

Sharing Information About the 'Disaster-resilient Waterworks Model, Connecting all to the Water of Life' 「命の水」をつなぐ、災害に強い水道モデルの発信

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1. Introduction

In March 2015, the Sendai City Waterworks Bureau (hereafter referred to as SCWB) held a symposium and some outdoor exhibitions as part of the public forum portion of The Third United Nations World Conference on Disaster Risk Reduction (hereafter referred to as WCDRR) in Sendai City. In this paper, we introduce our efforts towards these events and a Disaster-resilient Waterworks Model which we proposed at the symposium. In addition, we verify the correspondence between the model and our current countermeasures against disasters.

2. The 3rd WCDRR

Following on from the 1st WCDRR (1994, Yokohama City), and the 2nd WCDRR (2005, Hyogo Prefecture), the 3rd WCDRR was held in Sendai City from 14th to 18th March 2015. It was attended by over 6,500 participants from 185 countries, including the Secretary-General of the UN. Moreover, the public forum events such as symposiums and exhibitions were attended by a total of over 150,000 participants. Finally, the Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted as a successor to the Hyogo Framework for Action 2005-2015. Some of its features include the first agreement on global targets, new ideas such as the concept of 'Build Back Better', and emphasis on the roles of various parties in disaster prevention and disaster risk reduction, including women, children and the private sector.

3. Our Activities at The 3rd WCDRR

(1) Outdoor exhibitions and hands-on experience events

On March 14th and 15th, we held the following outdoor exhibitions and hands-on experience events:

- Emergency water supply demonstration: having people experience water being supplied by a water tank truck and a temporary sectional water tank.
- Water storage declarations by citizens: teaching the importance of storing water as a form of self help.
- Display of earthquake resistant pipes: showing people our countermeasures against disasters.
- Demonstration of the restoration of leakage pipes: showing people one of our emergency responses to disasters (held with the Miyagi Plumbing Constructor's Association (hereafter referred to as MPCA) with a total of over 5,000 of people visiting the site over two days)

(2) Symposium for Water Disaster Risk Reduction: Connecting all to the Water of Life

On March 18th, we held a symposium for water disaster risk reduction with around 300 participants.

Firstly, The Japan Water Works Association, SCWB, MPCA and Niigata City Waterworks Bureau gave presentations about their responses to the Great East Japan Earthquake, and their efforts that have been based on lessons learnt from the disaster. Secondly, we also held a panel discussion with citizens on the theme of 'building a disaster-resilient water supply system and the power of collaboration and cooperation'. Finally, based on the discussion, we proposed and sent out the message of a model, the 'Disaster-resilient Waterworks Model, Connecting all to the Water of Life,' (hereafter referred to as The Model) which combines ①Self Help by individual citizens, ②Mutual Help together with the local

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communities, schools and businesses, ③Public Support from water suppliers, and ④Cooperation with entire stakeholders including plumbing constructors and the national water supply network.

4. Correspondence Between The Model and Our Current Countermeasures Against Disasters

After the disaster, we selected 10 projects from the 'City of Sendai Waterworks Projects Mid-term Management Plan (2010-2014)' (hereafter referred to as The Management Plan) that needed to be focused on and addressed urgently, then bettered them as the 'Earthquake Countermeasure Projects for Promotion.'

Then, In March 2016, we drew up a new version of The Management Plan (2015-2019) including these 10 countermeasures. The correspondence between our current countermeasures against disasters in The Management Plan (2015-2019), and The Model is as follows (Fig.1)

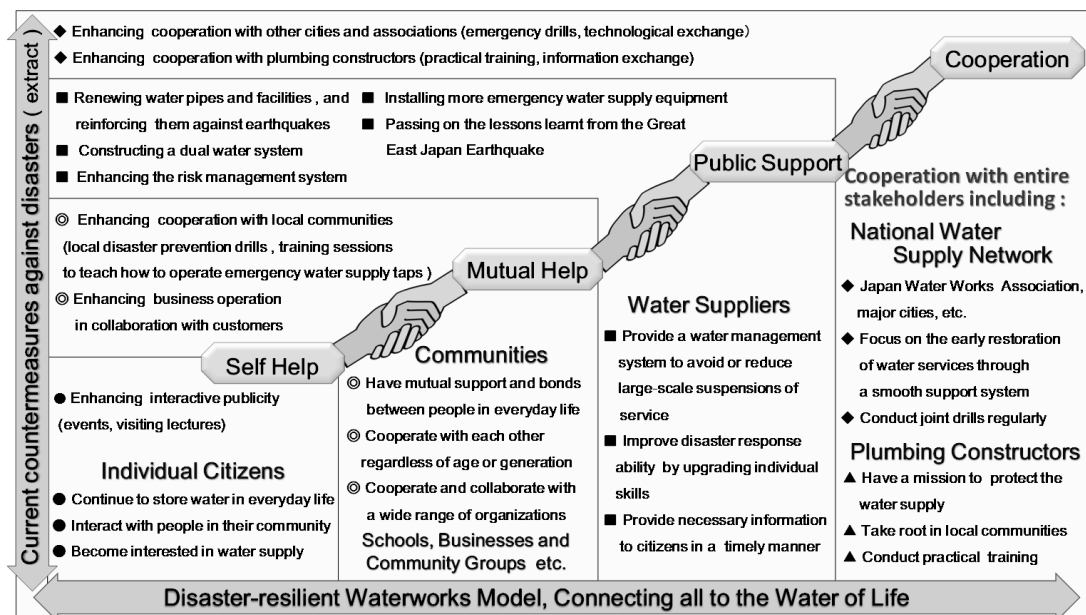


Fig.1 : Correspondence between The Model and SCWB's current countermeasures against disasters

As a result, the current countermeasures were clearly categorized into the four categories of 'Self Help,' 'Mutual Help,' 'Public Support' and 'Cooperation' based on The Model.

5. Conclusion

In this paper, we have verified the correspondence between The Model which we proposed at the 3rd WCDRR and our current countermeasures against disasters. As a result, we made sure that the concept of The Model was reflected in our current countermeasures against disasters. For example, 'enhancing cooperation with the local communities' as a form of 'Mutual Help' and 'installing more emergency water supply equipment' as a form of 'Public Support'.

In future, we will continue to further our current countermeasures against disasters steadily, based on The Management Plan (2015-2019). Moreover, we will strive towards creating a disaster-resilient waterworks in cooperation with various parties such as citizens, local communities, water suppliers, plumbing constructors and other cities. In order to help achieve this we aim to raise awareness of disaster prevention, enhance disaster prevention drills, and improve public relations with relation to disaster preparedness.