

**OResults 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	Items	General items		Radioactive materials			
		Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
J-1		○	○	○	○	○	○

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

Locations	Items	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)	
J-1(Surface layer)		37.4203°	140.1008°	2024/8/28	14:30	14:30	27.6	27.3	Sand	7.5Y5/3	Waterweed,Freshwater clam	3.5	>3.5	
J-1(Bottom layer)														

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

Locations	Items	Latitude and longitude of the location		Survey date and time		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)
		Latitude	Longitude	Date	Time (water)												
J-1(Surface layer)		37.4203°	140.1008°	2024/8/28	14:30	6.8	<0.5	1.9	8.6	11.3	0.06	0.9	<1	0.8	N.D.(0.0016)	0.0055	-
J-1(Bottom layer)						7.0	0.8	1.9	8.2	11.4	0.06	1.0	<1	0.6	N.D.(0.0012)	0.0044	0.0012

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: General survey items/Analysis of radioactive materials Sediment>

Locations	Items	Latitude and longitude of the location		Survey date and time		pH	Redox potential E <sub>NHE</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 (sediment)							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.075mm) (%)	Clay (Less than 0.005mm) (%)				Median grain diameter (mm)
J-1		37.4203°	140.1008°	2024/8/28	14:30	6.9	432	27.6	2.0	2.5	2.650	0.1	1.3	41.1	54.2	3.3	0.23	4.8	1.6	99	0.16

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>

Locations	Sampling point	Latitude and longitude of the location		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)	
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137		
I-1 I-2 (north lakeside)	Within the lake and Nagase River	37.5047° 37.4995°	140.1143° 140.1409°	2024/8/29	Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	80	0.041	Larva (Dragonfly larva)	-	-	-	N.D.	N.D.(1.2)	N.D.(1.1)	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>										
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Shaogomphus postocularis</i>	<i>Shaogomphus postocularis</i>										
					Arthropoda	Insecta	Odonata	Libellulidae	<i>Orthetrum albistylum speciosum</i>	Common skimmer										
					Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	9	0.12	Juvenile,Imago	-	-	-	3.0	N.D.(0.38)	3.0	-
					Arthropoda	Malacostraca	Decapoda	Astacidae	<i>Pacifastacus leniusculus trowbridgii</i>	Signal crayfish	15	0.24	Juvenile,Imago	-	-	-	2.2	N.D.(0.29)	2.2	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	526	0.29	Juvenile,Imago	-	-	-	3.5	N.D.(0.35)	3.5	-
					Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	<i>Semisulcospira libertina</i>	30	0.018	Imago	-	-	-	2.4	N.D.(2.1)	2.4	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsarichthys platypus</i>	Pale chub	9	0.087	Immature fish, Mature fish	-	-	-	2.9	N.D.(0.52)	2.9	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	4	3.4	Mature fish	Obscure digesta	Viscera removed	4.2	N.D.(0.45)	4.2	0.33	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	<i>Gnathopogon elongatus elongatus</i>	10	0.022	Immature fish, Mature fish	-	-	-	2.0	N.D.(1.6)	2.0	-
					Vertebrata	Osteichthyes	Perciformes	Actinopterygii	<i>Channa argus</i>	Snakehead	1	4.8	Mature fish	Empty stomach	Viscera removed	150	N.D.(1.7)	150	0.81	
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	61	0.21	Immature fish	-	-	-	2.7	N.D.(0.35)	2.7	-
					Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	1	0.28	Mature fish	Empty stomach	Viscera removed	2.2	N.D.(0.41)	2.2	-	
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.19	-	-	-	4.2	N.D.(0.45)	4.2	-	
J-1 (south lakeside)	Within the lake and around the Oninuma	37.4203°	140.1008°	2024/8/28	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.027	-	-	-	N.D.	N.D.(1.2)	N.D.(1.0)	-	
				2024/8/29	Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	1175	0.55	Juvenile,Imago	-	-	-	7.9	N.D.(0.65)	7.9	0.70
					Mollusca	Gastropoda	Architaenioglossa	Viviparidae	<i>Sinotaia quadrata histrica</i>	Mud-snail	30	0.044	Juvenile	-	-	-	1.4	N.D.(1.3)	1.4	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus langsdorffii</i>	<i>Carassius auratus langsdorffii</i>	13	4.0	Mature fish	Obscure digesta	Viscera removed	17	N.D.(1.1)	17	0.43	
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Rhodeus ocellatus ocellatus</i>	Rosy bitterling	43	0.048	Immature fish, Mature fish	-	-	-	7.6	N.D.(1.8)	7.6	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	44	0.049	Immature fish	-	-	-	4.8	N.D.(0.83)	4.8	-
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Lepomis macrochirus</i>	Bluegill	1	0.17	Mature fish	Empty stomach	Viscera removed	7.2	N.D.(0.81)	7.2	-	
					Vertebrata	Osteichthyes	Perciformes	Actinopterygii	<i>Channa argus</i>	Snakehead	2	1.9	Immature fish	Empty stomach	Viscera removed	12	N.D.(1.2)	12	0.47	
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	34	0.15	Immature fish	-	-	-	11	N.D.(1.0)	11	-
					Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	2	1.7	Mature fish	Insect(larva),Common prawn	Viscera removed	9.7	N.D.(1.4)	9.7	0.25	

\*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.