○Results of Radioactive Material Monitoring of Aquatic Organisms (Location G in Lake Hayama)

<Location G in Lake Hayama: Samples collected>

Items / Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
G-2	○	○	○	○	○	○
G-4	○	○	○	-	○	-

<Location G in Lake Hayama: 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)
G-2(Surface layer)	37.7267°	140.8223°	2019/11/5	10:45	11:00	14.6	15.2	Sediment	7.5Y 3/1	Fallen leaves	11.3	0.2
G-2(Bottom layer)						14.4						
G-4	37.7382°	140.8035°		13:20	13:30	15.3	15.3	Sand	7.5Y 5/3	None	0.3	>0.5

Note) The number in Secchi disk depth at G4 indicates Transparency.

<Location G in Lake Hayama: 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)
G-2(Surface layer)	37.7267°	140.8223°	2019/11/5	10:45	7.2	0.5	4.8	9.3	5.8	0.03	2.5	25	42.9	0.018	0.24	-
G-2(Bottom layer)					7.2	<0.5	4.8	8.9	5.9	0.03	2.4	28	43.6	0.013	0.18	0.0013
G-4	37.7382°	140.8035°		13:20	7.4	<0.5	1.7	10.7	6.7	0.04	1.1	2	1.1	N.D.(0.0015)	0.010	-

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

<Location G in Lake Hayama: General survey items/Analysis of radioactive materials Sediment>

Items / Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential $E_{N.H.E}$ (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm^3)	Grain size distribution								Cs-134	Cs-137	Sr-90
	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)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
G-2	37.7267°	140.8223°	2019/11/5	11:00	7.0	430	60.2	7.4	18.8	2.589	1.9	3.6	12.2	25.1	32.2	25.0	0.051	9.5	250	3700	2.0
G-4	37.7382°	140.8035°		13:30	7.4	514	32.8	3.5	2.0	2.717	7.9	6.5	40.0	32.3	8.2	5.1	0.27	9.5	35	490	-

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

<Location G in Lake Hayama: 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
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	(Bq/kg-wet)
G-1 G-2 G-3	In the lake	37.7348° 37.7267° 37.7302°	140.8102° 140.8223° 140.8307°	2019/10/20	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	1	0.072	Mature fish	Obscure digesta	Viscera removed	288	18	270	-
				2019/11/5	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	2	0.20	Immature fish	Obscure digesta	Viscera removed	42.2	3.2	39	-
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Salvelinus leucomaenis*	Char	1	0.019	Immature fish	-	-	40	N.D.(6.7)	40	-
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus salmoides*	Largemouth bass	6	0.26	Immature fish	Japanese smelt	Viscera removed	33.0	2.0	31	-
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	3	1.9	Immature fish,Mature fish	Obscure digesta	Viscera removed	106.9	7.9	99	0.55
G-4	Inflowing rivers	37.7382°	140.8035°	2019/10/20	Arthropoda	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	33	0.028	Larva	-	-	8.2	N.D.(3.8)	8.2	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	290	2.1	Immature fish	-	-	22.6	1.6	21	0.33
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou*	Yamame trout	6	0.078	Immature fish	-	-	51.5	3.5	48	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius fluviatilis*	Rhinogobius fluviatilis	20	0.029	Immature fish,Mature fish	-	-	24	N.D.(5.5)	24	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius flumineus*	Rhinogobius flumineus									
					Vertebrata	Amphibia	Anura	Ranidae	*Rana ornativentris*	Montane brown frog	3	0.053	Imago	-	-	75.1	4.1	71	-
					Vertebrata	Amphibia	Anura	Lithobates	*Lithobates catesbeianus*	American bullfrog									
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	31.5	2.5	29	-

*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.