



## **SIGNIFICANT WEATHER – November 2005**

### **SUMMARY**

Thunderstorms occurred in all states there was much damage to crops and property due to strong winds, lightning, flash flooding and hail. In New South Wales a woman died as a result of a lightning strike.

Tornadoes were observed in Queensland causing damage to homes and property.

### **TORNADOES**

#### **Queensland**

On the 25th a tornado was reported at Mulgildie, south of Monto, 12 homes were partially or completely unroofed, farm sheds demolished and a piggery flattened.

On the 27th a widespread outbreak of severe thunderstorms in the south eastern quarter of the state was observed around Brisbane and Gladstone. A tornado was observed at Narangba, an outer northern suburb of Brisbane. Trees were completely sheared off and garden sheds blown away. A caravan was overturned, tiles and iron sheets were torn off roofs. At Narangba Timbers, some exceptional damage was observed. Heavy timber beams were torn from the roof of the shed.

### **THUNDERSTORMS**

#### **Queensland**

On the 7th a wind gust of 96 km/h was recorded at Birdsville in a thunderstorm.

On the 9th a severe thunderstorm produced numerous strong wind gusts at Winton the highest of these was 100 km/h. This was accompanied by 31 mm of rain in 30 minutes.

On the 12th thunderstorms produced very heavy rain on the Gold Coast, 81 mm of rain fell in 60 minutes at Tallebudgera Creek and 85 mm in 60 minutes was recorded at Coplicks Bridge.

On the 13th a severe thunderstorm produced 107 km/h wind gusts at Maroochydore and 3-4cm hail was reported between Maroochydore and Coolum.

On the 14th thunderstorms in the Sunshine Coast Hinterland produced some exceptional rainfall values. At Yandina, severe thresholds were met or exceeded for all time periods up to and including 6 hours. Values at Yandina Creek were: 26mm in 5 minutes, 28mm in 6 minutes, 38mm in 10 minutes, 61mm in 20 minutes, 83 mm in 30 minutes, 119 mm in 60 minutes, 135 mm in 2 hours and 137 mm in 3 hours.

On the 15th an extremely long lived thunderstorm began its life near Inglewood. It tracked steadily east north east for the next few hours, eventually becoming a supercell near Deverton. Around midday it reached Gatton, producing 2.5-3cm hail in the area. Winds gusts of 72 km/h were recorded at the observation site. At Mt Tarampa, 2cm hail fell and trees were brought down. Further east, the storm brought down trees in an area 10 to 15 kilometres south of Esk. After a brief period of weakening, the storm then reintensified over the D'Aguiar Ranges, before moving through the Sunshine Coast Hinterland, where it produced very heavy rainfall. At Ball Lookout (near Eumundi) 45mm fell in 20 minutes and 51mm in 30 minutes. At Mapleton, 26mm was recorded in 10 minutes

and 44mm in 30 minutes. The storm eventually dissipated around 6 pm.

Another severe thunderstorm caused considerable damage at Gympie. Trees were brought down and roofs torn off many homes. The maximum wind gust recorded at the AWS at Gympie was just 68 km/h, however, the worst of the storm passed to the south and south east of the town. It produced extremely heavy rain with Mt Elliot (near Toolara) recording 51mm in 20 minutes and 61mm in 30 minutes.

On the 19th hail to 2.5cm in diameter was reported at Wondalli, near Goondiwindi.

On the 20th, afternoon storms resulted in more than 32,000 homes without power, some property damage and scattered debris along roadsides. The worst affected areas were Riverview, Goodna, Bundamba, Sherwood, Park Ridge, Moorooka, Ipswich, Beaudesert and Jimboomba.

On the 22nd reports of very heavy rainfall and minor flash flooding (30mm in 12 minutes and 40mm in 25 minutes) were reported from Withcott (near Toowoomba). A wind gust of 90 km/h was recorded at Cloncurry in a thunderstorm.

On the 23rd slow moving thunderstorms formed in a deep, moist tropical airmass, producing heavy rainfall. Bonogin Creek in the Gold Coast Hinterland reported 77mm in 60 minutes, Devon Hills (near the township of Moore in the upper Brisbane River Valley) received 25mm in 10 minutes and Moorina (near Caboolture) received 48mm in 30 minutes. There was minor flash flooding and water damage. There was also minor flash flooding at Springfield, near Ipswich.

On the 27th many reports of hail between 2-5 cm in diameter were received from around the Greater Brisbane area. Warrill View (near Aratula) reported 4-5 cm, Jindalee 4cm, Mango Hill golf ball sized, Murrumba Downs up to 2cm, Scarborough golf ball sized and Redcliffe up to 5cm in diameter. Also Nanango reported up to golf ball sized.

On the 28th golf ball sized hail was reported from Proserpine.

On the 29th hail larger than golf balls was reported from a site about 60 kilometres southsouthwest of Charters Towers. Hail 7cm in diameter was reported to the south west of Mackay.

The majority of the damage occurred in Brisbane, however there were numerous reports of hail from the southern suburbs. Some of the hail exceeded 2cm in diameter. Many places also received large quantities of hail and some of the damage was due to the quantity (e.g. gutters being filled by hail). Reports of interest included Algester with 2-3cm, Raceview golf ball sized, Redbank to golf ball sized, Sunnybank 2.5cm and Ipswich to 2cm. At Goodna, a wind gust of 100 km/h was recorded.

North of the city, at least 2 supercells were observed. One of these produced very heavy rainfall in the north western suburbs. Drapers Crossing, near Samford, reported 47mm in 20 minutes, 64mm in 30 minutes, and 84mm in 60 minutes.

On the 30th severe thunderstorms on the Atherton Tablelands produced several reports of damage. At Atherton, one property reported much tree damage and the loss of their solar hot water system. At Tolga, an iron roof was stripped from a shed. Roofs were torn off, a water tank was rolled over, power poles brought down and hail the size of golf balls were reported. At Mungali Falls, near Millaa Millaa (also on the Atherton Tablelands), hail the size of 10 cent pieces was reported, trees were brought down.

Severe thunderstorms also occurred near Rockhampton, several reports of hail, from Westwood (westsouthwest of Rockhampton), Stanwell and Kalapa. At Kalapa, one farmer reported golf ball sized hail which damaged crops. Strong winds tore a third of the house's roof off and knocked over the water tank. Bark was also stripped from trees by the storm.

## **New South Wales**

On the 1st at Valley Heights (Central Tablelands) there was very heavy rain from a slow moving thunderstorm between Bowen Mountain and Warragamba. Some 24 hour rainfalls to 9am on the 1st include: 143.4mm at

Valley Heights, 139mm also at Valley Heights and 61mm at Winmalee.

On the 6th at Broken Hill (Lower Western) a thunderstorm and very strong winds damaged many houses. Winds gusted to 106 km/h. There was also significant flash flooding in the streets of Broken Hill.

On the 7th at Silverton (Lower Western) a thunderstorm with strong winds estimated at up to 120 km/h occurred. Heavy rain, 28mm in 30 minutes was also recorded

On the 8th at Dubbo (Central West Slopes) thunderstorm, heavy rain (30mm in 15 mins) was recorded.

On the 10th at Collarenebri (Upper Western) a thunderstorm with heavy rain produced 37mm of rain in 30 minutes. At Uralla (Northern Tablelands) a thunderstorm with heavy rain (67mm) was recorded. At Shellharbour (Illawarra) 2-3cm hail was reported. Thunderstorms caused damage at several places in the Northwest Slopes, including Tamworth and Narrabri. A woman died as a result of a lightning strike which also left a man with burns to 30% of his body about 20 kilometres north of the town of Dunedoo (Central West Slopes) at about 3:15pm.

On the 15th storms in Sydney and on the Central Coast were reported. A falling tree knocked a chimney through the roof of the Randwick Public School. At Kogarah (Metropolitan) hail up to 2cm in diameter was reported.

On the 21st at Warialda (North West Slopes) hail 2cm in diameter was reported and at Barraba (North West Slopes) 3cm hail occurred.

On the 22nd at Penrith (Metropolitan) hail 2cm size was recorded. Heavy rain, 37mm in 25 minutes was produced. There were some reports of hail and wind damage.

On the 23rd at Murwillumbah (Northern Rivers) a thunderstorm with heavy rain, 47mm in 45 minutes was reported. At Wellington (Central Tablelands) a thunderstorm with very strong winds unroofed several houses and snapped power poles which caused widespread power outages. At Parkes (Central West Slopes)

thunderstorms with heavy rain 36mm in 30 minutes was recorded. At Orange (Central Tablelands) hail 2cm in size was reported and severe crop damage is estimated at \$8 million.

On the 24th at Eugowra (Central West Slopes) hail 2.3cm in size and heavy rain (25mm in 20 minutes) was recorded at Patens Bridge. On the 25th 68mm to 9am was also recorded.

On the 25th at Cargo (Central Tablelands) hail 4cm size was recorded. In the Orange area (Central Tablelands) hail 2cm (30 kilometres southwest of Orange) was reported.

On the 26th at Gilgandra (Central West Slopes) hail 4cm in diameter and estimated strong winds up to 100 km/h brought down trees. At Blayney (Central Tablelands) hail 3cm size was reported At Bathurst (Central Tablelands) thunderstorm with heavy hail caused minor damage to trees and cars. At Lithgow (Central Tablelands) a thunderstorm caused flash flooding on the Great Western Highway. At Canberra (Southern Tablelands) a thunderstorm with heavy rain caused flash flooding in Belconnen and Gungahlin, causing damage to houses. Trees were also blown down. Charnwood recorded 33mm of rain in about 30 minutes.

On the 27th at Grafton (Northern Rivers) hail 2.8cm size was recorded. At Gloucester (Mid North Coast) a thunderstorm with heavy rain, 29mm in 30 minutes was recorded. On the 27th storms caused damage in the Kempsey area and in the Illawarra.

On the 29th at Camden (Illawarra) a thunderstorm with heavy rain (15mm in 15 minutes) caused local flooding. At Clunes (Northern Rivers) a thunderstorm with heavy rain, 44mm in 25 minutes was reported (near Lismore).

## **Victoria**

On the 7th severe thunderstorms caused flash flooding at Rutherglen and Tarrawingee.

On the 8th severe thunderstorms produced flash flooding that inundated the main highway and put two houses at the risk of

inundation, 24.6mm of rainfall was recorded in 20 minutes.

On the 15th severe thunderstorms overnight caused flash flooding in Melbourne suburbs.

On the 25th severe thunderstorms near Bendigo caused widespread hail damage to Canola crops.

### **Tasmania**

Severe thunderstorms with hail to 3.5 cm were reported at Yambacoona on King Island on the night of the 2nd, and with hail to 3 cm at Arthurs River on the West Coast on the morning of the 3rd. There were several other reports of high intensity rainfall over short durations, mostly in the northwest of the State, with flash flooding causing problems to a number of businesses and private residences. Lightning strikes caused damage to a power transformer at East Devonport on the night of the 2nd, a brick shed wall in the Launceston suburb of Newstead on the 3rd, and a power pole at Oatlands on the 3rd. The electricity supply company had over 600 calls.

### **South Australia**

On the 6th hail up to 2.5 cm extensively damaged crops in the Alford/Tickera region.

### **Western Australia**

On the 14th a number of severe thunderstorms passed over Warburton during the afternoon, unroofing 3 houses and causing a carport to collapse on to a car. Numerous fences were damaged and many trees blown down. Hail from 1.0-1.5 cm in diameter were observed. A wind gust of 172 km/h and rainfall of 50mm were recorded with the passage of the storm.

### **Northern Territory**

On the afternoon of the 4th a small line of thunderstorms moved through the Darwin rural area. Tree damage was reported from McMinns Lagoon.

On the late afternoon of the 5th a thunderstorm produced a gust of 91 km/h at Yulara.

In the early hours of the 12th, persistent thunderstorms produced very heavy rainfall in the southern Darwin-Daly region. Tindal RAAF Base received 91.8 mm of rain in the 24 hours to 9 am, with 86.8 mm falling in the space of 1 hour.

On the 14th, an afternoon thunderstorm moved across Darwin from the northeast, and produced a gust of 126 km/h at Darwin airport. The automatic weather station at the airport was hit by lightning and stopped recording during the storm, but between 9am and 3pm 25mm of rain was recorded, most from the start of the storm. There were uprooted or snapped trees along a 1 kilometre stretch of the Stuart Highway in Winnellie, adjacent to the airport, and the outward bound section of the highway was blocked. Power supplies to many residents were disrupted for 10 minutes to an hour. Another thunderstorm the same afternoon produced an 87 km/h wind gust at Noonamah.

On the 15th, and early afternoon thunderstorm at Timber Creek brought down large tree limbs and damaged buildings.

Thunderstorms around midnight on the 19th produced flash flooding at a camping spot near the Katherine Gorge. A car was washed downriver and lost. Nitmiluk Rangers' Station, at the bottom of Katherine Gorge, recorded 84.0 mm of rain in the 24 hours to 9 am on the 20th.

On the 30th, a thunderstorm produced a 93 km/h gust at Yulara, and radar evidence suggested the presence of other severe thunderstorms in the Alice Springs region, although no further surface reports were received.

<b>WIND</b>
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### **Queensland**

Wind gusts of 90 km/h or greater were reported on:

27th	Spitfire AWS 90 km/h
	Inner Beacon 98 km/h

## New South Wales

Wind gusts of 90 km/h or greater were reported on:

- 3rd Thredbo 111km/h.
- 6th Broken Hill 105km/h.
- 8th Thredbo 100km/h.
- 9th Thredbo 91km/h
- 10th Tamworth 98km/h, Newcastle 96km/h, Richmond 94km/h.
- 15th Bellambi 91km/h, Sydney Harbour 91km/h, Norah Head 102km/h, Sydney Airport 91km/h, Newcastle 96km/h, Kempsey 98km/h, Montague Island 91km/h, Jervis Bay 96km/h, Coffs Harbour 94km/h, Ulladulla 96km/h, Evans Head 98km/h, Byron Bay 93km/h.
- 16th Byron Bay 102km/h.
- 26th Trangie 102km/h, Coonamble 113km/h.
- 28th Kiama 93km/h, Green Cape 113km/h, Montague Island 113km/h.

## Victoria

On the 3rd strong northerly winds associated with a low pressure system affected mostly elevated areas with Mt Hotham recording a 124 km/h wind gust, Mt Buller a 102 km/h wind gust and Dunns Hill a 100 km/h wind gust.

On the 8th strong northerly winds associated with another low pressure system affected elevated areas, with Mt Buller experiencing a 113 km/h wind gust and Mt Hotham a 111 km/h wind gust.

On the 11th strong winds associated with a trough produced a 104 km/h wind gust at Wilsons Promontory.

## Tasmania

An intense low pressure system passing close to southern Tasmania overnight on the 3rd and into the 4th brought storm force northwesterly winds to the south and southeast of the State. Tree limbs and roofing iron over fences, roads and power lines were the main cause of the over 100 emergency services callouts. Police logged 128 incident reports,

mostly south of Hobart in the Kingston/Huntingfield/Snug area, and Hobart suburbs in the Chigwell/Glenorchy/Rosetta area. 19,000 premises lost power, some for several hours, and the electricity supplier responded to over 4,000 calls. The power outages forced the closure of some schools in the south, and a “boil water” alert being issued to residents in some Huon Valley towns when their water treatment plant failed.

Wind gusts of 90 km/h or greater were reported on:

- 2nd Mount Read 91 km/h
- 3rd Mount Wellington 113 km/h, Maatsuyker Island 107 km/h, Hartz Mountain 107 km/h, Cape Grim 106 km/h, Tasman Island 102 km/h, Droughty Hill 96 km/h, Strahan Aerodrome 94 km/h, Hobart 94 km/h, Tunnack 94 km/h
- 4th Mount Wellington 165 km/h, Maatsuyker Island 163 km/h, Scotts Peak Dam 144 km/h, Hartz Mountain 131 km/h, Droughty Hill 126 km/h, Hobart 122 km/h, Warra 115 km/h, Mount Read 107 km/h, Cape Bruny 104 km/h, Tasman Island 102 km/h, Tunnack 102 km/h, Friendly Beaches 102 km/h, Cape Grim 102 km/h, Eddystone Point 100 km/h, Strahan Aerodrome 91 km/h
- 7th Tasman Island 91 km/h
- 8th Tasman Island 94 km/h
- 9th Scotts Peak Dam 96 km/h
- 10th Mount Wellington 106 km/h, Scotts Peak Dam 102 km/h, Cape Grim 98 km/h, Mount Read 96 km/h, Hartz Mountain 91 km/h
- 11th Cape Grim 109 km/h, Mount Wellington 107 km/h, Mount Read 96 km/h, Maatsuyker Island 91 km/h
- 14th Maatsuyker Island 91 km/h
- 19th Maatsuyker Island 96 km/h
- 25th Mount Read 120 km/h, Tasman Island 104 km/h, Maria Island 96 km/h, Mount Wellington 94 km/h
- 26th Mount Read 128 km/h, Mount Wellington 117 km/h, Tasman Island 106 km/h, Scotts Peak Dam 102 km/h, Maria Island 102 km/h, Maatsuyker Island 100 km/h, Hartz Mountain 91 km/h

## South Australia

On the 25th a high pressure system moved rapidly over South Australia which resulted in a wind gust to 91km/h at Port Augusta. A gale of 64 km/h was observed at Hindmarsh Island.

## FLOODING

### New South Wales

On the 7th very heavy rain 9pm to midnight caused flooding in the Parkes/Eugowra area. To 9am on the 8th, 127mm was recorded at Parkes, the second highest daily fall on record for any month. Over 100 people were evacuated from Eugowra when Mandagery Creek rose to 9.4 metres, close to the highest recorded. Eugowra was declared a natural disaster area. Several families were also evacuated at Molong after heavy rain caused flooding at lower end of town and shops had to be sandbagged. Flooding was reported from West Wyalong, Forbes, Orange, Bathurst and Wellington. Manildra recorded 102mm for the 24 hours, the third highest daily total on record for any month with records dating from 1893.

## South Australia

Intense rainfall over the Adelaide area during the late evening of the 7th through to early morning of the 8th led to major flooding in several rivers and caused extensive flash flooding in small creeks and in urbanized areas of Adelaide. Many parts of Adelaide were affected with a number of homes and businesses flooded.

## BUSHFIRES

### Northern Territory

Lightning strikes led to many small fires through central parts of the Northern Territory, but no significant damage to property was reported.

## TEMPERATURE

### Highest Mean Maximum Temperature for November

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>Queensland</b>				
Lady Elliot Island	28.9	28.8	1995	66
<b>Northern Territory</b>				
Alice Springs Airport	30.4	30.3	1979, 1980	63
Daly Waters AWS	35.3	35.2	2001, 2002	31
Centre Island AWS	32.1	32.0	1991, 1992	21

### Highest Mean Minimum Temperature for November

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>Queensland</b>				
Townsville Aero	24.5	24.3	1987	66
St Lawrence PO	22.3	22.0	1995	62
Mackay MO	23.0	22.7	1995	47
Monto Township	17.9	17.5	1991	32
Archerfield Aero	18.7	18.5	1997	30
<b>New South Wales</b>				
Woolbrook	10.5	10.1	2002	36
Murwillumbah	18.4	18.2	1995	34
Mount Seaview	15.7	15.5	1995	37

### Lowest Mean Minimum Temperature for November

Station	Actual °C	Previous Lowest °C	Year	Years of Record
<b>Western Australia</b>				
Cape Naturaliste	10.6	10.7	1952	101
Karnet	8.8	9.0	1971	34
Ongerup	8.7	8.8	1976	36

### Highest Daily Minimum Temperature for November

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>Tasmania</b>					
Launceston Airport	17.7	3	16.2	1977	67
Maatsuyker Island	16.9	8	16.5	1987	67
Flinders Island Airport	20.4	3	18.4	1987	42
Strathgordon Village	16.2	3	15.5	1997	35
Scottsdale (West Minstone Road)	18.2	3	16.0	1983	34

The 20.4°C at Flinders Island Airport equals the highest November overnight temperature ever recorded in Tasmania; the same value was registered at Strahan Airport on 30 November 2003.

**Lowest Daily Maximum Temperature for November**

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>Western Australia</b>					
Southern Cross	14.5	1	14.6	1981	48

**Lowest Daily Minimum Temperature for November**

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>New South Wales</b>					
Hillston	2.0	11	2.4	2004	49
<b>Western Australia</b>					
Hyden	1.3	2	1.5	1991	32
Katanning Comp	0.8	2	1.5	1991	48
Narrogin	1.1	2	2.1	1992	36
Salmon Gums	-0.1	10	0.0	2003	33

**RAINFALL****Queensland**

On the 27th heavy rainfall and flash flooding was reported from Norman Park in Brisbane and very heavy rainfall at nearby Carindale. Rain, 46 mm fell in 20 minutes was recorded.

**Tasmania**

The generally wet conditions in the north and east over the last three months (record wet in some areas) have led to marked crop losses or yield reductions. Potato crops were affected in three ways: some early plantings in the North East had rotted in the ground, later plantings were delayed, and harvesting delays had caused shortages of some varieties. Some peas already planted had suffered disease from the wet conditions, and other sowings had been significantly delayed; one estimate put the overall crop down about 25%. A similar fraction of the poppy crop was also lost to disease, and application of pesticides made difficult by recurrent rain; conditions were described by northern growers as the worst since the industry was established in 1964.

**Highest Monthly Rainfall on Record for November**

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Queensland</b>				
Riverton	210.6	165.2	1974	55
Glenmorgan PO	198.0	193.4	1983	71
<b>New South Wales</b>				
Orange Ag	204.3	191.1	1973	40
<b>Tasmania</b>				
Forthside Res Stn	163.8	152.2	1992	38
<b>South Australia</b>				
Neptune Island	74.0	70.9	1964	48
Curramulka	73.0	72.8	1992	119
Minlaton	77.6	73.1	1927	127
Gumeracha	135.2	111.2	1939	137
Cudlee Creek (Millbrook)	140.2	135.1	1952	92
Lenswood Res	162.6	134.0	1992	39
<b>Northern Territory</b>				
Douglas River	259.0	241.6	1983	31
Katherine Rural College	246.8	234.2	2001	40
Howard Springs	418.1	391.4	1964	37

**Lowest Monthly Rainfall on Record for November**

Station	Actual mm	Previous Lowest mm	Year	Years of Record
<b>Queensland</b>				
Malanda PO	0.2	3.6	1990	90
South Johnstone Exp Stn	14.6	15.4	1990	78
<b>Northern Territory</b>				
The Pines	29.4	38.6	1989	34

**Highest Daily Rainfall on Record for Any Month**

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
<b>South Australia</b>					
Uraidla	118.2	8	78.5	1952	116

**Highest Daily Rainfall on Record for November**

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
<b>Queensland</b>					
Riverton	103.6	1	77.7	1966	55
Ellangowan	88.4	6	74.4	1995	52
Glenlyon Dam	76.0	1	60.6	1997	31
Garrabarra	43.0	8	42.2	1963	58
Vanrook Station	182.6	20	83.8	1951	81
<b>New South Wales</b>					
Bathurst Ag	66.2	8	50.6	1985	98
Hillend	90.0	8	65.5	1932	126
Molong	95.0	8	67.3	1932	122
Orange Ag	96.0	8	77.0	1985	40
Orange Airport	74.8	8	62.6	1985	38
Manildra	102.0	8	65.3	1971	113
Bogan Gate	60.0	8	53.8	1930	112
Wentworth (Tarawi)	54.0	7	43.2	1973	40
Wyalong PO	67.2	8	52.8	1924	111

<b>Victoria</b>					
Halls Gap PO	53.0	8	50.0	1964	45
Chiltern PO	73.4	8	69.8	1998	121
<b>Tasmania</b>					
Cape Sorell	54.0	3	39.4	1952	83
<b>South Australia</b>					
Neptune Island	63.8	7	35.0	2002	48
Cape Borda	74.2	7	59.4	1910	139
Bridgewater	79.2	8	74.2	1934	130
Gumeracha	83.4	8	52.8	1964	137
Lobethal	84.4	8	80.8	1964	122
Millbrook Res	78.0	8	54.6	1964	92
Uraidla	118.2	8	78.5	1952	116
<b>Northern Territory</b>					
Daly Waters AWS	80.8	21	45.2	1942	31

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Distribution  
DIR, DDS, DDC, CSR  
Branch Heads  
Regional Directors,  
All Field Offices  
SRCE, STAN, SRDS, SRRT, PRO,  
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Society  
File 70/262

Note: Some statistical records mentioned in this report are  
based on data that have yet to be fully validated