

# May 19 Torrential Rain Flooding: Disaster Response Reports

Central Emergency Operations Center  
Data as of 2013/05/20 20:00

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

With a weather front approaching, the Central Weather Bureau issued a torrential rain warning for Taichung, Nantou, Kaohsiung and Pingtung areas and a heavy rain or extremely heavy rain warning for southeast Taiwan, north Taiwan and northeast 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 20th 20:00pm)

Area	Cumulative Rainfall(mm)
Kaohsiung City Taoyuan District Gaozhong	260.5
Kaohsiung City Taoyuan District Xiaoguanshan	260
Chiayi County Alishan Township Alishan (Mt. Ali)	248.5
Kaohsiung City Taoyuan District Yuyoushan (Mt. Yuyou)	248.5
Taichung City Heping District Songhe	245
Taichung City Heping District Shanguguan	242.5
Nantou County Ren'ai Township Amei	227.5

### B. River level (data 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: National Fire Agency, Ministry of the Interior)

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

### B. Mudslide danger area distribution situation

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

None

### C. Mountain climber contact

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

Date table made: May 20, 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
166	1043	158	881	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

#### D. Ensnored fishermen from Mainland China

(Data source: Council of Agriculture of Executive Yuan)

None

#### E. School and work suspension situation

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

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
Kaohsiung City	174	174	174
Total	174	174	174

#### 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 173 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	23	12	11	0	0	Yes	
	Taoyuan District		Qinhe Platform	2013/05/19 20:00		0	0	0	92	46	46	92	14	Yes	92
	Taoyuan District		Mashowaru Cultural Meeting House	2013/05/19 21:00		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; 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)	0	0	0	No damage

( 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	12	7	5	Roads Closed 1.Provincial HWY. No. 20 Qinhe (97K-102K) 2.Provincial HWY. No. 20 Fuxin(102K+300-102K+400) 3.Provincial HWY. No. 20 Taoyuan (95K+506-95K+783) 4.Provincial HWY. No. 21 From Namaxia Township to Wulipu(209K-221K) 5.Provincial HWY. No. 24 Ali 46.5K
(Self) Adopted County Road	1	1	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	13	8	5	

( 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)**

No.	Time and Date	Line	Service	Reason	Note	Filling Time
1	05/19 21:16	Alishan Forest Railway	71	Weather	Zushan line sunset train cancelled on May 20th 2013	05/19 22:38

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

No	Date and Time	Airline	Route or flight number	Delayed or Cancelled	Reason (airport closure, weather, flight change)	Note
1	05/20 17:20	UNI Air	320(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
2	05/20 16:40	UNI Air	318(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
3	05/20 16:00	UNI Air	319(Songshan-Nangan)	Cancel	Flight Change	0519extremely heavy rain
4	05/20 15:20	UNI Air	317(Songshan-Nangan)	Delay	Weather Condition	0519extremely heavy rain
5	05/20 14:50	UNI Air	316(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
6	05/20 14:20	UNI Air	338(Beigan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
7	05/20 13:50	UNI Air	312(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
8	05/20 13:30	UNI Air	337(Songshan-Beigan)	Cancel	Weather Condition	0519extremely heavy rain
9	05/20 13:20	UNI Air	371(Taichung-Nangan)	Cancel	Weather Condition	0519extremely heavy rain
10	05/20 12:30	UNI Air	313(Songshan-Nangan)	Cancel	Weather Condition	0519extremely heavy rain
11	05/20 11:50	UNI Air	372(Nangan-Taichung)	Cancel	Weather Condition	0519extremely heavy rain
12	05/20 10:50	UNI Air	306(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
13	05/20 10:30	UNI Air	309(Songshan-Nangan)	Cancel	Weather Condition	0519extremely heavy rain
14	05/20 10:00	UNI Air	305(Songshan-Nangan)	Cancel	Weather Condition	0519extremely heavy rain
15	05/20 09:15	UNI Air	336(Beigan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
16	05/20 08:10	UNI Air	302(Nangan-Songshan)	Cancel	Weather Condition	0519extremely heavy rain
17	05/20 08:00	UNI Air	335(Songshan-Beigan)	Cancel	Weather Condition	0519extremely heavy rain
18	05/20 06:50	UNI Air	301(Songshan-Nangan)	Cancel	Weather Condition	0519extremely heavy rain

**(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	05/20 09:07 the left bank 300 meters below Yongan Bridge on Qian Creek in Linnei Township, Yunlin County, collapsed; It was repaired at 6 pm 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	14105.57	14105.57	14105.57	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	235.8	235.8	0	0	0	0	0	0	0
Yunlin County	1230.75	1015.75	995.75	20	0	0	215	0	215	0
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	73032.04	72817.04	72780.04	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 personnel	Total
Mobilized personnel (times)	20(20)	24(24)	0(0)	2671(2671)	0(0)	2715(2715)
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)	0(0)
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 transported (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)	5 <sup>th</sup> combat zone (Central)	4th combat zone (South)	2nd combat zone (East)	Area
Place	West base, Xihu, Linkou	Artillery Testing Center, Dapu, Yunlin	Huoniou 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 an advance information judging meeting on May 16 and 19 and established the level 2 Central Extremely Heavy Rain Emergency Operations Center at 19:00 on May 19; three work meetings were held on May 19 and 20.

2. Affected by a lingering weather front, today (20 th) and tomorrow (21 st) the mountain areas of central and south Taiwan still have a chance of partial torrential rain; the areas threatened by torrential rain are Taichung City, Nantou County, Chiayi County, Tainan City, Kaohsiung City, Pingtung County. Various departments have been asked to monitor the rainfall situation and, if necessary support the emergency response work of local government initiatively.

(1) Figures from the information meeting show that up to May 17<sup>th</sup> some parts of the south had accumulated rainfall of 450mm and future rainfall will probably be concentrated in central and southern Taiwan; the focus of response efforts should be slope and road disasters; related departments and local government will continue to pay attention to the rock falls, collapses and slope disasters caused by the extremely heavy rain.

(2) At present the Council of Agriculture has lifted all yellow debris flow warnings but unstable weather will continue until May 23<sup>rd</sup> so the COA and MOI will continue to keep abreast of rainfall and keep in close contact with local government and be prepared to carry out preventive evacuation and provide shelter at any time.

(3) The MOEA will continue to monitor river water levels and will keep in contact with cities and counties that are carrying out and adjustment water release and floodwater discharge; downstream residents are reminded to pay attention to safety.

## 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
Kaohsiung City					174	174	
Total	-	-	-	-	174	174	-