The measures in Nagoya City Waterworks and Sewerage Bureau

Kenji MORI
Introduction (about Nagoya)

The overview of Nagoya waterworks

<table>
<thead>
<tr>
<th>Foundation</th>
<th>In 1914</th>
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<tbody>
<tr>
<td>Served population</td>
<td>About 2.4million (2013)</td>
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<td>Coverage</td>
<td>100.0% (2013)</td>
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<tr>
<td>Average daily consumption</td>
<td>About 770,000 m³/day (2013)</td>
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<td>The number of employee</td>
<td>About 2,300 (2013)</td>
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<td>Operation</td>
<td>Local government (Local public enterprise)</td>
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The arrangement of facilities

- Inuyama Intake
- Toriimatsu Sedimentation Basin
- Kasugai Purification Plant
- Oharu Purification Plant
- Nabeyaueno Purification Plant
- Asahi Intake
- Nagoya Station
- You are here

The measures in Nagoya City Waterworks and Sewerage Bureau
The Main Problem 1 (Changes in the Business Conditions)

The measures in Nagoya City Waterworks and Sewerage Bureau
The Main Problem 2 (Replacement of Aged Facilities)

- Pipes Over its Service Life
- Pipes Reaching its Service Life

Few Aged Pipes because of Planned Replacement

Rapid Growth of Aged Pipes in Future

(Laid in fiscal year)
The Measures 1  Advanced Water Supply System

Ecological Waterworks

Advanced water supply system

Strong Waterworks
Earthquake Countermeasures

Supply of Safe and Tasty Water
Rearranging Transmission Routes and Distribution Areas

Replacing or Reinforcing the Main Facilities

Constructing the Route from W.P.P. to W.D.S to be double-line

Replacement of Slow Sand Filter in Nabeyaueno Purification Plant

Constructing Kasugai Transmission Pipes

The measures in Nagoya City Waterworks and Sewerage Bureau
The Measures 2  Earthquake Countermeasures

Emergency Water Supply Centers

Facilities for Emergency Water Supply

*4 within our city*

Waterworks Staffs Operating

Emergency underground hydrants

Constructing at every Municipal Elementary School

Operated by Customers
Supporting Activity in the Great East Japan Earthquake

Emergency Drill in the local area to operate Emergency underground hydrants

Emergency Water Supply in the Disaster Affected Area

Restoring Distribution Pipes
The Measures 3  Supply Safe and Tasty Water

Management of Water Quality

Check Management of Customer’s Receiving Tanks

Monitoring Source Water Quality

Cleaning inside of Distribution Pipes

The measures in Nagoya City Waterworks and Sewerage Bureau
The Measures 4  Public Relations Strategy

School Visiting
- at Municipal Elementary School

Serving Cold Tap Water at Event
- Directly Connected Cold Water Server “Kinko Sui”

Open W.P.P to Public
- Nabeyaueno Purification Plant
The Measures 5  Business development at the opportunity of 100 years

- Repair of old Nabeyaueno Purification Plant no.1 Pump Station
- Historical Museum of Waterworks and Sewerage
- Photo Exhibition of Water History
Remote Monitoring and Control of Intakes

Remote Monitoring and Control System

- Asahi Intake
- Inuyama Intake
- Kasugai P.P.
- Oharu P.P.

Unmanned

Water distribution station - Booster pump station

The measures in Nagoya City Waterworks and Sewerage Bureau
**Concluding What Customers Expect to us**

Questionnaire “What customers expect in the future?” to our registered monitors

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<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Supply of Safe Water</td>
<td>89.0%</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Earthquake Countermeasures</td>
<td>67.6%</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Supply of Tasty Water</td>
<td>65.3%</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Drought Management</td>
<td>56.1%</td>
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<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Keeping the Water Rates</td>
<td>45.1%</td>
</tr>
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<td>6&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Environmental Friendliness</td>
<td>30.6%</td>
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The measures are also for Customers!
2012
The 100th Anniversary of Sewage Works

2014
The 100th Anniversary of Waterworks

Nagoya City Waterworks & Sewerage Bureau

Thank you for your kind Attention!