

ACTIVITIES FOR RECONSTRUCTION AND ENVIRONMENTAL REMEDICATION AFTER THE GREAT EAST JAPAN EARTHQUAKE

On March 11, 2011, a magnitude 9.0 earthquake struck off the coast of Japan. It was the most powerful earthquake ever recorded around Japan. It generated a tsunami that caused massive damage across a wide swath of northeastern Japan, particularly along the Pacific coast. At the same time, accidents at the Tokyo Electric Power Company (TEPCO) Fukushima Daiichi Nuclear Power Plant released a large volume of radioactive materials into the environment, forcing many residents to evacuate to other areas.

The following sections present the work that is being done to reconstruct and revitalize the disaster areas.

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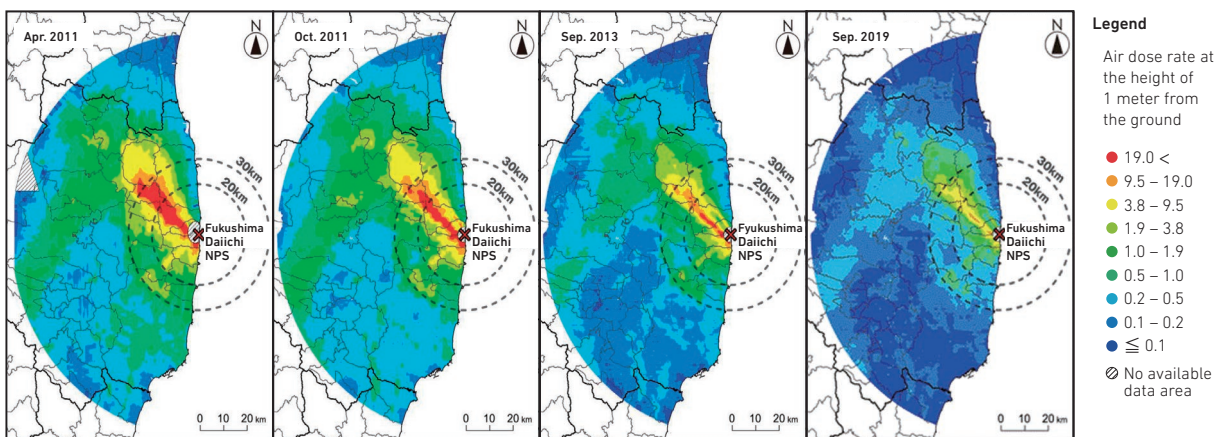
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AIR DOSE RATES

According to airborne monitoring data, as of November 2019, the air dose rate of radioactivity at a height of 1 m above the ground within the 80-km zone around the Fukushima Daiichi power plant had declined by about 78% vs. the rate in November 2011. The radioactive materials released in the Fukushima Daiichi nuclear disaster included mainly iodine-131, caesium-134, and caesium-137, which have half-lives of about 8 days, about 2 years, and about 30 years, respectively.

Considering the physical decay of the radioactive materials and expected attenuation by rainfall and other natural causes, it was estimated that the amount of radiation vs. August 2011 would decline by about 40% after two years and about 50% after five years. The actual rate of decline in radiation is exceeding these estimates, probably due to decontamination work as well as rainfall and other natural phenomena.

Air dose rate distribution within 80 km radius of TEPCO Fukushima Daiichi Nuclear Power Plant



* The figures include air dose rate by natural radioactive nuclide.
Source: Nuclear Regulation Agency

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INITIATIVES FOR RESTORING THE ENVIRONMENT IN DISASTER STRICKEN AREAS

Decontamination measures for soil, etc. contaminated by radioactive materials

As mandated by law, by the end of March 2018, the national and local governments completed whole area decontamination of 100 cities, towns, and villages in eight prefectures, with the exception of designated Difficult-to-Return Zones (DRZ).

In the DRZ, communities in those areas have drawn up Plans for Specified Reconstruction and

Revitalization Bases, in accordance with the provisions of the Act on Special Measures for the Reconstruction and Revitalization of Fukushima, as amended in May 2017. Coordinated work being done under these plans includes the demolition of houses and other buildings, decontamination, and construction of infrastructure.

The Ministry of the Environment is carrying out decontamination and waste disposal, including demolition work, in all Specified Reconstruction and Revitalization Bases: Futaba, Okuma, Namie, Tomioka, Iitate, and Katsurao. In regard to DRZ, in accordance with the complete reopening of the

JR Joban railway line, for some parts of the Specified Reconstruction and Revitalization Bases set up within the DRZ of Futaba, Okuma, and Tomioka, the evacuation order has now been lifted for the first time.

Establishment of Interim Storage Facility

An Interim Storage Facility is established to enable safe and centralized storage of soil and waste removed in decontamination work, and for designated waste (radioactive waste that exceeds 100,000 Bq/kg*) stored in Fukushima Prefecture, until the time of final disposal. Of the roughly 14 million m³ of soil and waste scheduled to be transported from Temporary Storage Sites to the

Interim Storage Facility, about 6.68 million m³ had been transported as of the end of FY2019. In continuation of this work, in accordance with the “Policy on Interim Storage Facility Project in FY2020” announced in January 2020, the transportation will be mostly completed (except for designated DRZ) by FY2021.

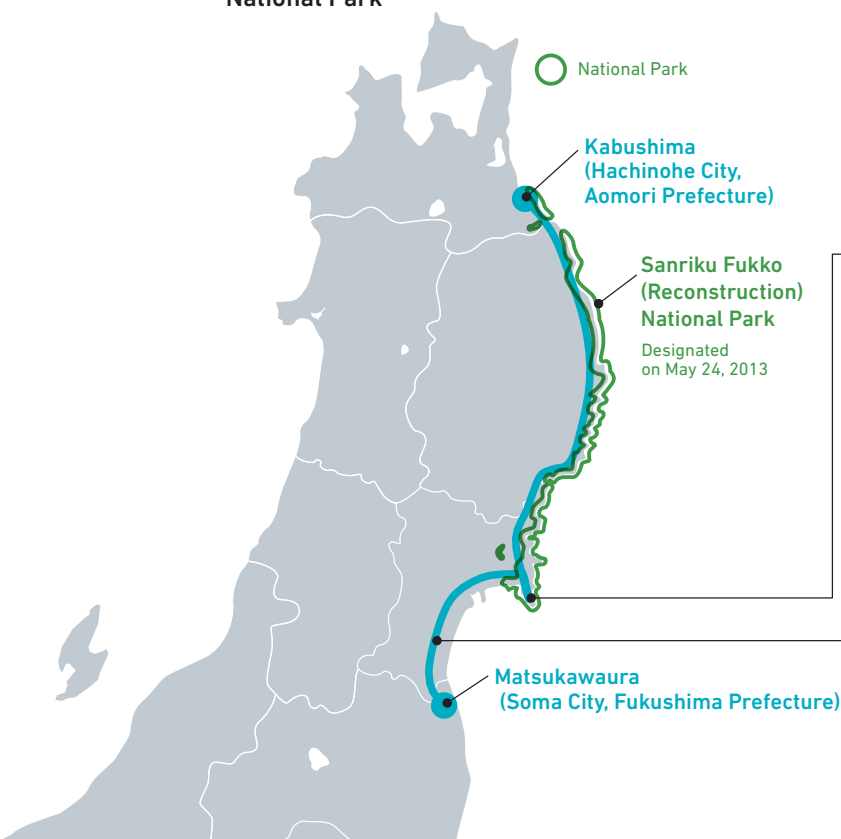
*The sum of the radioactivity concentrations of caesium-134 and caesium-137.

Green reconstruction

The Michinoku Coastal Trail is a long nature trail that follows the Pacific coastline from Hachinohe City in Aomori, through Sanriku Fukko (reconstruction) National Park, to Soma City in Fukushima Prefecture. With the help of local volunteers, the full trail covering over 1,000 km was opened in June 2019.

In October 2019, the Oshika Peninsula Visitors Center was opened in Ishinomaki City, Miyagi Prefecture, as part of the strengthening of local disaster protection capabilities, and as a regional eco-tourism promotion base to advance maintenance and repair work for reconstruction that contributes to the rebuilding of damaged park facilities and revitalization of tourist areas.

Efforts in Sanriku Fukko (reconstruction) National Park



Oshika Peninsula Visitors Center
(Ayukawahama)
Opened October 2019

Michinoku Coastal Trail Fully
Opened June 9, 2019



Source: Ministry of the Environment