# Formulation of Guidelines for B-DASH Project (Stormwater management technology for local torrential rain in urban area) (Study period: Fiscal 2015 and 2016)

IWASAKI Hirokazu, Head MATSUURA Tatsuro, Senior Researcher

NAKAMURA Yumi, Research Engineer Kondo Hiroki, Guest Research Engineer

Water Quality Control Department, Wastewater System Division

*Keywords: B-DASH, urban inundation control measures, self-help and mutual help*

## 1. Introduction

The Ministry of Land, Infrastructure, Transport and Tourism ("MLIT") launched the "Breakthrough by Dynamic Approach in Sewage High Technology" (B-DASH) project in fiscal 2011, and the Water Quality Control Department of NILIM serves as an executing agency of this project.

We have formulated guidelines for new technology introduction in January 2017 based on the results of empirical study on "Stormwater management technology for local torrential rain in urban area" (the "Technology"), an innovative technology adopted in fiscal 2015 for urban inundation control measures, considering the views of local governments and experts.

## 2. Outline of the demonstrated technology

The Technology implements rainfall prediction and runoff analysis on a real time basis based on the information collected from radar rain gauges and water gauges and provides facility administrators and local residents with information on predicted water levels in sewer pipelines and inundation by inland water. Accordingly, the Technology enables effective operation of existing inundation control facilities including rainwater storage pipes and mitigation of damage by inundation of inland water through promotion of self-help and mutual help activities (See Figure 1).

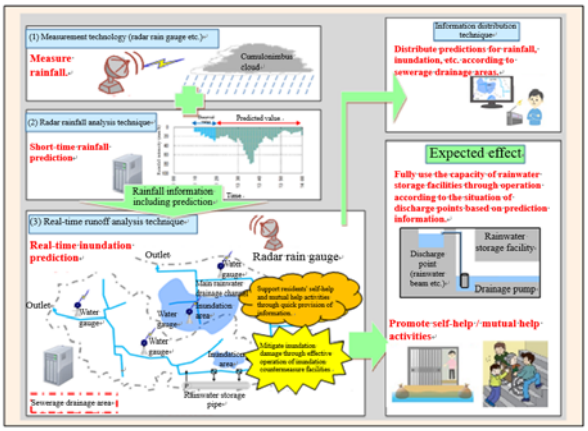


**Figure 1: Outline of the Technology**

## 3. Structure of the Guidelines

Figure 2 shows the structure of the Guidelines formulated. First, Chapters 2 and 3 provide the characteristics, performance, etc. of the Technology and confirm the assessment items. Next, Chapter 4 estimates the effect of introduction in target areas and studies specific introduction plans and system establishment based on Chapter 5 when the effect of introduction is considered high. Chapter 6 describes how to operate and maintain this Technology after introduction.

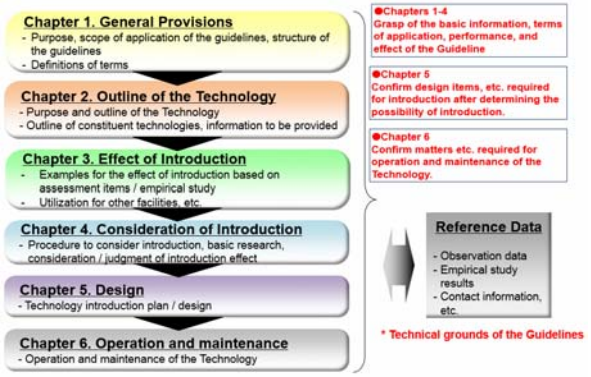


**Figure 2: Structure of the Guidelines**

## 4. Utilization of results and future development

In order to introduce these Guidelines to local governments that actually manage sewerage facilities, sewerage-related enterprises, etc., we held Guidelines Presentation at Tokyo Big Sight in August 2017, attended by about 80 people. We are going to hold such a meeting, etc. to actively introduce the Guidelines and disseminate the technologies that contribute to mitigation of inundation damage in urban areas.

---

**☞See the following for details.**

1) Technical Note of NILIM, No. 998
http://www.nilim.go.jp/lab/ebg/b-dash.html