



LAPORAN PEMANTAUAN KEMARAU
SEMENANJUNG MALAYSIA
(BERDASARKAN ANALISIS HIDROLOGI)

BULAN NOVEMBER 2015



DISEDIAKAN OLEH:
BAHAGIAN PENGURUSAN SUMBER AIR DAN HIDROLOGI
JABATAN PENGAIRAN DAN SALIRAN MALAYSIA

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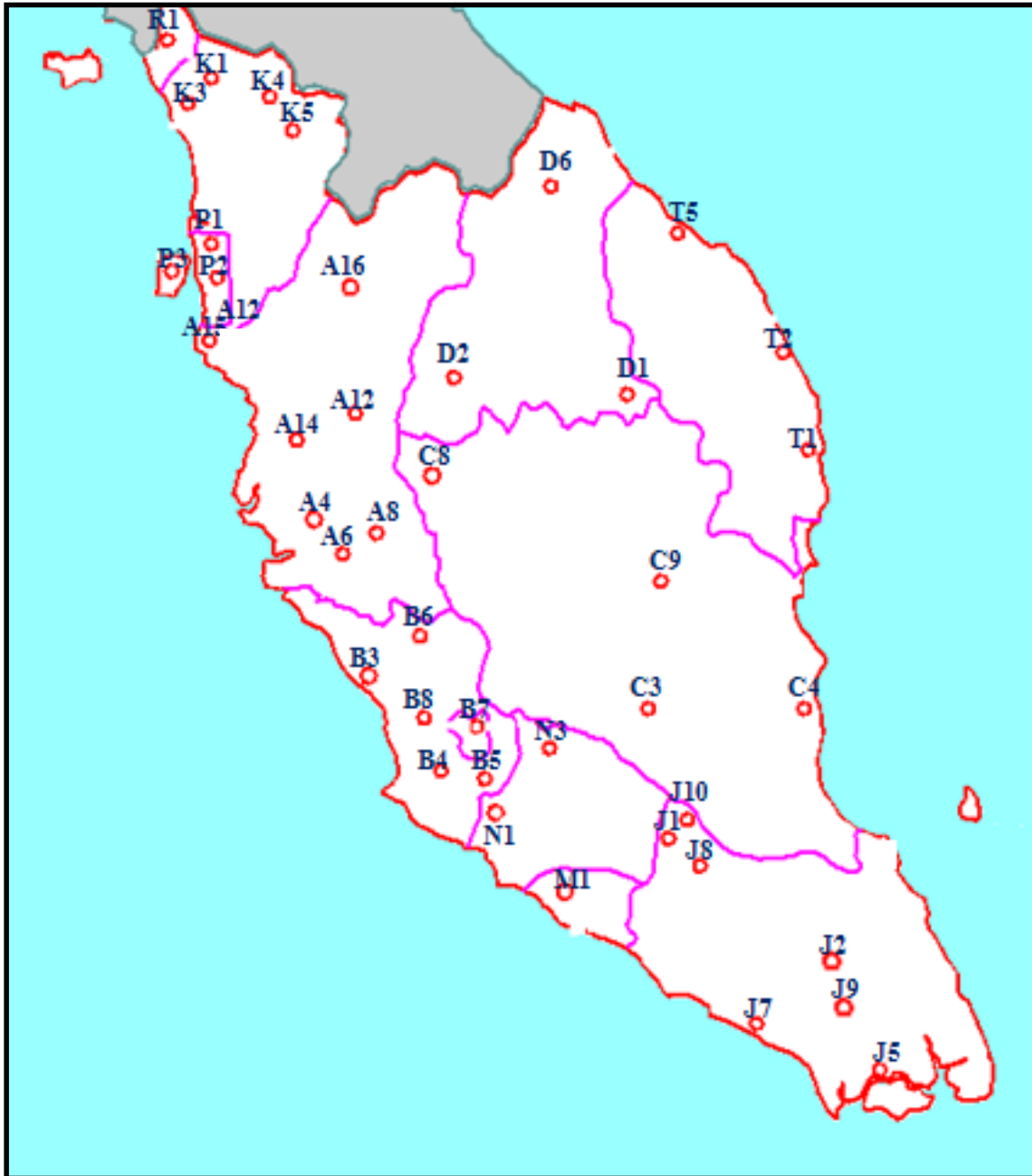
1. RINGKASAN

Sebanyak 41 stesen kemarau yang dipantau dalam analisis hujan untuk penyediaan Laporan Pemantauan Kemarau ini. Senarai stesen yang terlibat ditunjukkan dalam Jadual 1: Senarai 41 Stesen Kemarau di Semenanjung Malaysia seperti di bawah. Lokasi stesen yang terlibat adalah seperti dalam Rajah 1: 41 Stesen Kemarau di Semenanjung Malaysia (dibawah).

| Bil | Stn. Indeks | No. Stesen | Nama Stesen | Daerah | Negeri |
|-----|-------------|------------|--------------------------------------|-----------------------|--------------|
| 1 | R1 | 6501005 | Abi Kg. Bahru | Kangar | Perlis |
| 2 | K1 | 6206035 | Kuala Nerang | Padang Terap | Kedah |
| 3 | K3 | 6103047 | Rumah Pam Sungai Raja | Kota Setar | Kedah |
| 4 | K4 | 6207032 | Ampang Pedu | Padang Terap | Kedah |
| 5 | K5 | 6108062 | Ampang Muda | Padang Terap | Kedah |
| 6 | P1 | 5505033 | Rumah Pam Pinang Tunggal | Seberang Perai Utara | Pulau Pinang |
| 7 | P2 | 5304045 | Pusat Kesihatan Bkt. Berapit | Seberang Perai Tengah | Pulau Pinang |
| 8 | P3 | 5302003 | Kolam Takongan Air Itam | Daerah Timur Laut | Pulau Pinang |
| 9 | A4 | 4109095 | Kg. Pulau Besar | Perak Tengah | Perak |
| 10 | A6 | 4011139 | Rumah JPS., Sg. Mengkuang | Hilir Perak | Perak |
| 11 | A8 | 4011144 | Rumah Kerajaan JPS., Chui Chak | Hilir Perak | Perak |
| 12 | A12 | 4511111 | Politeknik Ungku Omar di Ipoh | Kinta | Perak |
| 13 | A14 | 5006021 | Kolam Air Bkt. Merah | Kerian | Perak |
| 14 | A15 | 5003028 | Stn. Petak Ujian Tg. Piandang | Kerian | Perak |
| 15 | A16 | 5210069 | Stn. Pemeriksaan Hutan Lawin | Hulu Perak | Perak |
| 16 | B3 | 3411017 | Stor JPS Tg.Karang | Kuala Selangor | Selangor |
| 17 | B4 | 2917001 | RTM Kajang | Hulu Langat | Selangor |
| 18 | B5 | 2818110 | SMK Tasik Kesuma | Hulu Langat | Selangor |
| 19 | B6 | 3516022 | Loji Air Kuala Kubu Bahru | Hulu Selangor | Selangor |
| 20 | B7 | 3117070 | Pusat Penyelidikan di JPS Ampang | Wilayah Persekutuan | Selangor |
| 21 | B8 | 3010001 | Tmn Ehsan Kg. Melayu Subang Sg.Buloh | Petaling | Selangor |
| 22 | N1 | 2719001 | Setor JPS Sikamat Seremban | Seremban | N. Sembilan |
| 23 | N3 | 3023098 | Sg. Lui Halt | Kuala Pilah | N. Sembilan |
| 24 | M1 | 2321006 | Ldg. Lendu | Alor Gajah | Melaka |
| 25 | J1 | 2526001 | Ldg. Sungai Gemas | Segamat | Johor |
| 26 | J2 | 2033002 | Stn. Telemetri Bandar Kluang | Kluang | Johor |
| 27 | J5 | 1437116 | Stor JPS Johor Bahru | Johor Bahru | Johor |
| 28 | J7 | 1829001 | Sek. Men. Munshi Sulaiman | Batu Pahat | Johor |
| 29 | J8 | 2528002 | Stn. Telemetri di Bandar Segamat | Segamat | Johor |
| 30 | J9 | 2536168 | Empangan Labong, Endau | Mersing | Johor |
| 31 | J10 | 2527004 | Ldg. Paya Lang, Segamat | Segamat | Johor |
| 32 | C3 | 3424081 | JPS Temerloh | Termeloh | Pahang |
| 33 | C4 | 3533102 | Rumah Pam Pahang Tua di Pekan | Pekan | Pahang |
| 34 | C8 | 4414036 | Ldg. Boh (Kawasan Kilang) | Cameron Highlands | Pahang |
| 35 | C9 | 3930012 | Sg. Lembing P.C.C.L Mill | Kuantan | Pahang |
| 36 | D1 | 4726001 | Gunung Gagau | Gua Musang | Kelantan |
| 37 | D2 | 4819027 | Gua Musang | Gua Musang | Kelantan |
| 38 | D6 | 5921009 | Ibu Bekalan To' Uban | Pasir Mas | Kelantan |
| 39 | T1 | 4234109 | JPS Kemaman | Kemaman | Terengganu |
| 40 | T2 | 4734079 | Sek. Men. Sultan Omar di Dungun | Dungun | Terengganu |
| 41 | T5 | 5331048 | Setor JPS Kuala Terengganu | Kuala Terengganu | Terengganu |

Jadual 1: Senarai 41 Stesen Kemarau di Semenanjung Malaysia

Rajah 1: Lokasi 41 Stesen Kemarau di Semenanjung Malaysia.



Jadual 2: Purata Hujan Bulan NOVEMBER 2015

| INDEKS STESEN | JUMLAH HUJAN (MM) | | | | |
|------------------|-------------------|---------------------------------|-----------|------------|------------|
| | Minggu 1 | Minggu 2 | Minggu 3 | Minggu 4 | (mm) |
| | 1hb-7hb | 8hb-14hb | 15hb-21hb | 22hb- 31hb | |
| R1 | 157 | 78 | 43 | 108 | 386 |
| K1 | 94.5 | 49.5 | 21 | 64.5 | 229.5 |
| K3 | 116.5 | 50.5 | 102 | 95.5 | 364.5 |
| K4 | 113 | 51 | 20 | 30 | 214 |
| K5 | 160 | 107 | 13 | 48 | 328 |
| P1 | 109 | 12 | 237.5 | 84 | 442.5 |
| P2 | 125.5 | 43.5 | 157 | 176.5 | 502.5 |
| P3 | 147.5 | 37 | 60.5 | 114.5 | 359.5 |
| A4 | 30 | 73 | 148.5 | 34 | 285.5 |
| A6 | 80 | 39.5 | 78 | 84.5 | 282 |
| A8 | 63.5 | 92 | 210 | 96 | 461.5 |
| A12 | 116.5 | 68 | 47 | 34 | 265.5 |
| A14 | 82.5 | 36.5 | 27 | 112 | 258 |
| A15 | 23 | 3.5 | 73.5 | 120.5 | 220.5 |
| A16 | 124 | 61 | 44.5 | 85 | 314.5 |
| B3 | 37 | 31 | 56.5 | 39 | 163.5 |
| B4 | 0 | 69.6 | 195.3 | 62.2 | 327.1 |
| B5 | 95.5 | 76 | 89 | 56.5 | 317 |
| B6 | 173 | 128 | 96 | 48 | 445 |
| B7 | 106 | 121.5 | 69 | 102 | 398.5 |
| B8 | 53.5 | 89 | 203.5 | 63 | 409 |
| N1 | 108 | 49 | 153 | 23 | 333 |
| N3 | 15.5 | 41.5 | 151.5 | 88 | 296.5 |
| M1 | 76.5 | 90 | 99 | 24 | 289.5 |
| J1 | 33 | 11 | 64 | 69 | 177 |
| J2 | 131 | 120 | 44 | 67.5 | 362.5 |
| J5 | 101.5 | 114 | 212.5 | 155.5 | 583.5 |
| J7 | 36.5 | 56 | 32.5 | 97 | 222 |
| J8 | 40 | 26.5 | 63.5 | 20.5 | 150.5 |
| J9 | 45.5 | 22 | 107 | 146.5 | 321 |
| J10 | 2.5 | 2.5 | 26 | 35 | 66 |
| C3 | 60 | 83 | 30 | 94 | 267 |
| C4 | 18 | 9 | 36 | 80.5 | 143.5 |
| C8 | 164 | 95 | 57 | 119.5 | 435.5 |
| C9 | 20 | 50 | 39 | 121 | 230 |
| D1 | 129 | 42 | 59 | 86 | 316 |
| D2 | 33 | 61 | 26 | 200 | 320 |
| D6 | 99 | 40.5 | 148.5 | 228.5 | 516.5 |
| T1 | 36 | 2 | 71 | 179 | 288 |
| T2 | 8 | 3 | 129 | 177 | 317 |
| T5 | 83 | 8 | 107 | 220 | 418 |
| | | JUMLAH PURATA HUJAN (MM) | | | 318 |

Rumusan Data

Secara ringkasannya, purata keseluruhan jumlah hujan pada bulan **November 2015** adalah sebanyak **318 mm** sebagaimana Jadual 2. Jumlah purata hujan bulan **November 2015** didapati telah bertambah sebanyak (**102 mm**) bersamaan (**32 %**) berbanding dengan jumlah purata hujan bulan **Oktober 2015** seperti Jadual 3 di bawah. Manakala **kumulatif 3 bulan sebenar** dengan **kumulatif 3 bulan (Long Term Mean rainfall, LTM)** berlaku penambahan hujan sebanyak (**89 mm**) bersamaan (**13.6 %**) seperti Jadual 4 dan rajah 3 di bawah.

Jadual 3: Peratus Perbezaan Purata Hujan Bulanan Semasa dengan Bulan sebelum

| PURATA HUJAN (MM) | | | |
|-------------------|----------|-----------|-------------|
| OKTOBER | NOVEMBER | PERBEZAAN | % PERBEZAAN |
| 216 | 318 | +102 | +32 % |

Jadual 4: Peratus Perbezaan Kumulatif 3 bulan sebenar (Bulan Semasa + 2 Bulan kebelakang) dengan Kumulatif 3 bulan (*Long Term Mean rainfall, LTM*)

| PURATA HUJAN (MM) | | | |
|---------------------------|-----------------------|-----------|-------------|
| Kumulatif 3 bulan SEBENAR | Kumulatif 3 bulan LTM | PERBEZAAN | % PERBEZAAN |
| 746 | 657 | +89 | +13.6 % |

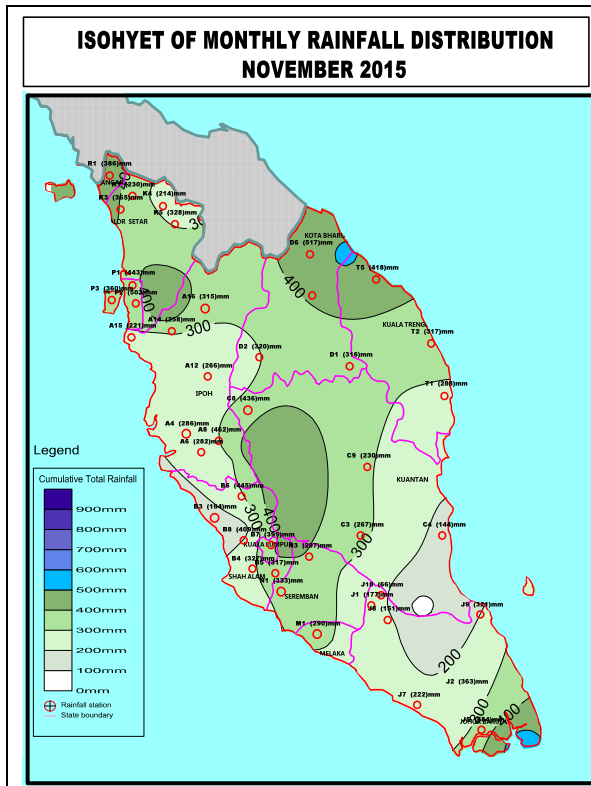
2. ANALISIS HUJAN (Berpandukan Data dan Peta Isohyet)

i. Taburan Hujan Bulan Semasa

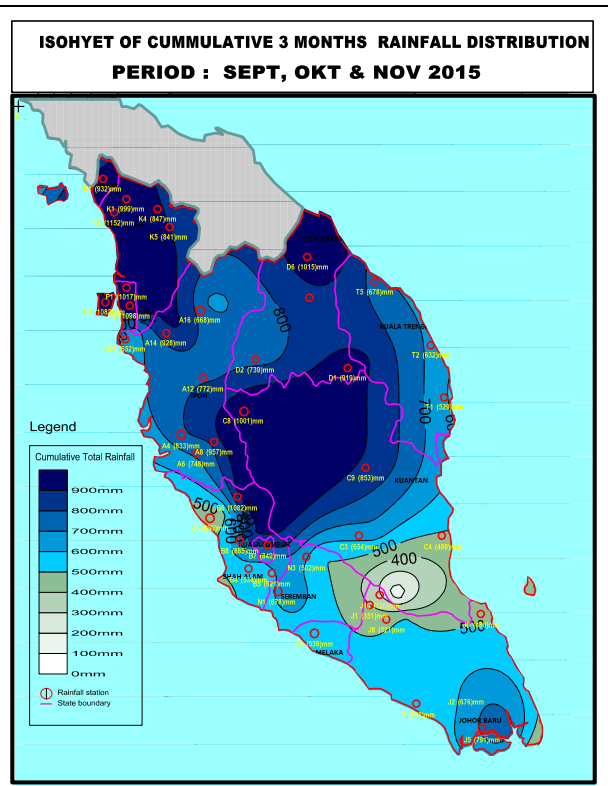
Peta Isohyet ini adalah bertujuan untuk menggambarkan taburan keadaan hujan semasa bagi bulan **November 2015** seperti di rajah 2 (di bawah). Purata taburan hujan bagi Semenanjung Malaysia ialah **318 mm**. Penambahan sebanyak (**13 mm**) bersamaan (**4.2 %**) berbanding dengan jumlah purata hujan bulan **Oktober 2015** (sila rujuk Jadual 3).

ii. Taburan Hujan Kumulatif untuk 3 bulan

Peta Isohyet ini adalah bertujuan untuk menggambarkan taburan hujan kumulatif untuk 3 bulan sebenar (**746 mm**) iaitu (Bulan Semasa + 2 Bulan kebelakang) seperti di rajah 3 (di bawah) jika dibandingkan dengan kumulatif 3 bulan LTM (**657 mm**) berlaku peningkatan hujan sebanyak (**89 mm**) bersamaan (**13.6 %**). (Sila rujuk Jadual 4)



Rajah 2: Taburan Hujan Bulan **November 2015**

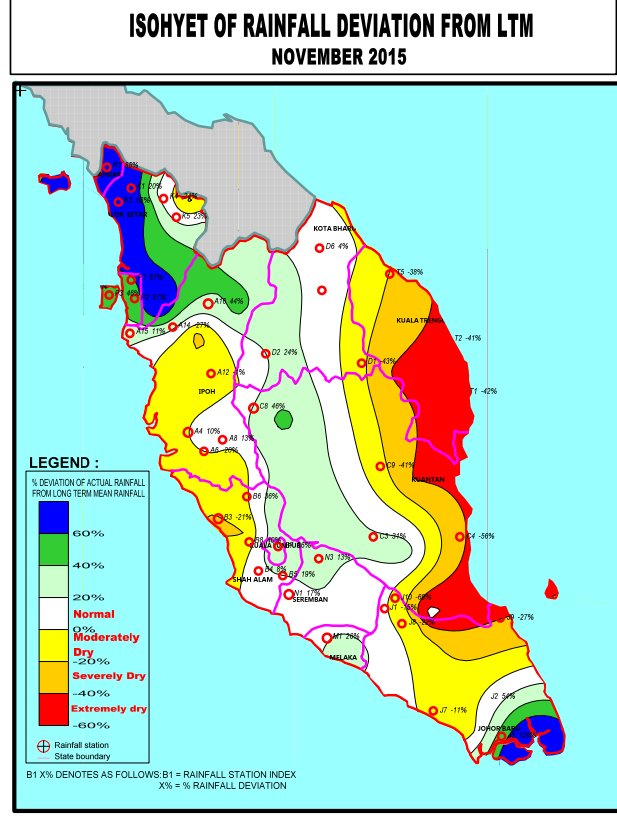


Rajah 3: Taburan Hujan Kumulatif 3 Bulan

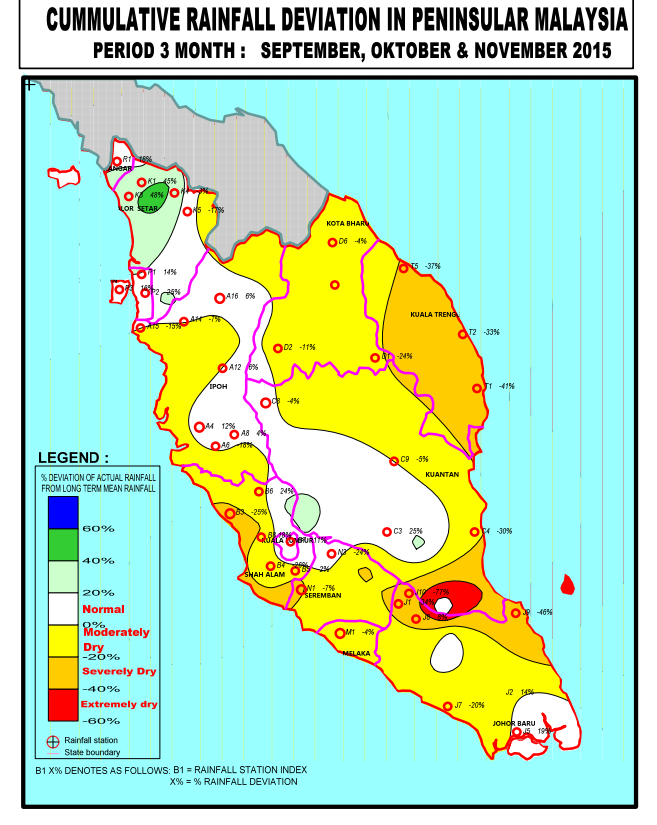
Jadual 5: Peratusan Perbandingan November 2015 dan Hujan Jangka Panjang (LTM).

| NO. | INDEKS STESEN | HUJAN SEMASA | HUJAN JANGKA PANJANG (LTM) | PERBEZAAN (MM) | % PERBEZAAN |
|-----|---------------|--------------|----------------------------|----------------|-------------|
| 1 | R1 | 386 | 208 | 178 | 85.2 |
| 2 | K1 | 230 | 192 | 38 | 19.8 |
| 3 | K3 | 365 | 217 | 147 | 67.9 |
| 4 | K4 | 214 | 281 | -67 | -23.8 |
| 5 | K5 | 328 | 268 | 60 | 22.6 |
| 6 | P1 | 443 | 265 | 178 | 67.1 |
| 7 | P2 | 503 | 268 | 234 | 87.2 |
| 8 | P3 | 360 | 246 | 114 | 46.1 |
| 9 | A4 | 286 | 259 | 27 | 10.3 |
| 10 | A6 | 282 | 354 | -72 | -20.4 |
| 11 | A8 | 462 | 408 | 53 | 13.1 |
| 12 | A12 | 266 | 269 | -3 | -1.2 |
| 13 | A14 | 258 | 351 | -93 | -26.6 |
| 14 | A15 | 221 | 198 | 22 | 11.2 |
| 15 | A16 | 315 | 218 | 97 | 44.5 |
| 16 | B3 | 164 | 207 | -44 | -21.2 |
| 17 | B4 | 327 | 304 | 24 | 7.8 |
| 18 | B5 | 317 | 266 | 51 | 19.3 |
| 19 | B6 | 445 | 327 | 118 | 36.0 |
| 20 | B7 | 399 | 292 | 106 | 36.4 |
| 21 | B8 | 409 | 292 | 117 | 40.0 |
| 22 | N1 | 333 | 285 | 48 | 16.7 |
| 23 | N3 | 297 | 262 | 34 | 13.0 |
| 24 | M1 | 290 | 231 | 59 | 25.6 |
| 25 | J1 | 177 | 208 | -31 | -14.9 |
| 26 | J2 | 363 | 235 | 128 | 54.3 |
| 27 | J5 | 584 | 258 | 325 | 125.9 |
| 28 | J7 | 222 | 249 | -27 | -10.8 |
| 29 | J8 | 151 | 192 | -42 | -21.7 |
| 30 | J9 | 321 | 439 | -118 | -26.8 |
| 31 | J10 | 66 | 214 | -148 | -69.2 |
| 32 | C3 | 267 | 203 | 64 | 31.5 |
| 33 | C4 | 144 | 324 | -180 | -55.7 |
| 34 | C8 | 436 | 298 | 138 | 46.2 |
| 35 | C9 | 230 | 393 | -163 | -41.5 |
| 36 | D1 | 316 | 551 | -235 | -42.7 |
| 37 | D2 | 320 | 258 | 62 | 24.3 |
| 38 | D6 | 517 | 497 | 20 | 4.0 |
| 39 | T1 | 288 | 495 | -207 | -41.9 |
| 40 | T2 | 317 | 541 | -224 | -41.4 |
| 41 | T5 | 418 | 679 | -261 | -38.4 |
| | PURATA | 318 | 305 | 13 | 4.2 |

**Rajah 4: Pelan Isohyet
(Peratusan Perbandingan Hujan November 2015 dan
LTM)**



**Rajah 5: Pelan Isohyet
(Peratusan perbandingan Hujan Kumulatif 3 bulan
dengan LTM)**



iii. Peratusan Perbandingan Purata Hujan November 2015 dengan LTM

Analisis berdasarkan jumlah hujan satu bulan, iaitu purata hujan bulan **November 2015** berbanding dengan purata hujan jangka panjang (*Long Term Mean rainfall, LTM*) telah menunjukkan bahawa terdapat penambahan sebanyak **(13mm)**, iaitu **(4.2 %)**. Darpada 41 stesen kemarau yang dipantau, **Tujuh (7)** stesen merekodkan defisit hujan melebihi **35%**; iaitu **di Johor (Segamat), Pahang (Pekan & Kuantan), Kelantan (Gua Musang) dan Terengganu (Kemaman, Dungun & Kuala Terengganu)**. Sila rujuk Jadual 5 dan Peta Isohyet (Rajah 4) di atas bagi analisis ini.

iv. Peratusan perbandingan Hujan Kumulatif 3 bulan dengan LTM

Analisis berdasarkan jumlah hujan kumulatif tiga bulan, iaitu purata hujan bulan **September, Oktober dan November 2015** berbanding dengan hujan jangka panjang 3 bulan kumulatif (*Long Term Mean rainfall, LTM*) telah menunjukkan **Satu (1)** stesen merekodkan defisit hujan melebihi **35%**; iaitu di **Johor (Segamat)** seperti Peta Isohyet (raajah 5) di atas.

v. Analisis Berdasarkan Jumlah Hujan 3 Bulan (*Moving 3 Months Analysis*)

Analisis Hujan 3 Bulan dijalankan bertujuan untuk meramalkan kebarangkalian berlaku kemarau di Semenanjung Malaysia dengan membandingkan keadaan hujan semasa dengan purata hujan jangka panjang bagi 3 bulan bergerak.

Bagi bulan **Oktober 2015**, Analisis Hujan 3 Bulan dijalankan dengan mengambilkira data bagi bulan-bulan berikut:

- i. Analisis 1 : September 2015, Oktober 2015 dan November 2015
- ii. Analisis 2 : Oktober 2015, November 2015 dan Disember LT
- iii. Analisis 3 : November 2015, Disember LT 2015 dan Januari LT 2016

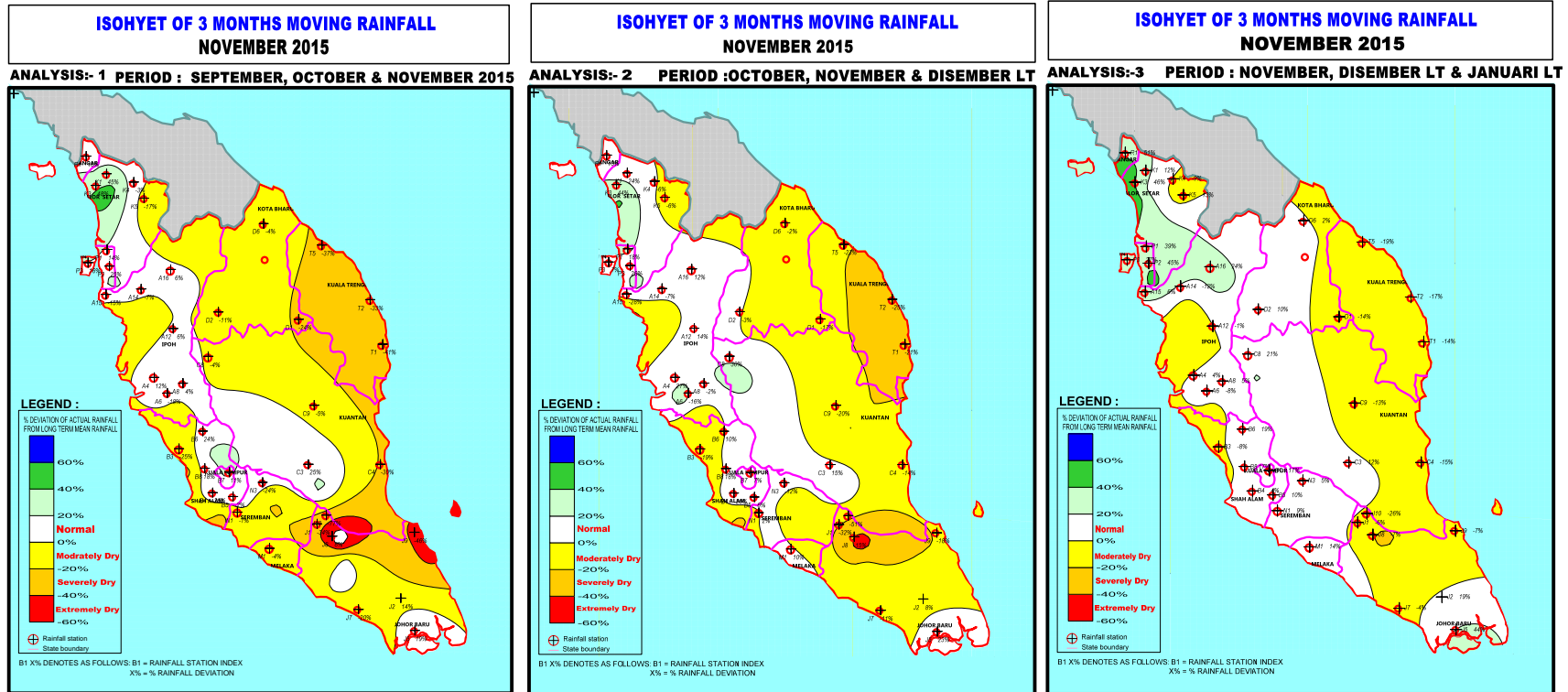
Bagi Analisis 1, data hujan semasa bagi ketiga-tiga bulan terlibat adalah digunapakai. Bagi Analisis 2 dan 3 pula, oleh kerana pada bulan **November 2015**, data hujan semasa bagi bulan Disember 2015 dan Januari 2016 masih belum diperolehi, maka data **purata hujan jangka panjang** digunakan dalam analisis-analisis ini.

Setiap analisis seperti di atas terbahagi kepada **tiga senario** seperti berikut:

- i. Senario 1 : Andaian Hujan Normal Untuk Tiga Bulan
- ii. Senario 2 : Andaian Penambahan (+20%) Kepada Purata Hujan Jangka Panjang
- iii. Senario 3 : Andaian Pengurangan (-20%) Kepada Purata Hujan Jangka Panjang

Keputusan analisis hujan 3 bulan untuk bulan **November 2015** bagi ketiga-tiga senario adalah sepertimana ditunjukkan dalam peta isohyet analisis hujan 3 bulan dari Rajah 6 - Rajah 8 dan jadual pengiraan analisis ketiga-tiga senario ini ditunjukkan dalam Jadual 6 - Jadual 12.

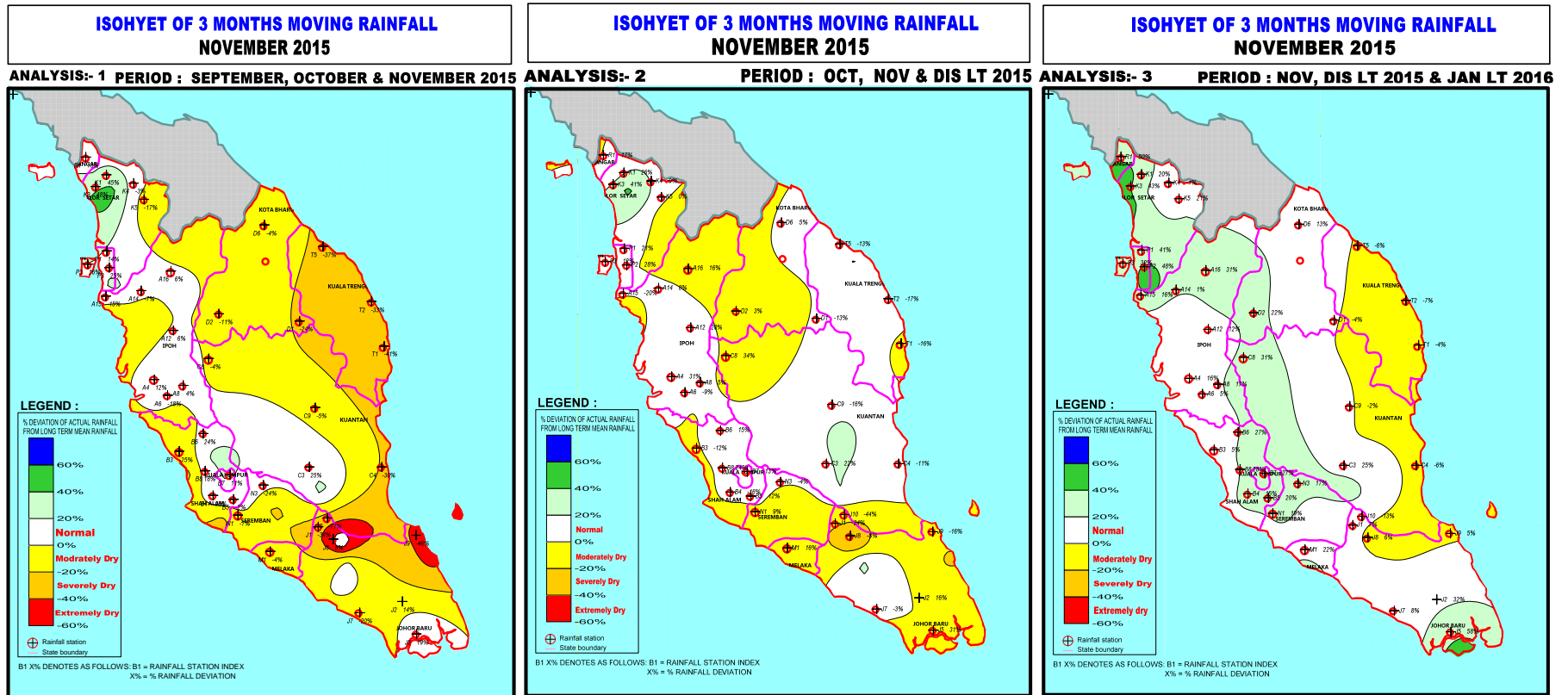
Rajah 6 : Peta Isohyet Analisis Hujan 3 Bulan : Senario 1-Andaian Hujan Normal untuk 3 bulan
 Analisis Berdasarkan Jumlah Hujan 3 Bulan (September, Oktober, November, Disember LT 2015 & Januari LT 2016)



Berdasarkan peta Isohyet bagi **Senario 1**, keputusan seperti di bawah adalah dirumuskan:

- i. Analisis 1 (Sept, Okt dan November 2015) menunjukkan pengurangan hujan melebihi 35% (kering) berlaku di stesen berindeks **J10** pada bulan **November 2015**.
- ii. Analisis 2 (Okt, Nov & Dis LT 2015) meramalkan keadaan kering berlaku di stesen berindeks **J10** pada bulan **Disember 2015**
- iii. Analisis 3 (Nov, Dis LT 2015 & Jan LT 2016) meramalkan **TIADA** keadaan kering berlaku pada bulan **Januari 2015**

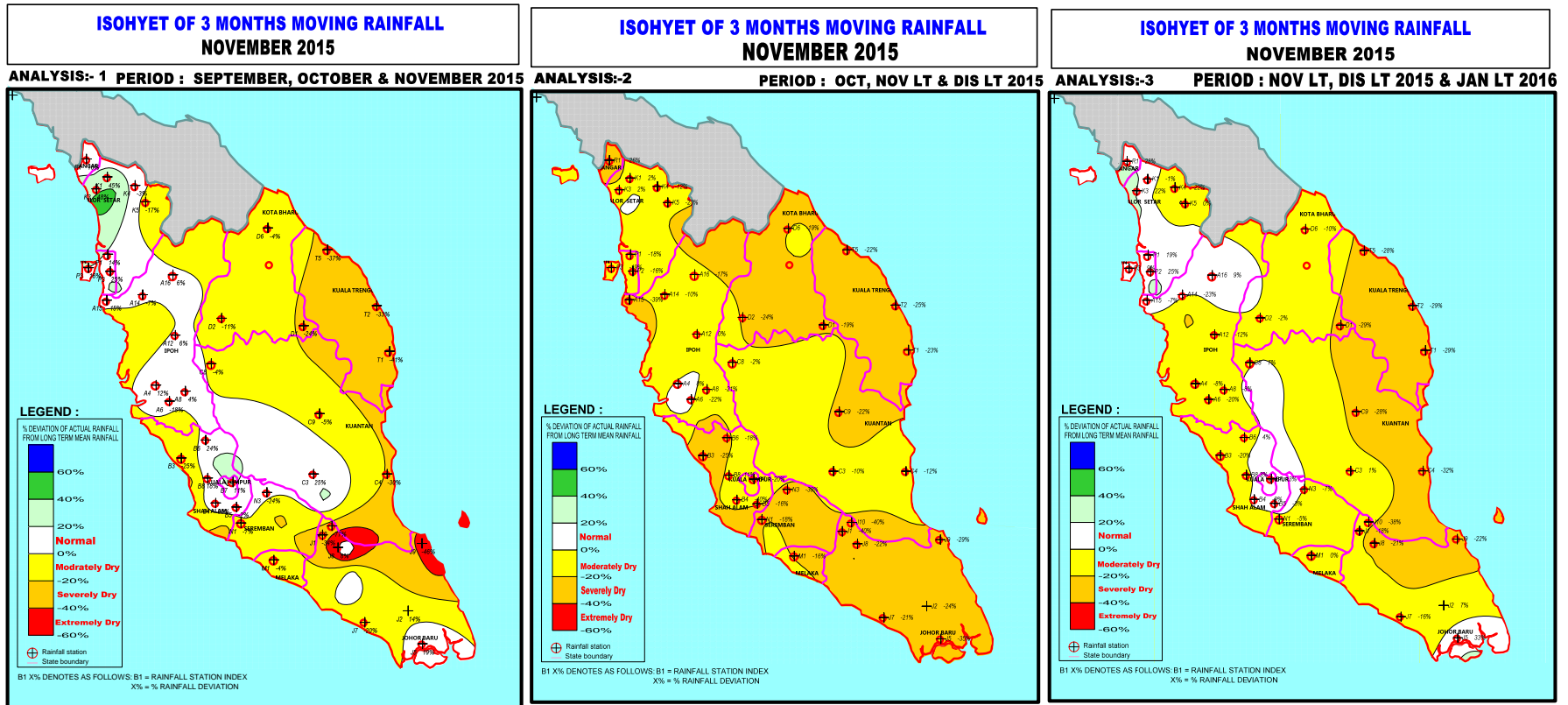
Rajah 7 : Peta Isohyet Analisis Hujan 3 Bulan : Senario 2– Andaian Penambahan Hujan 20% Kepada LTM
 Analisis Berdasarkan Jumlah Hujan 3 Bulan (September, Oktober, November, Disember LT 2015 & Januari LT 2016)



Berdasarkan peta Isohyet bagi **Senario 2**, keputusan seperti di bawah adalah dirumuskan:

- i. Analisis 1 (Sept, Okt dan November 2015) menunjukkan pengurangan hujan melebihi 35% (kering) berlaku di stesen berindeks **J10** pada bulan **November 2015**.
- ii. Analisis 2 (Okt, Nov & Dis LT 2015) meramalkan keadaan kering berlaku di stesen berindeks **J10** pada bulan **Disember 2015**
- iii. Analisis 3 (Nov, Dis LT 2015 dan Jan LT 2016) meramalkan **TIADA** keadaan kering berlaku pada bulan **Januari 2016**

Rajah 8: Peta Isohyet Analisis Hujan 3 Bulan : Senario 3- Andaian Pengurangan Hujan 20% Kepada LTM
 Analisis Berdasarkan Jumlah Hujan 3 Bulan (September, Oktober, November, Disember LT 2015 & Januari LT 2016)



Berdasarkan peta Isohyet bagi **Senario 3**, keputusan seperti di bawah adalah dirumuskan:

- Analisis 1 (Sept, Okt dan November 2015) menunjukkan pengurangan hujan melebihi 35% (kering) berlaku di stesen berindeks **J10** pada bulan **November 2015**.
- Analisis 2 (Okt, Nov & Dis LT 2015) meramalkan keadaan kering berlaku di stesen berindeks **B4, J1, J5 & J10** pada bulan **Disember 2015**
- Analisis 3 (Nov, Dis LT 2015 dan Jan LT 2016) meramalkan keadaan kering berlaku di stesen berindeks **J10** pada bulan **Januari 2016**

Jadual 6 : Hujan 3 Bulan Sept, Okt & November 2015: Senario 1,2,3 (Analisis 1)

| NO | Station ID | Station Index | SEPT | OCT | NOV | Cumm of 3 Months Actual Rainfall (Sept, Oct & Nov) | Cumm of 3 Months LT Rainfall | Diff in Rainfall (mm) | % Dev |
|----|------------|---------------|------|-----|-----|---|---------------------------------|--------------------------|----------|
| 1 | 6501005 | R1 | 352 | 194 | 386 | 932 | 787 | 145 | 18 |
| 2 | 6206035 | K1 | 421 | 349 | 230 | 999 | 690 | 309 | 45 |
| 3 | 6103047 | K3 | 409 | 379 | 365 | 1152 | 780 | 372 | 48 |
| 4 | 6207032 | K4 | 293 | 340 | 214 | 847 | 877 | -31 | -3 |
| 5 | 6108062 | K5 | 204 | 309 | 328 | 841 | 1013 | -172 | -17 |
| 6 | 5505033 | P1 | 278 | 297 | 443 | 1017 | 894 | 123 | 14 |
| 7 | 5304045 | P2 | 285 | 311 | 503 | 1098 | 876 | 222 | 25 |
| 8 | 5302003 | P3 | 420 | 302 | 360 | 1082 | 929 | 152 | 16 |
| 9 | 4109095 | A4 | 137 | 411 | 286 | 833 | 744 | 89 | 12 |
| 10 | 4011139 | A6 | 224 | 242 | 282 | 748 | 912 | -164 | -18 |
| 11 | 4011144 | A8 | 208 | 288 | 462 | 957 | 924 | 33 | 4 |
| 12 | 4511111 | A12 | 149 | 358 | 266 | 772 | 728 | 44 | 6 |
| 13 | 5006021 | A14 | 259 | 411 | 258 | 928 | 992 | -65 | -7 |
| 14 | 5003028 | A15 | 304 | 128 | 221 | 652 | 766 | -114 | -15 |
| 15 | 5210069 | A16 | 148 | 206 | 315 | 668 | 633 | 35 | 6 |
| 16 | 3411017 | B3 | 125 | 142 | 164 | 430 | 572 | -142 | -25 |
| 17 | 2917001 | B4 | 187 | 21 | 327 | 534 | 722 | -188 | -26 |
| 18 | 2818110 | B5 | 109 | 195 | 317 | 621 | 633 | -13 | -2 |
| 19 | 3516022 | B6 | 389 | 248 | 445 | 1082 | 874 | 208 | 24 |
| 20 | 3117070 | B7 | 239 | 212 | 399 | 849 | 764 | 85 | 11 |
| 21 | 3115180 | B8 | 184 | 292 | 409 | 885 | 746 | 138 | 18 |
| 22 | 2719001 | N1 | 126 | 219 | 333 | 678 | 725 | -47 | -7 |
| 23 | 3023098 | N3 | 95 | 111 | 297 | 502 | 658 | -156 | -24 |
| 24 | 2321006 | M1 | 90 | 160 | 290 | 539 | 563 | -25 | -4 |
| 25 | 2526001 | J1 | 149 | 25 | 177 | 351 | 533 | -182 | -34 |
| 26 | 2033001 | J2 | 180 | 133 | 363 | 676 | 592 | 84 | 14 |
| 27 | 1437116 | J5 | 147 | 60 | 584 | 791 | 666 | 125 | 19 |
| 28 | 1829001 | J7 | 131 | 149 | 222 | 502 | 624 | -122 | -20 |
| 29 | 2528002 | J8 | 266 | 105 | 151 | 521 | 480 | 41 | 8 |
| 30 | 2536168 | J9 | 62 | 97 | 321 | 480 | 881 | -402 | -46 |
| 31 | 2527004 | J10 | 41 | 13 | 66 | 120 | 528 | -409 | -77 |
| 32 | 3424081 | C3 | 195 | 192 | 267 | 654 | 522 | 132 | 25 |
| 33 | 3533102 | C4 | 114 | 232 | 144 | 489 | 699 | -210 | -30 |
| 34 | 4414036 | C8 | 187 | 379 | 436 | 1001 | 1044 | -43 | -4 |
| 35 | 3930012 | C9 | 432 | 191 | 230 | 853 | 895 | -42 | -5 |
| 36 | 4726001 | D1 | 295 | 308 | 316 | 919 | 1211 | -292 | -24 |
| 37 | 4819027 | D2 | 216 | 203 | 320 | 739 | 827 | -88 | -11 |
| 38 | 5921009 | D6 | 263 | 235 | 517 | 1015 | 1053 | -38 | -4 |
| 39 | 4234109 | T1 | 100 | 141 | 288 | 529 | 901 | -372 | -41 |
| 40 | 4734079 | T2 | 194 | 121 | 317 | 632 | 947 | -315 | -33 |
| 41 | 5331048 | T5 | 98 | 162 | 418 | 678 | 1075 | -397 | -37 |
| | MEAN | | 212 | 216 | 318 | 746 | 787 | -41 | -5 |

Jadual 7 : Hujan 3 Bulan Okt, Nov & Dis LT Senario 1 (Analisis 2)

| NO | Station ID | Station Index | Oct | Nov | Dis LT | Cumm of 3 Months Actual Rainfall (Oct, Nov & Dis LT) | Cumm of 3 Months LT Rainfall | Diff in Rainfall (mm) | % Dev |
|----|------------|---------------|-----|-----|--------|--|------------------------------|-----------------------|-------|
| 1 | 6501005 | R1 | 194 | 386 | 104 | 684 | 603 | 80.3 | 13 |
| 2 | 6206035 | K1 | 349 | 230 | 97 | 675 | 545 | 129.5 | 24 |
| 3 | 6103047 | K3 | 379 | 365 | 79 | 822 | 572 | 249.7 | 44 |
| 4 | 6207032 | K4 | 340 | 214 | 443 | 997 | 1056 | -59.4 | -6 |
| 5 | 6108062 | K5 | 309 | 328 | 161 | 797 | 847 | -49.7 | -6 |
| 6 | 5505033 | P1 | 297 | 443 | 124 | 864 | 734 | 129.5 | 18 |
| 7 | 5304045 | P2 | 311 | 503 | 147 | 960 | 763 | 197.2 | 26 |
| 8 | 5302003 | P3 | 302 | 360 | 120 | 781 | 729 | 52.2 | 7 |
| 9 | 4109095 | A4 | 411 | 286 | 198 | 894 | 705 | 188.9 | 27 |
| 10 | 4011139 | A6 | 242 | 282 | 321 | 845 | 1006 | -160.7 | -16 |
| 11 | 4011144 | A8 | 288 | 462 | 381 | 1131 | 1158 | -27.4 | -2 |
| 12 | 4511111 | A12 | 358 | 266 | 192 | 815 | 714 | 101.0 | 14 |
| 13 | 5006021 | A14 | 411 | 258 | 269 | 938 | 1003 | -65.5 | -7 |
| 14 | 5003028 | A15 | 128 | 221 | 124 | 472 | 656 | -183.8 | -28 |
| 15 | 5210069 | A16 | 206 | 315 | 123 | 644 | 577 | 67.0 | 12 |
| 16 | 3411017 | B3 | 142 | 164 | 187 | 493 | 611 | -118.7 | -19 |
| 17 | 2917001 | B4 | 21 | 327 | 207 | 555 | 754 | -199.3 | -26 |
| 18 | 2818110 | B5 | 195 | 317 | 169 | 681 | 644 | 36.8 | 6 |
| 19 | 3516022 | B6 | 248 | 445 | 192 | 885 | 808 | 77.2 | 10 |
| 20 | 3117070 | B7 | 212 | 399 | 195 | 806 | 757 | 49.2 | 7 |
| 21 | 3115180 | B8 | 292 | 409 | 241 | 942 | 800 | 142.1 | 18 |
| 22 | 2719001 | N1 | 219 | 333 | 161 | 713 | 697 | 15.4 | 2 |
| 23 | 3023098 | N3 | 111 | 297 | 249 | 656 | 741 | -85.4 | -12 |
| 24 | 2321006 | M1 | 160 | 290 | 120 | 569 | 516 | 53.3 | 10 |
| 25 | 2526001 | J1 | 25 | 177 | 203 | 405 | 591 | -186.9 | -32 |
| 26 | 2033001 | J2 | 133 | 363 | 260 | 756 | 698 | 57.5 | 8 |
| 27 | 1437116 | J5 | 60 | 584 | 290 | 933 | 759 | 174.2 | 23 |
| 28 | 1829001 | J7 | 149 | 222 | 231 | 601 | 674 | -72.6 | -11 |
| 29 | 2528002 | J8 | 105 | 151 | 203 | 458 | 541 | -82.6 | -15 |
| 30 | 2536168 | J9 | 97 | 321 | 806 | 1223 | 1494 | -270.7 | -18 |
| 31 | 2527004 | J10 | 13 | 66 | 218 | 297 | 601 | -303.8 | -51 |
| 32 | 3424081 | C3 | 192 | 267 | 212 | 671 | 585 | 85.4 | 15 |
| 33 | 3533102 | C4 | 232 | 144 | 613 | 988 | 1145 | -157.1 | -14 |
| 34 | 4414036 | C8 | 379 | 436 | 219 | 1033 | 794 | 238.3 | 30 |
| 35 | 3930012 | C9 | 191 | 230 | 542 | 963 | 1207 | -243.8 | -20 |
| 36 | 4726001 | D1 | 308 | 316 | 786 | 1410 | 1706 | -296.1 | -17 |
| 37 | 4819027 | D2 | 203 | 320 | 238 | 761 | 785 | -23.7 | -3 |
| 38 | 5921009 | D6 | 235 | 517 | 564 | 1315 | 1346 | -30.3 | -2 |
| 39 | 4234109 | T1 | 141 | 288 | 675 | 1104 | 1392 | -288.8 | -21 |
| 40 | 4734079 | T2 | 121 | 317 | 581 | 1019 | 1355 | -335.9 | -25 |
| 41 | 5331048 | T5 | 162 | 418 | 568 | 1148 | 1489 | -341.6 | -23 |
| | MEAN | | 216 | 318 | 288 | 822 | 858 | -35.6 | -4.2 |

Jadual 8 : Hujan 3 Bulan Nov, Dis LT & Jan LT 2016 : Senario 1 (Analisis 3)

| NO | Station ID | Station Index | Nov | Dis LT | Jan LT 2016 | Cumm of 3 Months Actual Rainfall (Nov, Dis LT & Jan LT 2016) | Cumm of 3 Months LT Rainfall | Diff in Rainfall (mm) | % Dev |
|----|------------|---------------|-----|--------|-------------|--|------------------------------|-----------------------|-------|
| 1 | 6501005 | R1 | 386 | 104 | 38 | 528 | 350 | 177.6 | 51 |
| 2 | 6206035 | K1 | 230 | 97 | 28 | 355 | 317 | 37.9 | 12 |
| 3 | 6103047 | K3 | 365 | 79 | 24 | 468 | 320 | 147.4 | 46 |
| 4 | 6207032 | K4 | 214 | 443 | 32 | 689 | 756 | -67.0 | -9 |
| 5 | 6108062 | K5 | 328 | 161 | 42 | 531 | 470 | 60.5 | 13 |
| 6 | 5505033 | P1 | 443 | 124 | 64 | 630 | 453 | 177.6 | 39 |
| 7 | 5304045 | P2 | 503 | 147 | 99 | 749 | 515 | 234.1 | 45 |
| 8 | 5302003 | P3 | 360 | 120 | 60 | 540 | 426 | 113.5 | 27 |
| 9 | 4109095 | A4 | 286 | 198 | 159 | 642 | 616 | 26.6 | 4 |
| 10 | 4011139 | A6 | 282 | 321 | 237 | 840 | 913 | -72.2 | -8 |
| 11 | 4011144 | A8 | 462 | 381 | 266 | 1108 | 1055 | 53.5 | 5 |
| 12 | 4511111 | A12 | 266 | 192 | 135 | 593 | 596 | -3.1 | -1 |
| 13 | 5006021 | A14 | 258 | 269 | 179 | 706 | 799 | -93.5 | -12 |
| 14 | 5003028 | A15 | 221 | 124 | 76 | 420 | 398 | 22.3 | 6 |
| 15 | 5210069 | A16 | 315 | 123 | 55 | 492 | 396 | 96.8 | 24 |
| 16 | 3411017 | B3 | 164 | 187 | 151 | 501 | 545 | -43.9 | -8 |
| 17 | 2917001 | B4 | 327 | 207 | 126 | 660 | 637 | 23.5 | 4 |
| 18 | 2818110 | B5 | 317 | 169 | 75 | 561 | 510 | 51.4 | 10 |
| 19 | 3516022 | B6 | 445 | 192 | 106 | 743 | 625 | 117.8 | 19 |
| 20 | 3117070 | B7 | 399 | 195 | 133 | 727 | 621 | 106.4 | 17 |
| 21 | 3115180 | B8 | 409 | 241 | 167 | 817 | 701 | 116.8 | 17 |
| 22 | 2719001 | N1 | 333 | 161 | 105 | 599 | 552 | 47.6 | 9 |
| 23 | 3023098 | N3 | 297 | 249 | 134 | 679 | 645 | 34.1 | 5 |
| 24 | 2321006 | M1 | 290 | 120 | 70 | 480 | 421 | 59.0 | 14 |
| 25 | 2526001 | J1 | 177 | 203 | 125 | 505 | 536 | -30.9 | -6 |
| 26 | 2033001 | J2 | 363 | 260 | 180 | 802 | 675 | 127.6 | 19 |
| 27 | 1437116 | J5 | 584 | 290 | 199 | 1072 | 747 | 325.2 | 44 |
| 28 | 1829001 | J7 | 222 | 231 | 150 | 603 | 630 | -27.0 | -4 |
| 29 | 2528002 | J8 | 151 | 203 | 174 | 528 | 569 | -41.6 | -7 |
| 30 | 2536168 | J9 | 321 | 806 | 463 | 1590 | 1708 | -117.5 | -7 |
| 31 | 2527004 | J10 | 66 | 218 | 145 | 430 | 578 | -148.2 | -26 |
| 32 | 3424081 | C3 | 267 | 212 | 100 | 578 | 514 | 63.9 | 12 |
| 33 | 3533102 | C4 | 144 | 613 | 295 | 1051 | 1232 | -180.2 | -15 |
| 34 | 4414036 | C8 | 436 | 219 | 131 | 785 | 647 | 137.6 | 21 |
| 35 | 3930012 | C9 | 230 | 542 | 288 | 1061 | 1224 | -163.0 | -13 |
| 36 | 4726001 | D1 | 316 | 786 | 347 | 1449 | 1685 | -235.4 | -14 |
| 37 | 4819027 | D2 | 320 | 238 | 119 | 677 | 615 | 62.5 | 10 |
| 38 | 5921009 | D6 | 517 | 564 | 152 | 1233 | 1213 | 20.1 | 2 |
| 39 | 4234109 | T1 | 288 | 675 | 267 | 1230 | 1437 | -207.3 | -14 |
| 40 | 4734079 | T2 | 317 | 581 | 171 | 1069 | 1293 | -223.9 | -17 |
| 41 | 5331048 | T5 | 418 | 568 | 143 | 1129 | 1389 | -260.5 | -19 |
| | MEAN | | 318 | 288 | 147 | 752 | 740 | 12.8 | 1.7 |

Jadual 9 : Hujan 3 Bulan Okt, Nov & Dis LT 2015 : Senario 2 (Analisis 2)

| No | Station ID | Indeks Stesen | OCT | NOV | DIS LT + 20% | Kumulatif Hujan 3 Bulan (OCT, NOV & DIS LT + 20%) | Kumulatif Hujan 'Long Term' 3 bulan | Perbezaan Hujan (mm) | % Dev |
|----|------------|---------------|-----|-----|--------------|---|-------------------------------------|----------------------|-------|
| 1 | 6501005 | R1 | 352 | 194 | 250 | 796 | 787 | 8.8 | 1 |
| 2 | 6206035 | K1 | 421 | 349 | 230 | 999 | 690 | 309.0 | 45 |
| 3 | 6103047 | K3 | 409 | 379 | 261 | 1048 | 780 | 267.7 | 34 |
| 4 | 6207032 | K4 | 293 | 340 | 337 | 970 | 877 | 92.5 | 11 |
| 5 | 6108062 | K5 | 204 | 309 | 321 | 834 | 1013 | -178.8 | -18 |
| 6 | 5505033 | P1 | 278 | 297 | 318 | 892 | 894 | -1.5 | 0 |
| 7 | 5304045 | P2 | 285 | 311 | 322 | 918 | 876 | 41.4 | 5 |
| 8 | 5302003 | P3 | 420 | 302 | 295 | 1017 | 929 | 88.0 | 9 |
| 9 | 4109095 | A4 | 137 | 411 | 311 | 858 | 744 | 114.6 | 15 |
| 10 | 4011139 | A6 | 224 | 242 | 425 | 891 | 912 | -20.5 | -2 |
| 11 | 4011144 | A8 | 208 | 288 | 490 | 985 | 924 | 61.2 | 7 |
| 12 | 4511111 | A12 | 149 | 358 | 322 | 828 | 728 | 100.7 | 14 |
| 13 | 5006021 | A14 | 259 | 411 | 422 | 1091 | 992 | 99.0 | 10 |
| 14 | 5003028 | A15 | 304 | 128 | 238 | 669 | 766 | -96.9 | -13 |
| 15 | 5210069 | A16 | 148 | 206 | 261 | 615 | 633 | -18.4 | -3 |
| 16 | 3411017 | B3 | 125 | 142 | 249 | 515 | 572 | -56.2 | -10 |
| 17 | 2917001 | B4 | 187 | 21 | 364 | 571 | 722 | -151.1 | -21 |
| 18 | 2818110 | B5 | 109 | 195 | 319 | 622 | 633 | -11.0 | -2 |
| 19 | 3516022 | B6 | 389 | 248 | 393 | 1029 | 874 | 155.3 | 18 |
| 20 | 3117070 | B7 | 239 | 212 | 351 | 801 | 764 | 37.0 | 5 |
| 21 | 3115180 | B8 | 184 | 292 | 351 | 826 | 746 | 79.7 | 11 |
| 22 | 2719001 | N1 | 126 | 219 | 342 | 687 | 725 | -37.6 | -5 |
| 23 | 3023098 | N3 | 95 | 111 | 315 | 520 | 658 | -138.0 | -21 |
| 24 | 2321006 | M1 | 90 | 160 | 277 | 526 | 563 | -37.4 | -7 |
| 25 | 2526001 | J1 | 149 | 25 | 249 | 423 | 533 | -109.8 | -21 |
| 26 | 2033001 | J2 | 180 | 133 | 282 | 595 | 592 | 3.0 | 1 |
| 27 | 1437116 | J5 | 147 | 60 | 310 | 517 | 666 | -149.0 | -22 |
| 28 | 1829001 | J7 | 131 | 149 | 299 | 578 | 624 | -45.6 | -7 |
| 29 | 2528002 | J8 | 266 | 105 | 231 | 601 | 480 | 120.7 | 25 |
| 30 | 2536168 | J9 | 62 | 97 | 526 | 685 | 881 | -196.7 | -22 |
| 31 | 2527004 | J10 | 41 | 13 | 257 | 311 | 528 | -217.6 | -41 |
| 32 | 3424081 | C3 | 195 | 192 | 244 | 631 | 522 | 108.3 | 21 |
| 33 | 3533102 | C4 | 114 | 232 | 388 | 734 | 699 | 35.1 | 5 |
| 34 | 4414036 | C8 | 187 | 379 | 357 | 922 | 1044 | -121.2 | -12 |
| 35 | 3930012 | C9 | 432 | 191 | 472 | 1095 | 895 | 199.4 | 22 |
| 36 | 4726001 | D1 | 295 | 308 | 662 | 1265 | 1211 | 54.0 | 4 |
| 37 | 4819027 | D2 | 216 | 203 | 309 | 728 | 827 | -98.9 | -12 |
| 38 | 5921009 | D6 | 263 | 235 | 596 | 1094 | 1053 | 41.3 | 4 |
| 39 | 4234109 | T1 | 100 | 141 | 594 | 835 | 901 | -65.7 | -7 |
| 40 | 4734079 | T2 | 194 | 121 | 649 | 964 | 947 | 16.9 | 2 |
| 41 | 5331048 | T5 | 98 | 162 | 814 | 1074 | 1075 | -0.9 | 0 |
| | MEAN | | 212 | 216 | 366 | 794 | 787 | 6.8 | 0.9 |

Jadual 10 : Hujan 3 Bulan Nov, Dis LT & Jan LT 2016 : Senario 2 (Analisis 3)

| No | Station ID | Indeks Stesen | NOV | DIS LT + 20% | JAN LT + 20% | Kumulatif Hujan 3 Bulan (Okt, (NOV, DIS LT + 20% & JAN LT 2016 + 20%)) | Kumulatif Hujan 'Long Term' 3 bulan | Perbezaan Hujan (mm) | % Dev |
|----|------------|---------------|-------|--------------|--------------|--|-------------------------------------|----------------------|-------|
| 1 | 6501005 | R1 | 352.0 | 250.1 | 124.4 | 726.45 | 599.7 | 126.8 | 21 |
| 2 | 6206035 | K1 | 421.0 | 229.9 | 116.1 | 767.01 | 530.2 | 236.8 | 45 |
| 3 | 6103047 | K3 | 408.5 | 260.6 | 94.4 | 763.48 | 582.3 | 181.2 | 31 |
| 4 | 6207032 | K4 | 293.0 | 337.2 | 531.6 | 1161.80 | 988.3 | 173.5 | 18 |
| 5 | 6108062 | K5 | 204.0 | 321.1 | 192.7 | 717.78 | 754.3 | -36.5 | -5 |
| 6 | 5505033 | P1 | 277.5 | 317.8 | 148.9 | 744.27 | 672.9 | 71.4 | 11 |
| 7 | 5304045 | P2 | 285.0 | 322.1 | 176.1 | 783.25 | 675.6 | 107.6 | 16 |
| 8 | 5302003 | P3 | 420.0 | 295.2 | 143.8 | 859.02 | 685.7 | 173.3 | 25 |
| 9 | 4109095 | A4 | 136.5 | 310.7 | 237.1 | 684.33 | 692.5 | -8.2 | -1 |
| 10 | 4011139 | A6 | 224.0 | 425.1 | 385.4 | 1034.46 | 902.2 | 132.2 | 15 |
| 11 | 4011144 | A8 | 207.5 | 489.6 | 457.4 | 1154.50 | 936.2 | 218.3 | 23 |
| 12 | 4511111 | A12 | 148.5 | 322.3 | 230.2 | 701.07 | 666.1 | 35.0 | 5 |
| 13 | 5006021 | A14 | 258.5 | 421.8 | 322.8 | 1003.05 | 878.3 | 124.8 | 14 |
| 14 | 5003028 | A15 | 303.5 | 237.9 | 148.7 | 690.09 | 556.2 | 133.9 | 24 |
| 15 | 5210069 | A16 | 147.5 | 261.2 | 148.0 | 556.72 | 520.6 | 36.1 | 7 |
| 16 | 3411017 | B3 | 124.5 | 248.8 | 224.3 | 597.67 | 541.6 | 56.0 | 10 |
| 17 | 2917001 | B4 | 186.5 | 364.3 | 248.9 | 799.62 | 686.3 | 113.3 | 17 |
| 18 | 2818110 | B5 | 109.0 | 318.7 | 203.1 | 630.79 | 593.4 | 37.4 | 6 |
| 19 | 3516022 | B6 | 388.5 | 392.7 | 230.6 | 1011.79 | 777.4 | 234.4 | 30 |
| 20 | 3117070 | B7 | 238.5 | 350.6 | 234.4 | 823.50 | 690.3 | 133.2 | 19 |
| 21 | 3115180 | B8 | 184.0 | 350.6 | 289.7 | 824.30 | 721.6 | 102.7 | 14 |
| 22 | 2719001 | N1 | 126.0 | 342.5 | 193.3 | 661.81 | 635.0 | 26.8 | 4 |
| 23 | 3023098 | N3 | 94.5 | 314.9 | 298.3 | 707.66 | 676.4 | 31.3 | 5 |
| 24 | 2321006 | M1 | 89.5 | 276.6 | 144.5 | 510.62 | 518.2 | -7.6 | -1 |
| 25 | 2526001 | J1 | 149.0 | 249.5 | 243.0 | 641.48 | 554.8 | 86.7 | 16 |
| 26 | 2033001 | J2 | 180.0 | 281.9 | 312.4 | 774.30 | 649.1 | 125.2 | 19 |
| 27 | 1437116 | J5 | 147.0 | 310.0 | 347.5 | 804.52 | 744.6 | 59.9 | 8 |
| 28 | 1829001 | J7 | 131.0 | 298.8 | 276.8 | 706.58 | 660.5 | 46.1 | 7 |
| 29 | 2528002 | J8 | 265.5 | 230.6 | 243.2 | 739.27 | 537.0 | 202.2 | 38 |
| 30 | 2536168 | J9 | 62.0 | 526.2 | 967.1 | 1555.31 | 1437.6 | 117.7 | 8 |
| 31 | 2527004 | J10 | 40.5 | 257.1 | 261.7 | 559.23 | 577.6 | -18.4 | -3 |
| 32 | 3424081 | C3 | 195.0 | 243.7 | 253.9 | 692.56 | 563.4 | 129.1 | 23 |
| 33 | 3533102 | C4 | 114.0 | 388.5 | 735.7 | 1238.14 | 1103.5 | 134.6 | 12 |
| 34 | 4414036 | C8 | 186.5 | 357.4 | 262.4 | 806.29 | 984.4 | -178.1 | -18 |
| 35 | 3930012 | C9 | 432.0 | 471.7 | 650.6 | 1554.25 | 1165.6 | 388.7 | 33 |
| 36 | 4726001 | D1 | 295.0 | 661.6 | 943.3 | 1899.93 | 1628.0 | 271.9 | 17 |
| 37 | 4819027 | D2 | 216.0 | 309.0 | 286.1 | 811.10 | 776.1 | 35.0 | 5 |
| 38 | 5921009 | D6 | 263.0 | 596.0 | 676.2 | 1535.22 | 1330.8 | 204.4 | 15 |
| 39 | 4234109 | T1 | 100.0 | 594.3 | 809.9 | 1504.28 | 1353.5 | 150.8 | 11 |
| 40 | 4734079 | T2 | 194.0 | 649.1 | 697.3 | 1540.39 | 1295.2 | 245.2 | 19 |
| 41 | 5331048 | T5 | 97.5 | 814.2 | 681.0 | 1592.74 | 1399.0 | 193.7 | 14 |
| | MEAN | | 212.1 | 365.9 | 345.7 | 923.7 | 810.8 | 112.9 | 14 |

Jadual 11 : Hujan 3 Bulan Okt, Nov & Dis LT: Senario 3 (Analisis 2)

| No | Station ID | Indeks Stesen | OCT | NOV | DIS LT + 20% | Kumulatif Hujan 3 Bulan (OCT, NOV & DIS LT + 20%) | Kumulatif Hujan 'Long Term' 3 bulan | Perbezaan Hujan (mm) | % Dev |
|----|------------|---------------|-----|-----|--------------|---|-------------------------------------|----------------------|-------|
| 1 | 6501005 | R1 | 194 | 167 | 167 | 527 | 708 | -180.6 | -26 |
| 2 | 6206035 | K1 | 349 | 153 | 153 | 655 | 640 | 14.9 | 2 |
| 3 | 6103047 | K3 | 379 | 174 | 174 | 726 | 710 | 15.5 | 2 |
| 4 | 6207032 | K4 | 340 | 225 | 225 | 789 | 894 | -104.8 | -12 |
| 5 | 6108062 | K5 | 309 | 214 | 214 | 737 | 954 | -217.1 | -23 |
| 6 | 5505033 | P1 | 297 | 212 | 212 | 721 | 875 | -154.0 | -18 |
| 7 | 5304045 | P2 | 311 | 215 | 215 | 740 | 884 | -144.2 | -16 |
| 8 | 5302003 | P3 | 302 | 197 | 197 | 696 | 855 | -159.7 | -19 |
| 9 | 4109095 | A4 | 411 | 207 | 207 | 825 | 767 | 58.7 | 8 |
| 10 | 4011139 | A6 | 242 | 283 | 283 | 809 | 1039 | -230.2 | -22 |
| 11 | 4011144 | A8 | 288 | 326 | 326 | 941 | 1185 | -244.1 | -21 |
| 12 | 4511111 | A12 | 358 | 215 | 215 | 787 | 791 | -3.4 | 0 |
| 13 | 5006021 | A14 | 411 | 281 | 281 | 973 | 1086 | -112.6 | -10 |
| 14 | 5003028 | A15 | 128 | 159 | 159 | 445 | 730 | -285.4 | -39 |
| 15 | 5210069 | A16 | 206 | 174 | 174 | 554 | 671 | -116.9 | -17 |
| 16 | 3411017 | B3 | 142 | 166 | 166 | 474 | 632 | -157.8 | -25 |
| 17 | 2917001 | B4 | 21 | 243 | 243 | 506 | 850 | -344.3 | -40 |
| 18 | 2818110 | B5 | 195 | 212 | 212 | 619 | 740 | -120.8 | -16 |
| 19 | 3516022 | B6 | 248 | 262 | 262 | 772 | 943 | -171.5 | -18 |
| 20 | 3117070 | B7 | 212 | 234 | 234 | 679 | 853 | -174.0 | -20 |
| 21 | 3115180 | B8 | 292 | 234 | 234 | 759 | 851 | -91.6 | -11 |
| 22 | 2719001 | N1 | 219 | 228 | 228 | 675 | 822 | -146.4 | -18 |
| 23 | 3023098 | N3 | 111 | 210 | 210 | 530 | 755 | -224.5 | -30 |
| 24 | 2321006 | M1 | 160 | 184 | 184 | 528 | 626 | -97.9 | -16 |
| 25 | 2526001 | J1 | 25 | 166 | 166 | 358 | 597 | -239.2 | -40 |
| 26 | 2033001 | J2 | 133 | 188 | 188 | 509 | 673 | -164.1 | -24 |
| 27 | 1437116 | J5 | 60 | 207 | 207 | 473 | 728 | -254.3 | -35 |
| 28 | 1829001 | J7 | 149 | 199 | 199 | 547 | 692 | -145.2 | -21 |
| 29 | 2528002 | J8 | 105 | 154 | 154 | 412 | 530 | -117.8 | -22 |
| 30 | 2536168 | J9 | 97 | 351 | 351 | 798 | 1127 | -328.6 | -29 |
| 31 | 2527004 | J10 | 13 | 171 | 171 | 356 | 597 | -241.3 | -40 |
| 32 | 3424081 | C3 | 192 | 162 | 162 | 517 | 577 | -59.8 | -10 |
| 33 | 3533102 | C4 | 232 | 259 | 259 | 749 | 856 | -106.4 | -12 |
| 34 | 4414036 | C8 | 379 | 238 | 238 | 855 | 874 | -18.5 | -2 |
| 35 | 3930012 | C9 | 191 | 314 | 314 | 820 | 1058 | -238.0 | -22 |
| 36 | 4726001 | D1 | 308 | 441 | 441 | 1190 | 1471 | -281.2 | -19 |
| 37 | 4819027 | D2 | 203 | 206 | 206 | 615 | 804 | -189.2 | -24 |
| 38 | 5921009 | D6 | 235 | 397 | 397 | 1030 | 1279 | -249.1 | -19 |
| 39 | 4234109 | T1 | 141 | 396 | 396 | 933 | 1213 | -279.6 | -23 |
| 40 | 4734079 | T2 | 121 | 433 | 433 | 986 | 1315 | -328.4 | -25 |
| 41 | 5331048 | T5 | 162 | 543 | 543 | 1248 | 1600 | -352.5 | -22 |
| | MEAN | | 216 | 244 | 244 | 704 | 874 | -170.4 | -19 |

Jadual 12 : Hujan 3 Bulan Nov, Dis LT & Jan LT : Senario 3 (Analisis 3)

| No | Station ID | Indeks Stesen | NOV | DIS LT + 20% | JAN LT + 20% | Kumulatif Hujan 3 Bulan (Okt, (NOV, DIS LT + 20% & JAN LT +20%) | Kumulatif Hujan 'Long Term' 3 bulan | Perbezaan Hujan (mm) | % Dev |
|----|------------|---------------|-------|--------------|--------------|---|-------------------------------------|----------------------|-------|
| 1 | 6501005 | R1 | 386.0 | 166.7 | 30.3 | 583.02 | 454.7 | 128.4 | 28 |
| 2 | 6206035 | K1 | 229.5 | 153.3 | 22.6 | 405.40 | 411.5 | -6.1 | -1 |
| 3 | 6103047 | K3 | 364.5 | 173.7 | 19.5 | 557.72 | 458.7 | 99.1 | 22 |
| 4 | 6207032 | K4 | 214.0 | 224.8 | 25.6 | 464.40 | 594.0 | -129.6 | -22 |
| 5 | 6108062 | K5 | 328.0 | 214.0 | 33.8 | 575.80 | 577.3 | -1.5 | 0 |
| 6 | 5505033 | P1 | 442.5 | 211.9 | 50.8 | 705.19 | 593.2 | 112.0 | 19 |
| 7 | 5304045 | P2 | 502.5 | 214.8 | 79.5 | 796.78 | 636.3 | 160.5 | 25 |
| 8 | 5302003 | P3 | 359.5 | 196.8 | 48.2 | 604.54 | 552.3 | 52.2 | 9 |
| 9 | 4109095 | A4 | 285.5 | 207.1 | 127.5 | 620.15 | 677.2 | -57.1 | -8 |
| 10 | 4011139 | A6 | 282.0 | 283.4 | 189.8 | 755.22 | 945.7 | -190.5 | -20 |
| 11 | 4011144 | A8 | 461.5 | 326.4 | 212.6 | 1000.48 | 1081.7 | -81.3 | -8 |
| 12 | 4511111 | A12 | 265.5 | 214.9 | 108.2 | 588.54 | 672.4 | -83.9 | -12 |
| 13 | 5006021 | A14 | 258.0 | 281.2 | 143.0 | 682.15 | 881.7 | -199.5 | -23 |
| 14 | 5003028 | A15 | 220.5 | 158.6 | 60.8 | 439.87 | 472.4 | -32.6 | -7 |
| 15 | 5210069 | A16 | 314.5 | 174.2 | 43.6 | 532.26 | 489.9 | 42.4 | 9 |
| 16 | 3411017 | B3 | 163.5 | 165.9 | 120.5 | 449.87 | 565.3 | -115.5 | -20 |
| 17 | 2917001 | B4 | 327.1 | 242.8 | 100.7 | 670.67 | 733.0 | -62.4 | -9 |
| 18 | 2818110 | B5 | 317.0 | 212.5 | 59.8 | 589.33 | 606.0 | -16.7 | -3 |
| 19 | 3516022 | B6 | 445.0 | 261.8 | 84.4 | 791.17 | 759.9 | 31.2 | 4 |
| 20 | 3117070 | B7 | 398.5 | 233.7 | 106.6 | 738.84 | 717.6 | 21.3 | 3 |
| 21 | 3115180 | B8 | 409.0 | 233.8 | 133.5 | 776.27 | 751.3 | 25.0 | 3 |
| 22 | 2719001 | N1 | 333.0 | 228.3 | 84.1 | 645.40 | 675.9 | -30.5 | -5 |
| 23 | 3023098 | N3 | 296.5 | 209.9 | 107.0 | 613.45 | 658.6 | -45.1 | -7 |
| 24 | 2321006 | M1 | 289.5 | 184.4 | 56.1 | 529.98 | 531.1 | -1.1 | 0 |
| 25 | 2526001 | J1 | 177.0 | 166.3 | 100.2 | 443.54 | 541.1 | -97.5 | -18 |
| 26 | 2033001 | J2 | 362.5 | 187.9 | 143.7 | 694.09 | 649.4 | 44.7 | 7 |
| 27 | 1437116 | J5 | 583.5 | 206.7 | 159.2 | 949.37 | 715.7 | 233.7 | 33 |
| 28 | 1829001 | J7 | 222.0 | 199.2 | 120.3 | 541.53 | 648.4 | -106.9 | -16 |
| 29 | 2528002 | J8 | 150.5 | 153.7 | 139.5 | 443.72 | 558.7 | -114.9 | -21 |
| 30 | 2536168 | J9 | 321.0 | 350.8 | 370.6 | 1042.44 | 1340.3 | -297.9 | -22 |
| 31 | 2527004 | J10 | 66.0 | 171.4 | 116.4 | 353.77 | 573.9 | -220.2 | -38 |
| 32 | 3424081 | C3 | 267.0 | 162.5 | 79.7 | 509.13 | 505.7 | 3.4 | 1 |
| 33 | 3533102 | C4 | 143.5 | 259.0 | 235.9 | 638.39 | 942.3 | -303.9 | -32 |
| 34 | 4414036 | C8 | 435.5 | 238.3 | 104.7 | 778.51 | 726.6 | 51.9 | 7 |
| 35 | 3930012 | C9 | 230.0 | 314.4 | 230.7 | 775.16 | 1074.5 | -299.3 | -28 |
| 36 | 4726001 | D1 | 316.0 | 441.1 | 277.9 | 1035.02 | 1450.1 | -415.1 | -29 |
| 37 | 4819027 | D2 | 320.0 | 206.0 | 95.0 | 621.07 | 633.9 | -12.8 | -2 |
| 38 | 5921009 | D6 | 516.7 | 397.3 | 121.9 | 1035.93 | 1145.7 | -109.7 | -10 |
| 39 | 4234109 | T1 | 288.0 | 396.2 | 213.3 | 897.51 | 1257.2 | -359.7 | -29 |
| 40 | 4734079 | T2 | 317.0 | 432.7 | 136.8 | 886.52 | 1252.8 | -366.3 | -29 |
| 41 | 5331048 | T5 | 418.0 | 542.8 | 114.7 | 1075.53 | 1500.4 | -424.9 | -28 |
| | MEAN | | 317.7 | 243.9 | 117.3 | 679.0 | 756.4 | -77.5 | -10 |

Berdasarkan keputusan Analisis Hujan 1 Bulan dan Analisis Hujan 3 Bulan bagi bulan **November 2015** untuk keseluruhan senario, kebarangkalian kawasan kering bagi bulan **Disember 2015** dan **Januari 2016** adalah seperti Jadual 13, Jadual 14 dan Jadual 15.

Jadual 13 : Senarai Stesen Kebarangkalian Kering Berpandukan Analisis Hujan Bagi Bulan **November 2015** (Senario 1: Sekiranya Berlaku **Hujan Normal** bagi bulan **Dis 2015** dan **Jan 2016**)

| BULAN | INDEKS STESEN | NAMA STESEN | DAERAH | NEGERI | KAWASAN KEBARANGKALIAN KERING |
|----------|---------------|----------------|---------|--------|-------------------------------|
| Dis 2015 | J10 | Ladang Segamat | Segamat | Johor | Segamat |
| Jan 2016 | TIADA | | | | |

Jadual 14: Senarai Stesen Kebarangkalian Kering Berpandukan Analisis Hujan Bagi Bulan **November 2015** (Senario 2: Sekiranya Berlaku **Pertambahan 20% Kepada Purata Hujan Jangka Panjang** bagi Bulan **Dis 2015** dan **Jan 2016**)

| BULAN | INDEKS STESEN | NAMA STESEN | DAERAH | NEGERI | KAWASAN KEBARANGKALIAN KERING |
|----------|---------------|----------------|---------|--------|-------------------------------|
| Dis 2015 | J10 | Ladang Segamat | Segamat | Johor | Segamat |
| Jan 2016 | TIADA | | | | |

Jadual 15 : Senarai Stesen Kebarangkalian Kering Berpandukan Analisis Hujan Bagi Bulan **November 2015** (Senario 3: Sekiranya Berlaku **Pengurangan 20% Kepada Purata Hujan Jangka Panjang** bagi bulan **Disember 2015** dan **Januari 2016**)

| BULAN | INDEKS STESEN | NAMA STESEN | DAERAH | NEGERI | KAWASAN KEBARANGKALIAN KERING |
|----------|---------------|----------------------|-------------|----------|-------------------------------|
| Dis 2015 | B4 | RTM Kajang | Hulu Langat | Selangor | Hulu Langat |
| | J1 | Ldg. Sungai Gemas | Segamat | Johor | Segamat |
| | J5 | Stor JPS Johor Bahru | Johor Bahru | Johor | Johor Bahru |
| | J10 | Ladang Segamat | Segamat | Johor | Segamat |
| Jan 2016 | J10 | Ladang Segamat | Segamat | Johor | Segamat |

3. Analisis Luahan Sungai

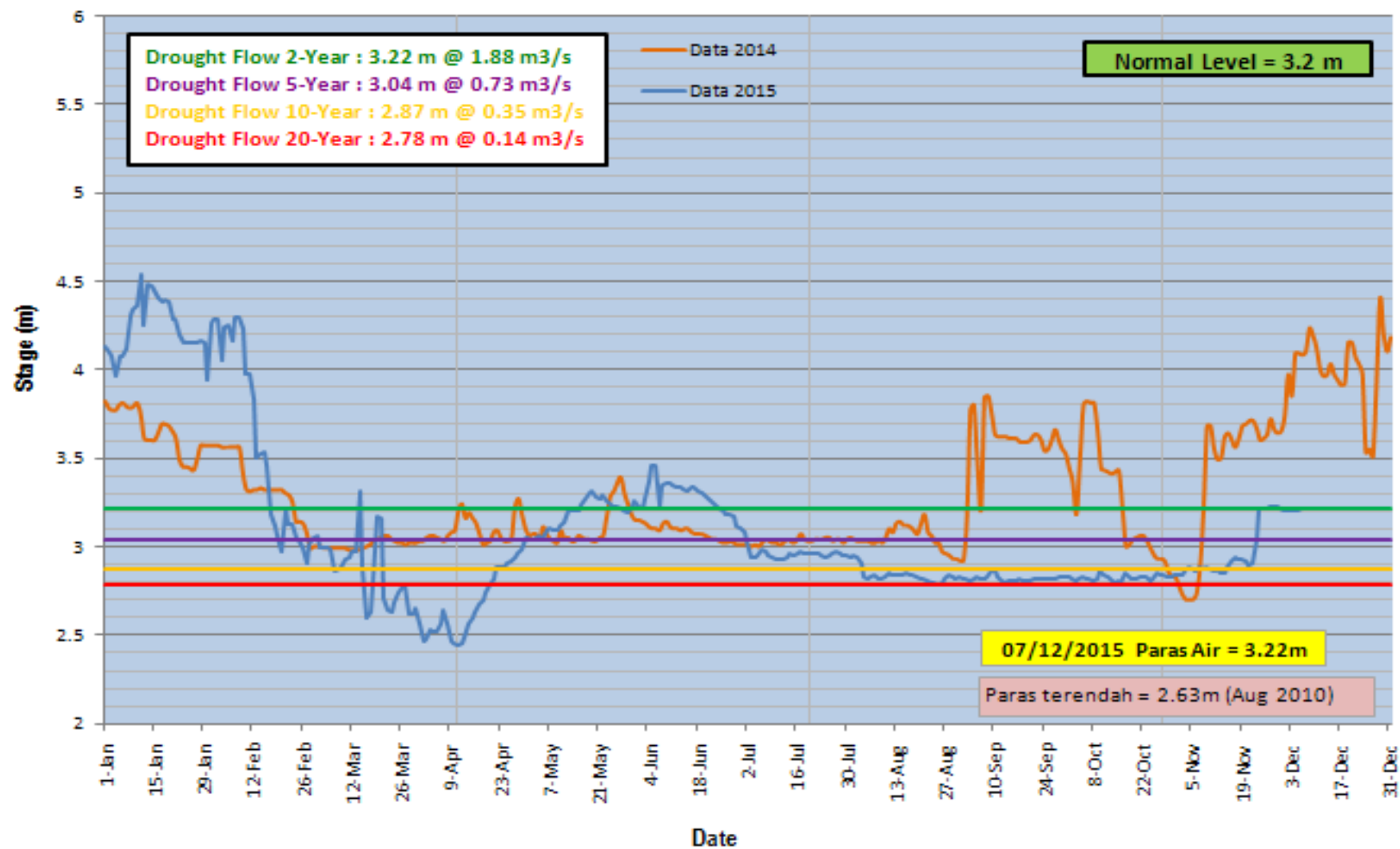
Rajah 5 di bawah menunjukkan bacaan purata luahan sungai yang dipantau bagi bulan November 2015.

| B. | ID STESEN | NAMA STESEN | NEGERI | PARAS NORMAL SUNGAI (m) | PURATA PARAS SUNGAI BULAN OKT (m) | PURATA KADARALIR SUNGAI BULAN OKT (m ³ /s) | PURATA PARAS SUNGAI BULAN NOV (m) | PURATA KADARALIR SUNGAI BULAN NOV (m ³ /s) | KADARALIR KEMARAU TEMPOH ULANGAN UNTUK 7 HARI KADARALIR RENDAH (m ³ /s) | | | |
|----|-----------|------------------------------------|--------|-------------------------|-----------------------------------|---|-----------------------------------|---|--|---------|----------|----------|
| | | | | | | | | | 2-Tahun | 5-Tahun | 10-Tahun | 20-Tahun |
| 01 | 2527411 | SG.MUAR DI BULOH KASAP | JHR | 15.50 | 4.12 | 6.79 | 7.18 | 72.49 | 8.05 | 5.05 | 4.2 | 3.2 |
| 02 | 2130422 | SG .BEKOK DI BT.77 JLN Y.P | JHR | 5.94 | 2.83 | 0.23 | 2.97 | 0.48 | 1.88 | 0.73 | 0.35 | 0.14 |
| 03 | 1737451 | SG. JOHOR AT RANTAU PANJANG | JHR | 4.00 | 3.02 | 24.85 | 3.87 | 45.45 | 8.14 | 4.79 | 3.15 | 1.9 |
| 04 | 5606410 | SG. MUDA AT JAMBATAN SYED OMAR | KDH | 8.00 | 7.65 | 132.33 | 8.55 | 206.15 | 17.6 | 10.96 | 9.33 | 8.6 |
| 05 | 5320443 | SG.GALAS DI DABONG | KEL | 28.00 | 25.88 | 128.04 | 26.62 | 228.46 | 195.13 | 101.74 | 61.48 | 33.74 |
| 06 | 5721442 | SG.KELANTAN DI KUSIAL | KEL | 10.00 | 10.24 | 641.20 | 10.61 | 786.20 | 155.4 | 98.9 | 70.5 | 48.5 |
| 07 | 2519421 | SG. LINGGI AT SUA BETONG | N. S | 5.00 | - | - | - | - | 3.47 | 1.73 | 1.07 | 0.65 |
| 08 | 3519426 | SG.BENTONG DI KUALA MARONG | PHG | 86.00 | 85.33 | 5.51 | 85.76 | 11.46 | 2.77 | 1.64 | 1.16 | 0.83 |
| 09 | 3930401 | SG.KUANTAN DI BUKIT KENAU | PHG | 17.00 | 16.45 | 1.90 | 16.68 | 2.48 | 8.28 | 1.5 | 0.91 | 0.64 |
| 10 | 4023412 | SG.PAHANG DI SUNGAI YAP | PHG | 44.00 | 45.57 | 841.88 | 45.65 | 866.34 | 104.52 | 51.78 | 32.16 | 20.05 |
| 11 | 3224433 | SG.TRIANG DI JAM.KERETAPI | PHG | 31.00 | 30.52 | 6.43 | 32.39 | 44.52 | 18.11 | 7.31 | 3.33 | 0.9 |
| 12 | 3424411 | SG.PAHANG DI TEMERLOH (LUBUK PASU) | PHG | 26.00 | - | - | 26.58 | 1347.71 | 165.43 | 110.86 | 90.75 | 78.44 |

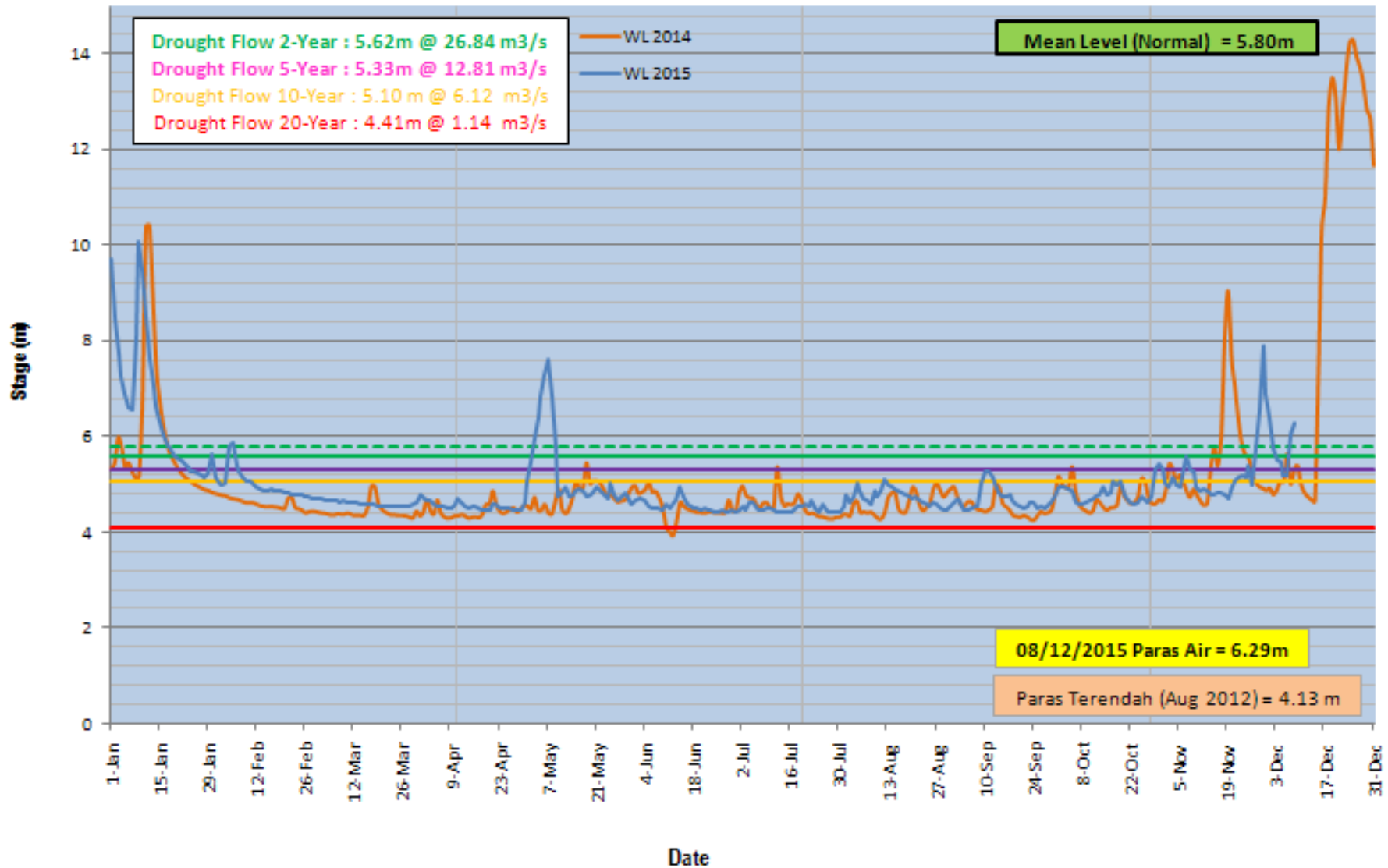
| B. | ID STESEN | NAMA STESEN | NEGERI | PARAS NORMAL SUNGAI (m) | PURATA PARAS SUNGAI BULAN OKT (m) | PURATA KADARALIR SUNGAI BULAN OKT (m3/s) | PURATA PARAS SUNGAI BULAN NOV (m) | PURATA KADARALIR SUNGAI BULAN NOV (m3/s) | KADARALIR KEMARAU TEMPOH ULANGAN UNTUK 7 HARI KADARALIR RENDAH (m3/s) | | | |
|----|-----------|-------------------------------|--------|-------------------------|-----------------------------------|--|-----------------------------------|--|---|---------|----------|----------|
| | | | | | | | | | 2-Tahun | 5-Tahun | 10-Tahun | 20-Tahun |
| 13 | 5405421 | SG. KULIM DI ARA KUDA | P.P | 7.00 | 6.25 | 11.53 | 6.71 | 24.42 | 1.74 | 1.22 | 1.07 | 0.99 |
| 14 | 5505412 | SG.MUDA DI LADANG VICTORIA | P. P | 3.50 | - | - | - | - | 15.75 | 9.83 | 8.2 | 7.39 |
| 15 | 4911445 | SG.PLUS DI KG.LINTANG | PRK | 52.00 | 53.21 | 54.87 | 53.70 | 85.92 | 13.3 | 9.29 | 7.41 | 6.03 |
| 16 | 4809443 | SG.PERAK DI ISKANDAR BRIDGE | PRK | 32.00 | 32.24 | 193.40 | 32.54 | 234.67 | 122.65 | 68.94 | 45.49 | 29.16 |
| 17 | 5206432 | SG. KERIAN DI SELAMA | PRK | 10.00 | 9.66 | 34.19 | 10.60 | 58.74 | 10.13 | 6.09 | 4.21 | 2.84 |
| 18 | 2816441 | SG.LANGAT DI DENGKIL | SEL | 4.00 | 3.50 | 26.42 | 4.51 | 106.69 | 7.29 | 4.31 | 3.15 | 2.41 |
| 19 | 3813411 | SG.BERNAM DI JAMBATAN SKC | SEL | 16.60 | 16.99 | 59.40 | 17.94 | 120.37 | 15.79 | 12.17 | 10.88 | 10.12 |
| 20 | 3615412 | SG.BERNAM DI TANJUNG MALIM | SEL | 38.30 | 36.75 | 3.92 | 37.09 | 6.84 | 3.27 | 2.28 | 1.97 | 1.81 |
| 21 | 2917401 | SG.LANGAT DI KAJANG | SEL | 22.89 | 22.42 | 8.54 | 22.77 | 16.89 | 2.29 | 1.13 | 0.79 | 0.61 |
| 22 | 3414421 | SG.SELANGOR DI RANTAU PANJANG | SEL | 4.50 | 5.19 | 56.73 | 6.19 | 113.81 | 18.87 | 13.07 | 9.95 | 7.4 |
| 23 | 3118445 | SG.LUI DI KG. SG. LUI | SEL | 77.00 | 74.64 | 4.02 | 74.93 | 81.19 | 0.65 | 0.37 | 0.24 | 0.16 |
| 24 | 2918401 | SG.SEMENYIH DI RINCHING | SEL | 22.00 | 20.45 | 3.61 | 20.65 | 7.82 | 1.93 | 1.14 | 0.96 | 0.88 |
| 25 | 4832441 | SG.DUNGUN DI JAM.JERANGAU | TER | 7.00 | 4.83 | 2.58 | 5.25 | 10.57 | 26.84 | 12.81 | 6.12 | 1.14 |

Rajah 5 : Rekod Luahan Sungai Pada November 2015.

Aras Air Sg Bekok di Bt.77 Jln Y.P (2014 - 2015)



Aras Air Sg. Dungun di Jam. Jerangau (2014 - 2015)



4. Analisis Storan Empangan

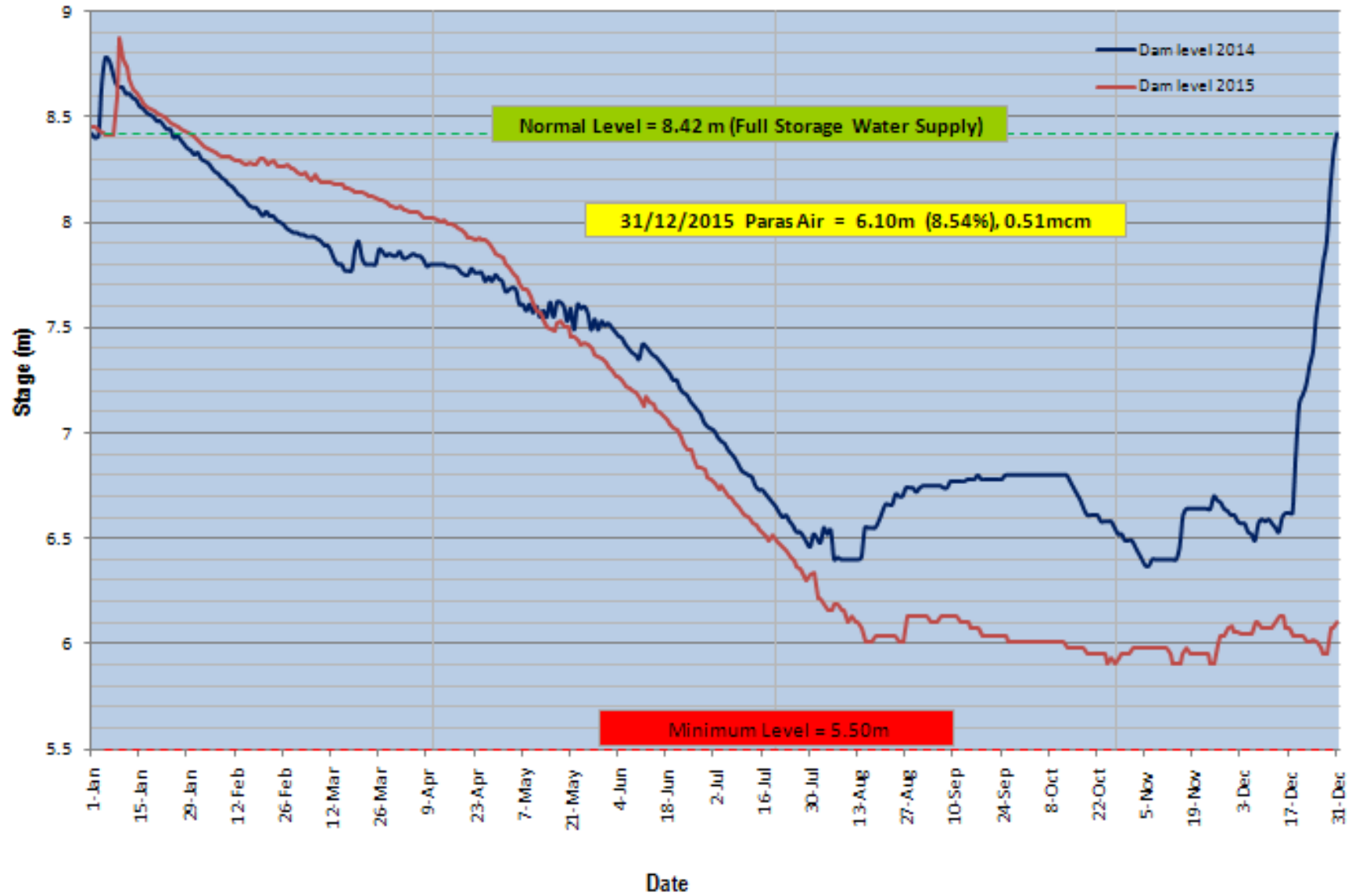
Rajah 6 di bawah menunjukkan aras air bagi empangan-empangan yang dipantau pada November 2015

| BIL | ID STESEN | NEGERI | NAMA EMPANGAN | NORMAL LEVEL (M) | MIN LEVEL (M) | MAX LEVEL (M) | ARAS AIR MIN BULAN NOV (M) | ARAS AIR MAX BULAN NOV (M) | ARAS AIR PURATA BULAN OKT (M) | ARAS AIR PURATA BULAN NOV (M) | STORAN EMPANGAN (MCM) | STORAN EMPANGAN (%) |
|-----|-----------|--------|--------------------------|------------------|---------------|---------------|----------------------------|----------------------------|-------------------------------|-------------------------------|-----------------------|---------------------|
| 1 | 1832401 | JHR | EMPANGAN MACHAP | 15.85 | 13.10 | 19.4 | 16.44 | 16.58 | 14.55 | 16.49 | 16.35 | 100 |
| 2 | 1931425 | JHR | EMPANGAN SEMBRONG | 10.00 | 6.00 | 13.8 | 9.29 | 9.60 | 9.29 | 9.49 | 26.00 | 85.36 |
| 3 | 2030401 | JHR | EMPANGAN BEKOK | 15.50 | 8.70 | 22.00 | 12.95 | 13.71 | 12.99 | 13.34 | 31.97 | 52.32 |
| 4 | 2536468 | JHR | EMPANGAN LABONG | 8.03 | 7.01 | 10.06 | 5.91 | 6.08 | 5.98 | 5.97 | 0.42 | 7.04 |
| 5 | 6397405 | KDH | EMPANGAN PADANG SAGA | 21.18 | 18.50 | 22.60 | 19.48 | 19.61 | 19.53 | 19.54 | 0.09 | 58.54 |
| 6 | 5907401 | KDH | EMPANGAN BERIS | 84.00 | 68.00 | 86.40 | 83.79 | 84.58 | 83.74 | 84.17 | 122.57 | 100 |
| 7 | 5919403 | KEL | EMPANGAN BUKIT KWONG | 16.76 | 12.20 | 17.72 | 13.30 | 14.53 | 13.49 | 13.71 | 3.38 | 24.49 |
| 8 | 6207480 | KDH | EMPANGAN PEDU | 97.56 | 67.07 | 97.56 | 96.07 | 97.49 | 95.58 | 96.64 | 1027.86 | 95.17 |
| 9 | 6307480 | KDH | EMPANGAN AHNING | 105.70 | 101.90 | 114.00 | 109.80 | 111.11 | 109.32 | 110.64 | 244.61 | 89.33 |
| 10 | 6108480 | KDH | EMPANGAN MUDA | 94.50 | 82.20 | 103.30 | 100.72 | 101.83 | 100.38 | 101.01 | 160.35 | 100 |
| 11 | 2634402 | PHG | EMPANGAN ANAK ENDAU | 19.00 | 12.00 | 21.60 | 18.99 | 19.15 | 18.96 | 19.10 | 38.17 | 66.09 |
| 12 | 6502436 | PLS | EMPANGAN TIMAH TASOH | 29.10 | 25.30 | 30.10 | 28.00 | 28.81 | 28.60 | 28.38 | 30.95 | 77.67 |
| 13 | 4613401 | PRK | EMPANGAN ULU KINTA | 245.00 | 189.80 | 245.00 | 245.24 | 245.35 | 245.23 | 245.29 | 68.03 | 100 |
| 14 | 5006401 | PRK | EMPANGAN BUKIT MERAH | 8.70 | 6.40 | 9.80 | 7.99 | 8.63 | 8.08 | 8.24 | 62.31 | 78.82 |
| 15 | 3218402 | SEL | EMPANGAN LANGAT | 220.96 | 204.21 | 220.96 | 208.95 | 213.52 | 208.47 | 211.37 | 16.78 | 49.23 |
| 16 | 3517401 | SEL | EMPANGAN SUNGAI SELANGOR | 220.00 | 184.63 | 220.00 | 214.50 | 220.25 | 212.69 | 217.97 | 215.26 | 93.59 |
| 17 | 3114401 | SEL | EMPANGAN TASIK SUBANG | 37.87 | 34.75 | 37.87 | 38.42 | 38.71 | 38.56 | 38.56 | 4.21 | 100 |

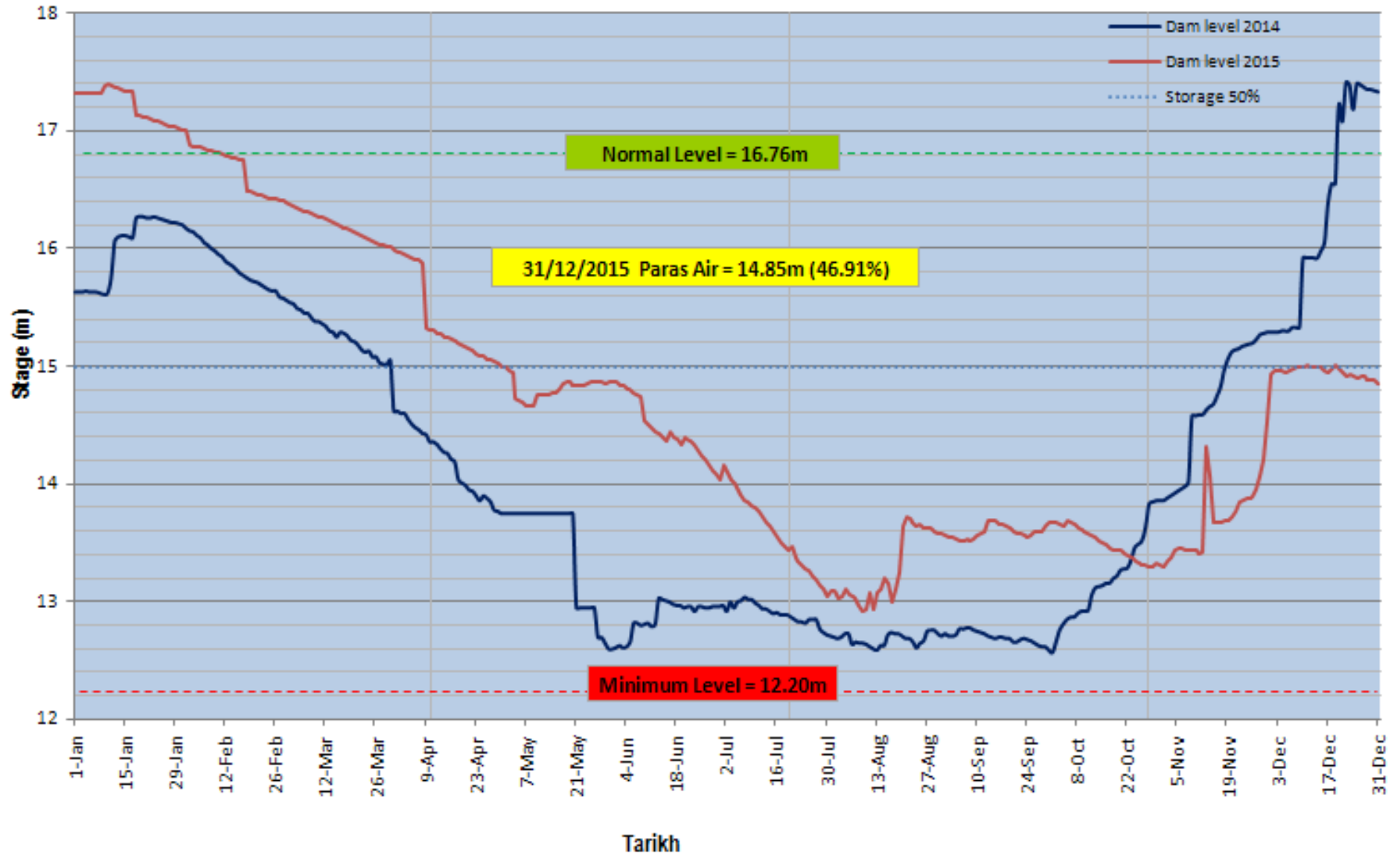
| BIL | ID STESEN | NEGERI | NAMA EMPANGAN | NORMAL LEVEL (M) | MIN LEVEL (M) | MAX LEVEL (M) | ARAS AIR MIN BULAN NOV (M) | ARAS AIR MAX BULAN NOV (M) | ARAS AIR PURATA BULAN OKT (M) | ARAS AIR PURATA BULAN NOV (M) | STORAN EMPANGAN (MCM) | STORAN EMPANGAN (%) |
|-----|-----------|--------|------------------------|------------------|---------------|---------------|----------------------------|----------------------------|-------------------------------|-------------------------------|-----------------------|---------------------|
| 18 | 3515401 | SEL | EMPANGAN SUNGAI TINGGI | 59.50 | 45.03 | 59.50 | 55.04 | 56.49 | 54.74 | 55.85 | 88.44 | 77.24 |
| 19 | 3018402 | SEL | EMPANGAN SEMENYIH | 111.00 | 84.30 | 113.90 | 107.97 | 110.23 | 108.08 | 109.06 | 52.27 | 88.48 |
| 20 | 3216403 | WLY | EMPANGAN BATU | 102.70 | 79 | 107.3 | 94.90 | 98.90 | 94.71 | 97.13 | 20.91 | 65.40 |
| 21 | 3217435 | WLY | EMPANGAN KLANG GATE | 94 | 84 | 98 | 95.17 | 95.78 | 94.46 | 95.37 | 28.12 | 100 |
| 22 | - | N.SMN | EMPANGAN GEMENCHEH | 110 | 86 | 120 | 91.07 | 94.44 | 89.89 | 93.31 | 5310.00 | 17.82 |

Rajah 6 : Rekod Aras Empangan Pada Bulan November 2015

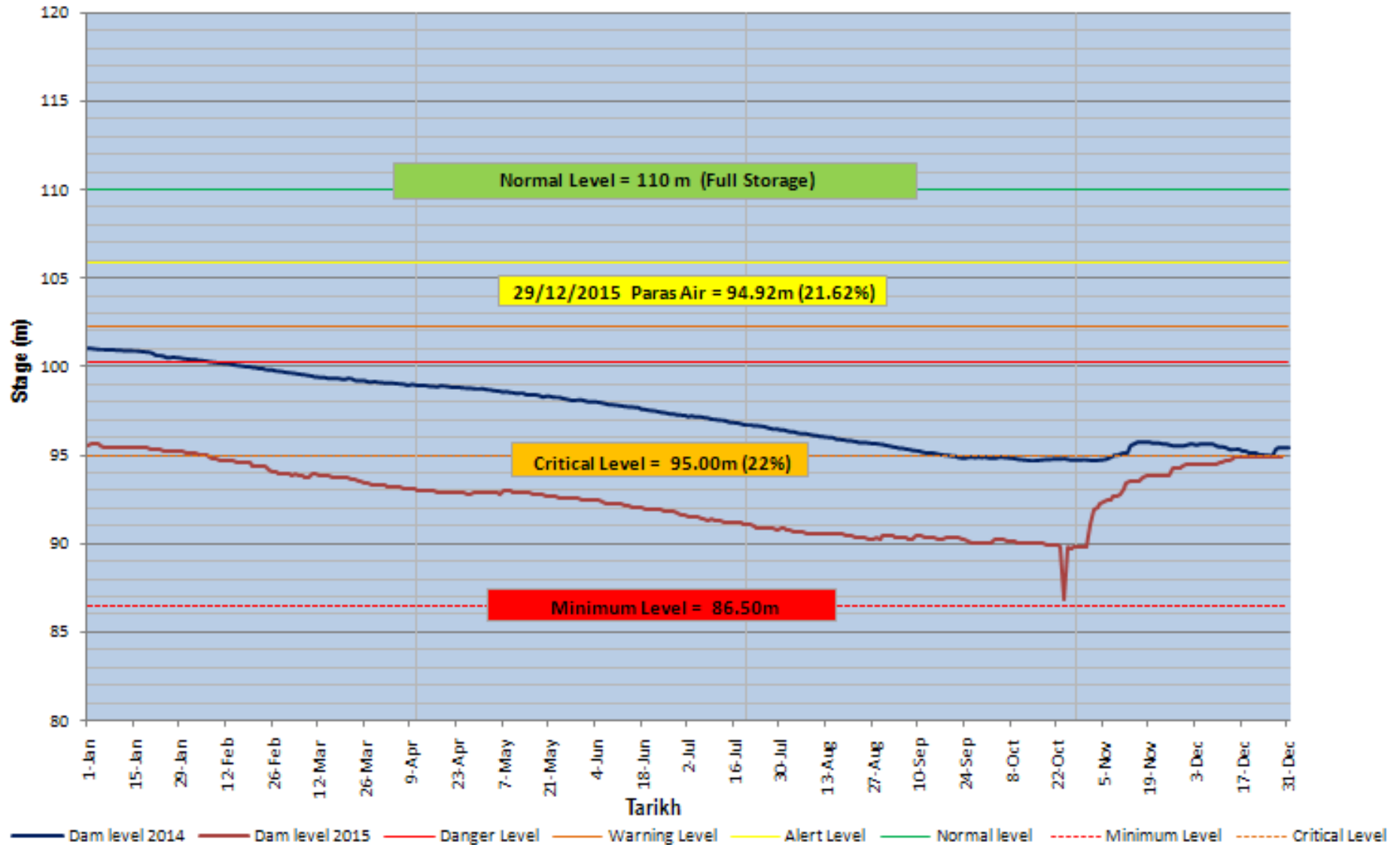
Empangan Labong (2014 - 2015)



Empangan Bukit Kwong (2014-2015)



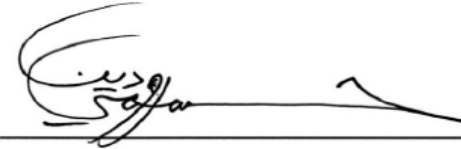
Empangan Gemencheh (2014 - 2015)



Disediakan Bersama Oleh :-



Nor Asiken Binti Alias
Penolong Pengarah
Unit Ramalan dan Operasi
Seksyen Ramalan Banjir & Kemarau



Mohammad Hasmiruddin Bin Mohd Nasaruddin
Penolong Jurutera
Unit Ramalan dan Operasi
Seksyen Ramalan Banjir & Kemarau

Disemak & Disahkan Untuk Edaran Oleh :-



Mohd Hazri Bin Moh Khambali
Ketua Penolong Pengarah
Unit Ramalan dan Operasi
Seksyen Ramalan Banjir & Kemarau