

# May 19 Torrential Rain Flooding: Disaster Response Reports

Central Emergency Operations Center  
Data as of 2013/05/21 15:30

## 1. Summary of the Disaster Situation (Data source: The disaster prevention and relief operations central responsible agency)

With a weather front continuing to affect Taiwan, the Central Weather Bureau issued a heavy rain or extremely heavy rain warning for parts of central and south Taiwan, the north, the northeast and Penghu, and an extremely heavy rain or torrential rain warning for parts of the mountain areas of central and southern Taiwan. Heavy rain in recent days has damaged some roads in central and southern Taiwan, caused agricultural losses, water accumulation and inundation, but luckily there have been no casualties so far. To respond to the disaster that may be caused by continuing torrential rain, the central government's May 19th Central Emergency Operations Center will remain in place. All related departments are requested to be vigilant and to effectively carry out all tasks relating to disaster avoidance, evacuation, provision of shelter and disaster prevention and relief.

## 2. Disaster Information

### A. Cumulative Rainfall

(Data source: Central Weather Bureau, Department of Transportation and Communication)

( Statistics from May 19th, 2013 12:00am ~ May 21<sup>st</sup> 09:00pm )

Area	Cumulative Rainfall(mm)
Chiayi County Alishan Township Alishan (Mt. Ali)	625
Kaohsiung City Taoyuan District Nantianshan	569
Taichung City Heping District Shanguan	481
Nantou County Xinyi Township Shenmu Village	512.5
Tainan City, Nanhua District, Guanshan	448

### B. River level (Date source Water Resources Agency, MOEA)

Rivers that have not exceed Grade 1 warning (level)

## 3. Disaster Response:

### A. Number of city-county emergency operation centers established

(Data source: Ministry of Economic Affairs)

Type	Established	Location
County/City	1	Level 2:Tainan City

### B. Danger area establishment situation (Date source: Ministry of Economic Affairs)

City/County	Number of danger areas					Implementation situation	
	Low-laying area	Mountain	Sea	River	Others	Warning issued	Penalty notice issued
Nantou County	0	1	0	0	0	0	0
Total	0	1	0	0	0	0	0

### C. Mudslide danger area distribution situation

(Data source: Soil and Water Conservation Bureau, Council of Agriculture, Executive Yuan)

None

County/City	Mudflows and Landslides Alert Areas							
	Yellow Alert			Red Alert			Total	
	Potential mudslide rivers	Township Located	Village Located	Potential mudslide rivers	Township Located	Village Located	Potential mudslide rivers	Status
Taipei City	0	0	0	0	0	0	0	null
New Taipei City	0	0	0	0	0	0	0	null
Taichung City	0	0	0	0	0	0	0	null
Tainan City	0	0	0	0	0	0	0	null
Kaohsiung City	77	4	24	0	0	0	77	null
Taoyuan County	0	0	0	0	0	0	0	null
Hsinchu County	0	0	0	0	0	0	0	null
Miaoli County	0	0	0	0	0	0	0	null
Nantou County	0	0	0	0	0	0	0	null
Changhua County	0	0	0	0	0	0	0	null
Yunlin County	0	0	0	0	0	0	0	null
Chiayi County	0	0	0	0	0	0	0	null
Pingtung County	0	0	0	0	0	0	0	null
Yilan County	0	0	0	0	0	0	0	null
Hualien County	0	0	0	0	0	0	0	null
Taitung County	0	0	0	0	0	0	0	null
Keelung City	0	0	0	0	0	0	0	null
Hsinchu City	0	0	0	0	0	0	0	null
Chiayi City	0	0	0	0	0	0	0	null
Total	77	4	24	0	0	0	77	-

Note: Response to alert

1. Yellow alert ( predicted rainfall higher than the mudslide warning base value: local government should begin to persuade potentially at risk people to leave

2. Red alert ( actual rainfall reached the mudslide warning base value ) : local government should, in accordance with the actual rainfall and situation in each area, carry out forced evacuation.

### D. Mountain climber contact

(Data Source: National Police Agency, Ministry of the Interior)

Date table made: May 21st, 2013

Applied For Entering Mountain Areas		Persuaded to not Enter Mountain Areas		People who have entered mountains and contact made with								Entered mountain area but no contact made with as yet	
				Already left mountains		In safe accommodation in mountain area		Taking shelter on the spot		Currently leaving mountain area			
Case	Person	Case	Person	Case	Person	Case	Person	Case	Person	Case	Person	Case	Person
172	1063	164	901	7	150	1	12	0	0	0	0	0	0

(Note: People who have not been contacted means the climbers have not contacted rangers, family members, or police for more than 48 hours after entering mountain areas. This statistical data is filled in and reported by the National Police Agency, Ministry of the Interior after collecting

### E. Ensnoced fishermen from Mainland China

(Data source: Council of Agriculture of Executive Yuan)

None

## F. School and work suspension situation

(Data Source: National Fire Agency, Ministry of Interior)

The school and work are suspended at Zhang Shan Primary School and Taoyuan Junior High School, Taoyuan District, Kaohsiung City

## 4. Evacuation and Shelter Status

### A. Evacuated people

(Data Source: Department of Civil Affairs, Ministry of Interior)

Directly-controlled municipality/ City / County	Estimated number of evacuated people	Number of Evacuated People	Accumulative number of Evacuated People
Tainan City	2	2	2
Kaohsiung City	174	174	174
Total	176	176	176

### B. Shelter situation

(1) Shelter (Data Source: Department of Social Affairs, Ministry of Interior)

An accumulated total of four shelters have been opened with an accumulated total of 174 people sheltered; at present two shelters are open and hold 29 people.

County/ City	District/ Township	Shelter		Set up time	Closed time	Current Number of People			Accumulative Number of People			Current Number of People		Is hot food continuing to be provided on the basis of a verbal contract or by private groups	Note
		Total	Name of the Shelter			Total	Male	Female	Total	Male	Female	Person	Day		
Kaohsiung City	Yanchao District	4	Ganshan Veterans' Home	2013/05/19 13:00		23	12	11	24	12	12	0	0	Yes	
	Taoyuan District		Qinhe Platform	2013/05/19 20:00	2013/05/20 17:00	0	0	0	92	46	46	92	14	Yes	92
	Taoyuan District		Mashowaru Cultural Meeting House	2013/05/19 21:00	2013/05/20 17:00	0	0	0	33	21	12	33	14	Yes	33
	Taoyuan District		Fuxing Village Seventh-day Adventist Church	2013/05/19 20:00		6	4	2	25	13	12	25	21	Yes	25

(2) Residents sheltered in military bases (Data Source: Ministry of National Defense)

35896 residents are sheltered in 102 bases

Table of military camps that are planned for use as shelters for evacuated people				
Area	3 <sup>rd</sup> combat zone (North)	5 <sup>th</sup> combat area (Central)	4 <sup>th</sup> combat area (South)	2 <sup>nd</sup> combat area (East)
Military camp shelters	35	35	24	8
total	102			
Capacity	13461 person	13153 person	7024 person	2258 person
Total	35896 person			

**C Relief supplies issued (Data source: MOI)**

None

(Note: This form should be filled in by the disaster-affected area )

**5. Disaster statistics****A. Death and injury****(Data source: National Fire Agency, MOI)**

None

( Note: The personnel list is attached as a separate table )

**B. Lifelines Damage****(Data Source: Ministry of Economic Affairs, National Communication Commission)**

Unit	Item	Number Affected	Has been repaired (household, location)	Waiting to be repaired (household, location)	Note
Ministry of Economic Affairs	Tap Water	0	0	0	
	Electricity	290	290	0	Nationwide 290 households suffered power cuts; repairs have been carried out and power to all was restored by 09 : 20 on May 20
	Gas	0	0	0	
NCC	Telephone (Local Telephone)	0	0	0	No damage
	Telephone (Base Station)	3	0	3	will repair before 08 : 00 on May 24

( Note: This table is compiled by the MOEA using NCC statistics )

**C. Transport situation –****(1) Transport situation -Blocked roads and repair situation****(Data Source: Ministry of Transportation and Communications)**

Item	Disaster-affected Places	Repaired	Not yet Repaired	Noted
National Highway	0	0	0	
Provincial Highway	22	18	4	Roads Closed 1. Provincial HWY. No. 24 Ali 46.5K 2. Provincial HWY. No. 20 Qinhe (97K-102K) 3. Provincial HWY. No. 21 From Namaxia Township to Wulipu(209K-221K) 4. Provincial HWY. No. 20 Fuxin(102K+300-102K+400)
(Self) Adopted County Road	4	4	0	
Township Road	0	0	0	
Native village main access Route	0	0	0	
Agricultural Route	0	0	0	
City Road	0	0	0	
Total	26	22	4	

( Note: List of damaged roads is attached as a separate table )

(Note: This table has been filled in after compiling data from the Council for Indigenous Peoples, COA and CPA.)

**(2) Closed bridges ( Data source: MOTC)**

None

(Note: This table has been filled in after compiling data from the Council for Indigenous Peoples, COA and CPA.)

**(3) Cancelled Railway Service ( Data source: MOTC)**

None

**(4) Air flight Cancellation Situation( Data source: MOTC)**

None

Item	Day/Time	Airline	Flight Information	Delay or Cancel	Reason
1	05/21 13:20	HONGKONG AIR	HKG/TPE	Delay	Climate Factors
2	05/21 12:30	UNI AIR	KHH/ Magong	Delay	Climate Factors
3	05/21 10:20	DAILY AIR	KHH/ Won-An	Cancel	Climate Factors

**(5) Inundated areas (Data source MOEA)**

None

**D. Water control facility damage and repair**

(Data source: Ministry of Economic Affairs)

Type of Facility	Number Damaged	Repair Completed	Under Repair	Note
River Wall	1	1	0	09:25 05/19; the left bank 300 meters below Yongan Bridge on Qian Creek in Linnei Township, Yunlin County, collapsed; Repairs were completed at 6pm on May 19th, 2013.
Sea wall	0	0	0	
Others	0	0	0	

**E. Agriculture, forestry, fishing, animal husbandry product and equipment losses**

(Data source: Council of Agriculture of Executive Yuan)

City/County	Total	Farming, forestry, fishing and animal husbandry industry losses (unit NT\$1000)					Damage to farming, forestry, fishing and animal husbandry industry			
		Sub-total	Agricultural product	Livestock and Poultry	Fish	Timber	Sub-total	Fields and farming facilities	Animal and poultry facilities	Fishermen's and fishing industry facilities
Kaohsiung City	15668.67	15668.67	15668.67	0	0	0	0	0	0	0
Taoyuan County	101.16	101.16	101.16	0	0	0	0	0	0	0
Hsinchu County	235.8	235.80	235.80	0	0	0	0	0	0	0
Yunlin County	1230.75	1015.75	995.75	20	0	0	215	0	215	0
Tainan City	37.28	37.28	37.28							
Pintung County	57341.76	57341.76	57341.76	0	0	0	0	0	0	0
Hsinchu Forest District Office	17	17	0	0	0	17	0	0	0	0
Total	74632.42	74417.42	74380.42	20	0	17	215	0	215	0

**6. City and County Emergency Operations Support situation**

**A. City and County Emergency Operations Support situation(Data source: National Fire Agency, MOI)**

None

(Note: Compiled by the NFA using Ministry of Defense statistics)

**B. Disaster relief personnel, equipment and mission implementation situation (Data source: MND, NFA MOI, NASC MOI, CPA MOI, Coastguard Administration)**

Personnel, equipment, mission	military	(National Fire Agency (incl. volunteers)	Police (incl. volunteers and civil defense )	Flight crew	Coastguard p rsonnel	Total
Mobilized personnel ( times )	20(20)	24(0)	0(0)	2671(2671)	0(0)	2715(2691)
Helicopter (flights)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Surveillance planes ( flights )	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Various vehicle ( times )	1(1)	0(0)	0(0)	0(0)	0(0)	1(1)
Ships/boats(incl. inflatable boats)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Various types of vehicle	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Number of people rescued	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Materials transported (ton )	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Rations transpor ed (servings)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Earth, rock and trash removed (ton)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Area disinfected (square meters)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Note: the table's data is the accumulated numbers (Single newly added)

**C. Emergency force preparation (Data source: Ministry of National Defense)**

The first emergency response force has 800 people and can be deployed within 10 minutes of being ordered; the second response force of 1200 persons can be deployed within three hours of being ordered.

Table of military emergency response forces of various combat zones on main island Taiwan				
Area	3rd combat zone (North)	5 <sup>th</sup> combat zone (Central)	4th combat zone (South)	2nd combat zone (East)
First emergency response force	200 people	200 people	200 people	200 people
Place				
Total	800 people			
Second response force	300 people	300 people	300 people	300 people
Place				
Total	800 people			

**D. Military personnel deployed in high risk areas in advance (Data source: Ministry of National Defense)**

The military has deployed 130 servicemen and 55 vehicles of 6 types in advance in high risk areas.

Table of military personnel and vehicles deployed in advance in various combat zones on main island Taiwan					
Area	3rd combat zone (North)	5th combat zone (Central)	4th combat zone (South)	2nd combat zone (East)	Area
Place	West base, Xihu, Linkou	Artillery Testing Center, Dapu, Yunlin	Huoniun base		

Number of forward personnel	23 people	13 people	94 people	0 people	130 people
Number of vehicles in place	12 of 2 types	3 of 2 types	40 of 2 types	0 of 0 types	55 of 6 types

## 7. Dispatch of helicopter to carry out a mission (Data source: National Rescue Command Center)

None

## 8. Key response measures (Data source: Central Emergency Operations Center)

1. The Central Emergency Operation Center held its first advance information judging meeting at 16:00 on May 16 and the second on May 19 at 14:30; the level 2 Central Extremely Heavy Rain Emergency Operations Center at 19:00 on May 19; the first work meeting was held at 20:00.
2. Various departments will remain on alert 24 hours a days, closely monitor Central Weather Bureau rain reports, keep abreast of the disaster situation in key areas and be prepared for horizontal coordination and communication, and to provide for mutual cooperation and support.
  - (1) The MOEA continues to strengthen reservoir flood discharge warnings, river water level warnings and flood prevention preparations, and is flexibly dispatching pumps and strengthening testing of pump operation in accordance with Central Weather Bureau reports and maintaining a grasp of the disaster situation together with the MOI
  - (2) In coordination with local county/city government, the MOI and the MOTC has restricted access to blocked roads and is closely monitoring the daily essential supply situation for stranded residents; the CLA and the MOI are monitoring the rainfall situation for villages within the scope of debris flow warnings issued by country government; if it is judged that preventive evacuation is necessary, township chiefs are requested to use their authority to directly issue an evacuation order and implement shelter provision work.
  - (3) The MOTC is closely monitoring the river water level and upstream rainfall situation and is inspecting roads and bridges where danger can easily occur; in the event that concerns about safety arise, the road or bridge will be closed following a Standard Operating Procedure and vehicles and people prevented from passing. The public will also be provided with a guide to an alternative route; when there is no alternative route, an effort will be made to reopen the bridge/road as soon as possible.
  - (4) The Ministry of Defense's various combat zones continue to prepare personnel, vehicles, helicopters and equipment, have carried out preparations for forward deployment of relief manpower, and are ready to engage in disaster relief at any time
  - (5) Media channels are requested to disseminate points for attention for flood-prone areas; members of the public are called upon to take precautions against extremely heavy rain; do not be complacent; to stay safe, avoid the seashore and mountain areas unless necessary.
  - (6) The CWD forecasts that May 21-23 Taiwan will still be affected by a plum rain front and southwesterly air current and, although the rain will ease, there is still a chance of heavy or extremely heavy rain in parts of west Taiwan; people in low-lying areas in the west should take precautions against inundation; in mountain areas, precautions should be taken against slope and road disaster.

## 9. List of casualties and missing persons

None

### Number of evacuated persons (Data source: Department of Civil Affairs)

City/County	Township	Location	Reason	Time of evacuation	Number of people who should be evacuated	Actual number of evacuated persons	Shelter location
Tainan City					2	2	
Kaohsiung					174	174	

City							
Total	-	-	-	-	176	176	-