

# Let's explore Yahagi Dam

Okuyahagi Lake  
(Dam reservoir)

As the reservoir of the Yahagi Dam, it can store up to 65 million m<sup>3</sup> of water (about 52 times the volume of Nagoya Dome stadium).

Dam thickness  
**Approx. 5 m at thinnest point**

## Selective withdrawal equipment

The water intake can be raised or lowered according to factors such as the water temperature and turbidity of the dam reservoir.



## Emergency spillway gate (Crest gate)

This is used only in emergency situations when the volume of water flowing into the dam is very high. Up to now, it has only been used during the 2000 Tokai (Keinan) Heavy Rain.

The management office has an "operation room" that remotely operates the dam facilities. It monitors Yahagi River, the dam lake, weather conditions, etc. 24 hours a day to control the dam.



Ministry of Land, Infrastructure, Transport and Tourism  
Yahagi Dam Management Office

Dam width **323 m**

Dam height **100 m**

## Service spillway gate (Conduit gate)

When heavy rain falls, these gates are operated to regulate rising river water, thereby reducing flood damage in downstream areas.

Dam thickness  
**Approx. 20 m at thickest point**

Water taken in from the selective withdraw equipment is sent to Chubu Electric Power's Yahagi 1 Power Station, located just downstream from Yahagi Dam.



Walkway

1st underground floor

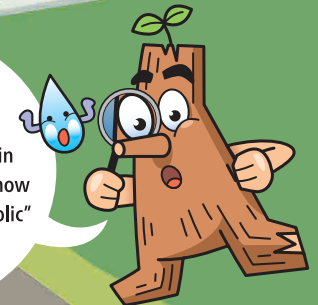
Audit corridor

2nd underground floor

Elevator

1st floor

Yahagi Dam is a concrete arch dam. It was the first dam in Japan to adopt the now mainstream "parabolic" shape!

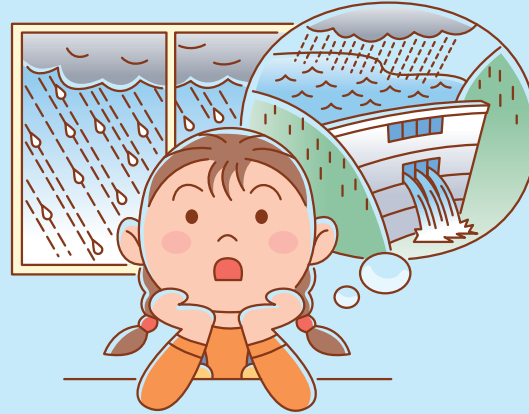


# The roles of the Yahagi Dam

Role

## 1 Protect livelihoods from flooding

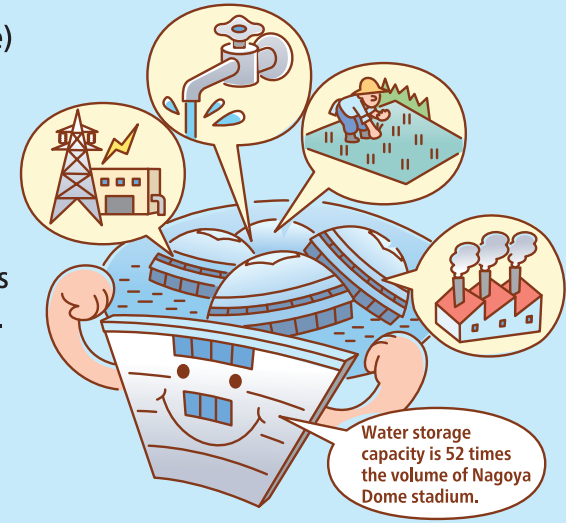
In times such as heavy rain, a portion of the water flowing into the river is temporarily stored in the dam reservoir (Okuyahagi Lake) to reduce the amount of river water flowing downstream from the dam, thereby protecting people's livelihoods from flood damage. This action is called "disaster reducing operations (flood control)" of the dam.



Role

## 2 Utilizing the blessings of water for people's livelihoods

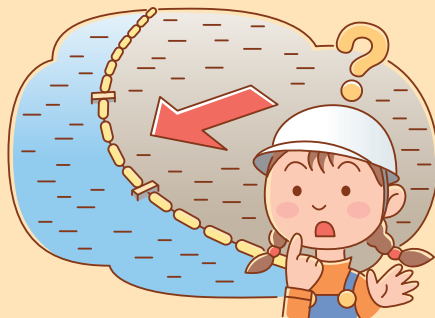
The dam reservoir (Okuyahagi Lake) can store up to 65 million m<sup>3</sup> of water (about 52 times the volume of Nagoya Dome stadium). The accumulated water is used as tap water for approx. 1 million people living in the Nishi Mikawa region as well as for agriculture and industry. In addition, water from the dam is used to generate up to approximately 1,200 MW of electricity.



Q1

### Why is there a rope floating in the dam lake?

There are two types of floats that look like ropes: "dam fences" and "turbidity barriers." The dam fence stops driftwood and debris flowing from upstream to protect the dam, while the turbidity barrier separates turbid water from the clean water, allowing only the clean water to flow downstream.



Q2

### Lots of sand accumulated upstream. Is that OK?

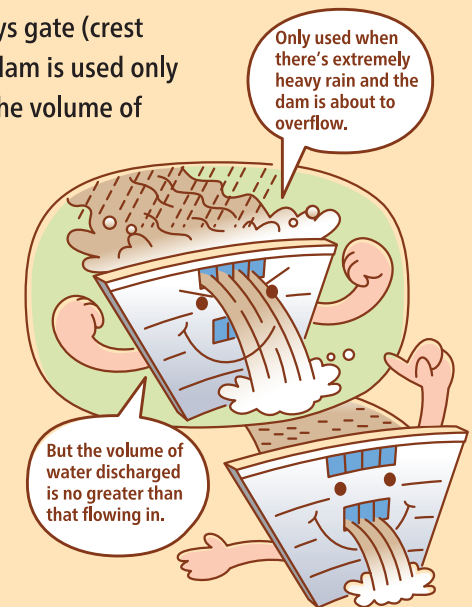
As more than 40 years have passed since the completion of Yahagi Dam, much soil and sand has accumulated from the mountains being scoured away by heavy rains and river currents. The extra soil and sand are currently being removed.



Q3

### Why are there two types of gates?

The "emergency spillways gate (crest gate)" at the top of the dam is used only in an emergency when the volume of water flowing in is so large that the dam is about to overflow. It was used for the first time in the 2000 Tokai (Keinan) Heavy Rain. Normally, the "service spillways gate (conduit gate)" at the middle of the dam is opened and closed for flood control.



# Yahagi Dam Q & A

