

## ○Results of Radioactive Material Monitoring of Aquatic Organisms (Location F along the Ota River)

<Location F along the Ota River: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
F-1	○	○	○	○	○	○

#### <Location F along the Ota River: Site measurement item>

Items	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
	Locations	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)
F-1	37.5975°	140.9252°	2021/6/17	09:10	09:30	18.2	18.5	Silt	7.5Y5/2	None	0.40	>50

## <Location F along the Ota River: General survey items/Analysis of radioactive materials Water>

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)												
F-1	37.5975°	140.9252°	2021/6/17	09:10	7.4	0.6	2.7	9.9	5.9	0.04	1.0	7	2.4	0.0020	0.051	0.0031

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

<Location F along the Ota River: General survey items/Analysis of radioactive materials Sediment>

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							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)			
	Locations											(%)	(%)	(%)	(%)	(%)	(%)	(mm)	(mm)			
F-1	37.5975°	140.9252°	2021/6/17	09:30	7.2	256	23.0	2.6	2.5	2.638	11.2	16.9	35.2	15.1	15.3	6.3	0.40	9.5	23	530	1.1	

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

#### <Location F along the Ota River: Analysis items Aquatic organisms>

Location F along the Ota River: 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	
F-1	The main stream of the Ota River	37.5975°	140.9252°	2021/6/15	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.015	-	-	-	558	18	540	-
					Arthropoda	Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia valida</i>	<i>Isonychia valida</i>	84	0.0073	Larva	-	-	77	N.D.(4.5)	77	-
					Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	27	0.0076	Larva(Dragonfly larva)	-	-	28	N.D.(5.9)	28	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	<i>Anotogaster sieboldii</i>									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	<i>Stylogomphus suzukii</i>									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<i>Sieboldius albardae</i>									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<i>Davidius</i>									
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	<i>Asiagomphus melaenops</i>									
					Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria macalachlani</i>	<i>Boyeria macalachlani</i>									
					Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes sp.</i>	<i>Parachauliodes</i>	39	0.015	Larva	-	-	15	N.D.(5.3)	15	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<i>Protohermes grandis</i>									
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	<i>Common prawn</i>	59	0.15	Imago	-	-	62.1	2.1	60	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	<i>Freshwater shrimp</i>	343	0.10	Juvenile,Imago	-	-	54	N.D.(3.2)	54	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	<i>Japanese mitten crab</i>	4	0.050	Juvenile	-	-	66	N.D.(6.0)	66	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	<i>Japanese eel</i>	4	0.69	Immature fish,Mature fish	Fish,Aquatic insect,Freshwater shrimp	Viscera removed	404	14	390	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	<i>Japanese dace</i>	26	0.17	Immature fish,Mature fish	-	-	135.3	5.3	130	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	<i>Dark chub</i>	7	0.029	Immature fish,Mature fish	-	-	66	N.D.(3.0)	66	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	3	0.030	Immature fish	-	-	56	N.D.(8.5)	56	-
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Cobitis biwae</i>	<i>Cobitis biwae</i>	10	0.030	Immature fish,Mature fish	-	-	46	N.D.(5.6)	46	-
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	<i>Yamame trout</i>	3	0.053	Immature fish	-	-	74	N.D.(4.0)	74	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	<i>Rhinogobius fluviatilis</i>	11	0.046	Mature fish	-	-	168.0	8.0	160	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Tridentiger brevispinis</i>	<i>Dusky tripletooth goby</i>	1	0.019	Mature fish	-	-	130	N.D.(6.7)	130	-
					Course Particulate Organic Matter	-	-	-	-	<i>Bottom fallen leaves</i>	-	0.23	-	-	-	63.5	2.5	61	-
F-5	The main stream of the Ota River	37.6022°	140.9868°	2021/6/15	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	<i>Japanese eel</i>	7	1.2	Immature fish,Mature fish	Terrestrial insect,Crab,Protohermes grandis,Caddis-fly	Viscera removed	95.7	3.7	92	0.48
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	<i>Carassius auratus langsdorffii</i>	3	1.5	Mature fish	Obscure digesta	Viscera removed	42.6	2.6	40	0.92
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	<i>Sweetfish</i>	44	0.47	Immature fish	-	-	44.1	2.1	42	-
					Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	<i>American bullfrog</i>	1	0.022	Larva(Tadpole)	-	-	140	N.D.(5.0)	140	-

\*1: Organisms were collected in or around the targeted water area

\*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.

\*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.