

(News Release)
The Results of Radioactive Material Monitoring Surveys of Aquatic Organisms
(2011 Winter Samples)

Monday, July 2, 2012
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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 radioactive materials monitoring in surface water and its sediment (rivers, lakes and headwaters, and coasts).

Samples of aquatic organisms taken mainly in Fukushima Prefecture (winter: sampling period: December 21, 2011-February 26, 2012) have been measured as part of MOE's efforts to monitor radioactive materials; the results have 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

		Surveyed Areas/ Survey Locations		Survey Locations
Rivers	A	Abukumagawa River	Harasegawa River (Tributary)*	February 8, 2012
	B		Near Taishobashi Bridge, Surikamigawa River (Tributary)*	December 27, 2011, January 12, 2012
	C	Manogawa River	December 26, 2011, January 11, 2012	
Lakes	D	Akimotoko Lake	December 21, 2011	
	E	Hayamako Lake (Mano Dam)	December 27, 2011, January 11, 2012	
Sea Areas	F	Offshore of Iwakishi City	Offshore of Hisanohama Beach	January 13, 18, 2012
	G		Offshore of Nakoso	January 13, 2012
	H	Offshore of Abukumagawa River Estuary	February 22, 26, 2012	

*Survey being carried out in winter, samples were taken at tributary of Abukumagawa River due to difficulty in sampling at the main stream.

(Map attached)

(2) Survey Method

Samples of aquatic organisms (aquatic insects, algae, crustaceans, shellfish, fishes, etc.) were collected and the concentration of radioactive materials (radioactive cesium (Cs-134 and Cs-137), etc.) in each type of organisms was measured.

2. Survey Results Summary (See Annex for details)

(1) Rivers and Lakes

Unit: Bq/kg-wet

	Aquatic insects	Crustacean	Fishes	CPOM (dry leaves, etc.)
Abukumagawa River A	340 (3 species)	156 (1 species)	61-171 (3 species)	920
Abukumagawa River B	330 (4 species)	-	115-680 (3 species)	1,120
Manogawa River	670 (3 species)	-	190-2,600 (4 species)	-
Akimoto Lake	-	180 (1 species)	167-510 (8 species)	-
Hayamako Lake (Mano Dam)	520 (5 species)	-	91-1,010 (5 species)	800

*Since there are few samples of aquatic insects, samples were combined by sampling area/location to measure the radioactive material concentration.

(2) Sea Areas

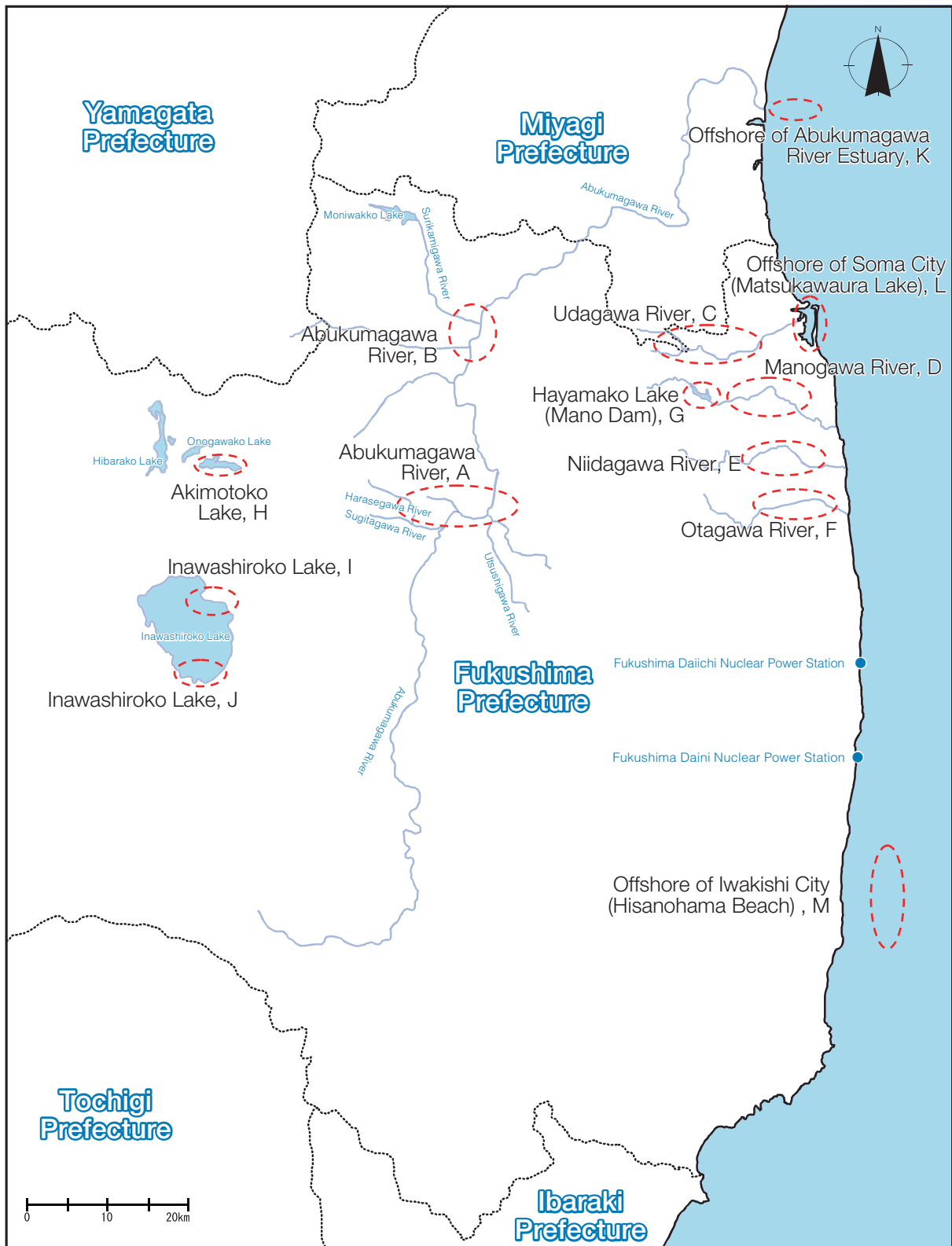
Unit: Bq/kg-wet

	Algae	Sea urchin, starfish, sea cucumber	Shellfish		Squid, Octopus	Fishes
			Without shell	Shell		
Offshore of Iwakishi City F (Hisanohama Beach)	27 150 (2 species)	7.1- 212 (3 species)	42 67 (2 species)	4.7 27 (2 species)	6.8-18.0 (5 species)	12.2-260 (19 species)
Offshore of Iwakishi City G (Nakoso)	-	9.6 (1 species)	-	-	5.0-11.5 (3 species)	27.3-163 (11 species)
Offshore of Abukumagawa River Estuary H	-	-	20 (1 species)	3.6 (1 species).	-	2.15 (1 species)

Future Plans

From this survey results, it was found the levels of radioactive concentrations of aquatic organisms were relatively higher in rivers and lakes compared to those in sea areas. However, since the survey was conducted during winter and the numbers of samples were small, and that there may also be some seasonal fluctuations, MOE will continue in 2012 to measure the concentration of radioactive materials in aquatic organisms (organisms collection to be conducted about 3 times each year).

Radioactive Material Monitoring Survey Locations of Aquatic Organisms



Results of Aquatic Organisms Radionuclides Survey (Rivers and Lakes)

Stn No.	Aquatic organism and others		Sample weight (kg-wet)	(Sample number)	Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)	
					Total	Cs-134	Cs-137		
A b u k u m a g a w a R i v e r	A	CPOM (leaves, etc.)	2.0	-	920	390	530	-	
		Aquatic insect	Oyamia sp.	0.13	(about 800)	340	140	200	-
			Club-tailed dragonfly						
			Stenopsyche marmorata						
		Crustacean	Japanese swamp shrimp	0.31	600	156	56	100	-
			Fish	Stone loach	0.43	75	61	26	35
		Dark chub		0.23	215	147	62	85	-
	Amur minnow	0.14		72	171	72	99	-	
	B	CPOM (leaves, etc.)	3.0	-	1,120	480	640	-	
		Aquatic insect	Drunella basalis	0.20	(about700)	330	160	170	-
			Kamimuria tibialis						
			Hydropsyche orientalis Martynov						
			Stenopsyche marmorata						
		Fish	Common carp	0.050	1	155	74	81	-
Barbel steed			1.5	1	350	150	200	-	
	1.5		2	-	-	-	0.41		
Smallmouth bass	0.040	1	680	280	400	-			
M a n o g a w a R i v e r	C	CPOM (leaves, etc.)	3.0	-	1,140	470	670	-	
		Aquatic insect	Kamimuria tibialis	0.20	(about 600)	670	290	380	-
			Dobsonfly						
			Stenopsyche marmorata						
	Fish	Common freshwater goby	0.20	40	2,600	1,100	1,500	-	
		Common carp	3.0	6	190	80	110	1.1	
		Japanese crucian carp	1.00	2	500	210	290	-	
Pale chub	0.20	20	600	250	350	-			
A k i m o t o k o L a k e	D	Crustacean	Signal crayfish	5.0	74	180	82	98	-
			Barbel steed	0.30	1	173	73	100	-
		Fish	Gin-buna	1.0	9	178	81	97	-
			Japanese dace	2.5	12	167	76	91	1.1
			Smallmouth bass	2.0	4	450	190	260	-
			Largemouth bass	0.80	2	470	200	270	-
			Japanese smelt	0.30	80	290	130	160	-
			Char	3.50	15	330	140	190	0.55
			Masu salmon	0.80	1	510	220	290	-
H a y a m a k o D a m L a k e	E	CPOM (leaves, etc.)	3.0	-	800	340	460	-	
		Aquatic insect	Kamimuria tibialis	0.20	(about700)	520	220	300	-
			Parachauliodes japonicus						
			Stenopsyche marmorata						
			Stenopsyche sauteri						
		Tipula sp.							
		Fish	Lizard goby	0.20	40	660	280	380	-
			Japanese dace	3.5	60	1,010	440	570	0.68
			Largemouth bass	2.0	3	790	350	440	1.6
			Rainbow trout	1.0	7	197	87	110	-
Cherry salmon	0.40		15	91	41	50	-		

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					Total	Cs-134	Cs-137			
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			Club-tailed dragonfly							
			Stenopsyche marmorata							
		Crustacean	Japanese swamp shrimp	0.31	600	156	56	100	-	
			Fish	Stone loach	0.43	75	61	26	35	-
				Dark chub	0.23	215	147	62	85	-
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	B	CPOM (leaves, etc.)	3.0	-	1,120	480	640	-		
		Aquatic insect	Drunella basalis	0.20	(about700)	330	160	170	-	
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		Fish	Common carp	0.050	1	155	74	81	-	
Barbel steed			1.5	1	350	150	200	-		
	1.5		2	-	-	-	0.41			
Smallmouth bass	0.040	1	680	280	400	-				
M a n o g a w a R i v e r	C	CPOM (leaves, etc.)	3.0	-	1,140	470	670	-		
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			Dobsonfly							
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			Smallmouth bass	2.0	4	450	190	260	-	
			Largemouth bass	0.80	2	470	200	270	-	
			Japanese smelt	0.30	80	290	130	160	-	
			Char	3.50	15	330	140	190	0.55	
			Masu salmon	0.80	1	510	220	290	-	
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