Activities of the Bureau of Sewerage Tokyo Metropolitan Government

~Management Plan 2010~

Background

- Addresses the social needs for sewerage works, and provides stable sewerage service

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- It is necessary to ensure uninterrupted efficient business management by reviewing the business operations, and reinforcing business foundations

What is a Management Plan

- Commitments to customers, business operation guidelines

- Period: 2010～2012

- Tokyo Sewage Works for Sustaining Today and Building Tomorrow

Management Policy

1. Ensure a safe and comfortable living environment

2. Contribute to hospitable and environmentally beneficial water environment

3. Provide the best service at the least cost

Overview of the Tokyo Bureau of Sewerage's 2010 Management Plan

Ensure a safe and comfortable living environment

Reconstruction

Flood control

Disaster management

Contribute to a hospitable and environmentally beneficial water environment

Global warming countermeasures

Improvement of combined sewer system

Advanced treatment

Use of resources

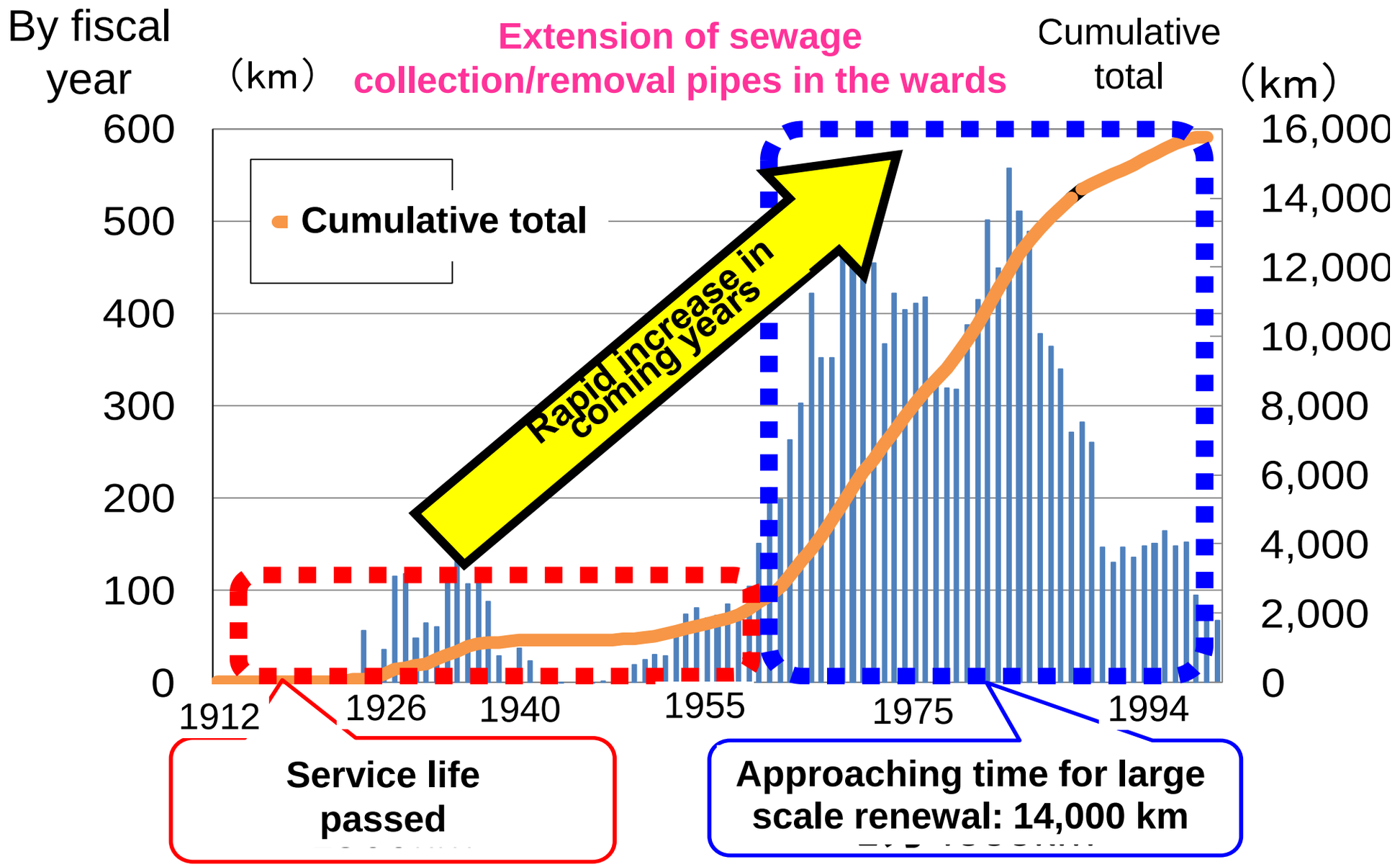
Provide the best service at the least cost

Exercise communality and economy as a public enterprise

Reconstruction

Collapsed sidewalk caused by aging sewer pipe

In the coming years, there will be a rapid increase in sewerage pipes which have crossed their service life



Survey & Construction Technology to Support Reconstruction

Mirror Camera

A sewage pipe being rebuilt

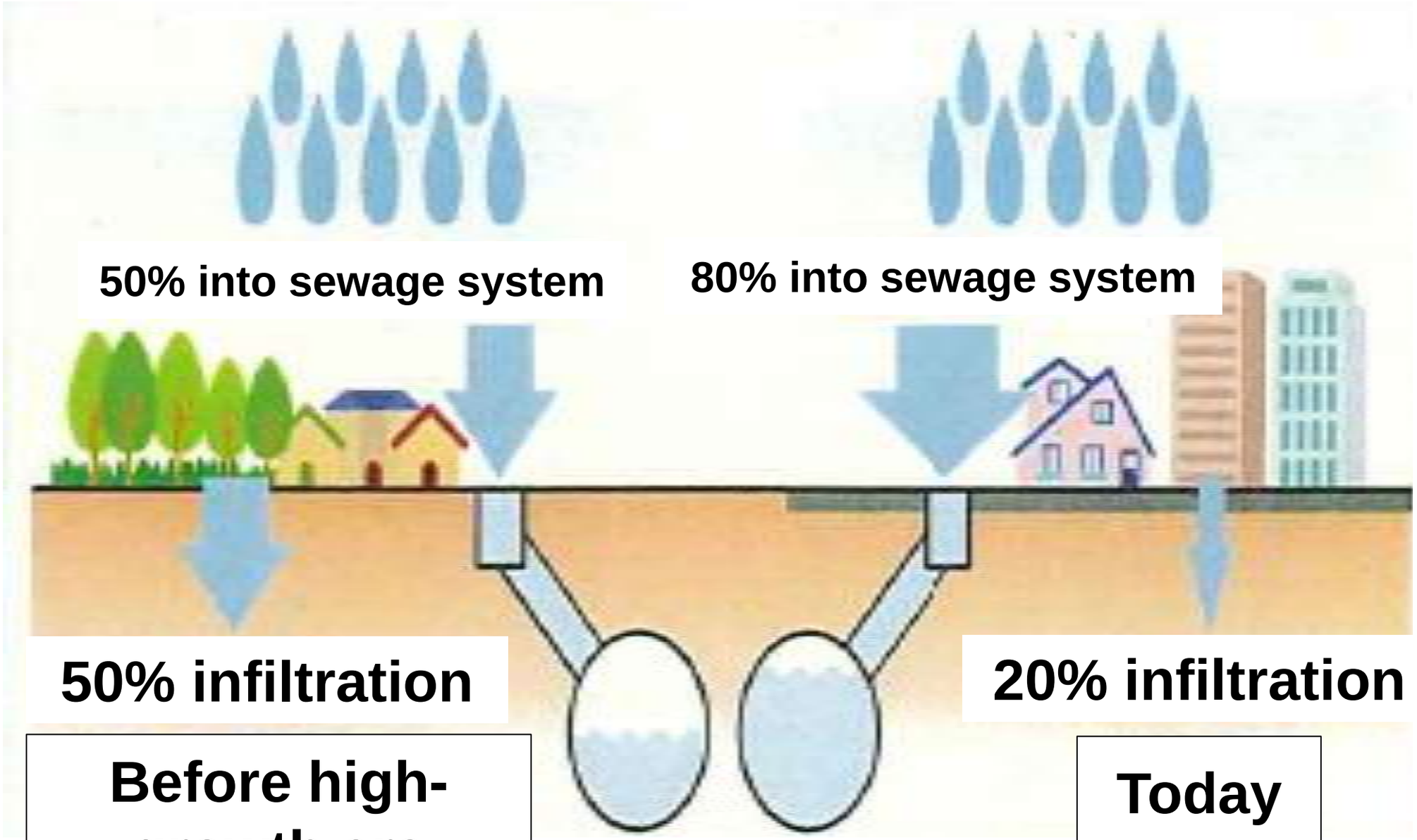
Before and After Reconstruction

Before reconstruction

After reconstruction

Flood Control

The amount of rainwater entering Tokyo's sewer system has increased compared to the metropolis' pre-high-growth era



Flood Status

Flood Control

Upgrade stormwater collection pipes

Stormwater regulating reservoir

Flood Control

Upgrade rainwater trunk lines

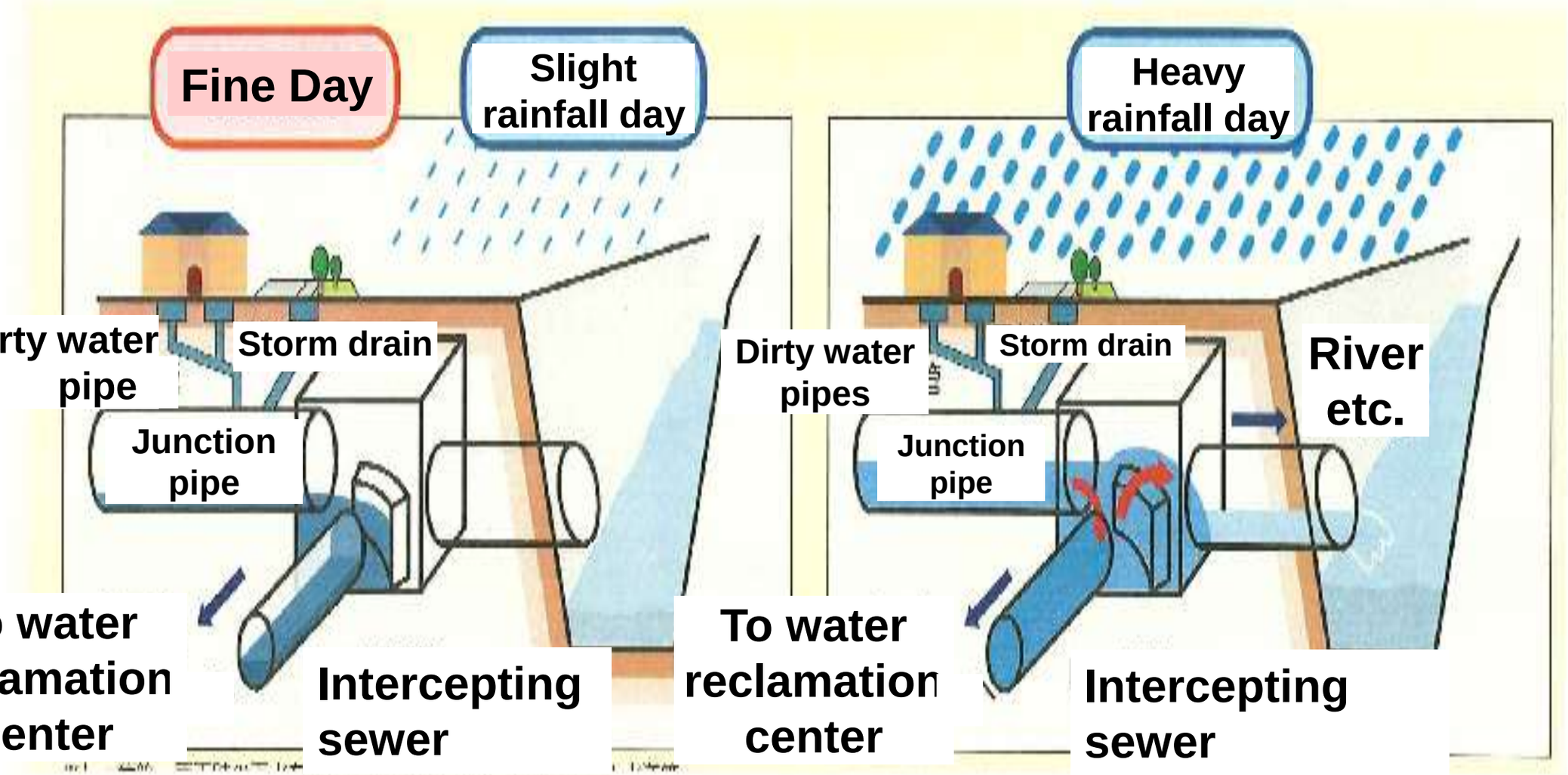
Rainwater infiltration

Tokyo Amesh

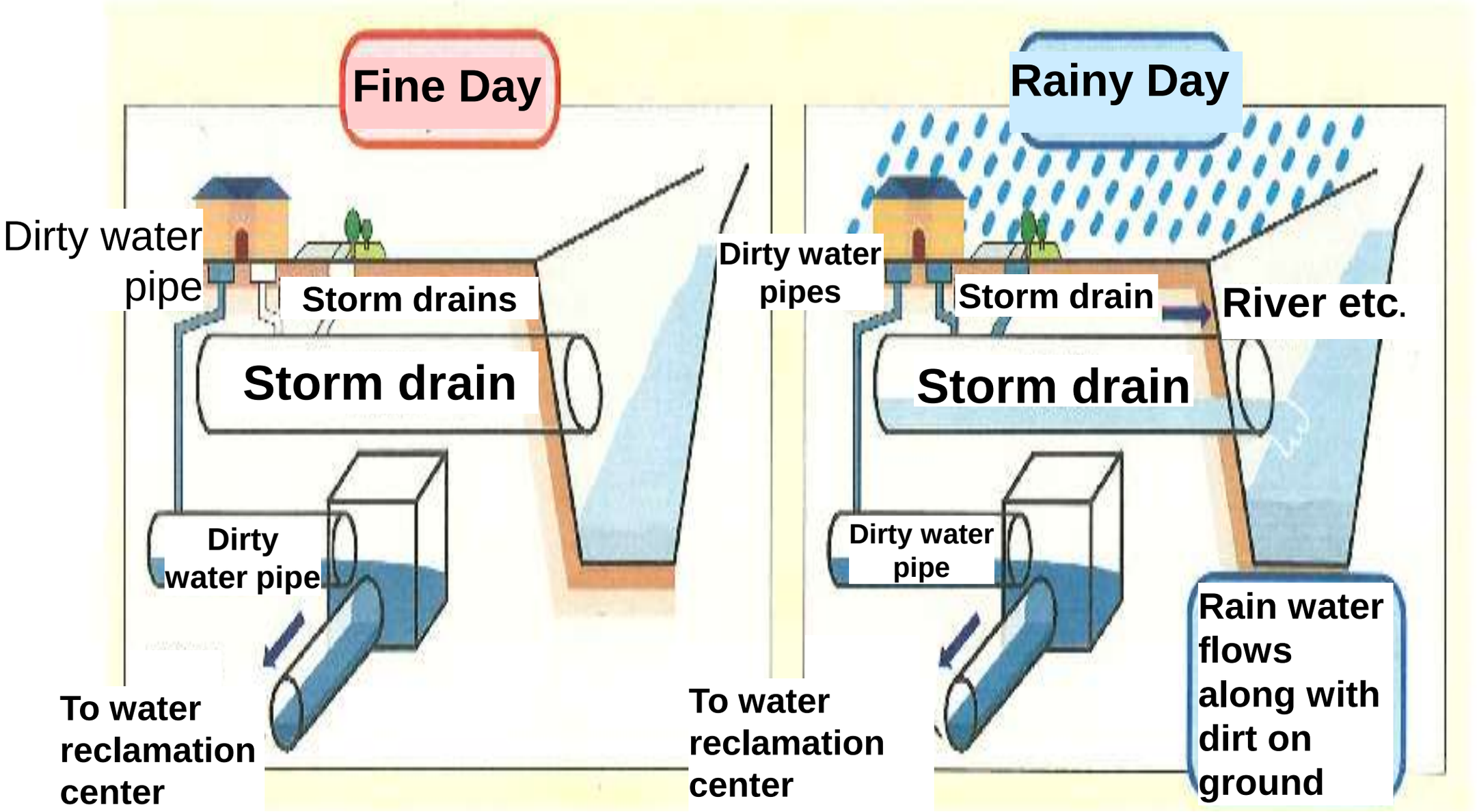

東京の街を雨から守る
東京アメッシュ
ホーム ご利用案内 東京アメッシュのご紹介 リンク English
東京都下水道局
お知らせ
多摩西部 多摩北部 多摩南部 23区西部 23区東部
200X年09月11日08時55分
群馬県 Gunma
長野県 Nagano
埼玉県 Saitama
茨城県 Ibaraki
山梨県 Yamanashi
千葉県 Chiba
神奈川県 Kanagawa
静岡県 Shizuoka
お知らせ一覧
注意報・警報（東京地方）
強
弱
猛烈な雨
非常に激しい雨
激しい雨
やや激しい雨
強い雨
やや強い雨
並みの雨
弱い雨
120 100 80 60 40 20 0 分前
5分戻
5分進
再生
停止
過去履歴一覧
全域表示
拡大

Improvement of Combined Sewer System

Combined Sewer System



Combined Sewer System



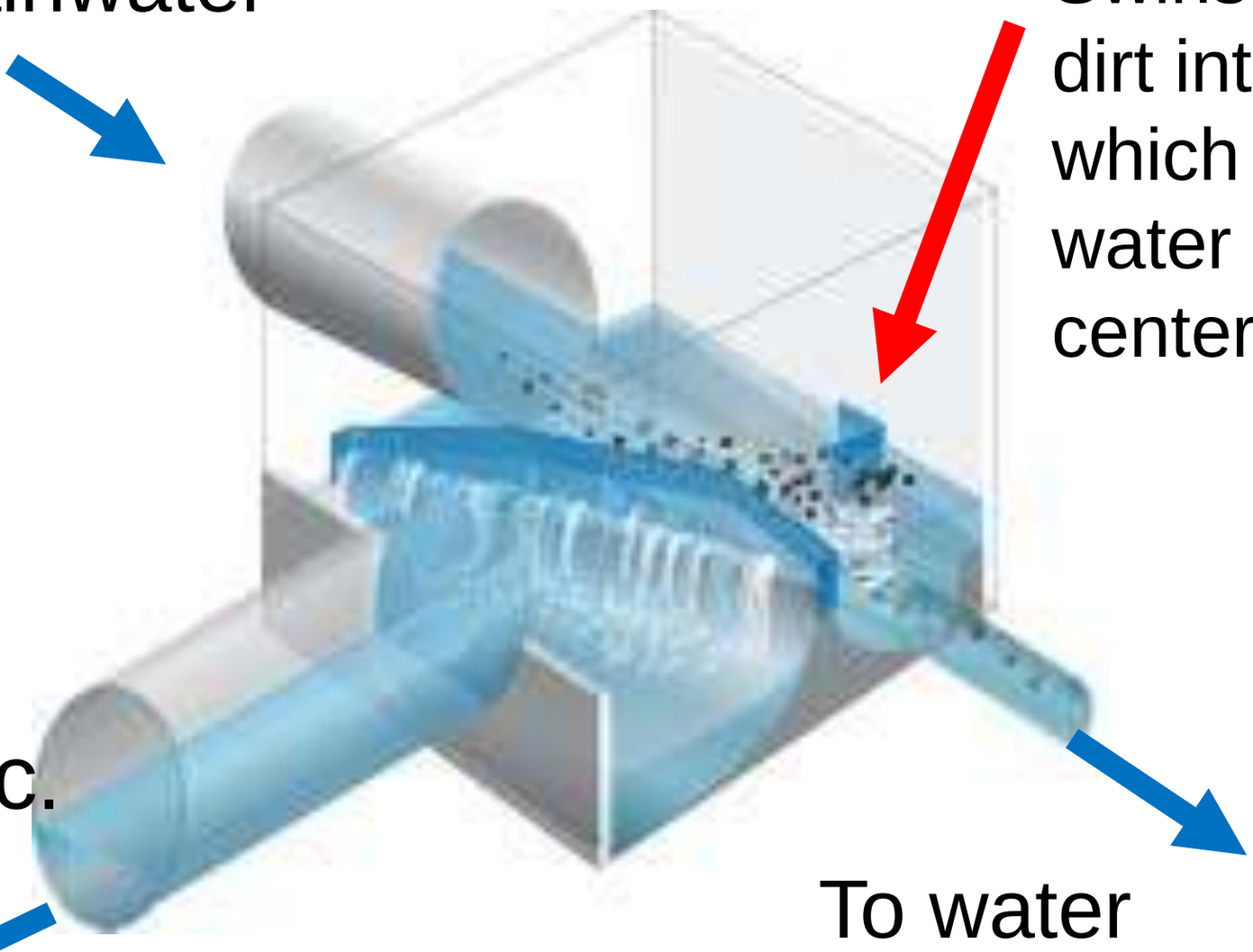
Discharge Opening During Clear Weather and Rainy Weather

Rainwater discharge opening during clear weather

Rainwater discharge opening during strong rain

Water Controller

Rainwater

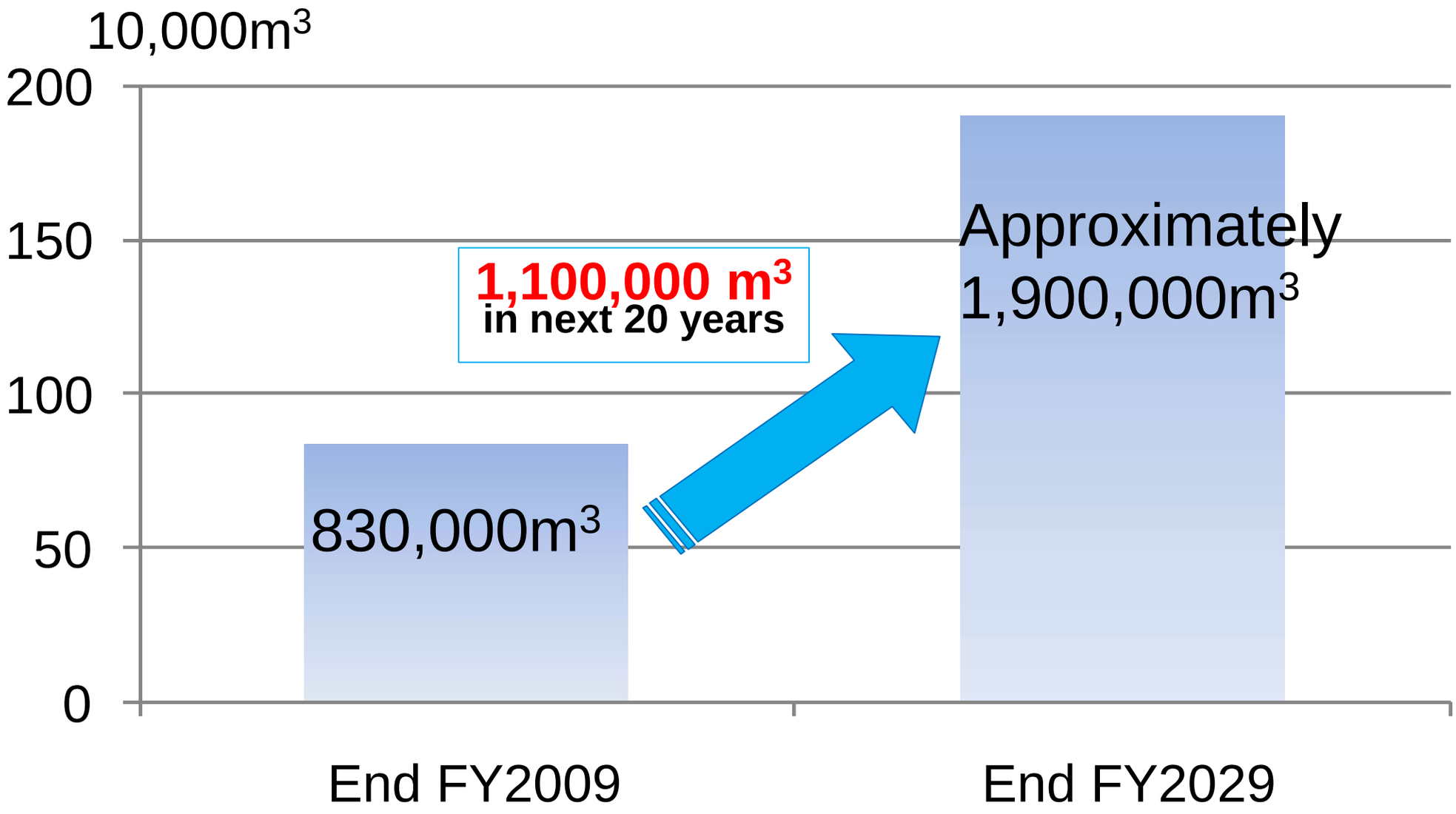


Swirls and guides dirt into pipe which flows to water reclamation center

To river, etc.

To water reclamation center

Target Upgrading of Retention Facilities (Wards)

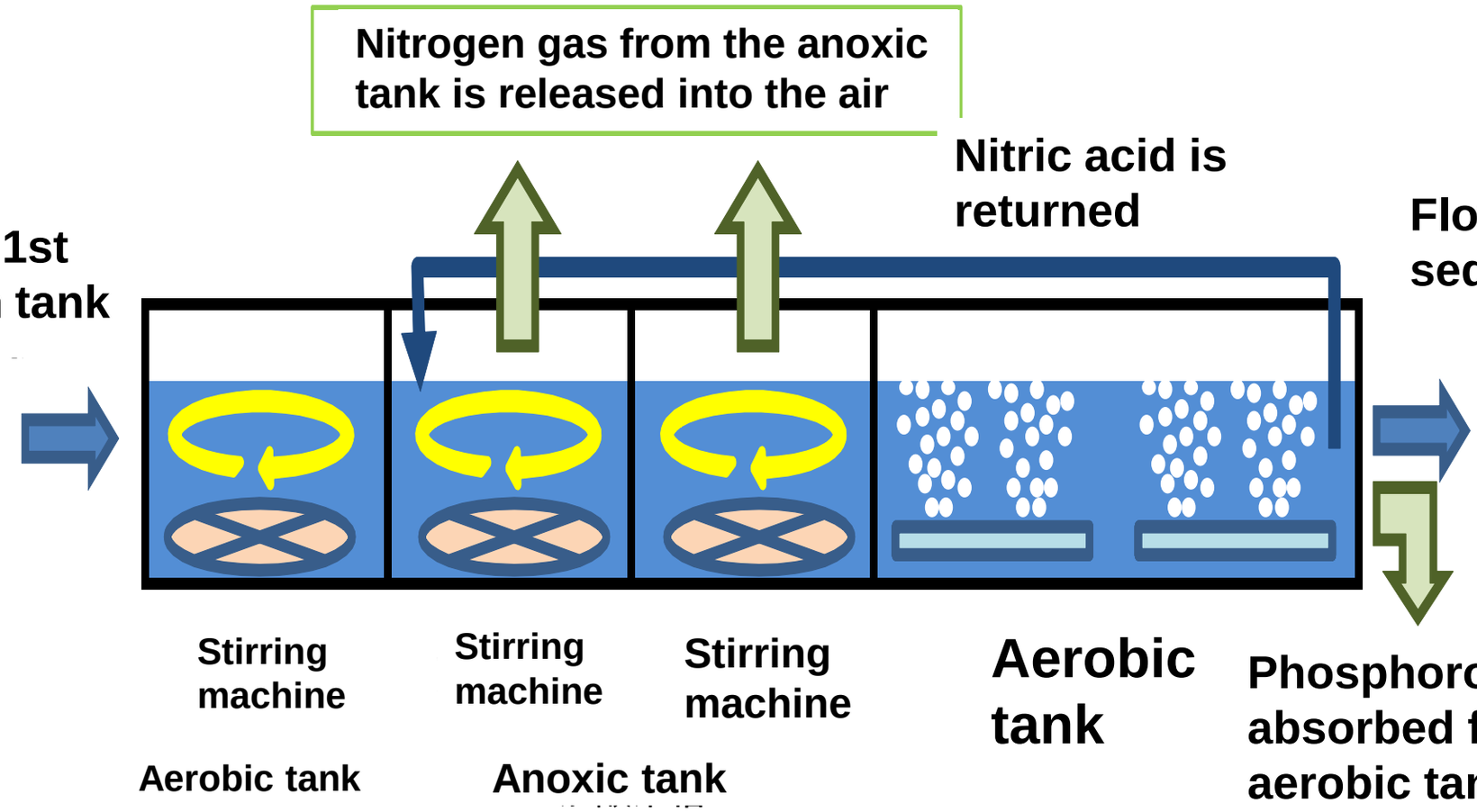


Advanced Treatment

Red Tide Occurring in Tokyo Bay

(Source: Bureau of Environment)

Advanced Treatment

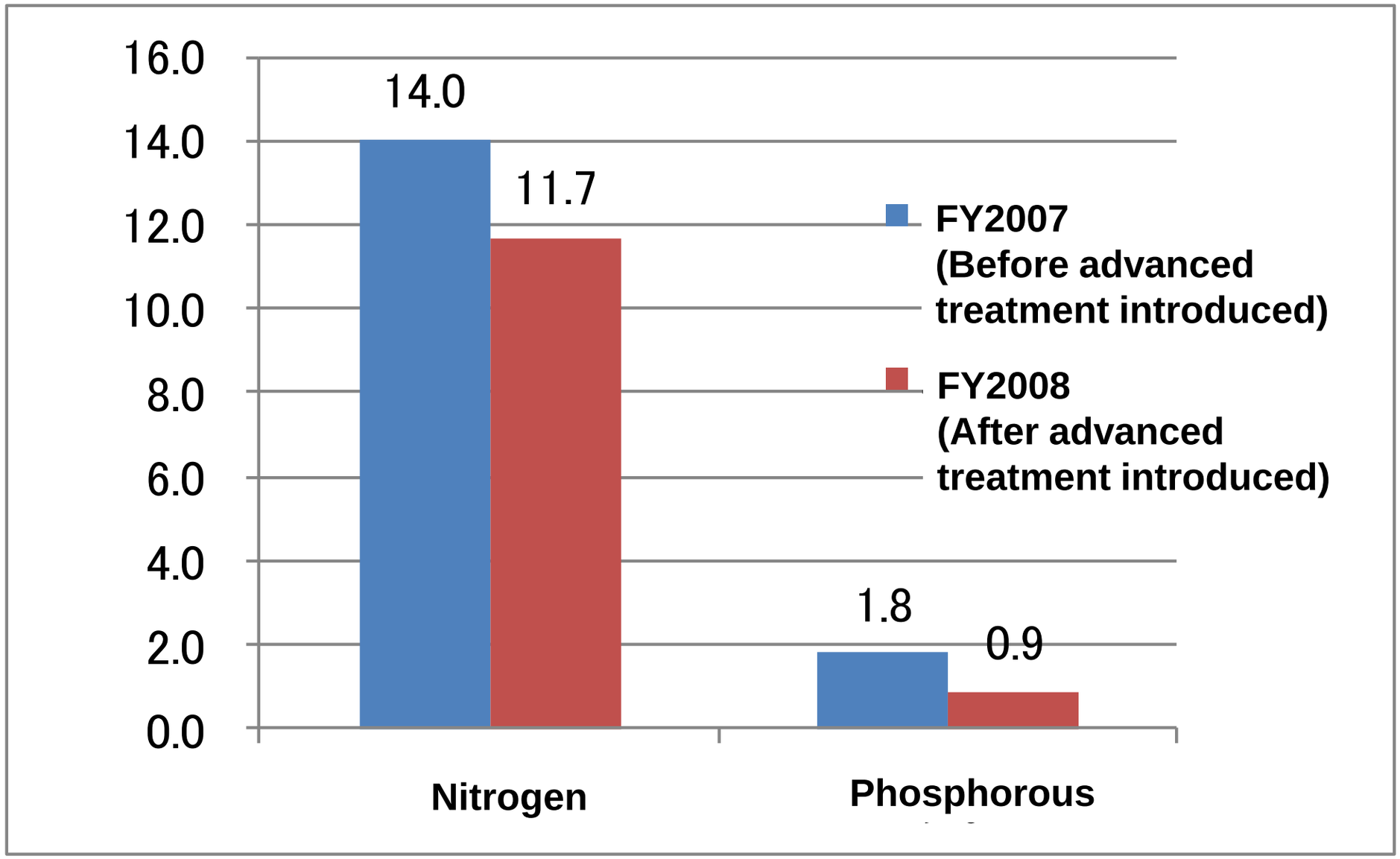


Role of each tank

Aerobic tank	In this tank, sewage is mixed with activated sludge without injecting air, and then phosphorous is released in the water
Anoxic tank	The circulating fluid (nitric acid) returned from the aerobic tank is mixed in this oxygen free tank, and nitrogen is released into the air
Aerobic tank	Sufficient amount of air is injected into this tank to accelerate nitrification, and a large amount of phosphorous is ingested in the microbes

Reduction of Nitrogen and Phosphorous by Advanced Treatment

Change in density of nitrogen and phosphorous by advanced treatment



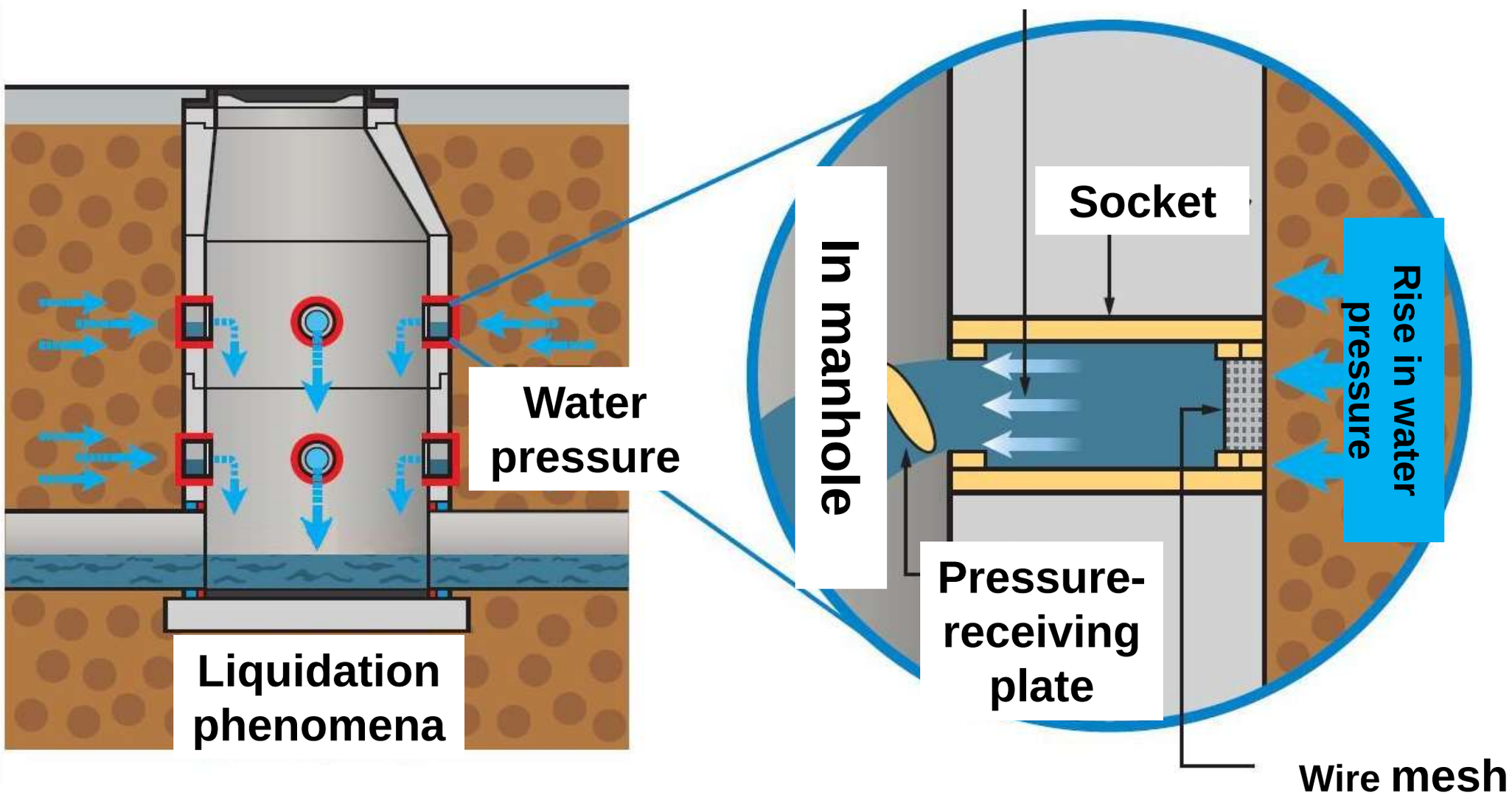
The density of nitrogen and phosphorous reduced considerably once the advanced treatment facility was partly installed at the Sunamachi Water Reclamation Center, compared to before

Disaster management

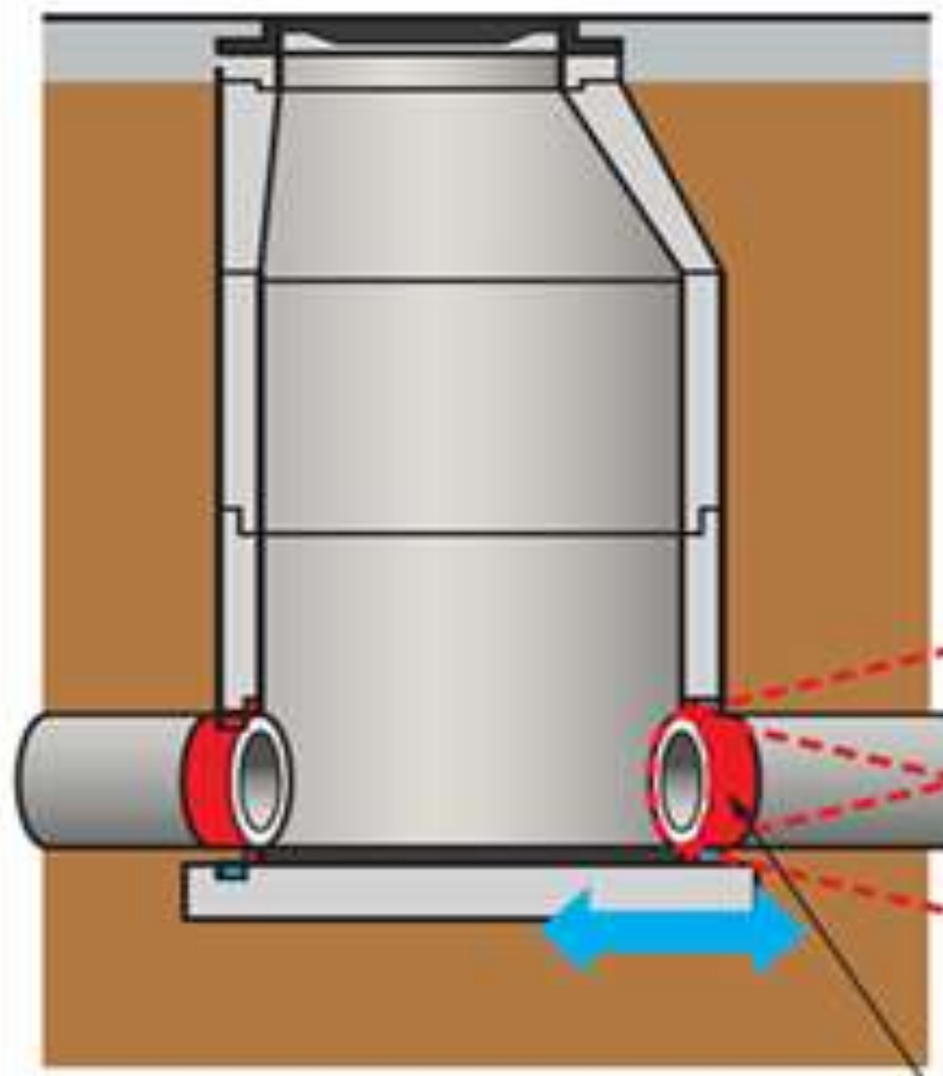
Manhole Pushed up by Liquidation

Measures to Prevent Floating Manholes

Release water pressure in manholes



Earthquake-proofing of the joints between sewer pipes and manholes

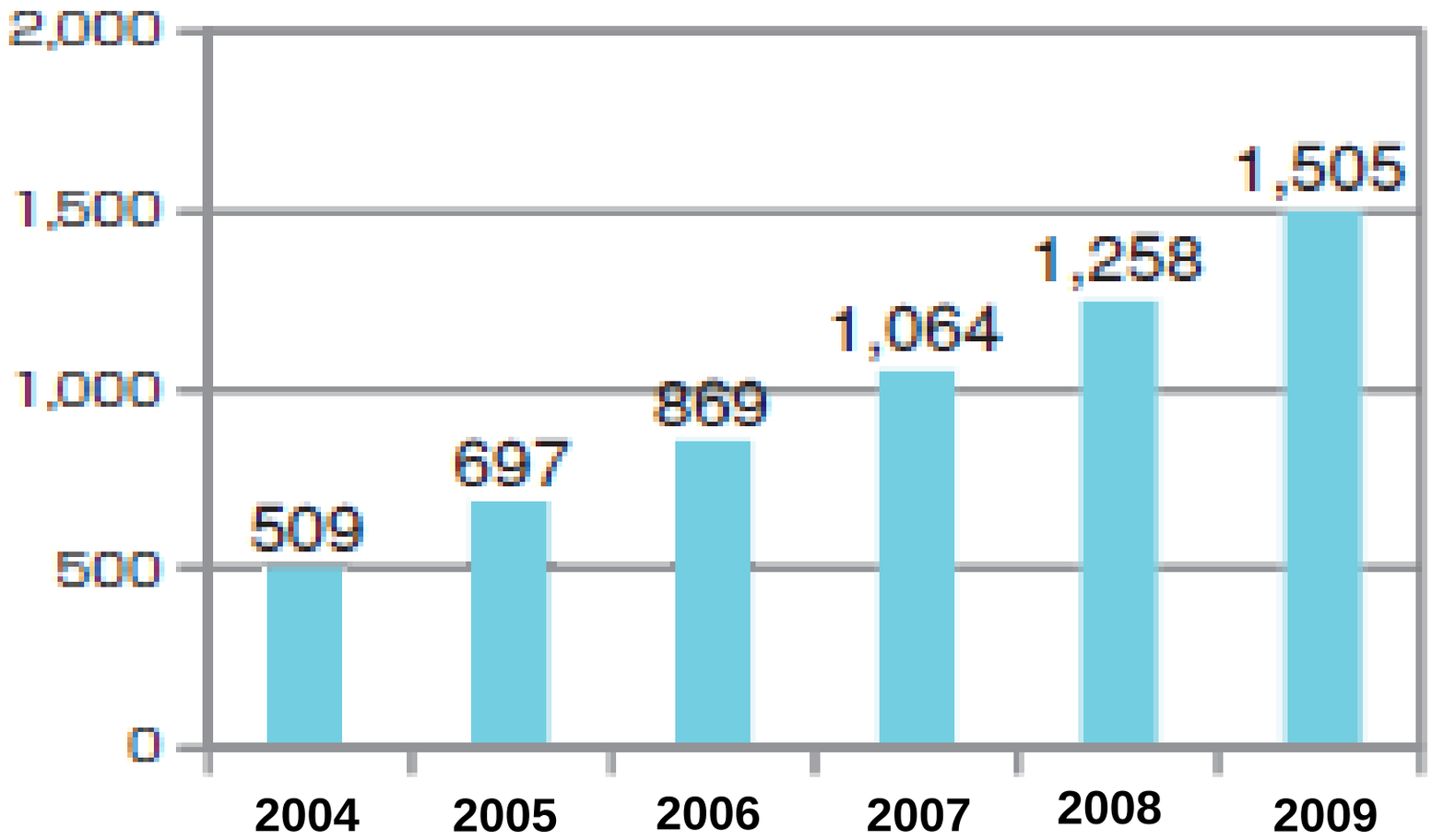


Make flexible connections between the sewer pipes and manholes, which are easily damaged by earthquakes.

Install rubber blocks etc to absorb earthquake tremors

Ensure Functioning of Toilets in Emergency Shelters etc.

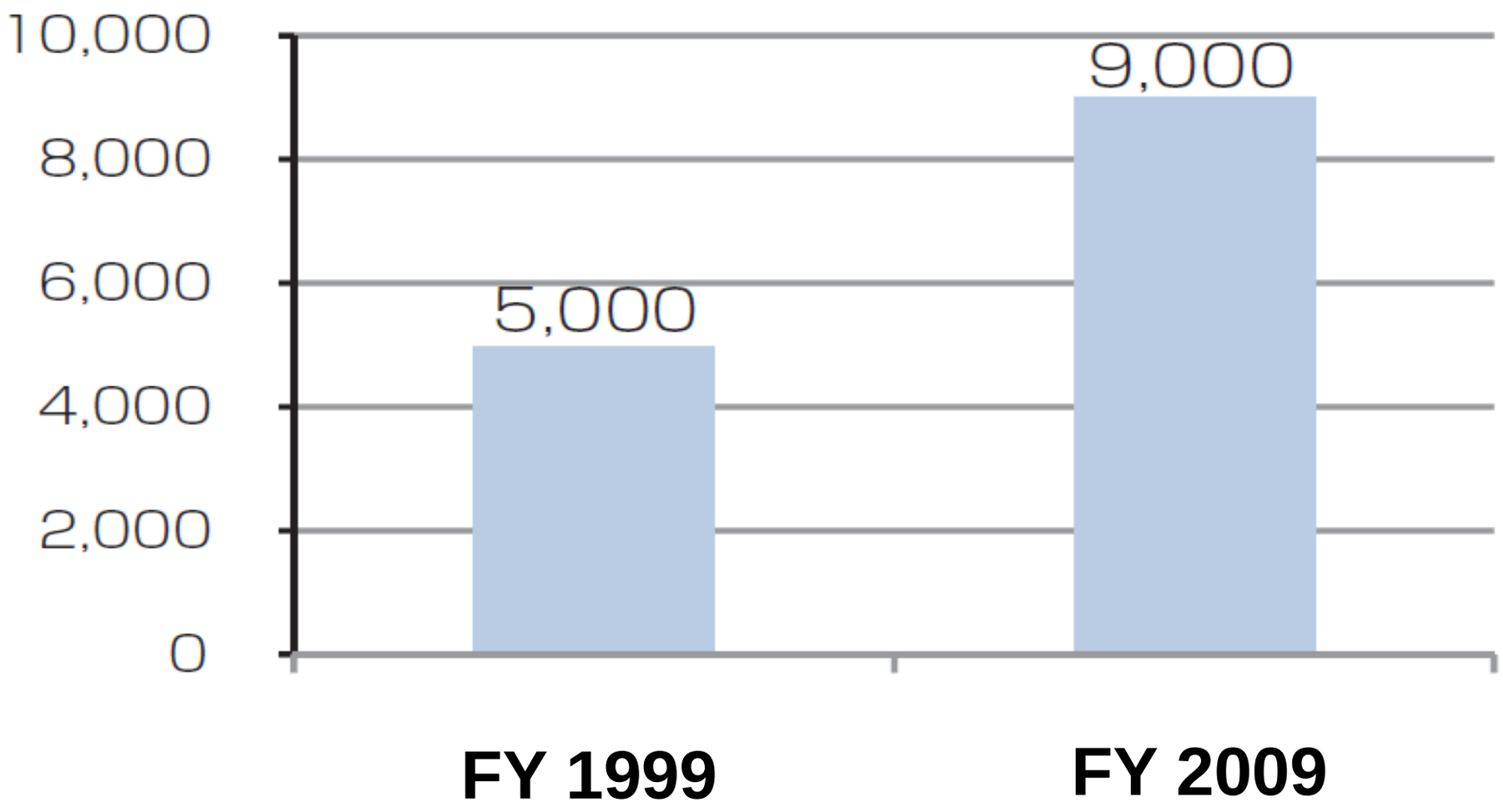
Facilities like shelters with quakeproof sewer pipes



Alterations in approximately 60% of the total 2500 shelters etc were completed in FY2009

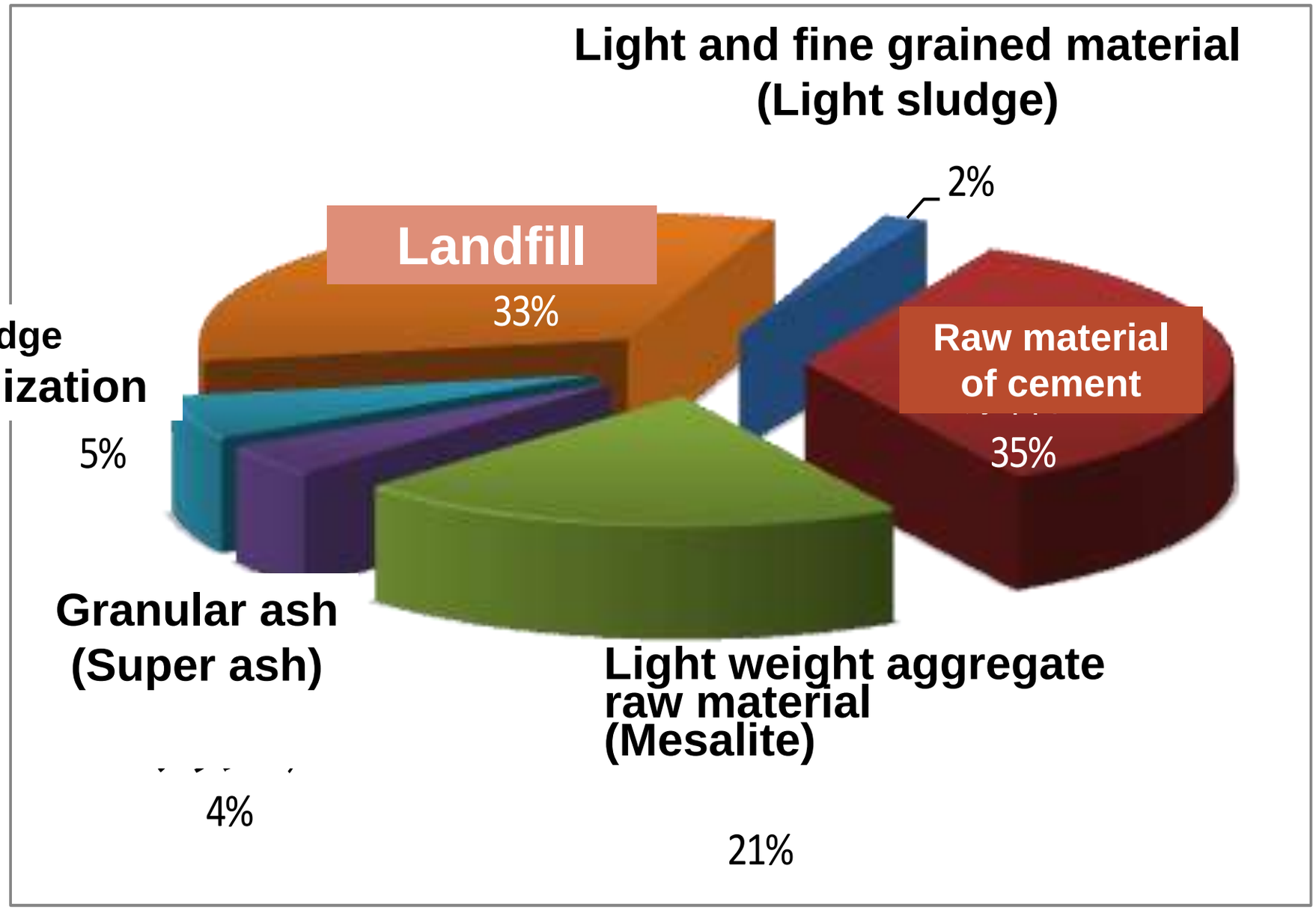
Use of Resources

Reused Water (Toilet) Usage Status



Over the past 10 years, the quantity used has increased by approximately 80%

Sewage Sludge Recycling Status



(Actual: April 1, 2008 to March 31, 2009)

Sludge Carbonization Furnace and Carbide

Carbonized sludge used as an alternative to coal at thermal power plants

Thank you for your attention