

(News Release)
The Results of Radioactive Material Monitoring of the Surface Water Bodies
Within Ibaraki Prefecture
(August Samples)

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In accordance with the Comprehensive Radiation Monitoring Plan determined by the Monitoring Coordination Meeting, the Ministry of the Environment (MOE) is continuing to monitor radioactive materials in water environments (surface water bodies (rivers, lakes and headwaters, and coasts), etc.).

Samples taken from the surface water bodies of Ibaraki Prefecture during the period of August 1-28, 2013 have been measured as part of MOE's efforts to monitor radioactive materials; the results have recently been compiled and are released here.

The monitoring results of radioactive materials in surface water bodies carried out to date can be found at the following web page: <http://www.env.go.jp/jishin/rmp.html#monitoring>

1. Survey Overview

(1) Survey Locations

77 environmental reference points, etc. in the surface water bodies within Ibaraki Prefecture
(Rivers: 53 locations, Lakes and headwaters: 19 locations, Coasts: 5 locations)

(2) Survey Method

- Measurement of concentrations of radioactive materials (radioactive cesium (Cs-134 and Cs-137)) in water and sediment
- Measurement of concentrations of radioactive materials and spatial dose-rate in soil in the surrounding environment of water and sediment sample collection points (river terraces, etc.)

2. Outline of Results (* denotes the results of the previous survey (May-June 2013))

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

Cs-134+ Cs-137: Not detectable (ND) at any location (* ND at any location)

<Reference>

Specification and Standards for Food, Food Additives, etc. in accordance with the Food Sanitation Act (Drinking Water) (Ministry of Health, Labour and Welfare Public Notice No.130, March 15, 2012)
Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

Target value for radioactive materials in tap water (management target for water supply facilities) (March 5, 2012; 0305 Notice No.1 from the Director of the Water Supply Division, Health Service Bureau, Ministry of Health, Labour and Welfare)

Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

(2) Sediment (Lower detection limit: 10Bq/kg (dried mud))

Overall, levels of both the rivers and lakes/headwaters measured were around 1,000Bq/kg or below for most of the locations (coasts: around 50Bq/kg or below), and have declined or remained constant.

(Rivers)

Cs-134+Cs-137: ND-4,200Bq/kg (dried mud) (*11-4,100Bq/kg (dried mud))

(Lakes and headwaters)

Cs-134+Cs-137: ND-5,400Bq/kg (dried mud) (*18-5,100Bq/kg (dried mud))

(Coasts)

Cs-134+Cs-137: ND-42Bq/kg (dried mud) (*ND-42Bq/kg (dried mud))

<Reference> Number of locations by radioactive cesium concentration (500Bq/kg)

Numbers in () denote results measured on the previous occasion.

	500 or below	501 -1,000	1,001 -1,500	1,501 -2,000	2,001 -2,500	2,501 -3,000	3,001 or more	Total
Rivers	37 (36)	11 (9)	1 (4)	2 (3)	1 (0)	0 (0)	1 (1)	53 (53)
Lakes and headwaters	10(10)	6 (5)	1 (2)	0 (0)	0 (0)	1 (1)	1 (1)	19 (19)
Coasts	5 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (5)

(3) Surrounding Environment (Lower detection limit: 10Bq/kg (dry))

(Rivers)

Cs-134+Cs-137: ND-9,700Bq/kg (dry) (*ND-7,200Bq/kg (dry))

Spatial dose: 0.03-0.29μSv/h

(Lakes and headwaters)

Cs-134+Cs-137: 20-4,600Bq/kg (dry) (*19-4,800Bq/kg (dry))

Spatial dose: 0.05-0.18μSv/h

(Annex for details)
(Map attached)

Future Plans

MOE intends to continue to measure radioactive materials in water, sediment, etc. in rivers, lakes, etc., since concentrations of radioactive materials seem to show fluctuations, depending on locations, due to minor differences in sampling points or properties of samples of each survey.

ORiver: Water Quality Monitoring Results

(Annex)

No.	Sampling point				Sampling date	Weather	Full depth (m)	General items					Radioactive material concentrations (Bq/L)		Remarks			
	Water body	Point	Municipality	Sampling depth (m)				Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity	Radioactive cesium						
												Cs-134	Cs-137					
1	Taga River System	Satonegawa River	Yamagoyabashi Bridge	Kitaibarakishi City	2013/8/26	Sunny	0.3	0.0	>100	13	13	2	<1	<1				
2			Murayamabashi Bridge		2013/8/26	Sunny	0.4	0.0	>100	21	2	2	<1	<1				
3		Hanazonogawa River	Kurabeishi		2013/8/26	Sunny	0.4	0.0	>100	6	<1	1	2	<1	<1			
4			Isonarebashi Bridge		2013/8/27	Sunny	0.7	0.0	72	18	11	2	<1	<1				
5		Okitagawa River	Sakaebashi Bridge		Takahagishi City	2013/8/26	Sunny	0.5	0.0	>100	7	2	1	1	<1	<1		
6			Sakaibashi Bridge		Kitaibarakishi City	2013/8/27	Sunny	0.5	0.0	60	13	6	4	4	<1	<1		
7		Kujigawa River System	Hananukigawa River		Shinhananukibashi Bridge	Takahagishi City	2013/8/27	Sunny	0.3	0.0	85	12	7	2	<1	<1		
8			Kujigawa River		Yamagata	Hitachiomiya City	2013/8/27	Sunny	0.3	0.0	90	13	2	1	<1	<1		
9					Sakakibashi Bridge	Hitachishi City/Tokaimura Village	2013/8/27	Sunny	0.5	0.0	44	14	17	6	6	<1	<1	
10	Nakagawa River System	Nakagawa River	Noguchi	Hitachiomiya City/Shirosatomachi Town	2013/8/28	Sunny	0.4	0.0	>100	16	2	1	1	<1	<1			
11			Shimokuni	Mitoshi City	2013/8/28	Sunny	0.5	0.0	92	16	3	2	2	<1	<1			
12			Katsutabashi Bridge	Mitoshi City/Hitachinakashi City	2013/8/28	Sunny	3.6	0.0	80	36	2	3	3	<1	<1			
13		Nakamarugawa River	Yanagisawabashi Bridge	Hitachinakashi City	2013/8/28	Sunny	1.2	0.0	44	112	12	7	7	<1	<1			
14			Hinumamaekawa River	Nagaokabashi Bridge	2013/8/19	Cloudy	0.3	0.0	60	26	14	3	3	<1	<1			
15		Hinumagawa River	Hinumagawa River	Takahashi	Ibarakimachi Town	2013/8/19	Cloudy	0.5	0.0	50	26	16	2	2	<1	<1		
16			Kanseigawa River	Kanseibashi Bridge	2013/8/19	Sunny	0.2	0.0	54	26	6	2	2	<1	<1			
17			Daiyagawa River	Oyabashi Bridge	Hokotashi City	2013/8/19	Sunny	0.3	0.0	53	36	19	3	3	<1	<1		
18			Hinumagawa River	Hinumabashi Bridge	Mitoshi City/Oaraimachi Town	2013/8/19	Sunny	0.5	0.0	33	2300	30	6	6	<1	<1		
19	Tonogawa River System	Kitaura Lake	Hokotagawa River	Asahibashi Bridge	2013/8/21	Sunny	0.9	0.0	62	34	7	4	4	<1	<1			
20			Tomogawa River	Shintomogawabashi Bridge	Hokotashi City	2013/8/21	Sunny	0.2	0.0	52	28	10	4	4	<1	<1		
21			Taiyogawa River	Tazukabashi Bridge	2013/8/6	Cloudy	0.2	0.0	80	28	4	3	3	<1	<1			
22			Takedagawa River	Uchijukuhashi Bridge	2013/8/21	Cloudy	0.2	0.0	70	30	15	4	4	<1	<1			
23			Yamadagawa River	Nioroshibashi Bridge	2013/8/21	Cloudy	0.3	0.0	35	38	17	8	8	<1	<1			
24			Kurakawa River	Kurakawabashi Bridge	Namegatashi City	2013/8/21	Cloudy	0.5	0.0	41	29	21	9	9	<1	<1		
25				Gantsugawa River		JA Yokohashi	2013/8/21	Cloudy	0.2	0.0	63	32	9	3	3	<1	<1	
26				Nagaregawa River		Suhoibashi Bridge	Kashimashi City	2013/8/6	Cloudy	0.2	0.0	95	40	18	3	3	<1	<1
27			Kasumi Lake	Sonobegawa River	Sonobeshinbashi Bridge	Omitamashi City	2013/8/1	Cloudy	0.8	0.0	33	24	22	12	12	<1	<1	
28		Sannogawa River		Tokorobashi Bridge	2013/8/1	Cloudy	1.3	0.0	27	36	32	11	11	<1	<1			
29		Koishigawa River		Heiwabashi Bridge	Ishiohoshi City	2013/8/1	Cloudy	0.8	0.0	51	24	13	7	7	<1	<1		
30		Kajinashigawa River		Kamishukubashi Bridge	Namegatashi City	2013/8/1	Cloudy	1.0	0.0	38	31	13	9	9	<1	<1		
31		Hishikigawa River		Hishikibashi Bridge	Kasumigaurashi City	2013/8/1	Cloudy	0.6	0.0	39	28	11	7	7	<1	<1		
32		Ichinosegawa River		Kawanakabashi Bridge	2013/8/1	Cloudy	1.1	0.0	54	26	10	5	5	<1	<1			
33		Sakaigawa River		Sakaibashi Bridge/National Route 354	Tsuchiurashi City	2013/8/2	Cloudy	0.4	0.0	69	38	8	3	3	<1	<1		
34		Shinkawa River		Shintenbashi Bridge	2013/8/2	Cloudy	2.5	0.0	34	27	14	8	8	<1	<1			
35		Sakuragawa River		Eiribashi Bridge	Tsuchiurashi City/Tsukubashi City	2013/8/2	Cloudy	0.4	0.0	45	23	12	5	5	<1	<1		
36		Bizengawa River	Bizengawabashi Bridge	Tsuchiurashi City	2013/8/2	Cloudy	1.0	0.0	35	27	18	8	8	<1	<1			
37		Hanamurogawa River	Shinwabashi Bridge	2013/8/2	Cloudy	0.2	0.0	64	28	16	6	6	<1	<1				
38		Seimeigawa River	Katsuhashi Bridge	Amimachi Town	2013/8/16	Sunny	0.4	0.0	31	34	11	8	8	<1	<1			
39		Onogawa River	Okuharaohashi Bridge	Ryugasakishi City/Ushikushi City	2013/8/16	Sunny	0.5	0.0	33	29	18	10	10	<1	<1			
40		Shintonogawa River	Shintonebashi Bridge	Inashikishi City	2013/8/6	Cloudy	1.2	0.0	13	51	16	12	12	<1	<1			
41		Hitachitongawa River	Yorokoshigawa River	Horinouchibashi Bridge	Itakoshi City	2013/8/6	Cloudy	0.6	0.0	27	38	17	8	8	<1	<1		
42			Maekawa River	Ayamebashi Bridge	2013/8/6	Cloudy	2.6	0.0	23	52	24	12	12	<1	<1			
43		Kinugawa River	Kinugawa River	Kawashimabashi Bridge	Chikuseishi City	2013/8/15	Sunny	0.3	0.0	>100	19	2	1	1	<1	<1		
44				Takishitabashi Bridge	Moriyashi City	2013/8/16	Sunny	0.6	0.0	51	22	10	3	3	<1	<1		
45			Tagawa River	Tagawabashi Bridge	Chikuseishi City	2013/8/15	Sunny	0.4	0.0	76	23	5	1	1	<1	<1		
46		Kokaigawa River	Kokogawa River	Kurokobashi Bridge	2013/8/15	Sunny	0.4	0.0	30	22	7	4	4	<1	<1			
47				Fumimabashi Bridge	Torideshi City	2013/8/20	Sunny	3.2	0.0	55	20	6	5	5	<1	<1		
48			Yatagawa River	Maruyamabashi Bridge	2013/8/20	Sunny	1.3	0.0	34	27	14	10	10	<1	<1			
49	Nishiyatagawa River		Sakaimatsubashi Bridge	Tsukubashi City	2013/8/20	Sunny	1.2	0.0	30	24	11	9	9	<1	<1			
50	Inarigawa River		Ogukibashi Bridge	2013/8/20	Sunny	0.9	0.0	79	25	6	9	9	<1	<1				
51	Tonogawa River	Tonogawa River	Kurihashi Bridge	Kogashi City	2013/8/15	Sunny	0.4	0.0	67	19	6	3	3	<1	<1			
52			Fukawa	Tonemachi Town	2013/8/16	Sunny	0.5	0.0	49	21	12	5	5	<1	<1			
53			Sawara	Inashikishi City	2013/8/6	Cloudy	0.2	0.0	38	26	13	7	7	<1	<1			

• Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.
 • Radioactive materials concentrations contain some measurement errors but are not noted here.

ORiver: Sediment Monitoring Results

No.	Sampling point				Sampling date	Weather	Full depth (m)	General items			Concentration of radioactive material [Bq/kg (dried mud)]			Remarks		
	Water body	Point	Municipality	Mud sampling depth (cm)				Mud content %	Property	Radioactive cesium						
										Cs-134	Cs-137	Total				
1	Taga River System	Satonegawa River	Yamagoyabashi Bridge	Kitaibarakishi City	2013/8/26	Sunny	0.3	8	79	Sand	27	54	81			
2			Murayabashi Bridge		2013/8/26	Sunny	0.4	8	79	Sand/gravel	37	79	116			
3		Hanazonogawa River	Kurabeishi		2013/8/26	Sunny	0.4	8	83	Gravel/sand	12	33	45			
4			Isonarebashi Bridge		2013/8/27	Sunny	0.7	8	81	Gravel/sand	15	23	38			
5		Okitagawa River	Sakaebashi Bridge		Takahagishi City	2013/8/26	Sunny	0.5	8	80	Gravel/sand	<10	21	21		
6			Sakaibashi Bridge		Kitaibarakishi City	2013/8/27	Sunny	0.5	8	81	Sand/gravel	22	46	68		
7		Hananukigawa River	Shinhananukibashi Bridge		Takahagishi City	2013/8/27	Sunny	0.3	8	78	Sand/gravel	33	82	115		
8	Kujigawa River System	Kujigawa River	Yamagata	Hitachiomiyashi City	2013/8/27	Sunny	0.3	8	80	Sand/silt	25	69	94			
9			Sakakibashi Bridge	Hitachishi City/Tokaimura Village	2013/8/27	Sunny	0.5	8	62	Silt/sand	36	75	111			
10	Nakagawa River System	Nakagawa River	Noguchi	Hitachiomiya City/Shirosatomachi Town	2013/8/28	Sunny	0.4	8	71	Sand	<10	15	15			
11			Shimokuni	Mitoshi City	2013/8/28	Sunny	0.5	8	67	Sand/silt	35	96	131			
12			Katsutabashi Bridge	Mitoshi City/Hitachinakashi City	2013/8/28	Sunny	3.6	8	40	Silt	200	400	600			
13			Nakamarugawa River	Yanagisawabashi Bridge	Hitachinakashi City	2013/8/28	Sunny	1.2	8	43	Silt/gravel	250	630	880		
14		Hinumagawa River	Hinumamaekawa River	Nagaokabashi Bridge	Ibarakimachi Town	2013/8/19	Cloudy	0.3	8	82	Sand/gravel	25	65	90		
15			Hinumagawa River	Takahashi		2013/8/19	Cloudy	0.5	8	82	Gravel/sand	12	27	39		
16			Kanseigawa River	Kanseibashi Bridge		2013/8/19	Sunny	0.2	7	83	Gravel/sand	26	56	82		
17			Daiyagawa River	Oyabashi Bridge		Hokotashi City	2013/8/19	Sunny	0.3	8	80	Gravel/sand	100	210	310	
18			Hinumagawa River	Hinumabashi Bridge		Mitoshi City/Oaraimachi Town	2013/8/19	Sunny	0.5	8	81	Sand/silt	140	290	430	
19			Hokotagawa River	Asahibashi Bridge		Hokotashi City	2013/8/21	Sunny	0.9	8	69	Sand	52	130	182	
20	Tomogawa River	Shintomogawabashi Bridge	2013/8/21	Sunny	0.2		8	29	Silt	180	420	600				
21	Taiyogawa River	Tazukabashi Bridge	2013/8/6	Cloudy	0.2		6	81	Sand	100	220	320				
22	Takedagawa River	Uchijukuhashi Bridge	2013/8/21	Cloudy	0.2		8	74	Sand/gravel	80	180	260				
23	Yamadagawa River	Nioroshibashi Bridge	Namegatashi City	2013/8/21	Cloudy		0.3	8	77	Sand/gravel	43	100	143			
24	Kurakawa River	Kurakawabashi Bridge		2013/8/21	Cloudy		0.5	8	82	Sand/gravel	32	68	100			
25	Gantsugawa River	JA Yokohashi		2013/8/21	Cloudy		0.2	8	81	Sand	55	140	195			
26	Nagaregawa River	Suhoibashi Bridge		Kashimashi City	2013/8/6		Cloudy	0.2	5	83	Sand/silt	120	220	340		
27	Tonegawa River System	Kasumigaura Lake	Sonobegawa River	Sonobeshinbashi Bridge	Omitamashi City		2013/8/1	Cloudy	0.8	8	37	Silt/sand	160	410	570	
28			Sannogawa River	Tokorobashi Bridge	2013/8/1		Cloudy	1.3	8	82	Sand/gravel	260	560	820		
29			Koisegawa River	Heiwabashi Bridge	Ishikashi City	2013/8/1	Cloudy	0.8	8	78	Sand	38	97	135		
30			Kajinashigawa River	Kamishukubashi Bridge	Namegatashi City	2013/8/1	Cloudy	1.0	8	80	Sand/gravel	53	110	163		
31			Hishikigawa River	Hishikibashi Bridge	Kasumigaurashi City	2013/8/1	Cloudy	0.6	8	76	Sand/gravel	170	360	530		
32			Ichinosegawa River	Kawanabashi Bridge		2013/8/1	Cloudy	1.1	8	64	Silt/sand	220	430	650		
33			Sakaigawa River	Sakaibashi Bridge/National Route 354		Tsuchiurashi City	2013/8/2	Cloudy	0.4	8	79	Sand/gravel	74	150	224	
34			Shinkawa River	Shintenbashi Bridge	2013/8/2		Cloudy	2.5	8	22	Silt	1,300	2,900	4,200		
35			Sakuragawa River	Eiribashi Bridge	Tsuchiurashi City/Tsukubashi City		2013/8/2	Cloudy	0.4	8	70	Sand/silt	19	33	52	
36			Bizengawa River	Bizengawabashi Bridge	2013/8/2		Cloudy	1.0	8	67	Sand/gravel	560	1,300	1,860		
37		Hanamurogawa River	Shinwabashi Bridge	Tsuchiurashi City	2013/8/2	Cloudy	0.2	8	75	Sand/gravel	250	540	790			
38		Seimeigawa River	Katsuhashi Bridge	Amimachi Town	2013/8/16	Sunny	0.4	8	70	Sand/silt	370	800	1,170			
39		Onogawa River	Okuharaohashi Bridge	Ryugasakishi City/Ushikushi City	2013/8/16	Sunny	0.5	8	60	Sand/silt	270	640	910			
40		Shintonegawa River	Shintonebashi Bridge	Inashikishi City	2013/8/6	Cloudy	1.2	7	58	Silt/sand	110	240	350			
41		Hitachitonegawa River	Yorokoshigawa River	Horinouchibashi Bridge	Itakoshi City	2013/8/6	Cloudy	0.6	5	30	Silt	180	350	530		
42			Maekawa River	Ayamebashi Bridge		2013/8/6	Cloudy	2.6	8	46	Silt/sand	110	320	430		
43		Kinugawa River	Kinugawa River	Kawashimabashi Bridge	Chikuseishi City	2013/8/15	Sunny	0.3	8	83	Sand/gravel	<10	<10	-		
44	Takishitabashi Bridge			Moriyashi City	2013/8/16	Sunny	0.6	8	63	Sand/silt	28	55	83			
45	Tagawabashi Bridge			2013/8/15	Sunny	0.4	8	85	Sand/gravel	10	30	40				
46	Kokaigawa River	Kokaigawa River	Kurokobashi Bridge	Chikuseishi City	2013/8/15	Sunny	0.4	8	50	Silt/sand	110	190	300			
47			Fumimakibashi Bridge		Torideshi City	2013/8/20	Sunny	3.2	8	82	Sand	23	50	73		
48		Yatagawa River	Maruyamabashi Bridge		2013/8/20	Sunny	1.3	8	43	Silt	510	1,100	1,610			
49		Nishiyatagawa River	Sakaimatsuhashi Bridge		Tsukubashi City	2013/8/20	Sunny	1.2	8	32	Silt	190	440	630		
50		Inarigawa River	Ogukibashi Bridge			2013/8/20	Sunny	0.9	8	56	Silt/sand	650	1,500	2,150		
51	Tonegawa River	Tonegawa River	Kurihashi Bridge	Kogashi City	2013/8/15	Sunny	0.4	8	80	Sand/silt	13	42	55			
52			Fukawa	Tonemachi Town	2013/8/16	Sunny	0.5	8	68	Sand/silt	51	120	171			
53			Sawara	Inashikishi City	2013/8/6	Cloudy	0.2	5	89	Gravel/sand	29	72	101			

• Sampling points for rivers are listed from north to south, and for different points along the river, from upstream to downstream.
 • Radioactive materials concentrations contain some measurement errors but are not noted here.

○Lake and Headwater: Water Quality Monitoring Results

Sampling point				Sampling date	Weather	Full depth (m)	General items					Radioactive material concentrations (Bq/L)		Remarks
No.							Sampling depth (m)	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity	Radioactive cesium		
												Cs-134	Cs-137	
1	Hiroura	Surface layer	2013/8/13	Sunny	1900/1/2	0.5	1.2	1,100	5	6	<1	<1		
		Lower layer				1.4		1,100	7	5	<1	<1		
2	Hinuma Lake	Miyamae	2013/8/13	Sunny	1900/1/3	0.5	1.2	1,019	6	4	<1	<1		
		Lower layer				2.2		1,052	5	4	<1	<1		
3	Oyazawa	Surface layer	2013/8/13	Sunny	1900/1/2	0.5	0.9	737	13	7	<1	<1		
		Lower layer				1.1		739	14	7	<1	<1		
4	Offshore of Tamatsukuri	Surface layer	2013/8/7	Sunny	1900/1/6	0.5	0.5	31	18	15	<1	<1		
		Lower layer				5.9		30	31	26	<1	<1		
5	Offshore of Kakeuma	Surface layer	2013/8/7	Sunny	1900/1/2	0.5	0.6	32	19	14	<1	<1		
		Lower layer				1.0		32	16	14	<1	<1		
6	Center	Surface layer	2013/8/7	Sunny	1900/1/6	0.5	0.7	33	16	11	<1	<1		
		Lower layer				5.3		33	16	14	<1	<1		
7	Offshore of Aso	Surface layer	2013/8/7	Sunny	1900/1/2	0.5	0.5	38	15	14	<1	<1		
		Lower layer				1.3		38	11	15	<1	<1		
8	Offshore of Kamaya	Surface layer	2013/8/7	Sunny	1900/1/6	0.5	0.8	33	16	12	<1	<1		
		Lower layer				5.8		33	16	10	<1	<1		
9	Jingubashi Bridge	Surface layer	2013/8/7	Sunny	1900/1/2	0.5	0.5	44	23	19	<1	<1		
		Lower layer				1.8		43	19	24	<1	<1		
10	Sotonasakaura Lake	Surface layer	2013/8/7	Sunny	1900/1/3	0.5	0.7	76	14	14	<1	<1		
		Lower layer				2.6		76	16	14	<1	<1		
11	Ikisu	Surface layer	2013/8/7	Sunny	1900/1/4	0.5	0.7	113	13	12	<1	<1		
		Lower layer				4.0		114	13	12	<1	<1		
12	Center of Ushikunuma Lake	Surface layer	2013/8/14	Sunny	1900/1/1	0.5	0.6	23	12	14	<1	<1		
		Lower layer				0.8		23	23	14	<1	<1		
13	Mizunuma Dam	Surface layer	2013/8/8	Sunny	1900/1/13	0.5	1.8	6	2	2	<1	<1		
		Lower layer				12.2		9	8	8	<1	<1		
14	Koyama Dam	Surface layer	2013/8/8	Sunny	1900/1/15	0.5	2.1	7	1	2	<1	<1		
		Lower layer				14.1		8	2	2	<1	<1		
15	Hananuki Dam	Surface layer	2013/8/8	Cloudy	1900/1/19	0.5	1.3	6	4	2	<1	<1		
		Lower layer				18.5		9	4	6	<1	<1		
16	Jyuo Dam	Surface layer	2013/8/9	Sunny	1900/1/18	0.5	2.7	13	<1	2	<1	<1		
		Lower layer				17.3		13	4	4	<1	<1		
17	Ryujin Dam	Surface layer	2013/8/9	Sunny	1900/1/19	0.5	1.1	8	4	3	<1	<1		
		Lower layer				18.3		13	6	6	<1	<1		
18	Fujigawa Dam	Surface layer	2013/8/12	Sunny	1900/1/9	0.5	1.8	14	2	2	<1	<1		
		Lower layer				8.9		15	6	5	<1	<1		
19	Iida Dam	Surface layer	2013/8/12	Sunny	1900/1/15	0.5	2.7	10	<1	2	<1	<1		
		Lower layer				14.6		14	13	15	<1	<1		

• Sampling points are listed from north to south.

• Radioactive materials concentrations contain some measurement errors but are not noted here.

OLake and Headwater: Sediment and Surrounding Environment (Lake Shore) Monitoring Results

Sampling point			Sampling date	Weather	Full depth (m)	Sediment						Surrounding environment (lake shore)					Remarks
						General items			Concentration of radioactive material [Bq/kg (dried mud)]			Property	Soil				
No.		Municipality	Mud sampling depth (cm)	Mud content %	Property	Radioactive cesium			Concentration of radioactive material [Bq/kg (dry)]				Air dose (μSv/h)				
						Cs-134	Cs-137	Total	Cs-134	Cs-137	Total						
1	Hinuma Lake	Hiroura	2013/8/13	Sunny	1900/1/2	8	42	Silt	32	82	114	Sandy	460	990	1,450	0.13	
2		Miyamae	2013/8/13	Sunny	1900/1/3	8	25	Silt	14	35	49	Sandy	<10	20	20	0.08	
3		Oyazawa	2013/8/13	Sunny	1900/1/2	8	31	Silt	180	360	540	-	-	-	-	-	Mud sampling points not determined
4	Kasumigaura Lake	Offshore of Tamatsu	2013/8/7	Sunny	1900/1/6	10	17	Silt·Clay	180	450	630	Sandy	17	45	62	0.06	
5		Offshore of Kakeura	2013/8/7	Sunny	1900/1/2	3	75	Sand	100	220	320	Sandy	62	120	182	0.10	
6		Center	2013/8/7	Sunny	1900/1/6	10	14	Silt·Clay	240	640	880	-	-	-	-	-	Mud sampling points not determined
7		Offshore of Aso	2013/8/7	Sunny	1900/1/2	5	72	Sand/silt	52	87	139	Sandy	75	180	255	0.10	
8	Kitaura Lake	Offshore of Kamaya	2013/8/7	Sunny	1900/1/6	10	15	Silt	140	270	410	Sandy	250	540	790	0.09	
9		Jingubashi Bridge	2013/8/7	Sunny	1900/1/2	5	64	Sand/silt	48	88	136	Loamy	22	61	83	0.05	
10	Hitachitongawa River	Sotonasakaura Lake	2013/8/7	Sunny	1900/1/3	4	69	Sand	16	50	66	Loamy	79	180	259	0.06	
11		Ikisu	2013/8/7	Sunny	1900/1/4	3	71	Sand	34	68	102	Loamy	120	260	380	0.07	
12	Ushikunuma Lake	Center of Ushikunuma	2013/8/14	Sunny	1900/1/1	9	24	Silt	270	580	850	Sandy	110	250	360	0.09	
13	Mizunuma Dam	Center	2013/8/8	Sunny	1900/1/13	8	19	Silt	1,700	3,700	5,400	Loamy	280	580	860	0.15	
14	Koyama Dam		2013/8/8	Sunny	1900/1/15	8	24	Silt	220	470	690	Sandy	320	610	930	0.13	
15	Hananuki Dam		2013/8/8	Cloudy	1900/1/19	8	22	Silt	820	1,700	2,520	Loamy	870	2,000	2,870	0.18	
16	Jyuo Dam		2013/8/9	Sunny	1900/1/18	8	26	Silt	180	340	520	Loamy	1,500	3,100	4,600	0.16	
17	Ryujin Dam		2013/8/9	Sunny	1900/1/19	8	20	Silt	340	670	1,010	Loamy	240	520	760	0.09	
18	Fujigawa Dam		2013/8/12	Sunny	1900/1/9	8	36	Silt	150	330	480	Loamy	380	840	1,220	0.14	
19	Iida Dam		2013/8/12	Sunny	1900/1/15	8	21	Silt	<10	<10	-	Loamy	180	410	590	0.10	

- Samples for surrounding environment (lake shore) were generally collected from 5 points in 3m square on the lake shore, etc., and mixed. Depending on the site situation, factors, such as the area of sampling may be much smaller, may cause figures to vary significantly.
- Sampling points are listed from north to south.
- Air dose was measured with a survey meter, TCS-172B of Hitachi-Aloka Medical, Ltd.
- Radio: Mizunuma Dam

○Coast: Water Quality Monitoring Results

Sampling point		Point Point	Weather	Full depth (m)	General items					Radioactive material concentrations (Bq)		Remarks
No.	Water body				Sampling depth (m)	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity	Radioactive cesium		
										Cs-134	Cs-137	
1	Offshore of Satonegawa River Estuary	Surface layer	2013/8/5	Cloudy	1900/1/13	0.5	4.0	28	1	1	<1	<1
		Lower layer				12.8		31	6	1	<1	<1
2	Offshore of Okitagawa River Estuary	Surface layer	2013/8/5	Sunny	1900/1/12	0.5	8.5	17	1	1	<1	<1
		Lower layer				11.8		30	2	1	<1	<1
3	Offshore of Momiyagawa River/Kujigawa River Estuaries	Surface layer	2013/8/5	Cloudy	1900/1/10	0.5	3.5	23	3	2	<1	<1
		Lower layer				9.2		31	3	2	<1	<1
4	Neighboring water body of Ken-o Offshore of Nakagawa River	Surface layer	2013/8/5	Cloudy	1900/1/5	0.5	1.5	6	7	4	<1	<1
		Lower layer				4.5		24	10	3	<1	<1
5	Offshore of Tonegawa River Estuary	Surface layer	2013/8/23	Sunny	1900/1/9	0.5	2.3	18	5	4	<1	<1
		Lower layer				8.1		30	2	1	<1	<1

• Sampling points are listed from north to south.

• Radioactive materials concentrations contain some measurement errors but are not noted here.

○Coast: Sediment Monitoring Results

No.	Koyama Dam	Sampling date	Weather	Full depth (m)	General items		Concentration of radioactive material [Bq/kg (dried n			Remarks
					Mud content %	Property	Radioactive cesium			
							Cs-134	Cs-137	Total	
1	Jyuo Dam	2013/8/5	Cloudy	1900/1/13	79	Sand	11	30	41	
2	Ryujin Dam	2013/8/5	Sunny	1900/1/12	74	Sand	10	18	28	
3	Fujiigawa Dam	2013/8/5	Cloudy	1900/1/10	72	Sand	16	26	42	
4	Hida Dam	2013/8/5	Cloudy	1900/1/5	81	Sand	<10	<10	-	
5	Offshore of Tonegawa River Estuary	2013/8/23	Sunny	1900/1/9	77	Sand	<10	<10	-	

• Sampling points are listed from north to south.

• Radioactive materials concentrations contain some measurement errors but are not noted here.

