

## 24/7 Emergency Operation Center for Flood, Storm and Landslide

DATE: Wednesday, September 21, 2011	TIME: 09.00	LOCATION: Meeting Room 2, Ministry of Interior
CHAIRPERSON: Mr. Panu Yamsri, Director of Disaster Mitigation Directing Center, Department of Disaster Prevention and Mitigation		

### 1. CURRENT SITUATION

1.1 **Current flooded provinces:** there are 24 recent flooded provinces: Sukhothai, Phichit, Phitsanulok, Nakhon Sawan, Uthai Thani, Chai Nat, Sing Buri, Ang Thong, Phra Nakhon Si Ayutthaya, Lopburi, Sara Buri, Suphan Buri, Nakhon Pathom, Pathumthani, Nonthaburi, Ubon Ratchathani, Yasothorn, Khon Kaen, Mahasarakham, Sisakes, Mahasarakam, Chacheongsao, Nakhon Nayok, Prachinburi, and **Chaiyaphum**. The total of 165 Districts, 1,243 Sub-Districts, 9,369 Villages, 588,347 families and/or 1,916,986 people are affected by the flood. The total fatalities are 130 deaths and 2 missing. (Fatalities: 1 in Udon Thani, Sakon Nakhon, Phetchabun, Trad, Uthai Thani, Umnatcharoen and Chacheongsao; 2 in Tak, Nakhon Phanom, Roi Et, Phang-Nga, Lopburi and Phra Nakhon Si Ayutthaya ; 3 in Chonburi, Suphanburi and Sa Kaew; 4 in Prachin Buri; 5 in Singburi ; 6 in Chainat and Chiang Mai; 7 in Mae Hong Son, Phitsanulok and Uttaradit; 8 in Phrae; 11 in Nakhon Sawan; 12 in Sukhothai and 29 in Phichit: Missing: 1 in Mae Hong Son, and 1 in Uttaradit due to landslide)

1.2 **Amount of Rainfall:** The heaviest rainfall in the past 24 hours is at Khlong Yai of Trad province at 112.8 mm.

#### 1.3 Estimate Losses and Damages:

1.3.1 **Agricultural impact:** Farming areas which would be affected are estimated at 4,192,131 rai; 60,124 rai of fish/shrimp ponds and 3.95 million of livestock (source: Ministry of Agriculture and Cooperatives).

#### 1.3.2 Transportation Routes:

**Highway:** 27 main highways in 10 provinces are flooded and cannot be passed (**Phichit Province:** Route 111 Sak Lek – Phichit at k.m. 9-16, 30 c.m. of flood water, divert to route 115 Phichit By pass route; Route 1068 Wangjik-Pai Tha Tho at KM.7-10, 30 c.m. of flood water, divert to Rural Road; Route 1118 Taphanhin-Bang Mun Nak at k.m. 0-23, 15-50 cm of flood water, divert to route 11; Route 1221 Phichit – Phitsanuloke at k.m. 7-8, 30 c.m. of flood water, divert to route 11 Sak Lek – Wang Thong; Route 1289 Wang Samrong – Bang Lai, 35 c.m. of flood water divert to route 1070 Tapan Hin – Dong Sue Lueng; Route 1313 Bang Mun Nak-Taphan Hin at k.m. 11-14, 35-60 c.m. of water flood, divert to route 1118 Taphan Hin – Sak Lek; **Phitsanulok Province:** Route 1275 Tha Chang-Phromphiram at k.m. 2-3, 70 cm. of flood water, divert to route 1086 Phitsanulok-Wat Bote; **Petchabun Province:** Route 2181 Pak Huay Khon Kaen-Lomsak at k.m. 4-6, no divert route; **Nakhon Sawan province:** Route 117 Nakhon Sawan – Phichit at k.m. 7-16 (outbound), 40 c.m. of water flood, divert to Route 122 at k.m. 0-3, 40-50 cm. of flood water, divert to inbound route; Route 225 Pak Num Pho-Nakhon Sawan at k.m. 1-29, 70 c.m. of flood water divert to route 3004 Nakhon Sawan-Tha Tako; Route 1084 Pa Dang-Bunphot Phisai at k.m. 47-52, divert to rural road; Route 3005 Ta Ta Kui – Krok Pra at k.m. 1-2, 60 c.m. of flood water, no divert route; Route 3319 Krok Phra-Uthathani at k.m. 0-3, no divert route; Route 3522 Junction to Phra Yuha Kiri at k.m. 2-4, 30-70 c.m. of flood water, divert rural road; Route 3475 Thabkrit-Phanom Rod at k.m. 0-12, No divert route; **Singburi province:** Route 311 Singburi – Chainart at k.m. 6-9, 35 c.m. of flood water, divert to route 3030 Bangrachan - Singburi ; Route 3030 Singburi-Bangrachan at k.m. 0-1, 50 c.m. of flood, divert to route 32 Asia Highway route ; Route 3033 Ba Nga – Promburi at k.m. 1-10, 35 c.m. of flood, divert to Asia Highway route 32 ; **Lopburi Province :** Route 3019 Khao Pra Ngam –Khok Ka Tiem at k.m. 1-2, 50 c.m. of flood water, divert to route 1 Ban Mi- Khok Ka Tiem; **Chainat Province:** Route 1 Chainat Intersection- Ban Kluay at k.m. 290-500, No divert route; **Uthai Thani Province:** Route 333 Uthai Thani- Nakhon Sawan at k.m.

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1-14, 50-100 cm. of flood water, divert to rural road; Route 3265 Uthai Thani By pass at k.m. 0-2, 40 c.m. of flood water divert to Municipality route; **Chaiphum Province** : Route 225 Kiew Khao – Wang Hup Krapong, at k.m. 153-155, 80 c.m. of flood water divert to route 201 Chaiphum-Nong Bua Khok; Route 2359 Nong Bua Dang-Wang Yai at k.m. 16-17, 70 c.m. of flood divert to rural road) **For more information, contact 1568 or DDPM Hotline 1784.**

**Rural roads:** 76 rural roads in 19 provinces are not passable (1 road in Phitsanulok, Pang-Nga, Ubon Ratchathani, Uthaitani, Nakhon Si Thammarat, Suphanburi, Rayong, Srisaket, Chiang Mai, Nakhon Ratchasima and Nakhon Phanom; 3 roads in Petchabun, Nakhon Nayok and Chaiphum, and; 4 roads in Amnatcharoen, and Chainat and Singburi; 19 roads in Nakhon Sawan; 25 roads in Phichit). **Additional inquiry, call 1146.**

#### 1.3.3 Ground Water Resources

The total of 27,653 ground water ponds/wells is affected, while the 5,071 closed system pond/wells are damaged by flood. The Department of Groundwater Resources has distributed 2,603,146 liters of drinking water for affected people. The water production Trucks are distributed in Ang Thong, Phra Nakorn Si Ayutthaya and Phichit Province. (Department of Groundwater Resources)

#### 1.4 **Important Assistance Provision**

- 1.4.1 According to the Cabinet Resolution of September 6, 2011 approval of flood compensation budget for 174,383 households (5,000 THB per households), **The Department of Disaster Prevention and Mitigation (DDPM)**, has already collected data of 131,655 households (75.50 percent) and submitted to the Saving Bank for money transfer to the province. The total budget to be provided to the flood affected household is 658,275,000 THB.
- 1.4.2 **The Military** has dispatched officers, tools and equipment for both marine and air operation to assist affected people in flood damaged provinces in lower north, northeastern, central, and southern region. In addition, they have worked with TV Channel 3 organized the relief activities for people affected by landslide in Nam Pad District of Uttaradit Province. In response to flood risk in Chao Phraya Basin, they have collaborated with concerned agencies mobilizing water pump engines to accelerate river water flow during 14-24 September 2011 in 6 critical points along the river, including 1) King Rama 7 Bridge, 2) Kiak kai Bridge, 3) Krung Thon Bridge, 4) Phut Bridge, 5) Lad Pho Canal and 6) mouth of Chao Phraya River.
- 1.4.3 **The Royal Thai Police** has been alerted all sections and units to be ready for deploy to help the affected people nationwide. They also established the unified Field Command Post among police sections (Marine Police and Patrol Police) in Phra Nakhon Si Ayutthaya Province, as well as in the risk areas in Chao Phraya River Basin to secure state and private properties.
- 1.4.4 **Emergency Institute of Thailand** reported of the supporting operation from several foundations for 20 rescue boats in Chainat, Uthaitani, and Lopburi Province.
- 1.4.5 **The Ministry of Public Health** has dispatched Medical Care Mobile Units to provide medical and mental health care for flood affected people. Also, The minister urged the 17 hospitals at risk (Ta Phan Hin Hospital, Bang Rakum Hospital, Inburi Hospital, Singburi Hospital, Ang Thong Hospital, Bang Sai Hospital, Bang Ban Hospital, Phak hai Hospital, Bang Pa In Hospital, Sena Hospital, Tha Reu Hospital, Phra Nang Klao Hospital, Bang Yai Hospital, Bang Kruay Hospital, Lum Phaya Hospital, Huay phlu Hospital, and Chao Phraya Yommarat Hospital) to be prepared for flood. Officials should wear safety vest at all time during the operation in flood water. For Maharat Hospital in Nakhon Ratchasima Province, The Ministry together with The Royal Thai Army have worked together to secure and prevent the hospital areas from flood.
- 1.4.6 **The Department of Public Relations** broadcasted special Live TV programme for flood affected areas during 19-23 September 2011 from 10.00-11.00 hr.
- 1.4.7 **MCOT** has invited representatives from DDPM and EMIT to the morning TV program on 23 September 2011 at 07.00 – 08.00 hr. for promoting safety awareness for the people in flooded areas such as basic life support for flood victims.

## 2. SITUATION ASSESSMENT/FORECAST

- **Thai Meteorological Department (TMD):** During 21-23 Sep, the monsoon trough lies across the lower North, the upper Central and the Northeast of Thailand. And the active southwest monsoon prevails over the Andaman, the South and the Gulf of Thailand. After that during 24-26 Sep, this monsoon trough remains across upper Thailand to a low pressure cell near the coastal of Vietnam. And the active southwest monsoon prevails over the Andaman, the South and the Gulf of Thailand. Increasing rain and isolated heavy to very heavy falls is likely over the country. The wind-wave in the Andaman Sea and the Gulf of Thailand will intensify with 2-3 meters high.
- **Royal Irrigation Department (RID):** Overall, water level in many areas are decreasing. However, close watch is still required especially in the lower Chao Phraya Basin. The followings are the water situation overview;

### River Basins

- **Ping Basin:** No inundation is reported, and the water level in Bunphot Phisai District (a confluence of Ping and Nan rivers before merging into Chao Phraya river) of Nakhon Sawan Province is decreasing 45 c.m. below river bank.
- **Yom Basin:** Inundation remains and likely to decrease in Bang Rakum District of Phitsanulok Province and 3 districts (Sam Ngam, Pho Thale, and Pho Prathap Chang) of Phichit Province.
- **Nan Basin:** Inundation is likely to decrease in Bang Mun Nak, and Meuang District of Phichit province. However, Chum Sang District of Nakhon Sawan Province (a confluence of Nan and Yom Rivers before merging into Chao Phraya River) is slightly increasing.
- **Pasak Basin:** Inundation in Wichian Buri District of Petchabun province is likely to decrease.
- **Prachinburi River Basin:** Inundation remains in Meuang District of Prachinburi Province, while Kabinburi District is increasing.
- **Mun Basin:** Inundation remains and likely to increase in many areas, including Nakhon Ratchasima (Choke Chai, and Phimai District); Si Saket Province (Payuha, Kantararom and Huay Taptan District); and Buriram Province. But, inundation is likely to increase in Phimai District of Nakhon Ratchasima Province; Suvannabhum District of Roi-Et Province, and Meaung District of Ubon Ratchathani Province where Shi and Mun Rivers are merging.
- **Shi Basins:** Inundation is likely to increase in Meuang District of Chaiyaphum Province, Roi-Et province (Jung Han and Thung Khao Luang District), Yasothorn Province (Meuang and Maha Chanachai District), and Nong Bua Lumphu Province (Meuang district).
- **Mae Khong Basin:** the inundation is likely to decrease in Meuang District of Udon Thani, and Ban Muang District of Sakon Nakorn Province.
- **Sakaekrang Basin:** Inundation is decreasing in Meuang District of Uthaithani Province.
- **Lower Chao Phraya Basin:** Water level is increasing. Inundation remains at lowlands of Uthaithani, Chainat, Singburi, Ang Thong, Suphanburi, Phra Nakhon Si Ayutthaya, Pathumthani, and Nonthaburi Province.
- **Tha Chine Basin:** Inundation is increasing in Bangplama District of Suphanburi Province and Nakhonchaisi District of Nakhon Pathom Province.

### Major Dams

- **Bhumibol Dam:** it reached 88 Percent of retention capacity.
- **Sirikit Dam:** it reached 96 Percent of retention capacity.
- **Kwae Noi Dam:** it reached 99 Percent of retention capacity.
- **Pasak Dam:** it reached 113 Percent of retention capacity.
- **Bangkok Metropolitan Administrative (BMA)** The highest water level in the river is expected at 13.00 hr at 1.40 m. On September 21, the highest sea level is expecting at 21.47 hr. No flood threat to BMA is reported. Special attention should be made at the eastern side of BMA, the outer flood prevention areas, including Meenburi, Nong Jok, and Lad Krabang District. The water discharges from Nakhon Nayok Province every day causes the increasing amount of water level in Bangkok. In addition, The BMA has been prepared necessary resources for flood prevention and mitigation. For more information, contact 0-2248-5115 or BMA Hotline 1555, or <http://dds.bangkok.go.th>

**3. WARNING AND ADVISORY MESSAGE**

- Thai Meteorological Department issued Warning Message of "Heavy Rainfall over Thailand" No.8 on September 21, 2011 at 05.30 a.m.: The ridge of moderate high pressure area from China covered upper Thailand. The monsoon trough lies across the lower North, the upper Central and the Northeast of Thailand and the moderated southwest monsoon prevails over the Andaman Sea, southern Thailand and the Gulf of Thailand. These cause abundant rain and isolated heavy rainfalls likely over the lower North, the Central, the Northeast and the East during 21-23 September. People in lowlands along foothills and near waterways are warned of possible flash flood. This area includes Phetchabun, Lop Buri, Saraburi, Loei, Nong Bua Lam Phu, Chaiyaphum, Nakhon Ratchasima, Buriram, Surin, Si Saket, Ubon Ratchathani, Nakhon Nayok, Prachin Buri, Chanthaburi and Trat. The wind-waves in the Andaman Sea and the upper Gulf are expected 2 meters highs. All ships should proceed with caution.
- Department of Mineral Resources issued Warning No. 23/2554 of Flashflood and Landslide in Petchabun (Lom kao, Lom Sak and Meuang Districts), Loei (Dan Sai District), Phitsanulok (Chat Tra Karn, Wang Thong, Noen Ma Prang, nakhon Thai District), Khon Kaen (Phu Pha Man District), Trat (khao Saming, and Bo Rai Districts), and Chanthaburi Province (Khlung, makham, and Khitchakut District).

**4. THE 2P2R MEASURES**PREPARATION

- Out of 17 flood risk hospitals, **Inburi Hospital in Singburi Province** should receive special attention. In this regard, agencies concerned should be prepared for preventing and mitigating the expecting river overflow flooding the hospital compounds.
- Based on the water situation forecast in Shi Basin by the Royal Irrigation Department, **Meuang District of Khon Kaen Province is at risk of flood within 1-2 days**. Therefore, the Province should keep watching the water situation and warning from responsible agencies, and be ready to mobilize resources for relief assistance. River overflow is expecting at Manjakhiri District on 23 September and at Meuang District on 24 September.