



*Welcome to Misogawa Dam's HP*

Incorporated Administrative Agency, Japan Water Agency  
Misogawa Dam Operation and Maintenance Office



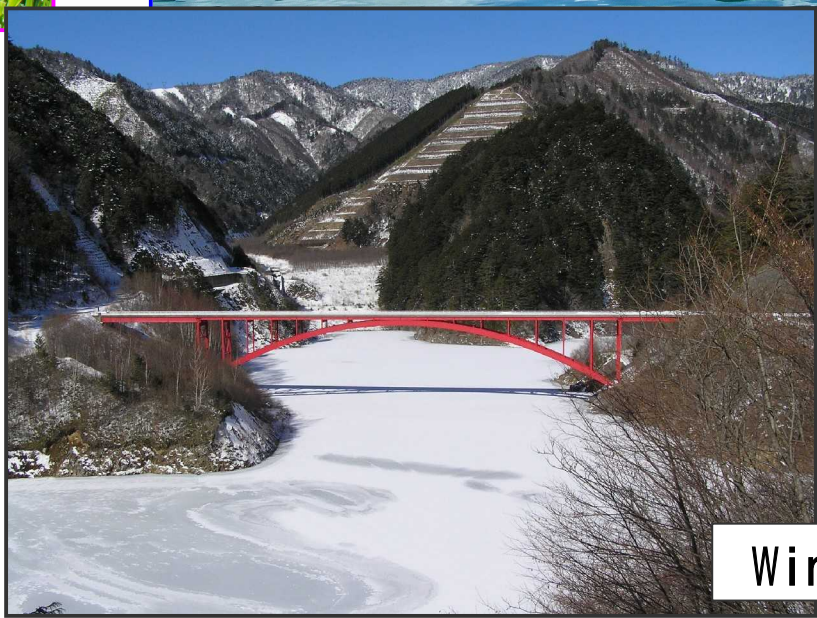
# Misogawa Dam and Reservoir in Four Seasons

Spring



Summer

Autumn



Winter

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## 1. Japan Water Agency (JWA) (1)

### 【Activities of JWA】

JWA, based on the Basic Plan for Water Resources Development (Full Plan) for each of the seven river systems (Tone, Ara, Toyo, Kiso, Yodo, Yoshino and Chikugo River System) designated for water resources development, is construction dams, estuary barrages, facilities for lake and marsh development, and canals. In addition, JWA is operating, managing and reconstructing completed facilities.

JWA activities range widely from securing water for domestic, industrial and agricultural use to controlling floods, and maintaining and improving normal functions of the river water. The matters related to personnel and financial accounting of JWA are placed under the supervision of the Minister of Land, Infrastructure and Transport.

(More information is seen at JWA's Home Page. URL: <http://www.water.go.jp>)



# 1. Japan Water Agency (JWA) (2)



## Project implementation and funding

### Project implementation

JWA is managing 48 facilities completed in 53 projects, and constructing for another 15 projects, in the seven river systems designated for water resources development (Tone, Ara, Toyo, Kiso, Yodo, Yoshino and Chikugo River Systems).

#### Legend

- Completed
- Under construction

#### Chikugo River System

- 1 Ryochiku-heiwa Canal
- 2 Terauchi Dam
- 3 Chikugo Barrage
- 4 Fukuoka Canal
- 5 Chikugogawa-Karyu Canal
- 6 Oyama Dam
- 7 Koishwaragawa Dam

#### Yoshino River System

- 1 Sameura Dam
- 2 Ikeda Dam
- 3 Kagawa Canal
- 4 Shingu Dam
- 5 Kyuyoshinogawa Estuary Barrage
- 6 Kochi Canal
- 7 Tomisato Dam
- 8 Emergency Reconstruction of Kagawa Canal facilities

#### Yodo River System

- 1 Takayama Dam
- 2 Shorenji Dam
- 3 Yodogawa Barrage
- 4 Shorenjigawa Development
- 5 Muro Dam
- 6 Hatsuse Channel
- 7 Hitokura Dam
- 8 Lake Biwa Development
- 9 Hiyoshi Dam
- 10 Hinachi Dam
- 11 Nunome Dam
- 12 Kawakami Dam
- 13 Niu Dam

#### Toyo River System

- 1 Toyogawa Canal
- 2 Emergency Reconstruction of Toyogawa Canal facilities
- 3 Toyogawa-Comprehensive Canal
- 4 Toyogawa Canal Stage II

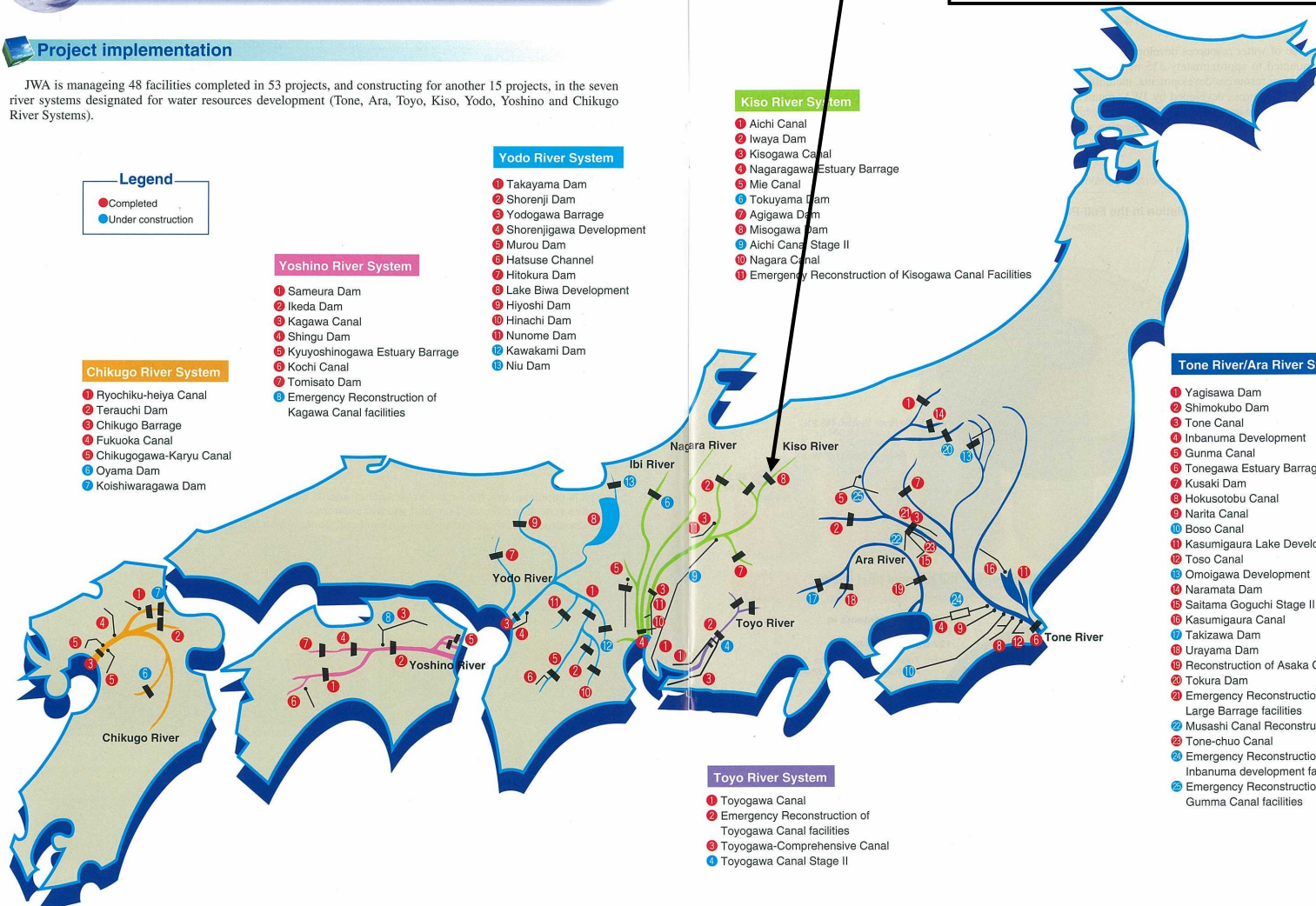
#### Kiso River System

- 1 Aichi Canal
- 2 Iwaya Dam
- 3 Kisogawa Canal
- 4 Nagaragawa Estuary Barrage
- 5 Mie Canal
- 6 Tokuyama Dam
- 7 Agigawa Dam
- 8 Misogawa Dam
- 9 Aichi Canal Stage II
- 10 Nagara Canal
- 11 Emergency Reconstruction of Kisogawa Canal Facilities

#### Tone River/Ara River System

- 1 Yagisawa Dam
- 2 Shimokubo Dam
- 3 Tone Canal
- 4 Inbanuma Development
- 5 Gunma Canal
- 6 Tonegawa Estuary Barrage
- 7 Kusaki Dam
- 8 Hokusotobu Canal
- 9 Narita Canal
- 10 Boso Canal
- 11 Kasumigaura Lake Development
- 12 Toso Canal
- 13 Omoigawa Development
- 14 Naramata Dam
- 15 Saitama Goguchi Stage II
- 16 Kasumigaura Canal
- 17 Takizawa Dam
- 18 Urayama Dam
- 19 Reconstruction of Asaka Canal
- 20 Tokura Dam
- 21 Emergency Reconstruction of Tone Large Barrage facilities
- 22 Musashi Canal Reconstruction
- 23 Tone-chuo Canal
- 24 Emergency Reconstruction of Inbanuma development facilities
- 25 Emergency Reconstruction of Gunma Canal facilities

Misogawa Dam  
Operation & Maintenance Office



## 2. Brief Description of Misogawa Dam Project (1)

The Misogawa Dam Project is a multi-purpose dam project which is planned as a part of Kiso River Comprehensive Development Plan. Demand of municipal and industrial water in Nagoya city and surrounding area rapidly increased as a high economic growth in Japan had started after middle of 1950's. Concentration of population and property progressed in Kiso River basin urgently necessitated counter measures for flood.

Misogawa Dam, on the Kiso River in Kiso village, Nagano Prefecture, serves to control floodwaters and store surplus runoff, provide flows for the conservation of environmental flow in Kiso River and water for municipal and industrial use, and generate hydroelectric power. Misogawa Dam's reservoir has a total capacity of 61 million cubic meters. The reservoir, which is called the Okugiso Lake, also provide recreation, including canoeing, fishing, swimming.

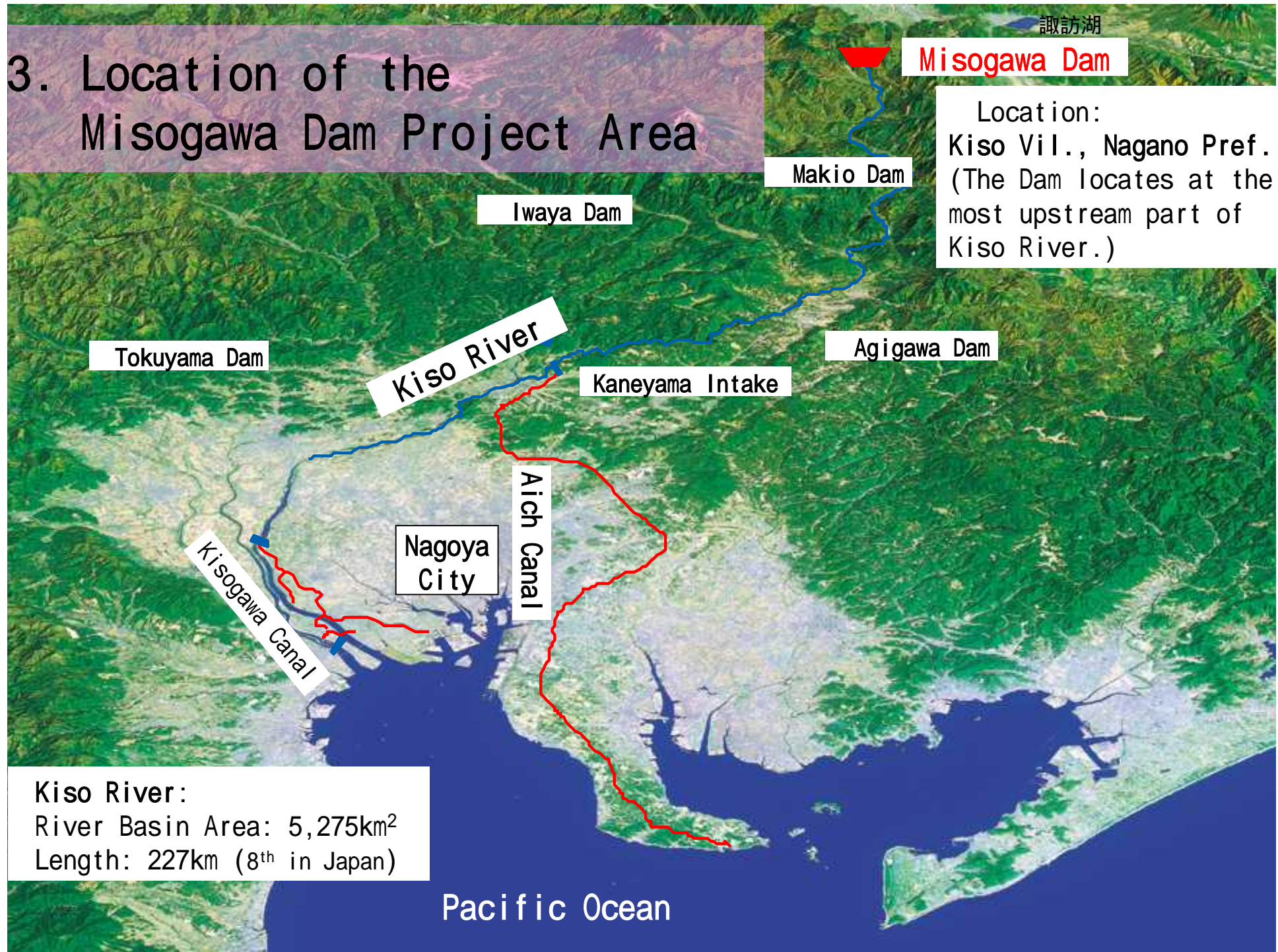
## 2. Brief Description of Misogawa Dam Project (2)

Misogawa Dam is 140 meters high, with a crest length of 446.9 meters. Misogawa Dam is a slightly curved earth and rock fill type dam with 8.9 million cubic meters of soils and rocks. A Project Implementation Policy was issued to Water Resources Development Public Corporation (WARDEC\*) by Ministry of Construction (MoC) in 1981, and a Project Implementation Plan prepared by WARDEC was approved by MoC in 1982. Construction of the dam started in 1982 and ended 1993. After test filling of the reservoir had successfully completed, Misogawa Dam was taken over from construction office to operation and maintenance office in 1996.

\*) Water resources Development Public Corporation (WARDEC) was transformed into Japan Water Agency (JWA), Incorporated Administrative Agency in October 2003.



### 3. Location of the Misogawa Dam Project Area





# Kiso Village, Nagano, at the source of the Kiso River

The North Alps

Mt. Hachimori El. 2,446 m

Divide

Divide

Misogawa  
Dam

Ogiso  
area

To Shiojiri

Suge  
area

Population: 3,247 (as of 1<sup>st</sup> March, 2011)

Area: 140.46km<sup>2</sup>

Location: In the northeastern part of  
the Kiso region/At the most upstream  
of the Kiso River

Climate: 8.1 (Ave. temperature  
throughout the year)

1,908mm (Ave. annual rainfall)

industry: tourism, forestry,  
agriculture, woodcraft

history: Yabuhara had been famous as a  
big stage in a Nakasendo-road in Edo  
period. Kiso village was established  
in 1874. It is composed of Yabuhara  
area, Ogiso area and Suge area.

Kiso  
River

To Chuo  
Line

Yabuhara  
area

National  
highway 19  
(甲斐国)

To Nagoya





## 4. Progress of the Misogawa Dam project

|                         |                                 |  |
|-------------------------|---------------------------------|--|
| Basic Plan              | 1968 October, 18 <sup>th</sup>  | Establishment of Basic Plan for Water Resources Development in the Kiso River Basin                                      |
| Basic Study             | 1972 April, 1 <sup>st</sup>     | Commencement of Basic Study for the Misogawa Dam Project (By Ministry of Construction (MoC))                             |
| Detailed Planning Study | 1973 April, 1 <sup>st</sup>     | Commencement of Detailed Planning Study (By Japan Water Agency(JWA), The project was transferred to Japan Water Agency.) |
| Construction Stage      | 1979 October, 22 <sup>nd</sup>  | Direction to launch the Construction Stage the Project (By MoC)  |
|                         | 1993 June, 3 <sup>rd</sup>      | Completion of Fill Construction of the Dam   |
|                         | 1996 August, 3 <sup>rd</sup>    | Completion of Test Ponding   |
| O&M Stage               | 1996 November, 30 <sup>th</sup> | Direction to launch the O&M Stage of the Project (By MoC)  |
|                         | 1996 December, 1 <sup>st</sup>  | Commencement of O&M Stage of the Project   |



## 5. Purposes of the Project

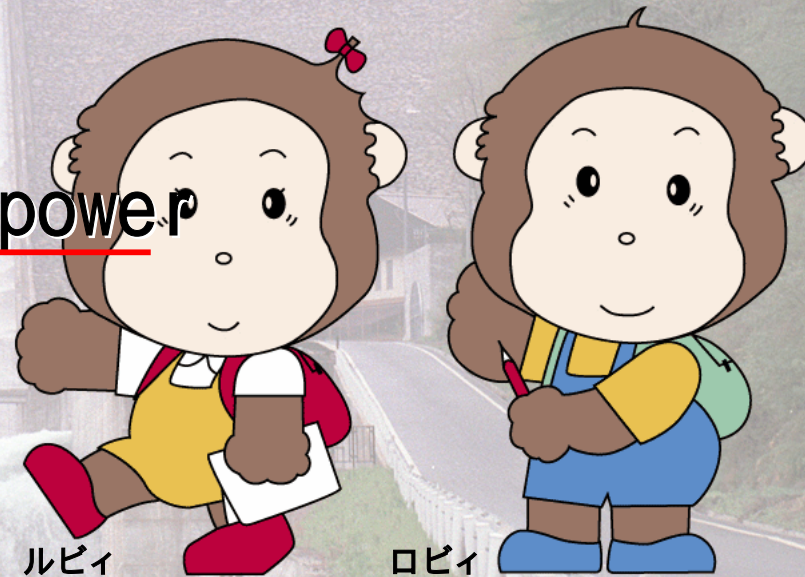
The Misogawa Dam Project serves four basic purposes.

1 . Flood mitigation

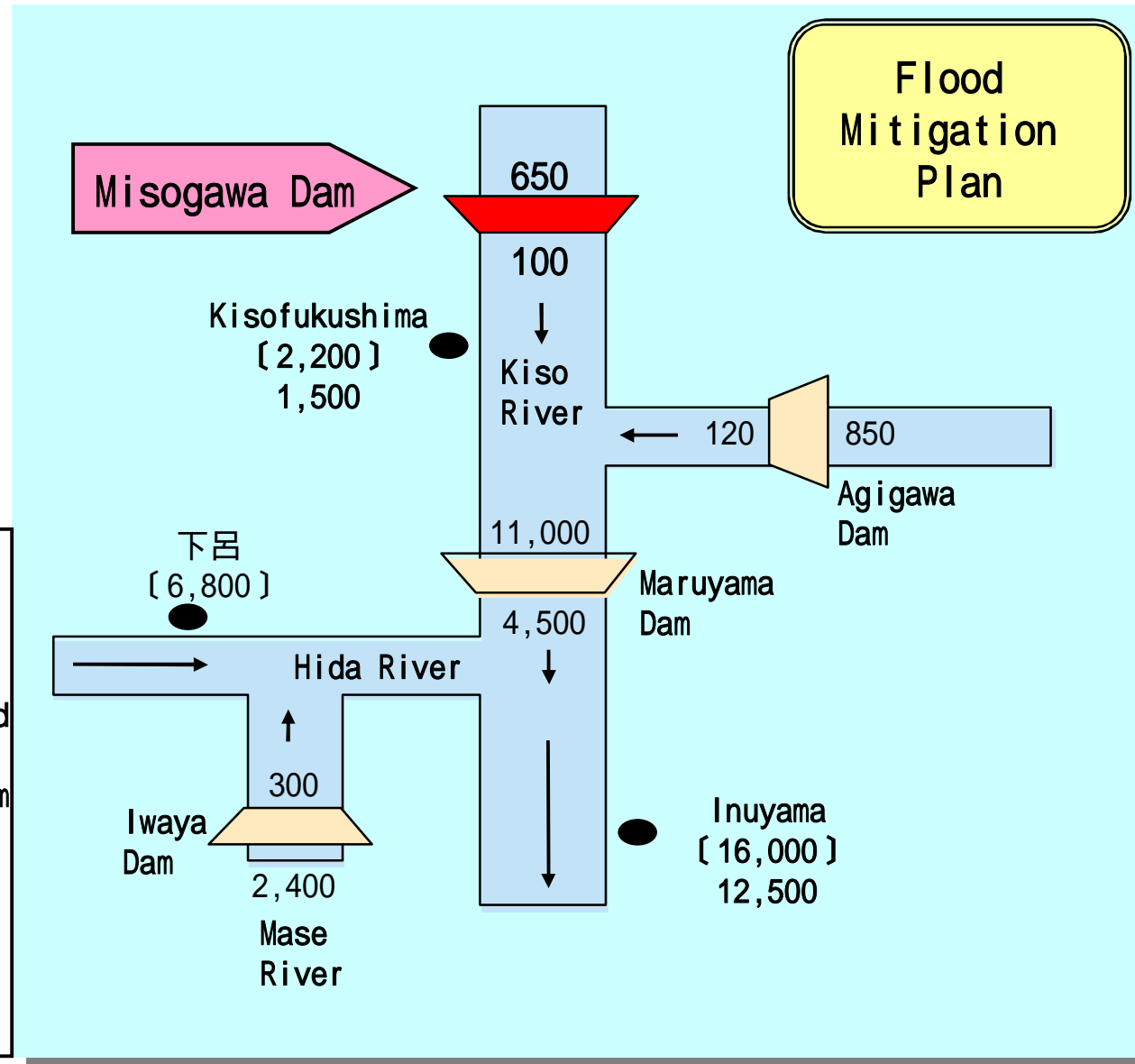
2 . River environment conservation

3 . Water supply

4 . Hydroelectric power



# 5 -1. Flood Mitigation



A figure in [ ] shows an estimated flood discharge at each reference point without flood mitigation dams. Figures at each dam shows design flood inflow to the dam and design flood discharge from the dam.  
Unit: m<sup>3</sup>/s



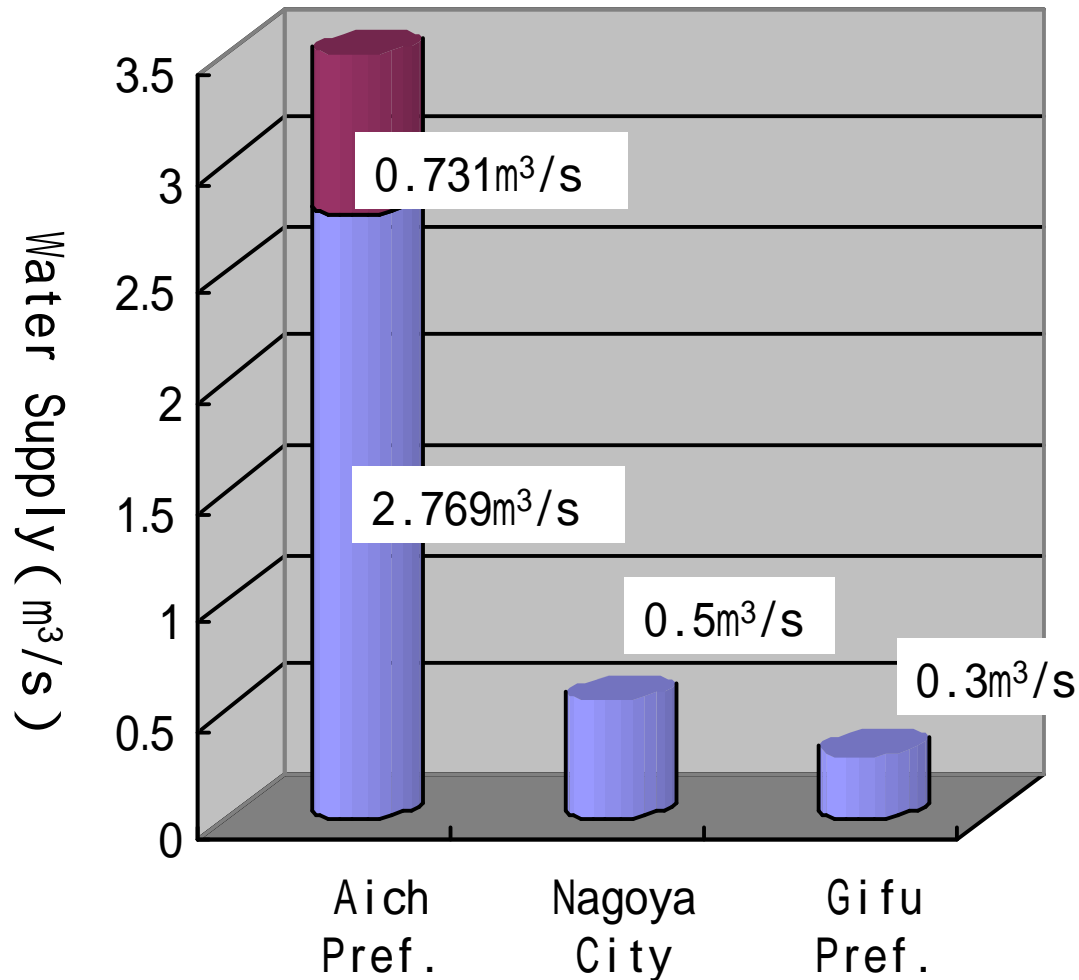
## 5 -2. River Environment Conservation



Water for river environment conservation is supplied during drought.

## 5-3. Water Supply

Water developed by the Misogawa Dam project is supplied to Aichi Pref., Nagoya City and Gifu Pref..

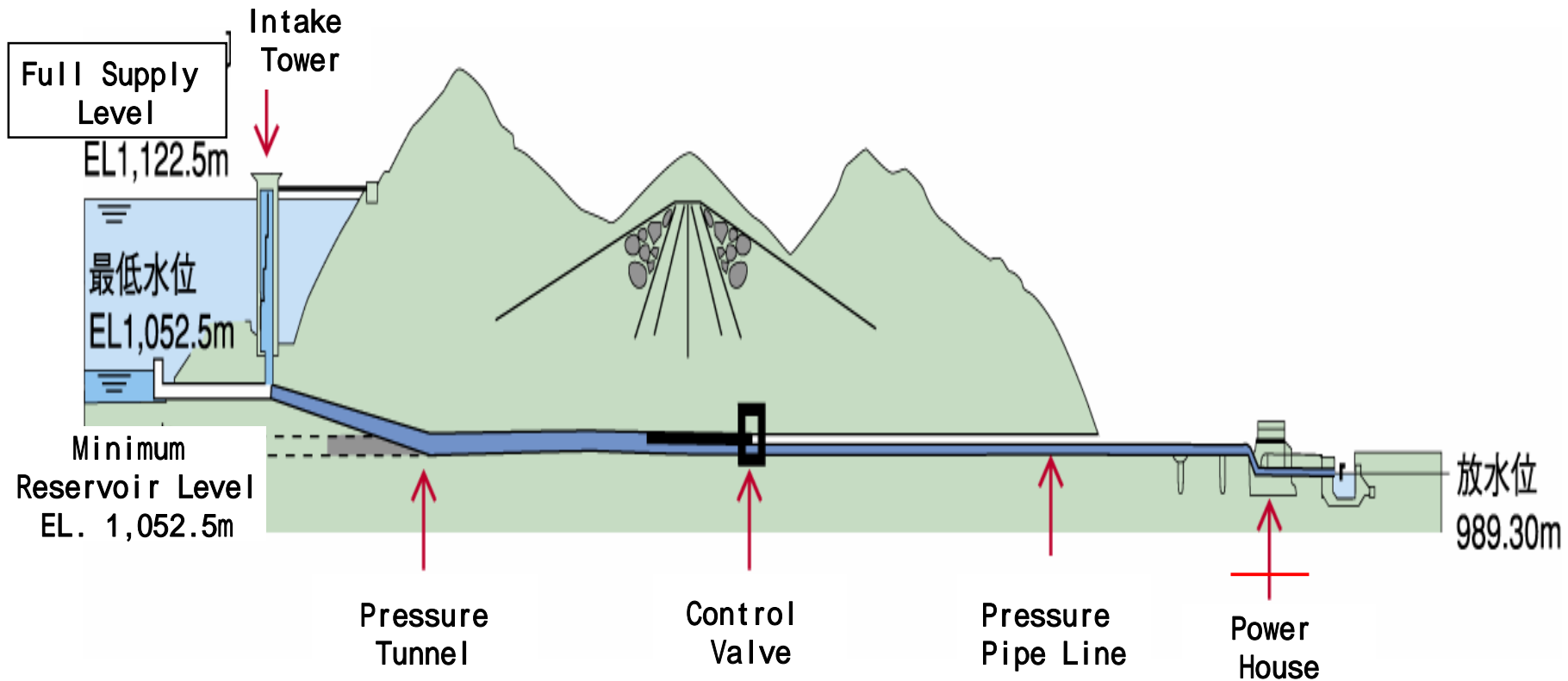


|                  |                |
|------------------|----------------|
| Municipal Water  | 3.569m³/s      |
| Industrial Water | 0.731m³/s      |
| <b>Total</b>     | <b>4.3m³/s</b> |



## 5 4. Hydroelectric Power

The hydraulic power of maximum 4,800kw ( $Q_{max}=4.7m^3/s$ ) is generated by using water discharge from the dam. The owner and operator of the hydroelectric power plant is an Agency of Nagano Pref..



## 6. Outline of Facilities

1 . Outline of Dam

2 . Outline of Reservoir and  
Appurtenance Facilities



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## (Continue) Fill Construction



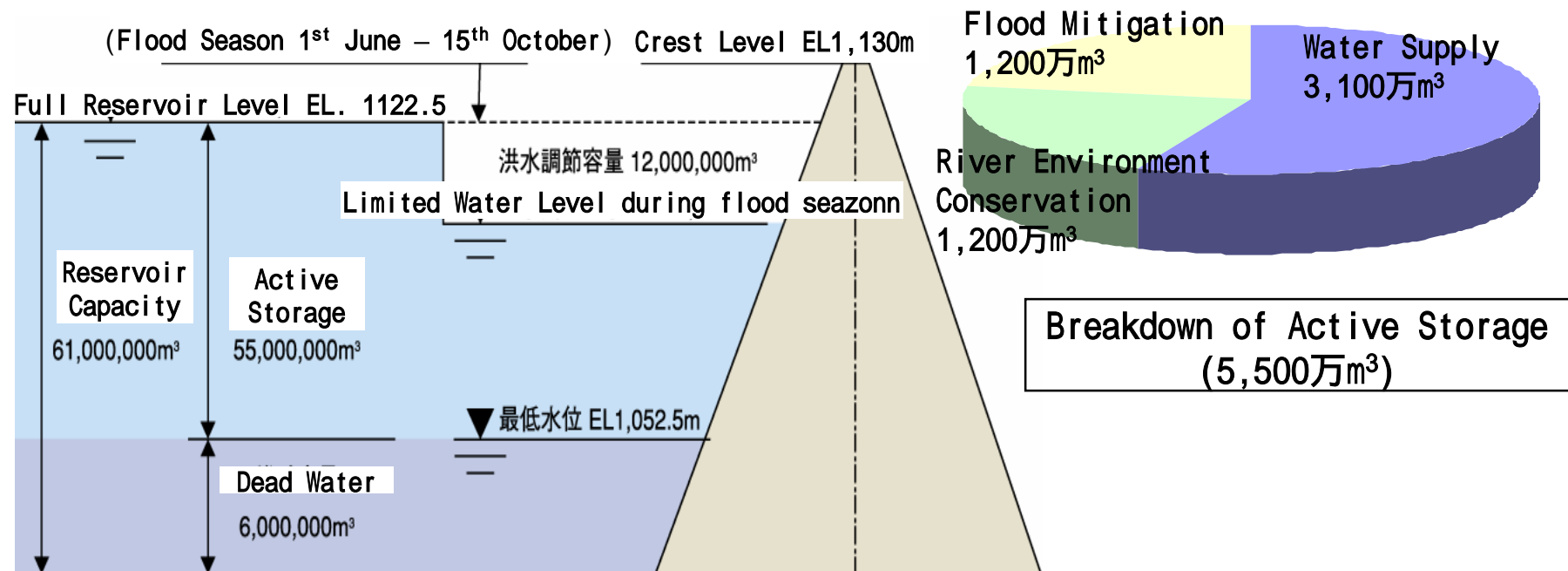


## 6 -2. Outline of Reservoir

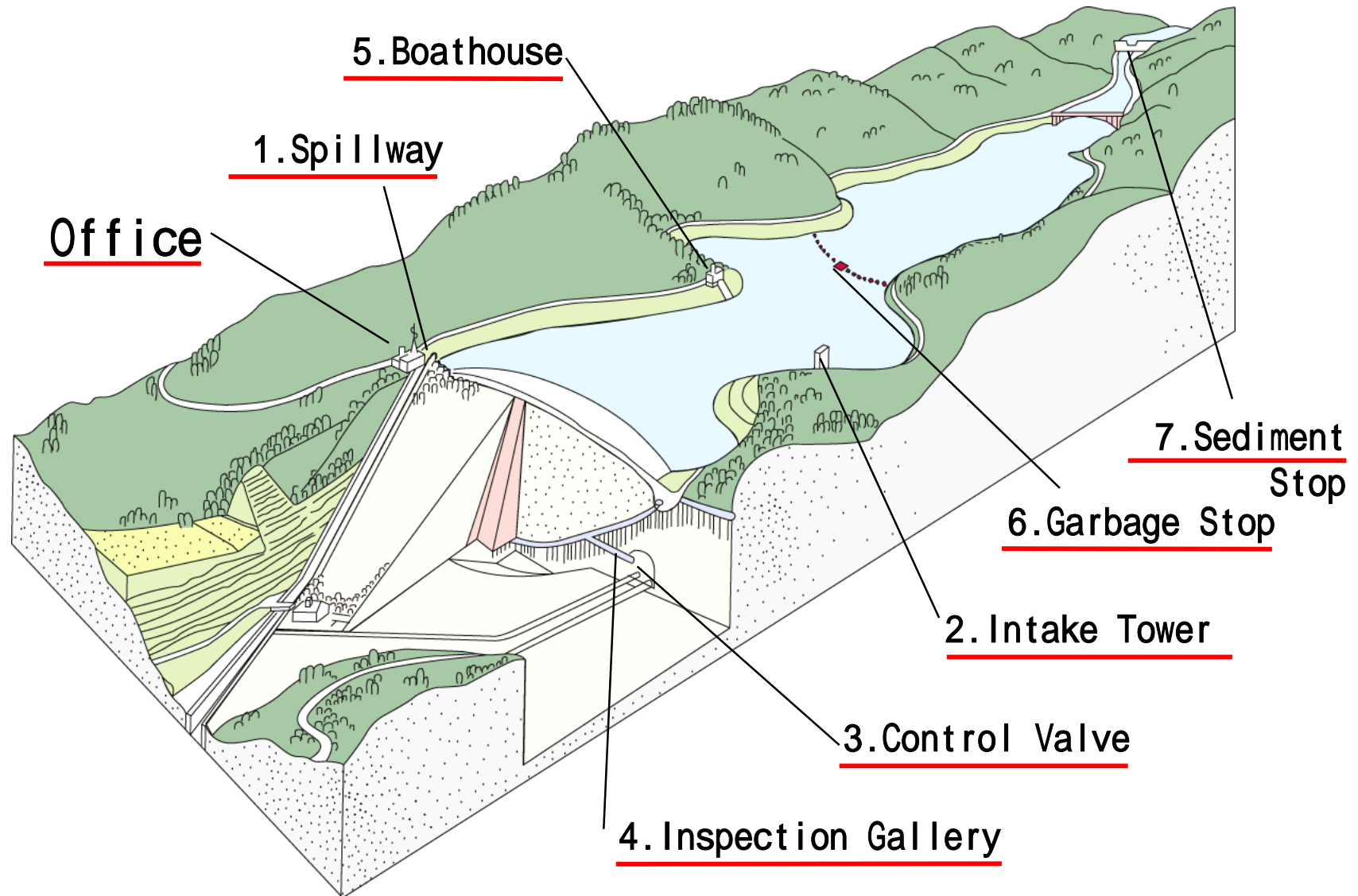
Catchment Area: 55.1km<sup>2</sup>

Reservoir Capacity: 61,000,000m<sup>3</sup>

Active Storage: 55,000,000m<sup>3</sup>



## 6-3. Appurtenance Facilities





## 7. O&M Office ' s Duties

We are ready for emergency in 24 Hours & 365 Days



Patrol

Management of Water Supply  
(Water Supply, Conservation of River Environment)



Operation

Management of Flood  
(Flood Mitigation, Warning & Patrol)



Inspection

Management of Facilities  
(Maintenance of valves, gates, observational instrument etc.)

## 8. Conservation of the Natural Environment



Japanese monkey





“We provide stable supply of safe and high quality water  
at a reasonable price”

Incorporated Administrative Agency, Japan Water Agency  
Misogawa Dam Operation and Maintenance Office

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