



Disaster Preparedness And Emergency Response For Taiwan Water Corporation(TWC)

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MOEA

Outline

Preparedness And Emergency Response



Drought



Earthquake



Typhoon



Drought

• Digital subscription

WATER WOES

Drought in Taiwan forces water rationing in northern areas

April 8, 2015



In Taiwan, more than 1 million households will have their water cut off for two days a week in order to ration dwindling supplies.



BBC News Asia
@BBCNewsAsia

Follow

Taiwan begins water rationing amid worsening drought
bbc.in/1H3jiuD
11:29 AM - 8 Apr 2015

2

How did the drought happen?



1. Mountains lies north to south

2. Rivers are short and fast-flowing

The rainfall recorded from Oct 2014 to Feb 2015 hit its minimum extent in history

3

Drought fighting measures, preparations and execution.

Water Supply Situation Map

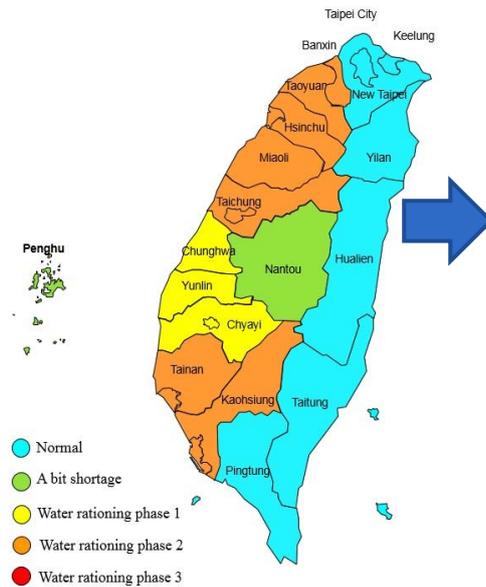
Date : 2014/11



2014/11

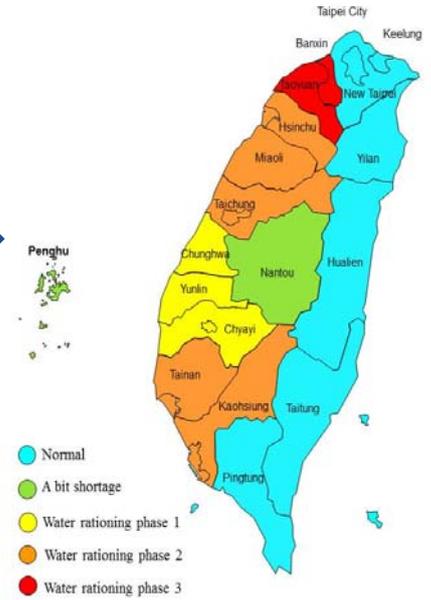
Water Supply Situation Map

Date : 2015/2



2015/2

Water Supply Situation Map



2015/4

Water rationing phase 1

Reduce water pressure (23:00~5:00)

News:
Linkou & Taoyuan started first stage of water rationing on Nov.27 2014

Rationing Poster

桃園林口 27日第一階段限水

2014年11月21日 04:10 記者劉朱松 / 台中報導

點閱 470

2/10 我要評比

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面對石門水庫集水區降雨不佳，造成當地水庫蓄水量拉警報！經濟部水利署北區水資源局昨（20）日開會檢討後宣布，將自27日起，針對桃園縣（含新北市林口區）實施第一階段的夜間減壓供水措施，且當地水情燈號同時也轉為代表第一階段限水的「黃燈」。

Legend for Water Rationing Phases:

- Water rationing phase 3 (Red)
- Water rationing phase 2 (Orange)
- Water rationing phase 1 (Yellow)
- A little water shortage (Light Green)
- Normal (Light Blue)

Map Labels:

- 桃園縣及 (Taoyuan)
- 新北市林口區
- 新竹縣(市) (Hsinchu)
- 苗栗縣 (Miaoli)
- 新北市板新地區 (Banxin)
- 台中及彰化縣北部地區 (Taichung)
- 澎湖縣 (Penghu)
- 台南市 (Tainan)
- 高雄市 (Kaohsiung)

要限水啦!

噢~愛注意喔!

限水資訊報你知!

Water rationing phase 2

Cut off water supply or Reduce water supply



Preparation :

Stage 2 rationing seminar for users in industrial zone



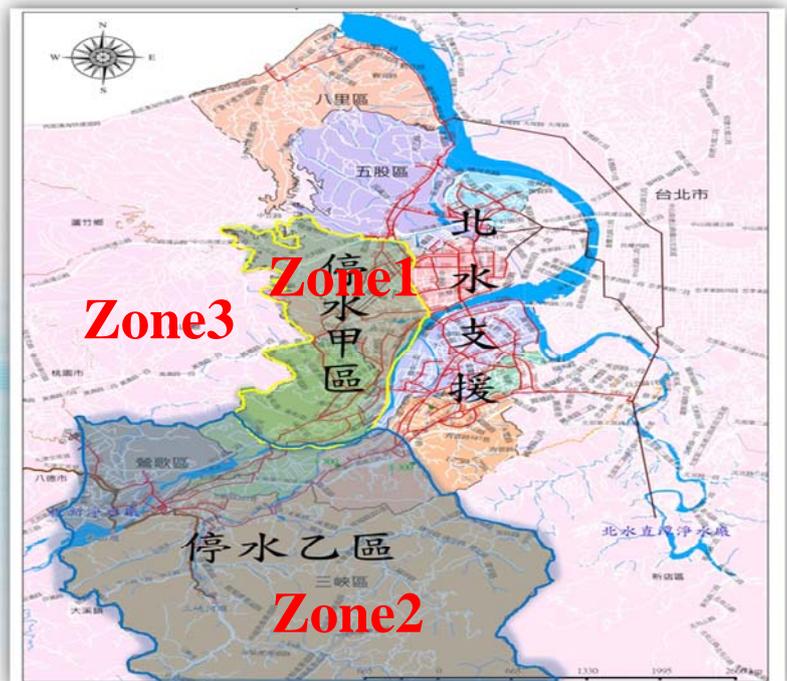
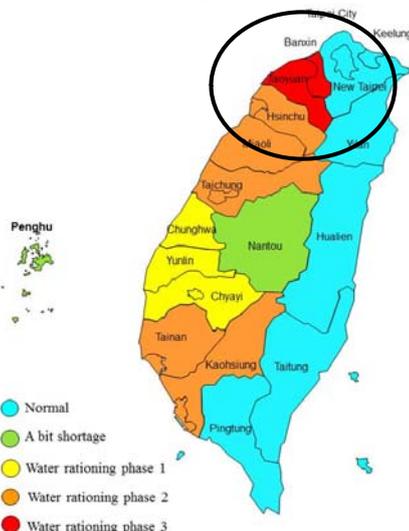
Execution :

- (1) Cut off water supply to unnecessary needs.
- (2) Reduce water supply:
 - a. Monthly consumption greater than 1000 m³ :
 - Non- industrial use → cut 20%
 - industrial use → cut 5-10%
 - b. Swimming pools ,car wash, and SPA services: cut 20%.

Water rationing phase 3

- ◆ Cut off water supply to different zones in turn.
- ◆ Supply 5 days a week, and cut off water 2 days a week.
- ◆ Implement four round in phase 3

Water Supply Situation Map



Outcomes of water rationing

In unit of million tons

	Water supply (per day)	Days	Total saving(m ³)	Saving rate
Phase 1	7.59	189	39.23	3.18%
Phase 2	7.59	88	29.36	5.53%
Phase 3	1.86	28	+ 4.93	9.45%

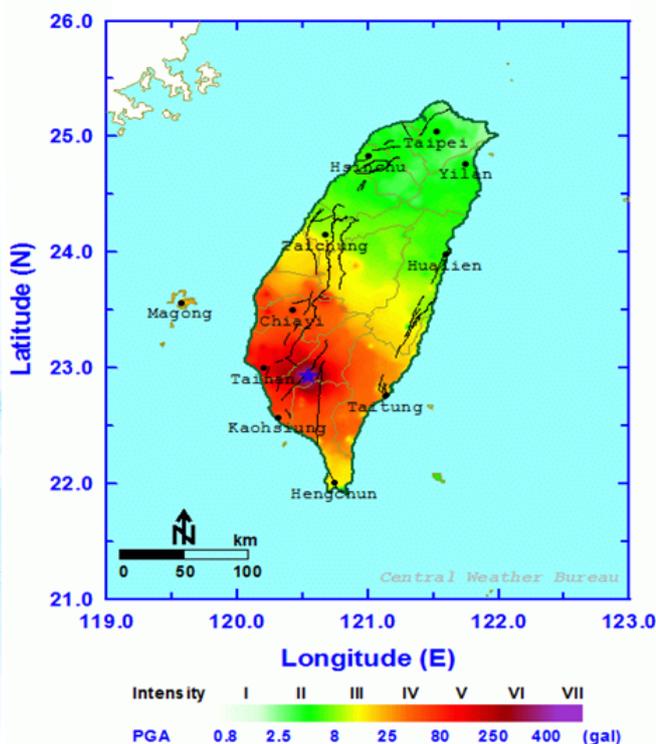
1.15 million household

= 73.52

8

Earthquake

Origin Time: 2016/02/06 03:57:27 (GMT+08:00)
 Lat:22.93N Lon:120.54E Mag:6.4 Depth:16.7km



The 17-story Weiguan residential building in Tainan lies in ruins after it collapsed in the earthquake.

9



More than 50 breaks found on the pipe bigger than 300 mm.

Install 1350mm pipe on the ground on Kun-Da Road

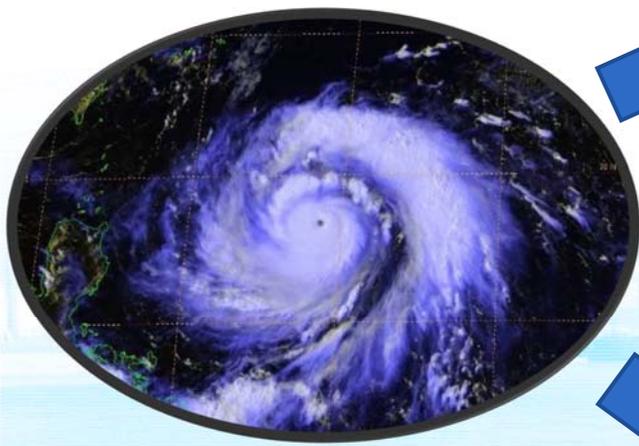


Provide water to citizens in temporary



Typhoon

Two main reasons led to water outage



High water turbidity



Power Cut

網站導覽 | English | 會員登入/註冊

台灣自來水公司
TAIWAN WATER CORPORATION

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公告資訊 機關簡介 企業社會責任 公司治理

災害專輯

0926梅姬颱風災情統計：截至105年9月27日17時00分，全國停水戶數約35,100戶，主要地區為新北市(淡水、深坑、石碇、新莊、土城、板橋、蘆洲、中和地區)受北水廠支援之直接供水戶25,100戶，湖口地區因新埔鄉民配水池加壓站跳電，致停水10,000戶。

水公告 區域HOT新聞 訊息公佈欄

網路e報
電子帳單
用戶服務
民意交流

高雄地區截至9月27日下午16時30分停水情形
【4G105_00124】
卓蘭內灣深井，因颶風影響機電漏電，已請廠商協助復電中。
【4G105_00124】
因后里、外埔部份區域台電停電致供水量減少造成高地區水壓降低(待台電修復後再行陸續復水)【4Z105_00043】

Water shortage information
Posted on TWC's website :

- Water outage areas and number of household.
- Addresses of water supply station.

Besides, every branch establishes mobile contacting groups with local government, representatives and head of borough.

The typhoon in 2016

Typhoon	Date	Intensity	Number of households without water
Meranti	9/12-9/19	Strong	722,699
Malakas	9/16-9/18	Moderate	0
Megi	9/26-9/29	Moderate	72,560



In order to prevent water outage caused by power cut



1. Large water purification plant have already set generator.
2. Generator can't be set in some plants because of narrow space.
3. 112 generators will be purchased in 4 years, which will cost about 10 millions US dollars.



Conclusions

Disaster is usually compound and unforeseeable. Learning from every disaster and continually improving our response measure is important.

To overcome the challenge of disaster, preparation and emergency response require the government's fast action and peoples' cooperation.

Thank you for your attention

