

1. WATER USE
2. ADMINISTRATION OF RIVERS AND COASTS

1. Water Use

The annual demand for water in Japan amounted to about 87,000 million m³, of which about 72% was collected from rivers. The water brought by precipitation totals about 630,000 million m³ a year, of which about 13% is put to use.

The annual total use of water for agricultural purposes is estimated at about 53,000 million m³, of which surface water is 49,600 million m³ and ground water 3,400 million m³. For paddy field irrigation, 48,000 million m³ is put to use, whereas 5,000 million m³ is used for upland irrigation and others.

The annual total use of freshwater for industrial purposes is estimated at about 35,000 million m³, of which surface water is 7,000 million m³, ground water 7,000 million m³, recovered water 19,500 million m³ and tap water 1,500 million m³. By use, 23,500 million m³ of water is used for refrigeration, 8,000 million m³ for washing, 2,000 million m³ for air-conditioning, 1,000 million m³ for boilers and 500 million m³ for resources and others. The total use of sea water for industrial purposes amounted to 45,750,000 m³ per day. These types of water account for about one-third of the total of water used per day. In recent times, the utilization of ground water has been on the decrease but that of recovered water on the increase.

The annual total use of tap water is estimated at about 10,500 million m³, of which surface water is 7,200 million m³ and ground water 3,300 million m³. By use, 4,900 million m³ is used for households, 1,600 million m³ for business purposes, 2,500 million m³ for public purposes, and 400 million m³ for industrial purposes and others.

The dams as of October 1975, including those under construction or investigation, consist of 2319 for agriculture, 532 for power generation (390 exclusively for power generation and 142 multipurpose dams), 346 for tap water (94 exclusively for tap water supplies and 252 multipurpose dams), and 159 for industrial purposes (17 exclusively for industrial purposes and 142 multipurpose dams).

Salient Points of the Legend and Map Compilation

With the utilization of water classified into various purposes, this map shows the volumes of water collected, water routes and dams in different colors. This map, however, does not show the volume of water collected for power generation.

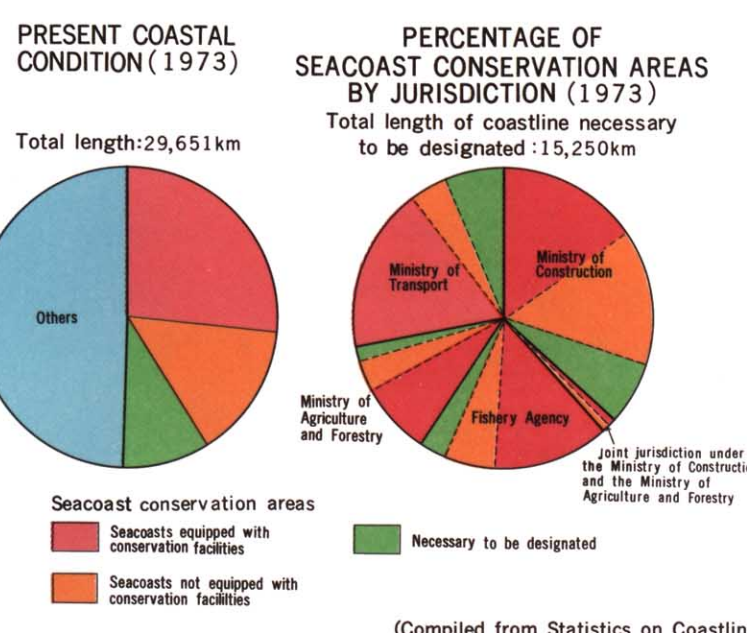
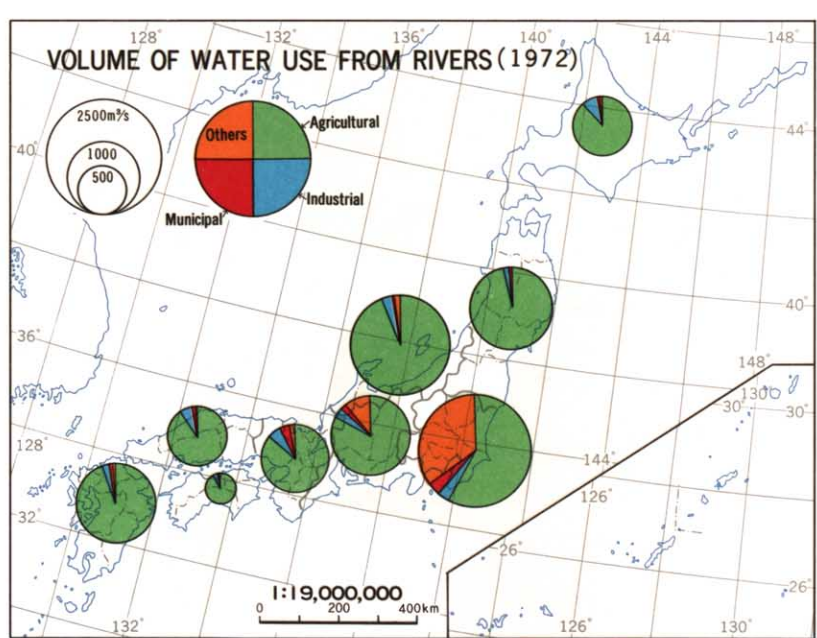
The mean discharge of water is the average of the discharges registered in the decade of 1961-70.

This map does not show the dams whose available pondage is less than 2,000,000 m³.

"Water route," as referred to here, represents that which is constructed as a canal and therefore has nothing to do with the water route of a river.

Sources

1. Ministry of Construction, Hydrological Yearbook, 1961-1970.
2. Data from the Ministry of International Trade and Industry, Ministry of Agriculture and Forestry and Ministry of Construction.
3. Ministry of Health and Welfare, 1972 Statistics on Waterworks.
4. Japan Dam Association, Handbook of Dams, 1976.



2. Administration of Rivers and Coasts

Japan's seacoasts total about 29,700 km in length, of which the seacoast necessary for being designated as seacoast conservation areas (the seacoasts whose protection is necessary against damage from tsunami, high tide, waves and other types of seawater or from land subsidence, and these seacoasts are designated by prefectural governors) account for 50.4%. Other types of seacoasts include the seacoasts administered for shore protection for roads and railways and also for reserved forests, and the natural seacoast whose administration is not required for the conservation of the national land.

Of the areas necessary for being designated as seacoast conservation areas, the already designated areas total 12,200 km in terms of coastline, of which the seacoasts equipped with conservation facilities cover 7,900 km.

The length of the coastline necessary for being designated as a seacoast conservation area and also the length of the coastline already designated as a seacoast conservation area are greatest in Hokkaido, followed by Nagasaki and Ehime prefectures.

By jurisdiction, 36.8% of the seacoasts designated as seacoast conservation areas are placed under the jurisdiction of the Ministry of Construction, 26.0% under the Ministry of Transport, 13.3% under the Agricultural Structure Improvement Bureau, Ministry of Agriculture and Forestry, 22.1% under the Fishery Agency, Ministry of Agriculture and Forestry, and 1.9% jointly under the Ministry of Construction and the Agricultural Structure Improvement Bureau.

Seacoast conservation projects are conducted under the Seacoast Law. The seacoast conservation project outlays for fiscal 1973 were about ¥61,100 million (32.5% for the Ministry of Construction, 41% for the Ministry of Transport, 11.5% for the Agricultural Structure Improvement Bureau and 15% for the Fishery Agency), of which 10.4% was conducted directly by the Government and others by prefectures, Si, Mati and Mura as grants-in-aid projects.

Practically every river in Japan is administered under the River Law. Under the River Law, the rivers are classified into Classes A and B. The Class A river is a river which is designated by the Minister of Construction and important particularly for the conservation of the national land or the national economy, whereas the Class B river is a river which does not fall under the category of Class A but is designated by the prefectural governor as a river directly associated with public interests. Other than the Class A and Class B rivers, those designated by the mayors of Si, Mati and Mura are called "rivers applicable," as the River Law is applicable to these rivers.

The administration of the Class A rivers is conducted by the Minister of Construction. Part of this administration may be delegated to prefectural governors, and the part of the administration which is delegated is known as the "designated section." Other sections are known as "non-designated

sections." The administration of the Class B rivers is conducted by prefectural governors.

As of April 11, 1974, there are 108 Class A rivers, and the water systems include 12,666 rivers. The main flow routes (practically the same as mainstreams) total 13,898 km and the other rivers 84,109 km in aggregate. Of these, the sections placed under the jurisdiction of the Minister of Construction (the non-designated sections) measure 9,492 km and the basins 243,791 km² in aggregate. In the Class B category, there are 2,533 water systems and 6,313 rivers. The total length of these rivers is 34,143 km and the total area of their basins 109,672 km².

Salient Points of the Legend and Map Compilation

Class A River (River administered by Minister of Construction) and Class A River (River administered by prefectural governor): These expressions represent the designated and non-designated sections stipulated under the River Law. On the basis of the actual status of their administration, "non-designated section" is changed to "Class A-River (River administered by Minister of Construction)" and "designated section" to "Class A River (River administered by prefectural governor)" for this map.

Class B River (River administered by Minister of Construction): This expression represents the section stipulated in the Enforcement Ordinance of the River Law, and its improvement, maintenance and repair are conducted by the Minister of Construction. Its administration, however, is conducted by the prefectural governor.

With respect to showing of the administrative classification of rivers, short rivers and those existent in great numbers in limited areas were optionally selected or omitted in view of the scale of the map.

Sources

1. Ministry of Construction, 1: 50,000 scale Maps Showing Present Coastal Conditions.
2. Regional Construction Bureaus, Ministry of Construction, 1: 50,000 scale Water System Maps.
3. Data from prefectural governments.
4. Ministry of Construction, Statistics on Coastlines, 1974.

