

## Standardized marks for floods



Flooding Sign



Evacuation Sign



Press release in July 2006

## Standardized marks in Japan



Flooding Sign



Evacuation Sign



Historical Flood (Toyooka, Japan)



Projected Flood (Tokyo, Japan)

Tentatively Translated Material.  
Extracted from the Materials Distributed on 25 Mar. 2008  
At Committee for Technical Investigation on Large-Scale Flood Countermeasures.  
Only the Japanese Version is Authentic.  
Ref: <http://www.bousai.go.jp/jishin/chubou/suigai/index.html>

Tone River's Segment Classification of Dyke Breach Location  
with respect to Inundation Type  
And  
Estimated Death Toll and Number of Stranded People

Title: 'The worst number of deaths is 6,300 when the Tone River levees are breached'  
Source: 26<sup>th</sup> March 2007, on the front page of the morning edition of Asahi Newspaper

# 利根川の決壊時 最悪6300人死亡

「孤立者」最大11万人  
利根川の決壊時、孤立者11万人に達する可能性がある。最悪の場合、死者6300人に達する可能性がある。中央防災会議が想定している。

中央防災会議が「利根川決壊時」の被害想定を公表した。利根川が決壊した場合、孤立者11万人に達する可能性がある。最悪の場合、死者6300人に達する可能性がある。中央防災会議が想定している。

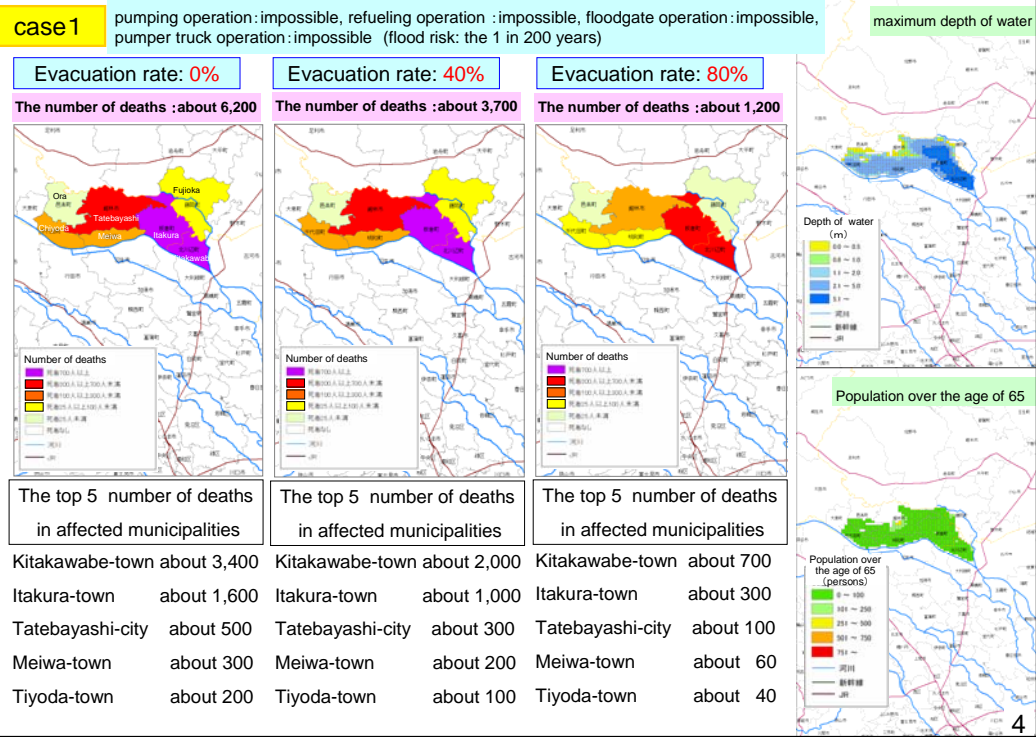
## 中央防災会議が想定



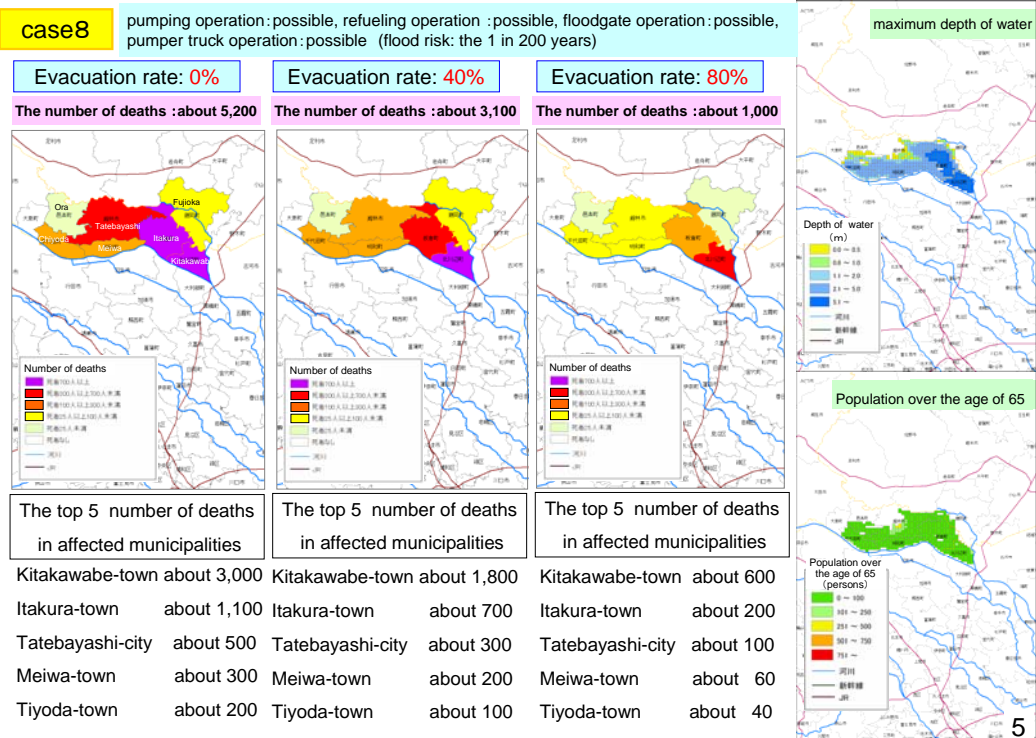
大前川町付近で決壊すると、利根川が氾濫し、孤立者11万人に達する可能性がある。最悪の場合、死者6300人に達する可能性がある。中央防災会議が想定している。

野口英世「アフリカ賞」への「寄附のお願い」  
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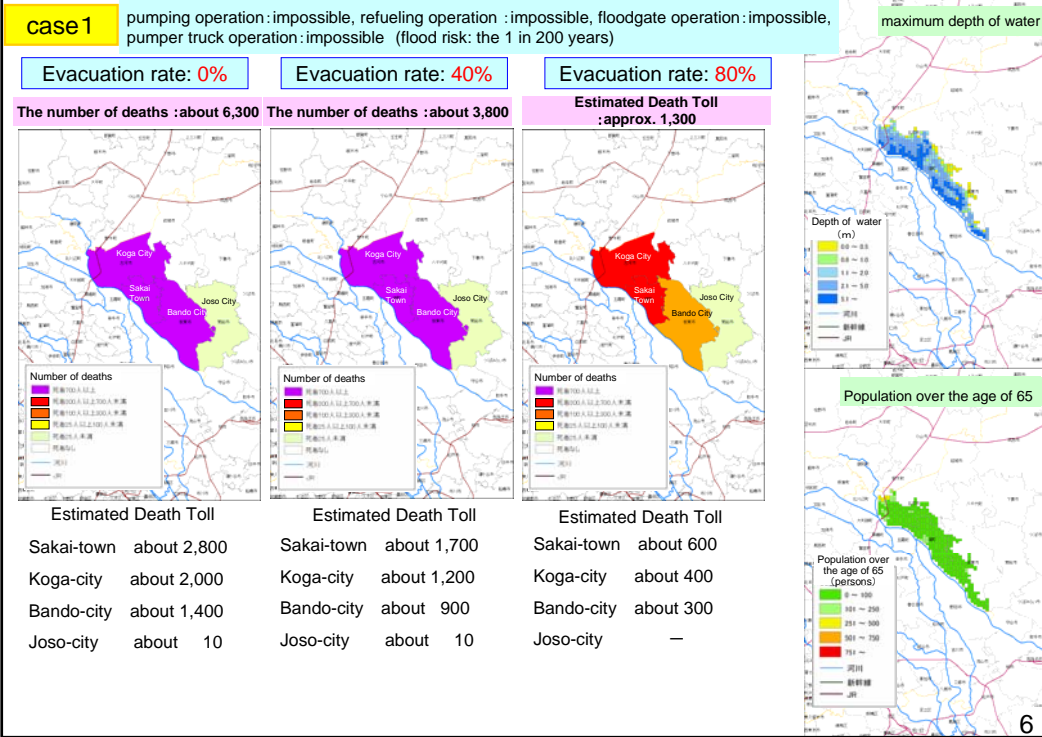
14. The number of deaths in affected municipalities (case 1 : flood in Watarase) the number of deaths



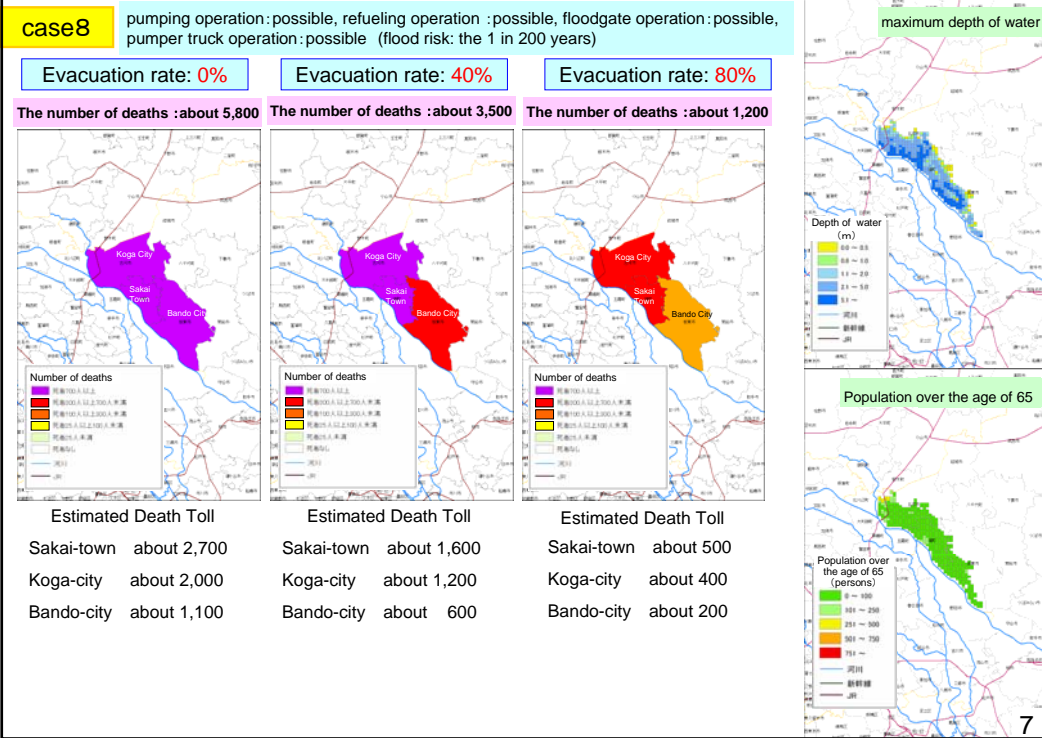
15. The number of deaths in affected municipalities (case 8 : flood in Watarase) the number of deaths

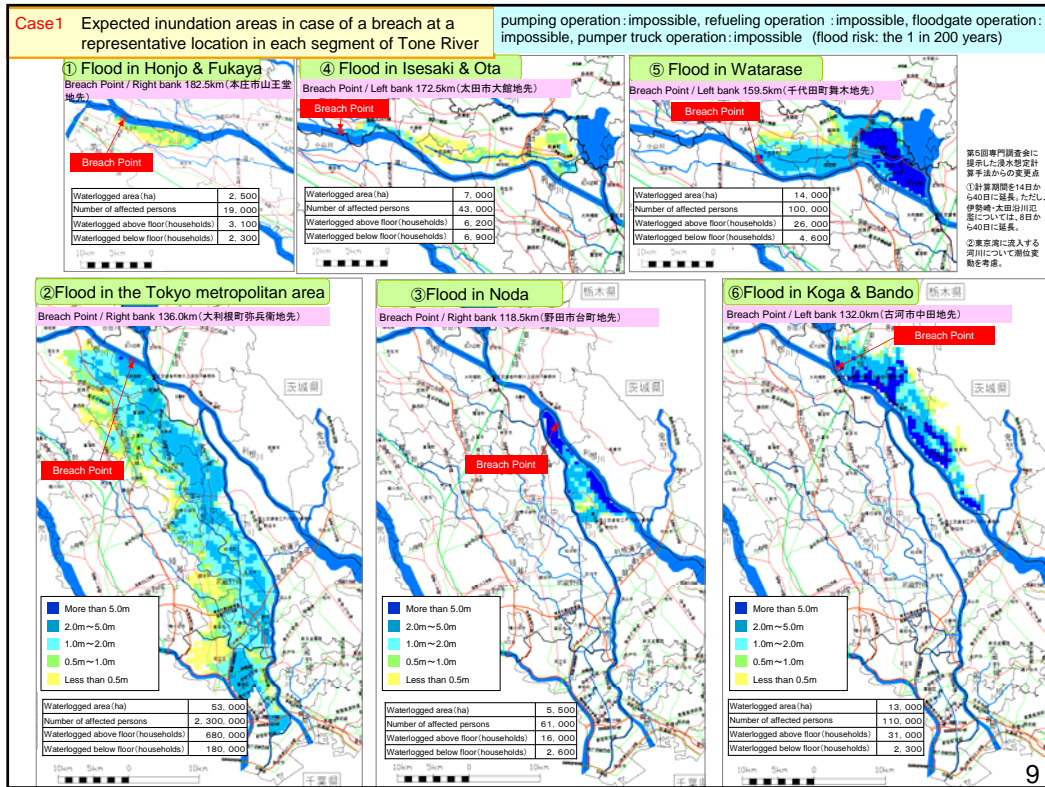
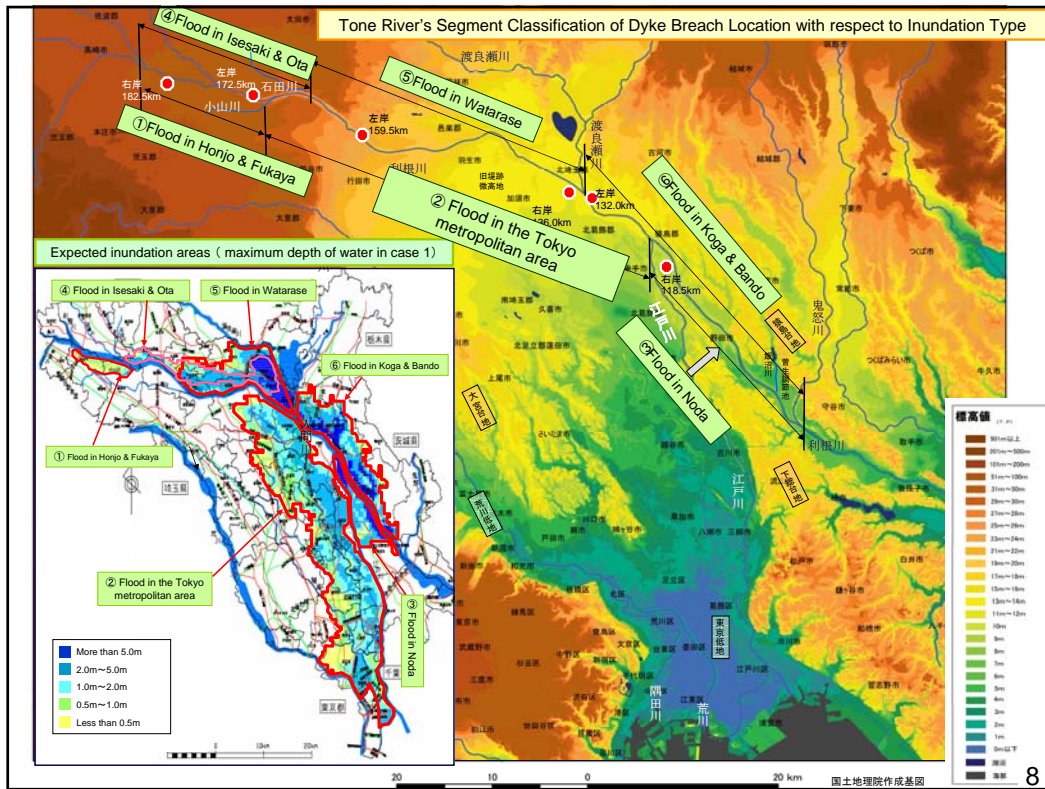


16. The number of deaths in affected municipalities (case 1 : flood in Koga/Bando) the number of deaths



17. The number of deaths in affected municipalities (case 8 : flood in Koga/Bando) the number of deaths

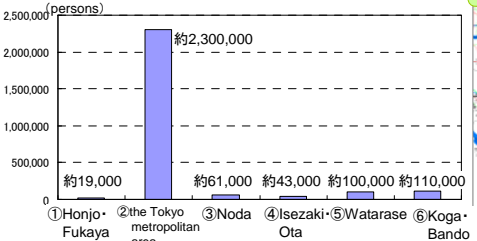




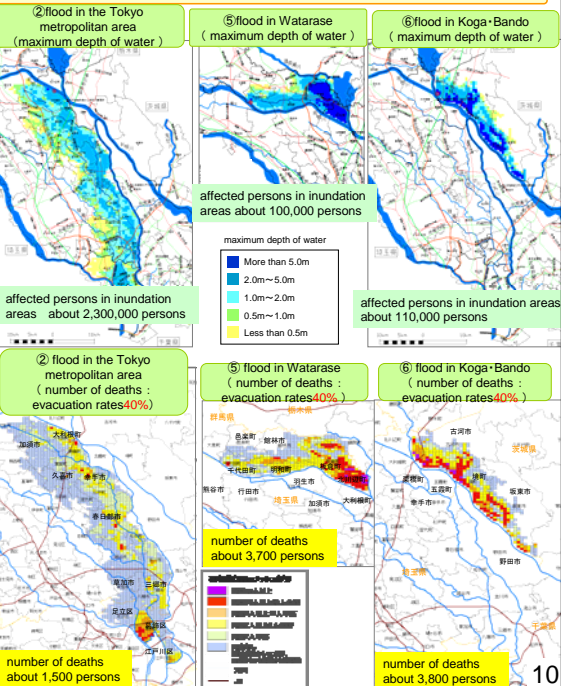
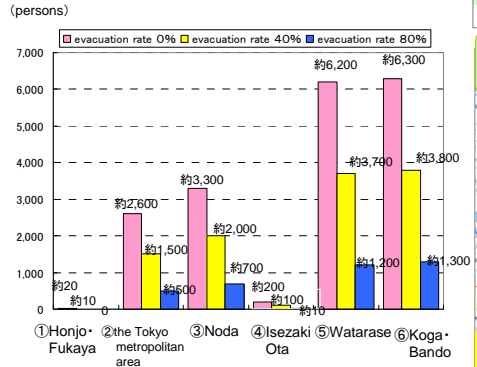
**12. The number of deaths in the different scenarios (case1)** pumping operation : impossible, refueling operation : impossible, floodgate operation : impossible, pumper truck operation : impossible (flood risk: the 1 in 200 years)

- Affected persons in expected inundation areas of the Tokyo metropolitan area are ten times more than those of other scenarios.
- On the other hand, number of deaths in expected inundation areas of Watarase, Koga/Bando is twice more than that of the Tokyo metropolitan area

affected persons in expected inundation areas



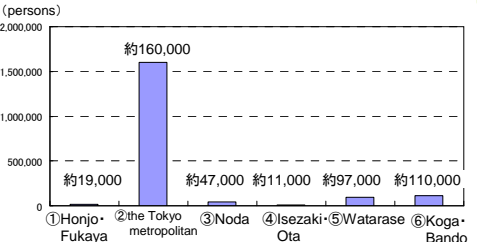
number of deaths in expected inundation areas



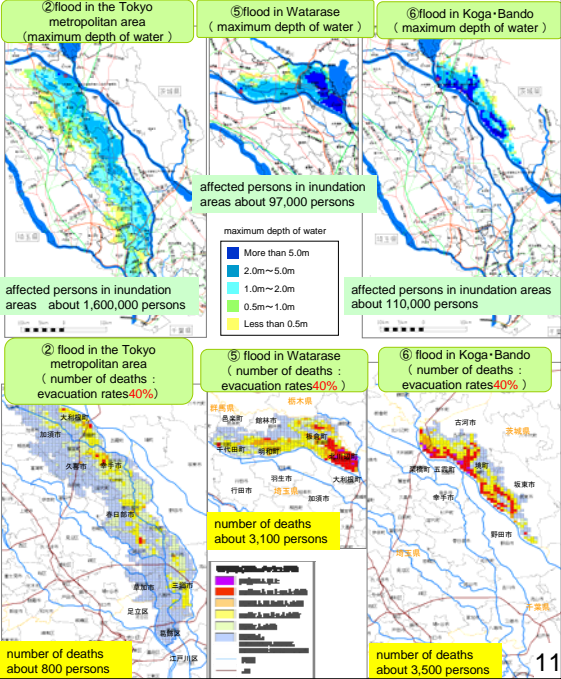
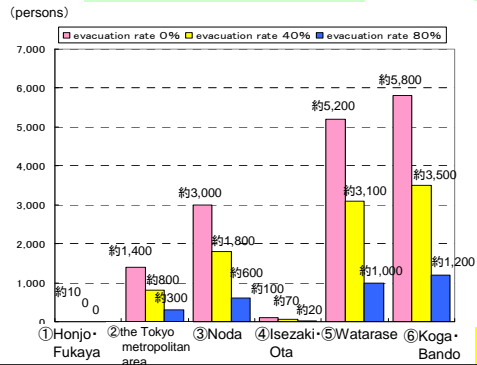
**13. The number of deaths in the different scenarios (case8)** pumping operation : possible, refueling operation : possible, floodgate operation : possible, pumper truck operation : possible (flood risk: the 1 in 200 years)

- Affected persons in expected inundation areas of the Tokyo metropolitan area are ten times more than those of other scenarios.
- On the other hand, number of deaths in expected inundation areas of Watarase, Koga/Bando is twice more than that of the Tokyo metropolitan area

affected persons in expected inundation areas



number of deaths in expected inundation areas



18. The number of deaths / the stranded people in each case : flood in the Tokyo metropolitan area

	Evacuation rate	The number of deaths (persons)	The number of the stranded people in inundated area(thousand)					
			After 1 day	After 2 days	After 3 days	After 1 week	After 2 weeks	After 4 weeks
Case 1 Pumping :N Refueling :N Floodgate :N Pumper truck:N the 1 in 200 years	0%	About 2,600	About 580	About 1,100	About 950	About 810	About 790	About 780
	40%	About 1,500	About 350	About 670	About 570	About 480	About 470	About 470
	80%	About 500	About 120	About 220	About 190	About 160	About 160	About 160
Case 2 Pumping :N Refueling :N Floodgate :Y Pumper truck:N the 1 in 200 years	0%	About 1,500	About 580	About 1,000	About 750	About 89	About 74	About 74
	40%	About 900	About 350	About 630	About 450	About 53	About 44	About 44
	80%	About 300	About 120	About 210	About 150	About 18	About 15	About 15
Case 3 Pumping :Y Refueling :N Floodgate :N Pumper truck:N the 1 in 200 years	0%	About 1,500	About 560	About 870	About 610	About 500	About 570	About 560
	40%	About 900	About 340	About 520	About 370	About 300	About 340	About 330
	80%	About 300	About 110	About 170	About 120	About 100	About 110	About 110
Case 4 Pumping :Y Refueling :N Floodgate :Y Pumper truck:N the 1 in 200 years	0%	About 1,400	About 560	About 850	About 560	About 53	About 52	About 52
	40%	About 800	About 340	About 510	About 330	About 32	About 31	About 31
	80%	About 300	About 110	About 170	About 110	About 11	About 10	About 10
Case 5 Pumping :Y Refueling :N Floodgate :N Pumper truck:Y the 1 in 200 years	0%	About 1,500	About 560	About 870	About 610	About 500	About 470	About 420
	40%	About 900	About 340	About 520	About 370	About 300	About 280	About 250
	80%	About 300	About 110	About 170	About 120	About 100	About 95	About 83
Case 6 Pumping :Y Refueling :N Floodgate :Y Pumper truck:Y the 1 in 200 years	0%	About 1,400	About 560	About 840	About 560	About 52	About 39	About 29
	40%	About 800	About 340	About 510	About 330	About 31	About 24	About 17
	80%	About 300	About 110	About 170	About 110	About 10	About 7.9	About 5.8

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18. The number of deaths / the stranded people in each case : flood in the Tokyo metropolitan area

	Evacuation rate	The number of deaths (persons)	The number of the stranded people in inundated area(thousand)					
			After 1 day	After 2 days	After 3 days	After 1 week	After 2 weeks	After 4 weeks
Case 7 Pumping :Y Refueling :Y Floodgate :N Pumper truck:Y the 1 in 200 years	0%	About 1,500	About 560	About 870	About 610	About 280	About 18	About 6.2
	40%	About 900	About 340	About 520	About 360	About 170	About 11	About 3.7
	80%	About 300	About 110	About 170	About 120	About 56	About 3.6	About 1.2
Case 8 Pumping :Y Refueling :Y Floodgate :Y Pumper truck:Y the 1 in 200 years	0%	About 1,400	About 560	About 850	About 560	About 26	About 13	About 2.3
	40%	About 800	About 340	About 510	About 330	About 15	About 7.7	About 1.4
	80%	About 300	About 110	About 170	About 110	About 5.2	About 2.6	About 0.5
Case 1' Pumping :N Refueling :N Floodgate :N Pumper truck:N the 1 in 1000 years	0%	About 4,500	About 730	About 1,500	About 1,500	About 1,000	About 940	About 880
	40%	About 2,700	About 440	About 910	About 870	About 600	About 560	About 530
	80%	About 900	About 150	About 300	About 290	About 200	About 190	About 180
Case 5' Pumping :Y Refueling :N Floodgate :N Pumper truck:Y the 1 in 1000 years	0%	About 4,000	About 720	About 1,400	About 1,200	About 890	About 840	About 780
	40%	About 2,400	About 430	About 820	About 710	About 530	About 510	About 470
	80%	About 800	About 140	About 270	About 240	About 180	About 170	About 160
Case 8' Pumping :Y Refueling :Y Floodgate :Y Pumper truck:Y the 1 in 1000 years	0%	About 2,800	About 720	About 1,300	About 760	About 29	About 15	About 4.4
	40%	About 1,700	About 430	About 800	About 450	About 17	About 8.9	About 2.6
	80%	About 600	About 140	About 270	About 150	About 5.8	About 3	About 0.9

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### 19. The number of deaths / the stranded people in the different scenarios

**Case 1** pumping operation : impossible, refueling operation : impossible, floodgate operation : impossible, pumper truck operation : impossible (flood risk: the 1 in 200 years)

	Evacuation rate	The number of deaths (persons)	The number of the stranded people in inundated area					
			After 1 day	After 2 days	After 3 days	After 1 week	After 2 weeks	After 4 weeks
① Flood in Honjo & Fukaya	0%	About 20	About 2,200	About 2,200	About 2,200	About 2,200	About 2,200	About 2,200
	40%	About 10	About 1,300	About 1,300	About 1,300	About 1,300	About 1,300	About 1,300
	80%	—	About 400	About 400	About 400	About 400	About 400	About 400
③ Flood in Noda	0%	About 3,300	About 49,000	About 43,000	About 34,000	About 27,000	About 25,000	About 25,000
	40%	About 2,000	About 30,000	About 26,000	About 20,000	About 16,000	About 15,000	About 15,000
	80%	About 700	About 9,900	About 8,600	About 6,800	About 5,400	About 5,000	About 5,000
④ Flood in Isesaki & Ota	0%	About 200	About 6,000	About 6,400	About 6,200	About 6,500	About 7,200	About 8,600
	40%	About 100	About 3,600	About 3,800	About 3,700	About 3,900	About 4,300	About 5,200
	80%	About 30	About 1,200	About 1,300	About 1,200	About 1,300	About 1,400	About 1,700
⑤ Flood in Watarase	0%	About 6,200	About 57,000	About 55,000	About 55,000	About 55,000	About 55,000	About 55,000
	40%	About 3,700	About 34,000	About 33,000	About 33,000	About 33,000	About 33,000	About 33,000
	80%	About 1,200	About 11,000	About 11,000	About 11,000	About 11,000	About 11,000	About 11,000
⑥ Flood in Koga & Bando	0%	About 6,300	About 88,000	About 51,000	About 40,000	About 32,000	About 30,000	About 29,000
	40%	About 3,800	About 53,000	About 30,000	About 24,000	About 19,000	About 18,000	About 18,000
	80%	About 1,300	About 18,000	About 10,000	About 8,000	About 6,300	About 6,000	About 5,900
【restate】 ② Flood in the Tokyo metropolitan area	0%	About 2,600	About 580,000	About 1,100,000	About 950,000	About 810,000	About 790,000	About 780,000
	40%	About 1,500	About 350,000	About 670,000	About 570,000	About 480,000	About 470,000	About 470,000
	80%	About 500	About 120,000	About 220,000	About 190,000	About 160,000	About 160,000	About 160,000

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### 19. The number of deaths / the people left behind in the different scenarios

**Case 8** pumping operation : possible, refueling operation : possible, floodgate operation : possible, pumper truck operation : possible (flood risk: the 1 in 200 years)

	Evacuation rate	The number of deaths (persons)	The number of the stranded people in inundated area					
			After 1 day	After 2 days	After 3 days	After 1 week	After 2 weeks	After 4 weeks
① Flood in Honjo & Fukaya	0%	About 10	About 1,400	About 1,200	About 700	0	0	0
	40%	—	About 800	About 700	About 400	0	0	0
	80%	—	About 300	About 200	About 100	0	0	0
③ Flood in Noda	0%	About 3,000	About 43,000	About 18,000	About 11,000	About 5,500	About 1,100	0
	40%	About 1,800	About 26,000	About 11,000	About 6,300	About 3,300	About 700	0
	80%	About 600	About 8,700	About 3,600	About 2,100	About 1,100	About 200	0
④ Flood in Isesaki & Ota	0%	About 100	About 1,500	About 400	About 400	0	0	0
	40%	About 70	About 900	About 300	About 300	0	0	0
	80%	About 20	About 300	About 90	About 90	0	0	0
⑤ Flood in Watarase	0%	About 5,200	About 56,000	About 46,000	About 35,000	About 20,000	About 14,000	About 10,000
	40%	About 3,100	About 34,000	About 28,000	About 21,000	About 12,000	About 8,200	About 6,000
	80%	About 1,000	About 11,000	About 9,200	About 7,100	About 3,900	About 2,700	About 2,000
⑥ Flood in Koga & Bando	0%	About 5,800	About 83,000	About 43,000	About 20,000	About 5,400	About 3,500	About 2,300
	40%	About 3,500	About 50,000	About 26,000	About 12,000	About 3,200	About 2,100	About 1,400
	80%	About 1,200	About 17,000	About 8,600	About 4,000	About 1,100	About 700	About 500
【restate】 ② Flood in the Tokyo metropolitan area	0%	About 1,400	About 560,000	About 850,000	About 560,000	About 26,000	About 13,000	About 2,300
	40%	About 800	About 340,000	About 510,000	About 330,000	About 15,000	About 7,700	About 1,400
	80%	About 300	About 110,000	About 170,000	About 110,000	About 5,200	About 2,600	About 500

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