

**FOURTH QUARTER  
CALENDAR YEAR 2017  
PRAIRIE PROVINCES WATER BOARD  
APPORTIONMENT QUARTERLY REPORT**

The interim apportionment balances are summarized for the Fourth Quarter of the calendar year 2017.

**South Saskatchewan River**

The apportionable flows of the South Saskatchewan River below its junction with the Red Deer River are shown below and are graphed in Appendices 1 and 2. From January to August 2017 the cumulative recorded flows, tabulated monthly, were above the median cumulative values. However, from September to December 2017 the cumulative recorded flows were slightly below the median. Cumulative monthly apportionable flows were above the median from January to December 2017. The percent of recorded flow delivered was 78% of the apportionable flows.

Note: Due to the current Water Survey of Canada (WSC) operational constraints in Alberta these calculations used preliminary flow and water level data from WSC stations obtained through Alberta Environment and Parks (AEP), rather than provisional data obtained directly from WSC. Recorded flow data from five of the hydrometric stations used in the calculation of consumptive use by irrigation districts was not available from AEP (these stations are not equipped with telemetry). Data for these stations was either estimated based on historical averages, or in case of return flow, assumed to be zero.

| Jan. 1, – Dec 31, 2017 | Cumulative Recorded Flow | Cumulative Apportionable Flow | * Sask Share | Cumulative Excess (or Deficit) Flow to Sask. |
|------------------------|--------------------------|-------------------------------|--------------|--|
|                        |                          |                               |              |  |
| S. Sask. River         | 6446000                  | 8294000                       | 4147000      | 2299000                                      |

\* Saskatchewan's share is 50% of the apportionable flow.

The combined daily recorded flows for the South Saskatchewan and Red Deer Rivers at the Alberta-Saskatchewan boundary exceeded the minimum flow criterion of 42.5 m<sup>3</sup>/sec (1 500 cfs) for January 1 – December 31, 2017 with the exception of ten days in December where the minimum flow criteria of 42.5 m<sup>3</sup>/sec was not met (Appendix 3).

**Lodge and Middle Creeks**

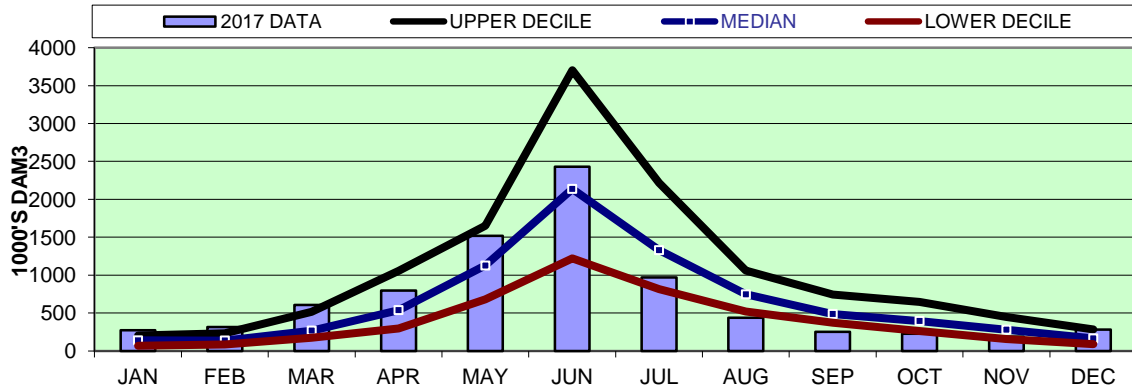
Interim recorded and apportionment flows are shown below for Lodge and Middle Creeks from January to the end of October 2017. The percent of recorded flow delivered was 99% and 96% of the apportionable flows for Lodge and Middle Creeks respectively.

| Jan. 1 to end of Oct. 2017 | Cumulative Recorded Flow | Cumulative Apportionable Flow | ** Sask Share | Cumulative Excess (or Deficit) Flow to Sask. |
|----------------------------|--------------------------|-------------------------------|---------------|--|
|                            |                          |                               |               |  |
| Lodge                      | 15264                    | 15411                         | 11559         | 3705   |
| Middle                     | 5631                     | 5871                          | 4403          | 1228   |

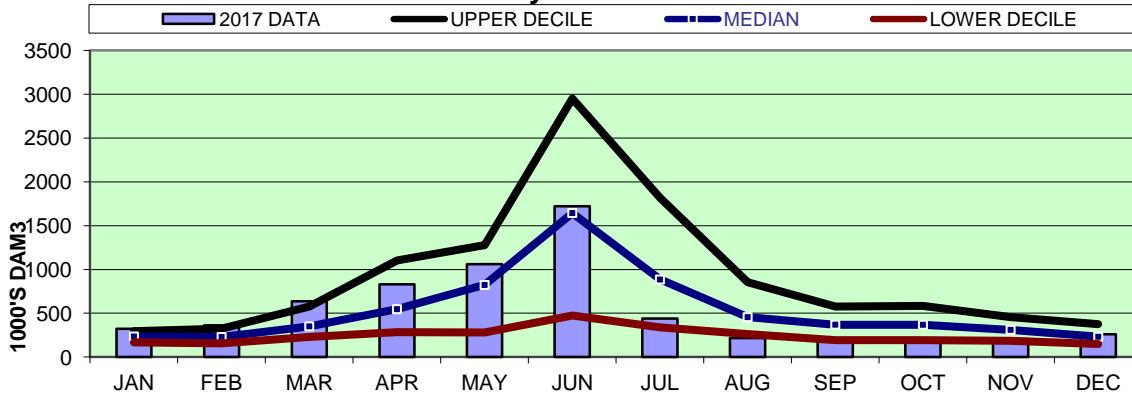
\*\* Saskatchewan's share is 75% of the apportionable flow.

**APPENDIX 1: South Saskatchewan River below Red Deer River  
Recorded and Apportionable Flows for January 1 – December 31, 2017.**

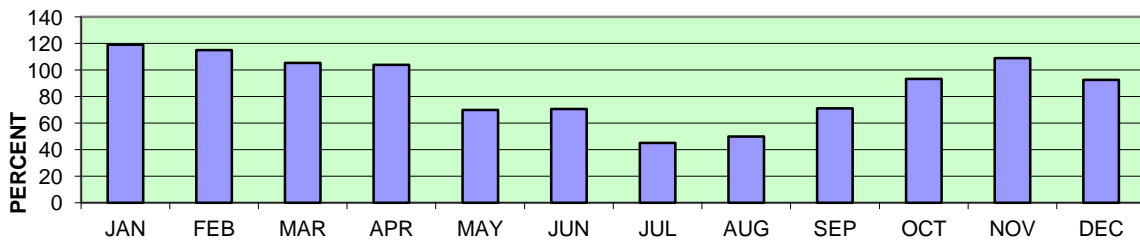
**Monthly Apportionable Flow Q4 2017**



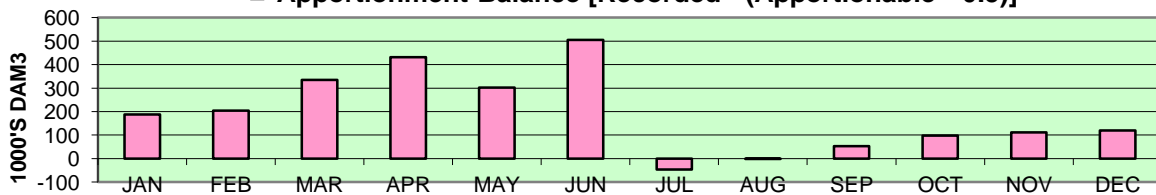
**Monthly Recorded Flow Q4 2017**



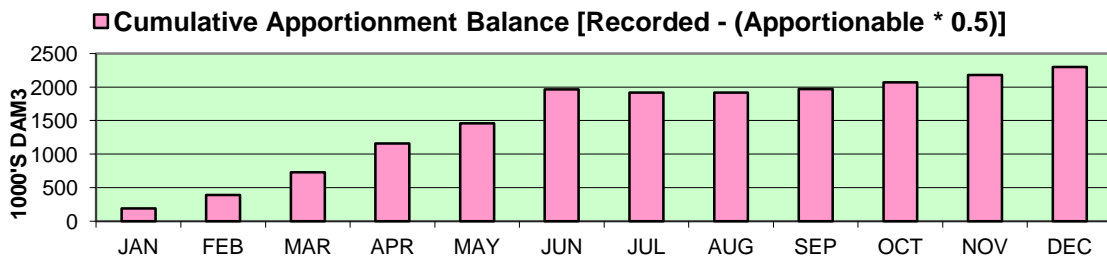
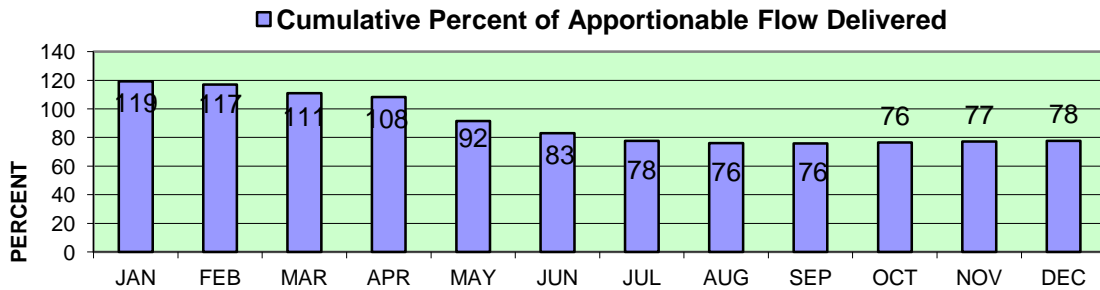
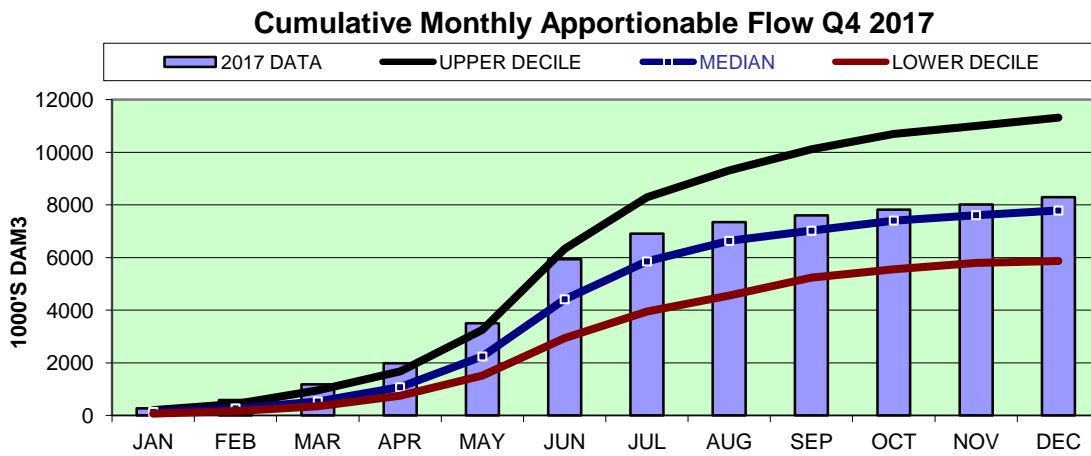
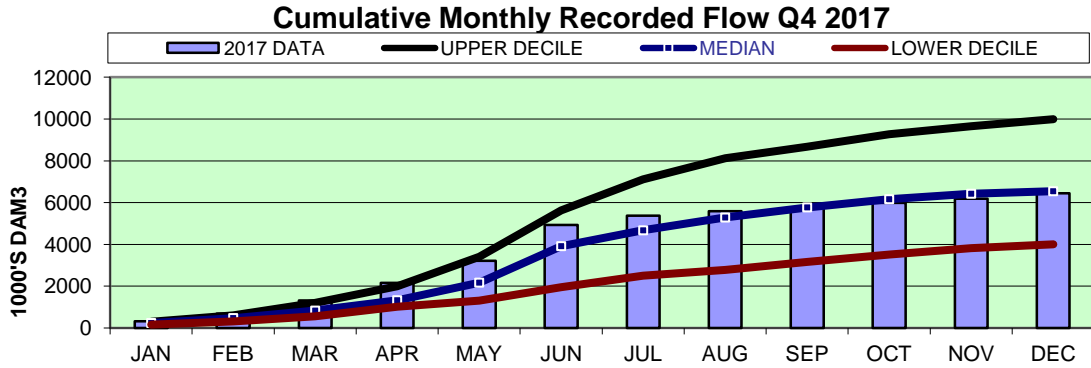
**Percent of Apportionable Flow Delivered**



**Apportionment Balance [Recorded - (Apportionable \* 0.5)]**



**APPENDIX 2: South Saskatchewan River below Red Deer River  
Cumulative Recorded and Apportionable Flows for January 1 – December 31, 2017**



**APPENDIX 3: Combined Daily and Minimum Flow Criterion of the South Saskatchewan and Red Deer Rivers near the Alberta/Saskatchewan Border  
January 1 – December 31, 2017**

