

FY2011 Gunma Prefecture Survey Results

[Survey Dates]

Survey	Rivers	Lakes	Sea Areas	Bathing Areas
1 st Time	Nov. 30-Dec. 8, 2011	Nov. 23-Dec. 16, 2011	—	—
2 nd Time	Feb. 23-Mar. 2, 2012	Feb. 23-Mar. 2, 2012	—	—

[Survey Results]

1st Time:

Water Quality (Lower detection limit: 1Bq/L)

- Radioactive iodine (I-131) was not detectable at any of the locations tested
- Radioactive cesium (Cs-134, Cs-137) was not detectable at any of the locations tested

Sediment

- Radioactive iodine (I-131) was not detectable at any of the locations tested (Lower detection limit: 30Bq/ kg (dried mud))
- Radioactive cesium

Rivers

Cs-134: ND-160Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))

Cs-137: ND -220Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))

Lakes and headwaters

Cs-134: ND-2,000Bq/kg (dried mud) (Lower detection limit: 11-41Bq/kg (dried mud))

Cs-137: ND -2,600Bq/kg (dried mud) Lower detection limit: 21-68Bq/kg (dried mud))

Surrounding Environment

- Radioactive iodine (I-131) was not detectable at any of the locations tested (Lower detection limit: 30Bq/kg (dry))
- Radioactive cesium

Rivers

Cs-134: 8-1,600Bq/kg (dry)

Cs-137: 22-2,100Bq/kg (dry)

Lakes and headwaters

Cs-134: 40-3,100Bq/kg (dry)

Cs-137: 55-4,000Bq/kg (dry)

- Spatial dose

Rivers 0.06-0.43μSv/h

Lakes and headwaters 0.06-0.37μSv/h

2nd Time:

Water Quality (Lower detection limit: 1Bq/L)

- Radioactive iodine (I-131) was not detectable at any of the locations tested
- Radioactive cesium (Cs-134, Cs-137) was not detectable at any of the locations tested

Sediment

- Radioactive iodine (I-131) was not detectable at any of the locations tested (Lower detection limit: 30Bq/ kg (dried mud))
- Radioactive cesium

Rivers

Cs-134: ND-60Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))

Cs-137: ND -250Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))

Lakes and headwaters

Cs-134: ND-870Bq/kg (dried mud) (Lower detection limit: 10Bq/kg (dried mud))

Cs-137: ND -1,100Bq/kg (dried mud) Lower detection limit: 10Bq/kg (dried mud))

Surrounding Environment

- Radioactive iodine (I-131) was not detectable at any of the locations tested (Lower detection limit: 30Bq/kg (dry))

- Radioactive cesium

Rivers

Cs-134: 16-2,300Bq/kg (dry)

Cs-137: 22-3,300Bq/kg (dry)

Lakes and headwaters

Cs-134: 40-430Bq/kg (dry)

Cs-137: 73-610Bq/kg (dry)

- Spatial dose

Rivers 0.05-0.20 μ Sv/h

Lakes and headwaters 0.06-0.18 μ Sv/h

River: 1st Surrounding Environment (River Terrace (Left Bank)) Monitoring Results

No	Sampling point			Sampling date	Weather	Surrounding environment (soil/herb/air dose)										Remarks		
						Left bank					Right bank							
	Water body	Point	Municipality			Soil			Concentration of radioactive cesium		Concentration of radioactive cesium		Air dose (µSv/h)					
						Color	Odor	Property	Radioactive cesium Cs-134	Radioactive cesium Cs-137	Radioactive cesium Cs-134	Radioactive cesium Cs-137	Radioactive cesium Cs-134	Radioactive cesium Cs-137				
1	Tonegawa River	Hirosebash Bridge	Minakamimachi Town	2011/11/30	Sunny	12.0	Brownish black	Faint earth	Loamy	<30	100	190	<30	260	360	0.33		
2		Iasukiyonobashi Bridge	Minakamimachi Town	2011/11/30	Sunny	11.6	Brownish black	Faint earth	Loamy	<30	92	110	<30	210	240	0.16		
3		Akagawaga River	Kosodebashi Bridge	Minakamimachi Town	2011/11/30	Sunny	14.6	Brownish black	Faint earth	Loamy	<30	230	290	<30	<10	<10	0.09	
4		Sakuragawa River	In Oozu Yaichi Kawabamura Village		2011/12/7	Cloudy	4.8	Brownish black	Faint earth	Loamy	<30	940	1,100	<30	170	230	0.43	
5		Kanabikigawa River	Kirimokobashi Bridge	Kawabamura Village	2011/12/11	Cloudy	4.8	Brownish black	Earth	Sandy	<30	290	370	<30	26	44	0.19	
6		Kanabikigawa River	Tonemachitakatoya	Numatashi City	2011/12/7	Sunny	11.0	Olive brown	Faint earth	Sandy	<30	55	55	<30	<10	<10	0.11	
7		Kanabikigawa River	Putabashi Bridge	Numatashi City	2011/11/30	Sunny	10.5	Brownish black	Faint earth	Loamy	<30	560	770	<30	41	80	0.13	
8		Kanabikigawa River	Gandobashi Bridge	Kusatsumachi Town	2011/12/5	Cloudy	4.4	Brownish black	Faint earth	Loamy	<30	150	190	<30	93	130	0.13	
9		Kanabikigawa River	Shintobashi Bridge	Naganoharumachi Town	2011/12/6	Cloudy	6.5	Brownish black	Faint earth	Loamy	<30	290	350	<30	120	130	0.12	
10		Shirayagawa River	Shiutatsubashi Bridge	Nakanonjima Town	2011/12/5	Cloudy	9.4	Brownish black	Faint earth	Loamy	<30	100	150	<30	84	91	0.07	
11	Agatsumagawa River	Agatsumagawa Bridge	Agatsumagawa Town	2011/12/11	Cloudy	8.8	Black	Faint earth	Loamy	<30	870	1,100	<30	<10	<10	0.20		
12	Shirayagawa River	Tonodabashi Bridge	Fakayamamura Village	2011/12/11	Cloudy	5.2	Dark brown	Faint earth	Loamy	<30	180	240	<30	<10	11	0.11		
13	Agatsumagawa River	Agatsumabashi Bridge	Shibukawashi City	2011/12/11	Cloudy	8.2	Dark olive brown	Faint earth	Loamy	<30	370	460	<30	69	91	0.15		
14	Tonegawa River	Taishobashi Bridge	Shibukawashi City	2011/12/11	Cloudy	7.2	Dark olive brown	None	Loamy	<30	150	200	<30	30	33	0.11		
15	Tonegawa River	Shintakizawabashi Bridge	Yoshikamachi Town	2011/12/11	Cloudy	6.2	Dark olive brown	Faint earth	Loamy	<30	210	280	<30	<10	14	0.09		
16	Tonegawa River	Gunmaohashi Bridge	Maebashishi City	2011/12/22	Cloudy	6.2	Dark brown	Faint earth	Loamy	<30	110	170	<30	<10	11	0.07		
17	Tonegawa River	Tukushimabashi Bridge	Tamamamachi Town	2011/12/3	Cloudy	10.2	Brownish black	Faint earth	Loamy	<30	58	87	<30	<10	<10	0.08		
18	Karasugawa River	Kamiyodabashi Bridge	Takasakishi City	2011/12/11	Cloudy	8.0	Brownish black	Faint earth	Loamy	<30	340	460	<30	23	43	0.16		
19	Karasugawa River	Karasugawabashi Bridge	Takasakishi City	2011/12/2	Snow	4.9	Black	Faint earth	Loamy	<30	140	190	<30	<10	<10	0.16		
20	Utsunogawa River	Nakasebashi Bridge	Annakashi City	2011/12/11	Cloudy	11.2	Brownish black	Faint earth	Loamy	<30	900	1,100	<30	<10	<10	0.23		
21	Utsunogawa River	Hanatabashi Bridge	Takasakishi City	2011/12/2	Cloudy	4.8	Dark olive brown	Faint earth	Loamy	<30	210	260	<30	<10	<10	0.11		
22	Karasugawa River	Hadakabashi Bridge	Numatashi City	2011/12/5	Sunny	16.8	Brownish black	Earth	Loamy	<30	99	120	<30	69	96	0.08		
23	Karasugawa River	Kabusagawabashi Bridge	Takasakishi City	2011/12/11	Cloudy	9.3	Brownish black	None	Loamy	<30	8	29	<30	<10	<10	0.06		
24	Utsunogawa River	Hamanobashi Bridge	Takasakishi City	2011/12/22	Cloudy	6.1	Brownish black	Faint earth	Loamy	<30	270	340	<30	<10	<10	0.09		
25	Utsunogawa River	Yakushibashi Bridge	Shimomura Village	2011/12/2	Cloudy	5.0	Brownish black	Faint earth	Loamy	<30	250	310	<30	<10	<10	0.08		
26	Utsunogawa River	In Motosomachi Town	Maebashishi City	2011/12/22	Cloudy	5.5	Brownish black	Faint earth	Loamy	<30	100	110	<30	<10	<10	0.06		
27	Utsunogawa River	Kamakurabashi Bridge	Takasakishi City	2011/12/11	Cloudy	7.6	Brownish black	None	Loamy	<30	46	80	<30	<10	<10	0.06		
28	Karasugawa River	Iwakurabashi Bridge	Takasakishi City	2011/12/11	Cloudy	7.4	Brownish black	Faint earth	Loamy	<30	150	190	<30	<10	19	0.06		
29	Karasugawa River	Moritobashi Bridge	Kannamachi Town	2011/12/5	Sunny	9.6	Brownish black	Faint earth	Loamy	<30	95	120	<30	34	46	0.09		
30	Karasugawa River	Tobukyo Bridge	Kannamachi Town	2011/12/11	Cloudy	9.8	Black	Faint earth	Loamy	<30	46	61	<30	<10	<10	0.09		
31	Karasugawa River	Kannagawabashi Bridge	Kannamachi Town	2011/12/11	Cloudy	9.6	Black	None	Loamy	<30	120	130	<30	<10	<10	0.07		
32	Tonegawa River	Bandoobashi Bridge	Honjoshi City	2011/12/2	Rain	6.2	Brownish black	None	Loamy	<30	210	250	<30	<10	<10	0.09		
33	Utsunogawa River	In Shimotosomachi Town	Maebashishi City	2011/12/3	Rain	8.2	Brownish black	Faint earth	Loamy	<30	78	140	<30	<10	<10	0.10		
34	Utsunogawa River	Utsuobashi Bridge	Maebashishi City	2011/12/3	Rain	7.6	Brownish black	Faint earth	Loamy	<30	110	160	<30	<10	<10	0.09		
35	Utsunogawa River	Okurarabashi Bridge	Maebashishi City	2011/12/3	Rain	8.0	Black	Faint earth	Loamy	<30	52	68	<30	<10	<10	0.07		
36	Kanokawa River	Hozumbashi Bridge	Isesakishi City	2011/12/3	Cloudy	11.9	Brownish black	Faint earth	Loamy	<30	40	47	<30	<10	<10	0.06		
37	Utsunogawa River	Nakamabashi Bridge	Isesakishi City	2011/12/2	Cloudy	7.8	Dark olive brown	None	Loamy	<30	89	99	<30	<10	<10	0.07		
38	Utsunogawa River	Hayakawabashi Bridge	Isesakishi City	2011/12/2	Cloudy	3.6	Brownish black	Faint earth	Loamy	<30	92	110	<30	<10	<10	0.10		
39	Utsunogawa River	Maemimabashi Bridge	Olashi City	2011/12/2	Cloudy	7.6	Brownish black	None	Loamy	<30	72	94	<30	<10	<10	0.07		
40	Utsunogawa River	In the confluence with Okawa River	Olashi City	2011/12/2	Cloudy	9.5	Brownish black	None	Loamy	<30	100	110	<30	<10	<10	0.08		
41	Utsunogawa River	Furutonebashi Bridge	Olashi City	2011/12/2	Cloudy	7.5	Brownish black	Faint earth	Loamy	<30	71	100	<30	<10	<10	0.09		
42	Syukugawa River	Izumiohashi Bridge	Ozummachi Town	2011/12/2	Rain	7.0	—	—	—	—	—	—	—	—	—	0.08	Surrounding environment (soil/herb/air dose): Unable to collect soil due to no exposed soil	
43	Tonegawa River	Toneozeki Weir	Yamaguchi City	2011/12/2	Rain	6.8	Olive black	None	Loamy	<30	200	260	<30	<10	<10	0.09		
44	Utsunogawa River	Kavanobashi Bridge	Kiryushu City	2011/12/7	Sunny	8.1	Dark olive brown	Faint earth	Loamy	<30	1,100	1,600	<30	810	1,000	0.26		
45	Utsunogawa River	Takatsudo	Midorishi City	2011/12/2	Cloudy	3.4	Brownish black	Faint earth	Loamy	<30	78	87	<30	22	36	0.11		
46	Utsunogawa River	In the 5th Akayoshi water channel	Kiryushu City	2011/12/2	Cloudy	6.2	Black	Faint earth	Loamy	<30	440	560	<30	<10	24	0.11		
47	Kiryugawa River	Kannonbashi Bridge	Kiryushu City	2011/12/8	Cloudy	8.0	Brownish black	Faint earth	Loamy	<30	170	230	<30	42	61	0.10		
48	Kiryugawa River	Sakabashi Bridge	Kiryushu City	2011/12/11	Cloudy	6.8	Dark brown	Faint earth	Loamy	<30	200	250	<30	<10	<10	0.08		
49	Utsunogawa River	Iwatabashi Bridge	Itakuramachi Town	2011/12/3	Rain	6.8	Brownish black	Faint earth	Loamy	<30	140	180	<30	66	73	0.11		
50	Utsunogawa River	Amokawabashi Bridge	Itakuramachi Town	2011/12/2	Cloudy	7.6	Black	None	Loamy	<30	270	340	<30	<10	18	0.07		

Note: Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.

Lake and Headwater: 1st Water Quality Monitoring Results

Sampling point				Sampling date	Weather	Air temperature	Full depth m	Water quality										Remarks
No.	Water body	Point	Municipality					General items							Radioactive material concentrations (Bq/L)			
								Water temperature	Sampling depth m	Color	Odor	Stochi disk depth m	Electrical conductivity mS/m	SS mg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137	
51	Okutoneko Lake (Yagisawa Dam)	Center	—	2011/12/2	Cloudy	1.8	77.2	9.8	0.5	Yellow green	None	1.1	22.9	5	9.0	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	9.0	76.2	—	None	—	23.3	14	23	<1	<1	<1
52	Naramatako Lake (Naramata Dam)	Center	—	2011/12/2	Cloudy	1.4	86.3	6.7	0.5	Yellow green	None	1.3	23.2	3	5.0	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	4.8	85.3	—	None	—	24.2	4	8.3	<1	<1	<1
53	Dogenko Lake (Sudagai Dam)	Center	—	2011/12/2	Cloudy	2.3	42.6	7.7	0.5	Yellow green	None	1.2	25.9	4	6.4	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	6.8	41.6	—	None	—	26.4	7	8.4	<1	<1	<1
54	Fujiwarako Lake (Fujiwara Dam)	Center	—	2011/12/1	Cloudy	2.3	68.3	9.2	0.5	Yellow green	None	1.1	25.1	7	11	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	8.8	67.3	—	None	—	25.7	28	35	<1	<1	<1
55	Akayako Lake (Aimata Dam)	Center	—	2011/12/7	Sunny	4.0	30.2	7.6	0.5	Dark yellow green	None	2.0	5.7	3	5.0	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	6.8	29.2	—	None	—	5.2	9	10	<1	<1	<1
56	Marunuma Lake (Marunuma Dam)	Center	—	2011/12/16	Snow	-2.0	43.7	4.8	0.5	Dark green	None	6.4	6.8	<1	1.1	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	4.7	42.7	—	None	—	12.1	1	3.6	<1	<1	<1
57	Sonoharako Lake (Sonohara Dam)	Center	—	2011/12/8	Cloudy	3.3	27.1	6.1	0.5	Dark green	None	3.8	5.3	3	3.1	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	5.9	26.1	—	None	—	5.2	3	2.8	<1	<1	<1
58	Akagionuma Lake	Center	—	2011/11/28	Cloudy	11.6	17.5	7.6	0.5	Dark yellow green	None	4.0	4.6	1	1.8	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	7.2	16.5	—	None	—	5.1	2	2.3	<1	<1	<1
59	Tashiroko Lake (Kazawa Dam)	Center	—	2011/12/6	Cloudy	1.9	5.0	4.4	0.5	Dark yellow green	Faint mold	1.8	5.9	4	5.9	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	4.6	4.0	—	Faint mold	—	5.9	5	7.0	<1	<1	<1
60	Okushimako Lake (Shimagawa Dam)	Center	—	2011/12/16	Sunny	-0.2	50.2	6.3	0.5	Blue	None	18.5	12.6	<1	<0.1	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	6.1	49.2	—	None	—	12.7	<1	0.1	<1	<1	<1
61	Harunako Lake	Center	—	2011/11/23	Clear	7.3	14.8	9.9	0.5	Dark yellow green	None	5.0	9.8	1	5.2	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	9.9	13.8	—	None	—	11.4	1	5.0	<1	<1	<1
62	Kirizumiko Lake (Kirizumi Dam)	Center	—	2011/12/1	Cloudy	6.3	0.7	8.5	0.0	Dark brown	None	0.7 or	12.1	2	6.1	<1	<1	<1
63	Usuiko Lake (Sakamoto Dam)	Center	—	2011/12/1	Cloudy	5.6	13.2	8.8	0.5	Dark yellow green	None	3.3	11.6	1	2.9	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	8.4	12.2	—	None	—	11.6	1	2.5	<1	<1	<1
64	Arafuneko Lake (Dodairagawa Dam)	Center	—	2011/12/6	Cloudy	9.7	29.8	10.5	0.5	Dark green	None	2.3	38.0	3	5.2	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	8.3	28.8	—	None	—	46.1	6	11	<1	<1	<1
65	Oshioke Lake (Oshio Dam)	Center	—	2011/12/6	Cloudy	8.0	13.1	10.6	0.5	Dark green	None	4.1	23.4	2	2.8	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	10.7	12.1	—	None	—	23.0	3	3.0	<1	<1	<1
66	Hebikamiko Lake (Shiozawa Dam)	Center	—	2011/12/6	Cloudy	8.6	14.7	8.6	0.5	Dark yellow green	None	2.1	16.8	2	4.4	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	8.4	13.7	—	None	—	16.8	3	4.8	<1	<1	<1
67	Kannako Lake (Shimokubo Dam)	Center	—	2011/12/6	Cloudy	7.0	79.4	11.6	0.5	Dark yellow green	None	1.2	15.2	3	7.1	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	5.6	78.4	—	None	—	18.8	13	23	<1	<1	<1
68	Kusakiko Lake (Kusaki Dam)	Center	—	2011/12/9	Sunny	3.8	51.0	9.8	0.5	Dark green	None	5.5	10.6	<1	1.8	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	9.0	50.0	—	None	—	10.6	1	2.3	<1	<1	<1
69	Umedako Lake (Kiryugawa Dam)	Center	—	2011/12/9	Cloudy	1.5	27.0	8.4	0.5	Dark green	None	2.8	6.3	1	3.0	<1	<1	<1
		1 m from the bottom	—	—	—	—	—	5.8	26.0	—	None	—	8.1	5	18	<1	<1	<1
—	Nozoriko Lake (Nozori Dam)	Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: Sampling points are listed from north to south.

Lake and Headwater: 1st Surrounding Environment (Lake Shore) Monitoring Results

Sampling point				Sampling date	Weather	Air temperature	Surrounding environment (soil/herb/air dose)										Remarks
							Soil			Concentration of radioactive material Bq/kg			Herb			Air dose (μSv/h)	
							Color	Odor	Property	Radioactive iodine	Radioactive cesium		Radioactive iodine	Radioactive cesium			
No.	Water body	Point	Municipality						Cs-134	Cs-137		Cs-134	Cs-137				
51	Okutoneko Lake (Yagisawa Dam)	Center	—	2011/12/2	Cloudy	1.8	Brownish black	Faint earth	Loamy	<30	1,300	1,600	<30	93	130	0.26	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
52	Naramatako Lake (Naramata Dam)	Center	—	2011/12/2	Cloudy	1.4	Brown	None	Sandy	<30	190	200	<30	50	70	0.32	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
53	Dogenko Lake (Sudagai Dam)	Center	—	2011/12/2	Cloudy	2.3	Brownish black	Earth	Loamy	<30	150	180	<30	480	650	0.26	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
54	Fujiwarako Lake (Fujiwara Dam)	Center	—	2011/12/1	Cloudy	2.3	Brownish black	Earth	Loamy	<30	310	450	<30	440	580	0.15	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
55	Akayako Lake (Aimata Dam)	Center	—	2011/12/7	Sunny	4.0	Black	Faint earth	Loamy	<30	540	710	<30	200	260	0.17	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
56	Marunuma Lake (Marunuma Dam)	Center	—	2011/12/16	Snow	-2.0	Brownish black	Earth	Loamy	<30	56	78	—	—	—	0.14	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
57	Sonoharako Lake (Sonohara Dam)	Center	—	2011/12/8	Cloudy	3.3	Brownish black	Faint earth	Loamy	<30	230	320	<30	100	150	0.13	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
58	Akagionuma Lake	Center	—	2011/11/28	Cloudy	11.6	Brownish black	Faint earth	Loamy	<30	260	300	—	—	—	0.15	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
59	Tashiroko Lake (Kazawa Dam)	Center	—	2011/12/6	Cloudy	1.9	Brownish black	Faint earth	Loamy	<30	240	380	<30	17	24	0.14	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
60	Okushimako Lake (Shimagawa Dam)	Center	—	2011/12/16	Sunny	-0.2	Brownish black	Earth	Loamy	<30	3,100	4,000	—	—	—	0.35	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
61	Harunako Lake	Center	—	2011/11/23	Clear	7.3	Black	Faint earth	Loamy	<30	1,100	1,400	—	—	—	0.37	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
62	Kirizumiko Lake (Kirizumi Dam)	Center	—	2011/12/1	Cloudy	6.3	Brown	Faint earth	Loamy	<30	390	510	<30	100	120	0.18	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
63	Usuiko Lake (Sakamoto Dam)	Center	—	2011/12/1	Cloudy	5.6	Brownish black	Faint earth	Loamy	<30	290	370	<30	<10	<10	0.15	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
64	Arafuneko Lake (Dodairagawa Dam)	Center	—	2011/12/6	Cloudy	9.7	Brownish black	Faint earth	Loamy	<30	330	390	<30	<10	<10	0.09	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
65	Oshio Lake (Oshio Dam)	Center	—	2011/12/6	Cloudy	8.0	Brownish black	Earth	Loamy	<30	240	320	<30	20	24	0.08	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
66	Hebikamiko Lake (Shiozawa Dam)	Center	—	2011/12/6	Cloudy	8.6	Brownish black	Earth	Sandy	<30	40	55	<30	24	28	0.11	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
67	Kannako Lake (Shimokubo Dam)	Center	—	2011/12/6	Cloudy	7.0	Brownish black	Earth	Loamy	<30	210	300	<30	16	26	0.06	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
68	Kusakiko Lake (Kusaki Dam)	Center	—	2011/12/9	Sunny	3.8	Black	Faint earth	Loamy	<30	660	790	<30	33	43	0.20	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
69	Umedako Lake (Kiryugawa Dam)	Center	—	2011/12/9	Cloudy	1.5	Dark grayish yellow	Faint earth	Clay-loamy	<30	150	250	<30	<10	<10	0.11	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Note: Sampling points are listed from north to south.

River: 2nd Water Quality Monitoring Results

Sampling point				Sampling date	Weather	Air temperature	Water depth	Water quality										Remarks	
No.	Water body	Point	Municipality					General items					Radioactive material concentrations (Bq/L)						
				Temperature	Color	Odor	Chlorophyll a	Chlorophyll b	SSmg/L	Turbidity	Cs-134	Cs-137							
1	Tonegawa River	Hirosebash Bridge	Shimane Prefecture	2012/2/29	Cloudy	3.4	2.00	0.4	0.0	Dark green	None	100 or more	6.0	8	6.9	<1	<1	<1	Since previous survey locations for water quality and sediment had increased water level, only water qual
2		Sakunobashi Bridge	Shimane Prefecture	2012/2/29	Snow	-1.0	0.40	1.2	0.0	Chlorophyll	None	100 or more	8.9	2	2.1	<1	<1	<1	
3		Kosodebash Bridge	Shimane Prefecture	2012/3/1	Sunny	2.4	0.70	3.0	0.0	Chlorophyll	None	100 or more	16.6	1	1.6	<1	<1	<1	
4		In Oozga Yachi	Kawabana Village	2012/2/29	Snow	-0.4	0.40	0.4	0.0	Chlorophyll	None	100 or more	7.5	<1	0.1	<1	<1	<1	
5		Kirmokobashi Bridge	Kawabana Village	2012/3/1	Sunny	4.8	0.20	2.8	0.0	Chlorophyll	None	100 or more	6.5	1	1.1	<1	<1	<1	Since previous survey locations of water quality and sediment (river bank) had much snow, water quality a
6		Tomemachikatave	Sumatashi City	2012/3/1	Sunny	7.8	0.80	4.6	0.0	Chlorophyll	None	100 or more	11.7	<1	0.7	<1	<1	<1	
7	Agatsumaga wa River	Butabashi Bridge	Shimane Prefecture	2012/2/29	Snow	-3.4	0.60	3.2	0.0	Chlorophyll	None	100 or more	12.3	1	1.2	<1	<1	<1	
9		Shimobashi Bridge	Shimane Prefecture	2012/2/28	Sunny	2.8	1.00	1.0	0.0	Yellow-green	None	61	25.1	15	11	<1	<1	<1	Previous survey locations of water quality and sediment (river bank) changed due to icy river bank slope. Wat
10		Shimatsubashi Bridge	Shimane Prefecture	2012/2/28	Sunny	2.2	1.00	1.8	0.0	Yellow-green	None	100 or more	14.7	3	3.2	<1	<1	<1	Previous survey locations of water quality and sediment (river bank) changed due to icy river bank slope. On
11		Downstream of Amunabashi Bridge	Kawabana Village	2012/2/28	Sunny	10.8	0.60	4.8	0.0	Chlorophyll	None	100 or more	19.0	1	1.6	<1	<1	<1	
12		Tonodabashi Bridge	Kawabana Village	2012/2/28	Sunny	4.3	0.40	4.0	0.0	Chlorophyll	None	100 or more	13.0	3	3.1	<1	<1	<1	
13		Agatsumabashi Bridge	Shibukawa City	2012/2/27	Sunny	6.2	0.30	7.4	0.0	Chlorophyll	None	100 or more	20.2	1	1.6	<1	<1	<1	
14	Tonegawa River	Tashobashi Bridge	Shibukawa City	2012/2/27	Sunny	6.2	0.80	4.8	0.0	Chlorophyll	None	100 or more	14.8	1	1.0	<1	<1	<1	
15		Shimokawabashi Bridge	Shimane Prefecture	2012/2/27	Sunny	6.4	0.30	8.6	0.0	Grayish yellow	None	16	25.9	85	51	<1	<1	<1	
16		Gummaobashi Bridge	Shibubashi City	2012/2/27	Sunny	2.3	0.60	2.3	0.0	Greenish brown	None	24	21.9	13	33	<1	<1	<1	
17		Takushimabashi Bridge	Sumitaniwa Town	2012/2/25	Cloudy	7.8	0.80	6.8	0.0	Grayish green	None	50	20.1	18	13	<1	<1	<1	
18		Kamugodabashi Bridge	Takakashi City	2012/3/2	Rain	5.6	0.32	7.0	0.0	Chlorophyll	None	100 or more	12.1	2	1.8	<1	<1	<1	
19		Karasugawabashi Bridge	Takakashi City	2012/3/2	Rain	6.7	0.55	6.1	0.0	Chlorophyll	None	100 or more	13.2	1	1.3	<1	<1	<1	
20	Tonegawa River	Nakasebash Bridge	Amakashi City	2012/2/27	Sunny	9.6	0.30	5.6	0.0	Chlorophyll	None	100 or more	24.5	1	0.8	<1	<1	<1	
21		Hanatakabashi Bridge	Takakashi City	2012/2/27	Sunny	9	0.30	7.2	0.0	Chlorophyll	None	100 or more	32.3	2	2.7	<1	<1	<1	
22		Hidakawabashi Bridge	Sumitaniwa Town	2012/2/23	Cloudy	11.1	0.60	7.2	0.0	Chlorophyll	None	100 or more	41.0	2	3.4	<1	<1	<1	
23		Kaburagawabashi Bridge	Sumitaniwa Town	2012/2/28	Sunny	6.4	0.50	6.4	0.0	Chlorophyll	None	100 or more	41.2	2	2.4	<1	<1	<1	
24		Yakushibashi Bridge	Sumitaniwa Town	2012/2/27	Sunny	1.8	0.40	3.8	0.0	Greenish brown	None	100 or more	29.9	3	2.8	<1	<1	<1	
25		Kamakurabashi Bridge	Takakashi City	2012/2/28	Sunny	0.0	0.50	4.3	0.0	Chlorophyll	None	84	41.3	7	5.8	<1	<1	<1	
26	Karasugawa River	Iwakurabashi Bridge	Takakashi City	2012/2/28	Sunny	4.2	0.70	8.2	0.0	Chlorophyll	None	100 or more	39.0	1	0.6	<1	<1	<1	
27		Moritobashi Bridge	Sumitaniwa Town	2012/2/24	Clear	8.2	0.40	2.9	0.0	Chlorophyll	None	100 or more	23.3	<1	0.2	<1	<1	<1	
28		Tobukyo Bridge	Sumitaniwa Town	2012/2/28	Sunny	9.0	0.30	8.5	0.0	Chlorophyll	None	100 or more	23.1	2	1.7	<1	<1	<1	
29		Kanagawabashi Bridge	Sumitaniwa Town	2012/2/28	Sunny	8.9	0.20	8.4	0.0	Chlorophyll	None	100 or more	23.3	2	1.8	<1	<1	<1	
30		Bandobashi Bridge	Honoshi City	2012/2/29	Snow	0.4	0.50	6.1	0.0	Chlorophyll	None	100 or more	37.8	3	3.0	<1	<1	<1	
31		In Shimohosonmachi Town	Maebashi City	2012/2/25	Cloudy	8.0	0.30	6.4	0.0	Grayish yellow	None	30	24.1	31	21	<1	<1	<1	
32	Tonegawa River	Utsuobashi Bridge	Maebashi City	2012/2/25	Cloudy	9.2	0.50	9.2	0.0	Greenish brown	None	34	24.9	19	16	<1	<1	<1	
33		Okuharabashi Bridge	Maebashi City	2012/2/25	Cloudy	8.2	0.30	9.2	0.0	Greenish brown	None	16	21.0	28	52	<1	<1	<1	
34		Hozumibashi Bridge	Besakashi City	2012/2/26	Cloudy	5.8	0.50	6.8	0.0	Greenish brown	None	59	37.7	11	9.6	<1	<1	<1	
35		Nakamabashi Bridge	Besakashi City	2012/2/29	Cloudy	1.4	0.30	5.4	0.0	Chlorophyll	None	62	41.1	8	6.9	<1	<1	<1	
36		Toneozeki Weir	Besakashi City	2012/2/29	Snow	2.7	0.50	4.9	0.0	Chlorophyll	None	72	33.1	7	7.0	<1	<1	<1	Unable to collect soil and measure air dose due to much snow on the river bank
37		Kavanobashi Bridge	Kiriyushi City	2012/3/1	Sunny	6.2	0.30	4.8	0.0	Chlorophyll	None	100 or more	7.8	3	2.2	<1	<1	<1	Since previous survey locations of water quality and sediment (river bank) had much snow, water quality a
38	Watarasega wa River	Takatsudo	Midorishi City	2012/2/26	Cloudy	5.4	0.60	5.6	0.0	Chlorophyll	None	100 or more	13.9	1	1.9	<1	<1	<1	
39		Intake for Akayomiyama water channel	Kiriyushi City	2012/2/26	Cloudy	8.8	0.40	6.0	0.0	Chlorophyll	None	100 or more	14.6	1	1.3	<1	<1	<1	
40		Kannonbashi Bridge	Kiriyushi City	2012/3/1	Sunny	8.9	0.30	5.2	0.0	Chlorophyll	None	100 or more	8.4	1	1.0	<1	<1	<1	
41		Sakabashi Bridge	Kiriyushi City	2012/2/26	Cloudy	6.8	0.60	6.2	0.0	Greenish brown	None	13.4	4	2.1	<1	<1	<1		

Note: Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.

River: 2nd Surrounding Environment (River Terrace (Left Bank)) Monitoring Results

Sampling point				Sampling date	Weather	Surrounding environment (soil and air dose)										Remarks
No.	Water body	Point	Municipality			Left bank					Soil			Air dose (μSv/h)		
						Color	Odor	Property	Radioactive material concentration	Radioactive iodine	Radioactive cesium	Radioactive strontium				
				Color	Odor	Property	Radioactive material concentration	Radioactive iodine	Radioactive cesium	Radioactive strontium	Air dose (μSv/h)					
1	Tonegawa River	Hirosebash Bridge	Minakamimachi Town	2012/2/29	Cloudy	3.4	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
2	Tonegawa River	Iasukiyonobashi Bridge	Minakamimachi Town	2012/2/29	Snow	-1.0	Brownish black	None	Loamy	<30	170	270	0.15	—	—	
3	Atsugawa River	Kosodebashi Bridge	Minakamimachi Town	2012/3/1	Sunny	2.4	—	—	—	<30	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
4	Sakuragawa River	In Oozga Yachi	Kawabamura Village	2012/2/29	Snow	-0.4	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
5	Kiritagawa River	Kirinokibashi Bridge	Katshiramura Village	2012/3/1	Sunny	4.8	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
6	Kiritagawa River	Tonemachitakatovz	Numatashi City	2012/3/1	Sunny	7.8	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
7	Kiritagawa River	Futabashi Bridge	Kawanabe City	2012/2/29	Snow	3.4	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
9	Kiritagawa River	Shimobashi Bridge	Naganoharumachi Town	2012/2/28	Sunny	2.8	Brownish black	None	Loamy	<30	650	930	0.10	—	—	
10	Kiritagawa River	Shiitatsubashi Bridge	Nakanotojima Town	2012/2/28	Sunny	2.2	Brownish black	None	Loamy	<30	190	260	0.07	—	—	
11	Agatsugawa River	Downstream of Azumabashi Bridge	Higashigatsugomachi Town	2012/2/28	Sunny	10.8	Brownish black	Faint earth	Loamy	<30	690	1,000	0.20	—	—	
12	Nakutagawa River	Tonodabashi Bridge	Takayamamura Village	2012/2/28	Sunny	4.3	Brownish black	None	Loamy	<30	270	370	0.09	—	—	
13	Agatsugawa River	Agatsubashi Bridge	Shibukawashi City	2012/2/27	Sunny	6.2	Brownish black	Faint earth	Loamy	<30	300	440	0.16	—	—	
14	Tonegawa River	Taishobashi Bridge	Shibukawashi City	2012/2/27	Sunny	6.2	Brownish black	Faint earth	Loamy	<30	650	840	0.11	—	—	
15	Kiritagawa River	Shimokizawabashi Bridge	Yoshokamachi Town	2012/2/27	Sunny	6.4	Dark brown	Faint earth	Loamy	<30	210	310	0.09	—	—	
16	Tonegawa River	Gumanoashi Bridge	Maebashi City	2012/2/27	Sunny	2.5	Dark brown	None	Loamy	<30	16	22	0.05	—	—	
17	Tonegawa River	Fukushimabashi Bridge	Tanamarumachi Town	2012/2/25	Cloudy	7.8	Brownish black	None	Loamy	<30	63	99	0.06	—	—	
18	Nagatagawa River	Kamigondabashi Bridge	Takasakishi City	2012/3/2	Rain	5.6	Brownish black	Faint earth	Loamy	<30	1,500	1,800	0.14	—	—	
19	Kanagawa River	Karasuawabashi Bridge	Takasakishi City	2012/3/2	Rain	6.7	Brownish black	Faint earth	Loamy	<30	250	340	0.16	—	—	
20	Utsugawa River	Nakasebashi Bridge	Annakashi City	2012/2/27	Sunny	9.6	Brownish black	None	Loamy	<30	630	850	0.20	—	—	
21	Utsugawa River	Hanatakabashi Bridge	Takasakishi City	2012/2/27	Sunny	7.9	Brownish black	None	Loamy	<30	140	200	0.09	—	—	
22	Kiritagawa River	Tadakawabashi Bridge	Yoshokamachi Town	2012/2/25	Cloudy	11.1	Brownish black	None	Loamy	<30	140	200	0.16	—	—	
23	Kiritagawa River	Kaburagawabashi Bridge	Yoshokamachi Town	2012/2/28	Sunny	6.4	Black	None	Loamy	<30	87	130	0.07	—	—	
24	Senryugawa River	Yakushibashi Bridge	Shintomura Village	2012/2/27	Sunny	1.8	Dark brown	Faint earth	Loamy	<30	400	490	0.08	—	—	
27	Inogawa River	Kamakurabashi Bridge	Takasakishi City	2012/2/28	Sunny	0.0	Dark grayish yellow	None	Loamy	<30	59	72	0.06	—	—	
28	Kanagawa River	Iwakurabashi Bridge	Takasakishi City	2012/2/28	Sunny	4.2	Brownish black	None	Loamy	<30	110	180	0.07	—	—	
29	Kanagawa River	Montobashi Bridge	Kannamachi Town	2012/2/24	Clear	8.2	Dark olive brown	Faint earth	Loamy	<30	79	140	0.08	—	—	
30	Kanagawa River	Tobukyo Bridge	Yoshokamachi Town	2012/2/28	Sunny	9.0	Brownish black	None	Loamy	<30	130	180	0.08	—	—	
31	Kanagawa River	Kannagawabashi Bridge	Kamisatomachi Town	2012/2/28	Sunny	8.9	Brownish black	None	Loamy	<30	95	120	0.08	—	—	
32	Tonegawa River	Randoohashi Bridge	Honishi City	2012/2/29	Snow	0.4	Brownish black	None	Loamy	<30	250	400	0.10	—	—	
33	Kiritagawa River	In Shimohosomachi	Maebashi City	2012/2/25	Cloudy	8.0	Brownish black	Faint earth	Loamy	<30	210	290	0.08	—	—	
34	Kiritagawa River	Utsubashi Bridge	Maebashi City	2012/2/25	Cloudy	9.2	Brownish black	None	Loamy	<30	240	340	0.07	—	—	
35	Atsugawa River	Okuharabashi Bridge	Maebashi City	2012/2/25	Cloudy	8.2	Brownish black	None	Loamy	<30	82	100	0.06	—	—	
36	Kiritagawa River	Hozumbashi Bridge	Iesakishi City	2012/2/26	Cloudy	5.8	Black	Faint green grass	Loamy	<30	140	180	0.06	—	—	
37	Hirasegawa River	Nakaumabashi Bridge	Iesakishi City	2012/2/29	Cloudy	1.4	Brownish black	None	Loamy	<30	83	100	0.07	—	—	
43	Tonegawa River	Toneozeki Weir	Shimomachi Town	2012/2/29	Snow	2.7	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
44	Kiritagawa River	Kavanobashi Bridge	Kiryushi City	2012/3/1	Sunny	6.2	—	—	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank	
45	Kiritagawa River	Takatsuda	Midorishi City	2012/2/26	Cloudy	5.4	Brownish black	None	Loamy	<30	110	170	0.10	—	—	
46	Kiritagawa River	Intake for Akawayama water channel	Kiryushi City	2012/2/26	Cloudy	8.8	Black	Faint earth	Loamy	<30	550	840	0.12	—	—	
47	Kiryugawa River	Kamonobashi Bridge	Kiryushi City	2012/3/1	Sunny	8.9	Brownish black	Faint earth	Loamy	<30	150	190	0.09	—	—	
48	Kiryugawa River	Sakabashi Bridge	Kiryushi City	2012/2/26	Cloudy	6.8	Brownish black	Faint earth	Loamy	<30	100	130	0.09	—	—	

Note: Air dose was measured with a survey meter, TCS-172 or TCS-161 of Hitachi-Aloka Medical, Ltd.

*Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.

River: 2nd Surrounding Environment (River Terrace (Right Bank)) Monitoring Results

Sampling point				Sampling date	Weather	Surrounding environment (soil and air dose)							Remarks
No.	Water body	Point	Municipality			Soil			Radioactive material concentration		Air dose (μSv/h)		
						Color	Odor	Property	Radioactive iodine	Radioactive cesium			
						Color	Odor	Property	Cs-134	Cs-137			
1	Tonegawa River	Hirosebash Bridge	Minakamimachi Town	2012/2/29	Cloudy	3.4	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
2	Tonegawa River	Iasukiyonobashi Bridge	Minakamimachi Town	2012/2/29	Snow	-1.0	Brownish black	None	Loamy	<30	960	1,300	0.15
3	Abayagawa River	Kosodebash Bridge	Minakamimachi Town	2012/3/1	Sunny	2.4	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
4	Karugawa River	In Ooaza Yachi	Kawabamura Village	2012/2/29	Snow	-0.4	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
5	Karugawa River	Kirinokibashi Bridge	Katsuramura Village	2012/3/1	Sunny	4.8	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
6	Karugawa River	Tonemachitakatovz	Numatashi City	2012/3/1	Sunny	7.8	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
7	Karugawa River	Futabashi Bridge	Kawanabe Town	2012/2/29	Snow	3.4	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
8	Karugawa River	Shimobashi Bridge	Naganoharumachi Town	2012/2/28	Sunny	2.8	Very dark brown	None	Loamy	<30	810	1,200	0.13
9	Karugawa River	Shiitabashi Bridge	Nakanotojima Town	2012/2/28	Sunny	2.2	Brownish black	None	Loamy	<30	1,100	1,600	0.10
10	Karugawa River	Downstream of Azumabashi Bridge	Higashigatsumamachi Town	2012/2/28	Sunny	10.8	Dark brown	None	Loamy	<30	200	270	0.11
11	Karugawa River	Lonodabashi Bridge	Takayamamura Village	2012/2/28	Sunny	4.3	Brownish black	None	Loamy	<30	330	440	0.09
12	Karugawa River	Agatsumabashi Bridge	Shibukawashi City	2012/2/27	Sunny	6.2	Black	Faint earth	Loamy	<30	850	1,200	0.12
13	Karugawa River	Taishobashi Bridge	Shibukawashi City	2012/2/27	Sunny	6.2	Brownish black	Faint earth	Loamy	<30	2,300	3,300	0.10
14	Karugawa River	Shimokizawabashi Bridge	Yoshokamachi Town	2012/2/27	Sunny	6.4	Dark brown	Faint earth	Loamy	<30	130	210	0.08
15	Karugawa River	Gumanoashi Bridge	Maebashi City	2012/2/27	Sunny	2.5	Brownish black	None	Loamy	<30	380	580	0.09
16	Karugawa River	Fukushimabashi Bridge	Tanamarumachi Town	2012/2/25	Cloudy	7.8	Brownish black	None	Loamy	<30	82	100	0.07
17	Karugawa River	Kamigondabashi Bridge	Takasakishi City	2012/3/2	Rain	5.6	Brownish black	Faint earth	Loamy	<30	840	1,100	0.18
18	Karugawa River	Karasuawabashi Bridge	Takasakishi City	2012/3/2	Rain	6.7	Brownish black	Faint earth	Loamy	<30	660	910	0.18
19	Karugawa River	Nakasebashi Bridge	Annakashi City	2012/2/27	Sunny	9.6	Brownish black	None	Loamy	<30	480	610	0.19
20	Karugawa River	Hanatakabashi Bridge	Takasakishi City	2012/2/27	Sunny	7.9	Brownish black	None	Loamy	<30	110	170	0.10
21	Karugawa River	Tadakawabashi Bridge	Tadokashi City	2012/2/25	Cloudy	11.1	Olive black	None	Sandy	<30	210	300	0.12
22	Karugawa River	Kaburagawabashi Bridge	Takayama City	2012/2/28	Sunny	6.4	Dark greenish yellow	None	Loamy	<30	31	44	0.05
23	Karugawa River	Yakushibashi Bridge	Shintomura Village	2012/2/24	Sunny	1.8	Brownish black	None	Loamy	<30	430	460	0.07
24	Karugawa River	Kamakurabashi Bridge	Takasakishi City	2012/2/28	Sunny	0.0	Brownish black	None	Loamy	<30	100	170	0.07
25	Karugawa River	Iwakurabashi Bridge	Takasakishi City	2012/2/24	Sunny	4.2	Brownish black	None	Loamy	<30	230	320	0.06
26	Karugawa River	Montobashi Bridge	Kannamachi Town	2012/2/24	Clear	8.2	Dark olive brown	Faint earth	Loamy	<30	84	120	0.07
27	Karugawa River	Tobukyo Bridge	Yoshida City	2012/2/28	Sunny	9.0	Brownish black	None	Loamy	<30	220	300	0.09
28	Karugawa River	Kannagawabashi Bridge	Kamiatomachi Town	2012/2/28	Sunny	8.9	Brownish black	None	Loamy	<30	63	96	0.08
29	Karugawa River	Handoobashi Bridge	Honoshi City	2012/2/29	Snow	0.4	Brownish black	None	Loamy	<30	87	140	0.08
30	Karugawa River	In Shimohosomachi	Maebashi City	2012/2/25	Cloudy	8.0	Brownish black	Faint earth	Loamy	<30	57	93	0.07
31	Karugawa River	Utsunobashi Bridge	Maebashi City	2012/2/25	Cloudy	9.2	Dark brown	None	Loamy	<30	330	440	0.07
32	Karugawa River	Okuharabashi Bridge	Maebashi City	2012/2/25	Cloudy	8.2	Brownish black	None	Loamy	<30	69	100	0.05
33	Karugawa River	Hozumbashi Bridge	Iesakishi City	2012/2/26	Cloudy	5.8	Brownish black	Faint earth	Loamy	<30	250	340	0.07
34	Karugawa River	Nakaumabashi Bridge	Iesakishi City	2012/2/29	Cloudy	1.4	Brownish black	None	Loamy	<30	97	160	0.08
35	Karugawa River	Toneozeki Weir	Shimane City	2012/2/29	Snow	2.7	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
36	Karugawa River	Kavanobashi Bridge	Kiryushi City	2012/3/1	Sunny	6.2	—	—	—	—	—	—	Unable to collect soil and measure air dose due to much snow on the river bank
37	Karugawa River	Takatsubo	Midorishi City	2012/2/26	Cloudy	5.4	Dark brown	None	Loamy	<30	270	410	0.11
38	Karugawa River	Intake for Akawayama water channel	Kiryushi City	2012/2/26	Cloudy	8.8	Dark brown	None	Loamy	<30	130	190	0.10
39	Kiryugawa River	Kamnobashi Bridge	Kiryushi City	2012/3/1	Sunny	8.9	Brownish black	Faint earth	Loamy	<30	270	360	0.08
40	Kiryugawa River	Sakabashi Bridge	Kiryushi City	2012/2/26	Cloudy	6.8	Dark brown	Faint earth	Loamy	<30	100	160	0.07

Note: Air dose was measured with a survey meter, TCS-172 or TCS-161 of Hitachi-Aloka Medical, Ltd.

*Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.

Lake and Headwater: 2nd Water Quality Monitoring Results

Sampling point				Sampling date	Weather	Air temperature	Full depth m	Water quality											Remarks
No.	Water body	Point	Municipality					General items							Radioactive material concentrations (Bq/L)				
								Water temperature °C	Sampling depth m	Color	Odor	Secchi disk depth m	Electrical conductivity	SSmg/L	Turbidity	Radioactive iodine I-131	Radioactive cesium Cs-134 Cs-137		
55	Tonegawa River	Akayako Lake (Aimata Dam) Center	—	2012/2/25	Snow	2.0	29.5	1.8	0.5	Yellow green	None	3.0	12.5	1	1.8	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	2.6	28.5	—	None	—	12.6	2	2.8	<1	<1	<1	
63		Usuiko Lake (Sakamoto Dam) Center	—	2012/3/2	Rain	2.5	14.0	2.5	0.5	Dark green	None	2.6	12.8	1	3.1	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	2.7	13.0	—	None	—	12.6	1	3.2	<1	<1	<1	
64	Karasugawa River	Arafuneko Lake (Dodairagawa Dam) Center	—	2012/2/23	Cloudy	6.7	34.8	4.2	0.5	Dark green	None	4.4	45.0	1	2.0	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	4.2	33.8	—	None	—	46.0	1	2.9	<1	<1	<1	
65		Oshioko Lake (Oshio Dam) Center	—	2012/2/23	Rain	6.6	8.7	4.4	0.5	Dark green	None	2.1	28.6	2	3.4	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	4.2	7.7	—	None	—	31.6	3	3.5	<1	<1	<1	
67		Kannako Lake (Shimokubo Dam) Center	—	2012/2/24	Clear	12.2	76.7	6.4	0.5	Green	None	2.6	16.6	1	2.9	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	5.8	75.7	—	None	—	17.0	6	14	<1	<1	<1	
68	Watarasegawa River	Kusakiko Lake (Kusaki Dam) Center	—	2012/3/1	Sunny	7.3	46.5	5.3	0.5	Dark green	None	5.8	14.0	1	1.7	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	3.9	45.5	—	None	—	14.4	4	2.5	<1	<1	<1	
69		Umedako Lake (Kiryugawa Dam) Center	—	2012/3/1	Sunny	5.2	33.2	4.4	0.5	Dark green	None	3.8	7.6	1	2.7	<1	<1	<1	
		1 m from the bottom	—	—	—	—	—	4.4	32.2	—	None	—	7.6	2	3.3	<1	<1	<1	

Note: Sampling points are listed from north to south.

Lake and Headwater: 2nd Sediment Monitoring Results

Sampling point				Sampling date	Weather	Air temperature	Full depth m	Sediment															Remarks			
No.	Water body	Point	Municipality					General items										Radioactive material								
								Mud temperature	Mud sampling depth	Color	Odor	Mechanical composition			Moisture content			Property	Radioactive cesium							
55	Tonegawa River	Akayako Lake (Aimata Dam) Center	—	2012/2/25	Snow	2.0	29.5	3.1	5	Dark olive	None	—	—	—	—	0.1	1.5	61.1	37.3	38.6	2.562	Silt	<30	870	1,100	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63		Usuiko Lake (Sakamoto Dam) Center	—	2012/3/2	Rain	2.5	14.0	3.4	10	Brownish black	Faint putrescence	—	—	—	—	—	—	5.8	61.7	32.5	33.2	2.584	Silt	<30	390	580
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64	Karasugawa River	Arafuneko Lake (Dodairagawa Dam) Center	—	2012/2/23	Cloudy	6.7	34.8	4.9	12	Olive black	Faint hydrogen sulfide	—	—	—	—	0.2	0.6	2.4	56.0	40.8	34.3	2.558	Silt	<30	93	140
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65		Oshioko Lake (Oshio Dam) Center	—	2012/2/23	Rain	6.6	8.7	4.9	12	Dark olive gray	None	—	—	0.7	0.6	1.7	3.8	32.3	60.9	30.2	2.568	Silt	<30	110	170	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
67		Kannako Lake (Shimokubo Dam) Center	—	2012/2/24	Clear	12.2	76.7	5.8	10	Grayish olive	None	—	—	—	—	0.1	0.7	14.5	84.7	43.5	2.546	Silt	<30	77	120	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
68	Watarasegawa River	Kusakiko Lake (Kusaki Dam) Center	—	2012/3/1	Sunny	7.3	46.5	4.7	5	Dark olive brown	Faint putrescence	—	—	—	—	0.9	20.4	56.2	22.5	38.5	2.595	Silt	<30	760	1,100	
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69		Umedako Lake (Kiryugawa Dam) Center	—	2012/3/1	Sunny	5.2	33.2	4.6	5	Grayish olive	None	—	—	—	—	0.9	46.3	52.8	27.7	2.563	Silt	<30	<10	<10		
		1 m from the bottom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

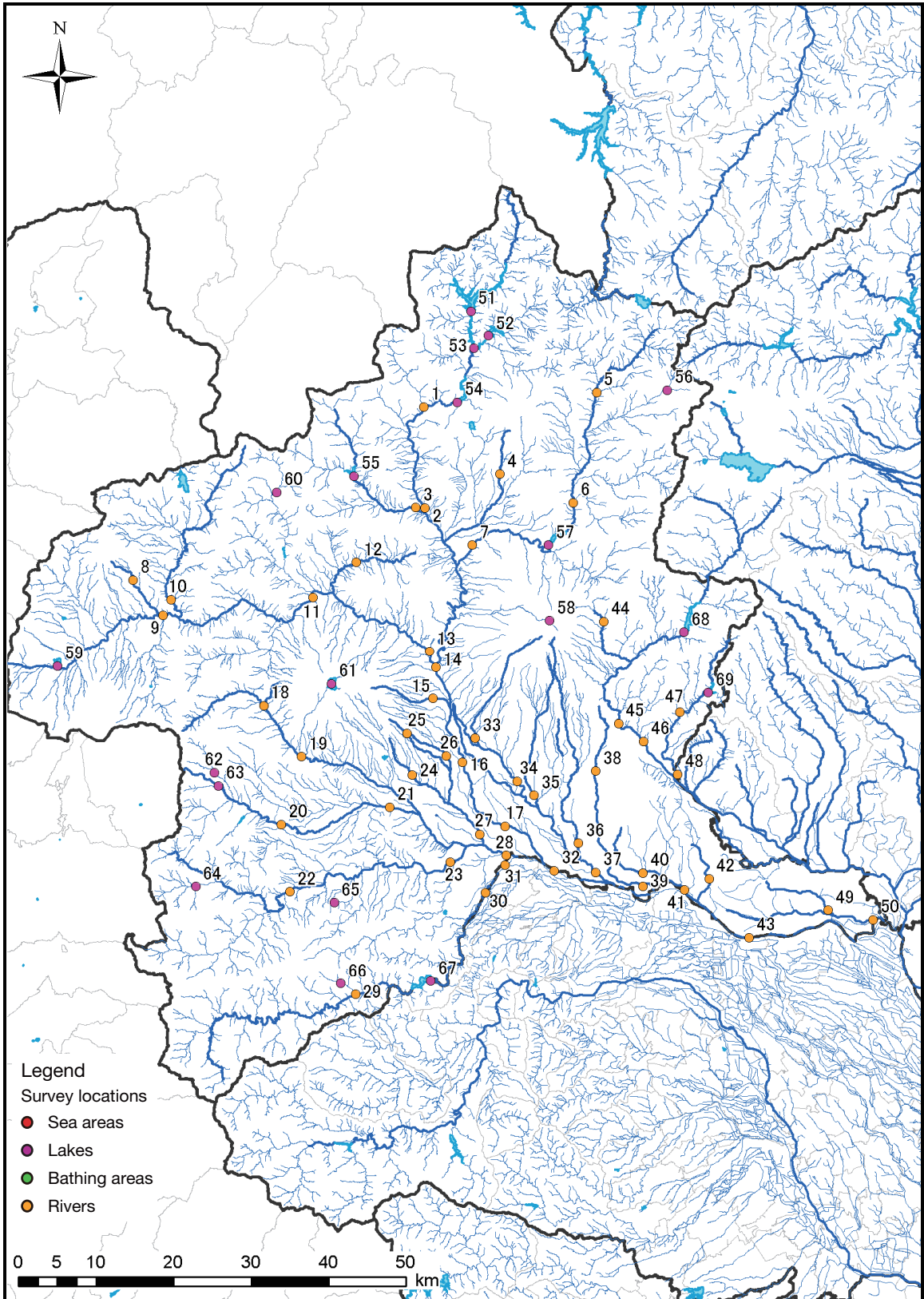
Note: Sampling points are listed from north to south.

Lake and Headwater: 2nd Surrounding Environment (Lake Shore) Monitoring Results

No.	Sampling point			Sampling date	Weather	Surrounding environment (soil and air dose)							Remarks	
	Water body	Point	Municipality			General items			Soil			Air dose (μSv/h)		
						Color	Odor	Property	Radioactive material concentrations (Bq/kg (dry))	Radioactive cesium				
									Cs-134	Cs-137				
55	Tonegawa River	Akayako Lake (Aimata Dam) Center	---	2012/2/25	Snow	2.0	---	---	---	---	---	---	---	Unable to collect soil and measure air dose due to much snow on the lake shore
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
63		Usunko Lake (Sakamoto Dam) Center	---	2012/3/2	Rain	2.8	Brownish black	Faint earth	Loamy	<30	250	370	0.15	
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
64	Karasugawa River	Arafuneko Lake (Dodaragawa Dam) Center	---	2012/2/23	Cloudy	6.7	Brownish black	Faint earth	Loamy	<30	340	550	0.13	
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
65		Oshoko Lake (Oshio Dam) Center	---	2012/2/23	Rain	6.6	Brownish black	Faint earth	Loamy	<30	430	610	0.13	
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
67		Kamnako Lake (Shumokubo Dam) Center	---	2012/2/24	Clear	12.2	Black	Faint earth	Loamy	<30	40	73	0.06	Since previous survey locations of surrounding environment (right bank) was covered by concrete, soil sample and air dose surveyed at oil
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
68	Watarasegawa River	Kusakiko Lake (Kusaki Dam) Center	---	2012/3/1	Sunny	7.3	Black	Faint earth	Loamy	<30	330	500	0.18	
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	
69		Umedako Lake (Kiryugawa Dam) Center	---	2012/3/1	Sunny	5.2	Dark grayish white	Faint earth	Loamy	<30	300	400	0.08	
		[1 m from the bottom]	---	---	---	---	---	---	---	---	---	---	---	

Note: · Air dose was measured with a survey meter, TCS-172 or TCS-161 of Hitachi-Aloka Medical, Ltd.

· Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.



Survey Locations (Gunma Prefecture)