

•Results of Radioactive Material Monitoring of Aquatic Organisms (Location C along the Uda River)

<Location C along the Uda River: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
C-1	○	○	○	—	○	—
C-2	○	○	○	—	○	—
C-3	○	—	○	—	—	—
C-4	○	○	○	—	○	○
C-5	○	○	○	—	○	—
C-6	○	○	○	—	○	—

<Location C along the Uda River: 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	Odor	Contaminants	Water depth (m)	Transparency (cm)
C-1	37.795517°	140.745700°	2013/7/10	8:55	9:02	20.3	22.6	Sand	2.5Y4/3	None	Leaves	0.52	>50.0
C-2	37.770933°	140.727683°	2013/7/10	9:57	10:04	23.6	23.0	Sand/sediment	2.5Y3/1	Sediment smell	Plant	0.21	>50.0
C-3	37.779133°	140.804033°	2013/7/10	10:56	—	21.8	—	—	—	—	—	0.35	>50.0
C-4	37.769233°	140.844167°	2013/7/10	11:52	12:00	23.5	23.6	Sand gravel	2.5Y3/2	None	None	0.18	>50.0
C-5	37.764550°	140.859900°	2013/7/10	13:50	14:00	29.5	28.2	Sand	2.5Y3/2	Faint sediment	Plant	0.16	>50.0
C-6	37.776450°	140.887467°	2013/7/10	14:43	14:48	25.2	24.8	Sand	2.5Y3/3	None	None	0.34	>50.0

<Location C along the Uda River: 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												
C-1	37.795517°	140.745700°	2013/7/10	8:55	7.4	1.2	2.8	9.5	12.7	0.07	1.1	2	1.3	0.025	0.051	—
C-2	37.770933°	140.727683°	2013/7/10	9:57	7.1	0.9	7.1	8.4	11.7	0.06	3.8	8	4.2	0.066	0.13	—
C-3	37.779133°	140.804033°	2013/7/10	10:56	7.8	0.6	2.8	9.3	11.3	0.06	1.0	3	1.8	0.050	0.10	—
C-4	37.769233°	140.844167°	2013/7/10	11:52	7.8	<0.5	2.8	9.4	11.1	0.06	0.9	1	1.0	0.019	0.039	0.00096
C-5	37.764550°	140.859900°	2013/7/10	13:50	7.2	0.9	3.5	8.3	11.6	0.06	1.4	2	0.9	0.013	0.027	—
C-6	37.776450°	140.887467°	2013/7/10	14:43	7.7	0.6	3.4	9.4	13.7	0.07	1.3	2	1.3	0.022	0.048	—

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

Items Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential E _{NHE} (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm ³)	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)
C-1	37.795517°	140.745700°	2013/7/10	9:02	7.0	230	28.6	5.1	2	2.815	41.7	26.5	21.2	4.2	2.4	4.0	1.5	19	310	620	—
C-2	37.770933°	140.727683°	2013/7/10	10:04	6.8	42	50.0	24	2.743	19.4	13.0	22.3	12.7	10.5	22.1	0.33	0.33	19	1,700	3,500	—
C-4	37.769233°	140.844167°	2013/7/10	12:00	7.2	276	18.4	2.2	<1	2.755	50.9	32.2	14.5	1.3	0.3	0.8	2.0	19	220	450	0.73
C-5	37.764550°	140.859900°	2013/7/10	14:00	6.8	242	29.2	3.2	1	2.747	4.1	27.0	56.9	6.8	2.1	3.1	0.62	9.5	500	1,100	—
C-6	37.776450°	140.887467°	2013/7/10	14:48	7.2	380	27.8	3.2	<1	2.748	4.8	5.0	59.9	23.8	3.0	3.5	0.34	9.5	67	130	—

<Location C along the Uda River: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				
C-6	37.776450°	140.887467°	2013/7/14	Algae/plant	—	—	—	—	Attached algae	—	0.077	—	—	170	350	—	
				Arthropod	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<u>Stenopsyche marmorata</u>	283	0.051	Larva	—	—	67	150	—
				Arthropod	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche sauteri</i>	Parastenopsyche sauteri	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes continentalis</i>	Parachauliodes continentalis Weele	59	0.024	Larva	—	—	18	40	—
				Arthropod	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	<u>Protohermes grandis</u>	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<u>Macromia amphigena</u>	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius nanus</i>	Davidius nanus	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	Davidius	231	0.059	Larva	—	—	7.2	14	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Nihonogomphus viridis</i>	Nihonogomphus viridis	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Onychogomphus viridicostus</i>	Onychogomphus viridicostus	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<u>Sieboldius albardae</u>	—	—	—	—	—	—	—	—
				Arthropod	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii	—	—	—	—	—	—	—	—
				Arthropod	Malacostraca	Decapoda	Procambarus	<i>Procambarus clarkii</i>	Red swamp crawfish	8	0.11	Imago	—	—	9.0	20	—
				Arthropod	Malacostraca	Decapoda	Grapsidae	<i>Eriocheir japonica</i>	Japanese mitten crab	7	0.22	Imago	—	—	16	39	—
				Arthropod	Malacostraca	Decapoda	Atyidae	<i>Atyidae</i>	Freshwater shrimp	233	0.049	Imago	—	—	14	29	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Nipponocypris temminckii</i>	Dark chub	12	0.13	More than 1 year old	—	—	15	30	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	3	0.078	4-year-old fish	Some (details unknown)	—	30	56	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	R. fluviatilis	24	0.098	More than 1 year old	—	—	42	99	—
				Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese Brown Frog	20	0.031	Imago	—	—	3.3	8.4	—
				Vertebrata	Amphibia	Anura	Hylidae	<i>Hyla japonica</i>	Japanese tree frog	42	0.021	Imago	—	—	4.5	11	—
				Coarse particulate	—	—	—	—	—	—	—	—	CPOMs (fallen leaves)	—	0.91	—	65

Note 1) Underlined names in the English name column indicate species largest in number in the respective samples.

Note 2) A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.