

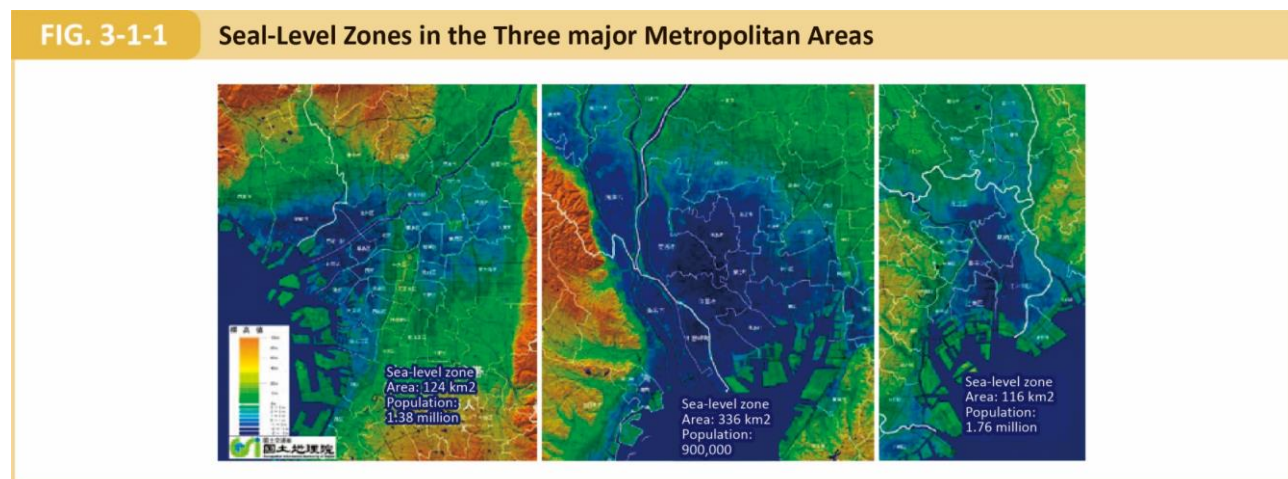
Section 3 Responding to Disaster Threats

3-1 Consideration of Region-Wide Evacuation due to Overflow from Floods and Storm Surges in the Tokyo Metropolitan Area

Due to global warming in recent years, there are concerns about the intensification of tropical cyclones, and it is predicted that there will be large-scale floods in the future that will require large-scale wide-area evacuation. Each of the 3 major metropolitan areas in Japan has a wide "sea-level zones," and in the event of a large-scale flood due to a levee burst or similar disaster, it is expected that a large number of residents will evacuate, resulting in heavy congestion and a large number of isolated people due to delayed escape (FIG. 3-1-1).

For this reason, the Working Group on Large-Scale and Wide-Area Evacuation from Floods and Storm Surge Flooding, established in June 2016 under the Disaster Management Implementation Committee of the National Disaster Management Council, studied how large-scale and wide-area evacuation from floods and storm surge flooding should be carried out in the 3 major metropolitan areas. In March 2018, the "Fundamental Thought Process on Large-Scale and Wide-Area Evacuation from Floods and Storm Surge Flooding (Report)" was compiled.

(Reference: <http://www.bousai.go.jp/fusuigai/kozuiworking/>)



Source: Cabinet Office, based on Geospatial Information Authority of Japan website

Based on this report, the Cabinet Office, in cooperation with the Tokyo Metropolitan Government, held the "Study Group on Extensive Evacuation from Large-Scale Flood Disasters in the Tokyo Metropolitan Area" 5 times from June 2020 to February 2021, with the aim of organizing matters that should be tackled in cooperation among relevant organizations, including government agencies, with a viewpoint on implementing large-scale wide-area evacuation in the event of a large-scale flood, as well as examining the nature of cooperation and role sharing among relevant organizations. The main topics discussed were securing wide-area evacuation sites, evacuation means, and evacuation guidance.

(Reference: <http://www.bousai.go.jp/fusuigai/suigaiworking/suigaiworking.html>)

In FY 2020, the "Sub-Working Group Concerning Evacuation Information and Region-Wide Evacuation Based on Typhoon Hagibis in 2019 (T1919)," was convened 6 times from June to December 2020 to study formulation of a system to facilitate large-scale wide-area evacuation, leading to the final complication of the "Summary of

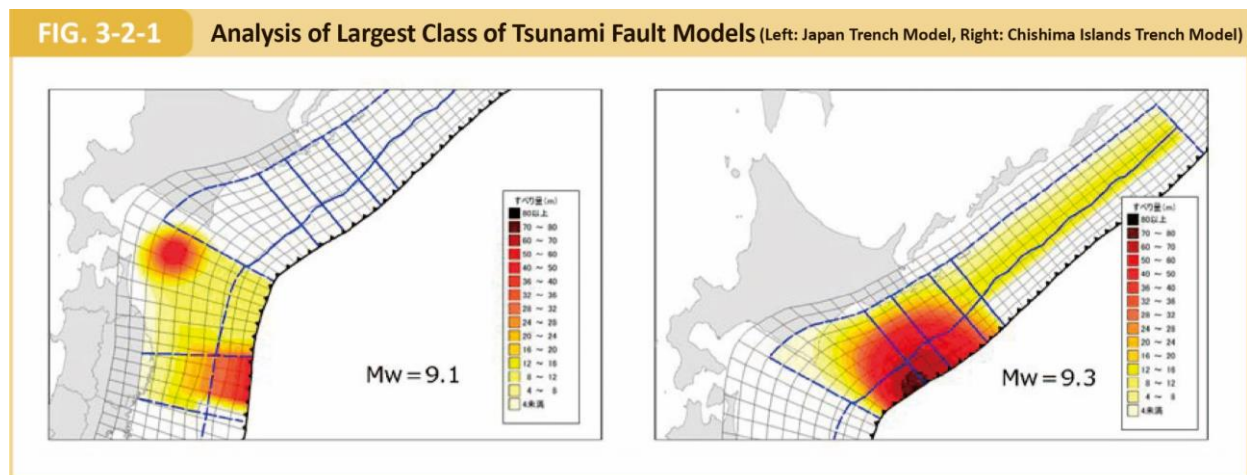
Evacuation Information and Region-Wide Evacuation Based on Typhoon Hagibis in 2019 (T1919), etc." From FY 2021 onward, in order to promote wide-area evacuation throughout Japan, basic ideas on points to keep in mind and procedures in considering wide-area evacuation will be put together and disseminated to local governments.

(Reference: http://www.bousai.go.jp/fusuigai/subtyphoonworking/pdf/dai19gou/hinan_honbun.pdf)

3-2 Consideration of Countermeasures against Megaquakes along the Japan Trench and the Chishima Trench

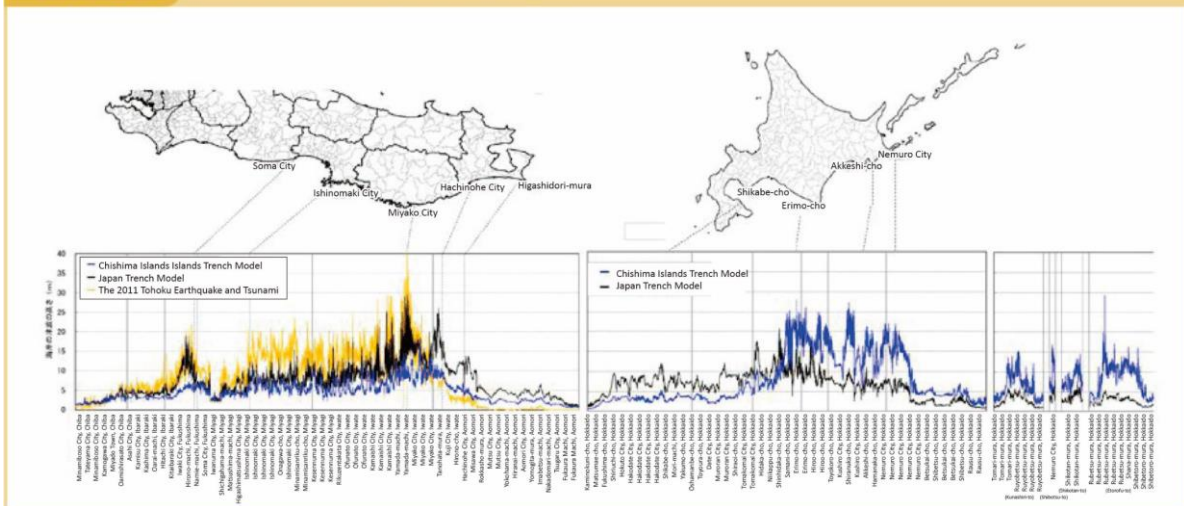
The government as a whole has been focusing on disaster prevention measures against trench-type earthquakes along the Japan Trench and the Chishima Trench based on the "Basic Plan for Promotion of Disaster Management for Trench-type Earthquakes in the Vicinity of the Japan and Chishima Trenches." However, based on the "Committee for Technical Investigation of Earthquake and Tsunami Countermeasures from the Lessons Learned from the 2011 off the Pacific coast of Tohoku Earthquake" (September 28, 2011) of the National Disaster Management Council, the government has been focusing on the establishment of comprehensive countermeasures whose top priority is to save lives against tsunamis based on the assumption that the largest class of earthquake and tsunami will occur.

In February 2015, the Cabinet Office established the "Study Group on a Megaquake Model in the Vicinity of the Japan and Chishima Trenches," which consists of researchers in science, engineering, and other fields. Based on scientific knowledge, the committee established a model of the largest possible earthquake and tsunami fault, estimated the distribution of seismic intensity and the height of the possible tsunami along the coast (FIG. 3-2-1, FIG. 3-2-2).



Source: Study Group on a Megaquake Model in the Vicinity of the Japan and Chishima Trenches - Summary Report Reference Figures collection
(See: http://www.bousai.go.jp/jishin/nihonkaiko_chishima/model/index.html)

FIG. 3-2-2 Estimated Coastal Tsunami Height



Source: Study Group on a Megaquake Model in the Vicinity of the Japan and Chishima Trenches - Summary Report Reference Figures collection
(See: http://www.bousai.go.jp/jishin/nihonkaiko_chishima/model/index.html)

In April 2020, the "Working Group for Studying Megaquake Countermeasures in the Vicinity of the Japan and Chishima Trenches" was established under the Disaster Management Implementation Committee of the National Disaster Management Council in order to consider damage assumptions and disaster prevention measures to mitigate damage based on the investigative results of these maximum class earthquake and tsunami fault models.

In order to formulate various disaster prevention and mitigation measures that should be implemented by the national government and to promote them, the working group will first examine the nature and quantitative amount of damage to human beings, buildings, lifelines such as water, electricity, and gas, and transportation facilities such as roads and railroads that would be caused by tsunamis and tremors in a major earthquake along the Japan Trench and the Chishima Trench. After that, based on the scale of such damage, the issues to be addressed in the event of a huge earthquake along the Japan Trench and the Chishima Trench will be adjusted, and the basic concept of countermeasures against huge earthquakes will be considered. In particular, if an earthquake occurs in winter along the Japan Trench or the Chishima Trench, damage specific to snow-covered cold regions is expected, and this is being taken into consideration.