



Republic of the Philippines  
Department of Science and Technology



Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

# PAMPANGA RIVER BASIN FLOOD FORECASTING AND WARNING CENTER (PRFFWC)

DMGC DOST Reg.3 Compd, Brgy. Maimpis, CSF, Pampanga 2000

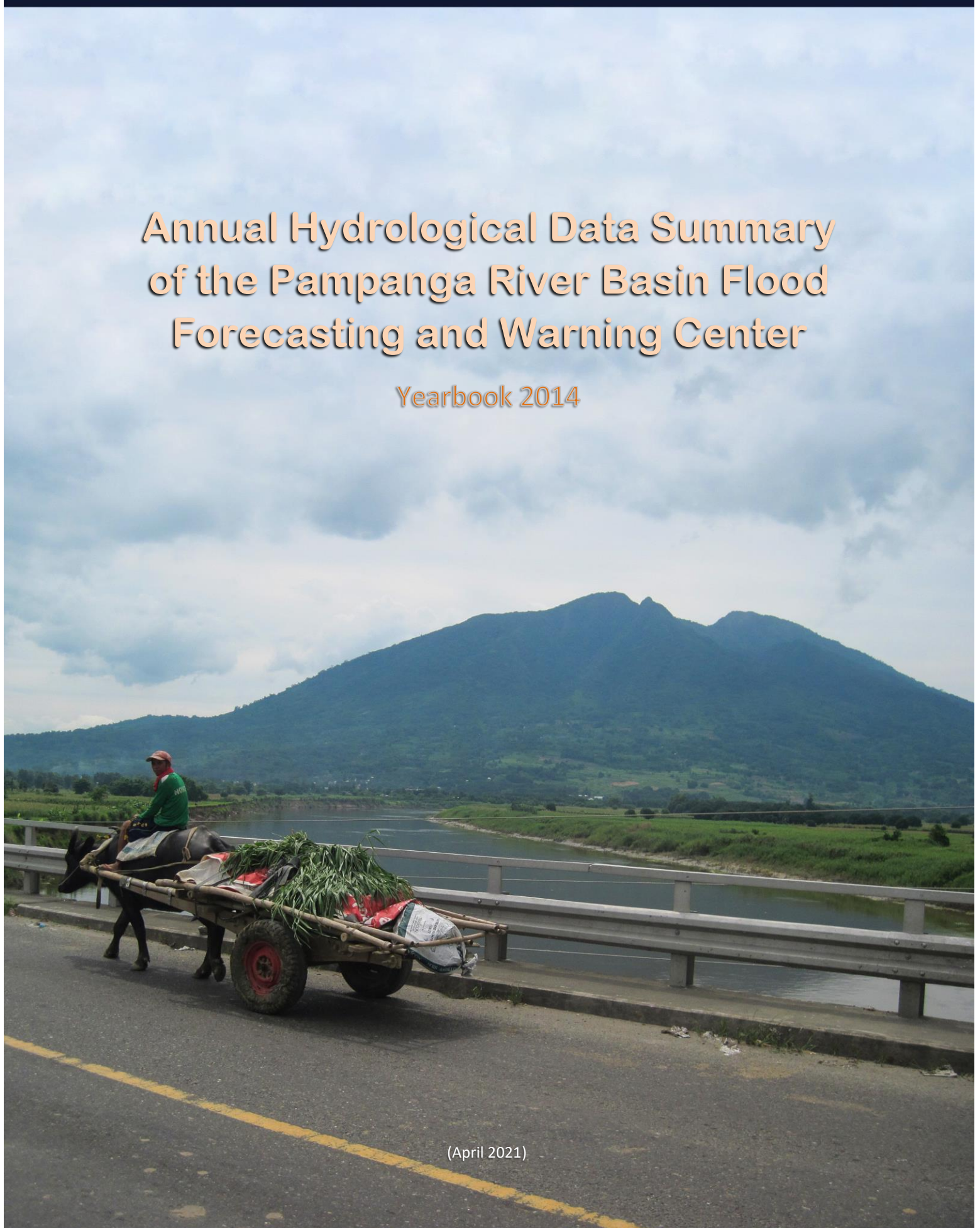
(045) 455-1701

prffwc@gmail.com

<http://prffwc.synthasite.com>

## Annual Hydrological Data Summary of the Pampanga River Basin Flood Forecasting and Warning Center

Yearbook 2014



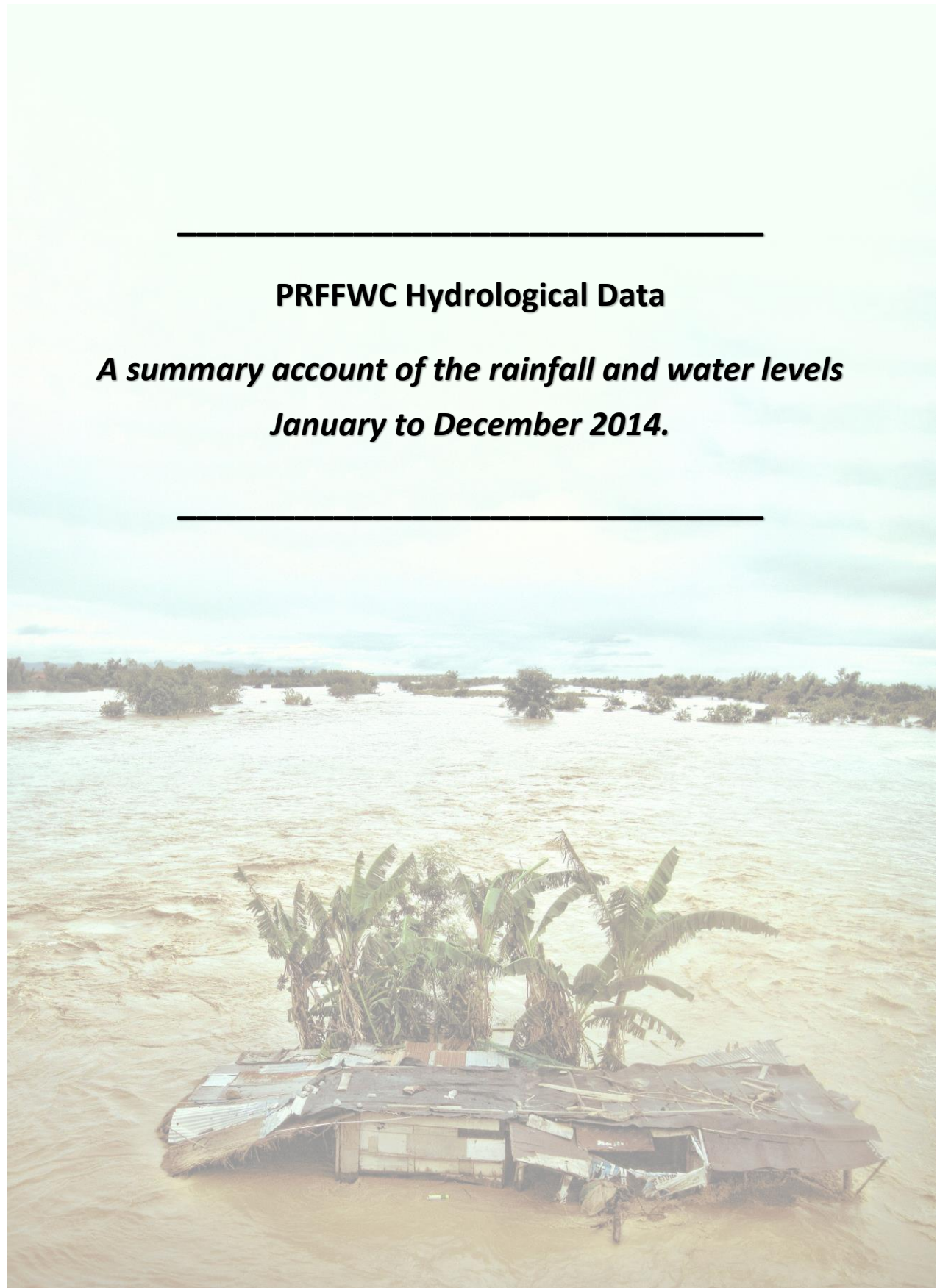
(April 2021)



Front / Back Cover:

A carabao driven vegetable cart traversing the San Agustin Bridge in Arayat, Province of Pampanga amidst the mighty Pampanga River & the majestic Mt. Arayat in the background (August 14, 2014)

Photograph: H. Hernando Edited by: M. Joson



---

## **PRFFWC Hydrological Data**

***A summary account of the rainfall and water levels  
January to December 2014.***

---

## Acronyms & Abbreviations:

- CSFP – City of San Fernando, Pampanga
- D/S - downstream
- D/T - downtime
- FFWS – Flood Forecasting & Warning System
- FM – Flood Marker
- HMD – Hydro-Meteorology Division
- HMTS – Hydro-Met Telemetry Section
- LB – Left Bank
- LST – local standard time
- NIA-UPRIIS – National Irrigation Administration – Upper Pampanga River Integrated Irrigation System
- NCR-PRSD – National Capital Region – PAGASA Regional Services Division
- PAGASA – Philippine Atmospheric, Geophysical and Astronomical Services Administration
- PRB – Pampanga River Basin
- PRFFWC – Pampanga River Basin Flood Forecasting & Warning Center
- Q - discharge
- Racc – accumulated rainfall
- RB – Right Bank
- RR – Rainfall
- SG or S.G. – Staff Gauge
- TBM – Temporary benchmark
- U/S - upstream
- WL – Water Level
- X-sect – cross-section

## Table of Contents:

	Page
<b>Yearbook Notes</b> .....	<b>1</b>
<b>Station Profile</b> .....	<b>2</b>
<b>Scope and Limitations</b> .....	<b>3</b>
<b>Data series issues of 2014</b> .....	<b>4</b>
<b>A. Rainfall Data Summary Presentation</b>	
Daily point rainfall of Muñoz Station .....	<b>6</b>
Daily point rainfall of Sapang Buho Station .....	<b>7</b>
Daily point rainfall of Gabaldon Station .....	<b>8</b>
Daily point rainfall of Zaragoza Station .....	<b>9</b>
Daily point rainfall of Mayapyap Station .....	<b>10</b>
Daily point rainfall of Peñaranda Station .....	<b>11</b>
Daily point rainfall of Calaanan Station .....	<b>12</b>
Daily point rainfall of Palali Station .....	<b>13</b>
Daily point rainfall of San Isidro Station .....	<b>14</b>
Daily point rainfall of Arayat Station .....	<b>15</b>
Daily point rainfall of Candaba Station .....	<b>16</b>
Daily point rainfall of Sibul Springs Station .....	<b>17</b>
Daily point rainfall of Sasmuan Station .....	<b>18</b>
Daily point rainfall of Sulipan Station .....	<b>19</b>
Daily point rainfall of Mexico Station .....	<b>20</b>
Daily point rainfall of Porac Station .....	<b>21</b>
Daily point rainfall of San Rafael Station .....	<b>22</b>
Daily point rainfall of PRFFWC (CSFP) Station .....	<b>23</b>
Monthly Rainfall Summary for 2014 .....	<b>24</b>
Isohyets & Rain-Day distribution .....	<b>24</b>
Monthly rainfall distribution for each station .....	<b>25</b>
<b>B. Water Level Data Summary Presentation</b>	
Water Level daily average of Sapang Buho Station .....	<b>27</b>
Water Level daily average of Zaragoza Station .....	<b>28</b>
Water Level daily average of Mayapyap Station .....	<b>29</b>
Water Level daily average of Peñaranda Station .....	<b>30</b>
Water Level daily average of San Isidro Station .....	<b>31</b>
Water Level daily average of Arayat Station .....	<b>32</b>
Water Level daily average of Candaba Station .....	<b>33</b>
Water Level daily average of Sasmuan Station .....	<b>34</b>
Water Level daily average of Sulipan Station .....	<b>35</b>
Water Level daily average of Mexico Station .....	<b>36</b>
Monthly Maximum WL per station for the year 2014 .....	<b>37</b>
<b>C. Annex</b>	
Maximum rainfall per station for various sliding time period ...	<b>39</b>
Graph of max RR per station for various sliding time period ....	<b>40</b>
Present Flood Warning Assessment levels & WL notes .....	<b>41</b>
Water Level percent duration Curves .....	<b>42-44</b>

**Figures:**

Figure 1a	The Isohyet (RR distribution) for the year 2014 in the PRB .....	24
Figure 1b	Estimated RR days distribution (2014) in the PRB .....	24
Figure 2.0	Monthly RR distribution (hyetograph) for year 2014 for each monitoring stations of PRFFWC in the PRB .....	25
Figure AA-1	The sliding time period per station graph .....	40
Figure AA-2	Sapang Buho WL percent duration curve (2014) .....	42
Figure AA-3	Zaragoza WL percent duration curve (2014) .....	42
Figure AA-4	Arayat WL percent duration curve (2014) .....	43
Figure AA-5	Candaba WL percent duration curve (2014) .....	43
Figure AA-6	Sasmuan WL percent duration curve (2014) .....	44
Figure AA-7	Sulipan WL percent duration curve (2014) .....	44

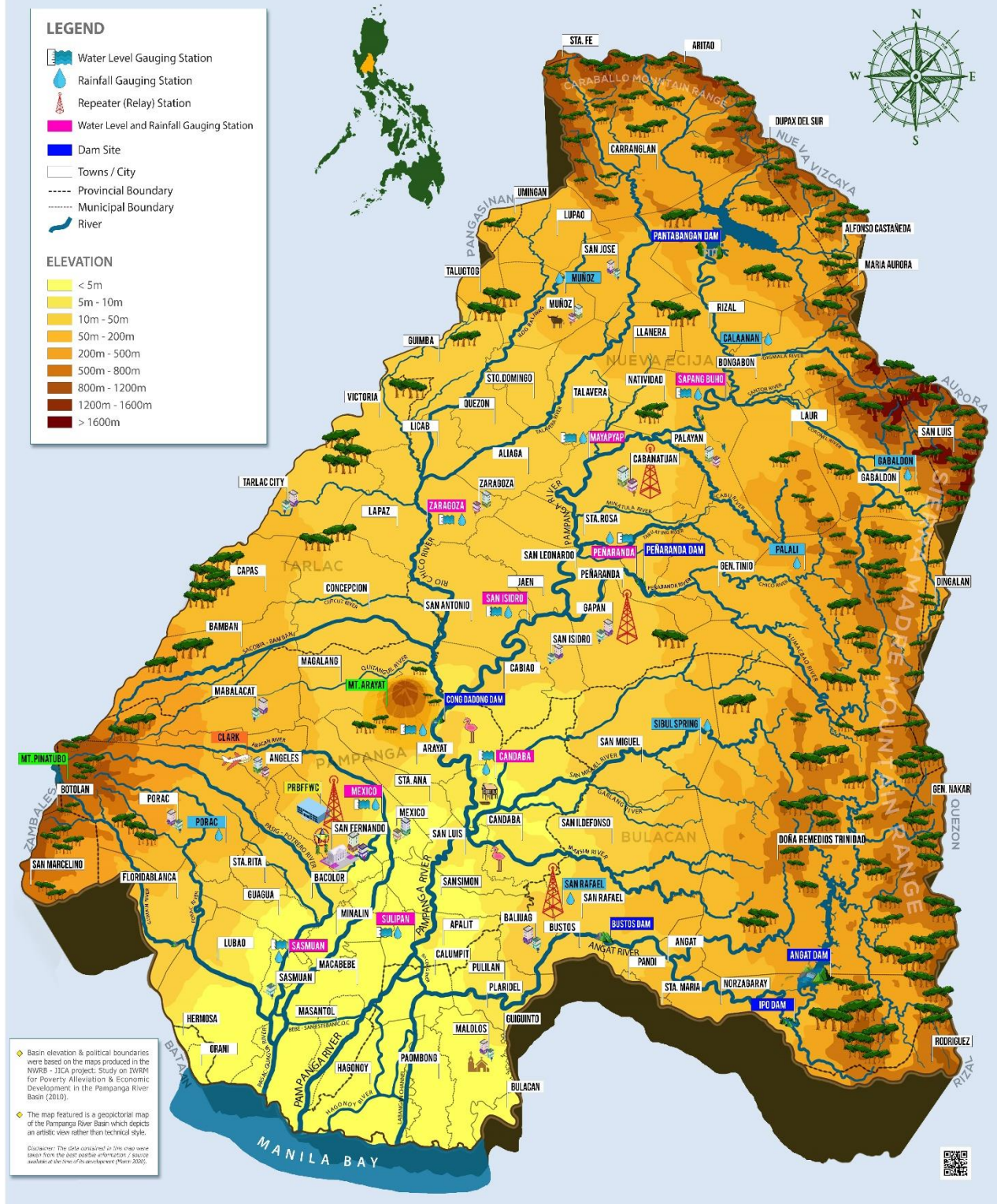
**List of Tables:**

Table 1.0	Monthly RR Summary for 2014 .....	24
Table 2.0	Monthly Maximum WL recorded per station for the year 2014 .....	37
Table A-1	Maximum RR for a given sliding time period per station for the year 2014 .....	39
Table A-2	PRFFWC existing Flood Warning Assessment Levels (SG in meters) .....	41
Table A-3	WL station notes .....	41



*The PRFFWC Telemetry Tower located in the City of San Fernando, Province of Pampanga.*

# PAMPANGA RIVER BASIN ELEVATION MAP



A geopictorial map of the generalized area elevation in the Pampanga River Basin with location of the PRFFWC telemetry stations (as of Feb 2020).



## Yearbook Notes



- This Annual Hydrological Data Summary Yearbook presents a summary of the rainfall and water level data observed and recorded by the telemetry system of the PRFFWC in year 2014.
- The supervisory terminal of the PRFFWC system is the main data series considered for database buildup. This is the immediate real-time data received at the center and the main data reference for operational flood forecasting and warning activities of the PRFFWC.
- The main source for complementing breaks / gaps in the supervisory terminal data series are the telemetry stations' data loggers.
- In most instances, total rainfall shown in the supervisory is (always) equal to the total rainfall in the data logger. However, there were relatively few occasions that they do not agree with one another. Fortunately, differences were not that big, at most it is only 1 to 2 mm difference.
- No attempts were made to fill-in gaps and breaks in the data series when there are no data available in the loggers except only those with relatively short gap periods.
- Obvious and suspected data errors were directly deleted from the data series. However, these were done after doing some data consistency check, reference to field reports, and / or field station instrument validation.
- For further information and clarification on the general buildup of the PRFFWC data series please e-mail us: [prffwc@gmail.com](mailto:prffwc@gmail.com)

## Station Profile

Table of Rainfall and Water Level Stations of the PRFFWC

Station	Station Number	Station Type RR (rainfall) WL (Water Level)	Location	Coordinates (estimated)
	(DEC) 6301XX			
Muñoz	61	Telemetered RR	Within the compound of the Philippine Carabao Center in the Science City of Muñoz, N.E.	15°44'17"N, 120°57'38"E
Sapang Buho	62	Telemetered RR & WL	@ LB of Pampanga River in Bgy. Sapang Buho, Palayan City, Nueva Ecija	15°35'39"N, 121°07'09"E
Gabalton	63	Telemetered RR	Around 450 meters above the natural ground elevation of Bgy. Malinao, Gabaldon, N.E.	15°29'55"N, 121°21'20"E
Zaragoza	64	Telemetered RR & WL	Along the Zaragoza – La Paz road (RB-D/S of the Rio Chico Bridge)	15°26'36"N, 120°45'03"E
Mayapyap	65	Telemetered RR & WL	@ RB-D/S of Gen. Luna Bridge, (Bgys. Mayapyap & Valdefuente) Cabanatuan City, Nueva Ecija	15°30'52"N, 120°57'20"E
Peñaranda	66	Telemetered RR & WL	@ LB-D/S side of the bridge, around 550 meters D/S of Peñaranda River Irrigation Dam at Bgy. Uno, Poblacion, Peñaranda, N.E.	15°21'14"N, 121°00'20"E
Calaanan	67	Telemetered RR	Inside the Pesa Elementary School compound, Purok 2, Bgy. Pesa, Bongabon, N.E.	15°38'53"N, 121°11'09"E
Palali	68	Telemetered RR	Within Nueva Ecija Stock Farm in Bgy. Nazareth, Gen. Tinio, N.E.	15°22'50"N, 121°9'41"E
San Isidro	71	Telemetered RR & WL	@ the RB-D/S side of the San Isidro-Jaen Bridge, San Isidro, N.E.	15°18'49"N, 120°54'09"E
Arayat	72	Telemetered RR & WL	@ RB-D/S side of San Agustin Bridge, Arayat, Pampanga	15°10'06"N, 120°46'56"E
Candaba	73	Telemetered RR & WL	Along Candaba-San Miguel road (Dukma) at Bgy. Paralaya, Candaba, Pampanga	15°06'56"N, 120°51'01"E
Sibul Spring	74	Telemetered RR	Bgy. Sibul, San Miguel, Bulacan	15°10'05"N, 121°03'33"E
Sasmuan	75	Telemetered RR & WL	Bgy. Sta. Lucia (Poblacion), Sasmuan, Pampanga	14°56'11"N, 120°37'23"E
Sulipan	76	Telemetered RR & WL	@ RB of Pampanga River at Bgy. Sulipan, Apalit, Pampanga	14°56'21"N, 120°45'39"E
Mexico	77	Telemetered RR & WL	LB-D/S of Mexico Bridge No. 2, Bgy. Sto. Rosario, Mexico, Pampanga	15°04'05"N, 120°43'51"E
Porac	78	Telemetered RR	Within the municipal compound property, Bgy. Cangatba, Porac, Pampanga	15°04'48"N, 120°32'43"E
San Rafael	90	Telemetered RR (Repeater)	NIA compound, Bgy. Sabang, Baliwag, Bulacan	14°58'05"N, 120°54'52"E
Cabanatuan	89	Repeater station (no hydrological data reporting)	Within the NIA-UPRIIS Compound, Cabanatuan City	15°28'33"N, 120°57'30"E
PRFFWC (CSFP)		Digital tipping-bucket / manually recorded	PRFFWC area compound besides DOST-3, DMGC, Bgy. Maimpis, CSFP	15°04'04"N, 120°39'22"E

## Scope and Limitations

1. This Data Yearbook presents the hydrological data summary of the 18 rainfall stations and 10 water level stations of the PRFFWC for the year 2014.
2. The rainfall and water level dataset in this report covers the period starting from the past 1-hour observation ending at 0900H of January 01, 2014, and will end at 0800H of 01 January 2015.
3. Accordingly, it follows a 24-hour daily total (or average for WL) which starts at (practically) 0801H of the present day and ends at 0800H of the following day (meteorological day); Water level summary values for maximum data are reported as per instantaneous observed value from the dataset but the average value is taken using the same reporting time period as in total rainfall for a met day.
4. The shortest time period considered in this summary report is 1 hour.
5. Units used for some of the hydrological elements:
  - a. Rainfall – millimeters (mm)
  - b. Water Level (River Stage) – meters (m)
  - c. Cross-sectional area – square meter (m<sup>2</sup>)
  - d. River Discharge – cubic meters per second or cumecs (m<sup>3</sup>/sec)
  - e. Rainfall day – rain-days
6. The minimum rainfall amount for telemetry stations is 1 mm; and for the rainfall observations in PRFFWC in CSFP, the minimum is 0.25 mm;
7. Rain-day is considered as a day with at least 1 mm of rainfall for telemetry stations; and at least 0.25 mm for PRFFWC in CSFP station;
8. The hydrological data summary presented in this yearbook are the daily rainfall observations (met day total), monthly rainfall and average, maximum rainfall total of various periods, and total rain-days per month; the daily water level averages (met day), maximum stage for each month and other regular information that were extracted from the available data series of each station.
9. For the daily rainfall presentation table, yellow shaded cell indicates rainfall values between 1 to 60 mm for telemetry stations (0.25 to 60.0 for PRFFWC-CSFP station); pink shade cells from 61 to 180 mm (60.25 to 180.0 for PRFFWC-CSFP station); light-red shade cells for values greater than 180 mm. Likewise, for water level summary, cell shades are in a graded color scale from a white shade to a regular semi-orange shade that is relative to an increase in water level values. Thus, a “0.00” value (minimum) is white and maximum value within the table will be orange shaded. In the summary below the daily value tables (the daily rainfall and in the average daily water level tables) a green shaded cell indicates the maximum value in their respective rows.

*Disclaimer: The dataset summary presented herein have been processed and validated through several steps using the best possible means available to the PRFFWC at the time of processing. However, still it is possible that results may contain inadvertent errors such as typographical in nature, errors resulting from possible misuse of excel formulae, and other similar factors. The summary information in this yearbook report may be revised as new analyses emerge.*

*Users noting any errors that they may have encountered in this report are requested to inform the PRFFWC. Furthermore, users may use the information contained herein at their own risk.*

## Data Series Issues of 2014

1. January: No data for Mayapyap WL for the whole month; Peñaranda & San Isidro WL are all zero for the whole month; All RR stations are zero for the whole month except for Sulipan RR.
2. February: No data for Mayapyap RR & WL for the whole month; Peñaranda & San Isidro WL are all zero for the whole month; Several RR stations registered zero rainfall for the whole month (Muñoz, Sapang Buho, Zaragoza, Peñaranda, Calaanan, San Isidro, & Sulipan).
3. March: No data for Mayapyap WL for the whole month; San Isidro WL is zero for the whole month.
4. April: No data for Mayapyap WL for the whole month while Sapang Buho, Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan WL adjusted on 2000H of 14th with eye-fit connection at the start with varying adjustments from -0.50 meters to about -0.06 m to the supervisory reading; after this, at 0600H, 16, a +.50m was added to the telemetry reading onwards... adjustments were made at this time but no documentation / records to support this... data series turned from previously a sinusoidal wave to a more abrupt up-down wave response; it is believed that the sensor may have been replaced at this period (no reports from HMTS).
5. May: No data for Mayapyap WL for the whole month; Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.51 for the whole month.
6. June: No data for Mayapyap WL for the whole month; Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.52 for the whole month.
7. July: Mayapyap WL is zero for the whole month; Sasmuan WL adjusted by +0.52 for the whole month. Sasmuan supervisory WL adjusted by +0.53 for the whole month.
8. August: Mayapyap RR & WL were out of order 2300H, 28 & 1200H, 29, respectively; Sasmuan supervisory WL adjusted by +0.54 for the whole month.
9. September: Mayapyap RR have breaks in series (0000H, 11 to 0000H, 13) & for WL (1000H to 1600H, 24); some eye-fit adjustments in 1 or 2 points in Mayapyap WL (0000H, 11 to 2300H, 14); Sasmuan supervisory WL adjusted by +0.55 for the whole month.
10. October: Sasmuan supervisory WL adjusted by +0.56 for the whole month; Mayapyap RR breaks in data series (0400H, 18 to 1300H, 21; 0100H, 26 to 0800H of Nov. 01); San Rafael RR - break at 0400H, 18 to 1100H, 23; San Isidro WL is zero for the whole month.
11. November: Sasmuan supervisory WL adjusted by +0.57 for the whole month; Mayapyap and San Isidro WL are zero for the whole month; Sulipan RR – doubtful for the month.
12. December: Sasmuan supervisory WL adjusted by +0.58 for the whole month; Sulipan RR is zero whole month and seems erroneous, was not included in the data series; Mayapyap WL - zero for the whole month; Arayat WL have zero readings that may be attributed possibly to Cong Dadong Dam.

## A. RAINFALL Data Summary Presentation



## Daily Point Rainfall in millimeters (meteorological day)

2014

Station:

Muñoz

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	10	9	4	0	0
2	0	0	0	0	0	0	0	5	15	4	0	0
3	0	0	0	0	0	0	5	3	89	10	0	0
4	0	0	0	0	0	0	11	4	1	88	1	0
5	0	0	0	0	0	0	59	9	0	0	0	0
6	0	0	0	0	0	3	43	1	0	10	0	0
7	0	0	0	0	0	0	22	0	0	0	0	0
8	0	0	0	0	0	27	48	0	14	16	0	3
9	0	0	0	0	0	0	16	0	29	0	0	2
10	0	0	0	0	37	1	0	0	0	3	0	0
11	0	0	0	0	0	6	0	0	0	33	0	0
12	0	0	0	0	0	34	0	0	0	0	0	0
13	0	0	0	38	0	0	0	0	22	16	0	0
14	0	0	0	0	0	1	21	0	98	2	0	0
15	0	0	0	0	0	0	29	0	1	0	0	24
16	0	0	0	0	0	2	26	11	0	0	0	8
17	0	0	0	0	0	14	0	11	0	6	0	0
18	0	0	0	0	0	42	7	1	4	11	0	0
19	0	0	0	0	0	5	13	0	57	0	0	0
20	0	0	0	0	0	1	0	28	2	0	0	0
21	0	0	0	0	10	1	8	66	23	0	0	0
22	0	0	0	0	4	0	5	1	0	0	0	0
23	0	0	0	0	4	4	1	0	0	0	0	0
24	0	0	13	0	0	7	0	0	5	0	0	9
25	0	0	7	0	0	0	4	45	4	0	0	0
26	0	0	0	0	11	12	10	27	28	0	0	0
27	0	0	0	0	12	0	0	0	0	0	25	0
28	0	0	0	5	0	0	0	6	0	0	0	0
29	0		0	33	0	0	0	19	0	6	2	0
30	0		0	2	16	23	23	0	0	0	1	0
31	0		0		3		59	0		0		0

Monthly Total	0	0	20	78	97	183	410	247	401	209	29	46
Average	0.00	0.00	0.65	2.60	3.13	6.10	13.23	7.97	13.37	6.74	0.97	1.48
Max daily rain	0	0	13	38	37	42	59	66	98	88	25	24
Day of Max Daily	1	1	24	13	10	18	5	21	14	4	27	15
No. of Rain days	0	0	2	4	8	16	19	16	16	13	4	5
Max 1-hr rain			5	22	24	28	33	42	46	44	8	7
Day of max 1-hr			25	30	10	12	31	26	3	4	28	24

Total rain for the year

1720

Total rain days for the year

103

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Sapang_Buho											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	1	0	15	0	0
2	0	0	0	0	0	0	24	34	1	0	0	0
3	0	0	0	0	0	0	97	21	5	4	0	0
4	0	0	0	0	0	0	0	5	0	16	0	0
5	0	0	0	0	0	0	8	1	3	0	0	0
6	0	0	0	0	0	2	5	1	0	13	0	0
7	0	0	0	0	0	28	31	0	0	10	0	0
8	0	0	0	0	0	22	1	14	20	0	0	6
9	0	0	0	0	0	0	1	0	44	0	0	4
10	0	0	0	0	0	0	2	0	2	0	0	0
11	0	0	0	0	0	10	0	0	0	0	0	0
12	0	0	0	0	0	16	0	0	0	4	0	0
13	0	0	0	0	0	0	0	0	54	0	0	0
14	0	0	0	0	0	1	15	0	83	25	0	0
15	0	0	0	0	0	0	28	0	3	0	0	22
16	0	0	0	0	0	10	37	8	0	0	2	1
17	0	0	0	0	0	4	10	8	7	17	0	0
18	0	0	0	0	0	1	28	34	4	19	0	0
19	0	0	0	0	0	1	23	10	62	0	0	0
20	0	0	0	0	7	6	5	0	7	0	0	0
21	0	0	0	0	0	0	54	1	2	1	0	0
22	0	0	0	0	28	0	3	4	1	0	0	0
23	0	0	0	0	0	1	4	0	4	0	0	0
24	0	0	14	0	0	0	7	0	6	0	0	7
25	0	0	17	0	1	1	0	20	1	0	0	0
26	0	0	0	0	17	14	39	24	0	0	0	0
27	0	0	0	0	0	9	19	2	0	0	28	0
28	0	0	0	30	3	0	0	17	0	1	0	0
29	0		0	0	50	0	0	30	12	6	1	0
30	0		0	0	0	90	3	0	0	0	2	0
31	0		0		0		10	0		0		0

Monthly Total	0	0	31	30	106	216	454	235	321	131	33	40
Average	0.00	0.00	1.00	1.00	3.42	7.20	14.65	7.58	10.70	4.23	1.10	1.29
Max daily rain	0	0	17	30	50	90	97	34	83	25	28	22
Day of Max Daily	1	1	25	28	29	30	3	2	14	14	27	15
No. of Rain days	0	0	2	1	6	16	23	18	19	12	4	5
Max 1-hr rain			6	18	45	45	74	33	26	11	10	5
Day of max 1-hr			25	28	29	31	3	18	13	1	27	24

Total rain for the year	1597
Total rain days for the year	106

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Gabaldon											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	10	0	0	0	3	0	19	3	3	0	2
2	0	0	0	0	0	9	0	10	9	0	0	1
3	0	0	0	0	0	4	35	10	36	9	0	0
4	0	0	0	0	0	15	4	6	8	0	0	0
5	0	0	0	0	0	0	0	14	5	5	0	0
6	0	0	0	0	0	34	5	0	1	14	0	0
7	0	0	0	0	0	15	31	14	0	0	0	0
8	0	0	0	1	0	4	1	2	47	1	0	47
9	0	0	0	0	1	19	1	4	71	0	0	50
10	0	0	0	0	0	14	1	0	12	0	0	0
11	0	0	1	0	0	20	0	0	0	0	0	0
12	0	0	0	0	0	15	0	0	0	2	0	0
13	0	0	0	0	0	0	0	0	133	25	0	3
14	0	0	0	0	0	0	0	0	100	18	0	3
15	0	0	0	0	0	3	138	0	2	0	4	42
16	0	0	0	0	0	0	60	13	0	0	0	0
17	0	0	0	0	0	0	6	1	0	27	1	0
18	0	0	0	0	0	1	12	0	9	25	0	0
19	0	0	0	0	0	2	56	0	75	0	0	0
20	0	0	0	0	0	0	0	0	1	8	0	2
21	0	0	0	0	0	3	9	7	0	0	0	0
22	0	0	0	0	0	0	10	12	0	0	0	0
23	0	0	0	0	0	0	13	1	0	2	0	0
24	0	0	51	0	0	0	3	3	0	0	0	13
25	0	1	31	4	0	0	44	60	0	0	0	0
26	0	0	0	0	0	18	36	54	1	0	0	0
27	0	0	0	0	21	3	1	1	0	0	78	0
28	0	0	0	38	0	0	1	50	0	5	0	0
29	0		0	0	10	13	1	27	1	8	11	0
30	0		0	0	0	0	8	0	0	0	6	0
31	0		0		0		24	3		0		0

Monthly Total	0	11	83	43	32	195	500	311	514	152	100	163
Average	0.00	0.39	2.68	1.43	1.03	6.50	16.13	10.03	17.13	4.90	3.33	5.26
Max daily rain	0	10	51	38	21	34	138	60	133	27	78	50
Day of Max Daily	1	1	24	28	27	6	15	25	13	17	27	9
No. of Rain days	0	2	3	3	3	18	23	20	17	14	5	9
Max 1-hr rain		2	15	35	21	24	39	35	32	9	13	13
Day of max 1-hr		1	25	28	27	6	16	26	9	6	28	9

Total rain for the year	2104
Total rain days for the year	117



## Daily Point Rainfall in millimeters (meteorological day)

2014		Station: Zaragoza										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	7	11	0	6	0	0
2	0	0	0	0	0	0	0	5	5	0	0	0
3	0	0	0	0	1	4	18	24	14	13	0	0
4	0	0	0	0	0	0	26	14	0	26	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	1	0	0	0	0	0	0
7	0	0	0	0	0	0	7	0	0	0	0	0
8	0	0	0	0	0	12	15	0	30	16	0	0
9	0	0	0	41	0	1	9	0	53	0	0	5
10	0	0	0	0	0	2	0	0	4	0	0	0
11	0	0	0	0	0	20	0	0	0	78	0	0
12	0	0	0	0	0	22	0	0	0	0	0	0
13	0	0	0	0	0	1	0	0	22	0	0	0
14	0	0	0	0	0	4	12	0	76	20	0	0
15	0	0	0	0	0	0	64	0	3	0	0	4
16	0	0	0	0	0	0	5	3	0	0	0	1
17	0	0	0	0	0	0	1	2	0	15	0	0
18	0	0	0	0	0	3	22	16	3	9	0	0
19	0	0	0	0	18	1	8	0	45	0	0	0
20	0	0	0	0	0	1	0	11	0	0	0	0
21	0	0	0	0	4	2	22	43	1	0	0	0
22	0	0	0	0	9	3	10	0	1	0	0	0
23	0	0	0	0	0	0	10	0	0	15	0	0
24	0	0	1	0	0	2	2	0	10	0	0	11
25	0	0	2	2	4	21	2	51	1	0	0	0
26	0	0	0	22	32	21	85	3	0	0	0	0
27	0	0	0	7	0	7	1	0	0	0	16	0
28	0	0	0	0	0	0	0	16	0	0	0	0
29	0		0	0	14	0	0	20	0	0	0	0
30	0		0	17	8	0	8	0	0	0	0	0
31	0		0		4		10	1		0		0

Monthly Total	0	0	3	89	94	128	344	220	268	198	16	21
Average	0.00	0.00	0.10	2.97	3.03	4.27	11.10	7.10	8.93	6.39	0.53	0.68
Max daily rain	0	0	2	41	32	22	85	51	76	78	16	11
Day of Max Daily	1	1	25	9	26	12	26	25	14	11	27	24
No. of Rain days	0	0	2	5	9	18	21	14	14	9	1	4
Max 1-hr rain			2	35	30	20	42	41	28	40	5	8
Day of max 1-hr			25	9	26	25	26	21	8	11	27	24

Total rain for the year	1381
Total rain days for the year	97

**Daily Point Rainfall in millimeters (meteorological day)**

**2014** Station: **Mayapyap**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1								3		15	0	0
2								45		0	0	0
3								23		22	0	0
4								6		8	0	0
5								1	0	0	0	0
6								0	0	3	0	0
7								0	0	8	0	0
8								3	8	0	0	3
9								0	34	0	0	9
10							0	0	0	0	0	0
11							14	0		7	0	0
12							0	0	0	0	0	0
13							0	0	45	0	0	0
14							37	0	56	12	0	0
15							41	0	0	2	0	17
16							7	10	1	0	0	0
17							1	34	0	4	0	0
18							24	15	7		0	0
19							19	0	50		0	0
20							0	6	16		0	0
21							38	17	0	2	0	0
22							8	1	13	0	0	0
23							9	0	0	0	0	0
24							4	0	0	0	0	14
25							0	19	0	0	0	0
26							32	13	0		0	0
27							58	0	0		22	0
28							8	7	7		0	0
29							0		0		1	0
30							0		0		2	0
31							13					0

Monthly Total							313	203	237	83	25	43
Average							14.23	7.25	9.48	3.77	0.83	1.39
Max daily rain							58	45	56	22	22	17
Day of Max Daily							27	2	14	3	27	15
No. of Rain days							15	15	10	10	3	4
Max 1-hr rain							47	25	19	12	5	13
Day of max 1-hr							27	2	13	3	28	24

<b>Total rain for the year</b>	<b>904</b>
<b>Total rain days for the year</b>	<b>57</b>

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Peñaranda											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	12	3	45	0	0
2	0	0	0	0	0	0	4	4	2	2	0	0
3	0	0	0	0	0	0	33	22	42	37	0	0
4	0	0	0	0	0	0	2	2	2	14	0	0
5	0	0	0	0	0	0	0	10	5	0	0	0
6	0	0	0	0	0	0	7	0	0	0	0	0
7	0	0	0	0	0	0	18	0	0	6	0	0
8	0	0	0	0	0	4	1	0	16	1	0	7
9	0	0	0	0	0	0	17	0	26	0	0	14
10	0	0	0	0	30	0	0	6	5	0	0	0
11	0	0	0	0	0	27	11	0	0	0	0	0
12	0	0	0	0	0	24	0	0	0	15	0	0
13	0	0	0	0	0	0	0	0	107	1	0	2
14	0	0	0	0	0	0	13	0	82	11	0	0
15	0	0	0	0	0	0	32	0	3	0	2	6
16	0	0	0	0	0	15	2	21	0	0	0	0
17	0	0	0	0	0	2	10	5	9	33	0	0
18	0	0	0	0	7	2	11	2	5	9	0	0
19	0	0	0	0	0	0	14	3	96	0	0	0
20	0	0	0	0	4	15	0	0	0	4	0	0
21	0	0	0	0	4	1	6	3	4	2	0	0
22	0	0	0	0	12	0	10	0	0	0	0	0
23	0	0	0	6	0	0	15	0	0	0	0	0
24	0	0	8	0	0	0	11	1	0	3	0	8
25	0	0	4	0	1	5	0	114	0	0	0	0
26	0	0	0	0	33	28	53	8	22	0	0	0
27	0	0	0	0	7	0	15	0	0	0	40	0
28	0	0	0	6	0	1	0	36	12	0	0	0
29	0		0	55	21	0	10	40	1	0	2	0
30	0		0	1	0	0	4	1	0	0	0	0
31	0		0		0		17	34		0		0

Monthly Total	0	0	12	68	119	124	316	324	442	183	44	37
Average	0.00	0.00	0.39	2.27	3.84	4.13	10.19	10.45	14.73	5.90	1.47	1.19
Max daily rain	0	0	8	55	33	28	53	114	107	45	40	14
Day of Max Daily	1	1	24	29	26	26	26	25	13	1	27	9
No. of Rain days	0	0	2	4	9	11	23	18	18	14	3	5
Max 1-hr rain			4	23	30	16	29	62	27	39	15	7
Day of max 1-hr			25	29	10	11	26	26	13	1	27	9

Total rain for the year	1669
Total rain days for the year	107

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Calaanan											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	2	0	15	0	0
2	0	0	0	0	0	0	2	27	1	2	0	0
3	0	0	6	0	0	0	19	15	11	3	0	0
4	0	0	0	0	3	2	5	10	3	67	0	0
5	0	0	0	0	0	0	15	0	0	6	0	0
6	0	0	0	0	0	33	7	0	1	2	0	0
7	0	0	0	0	0	15	18	2	0	8	0	0
8	0	0	0	0	0	20	3	11	14	0	0	24
9	0	0	0	0	0	0	0	0	79	36	0	1
10	0	0	0	0	0	0	0	0	3	5	0	0
11	0	0	0	0	0	8	0	0	0	0	0	0
12	0	0	0	0	0	15	0	0	0	0	0	0
13	0	0	0	0	0	0	6	0	53	0	0	0
14	0	0	0	0	0	3	13	0	77	15	0	0
15	0	0	0	0	0	1	60	0	3	0	0	29
16	0	0	0	0	0	4	31	8	0	0	0	8
17	0	0	0	0	0	13	14	9	0	20	0	0
18	0	0	0	0	0	6	54	10	7	18	0	0
19	0	0	0	0	0	14	31	0	71	0	0	0
20	0	0	0	0	0	11	20	0	26	1	0	3
21	0	0	0	0	0	1	5	0	7	0	0	0
22	0	0	0	0	0	0	7	3	19	0	0	0
23	0	0	34	0	0	0	14	6	0	0	0	0
24	0	0	32	0	0	0	7	0	0	0	0	7
25	0	0	0	3	1	0	1	32	0	0	0	0
26	0	0	0	0	16	27	13	55	0	0	0	0
27	0	0	0	0	6	2	4	0	0	0	47	0
28	0	0	0	4	37	0	0	12	0	2	0	0
29	0		0	0	32	0	0	24	18	12	7	0
30	0		0	0	0	15	13	0	0	0	1	0
31	0		0		0		7	1		0		0

Monthly Total	0	0	72	7	95	190	369	227	393	212	55	72
Average	0.00	0.00	2.32	0.23	3.06	6.33	11.90	7.32	13.10	6.84	1.83	2.32
Max daily rain	0	0	34	4	37	33	60	55	79	67	47	29
Day of Max Daily	1	1	23	28	28	6	15	26	9	4	27	15
No. of Rain days	0	0	3	2	6	17	24	16	16	15	3	6
Max 1-hr rain			16	2	36	18	28	28	28	31	15	12
Day of max 1-hr			25	25	28	6	18	26	9	4	28	15

Total rain for the year	1692
Total rain days for the year	108

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Palali											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	1	0	0	0	0	0	9	9	25	0	1
2	0	0	0	0	0	0	0	1	4	1	0	1
3	0	0	0	0	0	0	84	22	32	5	0	0
4	0	0	0	0	1	1	2	1	10	11	0	0
5	0	0	0	0	0	0	1	8	13	1	0	0
6	0	0	0	0	0	40	8	0	2	8	0	0
7	0	0	0	0	0	16	20	0	0	10	0	0
8	0	0	0	0	0	0	2	0	9	2	0	15
9	0	0	0	0	0	1	0	5	51	42	0	12
10	0	0	0	0	10	10	4	0	5	0	0	0
11	0	0	0	0	0	16	1	0	0	3	0	0
12	0	0	0	0	0	22	0	0	0	2	0	0
13	0	0	0	0	0	0	0	1	88	9	0	0
14	0	0	0	0	6	1	0	0	72	14	1	0
15	0	0	0	0	0	0	21	0	0	1	4	10
16	0	0	0	0	0	25	16	23	0	0	0	0
17	0	0	0	0	0	2	1	5	6	41	0	0
18	0	0	0	0	0	6	2	0	33	16	0	0
19	0	0	0	0	0	2	11	0	59	0	0	0
20	0	0	0	0	58	1	3	1	0	16	0	0
21	0	0	0	0	0	1	0	1	0	0	0	0
22	0	0	0	0	0	0	2	0	0	13	0	0
23	0	0	0	0	0	0	4	10	0	1	0	2
24	0	0	27	0	0	0	0	0	17	0	0	3
25	0	1	5	0	0	7	10	49	12	0	0	0
26	0	0	0	0	42	20	24	35	24	0	0	0
27	0	0	0	0	43	1	11	0	0	0	39	0
28	0	0	0	22	0	1	0	0	1	0	0	0
29	0		0	0	2	0	0	19	3	3	2	0
30	0		0	1	0	0	1	0	1	0	3	0
31	0		0		0		21	1		0		0

Monthly Total	0	2	32	23	162	173	249	191	451	224	49	44
Average	0.00	0.07	1.03	0.77	5.23	5.77	8.03	6.16	15.03	7.23	1.63	1.42
Max daily rain	0	1	27	22	58	40	84	49	88	42	39	15
Day of Max Daily	1	1	24	28	20	6	3	25	13	9	27	8
No. of Rain days	0	2	2	2	7	18	21	16	20	20	5	7
Max 1-hr rain		1	5	21	40	36	27	19	34	37	11	5
Day of max 1-hr		2	25	28	21	6	4	26	13	6	27	9

Total rain for the year	1600
Total rain days for the year	120

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: San Isidro											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	2	13	25	18	0	0
2	0	0	0	0	0	0	8	1	1	0	1	0
3	0	0	0	0	0	0	22	9	67	8	0	0
4	0	0	0	0	0	0	3	3	2	0	0	0
5	0	0	0	0	0	2	0	5	0	0	0	0
6	0	0	0	0	0	0	0	0	0	1	0	0
7	0	0	0	0	0	1	0	0	0	13	0	0
8	0	0	0	0	0	2	2	0	15	0	0	2
9	0	0	0	0	20	0	23	0	24	0	0	5
10	0	0	0	0	0	1	0	0	10	0	0	0
11	0	0	0	0	0	10	6	0	0	0	0	0
12	0	0	0	0	0	24	0	0	0	0	0	0
13	0	0	0	0	0	2	0	0	72	0	0	1
14	0	0	0	0	0	1	8	0	70	3	0	0
15	0	0	0	0	0	0	34	0	2	0	5	2
16	0	0	0	0	0	0	1	5	0	0	0	1
17	0	0	0	0	0	0	5	13	0	26	0	0
18	0	0	0	0	3	10	1	1	3	5	0	0
19	0	0	0	0	0	6	6	0	59	0	0	0
20	0	0	0	0	0	16	0	0	0	0	0	0
21	0	0	0	0	5	0	18	27	0	0	0	0
22	0	0	0	0	7	0	12	0	0	0	0	0
23	0	0	0	1	0	0	16	0	0	0	0	0
24	0	0	1	0	0	0	15	0	0	0	0	4
25	0	0	2	0	0	3	3	43	0	0	0	0
26	0	0	0	0	17	19	18	4	7	0	0	0
27	0	0	0	0	0	3	3	0	0	0	28	0
28	0	0	0	36	0	0	0	33	65	0	0	0
29	0		0	3	26	0	6	39	0	0	2	0
30	0		0	16	9	0	15	0	0	0	1	0
31	0		0		0		18	10		0		0

Monthly Total	0	0	3	56	87	100	245	206	422	74	37	15
Average	0.00	0.00	0.10	1.87	2.81	3.33	7.90	6.65	14.07	2.39	1.23	0.48
Max daily rain	0	0	2	36	26	24	34	43	72	26	28	5
Day of Max Daily	1	1	25	28	29	12	15	25	13	17	27	9
No. of Rain days	0	0	2	4	7	14	23	14	14	7	5	6
Max 1-hr rain			1	18	19	9	13	24	38	12	8	2
Day of max 1-hr			25	28	29	12	16	26	28	7	27	9

Total rain for the year	1245
Total rain days for the year	96

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Arayat											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	16	3	15	0	22	0	1
2	0	0	0	0	0	0	24	3	5	0	0	0
3	0	0	0	0	4	0	16	6	24	1	0	0
4	0	0	0	0	0	0	15	6	8	0	0	0
5	0	0	0	0	0	0	0	5	13	0	0	0
6	0	0	0	0	0	0	2	0	4	0	0	0
7	0	0	0	0	0	2	0	0	0	10	0	0
8	0	0	0	0	0	1	1	0	5	0	0	9
9	0	0	0	0	1	1	11	0	16	0	0	2
10	0	0	0	0	1	3	0	0	27	0	0	0
11	0	1	0	0	0	18	2	0	4	1	0	0
12	0	0	0	0	0	42	11	0	0	1	0	0
13	0	0	0	1	0	2	0	0	68	0	0	0
14	0	0	0	0	0	0	0	0	54	1	0	0
15	0	0	0	0	0	0	16	0	5	3	8	4
16	0	0	0	0	0	0	17	11	0	0	0	4
17	0	0	0	0	0	1	13	1	0	18	0	0
18	0	0	0	0	1	9	2	0	8	2	0	0
19	0	0	0	0	0	7	26	0	106	0	0	0
20	0	0	0	0	0	8	23	0	2	0	0	0
21	0	0	0	0	61	0	46	9	0	0	0	0
22	0	0	0	0	0	0	18	23	0	0	0	0
23	0	0	0	5	0	5	12	0	8	0	0	0
24	0	0	2	0	0	0	12	35	0	0	0	6
25	0	0	0	0	1	0	0	33	0	0	0	0
26	0	0	0	0	0	49	16	7	0	0	0	0
27	0	0	0	0	0	1	3	3	0	0	21	0
28	0	0	0	0	11	1	2	30	3	0	0	0
29	0		0	0	0	0	0	12	22	0	0	0
30	0		0	8	0	0	0	2	0	0	1	0
31	0		0		0		9	0		0		0

Monthly Total	0	1	2	14	80	166	300	201	382	59	30	26
Average	0.00	0.04	0.06	0.47	2.58	5.53	9.68	6.48	12.73	1.90	1.00	0.84
Max daily rain	0	1	2	8	61	49	46	35	106	22	21	9
Day of Max Daily	1	11	24	30	21	26	21	24	19	1	27	8
No. of Rain days	0	1	1	3	7	16	23	16	18	9	3	6
Max 1-hr rain		1	1	5	35	29	28	28	32	10	6	4
Day of max 1-hr		11	24	31	21	26	21	25	19	1	15	16

Total rain for the year	1261
Total rain days for the year	103

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Candaba											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	3	12	23	50	0	0
2	0	0	0	0	0	0	5	1	3	0	42	0
3	0	0	0	0	1	0	11	5	8	2	0	0
4	0	0	0	0	0	0	30	24	4	0	0	0
5	0	0	0	0	0	0	0	5	35	0	0	0
6	0	0	0	0	0	0	11	0	0	6	0	0
7	0	0	0	0	0	4	0	0	0	0	0	0
8	0	0	0	0	0	0	2	0	8	0	0	12
9	0	0	0	0	10	7	20	0	12	0	0	1
10	0	0	0	0	0	6	0	0	21	3	0	0
11	0	0	0	0	0	9	3	0	7	42	0	0
12	0	0	0	0	0	28	14	0	0	0	0	0
13	0	0	0	48	0	1	0	0	58	0	0	0
14	0	0	0	0	0	4	8	31	52	13	0	0
15	0	0	0	0	0	0	25	0	8	6	3	1
16	0	0	0	0	0	0	12	30	0	0	0	0
17	0	0	0	0	0	2	13	1	0	23	0	0
18	0	0	0	0	0	12	0	0	7	1	0	0
19	0	0	0	0	0	21	24	0	72	0	0	0
20	0	0	0	0	0	9	8	0	10	9	0	0
21	0	0	0	0	23	0	8	0	0	4	0	0
22	0	0	0	0	0	0	16	2	4	4	0	0
23	0	0	0	0	0	0	16	0	0	1	0	0
24	0	0	4	0	0	0	15	2	0	0	0	8
25	0	1	0	1	14	0	0	51	0	0	0	0
26	0	0	0	0	1	6	56	6	0	0	0	0
27	0	0	0	0	0	9	0	22	0	0	24	0
28	0	0	0	0	3	0	1	15	2	0	0	0
29	0		0	1	0	0	0	13	5	0	0	0
30	0		0	16	5	0	1	0	0	0	3	0
31	0		0		0		14	0		0		0

Monthly Total	0	1	4	66	57	118	316	220	339	164	72	22
Average	0.00	0.04	0.13	2.20	1.84	3.93	10.19	7.10	11.30	5.29	2.40	0.71
Max daily rain	0	1	4	48	23	28	56	51	72	50	42	12
Day of Max Daily	1	25	24	13	21	12	26	25	19	1	2	8
No. of Rain days	0	1	1	4	7	13	23	15	18	13	4	4
Max 1-hr rain		1	1	48	15	17	36	26	24	29	25	4
Day of max 1-hr		26	24	13	21	20	26	14	13	1	2	9

Total rain for the year	1379
Total rain days for the year	103



## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Sibul_Springs											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	24	0	2	13	2	47	0	3
2	0	0	0	0	0	0	7	7	4	4	0	0
3	0	0	0	0	0	9	37	23	33	5	0	0
4	0	0	0	0	0	11	10	20	5	11	0	0
5	0	0	0	0	0	0	0	2	1	6	0	0
6	0	0	0	0	0	11	3	0	0	2	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	2	2	1	10	0	12	1	0	34
9	0	0	0	0	12	23	0	0	15	5	0	2
10	0	0	0	0	0	8	1	0	17	0	0	0
11	0	0	2	0	0	14	1	0	0	0	0	0
12	0	0	0	0	0	40	0	0	0	30	0	0
13	0	0	0	0	0	0	1	0	121	0	0	0
14	0	0	0	0	0	0	2	0	84	20	0	0
15	0	0	0	0	0	0	51	0	1	2	15	6
16	0	0	0	0	0	13	0	9	0	0	0	1
17	0	0	0	0	0	15	12	2	12	39	0	0
18	0	0	0	0	0	42	2	0	28	4	0	0
19	0	0	0	0	0	5	33	11	80	0	0	0
20	0	0	0	0	0	3	55	0	14	1	0	0
21	0	0	0	0	9	0	2	1	0	6	0	0
22	0	0	0	0	2	0	18	0	0	1	0	0
23	0	0	0	0	0	0	15	1	16	5	0	0
24	0	0	15	0	0	0	45	18	1	0	0	6
25	0	1	0	0	0	12	0	43	0	0	0	0
26	0	0	0	6	44	13	36	3	0	0	2	0
27	0	0	0	0	0	9	2	1	0	0	40	0
28	0	0	0	0	10	0	1	33	1	1	0	0
29	0		0	0	0	0	3	62	1	3	16	0
30	0		0	0	3	0	2	4	0	0	0	0
31	0		0		0		9	43		0		0

Monthly Total	0	1	17	8	106	229	360	296	448	193	73	52
Average	0.00	0.04	0.55	0.27	3.42	7.63	11.61	9.55	14.93	6.23	2.43	1.68
Max daily rain	0	1	15	6	44	42	55	62	121	47	40	34
Day of Max Daily	1	25	24	26	26	18	20	29	13	1	27	8
No. of Rain days	0	1	2	2	8	16	25	18	19	19	4	6
Max 1-hr rain		1	3	6	20	26	25	22	43	17	15	5
Day of max 1-hr		26	24	26	26	18	24	31	13	12	27	9

Total rain for the year	1783
Total rain days for the year	120

## Daily Point Rainfall in millimeters (meteorological day)

2014		Station: Sasmuan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	13	0	22	50	11	0	0
2	0	0	0	0	3	0	3	14	14	0	0	0
3	0	0	0	0	0	0	21	22	9	0	0	0
4	0	0	0	0	0	0	2	31	2	8	0	0
5	0	0	0	0	0	0	2	12	18	0	0	0
6	0	0	0	0	0	0	7	1	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	28	0	1	11	0	0	0	0	2
9	0	0	0	3	0	13	4	0	6	0	0	1
10	0	0	0	0	0	20	2	0	23	1	0	0
11	0	1	0	0	27	13	0	0	4	24	0	0
12	0	0	0	0	0	43	9	0	0	1	0	0
13	0	0	0	9	0	5	4	0	24	5	0	0
14	0	0	0	38	0	1	0	0	47	9	0	0
15	0	0	0	0	0	0	17	0	4	0	0	2
16	0	0	0	0	0	0	62	13	0	0	0	0
17	0	0	0	4	0	6	19	12	0	3	0	0
18	0	0	0	0	23	1	0	13	2	0	0	0
19	0	0	0	0	0	0	7	0	74	0	0	0
20	0	0	0	0	0	2	0	7	6	0	0	0
21	0	0	0	0	20	5	19	42	0	0	0	0
22	0	0	0	0	0	9	21	0	0	0	0	0
23	0	0	0	0	0	1	32	0	0	0	0	1
24	0	0	1	0	0	0	15	0	0	0	0	10
25	0	0	0	2	11	0	2	47	0	0	0	0
26	0	0	0	15	0	5	2	51	0	0	0	0
27	0	0	0	0	0	4	0	0	0	0	8	0
28	0	0	0	0	0	0	10	19	0	0	0	0
29	0		0	69	0	0	1	7	0	0	0	0
30	0		0	5	3	0	7	0	0	0	0	0
31	0		0		12		24	0		0		0

Monthly Total	0	1	1	173	99	142	303	313	283	62	8	16
Average	0.00	0.04	0.03	5.77	3.19	4.73	9.77	10.10	9.43	2.00	0.27	0.52
Max daily rain	0	1	1	69	27	43	62	51	74	24	8	10
Day of Max Daily	1	11	24	29	11	12	16	26	19	11	27	24
No. of Rain days	0	1	1	9	7	16	24	15	14	8	1	5
Max 1-hr rain		1	1	52	25	11	20	37	33	11	4	4
Day of max 1-hr		11	24	30	12	12	16	26	2	11	27	24

Total rain for the year	1401
Total rain days for the year	101

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Sulipan											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	46	3	8	21	68	0	
2	0	0	0	0	0	0	12	6	0	0	0	
3	0	0	3	0	16	0	39	18	9	0	0	
4	0	0	0	0	0	0	0	28	11	8	0	
5	0	0	0	0	0	0	13	0	27	0	0	
6	5	0	0	0	0	0	1	0	1	0	1	
7	0	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	3	0	0	
9	0	0	0	0	0	11	2	0	18	0	0	
10	0	0	0	0	0	22	0	0	44	0	0	
11	0	0	0	0	0	4	0	0	0	0	0	
12	0	0	0	0	0	0	36	0	0	0	0	
13	0	0	0	1	0	0	6	0	24	0	0	
14	0	0	0	0	0	0	2	6	0	0	0	
15	0	0	0	0	0	0	22	0	2	0	0	
16	0	0	0	0	0	0	18	10	0	0	0	
17	0	0	0	8	0	2	18	0	0	0	0	
18	0	0	0	0	21	1	0	1	0	0	0	
19	0	0	0	4	0	3	9	0	2	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	3	13	4	0	0	0	
22	0	0	0	0	0	19	10	0	0	0	0	
23	0	0	0	0	0	6	0	0	0	1	0	
24	0	0	3	0	0	0	0	0	0	0	0	
25	0	0	1	0	0	0	0	57	0	0	0	
26	0	0	0	0	0	0	14	33	12	0	0	
27	0	0	1	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	20	24	12	0	0	
29	0		0	15	0	0	0	8	2	1	0	
30	0		0	10	0	0	10	6	0	0	0	
31	0		0		0		8	1		0		

Monthly Total	5	0	8	38	37	117	256	210	188	78	1	
Average	0.16	0.00	0.26	1.27	1.19	3.90	8.26	6.77	6.27	2.52	0.03	
Max daily rain	5	0	3	15	21	46	39	57	44	68	1	
Day of Max Daily	6	1	3	29	18	1	3	25	10	1	6	
No. of Rain days	1	0	4	5	2	10	19	14	14	4	1	
Max 1-hr rain	5	3		14	21	19	22	26	20	48	1	
Day of max 1-hr	6	3		30	18	23	3	26	1	1	6	

Total rain for the year	938
Total rain days for the year	74

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: Mexico											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	8	2	0	26	31	61	0	1
2	0	0	0	0	0	0	0	2	30	0	17	0
3	0	0	0	0	0	0	0	53	12	22	0	0
4	0	0	0	0	0	0	0	6	48	1	0	0
5	0	0	0	0	0	0	0	8	5	0	0	0
6	0	0	0	0	0	0	0	1	0	3	0	0
7	0	0	0	0	0	0	0	0	0	2	0	0
8	0	0	0	0	0	1	1	0	4	0	0	6
9	0	0	0	10	0	11	15	0	8	0	0	1
10	0	0	0	0	0	10	0	0	41	0	0	0
11	0	1	0	0	3	22	1	0	19	42	0	0
12	0	0	0	0	0	39	0	0	0	0	0	0
13	0	0	0	1	0	1	0	0	33	0	0	0
14	0	0	0	0	0	1	8	24	45	4	0	0
15	0	0	0	0	0	0	19	0	8	5	0	0
16	0	0	0	0	0	0	34	63	0	0	0	0
17	0	0	0	0	0	3	20	0	0	12	0	0
18	0	0	0	0	1	20	1	0	3	1	0	0
19	0	0	0	0	0	1	15	0	91	0	0	0
20	0	0	0	0	2	1	12	34	19	0	0	0
21	0	0	0	0	3	3	37	15	0	0	0	0
22	0	0	0	0	0	20	16	0	38	0	0	0
23	0	0	0	0	0	7	20	0	0	0	0	3
24	0	0	1	0	0	0	13	0	0	0	0	7
25	0	0	0	0	6	0	0	79	1	0	0	0
26	0	0	0	0	0	8	11	20	0	0	0	0
27	0	0	0	0	2	3	0	0	0	0	12	0
28	0	0	0	0	10	1	6	15	0	0	0	0
29	0		0	1	0	0	1	9	9	0	1	0
30	0		0	1	0	0	1	5	0	0	2	0
31	0		0		2		15	0		0		0

Monthly Total	0	1	1	13	37	154	306	360	411	127	32	18
Average	0.00	0.04	0.03	0.43	1.19	5.13	9.87	11.61	13.70	4.10	1.07	0.58
Max daily rain	0	1	1	10	10	39	53	79	91	61	17	7
Day of Max Daily	1	11	24	9	28	12	3	25	19	1	2	24
No. of Rain days	0	1	1	4	9	18	22	14	19	7	4	5
Max 1-hr rain		1	1	6	9	20	25	38	35	29	17	3
Day of max 1-hr		11	24	9	28	23	22	25	22	11	2	9

Total rain for the year	1460
Total rain days for the year	104

## Daily Point Rainfall in millimeters (meteorological day)

2014		Station: Porac										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	28	23	4	0	0
2	0	0	0	0	0	0	1	16	0	4	25	0
3	0	0	0	0	0	0	22	14	7	0	1	0
4	0	0	0	0	0	13	5	32	0	2	0	0
5	0	0	0	0	0	0	1	15	1	0	0	0
6	0	0	0	0	0	0	6	0	0	0	0	0
7	0	0	0	0	2	0	0	0	1	4	0	0
8	0	0	0	0	11	1	8	0	5	0	0	5
9	0	0	0	6	0	13	5	0	3	0	0	0
10	0	0	0	0	0	13	4	0	14	0	0	0
11	0	54	0	0	0	27	0	0	0	0	0	0
12	0	0	0	0	0	57	21	0	0	1	0	0
13	0	0	0	0	0	7	32	0	15	1	0	0
14	0	0	0	10	0	1	5	0	39	6	0	0
15	0	0	0	0	0	1	27	0	11	0	0	0
16	0	0	0	0	0	0	56	21	0	0	0	0
17	0	0	0	0	0	3	8	1	0	2	0	0
18	0	0	0	0	0	1	1	1	3	1	0	0
19	0	0	0	0	18	2	14	0	53	0	0	0
20	0	0	0	0	0	5	3	1	2	1	0	0
21	0	0	0	0	44	22	6	16	0	0	0	0
22	0	0	0	0	0	13	17	0	0	0	0	0
23	0	0	0	0	0	1	24	0	0	0	0	0
24	0	0	0	0	0	0	15	0	0	0	0	7
25	0	0	0	0	0	0	2	81	0	0	0	0
26	0	0	0	0	0	11	13	69	9	0	0	0
27	0	0	0	0	0	6	15	0	0	0	8	0
28	0	0	0	1	2	0	3	26	0	0	0	0
29	0		0	0	19	3	1	6	0	0	0	0
30	0		0	0	0	0	1	0	8	0	0	0
31	0		0		5		18	0		0		0

Monthly Total	0	54	0	17	101	200	334	327	194	26	34	12
Average	0.00	1.93	0.00	0.57	3.26	6.67	10.77	10.55	6.47	0.84	1.13	0.39
Max daily rain	0	54	0	10	44	57	56	81	53	6	25	7
Day of Max Daily	1	11	1	14	21	12	16	25	19	14	2	24
No. of Rain days	0	1	0	3	7	19	28	14	15	10	3	2
Max 1-hr rain		32		5	18	21	21	53	13	3	20	3
Day of max 1-hr		11		9	19	21	12	26	1	2	2	24

Total rain for the year	1299
Total rain days for the year	102

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: San_Rafael											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	8	15	5	17	5	11	0	3
2	0	0	0	0	0	2	40	5	1	0	0	0
3	0	0	0	0	0	6	59	17	8	0	2	0
4	0	0	0	0	0	0	20	22	3	0	0	0
5	0	0	0	0	0	14	3	3	4	1	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	1	0	0	0	0	0
8	0	0	0	0	0	0	25	0	5	0	0	14
9	0	0	0	0	0	9	1	0	10	2	0	2
10	0	0	0	0	0	13	2	0	28	16	0	0
11	0	0	0	0	0	14	10	0	1	1	0	0
12	0	0	0	0	0	71	12	0	0	0	0	0
13	0	0	0	0	0	1	0	0	32	0	0	0
14	0	0	0	0	0	2	7	9	67	33	0	0
15	0	0	0	0	0	0	34	0	12	7	1	4
16	0	0	0	0	0	9	23	48	0	0	0	2
17	0	0	0	0	0	8	9	0	1	11	0	0
18	0	0	0	0	0	31	0	0	26		0	0
19	0	0	0	8	0	17	12	0	91		0	0
20	0	0	0	0	3	2	7	0	7		0	0
21	0	0	0	0	0	0	5	4	0	0	0	0
22	0	0	0	0	0	0	34	0	0	1	0	0
23	0	0	0	0	0	3	37	0	0	0	0	9
24	0	0	5	0	0	0	1	0	0	0	0	9
25	0	0	0	7	15	1	0	34	0	0	0	0
26	0	0	0	0	0	40	11	5	20	0	0	0
27	0	0	0	0	9	85	3	4	0	0	16	0
28	0	0	0	0	15	0	9	14	0	0	0	0
29	0		0	4	0	0	0	16	1	5	2	0
30	0		0	15	1	0	1	0	0	0	8	0
31	0		0		0		19	0		0		0

Monthly Total	0	0	5	34	51	343	390	198	322	88	29	43
Average	0.00	0.00	0.16	1.13	1.65	11.43	12.58	6.39	10.73	3.14	0.97	1.39
Max daily rain	0	0	5	15	15	85	59	48	91	33	16	14
Day of Max Daily	1	1	24	30	25	27	3	16	19	14	27	8
No. of Rain days	0	0	1	4	6	19	26	13	18	10	5	7
Max 1-hr rain			1	11	15	34	28	24	20	15	6	5
Day of max 1-hr			24	30	28	28	2	16	19	10	31	24

Total rain for the year	1503
Total rain days for the year	109

## Daily Point Rainfall in millimeters (meteorological day)

2014	Station: PRFFWC_(CSFP)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	1.8	4.1	0.8	28.2	11.2	16.5	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.1	3.8	4.1	20.6	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	37.8	20.3	24.6	3.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	11.4	38.9	6.4	0.3	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	3.8	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.8	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.3	11.9	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.8	3.3	0.0	11.7	0.0	0.0	10.4
9	0.1	0.0	0.0	13.7	0.0	12.4	4.6	0.0	8.1	0.0	0.0	0.5
10	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	25.7	13.0	0.0	0.0
11	0.0	8.1	1.5	0.0	0.0	24.4	0.0	0.0	2.3	1.5	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	2.8	0.3	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	4.6	6.9	0.0	19.3	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	10.7	2.0	7.9	45.5	2.5	0.3	0.0
15	0.0	0.0	0.0	0.0	0.0	1.3	28.4	0.0	3.0	0.8	0.0	1.0
16	0.0	0.0	0.0	0.0	0.0	0.3	35.8	47.8	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	9.4	14.5	19.6	0.0	5.9	0.0	0.0
18	0.0	0.3	0.0	0.0	0.0	1.3	8.4	6.1	2.8	0.5	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	65.8	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	2.0	6.1	52.3	20.1	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	37.1	8.9	19.8	8.9	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	7.1	18.8	0.0	35.6	0.0	0.0	0.0
23	0.0	0.0	0.0	2.8	18.0	2.5	5.6	0.0	0.0	0.0	0.0	3.6
24	0.0	0.0	1.5	0.0	0.0	0.0	14.7	1.0	0.0	0.0	0.0	6.1
25	0.0	1.3	0.0	0.5	0.8	1.8	0.3	74.7	0.0	0.0	0.0	0.0
26	0.0	0.3	0.0	1.0	0.0	26.2	9.9	46.7	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	4.3	1.8	0.0	1.5	0.0	9.7	0.0
28	0.0	0.0	0.0	0.0	24.9	1.8	2.5	18.8	0.0	0.0	0.0	0.0
29	0.0		0.0	1.8	1.0	0.5	2.8	7.1	1.8	0.0	1.5	0.0
30	0.0		0.0	0.0	0.3	0.0	1.3	2.3	0.0	0.0	0.5	0.0
31	0.0		0.0		17.8		15.7	0.3		0.0		0.0

Monthly Total	0.1	9.9	3.0	19.8	101.6	178.8	275.3	390.9	297.7	60.2	32.5	21.6
Average	0.00	0.35	0.10	0.66	3.28	5.96	8.88	12.61	9.92	1.94	1.08	0.70
Max daily rain	0.1	8.1	1.5	13.7	37.1	42.7	37.8	74.7	65.8	16.5	20.6	10.4
Day of Max Daily	9	11		9	21	12	3	25	19	1	2	8
No. of Rain days	1	4	2	5	8	22	26	18	21	12	5	5
Max 1-hr rain		3.3	1.3	7.9	24.9	21.8			21.3		20.6	4.3
Day of max 1-hr		11	11	9	28	26			3		2	9

Total rain for the year	1391.6
Total rain days for the year	129

Table 1.0

Monthly Rainfall Summary for 2014															
PRB Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total for the year	Number of RR days	Max 24-hr RR (Met day)
Muñoz	0	0	20	78	97	183	410	247	401	209	29	46	1720	103	98
Sapang Buho	0	0	31	30	106	216	454	235	321	131	33	40	1597	105	97
Gabaldon	0	11	83	43	32	195	500	311	514	152	100	163	2104	117	138
Zaragoza	0	0	3	89	94	128	344	220	268	198	16	21	1381	97	85
Mayapyap							313	203	237	83	25	43	904	57	58
Peñaranda	0	0	12	68	119	124	316	324	442	183	44	37	1669	107	114
Calaanan	0	0	72	7	95	190	369	227	393	212	55	72	1692	108	79
Palali	0	2	32	23	162	173	249	191	451	224	49	44	1600	120	88
San Isidro	0	0	3	56	87	100	245	206	422	74	37	15	1245	95	72
Arayat	0	1	2	14	80	166	300	201	382	59	30	26	1261	103	106
Candaba	0	1	4	66	57	118	316	220	339	164	72	22	1379	103	72
Sibul Spring	0	1	17	8	106	229	360	296	448	193	73	52	1783	120	121
Sasmuan	0	1	1	173	99	142	303	313	283	62	8	16	1401	101	74
Sulipan	5	0	8	38	37	117	256	210	188	78	1		938	74	68
Mexico	0	1	1	13	37	154	306	360	411	127	32	18	1460	104	91
Porac	0	54	0	17	101	200	334	327	194	26	34	12	1299	102	81
San Rafael	0	0	5	34	51	343	390	198	322	88	29	43	1503	109	91
PRFFWC	0.1	9.9	3.0	19.8	101.6	178.8	275.3	390.9	297.7	60.2	32.5	21.6	1391.6	129	74.7
<i>Mayapyap RR - no data from Jan to Jun; incomplete from Jul to Oct</i>															
<i>Sulipan RR for Nov (doubtful); Dec (deleted from data series)</i>															

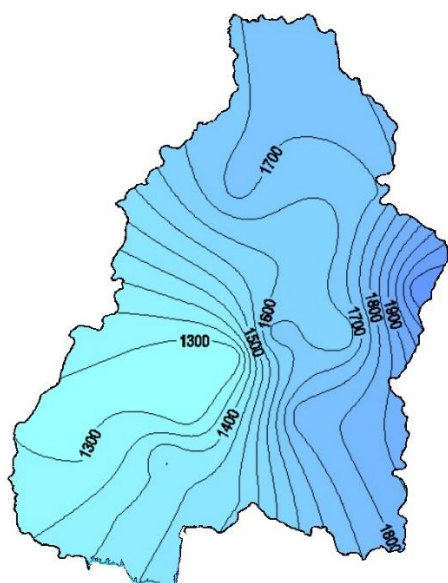


Figure 1a. The Isohyet rainfall distribution for the year 2014 in the Pampanga River Basin

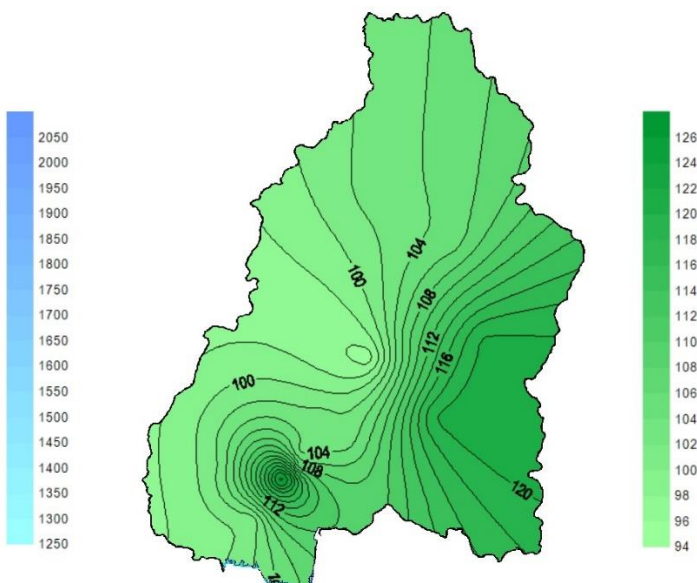


Figure 1b. Estimated rainfall days distribution (2014) in the Pampanga River Basin



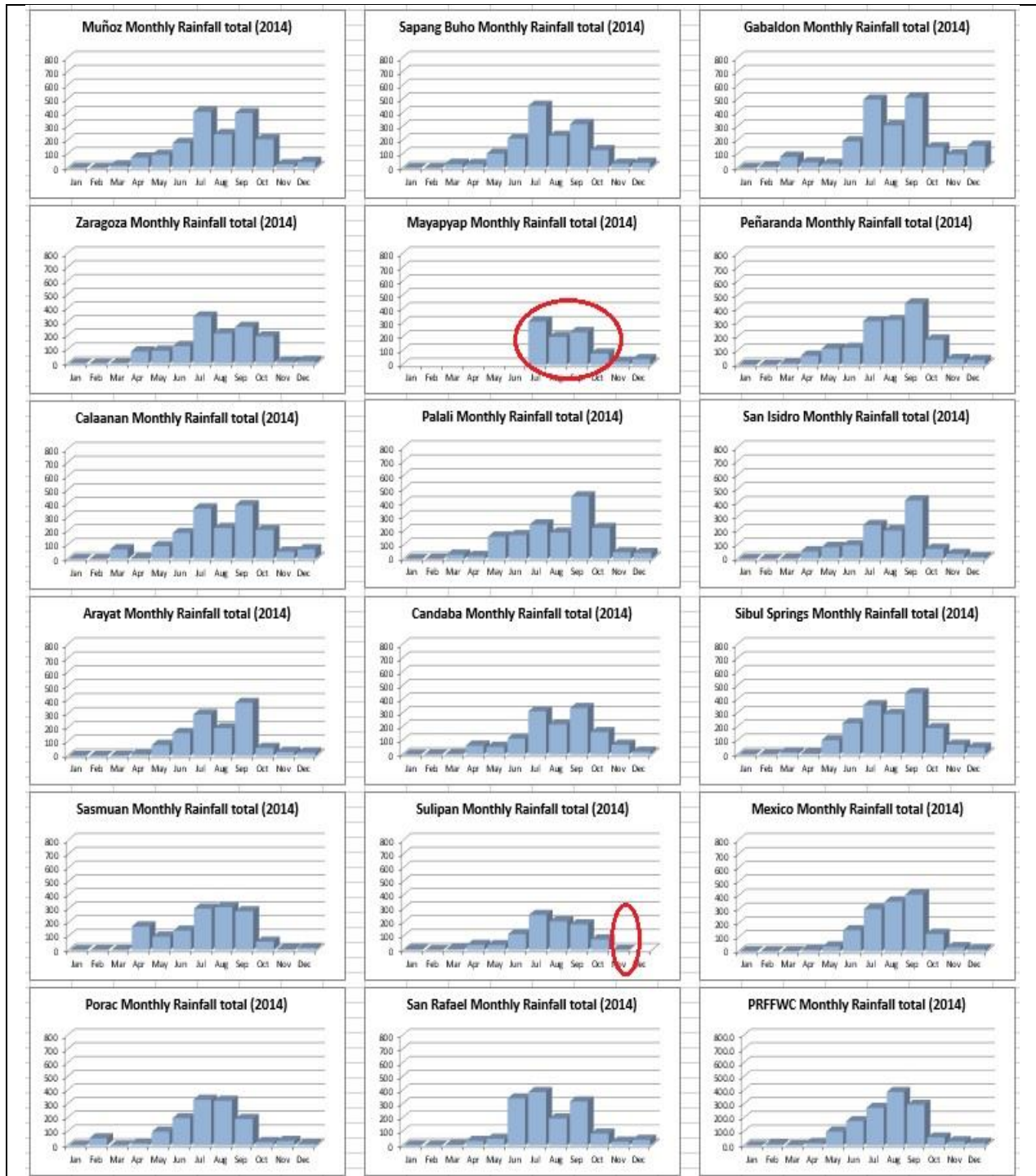


Figure 2. Monthly Rainfall distribution (hyetograph) of all operational RR monitoring stations of PRFFWC within the PRB for the year 2014. Note that encircled portions have incomplete data and / or have doubtful observations.

## B. WATER LEVEL Data Summary Presentation



**Water Level in meters (Daily Average)**

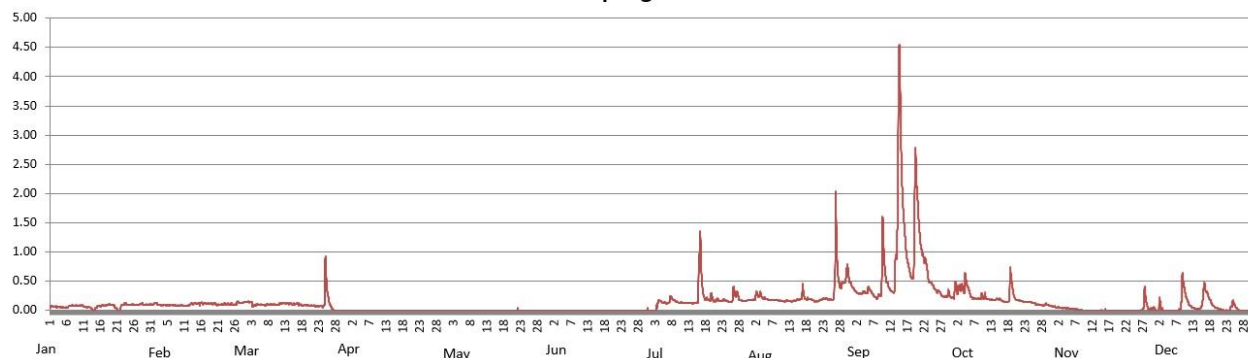
**2014**

Station: **Sapang\_Buho**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.06	0.11	0.14	0.00	0.00	0.00	0.00	0.18	0.34	0.32	0.05	0.01
2	0.06	0.11	0.14	0.00	0.00	0.00	0.00	0.25	0.29	0.35	0.05	0.08
3	0.06	0.09	0.09	0.00	0.00	0.00	0.06	0.26	0.29	0.41	0.04	0.01
4	0.06	0.09	0.10	0.00	0.00	0.00	0.16	0.22	0.31	0.43	0.04	0.00
5	0.06	0.09	0.10	0.00	0.00	0.00	0.15	0.21	0.33	0.42	0.03	0.00
6	0.06	0.09	0.09	0.00	0.00	0.00	0.12	0.18	0.31	0.25	0.02	0.00
7	0.08	0.09	0.09	0.00	0.00	0.00	0.18	0.18	0.23	0.21	0.01	0.00
8	0.08	0.08	0.10	0.00	0.00	0.00	0.19	0.17	0.24	0.20	0.01	0.01
9	0.08	0.09	0.10	0.00	0.00	0.00	0.15	0.17	0.72	0.22	0.00	0.41
10	0.08	0.08	0.10	0.00	0.00	0.00	0.13	0.16	0.78	0.23	0.00	0.27
11	0.07	0.08	0.11	0.00	0.00	0.00	0.13	0.16	0.43	0.19	0.00	0.11
12	0.06	0.10	0.12	0.00	0.00	0.00	0.12	0.16	0.33	0.18	0.00	0.05
13	0.04	0.12	0.12	0.00	0.00	0.00	0.12	0.16	0.56	0.17	0.00	0.02
14	0.02	0.12	0.12	0.00	0.00	0.00	0.12	0.17	2.68	0.19	0.00	0.02
15	0.06	0.12	0.11	0.00	0.00	0.00	0.13	0.18	2.79	0.18	0.00	0.17
16	0.08	0.11	0.11	0.00	0.00	0.00	0.85	0.28	1.36	0.15	0.00	0.37
17	0.08	0.12	0.10	0.00	0.00	0.00	0.37	0.21	0.81	0.14	0.00	0.22
18	0.09	0.11	0.09	0.00	0.00	0.00	0.19	0.20	0.59	0.48	0.00	0.11
19	0.10	0.11	0.09	0.00	0.00	0.00	0.19	0.18	1.69	0.28	0.00	0.05
20	0.07	0.10	0.08	0.00	0.00	0.00	0.20	0.16	1.78	0.17	0.00	0.02
21	0.02	0.10	0.08	0.00	0.00	0.00	0.18	0.16	1.08	0.16	0.00	0.01
22	0.04	0.10	0.07	0.00	0.00	0.00	0.17	0.19	0.89	0.15	0.00	0.00
23	0.11	0.11	0.07	0.00	0.00	0.00	0.17	0.20	0.63	0.15	0.00	0.00
24	0.10	0.10	0.07	0.00	0.00	0.00	0.16	0.19	0.46	0.14	0.00	0.11
25	0.10	0.10	0.47	0.00	0.00	0.00	0.15	0.18	0.38	0.12	0.00	0.07
26	0.09	0.12	0.17	0.00	0.00	0.00	0.24	0.95	0.33	0.10	0.00	0.01
27	0.09	0.13	0.03	0.00	0.00	0.00	0.30	0.59	0.28	0.10	0.04	0.00
28	0.11	0.13	0.00	0.00	0.00	0.00	0.21	0.43	0.24	0.09	0.19	0.00
29	0.10		0.00	0.00	0.00	0.00	0.16	0.53	0.27	0.10	0.02	0.00
30	0.10		0.00	0.00	0.00	0.00	0.16	0.63	0.23	0.08	0.03	0.01
31	0.10		0.00		0.00		0.17	0.42		0.06		0.01

Max WL observed	0.12	0.16	0.92	0.00	0.04	0.04	1.36	2.04	4.54	0.75	0.41	0.65
Day of Max WL	23	27	25		22	31	17	27	15	18	28	9

**Sapang Buho WL 2014**



**Water Level in meters (Daily Average)**

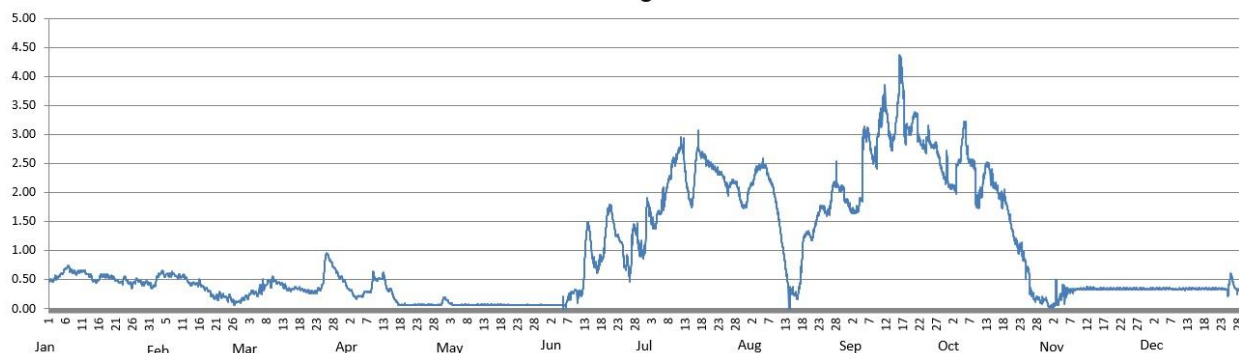
**2014**

Station: **Zaragoza**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.49	0.38	0.19	0.38	0.17	0.06	1.55	2.03	1.70	2.11	0.05	0.34
2	0.49	0.45	0.20	0.32	0.11	0.06	1.66	2.15	1.68	2.10	0.14	0.34
3	0.53	0.58	0.29	0.24	0.08	0.06	1.45	2.34	1.70	2.32	0.14	0.34
4	0.58	0.63	0.28	0.20	0.06	0.07	1.51	2.42	1.87	2.57	0.27	0.34
5	0.61	0.60	0.27	0.21	0.06	0.07	1.58	2.45	2.39	2.80	0.28	0.34
6	0.71	0.59	0.35	0.24	0.07	0.07	1.89	2.44	3.02	2.97	0.31	0.35
7	0.68	0.60	0.39	0.29	0.07	0.15	2.04	2.27	2.76	2.56	0.30	0.35
8	0.64	0.58	0.45	0.29	0.07	0.26	2.26	2.15	2.59	2.50	0.33	0.34
9	0.61	0.55	0.46	0.51	0.07	0.30	2.52	1.92	2.78	2.04	0.34	0.33
10	0.65	0.56	0.50	0.50	0.07	0.23	2.60	1.59	3.26	1.94	0.34	0.34
11	0.66	0.54	0.45	0.52	0.07	0.28	2.75	1.18	3.55	2.11	0.34	0.34
12	0.61	0.46	0.44	0.56	0.07	0.64	2.73	0.77	3.32	2.44	0.35	0.34
13	0.58	0.42	0.40	0.39	0.07	1.39	2.23	0.45	2.88	2.38	0.35	0.34
14	0.49	0.43	0.34	0.32	0.07	1.19	1.92	0.31	2.93	2.20	0.35	0.35
15	0.47	0.44	0.33	0.24	0.07	0.82	1.91	0.25	3.40	2.08	0.33	0.34
16	0.54	0.40	0.35	0.13	0.07	0.70	2.54	0.27	4.13	1.96	0.34	0.34
17	0.57	0.35	0.34	0.07	0.07	0.83	2.72	0.72	3.42	1.88	0.34	0.35
18	0.56	0.32	0.34	0.06	0.07	0.98	2.64	1.24	3.09	1.85	0.34	0.34
19	0.55	0.24	0.32	0.07	0.07	1.55	2.57	1.30	3.06	1.61	0.34	0.34
20	0.55	0.20	0.31	0.06	0.07	1.72	2.49	1.22	3.29	1.34	0.34	0.34
21	0.49	0.21	0.29	0.06	0.06	1.47	2.43	1.40	3.23	1.16	0.34	0.34
22	0.46	0.23	0.29	0.07	0.07	1.26	2.40	1.60	2.89	1.03	0.34	0.34
23	0.48	0.21	0.31	0.07	0.07	1.17	2.34	1.74	2.79	0.98	0.34	0.34
24	0.52	0.18	0.35	0.07	0.07	0.92	2.30	1.71	2.88	0.75	0.34	0.32
25	0.45	0.17	0.58	0.07	0.06	0.77	2.16	1.66	2.90	0.58	0.34	0.48
26	0.42	0.11	0.93	0.07	0.06	0.66	2.08	1.87	2.80	0.25	0.34	0.45
27	0.48	0.12	0.83	0.07	0.06	1.34	2.19	2.15	2.75	0.16	0.34	0.32
28	0.48	0.15	0.72	0.06	0.06	1.27	2.17	2.14	2.53	0.16	0.34	0.33
29	0.44		0.64	0.07	0.06	1.05	2.01	2.07	2.33	0.12	0.34	0.34
30	0.46		0.55	0.12	0.07	0.95	1.80	1.97	2.38	0.15	0.34	0.34
31	0.44		0.50		0.06		1.77	1.83		0.06		0.35

Max WL observed	0.74	0.66	0.96	0.64	0.20	1.80	3.07	2.59	4.37	3.23	0.50	0.61
Day of Max WL	7	4	25	9	1	20	17	6	16	6	3	6

**Zaragoza WL 2014**



**Water Level in meters (Daily Average)**

2014

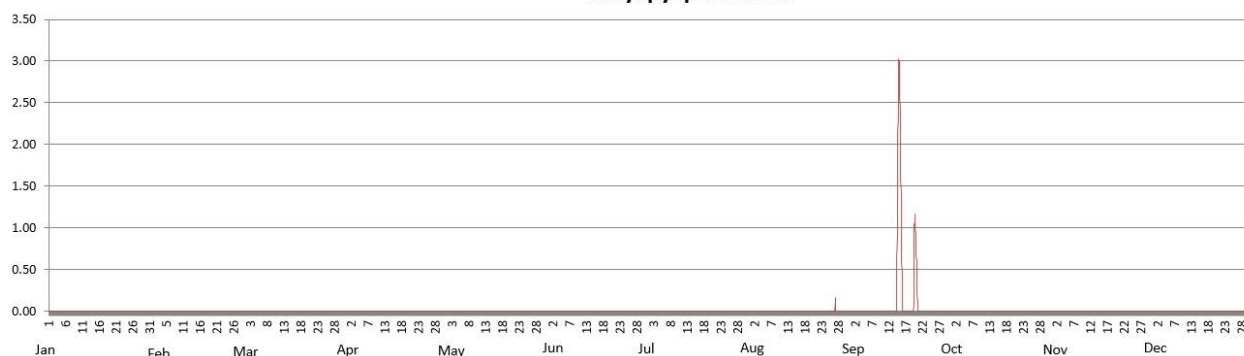
Station:

**Mayapyap**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1							0.00	0.00		0.00	0.00	0.00
2							0.00	0.00		0.00	0.00	0.00
3							0.00	0.00		0.00	0.00	0.00
4							0.00	0.00		0.00	0.00	0.00
5							0.00	0.00	0.00	0.00	0.00	0.00
6							0.00	0.00	0.00	0.00	0.00	0.00
7							0.00	0.00	0.00	0.00	0.00	0.00
8							0.00	0.00	0.00	0.00	0.00	0.00
9							0.00	0.00	0.00	0.00	0.00	0.00
10							0.00	0.00	0.00	0.00	0.00	0.00
11							0.00	0.00		0.00	0.00	0.00
12							0.00	0.00	0.00	0.00	0.00	0.00
13							0.00	0.00	0.00	0.00	0.00	0.00
14							0.00	0.00	0.73	0.00	0.00	0.00
15							0.00	0.00	2.24	0.00	0.00	0.00
16							0.00	0.00	0.12	0.00	0.00	0.00
17							0.00	0.00	0.00	0.00	0.00	0.00
18							0.00	0.00	0.00		0.00	0.00
19							0.00	0.00	0.32		0.00	0.00
20							0.00	0.00	0.55		0.00	0.00
21							0.00	0.00	0.00	0.00	0.00	0.00
22							0.00	0.00	0.00	0.00	0.00	0.00
23							0.00	0.00	0.00	0.00	0.00	0.00
24							0.00	0.00	0.00	0.00	0.00	0.00
25							0.00	0.00	0.00	0.00	0.00	0.00
26							0.00	0.02	0.00		0.00	0.00
27							0.00	0.00	0.00		0.00	0.00
28							0.00	0.00	0.00		0.00	0.00
29							0.00	0.00	0.00		0.00	0.00
30							0.00		0.00		0.00	0.00
31							0.00					0.00

Max WL observed							0.00	0.17	3.03	0.00	0.00	0.00
Day of Max WL								27	15			

**Mayapyap WL 2014**

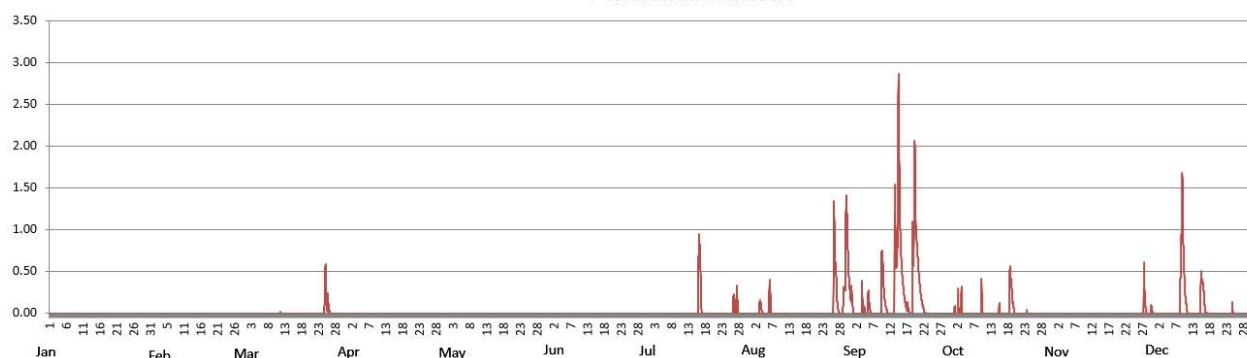


**Water Level in meters (Daily Average)**

2014		Station: Peñaranda										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.06	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.05	0.00	0.96
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.18
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57	0.00	0.00	0.02
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.02	0.00	0.38
16	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.18	0.00	0.00	0.04
17	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.38	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.07	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
25	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
26	0.00	0.00	0.07	0.00	0.00	0.00	0.08	0.71	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.05	0.00	0.00	0.12	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.06	0.00
29	0.00		0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
30	0.00		0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.02	0.00
31	0.00		0.00		0.00		0.00	0.17		0.00		0.00

Max WL observed	0.00	0.00	0.59	0.00	0.00	0.00	0.95	1.41	2.87	0.57	0.61	1.68
Day of Max WL			25				16	30	15	18	28	9

**Peñaranda WL 2014**



**Water Level in meters (Daily Average)**

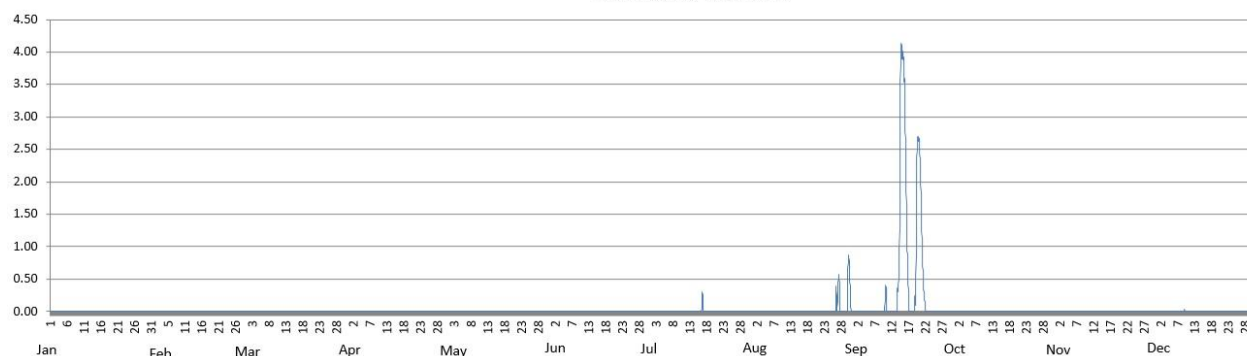
**2014**

Station: **San\_Isidro**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	1.94	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.11	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00		0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00
30	0.00		0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
31	0.00		0.00		0.00		0.00	0.00		0.00		0.00

Max WL observed	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.87	4.13	0.00	0.00	0.04
Day of Max WL							17	30	15			9

**San Isidro WL 2014**



**Water Level in meters (Daily Average)**

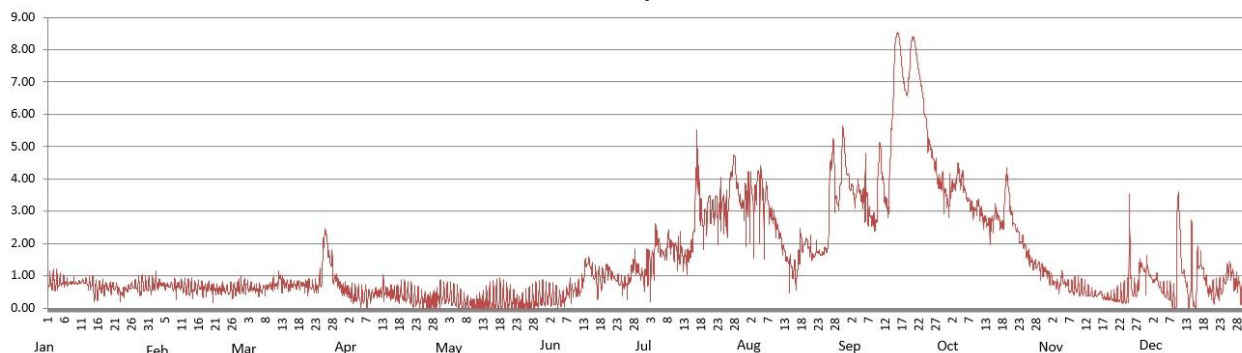
**2014**

Station: **Arayat**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.79	0.68	0.67	0.57	0.39	0.35	1.14	3.65	3.83	3.31	0.89	1.04
2	0.79	0.77	0.67	0.45	0.38	0.37	1.28	3.45	3.63	3.72	0.80	0.86
3	0.80	0.74	0.63	0.39	0.34	0.34	1.38	3.19	3.58	3.85	0.72	0.94
4	0.78	0.74	0.60	0.38	0.32	0.28	2.04	3.89	3.64	4.17	0.87	0.67
5	0.79	0.71	0.59	0.37	0.29	0.28	2.01	3.80	3.55	4.09	0.83	0.61
6	0.79	0.70	0.55	0.34	0.21	0.27	1.74	3.16	3.51	3.59	0.73	0.46
7	0.77	0.72	0.60	0.42	0.16	0.45	1.64	3.45	2.84	3.33	0.63	0.41
8	0.80	0.67	0.64	0.39	0.14	0.51	2.09	2.89	2.74	3.09	0.63	0.30
9	0.78	0.71	0.69	0.41	0.13	0.57	1.95	2.70	2.91	3.03	0.65	1.13
10	0.79	0.70	0.73	0.47	0.12	0.55	1.88	2.47	4.79	3.15	0.56	2.68
11	0.83	0.67	0.75	0.48	0.13	0.58	1.62	2.15	3.89	2.89	0.55	1.15
12	0.81	0.65	0.95	0.59	0.15	0.90	1.71	1.81	3.26	2.71	0.48	0.79
13	0.76	0.59	0.76	0.46	0.18	1.37	1.57	1.49	4.03	2.60	0.45	0.35
14	0.75	0.63	0.74	0.47	0.21	1.36	1.59	1.25	6.38	2.59	0.42	0.85
15	0.52	0.60	0.69	0.48	0.23	1.08	1.93	1.19	8.33	2.95	0.41	0.46
16	0.56	0.66	0.72	0.45	0.25	0.83	3.33	1.13	8.25	2.82	0.48	1.38
17	0.64	0.61	0.71	0.38	0.27	0.92	4.12	1.96	7.25	2.62	0.33	1.21
18	0.62	0.61	0.73	0.47	0.28	0.96	2.84	1.91	6.67	3.40	0.32	0.86
19	0.64	0.66	0.72	0.41	0.27	1.15	2.76	2.02	7.38	3.77	0.32	0.55
20	0.68	0.53	0.69	0.43	0.26	1.13	3.28	1.78	8.33	2.90	0.32	0.52
21	0.64	0.53	0.68	0.32	0.26	0.98	3.04	1.61	7.97	2.56	0.33	0.50
22	0.54	0.55	0.65	0.29	0.21	0.88	3.14	1.75	7.26	2.32	0.36	0.56
23	0.45	0.59	0.65	0.29	0.16	0.80	2.91	1.68	6.59	2.09	0.36	0.66
24	0.58	0.55	0.79	0.24	0.12	0.74	3.25	1.74	5.84	1.89	0.39	0.93
25	0.60	0.59	1.54	0.26	0.13	0.74	3.05	1.81	5.09	1.65	1.55	1.22
26	0.68	0.57	2.23	0.19	0.15	0.92	3.20	3.94	4.72	1.47	0.56	1.00
27	0.70	0.60	1.55	0.20	0.20	1.31	4.13	4.68	4.32	1.37	0.51	0.78
28	0.70	0.66	1.15	0.26	0.26	1.35	4.50	3.34	3.92	1.33	1.25	0.70
29	0.68		0.92	0.32	0.28	1.13	3.65	3.74	3.84	1.21	1.21	0.45
30	0.69		0.75	0.41	0.36	1.04	3.22	5.25	3.54	1.17	1.18	0.31
31	0.69		0.59		0.35		3.31	4.26		1.08		0.39

Max WL observed	1.21	1.15	2.48	1.05	0.95	1.84	5.53	5.63	8.53	4.51	3.55	3.62
Day of Max WL	3	3	26	13	18	28	17	30	16	4	25	10

**Arayat WL 2014**



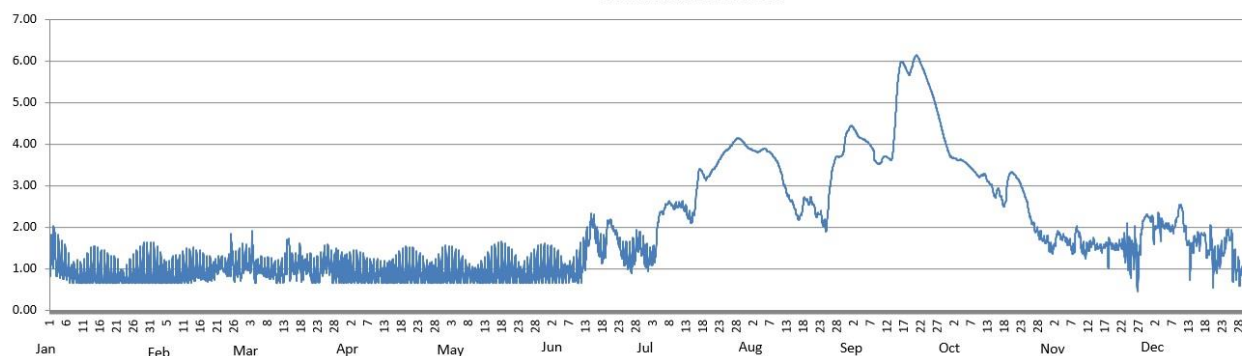


**Water Level in meters (Daily Average)**

2014		Station: Candaba										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.26	0.95	1.16	0.94	0.94	1.00	1.20	3.89	4.42	3.71	1.47	2.22
2	1.47	0.96	1.13	0.93	0.93	1.01	1.27	3.85	4.33	3.66	1.71	1.93
3	1.17	0.93	1.35	0.93	0.94	0.99	1.30	3.82	4.20	3.63	1.83	2.16
4	1.10	0.88	0.95	0.91	0.93	0.97	1.87	3.83	4.14	3.62	1.76	2.04
5	1.08	0.86	0.98	0.90	0.93	0.96	2.11	3.85	4.12	3.60	1.73	2.03
6	0.98	0.81	1.01	0.88	0.90	0.91	2.40	3.87	4.03	3.52	1.63	2.01
7	0.87	0.86	0.94	0.88	0.87	0.92	2.56	3.81	3.93	3.44	1.47	1.94
8	0.85	0.89	0.94	0.89	0.86	0.92	2.57	3.73	3.64	3.36	1.80	2.02
9	0.82	0.91	0.95	0.89	0.84	0.92	2.47	3.62	3.53	3.26	1.82	2.32
10	0.81	0.92	0.90	0.89	0.83	0.98	2.51	3.45	3.59	3.22	1.49	2.48
11	0.83	0.93	0.89	0.87	0.83	1.08	2.52	3.18	3.70	3.26	1.41	2.01
12	0.89	0.92	0.91	0.87	0.84	1.31	2.48	2.91	3.67	3.16	1.52	1.62
13	0.93	0.99	0.98	0.87	0.87	1.70	2.35	2.70	3.65	3.05	1.62	1.39
14	0.94	0.97	1.51	0.89	0.91	2.10	2.22	2.58	4.33	2.84	1.55	1.64
15	0.90	0.98	1.03	0.88	0.94	1.93	2.30	2.37	5.48	2.84	1.53	1.74
16	0.88	0.94	1.06	0.90	0.96	1.58	2.90	2.23	5.95	2.79	1.49	1.75
17	0.88	0.91	1.04	0.90	0.98	1.40	3.38	2.43	5.88	2.56	1.58	1.80
18	0.87	0.93	1.10	0.93	0.98	1.46	3.26	2.67	5.72	2.86	1.51	1.35
19	0.84	0.93	1.04	0.94	0.98	2.03	3.18	2.60	5.79	3.28	1.56	1.67
20	0.84	0.99	1.07	0.94	0.97	2.10	3.27	2.61	6.05	3.29	1.51	1.10
21	0.83	1.06	0.93	0.95	0.97	1.91	3.39	2.36	6.10	3.21	1.54	1.17
22	0.79	1.07	0.86	0.94	0.92	1.71	3.50	2.32	5.93	3.08	1.59	1.31
23	0.74	0.99	0.87	0.93	0.87	1.44	3.64	2.18	5.74	2.88	1.45	1.46
24	0.76	1.00	1.01	0.91	0.82	1.28	3.77	2.02	5.52	2.64	1.53	1.80
25	0.82	1.39	1.18	0.87	0.83	1.22	3.85	2.59	5.30	2.30	1.35	1.75
26	0.88	1.01	1.23	0.86	0.85	1.21	3.93	3.28	5.05	2.08	1.49	1.24
27	0.91	1.01	1.05	0.86	0.90	1.36	4.03	3.63	4.77	1.91	1.01	1.00
28	0.95	1.04	0.97	0.87	0.93	1.59	4.12	3.70	4.47	1.80	1.92	0.84
29	0.97		1.08	0.89	0.96	1.53	4.12	3.73	4.16	1.72	2.23	0.91
30			0.95	0.93	0.98	1.36	4.05	4.08	3.90	1.67	2.26	0.87
31			0.95		1.00		3.95	4.35		1.54		1.14

Max WL observed	2.04	1.84	1.92	1.55	1.66	2.34	4.14	4.42	6.14	3.78	2.31	2.54
Day of Max WL	2	25	3	19	18	14	29	Sept 01	21	1	30	10

**Candaba WL 2014**

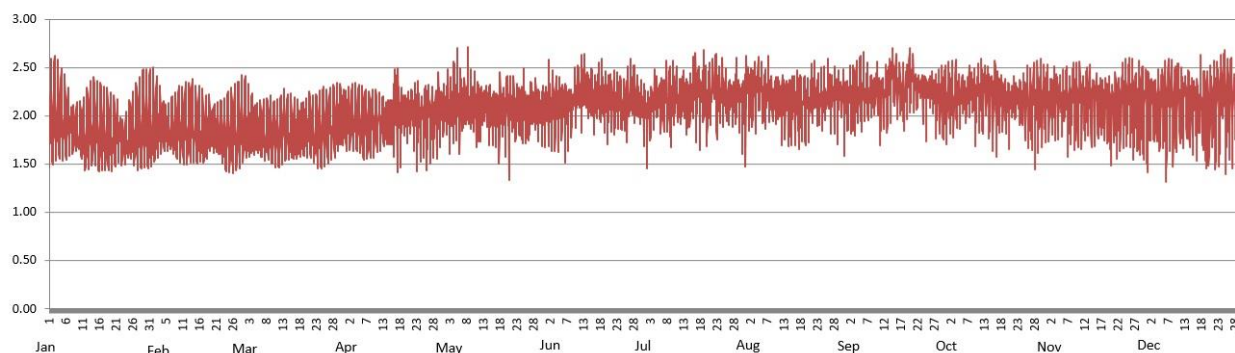


**Water Level in meters (Daily Average)**

2014		Station: <b>Sasmuan</b>										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.96	1.90	1.89	1.95	2.10	2.08	2.05	2.31	2.19	2.17	2.16	2.10
2	1.98	1.90	1.89	1.95	2.11	2.11	2.06	2.23	2.19	2.19	2.20	2.15
3	1.98	1.92	1.88	1.95	2.06	2.13	2.13	2.27	2.21	2.19	2.16	2.12
4	1.96	1.89	1.85	1.94	2.20	2.10	2.18	2.32	2.25	2.17	2.13	2.14
5	1.95	1.88	1.84	1.93	2.18	2.11	2.17	2.32	2.25	2.20	2.14	2.14
6	1.91	1.83	1.83	1.90	2.14	2.08	2.19	2.18	2.24	2.18	2.17	2.14
7	1.85	1.84	1.80	1.90	2.13	2.08	2.19	2.23	2.24	2.20	2.13	2.10
8	1.85	1.85	1.81	1.92	2.17	2.13	2.15	2.18	2.23	2.29	2.20	2.20
9	1.82	1.89	1.84	1.93	2.10	2.14	2.17	2.16	2.23	2.23	2.14	2.20
10	1.79	1.88	1.83	1.94	2.11	2.22	2.19	2.16	2.26	2.24	2.18	2.15
11	1.77	1.89	1.81	1.93	2.08	2.27	2.14	2.15	2.23	2.26	2.16	2.19
12	1.82	1.89	1.84	1.93	2.04	2.28	2.16	2.16	2.22	2.25	2.17	2.14
13	1.87	1.90	1.89	1.92	2.09	2.26	2.13	2.16	2.27	2.24	2.15	2.14
14	1.89	1.87	1.86	1.94	2.06	2.21	2.17	2.11	2.43	2.18	2.13	2.11
15	1.86	1.84	1.83	1.97	2.05	2.19	2.16	2.14	2.39	2.20	2.19	2.11
16	1.80	1.82	1.81	2.15	2.05	2.21	2.35	2.13	2.26	2.20	2.13	2.09
17	1.80	1.80	1.82	2.09	2.04	2.17	2.29	2.16	2.24	2.19	2.11	2.09
18	1.78	1.87	1.83	2.06	2.09	2.22	2.17	2.15	2.21	2.19	2.10	2.07
19	1.78	1.86	1.86	2.05	2.06	2.19	2.24	2.13	2.41	2.14	2.09	2.08
20	1.78	1.84	1.86	2.02	2.09	2.18	2.16	2.13	2.39	2.15	2.09	2.10
21	1.81	1.81	1.87	2.07	2.08	2.15	2.19	2.22	2.28	2.19	2.12	2.15
22	1.79	1.77	1.82	2.04	2.07	2.14	2.35	2.20	2.27	2.18	2.14	2.11
23	1.74	1.76	1.81	2.01	2.05	2.14	2.20	2.17	2.24	2.18	2.15	2.15
24	1.73	1.80	1.83	2.00	2.05	2.10	2.22	2.14	2.23	2.20	2.17	2.27
25	1.79	1.84	1.87	2.05	2.05	2.11	2.19	2.18	2.24	2.14	2.19	2.13
26	1.83	1.85	1.90	2.00	2.04	2.18	2.17	2.26	2.25	2.13	2.14	2.14
27	1.86	1.87	1.91	2.03	2.12	2.21	2.17	2.22	2.20	2.17	2.12	2.14
28	1.88	1.90	1.92	2.01	2.10	2.21	2.21	2.20	2.20	2.16	2.12	2.12
29	1.91		1.93	2.08	2.06	2.13	2.23	2.21	2.18	2.18	2.15	2.05
30	1.91		1.95	2.06	2.05	2.11	2.18	2.22	2.16	2.18	2.13	2.07
31	1.87		1.97		2.06		2.22	2.14		2.15		2.02

Max WL observed	2.62	2.50	2.41	2.49	2.71	2.64	2.68	2.62	2.70	2.59	2.60	2.68
Day of Max WL	3	2	2	17	8	13	19	1	15	12	26	25

**Sasmuan WL 2014**



**Water Level in meters (Daily Average)**

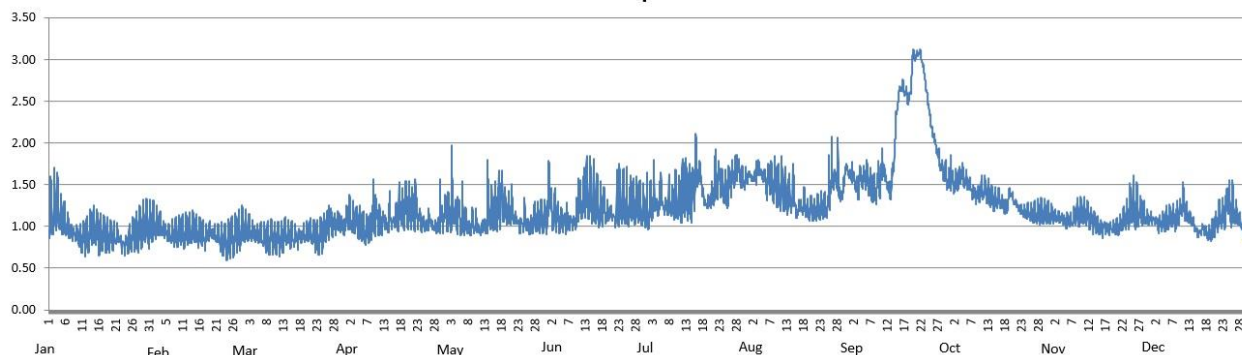
**2014**

Station: **Sulipan**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.12	1.01	0.95	1.11	1.16	1.34	1.18	1.63	1.62	1.59	1.12	1.09
2	1.19	1.01	0.95	1.09	1.19	1.19	1.22	1.57	1.52	1.52	1.12	1.07
3	1.20	1.00	0.93	1.07	1.19	1.16	1.31	1.64	1.52	1.53	1.11	1.04
4	1.14	0.97	0.90	1.03	1.14	1.10	1.23	1.67	1.56	1.62	1.08	1.05
5	1.10	0.95	0.89	1.03	1.15	1.09	1.29	1.64	1.57	1.58	1.08	1.06
6	1.00	0.90	0.88	0.97	1.09	1.06	1.23	1.52	1.53	1.53	1.07	1.08
7	0.93	0.91	0.85	0.96	1.04	1.10	1.24	1.57	1.45	1.46	1.09	1.10
8	0.92	0.92	0.85	1.01	0.98	1.06	1.30	1.49	1.44	1.41	1.15	1.09
9	0.90	0.94	0.88	1.16	1.03	1.05	1.26	1.48	1.53	1.38	1.14	1.16
10	0.88	0.94	0.86	1.16	1.02	1.26	1.30	1.44	1.67	1.43	1.17	1.27
11	0.85	0.94	0.85	1.03	0.96	1.25	1.26	1.49	1.61	1.43	1.14	1.19
12	0.88	0.94	0.86	1.05	1.00	1.35	1.42	1.41	1.48	1.40	1.09	1.12
13	0.94	0.96	0.90	1.03	0.98	1.36	1.44	1.36	1.55	1.34	1.06	1.06
14	0.98	0.94	0.89	1.11	1.23	1.33	1.41	1.33	2.03	1.31	1.03	0.97
15	0.95	0.90	0.87	1.06	1.13	1.31	1.47	1.21	2.52	1.31	1.00	0.92
16	0.88	0.89	0.86	1.08	1.15	1.25	1.68	1.23	2.68	1.30	0.98	0.96
17	0.89	0.86	0.86	1.17	1.24	1.21	1.62	1.23	2.63	1.24	1.00	0.94
18	0.87	0.91	0.88	1.19	1.32	1.21	1.36	1.23	2.53	1.27	0.99	0.91
19	0.86	0.92	0.90	1.26	1.21	1.16	1.27	1.18	2.81	1.40	0.99	0.94
20	0.85	0.90	0.91	1.21	1.18	1.15	1.30	1.20	3.04	1.32	0.98	1.01
21	0.87	0.88	0.91	1.22	1.17	1.10	1.39	1.18	3.08	1.26	1.00	1.10
22	0.85	0.82	0.86	1.29	1.09	1.21	1.56	1.21	3.02	1.20	1.06	1.14
23	0.79	0.81	0.87	1.11	1.03	1.26	1.59	1.23	2.80	1.19	1.12	1.15
24	0.79	0.84	0.88	1.04	1.04	1.24	1.47	1.23	2.50	1.17	1.16	1.32
25	0.85	0.89	0.94	1.00	1.09	1.21	1.41	1.35	2.22	1.16	1.24	1.20
26	0.90	0.90	1.00	1.09	0.99	1.24	1.56	1.55	2.04	1.15	1.17	1.17
27	0.93	0.92	1.08	1.01	1.02	1.28	1.60	1.58	1.88	1.16	1.18	1.08
28	0.95	0.94	1.04	0.98	1.11	1.28	1.69	1.50	1.72	1.15	1.14	1.02
29	1.00		1.06	1.10	1.09	1.23	1.62	1.38	1.64	1.16	1.11	0.94
30	1.02		1.05	1.11	1.11	1.19	1.56	1.65	1.55	1.15	1.08	0.90
31	0.99		1.01		1.11		1.58	1.64		1.14		0.89

Max WL observed	1.71	1.31	1.26	1.57	1.98	1.85	2.11	2.08	3.13	1.86	1.62	1.56
Day of Max WL	3	2	27	9	3	13	16	26	20	1	26	25

**Sulipan WL 2014**



**Water Level in meters (Daily Average)**

2014		Station: Mexico										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.10	0.00	0.00	0.00	0.00	0.01	0.00	0.28	0.29	0.42	0.00	0.03
2	0.19	0.00	0.00	0.00	0.00	0.00	0.04	0.18	0.32	0.48	0.05	0.00
3	0.15	0.00	0.00	0.00	0.00	0.00	0.15	0.17	0.36	0.40	0.00	0.00
4	0.07	0.00	0.00	0.00	0.00	0.00	0.26	0.32	0.31	0.32	0.00	0.00
5	0.07	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.31	0.30	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.31	0.22	0.00	0.00
7	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.09	0.27	0.16	0.00	0.00
8	0.01	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.17	0.08	0.00	0.00
9	0.00	0.00	0.06	0.10	0.00	0.00	0.00	0.00	0.24	0.03	0.00	0.01
10	0.01	0.00	0.04	0.18	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.02
11	0.05	0.00	0.02	0.11	0.00	0.00	0.00	0.00	0.32	0.22	0.00	0.00
12	0.07	0.02	0.04	0.09	0.00	0.08	0.00	0.00	0.31	0.19	0.00	0.00
13	0.00	0.07	0.08	0.10	0.00	0.16	0.00	0.00	0.47	0.04	0.00	0.00
14	0.00	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00
15	0.00	0.00	0.13	0.07	0.00	0.00	0.00	0.00	0.69	0.01	0.00	0.00
16	0.00	0.00	0.17	0.00	0.00	0.00	0.32	0.39	0.51	0.00	0.00	0.00
17	0.00	0.00	0.16	0.03	0.00	0.00	0.26	0.33	0.43	0.00	0.00	0.00
18	0.00	0.00	0.06	0.04	0.00	0.00	0.06	0.24	0.41	0.03	0.01	0.00
19	0.00	0.00	0.05	0.09	0.04	0.00	0.15	0.06	0.79	0.00	0.10	0.00
20	0.00	0.00	0.02	0.01	0.02	0.00	0.20	0.19	0.70	0.00	0.13	0.00
21	0.01	0.00	0.00	0.00	0.07	0.00	0.13	0.30	0.61	0.00	0.12	0.00
22	0.10	0.00	0.00	0.00	0.07	0.00	0.30	0.24	0.65	0.00	0.12	0.05
23	0.02	0.00	0.00	0.00	0.16	0.00	0.29	0.01	0.55	0.00	0.12	0.12
24	0.02	0.00	0.00	0.00	0.18	0.00	0.30	0.00	0.49	0.00	0.11	0.19
25	0.00	0.00	0.00	0.00	0.01	0.00	0.18	0.22	0.48	0.00	0.10	0.26
26	0.00	0.00	0.00	0.00	0.00	0.06	0.13	0.40	0.44	0.00	0.11	0.25
27	0.00	0.00	0.02	0.02	0.00	0.00	0.21	0.33	0.39	0.00	0.09	0.24
28	0.00	0.00	0.00	0.02	0.00	0.00	0.05	0.33	0.34	0.00	0.08	0.24
29	0.00		0.00	0.00	0.09	0.00	0.00	0.32	0.31	0.00	0.06	0.24
30	0.00		0.04	0.00	0.01	0.00	0.00	0.31	0.28	0.00	0.06	0.23
31	0.00		0.01		0.03		0.00	0.30		0.00		0.21

Max WL observed	0.24	0.13	0.18	0.45	0.62	0.34	0.70	1.11	1.17	0.80	0.18	0.26
Day of Max WL	3	14	17	10	23	13	4	15	19	1	2	25

**Mexico WL 2014**

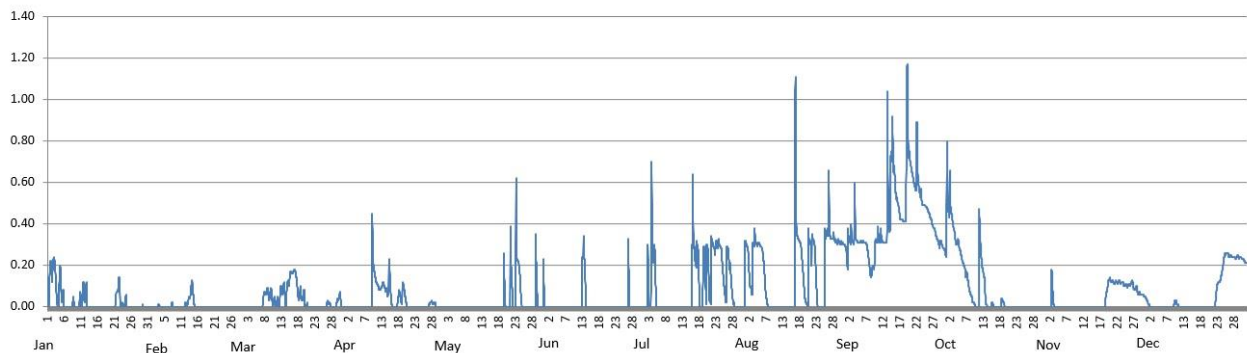


Table 2.0

**Maximum WL recorded per station for the year 2014**

Station	January	February	March	April	May	June	July	August	September	October	November	December
Sapang Buho	0.12	0.16	0.92	0.00	0.04	0.04	1.36	2.04	4.54	0.75	0.41	0.65
Zaragoza	0.74	0.66	0.96	0.64	0.20	1.80	3.07	2.59	4.37	3.23	0.50	0.61
Mayapyap							0.00	0.17	3.03	0.00	0.00	0.00
Penaranda	0.00	0.00	0.59	0.00	0.00	0.00	0.95	1.41	2.87	0.57	0.61	1.68
San Isidro	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.87	4.13	0.00	0.00	0.04
Arayat	1.21	1.15	2.48	1.05	0.95	1.84	5.53	5.63	8.53	4.51	3.55	3.62
Candaba	2.04	1.84	1.92	1.55	1.66	2.34	4.14	4.42	6.14	3.78	2.31	2.54
Sasmuan	2.62	2.50	2.41	2.49	2.71	2.64	2.68	2.62	2.70	2.59	2.60	2.68
Sulipan	1.71	1.31	1.26	1.57	1.98	1.85	2.11	2.08	3.13	1.86	1.62	1.56
Mexico	0.24	0.13	0.18	0.45	0.62	0.34	0.70	1.11	1.17	0.80	0.18	0.26



## C. ANNEX

Table A-1.

Maximum Rainfall for a given sliding time period during the year 2014																
Sliding time period (minimum time period of 1 hour)	Rainfall Stations															
	Munoz	Sapang Buho	Gabalton	Zaragoza	Peñaranda	Calaanan	Palali	San Isidro	Arayat	Candaba	Sibul Spring	Sasmuan	Sulipan	Mexico	Porac	San Rafael
1 hr	46	74	39	42	62	36	40	38	35	48	43	52	48	38	53	34
2 hrs	87	79	56	78	74	52	46	65	61	53	54	56	58	48	63	48
3 hrs	88	90	73	78	78	59	48	65	62	54	92	57	60	49	64	56
4 hrs	88	90	93	81	87	68	62	65	69	56	101	57	66	56	64	68
5 hrs	88	90	109	85	97	70	64	65	74	56	109	57	68	59	65	81
6 hrs	88	90	120	85	98	76	66	66	75	56	110	57	68	60	65	81
7 hrs	88	90	123	85	98	77	68	66	78	56	111	65	68	61	65	82
8 hrs	88	90	132	85	98	79	68	66	87	57	111	69	68	65	65	83
9 hrs	88	92	143	85	98	79	78	66	94	60	111	69	68	69	65	83
10 hrs	88	94	146	85	98	79	82	67	99	64	111	69	68	75	66	84
11 hrs	88	95	148	85	105	79	82	67	103	67	111	69	68	79	66	85
12 hrs	88	95	150	85	110	86	82	67	108	69	113	69	68	80	67	91
18 hrs	98	97	176	85	115	87	92	72	112	76	121	71	68	81	91	104
24 hrs	103	100	196	86	130	91	113	97	113	77	147	75	79	91	91	112
48 hrs (2 days)	121	139	234	101	192	133	160	143	126	114	206	98	90	113	150	125
72 hrs (3 days)	142	194	235	101	192	146	160	144	127	118	206	112	106	113	170	126
96 hrs (4 days)	185	211	250	104	197	172	161	148	146	130	217	117	114	151	176	126
120 hrs (5 days)	197	219	272	115	201	201	171	154	157	142	223	124	123	151	182	152
144 hrs (6 days)	204	219	318	158	266	223	228	179	211	181	284	147	129	160	182	212
240 hrs (10 days)	227	259	383	188	307	269	286	222	282	235	357	198	162	253	212	262
480 hrs (20 days)	373	405	615	302	493	375	395	409	349	328	465	320	287	369	305	363
Meteorological day (8 am to 8 am)	98	97	138	85	114	79	88	72	106	72	121	74	68	91	81	91
Max monthly total	410	454	514	344	442	393	451	422	382	339	448	313	256	411	334	390

The maximum monthly total values for some stations may be smaller than their 480 hours (20 days) of sliding time total. This means that the 20-day total transcends 2 succeeding months. Likewise, the 24-hour unrestricted sliding time period is relatively much larger than the meteorological day (fixed 8am to 8am) total.

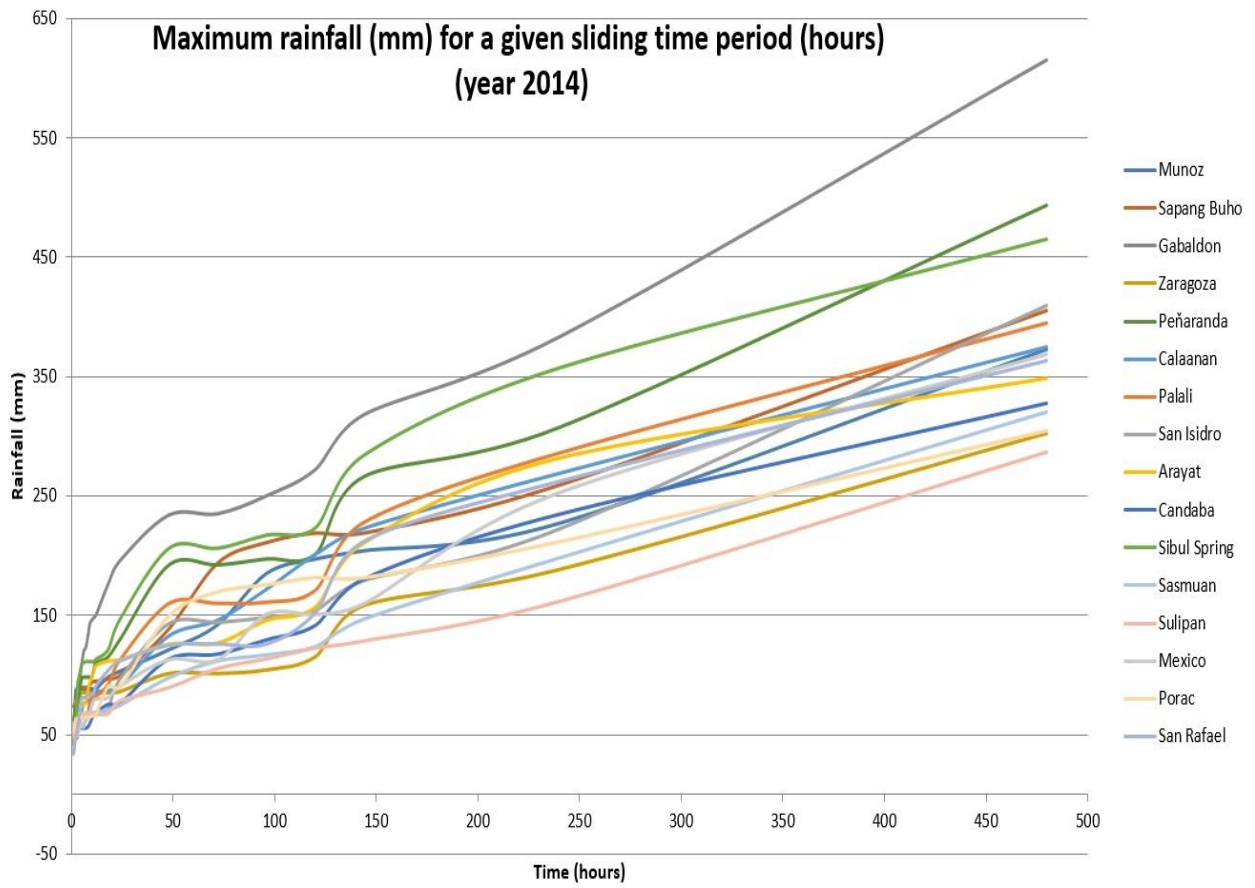


Figure AA-1. The sliding time period per station graph.



Table A-2. PRFFWC Existing Flood Warning Assessment Levels (SG in meters)

Color code	YELLOW	ORANGE	RED
<b>STATION</b>	<b>ALERT</b>	<b>ALARM</b>	<b>CRITICAL</b>
<b>Sapang Buho</b>	<b>3.70</b>	<b>4.50</b>	<b>6.50</b>
<b>Mayapyap</b>	<b>3.00</b>	<b>3.50</b>	<b>4.50</b>
<b>Zaragoza ++</b>	<b>11.00</b>	<b>12.50</b>	<b>14.50</b>
<b>Penaranda</b>			
<b>San Isidro +</b>	<b>3.20</b>	<b>4.50</b>	<b>6.00</b>
<b>Arayat</b>	<b>5.00</b>	<b>6.00</b>	<b>8.50</b>
<b>Candaba</b>	<b>3.00</b>	<b>4.50</b>	<b>5.00</b>
<b>Mexico</b>			
<b>Sasmuan +</b>			<b>2.90 *</b>
<b>Sulipan +</b>	<b>3.60 (2.50)</b>	<b>4.20 (3.00)</b>	<b>5.00 (3.50)</b>

\* Based on past observations from various flood events (for validation)

+ for updating of assessment levels (Sulipan values in parenthesis are proposed assessment levels)

++ assessment values are in MSL

Table A-3. Water Level Station notes

Water Level Station	Elevation of "0" of Staff Gauge (m) (as of Aug. 2009)	Rating Curve (RC) Equation as of April 2009	RC range of applicability
Sapang Buho	50.212	$Q = 4.015 (H - (-2.94))^2$	$0 < H \leq 3.4$
Zaragoza	10.213	$Q = 12.111 (H - 0.0)^2$	(for validation)
Peñaranda	22.498**	$Q = 2.30 (H - (-1.20))^2$	$0 < H \leq 4.0$
San Isidro	9.585	$Q = 15.2 (H - (-1.70))^2$	$0 < H \leq 8.0$
Arayat	0.077	$Q = 9.106 (H - (-0.39))^2$	$0 < H \leq 9.0$
Candaba	-0.157	$Q = 1.80 (H - (-1.30))^2$	$0 < H \leq 2.0$
Sasmuan	-1.147	$Q = 1.50 (H - (-2.0))^2$	$0 < H \leq 2.0$
Sulipan	-0.062	$Q = 9.50 (H - (-0.4))^2$	$0 < H \leq 3.0$
Mexico	5.933**	$Q = 11.0 (H - (-0.50))^2$	$0 < H \leq 3.0$

Notes: RC equations by JICA Consultants

\* - based on x-section of March 2000 (by PRFFWC)

\*\* - based on temporary markers (TBM)

Above table are still the latest information for PRFFWC streamgaging sites. Rating curve equations remains the latest available for now. The RCs should be updated regularly.

Water Level Percent Duration Curves of some stations

Sapang Buho WL % duration (2014)

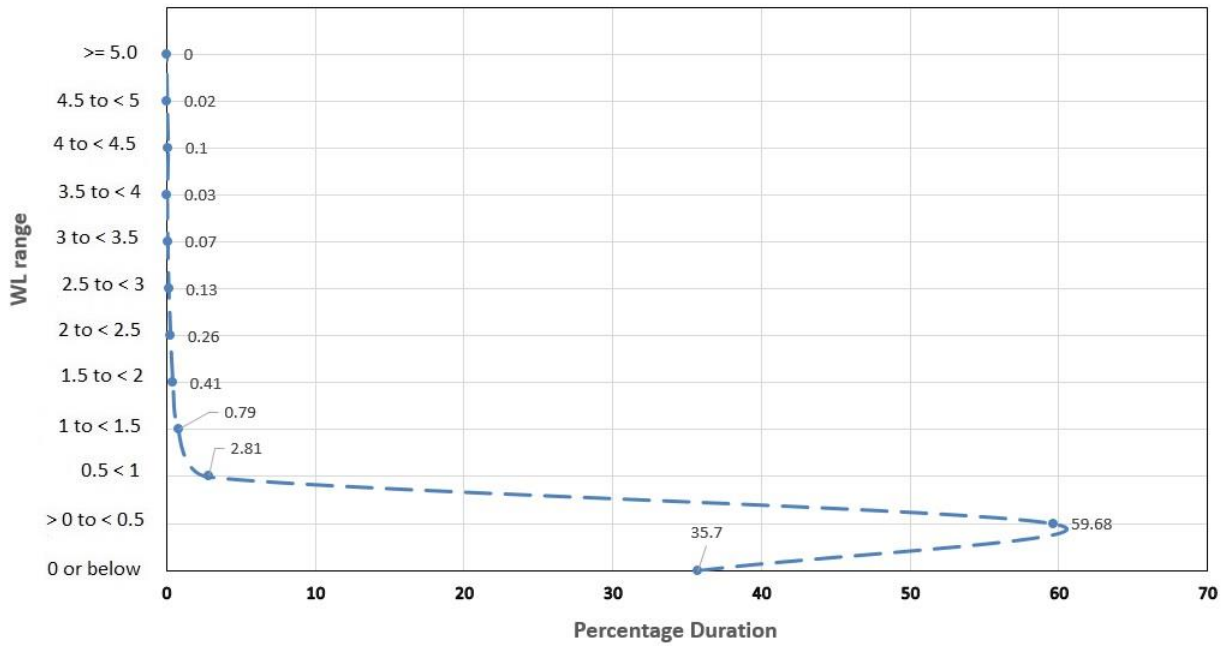


Figure AA-2. Sapang Buho WL percent duration curve (2014)

Zaragoza WL % duration (2014)

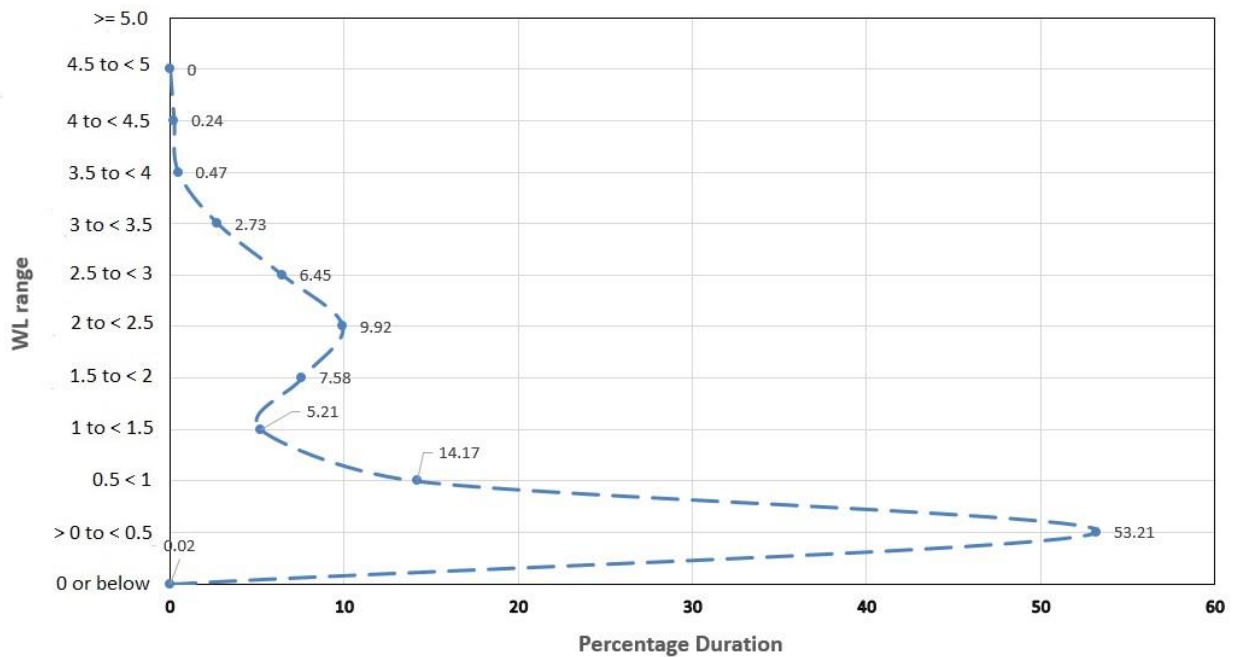


Figure AA-3. Zaragoza WL percent duration curve (2014)

### Arayat WL % duration (2014)

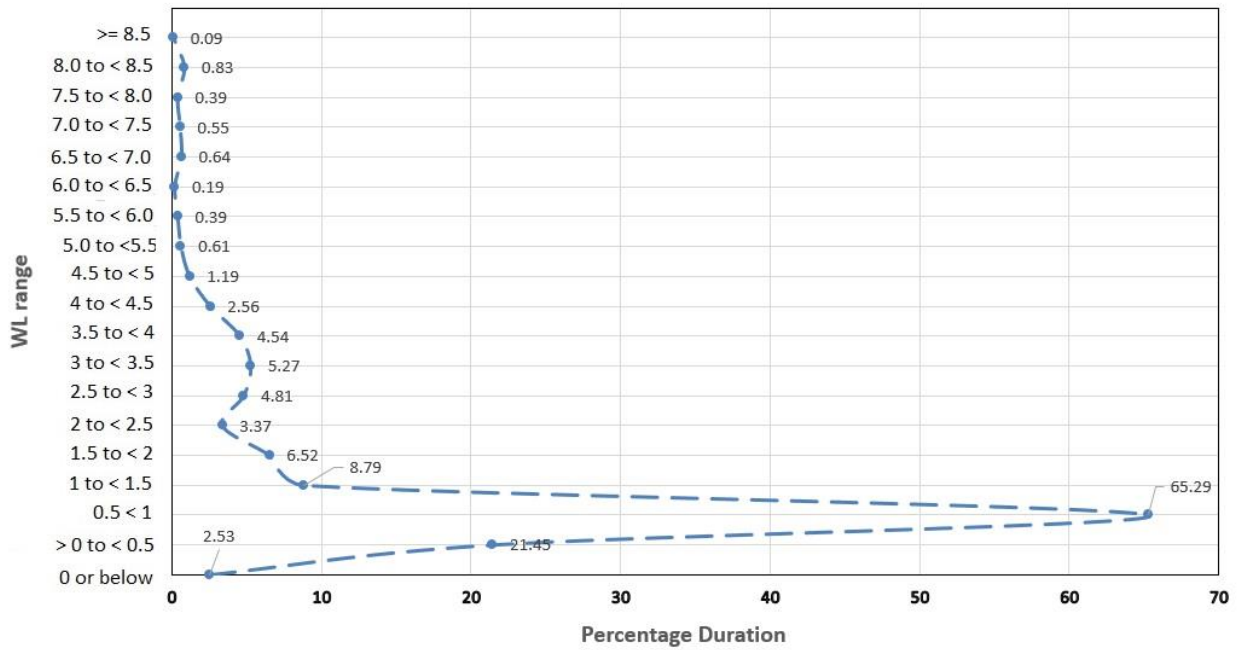


Figure AA-4. Arayat WL percent duration curve (2014)

### Candaba WL % duration (2014)

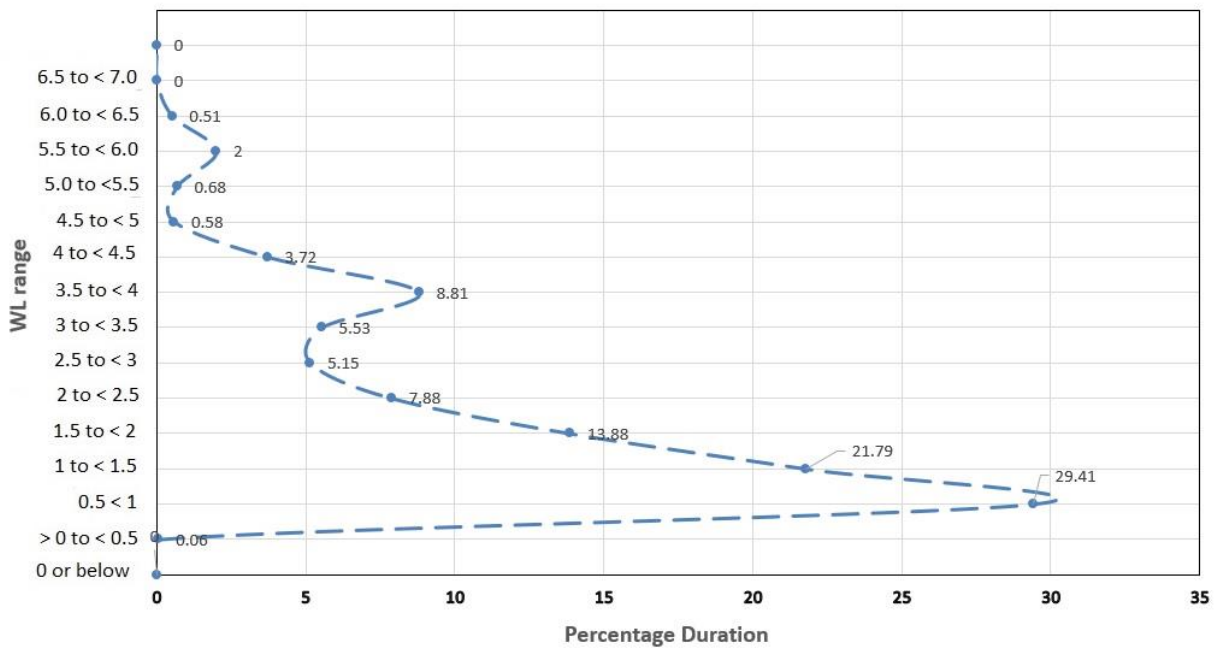


Figure AA-5. Candaba WL percent duration curve (2014)

### Sasmuan WL % duration (2014)

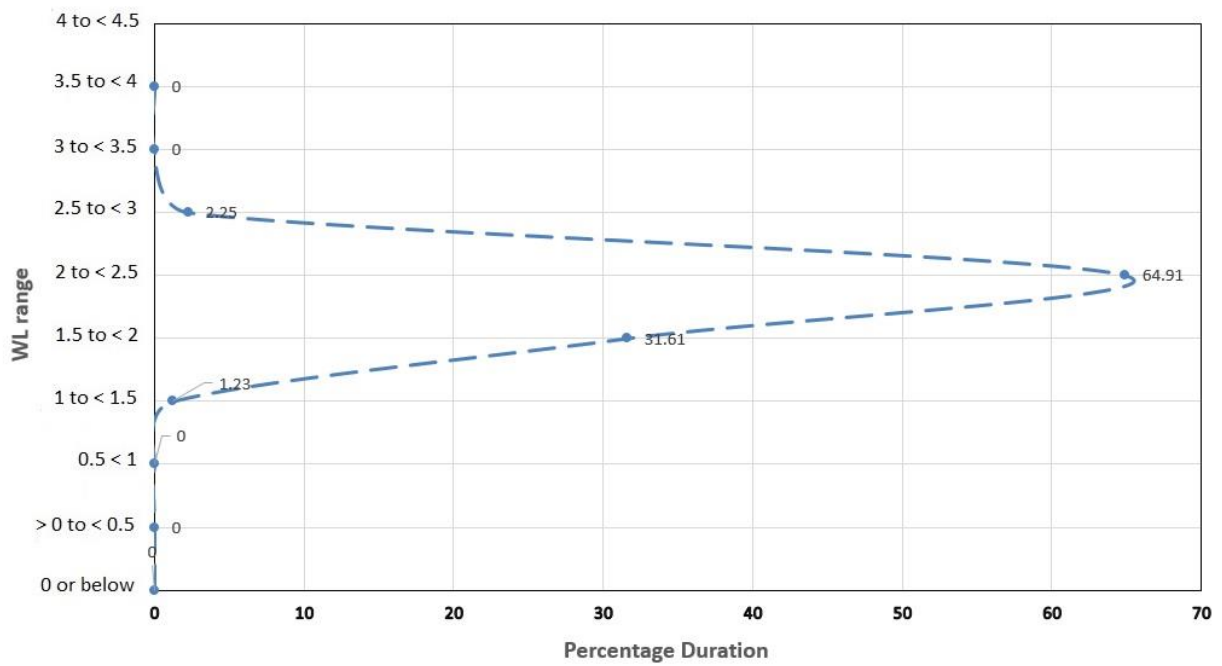


Figure AA-6. Sasmuan WL percent duration curve (2014)

### Sulipan WL % duration (2014)

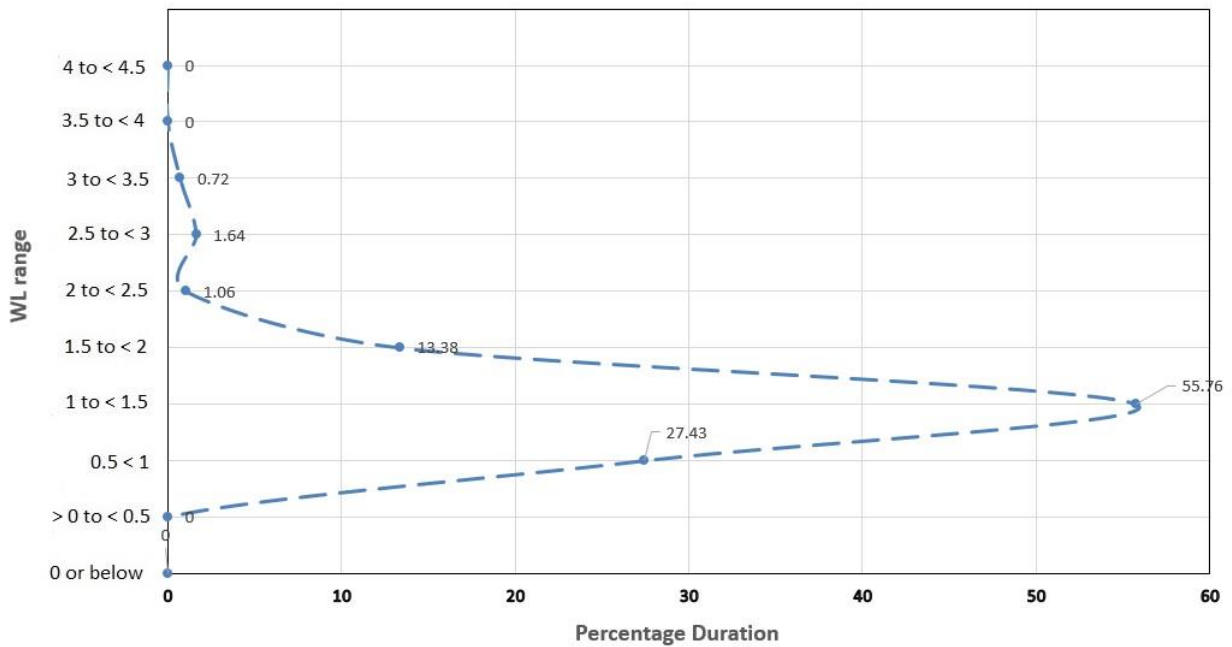


Figure AA-7. Sulipan WL percent duration curve (2014)

Note: The other WL stations were not included in WL percent duration curves as most of their observations are either erroneous and / or zero such as for San Isidro, Peñaranda, Mexico and Mayapyap stations.



*PRFFWC report 2021*

*PRFFWC Contact details:*

*Cell phone: (0999) 336 6416*

*E-mail: [prffwc@gmail.com](mailto:prffwc@gmail.com)*

*Facebook: [Prffwc Pagasa](#) (or just search for PRFFWC)*

*Twitter: [@PRFFWC](#)*

*Website: [www.prffwc.synthasite.com](http://www.prffwc.synthasite.com)*

