

## WATER YEAR : 2012

## NAN RIVER BASIN

Nam Phak at Ban Tha Sakae , Phitsanulok (N.55)

Lat 17 - 15 - 06 N Long 100 - 37 - 53 E

Location : on left bank at the bridge of Nakhon Thai - Chat Trakan Road , Tambon Pa Daeng.

|   |   |                           |                             |
|---|---|---------------------------|-----------------------------|
|   | <b>Ban</b> Tha Sakae  | <b>Amphoe</b> Chat Trakan | <b>Changwat</b> Phitsanulok |
| <b>Drainage Area</b>                    | 971 sq.km.  |                           |                             |
| <b>Type of Gage</b>                     | Staff gage  |                           |                             |
| <b>Zero Gage at Bottom</b>              | +182.830 m. (MSL.)  |                           |                             |
| <b>Bench Mark</b>                       | B.M.-H.D.   |                           |                             |
| <b>Location BM</b>                      | On left bank about 13 meters from the top staff gage.                                     | <b>Elevation</b>          | +191.446 m. (MSL.)          |
| <b>Gage Reading Frequency</b>           | 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.                      |                           |                             |
| <b>Basis of Mean Daily Gage Height</b>  | Arithmetic mean of 5 readings   |                           |                             |
| <b>Period of Available Gage Records</b> | 1983 to date  |                           |                             |
| <b>Rating Operation</b>                 |   |                           |                             |
| <b>Period of Rating</b>                 | 1994 to date  |                           |                             |
| <b>Rated by Flot</b>                    | -   |                           |                             |
| <b>Rated by Current Meter</b>           | 1994 to date  |                           |                             |
| <b>Stability of Channel Regimes</b>     | Stable.   |                           |                             |
| <b>Overbank Flow Conditions</b>         | No overbank flow.   |                           |                             |
| <b>General Description</b>              | Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012. |                           |                             |

## Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

| Date                             | Apr    | May    | Jun         | Jul         | Aug    | Sep           | Oct                               | Nov    | Dec               | Jan    | Feb    | Mar    | Annual |
|----------------------------------|--------|--------|-------------|-------------|--------|---------------|-----------------------------------|--------|-------------------|--------|--------|--------|--------|
| 1                                | 183.34 | 183.35 | 184.05      | 183.62      | 184.11 | 185.54        | 184.31                            | 183.78 | 183.72            | 183.42 | 183.46 | 183.28 |        |
| 2                                | 183.33 | 183.32 | 183.81      | 183.56      | 183.98 | 185.08        | 184.29                            | 183.76 | 183.64            | 183.41 | 183.47 | 183.28 |        |
| 3                                | 183.32 | 183.32 | 183.94      | 183.55      | 183.87 | 185.16        | 185.14                            | 183.77 | 183.77            | 183.42 | 183.46 | 183.29 |        |
| 4                                | 183.33 | 183.33 | 183.77      | 183.55      | 183.84 | 186.56        | 184.72                            | 183.78 | 183.59            | 183.41 | 183.45 | 183.49 |        |
| 5                                | 183.33 | 183.33 | 183.92      | 183.53      | 183.86 | 186.56        | 184.51                            | 183.73 | 183.50            | 183.42 | 183.41 | 183.52 |        |
| 6                                | 183.34 | 183.39 | 183.77      | 183.55      | 183.83 | 186.15        | 185.19                            | 183.77 | 183.61            | 183.42 | 183.40 | 183.51 |        |
| 7                                | 183.33 | 183.73 | 183.72      | 183.61      | 183.78 | 185.42        | 184.81                            | 183.77 | 183.58            | 183.42 | 183.39 | 183.36 |        |
| 8                                | 183.33 | 184.31 | 183.87      | 183.72      | 183.76 | 185.43        | 184.58                            | 183.78 | 183.57            | 183.42 | 183.39 | 183.38 |        |
| 9                                | 183.58 | 184.59 | 184.00      | 183.76      | 184.70 | 185.99        | 184.39                            | 183.82 | 183.55            | 183.42 | 183.38 | 183.33 |        |
| 10                               | 183.46 | 183.80 | 184.16      | 183.72      | 186.84 | 186.64        | 184.31                            | 183.75 | 183.54            | 183.38 | 183.37 | 183.32 |        |
| 11                               | 183.43 | 183.55 | 183.85      | 183.78      | 187.23 | 187.31        | 184.25                            | 183.72 | 183.53            | 183.40 | 183.37 | 183.31 |        |
| 12                               | 183.42 | 183.47 | 183.69      | 183.78      | 186.99 | 186.59        | 184.21                            | 183.73 | 183.51            | 183.41 | 183.37 | 183.29 |        |
| 13                               | 183.38 | 183.44 | 183.68      | 183.68      | 185.79 | 185.99        | 184.20                            | 183.80 | 183.51            | 183.41 | 183.35 | 183.30 |        |
| 14                               | 183.36 | 183.38 | 183.75      | 183.63      | 185.39 | 186.04        | 184.47                            | 183.78 | 183.53            | 183.40 | 183.35 | 183.28 |        |
| 15                               | 183.34 | 183.37 | 183.64      | 183.60      | 185.40 | 185.88        | 184.65                            | 183.75 | 183.52            | 183.40 | 183.34 | 183.28 |        |
| 16                               | 183.35 | 183.38 | 183.57      | 183.78      | 185.37 | 185.40        | 184.29                            | 183.68 | 183.50            | 183.40 | 183.34 | 183.31 |        |
| 17                               | 183.33 | 183.55 | 183.53      | 183.59      | 184.38 | 185.12        | 184.20                            | 183.69 | 183.48            | 183.39 | 183.33 | 183.28 |        |
| 18                               | 183.35 | 183.37 | 183.95      | 183.55      | 184.25 | 184.98        | 184.24                            | 183.72 | 183.49            | 183.39 | 183.32 | 183.29 |        |
| 19                               | 183.33 | 183.62 | 183.84      | 183.56      | 184.15 | 184.84        | 184.11                            | 183.68 | 183.48            | 183.39 | 183.32 | 183.27 |        |
| 20                               | 183.33 | 184.51 | 183.63      | 183.53      | 184.06 | 184.80        | 184.00                            | 183.63 | 183.47            | 183.38 | 183.32 | 183.27 |        |
| 21                               | 183.33 | 183.81 | 183.57      | 183.61      | 184.58 | 184.97        | 184.00                            | 183.68 | 183.45            | 183.37 | 183.33 | 183.34 |        |
| 22                               | 183.33 | 183.67 | 183.53      | 183.60      | 184.38 | 184.83        | 184.25                            | 183.65 | 183.45            | 183.37 | 183.34 | 183.28 |        |
| 23                               | 183.32 | 183.54 | 183.60      | 183.58      | 184.30 | 185.04        | 184.22                            | 183.64 | 183.44            | 183.37 | 183.33 | 183.28 |        |
| 24                               | 183.32 | 183.52 | 183.58      | 183.59      | 184.12 | 184.67        | 183.97                            | 183.81 | 183.44            | 183.37 | 183.36 | 183.27 |        |
| 25                               | 183.31 | 183.49 | 183.56      | 184.00      | 184.13 | 184.52        | 183.91                            | 183.75 | 183.44            | 183.38 | 183.35 | 183.28 |        |
| 26                               | 183.31 | 183.48 | 183.54      | 186.06      | 186.56 | 185.45        | 183.91                            | 183.69 | 183.43            | 183.37 | 183.34 | 183.28 |        |
| 27                               | 183.31 | 183.89 | 183.54      | 185.69      | 186.61 | 184.96        | 183.88                            | 183.65 | 183.45            | 183.38 | 183.33 | 183.29 |        |
| 28                               | 183.32 | 184.08 | 183.52      | 184.95      | 187.32 | 184.61        | 183.86                            | 183.75 | 183.43            | 183.43 | 183.32 | 183.30 |        |
| 29                               | 183.35 | 183.97 | 183.51      | 184.54      | 188.18 | 184.46        | 183.78                            | 183.83 | 183.41            | 183.48 |        | 183.31 |        |
| 30                               | 183.40 | 183.97 | 183.58      | 184.36      | 187.50 | 184.34        | 183.79                            | 183.89 | 183.44            | 183.46 |        | 183.30 |        |
| 31                               |        | 184.10 |             | 184.28      | 186.96 |               | 183.78                            |        | 183.43            | 183.45 |        | 183.27 |        |
| Mean                             | 183.35 | 183.67 | 183.72      | 183.90      | 185.17 | 185.44        | 184.27                            | 183.74 | 183.51            | 183.40 | 183.37 | 183.32 |        |
| Max                              | 183.58 | 184.59 | 184.16      | 186.06      | 188.18 | 187.31        | 185.19                            | 183.89 | 183.77            | 183.48 | 183.47 | 183.52 | 188.18 |
| Min                              | 183.31 | 183.32 | 183.51      | 183.53      | 183.76 | 184.34        | 183.78                            | 183.63 | 183.41            | 183.37 | 183.32 | 183.27 | 183.27 |
| Annual Max Momentary Gage Height | 188.29 |        | m. (MSL.) , |             |        |               | at 06.00 Hours , on Aug 29 , 2012 |        |                   |        |        |        |        |
| Zero Gage at Bottom Elevation    | 182.83 |        | m. (MSL.) , |             |        | River Bed     | 183.12                            |        | m. (MSL.)         |        |        |        |        |
| Left Bank Elevation              |        | 190.27 |             | m. (MSL.) , |        |               |                                   |        |                   |        |        |        |        |
| Right Bank Elevation             |        | 190.27 |             | m. (MSL.) , |        | Drainage Area | 971                               |        | Square Kilometers |        |        |        |        |