○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)
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)
J-1(Surface layer)	37.4203°	140.1008°	2020/8/3	13:00	14:20	25.2	24.0	Sand	7.5Y 5/3	Waterweed	3.8	>3.8
J-1(Bottom layer)						24.4						

<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	COD	DO	Electric conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time (water)		(mg/L)	(mg/L)	(mg/L)	(mS/m)		(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
J-1(Surface layer)	37.4203°	140.1008°	2020/8/3	13:00	7.2	0.9	1.9	9.2	10.7	0.06	0.8	<1	0.9	N.D.(0.0014)	0.0043	-
J-1(Bottom layer)					7.1	0.6	2.2	9.2	10.9	0.06	1.3	<1	0.9	N.D.(0.0014)	0.0051	0.00076

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>

Items / Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential $E_{N.H.E}$	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time (sediment)		(mV)	(%)	(%)	(mg/g-dry)	(g/cm^3)	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)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
J-1	37.4203°	140.1008°	2020/8/3	14:20	7.0	363	25.9	1.9	2.8	2.715	0.6	1.3	37.5	56.1	2.2	2.3	0.22	9.5	7.7	170	0.25

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°	2020/8/4	Arthropoda	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena	75	0.023	Larva(Dragonfly larva)	-	-	2.1	N.D.(2.4)	2.1	-
					Arthropoda	Insecta	Odonata	Gomphidae	*Asiagomphus melaenops*	Asiagomphus melaenops									
					Arthropoda	Insecta	Odonata	Libellulidae	*Sympetrum sp.*	Sympetrum									
					Arthropoda	Insecta	Odonata	Libellulidae	*Orthetrum albistylum speciosum*	Common skimmer									
					Arthropoda	Insecta	Odonata	Aeshnidae	*Anax parthenope julius*	Anax parthenope julius									
					Arthropoda	Malacostraca	Decapoda	Cambaridae	*Procambarus clarkii*	Red swamp crawfish	5	0.049	Juvenile,Imago	-	-	5.0	N.D.(3.5)	5.0	-
					Arthropoda	Malacostraca	Decapoda	Astacidae	*Pacifastacus leniusculus trowbridgii*	Signal crayfish	5	0.058	Juvenile,Imago	-	-	4.7	N.D.(2.0)	4.7	-
					Mollusca	Bivalvia	Unionoida	Unionidae	*Sinanodonta japonica*	Sinanodonta japonica	2	0.011	Juvenile,Imago	-	Molluscous part	N.D.	N.D.(4.0)	N.D.(3.3)	-
					Mollusca	Bivalvia	Veneroida	Corbicula	*Corbicula.sp*	Corbicula	93	0.015	Imago	-	Molluscous part	5.3	N.D.(2.7)	5.3	-
					Mollusca	Gastropoda	Discopoda	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	30	0.023	Imago	-	Molluscous part	2.4	N.D.(2.3)	2.4	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	2	0.023	Immature fish	-	-	4.1	N.D.(2.4)	4.1	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	1	0.014	Mature fish	-	-	2.8	N.D.(3.0)	2.8	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	3	0.067	Immature fish,Mature fish	Obscure digesta	Viscera removed	2.3	N.D.(1.2)	2.3	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	2	4.3	Mature fish	Obscure digesta	Viscera removed	6.2	N.D.(0.96)	6.2	0.32
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Misgurnus anguillicaudatus*	Oriental weatherfish	28	0.051	Immature fish,Mature fish	-	-	N.D.	N.D.(1.8)	N.D.(1.8)	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Gymnogobius urotaenia*	Goby	35	0.20	Immature fish	-	-	5.9	N.D.(1.0)	5.9	-
					Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	2.0	Mature fish	Lepidoptera(larva),Frog	Viscera removed	22.2	1.2	21	0.24
					Vertebrata	Amphibia	Anura	Ranidae	*Rana japonica*	Japanese brown frog	5	0.031	Imago	-	-	3.3	N.D.(2.3)	3.3	-
					Vertebrata	Amphibia	Anura	Glandirana	*Glandirana rugosa*	Wrinkled frog									
				2020/8/3	Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.18	-	-	-	0.61	N.D.(0.52)	0.61	-
J-1 (south lakeside)	Within the lake and around the Oninuma	37.4203°	140.1008°	2020/8/3	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.013	-	-	-	N.D.	N.D.(3.4)	N.D.(2.6)	-
					Algae/plant	Dicotyledoneae	Nymphaeales	Nymphaeaceae	*Nuphar japonicum*	Cow lily	-	0.30	-	-	-	1.1	N.D.(0.69)	1.1	-
					Algae/plant	Dicotyledoneae	Solanales	Menyanthaceae	*Nymphoides peltata*	Fringed water-lily	-	0.28	-	-	-	0.33	N.D.(0.38)	0.33	-
					Algae/plant	Monocotyledoneae	Alismatales	Hydrocharitaceae	*Elodea nuttallii*	Western waterweed	-	0.040	-	-	-	N.D.	N.D.(1.4)	N.D.(1.1)	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	5	0.0069	Larva(Dragonfly larva)	-	-	N.D.	N.D.(5.0)	N.D.(2.6)	-
					Arthropoda	Insecta	Odonata	Aeshnidae	*Polycanthagyna melanictera*	Polycanthagyna melanictera									
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	350	0.11	Imago	-	-	4.8	N.D.(2.2)	4.8	-
					Mollusca	Gastropoda	Architaenioglossa	Viviparidae	*Cipangopaludina japonica*	Japanese mysterysnail	26	0.044	Juvenile,Imago	-	Molluscous part	3.9	N.D.(2.9)	3.9	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	8	0.0076	Immature fish	-	-	N.D.	N.D.(8.8)	N.D.(2.8)	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Pale chub	3	0.013	Immature fish	-	-	7.1	N.D.(4.1)	7.1	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Pseudogobio esocinus esocinus*	Pseudogobio esocinus esocinus	24	0.15	Immature fish	-	-	2.6	N.D.(0.42)	2.6	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	7	2.1	Mature fish	Obscure digesta	Viscera removed	29	N.D.(1.3)	29	0.41
				2020/8/4	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	5	4.7	Mature fish	Obscure digesta	Viscera removed	23.5	1.5	22	0.41
				2020/8/3	Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	*Misgurnus anguillicaudatus*	Oriental weatherfish	16	0.022	Immature fish	-	-	N.D.	N.D.(2.5)	N.D.(2.1)	-
				2020/8/4	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	16	7.9	Immature fish,Mature fish	Fish,Common prawn	Viscera removed	37.7	1.7	36	0.25
				2020/8/3	Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Gymnogobius urotaenia*	Goby	37	0.045	Immature fish	-	-	5.3	N.D.(3.1)	5.3	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius kurodai*	Rhinogobius kurodai	31	0.023	Immature fish,Mature fish	-	-	2.2	N.D.(2.0)	2.2	-
				2020/8/4	Vertebrata	Osteichthyes	Siluriformes	Siluridae	*Silurus asotus*	Amur catfish	1	0.90	Mature fish	Obscure digesta	Viscera removed	26.2	1.2	25	-
				2020/8/3	Vertebrata	Amphibia	Anura	-	-	Frog	7	0.0039	Larva(Tadpole)	-	-	6.9	N.D.(8.5)	6.9	-
					Vertebrata	Amphibia	Anura	Glandirana	*Glandirana rugosa*	Wrinkled frog	5	0.035	Imago	-	-	N.D.	N.D.(1.7)	N.D.(1.6)	-
					Vertebrata	Amphibia	Anura	Pelophylax	*Pelophylax porosus porosus*	Tokyo daruma pond frog									
					Vertebrata	Amphibia	Caudata	Salamandridae	*Cynops pyrrhogaster*	Cynops pyrrhogaster	17	0.073	Imago	-	-	1.8	N.D.(1.5)	1.8	-

*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.