

**OResults of Radioactive Material Monitoring of Aquatic Organisms (Location E along the Niida River)**

<Location E along the Niida River: Samples collected>

Items	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
E-2 a	○	○	○	○	○	○

<Location E along the Niida River: Site measurement item>

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)	Transparency (cm)
E-2 a	37.6640°	140.9447°	2021/8/26	13:32	13:47	24.4	25.1	Sand with silt	5Y4/2	None	0.36	33

<Location E along the Niida 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)												
E-2 a	37.6640°	140.9447°	2021/8/26	13:32	7.3	<0.5	3.8	8.8	7.1	0.04	1.4	11	7.8	0.0032	0.063	0.0016

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

<Location E along the Niida 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>H</sub> H <sub>2</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)	Maximum grain diameter (mm)			

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

<Location E along the Niida 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		
E-2 b	The main stream of the Niida River	37.6635°	140.9452°	2021/8/24	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0059	-	-	-	150	N.D.(20)	150	-	
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	28	0.0098	Larva	-	-	-	19	N.D.(5.7)	19	-
					Arthropoda	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	72	0.039	Larva	-	-	-	9.6	N.D.(4.0)	9.6	-
					Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	10	0.037	Juvenile, Imago	-	-	-	29	N.D.(4.1)	29	-
					Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	72	0.66	Juvenile	-	-	-	20	N.D.(1.5)	20	5.0
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	0.33	Mature fish	Obscure digesta	Viscera removed	29	N.D.(1.9)	29	-	
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus pollux</i>	Japanese fluvial sculpin	18	0.24	Immature fish	-	-	-	9.8	N.D.(1.2)	9.8	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	46	1.1	Immature fish, Mature fish	-	-	-	15	N.D.(1.3)	15	0.40
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	171	1.1	Immature fish	-	-	-	14	N.D.(1.4)	14	0.59
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Pseudogobio esocinus esocinus</i>	Pseudogobio esocinus esocinus	57	0.16	Immature fish, Mature fish	-	-	-	10	N.D.(1.7)	10	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Sarcocheilichthys variegatus variegatus</i>	Sarcocheilichthys variegatus variegatus	4	0.037	Immature fish, Mature fish	-	-	-	13	N.D.(5.5)	13	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	23	0.093	Immature fish	-	-	-	7.9	N.D.(2.9)	7.9	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Acheilognathus melanogaster</i>	Acheilognathus melanogaster	12	0.010	Immature fish, Mature fish	-	-	-	61	N.D.(3.4)	61	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Gnathopogon elongatus elongatus</i>	Gnathopogon elongatus elongatus	18	0.074	Immature fish, Mature fish	-	-	-	12	N.D.(3.7)	12	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	80	0.26	Immature fish	-	-	-	6.0	N.D.(1.5)	6.0	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Hemibarbus barbus</i>	Hemibarbus barbus	1	1.8	Mature fish	Obscure digesta	Viscera removed	33	N.D.(1.8)	33	1.1	
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Misgurnus anguillicaudatus</i>	Oriental weatherfish	27	0.091	Immature fish, Mature fish	-	-	-	7.4	N.D.(2.8)	7.4	-
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	41	1.0	Immature fish, Mature fish	-	-	-	62	N.D.(1.9)	62	0.38
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	78	0.23	Mature fish	-	-	-	17	N.D.(1.7)	17	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius sp.</i>	Rhinogobius sp.										
Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog	5	0.023	Imago	-	-	-	8.5	N.D.(5.0)	8.5	-					
Vertebrata	Amphibia	Anura	Pelophylax	<i>Pelophylax porosus porosus</i>	Tokyo daruma pond frog	-	-	-	-	-	-	60.7	1.7	59	-					
Crustacea	Crustacea	-	-	-	Bottom fallen leaves	-	0.25	-	-	-	-	-	-	-	-	-				
E-3	The main stream of the Niida River	37.6444°	141.0018°	2021/8/24	Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	21	0.020	Juvenile, Imago	-	-	4.7	N.D.(3.3)	4.7	-	

\*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.