog	21	0.17	Imago	—	—	—	0.94	2.2	—				
Vertebrata	Amphibia	Anura	Ranidae	<i>Rana porosa porosa</i>						Daruma pond frog	12	0.12	Imago	—	—	—	0.75	2.1	—				
Vertebrata	Amphibia	Anura	—	—						Frogs	490	0.11	Larva(tadpole)	—	—	—	13	34	—				
Vertebrata	Amphibia	Caudata	Salamandridae	<i>Cynops pyrrhogaster</i>						Cynops pyrrhogaster	5	0.021	Imago	—	—	—	9.7	27	—				
2014/7/17	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae						<i>Carassius auratus</i>	Carassius auratus langsdorfii	64	0.47	Immature fish (1-year-old)	—	—	—	4.5	13	—			
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Carassius auratus</i>	Carassius auratus langsdorfii	10	1.0	Mature fish	Some (details unknown)	Viscera removed	18	53	—					
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Hemibarbus barbus</i>	Hemibarbus barbus	3	0.25	Immature fish (2-year-old)	Larva of aquatic insects	Viscera removed	13	38	—					
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Pseudogobio esocinus</i>	Pseudogobio esocinus	118	2.1	Mature fish (1,2,3-year-old)	Larva of aquatic insects	Viscera removed	5.6	16	0.47					
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Tribolodon hakonensis</i>	Japanese dace	60	1.7	Mature fish	Larva of aquatic insects	Viscera removed	13	38	—					
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Tribolodon hakonensis</i>	Japanese dace	29	2.2	Mature fish	Larva of aquatic insects	Viscera removed	25	74	0.27					
	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae					<i>Zacco platypus</i>	Pale chub	22	0.38	Mature fish (1-year-old)	Algae	Viscera removed	3.0	8.9	—					
Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>					Small mouth bass	1	0.16	Immature fish (1,2-year-old)	Fish	Viscera removed	19	52	—						

\*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 sewerwater 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.