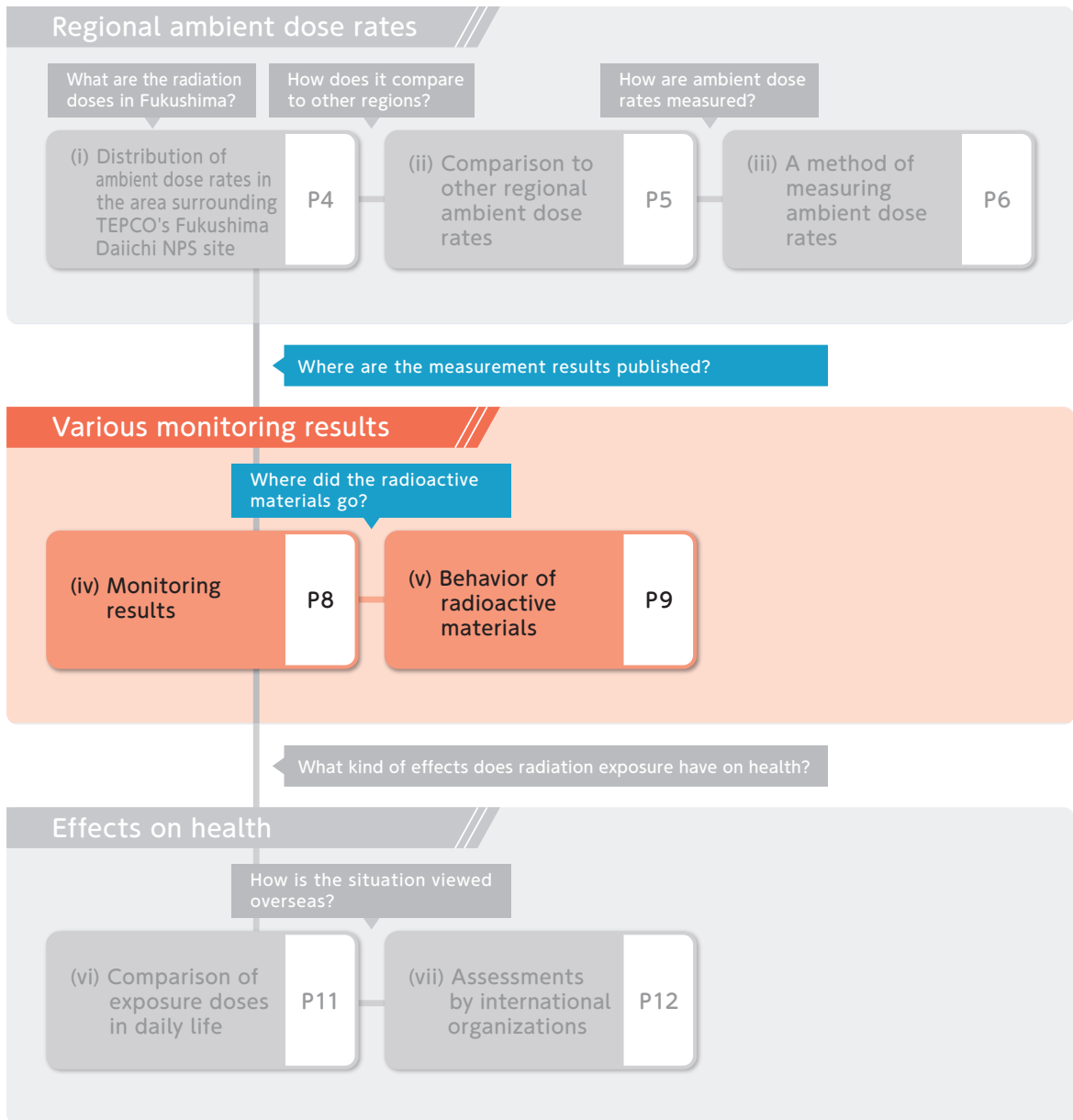




Theme: Various monitoring results

We introduce a variety of monitoring surveys carried out in connection to the accident at TEPCO's Fukushima Daiichi NPS. We also explain the movements of released radioactive materials within the environment.



Regional ambient dose rates

Various monitoring results

Effects on health



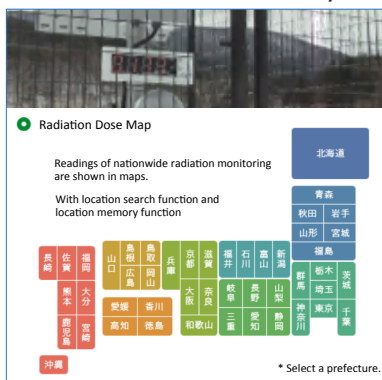
(iv) Monitoring results

Within Fukushima Prefecture, monitoring of various data in addition to ambient dose measurements is being conducted in order to maintain awareness of radiation dose and radioactive materials.

Comprehensive Radiation Monitoring Plan and Information Disclosure

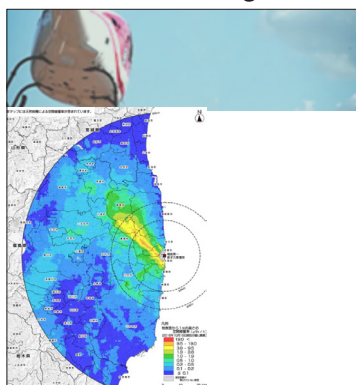
At the Monitoring Coordination Meeting held at the Nuclear Emergency Response Headquarters, a Comprehensive Monitoring Plan was determined, and monitoring is being carried out in coordination with related organizations and nuclear operators. The results are posted on the websites of these organizations and updated as needed.

Real-time Dose Measurement System



Ambient dose rates measured at mobile monitoring posts nationwide and by the Real-time Dose Measurement System are shown in a map.

Airborne monitoring



Monitoring using airplanes is conducted on a regular basis, centered on Fukushima Prefecture. The results are compiled into ambient dose rate maps and released.

Sea area monitoring



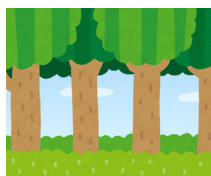
Relevant ministries and agencies conduct monitoring of seawater, marine soil and marine organisms and release measurement results.

Nuclear Regulation Authority radiation monitoring information <https://radioactivity.nra.go.jp/ja/>
Taken from the comprehensive radiation monitoring plan <https://radioactivity.nra.go.jp/ja/list/511/list-1.html>

For more details about the comprehensive radiation monitoring plan, see page 23 of Vol. 2, FY2022 edition.

The major results from the monitoring implemented in accordance with the comprehensive radiation monitoring plan are shown below.

Changes in ambient dose rates in Fukushima Prefecture forest areas



Average ambient dose rate values at 362 continuously-measured areas show a significant decline, falling to 20% or less of the values measured immediately after the accident.

Fukushima Prefecture well water inspection results



Radioactive materials have never been detected from well water in the inspections conducted so far. Inspection results have all been "ND" (not detected; below the detection limit).

Monitoring results for public water areas in Fukushima Prefecture and the surrounding region*1



Monitoring has been conducted at about 600 sites. At all but a very small number of these, no radioactive materials are detected.

Tap water monitoring results for Fukushima Prefecture and the surrounding region*2



There has been no report of radioactive cesium detection at a level exceeding 10 Bq/kg since June 2011.

*1: All of Fukushima Prefecture, Miyagi Prefecture, Ibaraki Prefecture, Tochigi Prefecture, and Gunma Prefecture, as well as parts of Iwate Prefecture and Chiba Prefecture

*2: Fukushima Prefecture and 10 neighboring prefectures (Miyagi, Yamagata, Ibaraki, Tochigi, Gunma, Saitama, Chiba, Tokyo, Kanagawa, and Niigata)

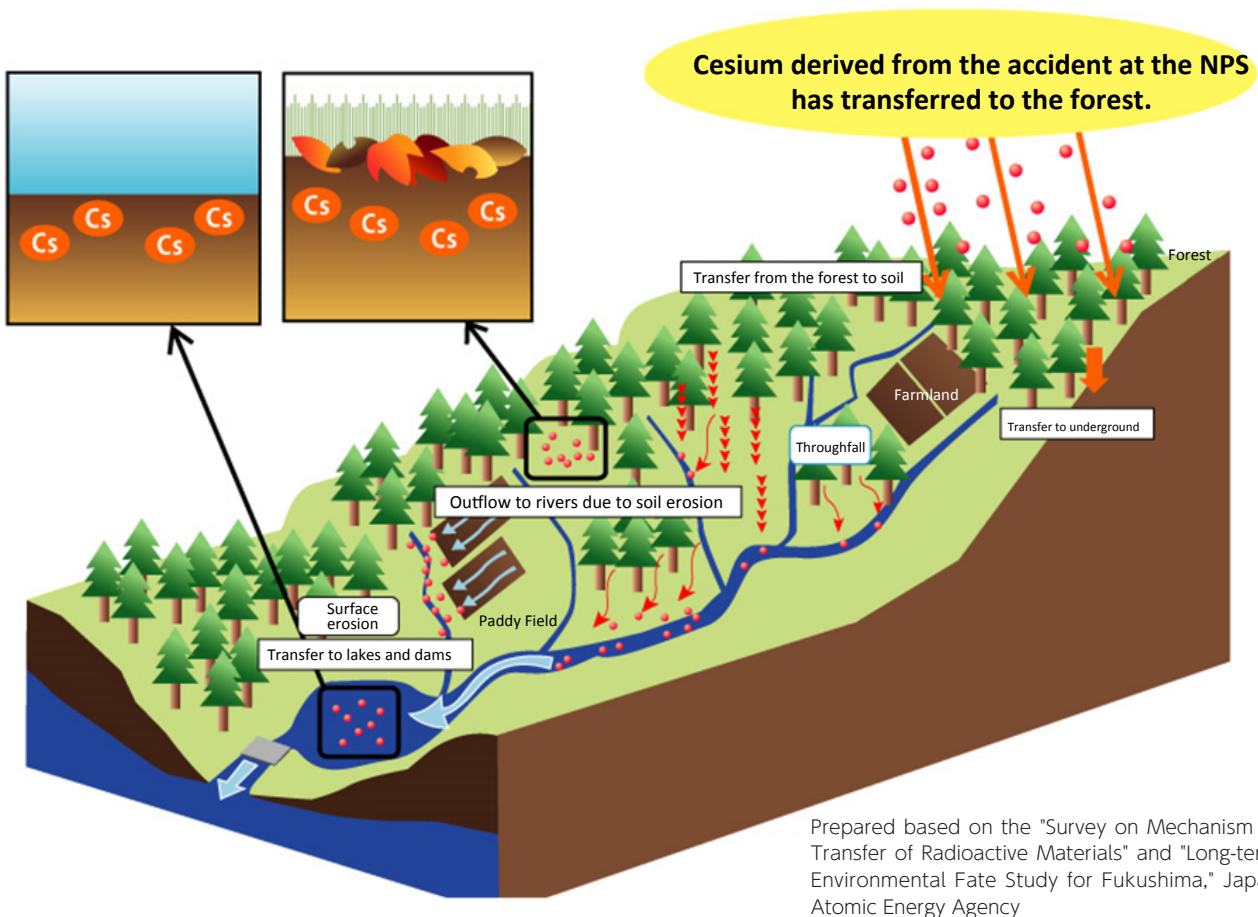
For more information about the results of inspections, see pages 30, 33, 36, and 41 in Vol. 2, FY2022 edition.



(v) Behavior of radioactive materials

In various monitoring results, radioactive material detection is decreasing.
Where has the cesium released into the environment gone?

● Transfer of Fallen and Deposited Cesium in the Environment



The above figure illustrates the process of fallen and deposited cesium in the forest flowing from upstream to a downstream dam lake. The two enlarged pictures show the forest floor and the sediment at the bottom of the dam lake, both indicating that the cesium is deposited in the surface layer of soil.

Distribution of radioactive cesium released into the environment due to the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS has changed significantly over time. Cesium that adhered to tree bark, branches and leaves immediately after the accident transferred onto the forest soil due to leaf fall and precipitation, etc. At present, over 90% is found to be located within a depth of 5 cm from the ground surface.

For more information about transfer of cesium in the environment, see page 184 of Vol. 1, FY2022 edition.