

# South Saskatchewan River Basin

## Water Management Plan

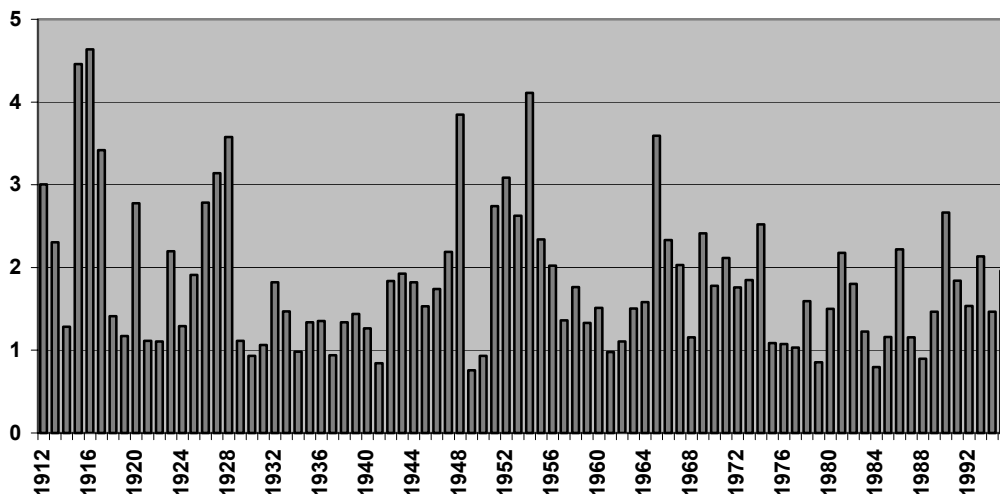


### Exceedence Curves *Fact Sheet*

Exceedence curve graphs are tools used in water management planning. Using historical data, exceedence curves portray how often a river had a particular flow of water during a specific week.

Data for exceedence curves requires the records of flow of the river (in cubic metres per second or  $m^3/s$ ) to be gathered at one location over a number of years. For example:

**Example River**  
**Historical Natural Flow, week 25 ( $m^3/s$ )**



The raw data arranged by year makes it difficult to determine how often a particular volume of water flows in the river.

An exceedence curve arranges the volume of flow from the highest to lowest.

#### ***Did you know?***

*$m^3/s$  = metres cubed per second.*

*This amounts to one bathtub full per second!*

**The South Saskatchewan River Basin includes the sub-basins of:**

- Red Deer River
- Bow River
- Oldman River (including the South Saskatchewan)

**The planning process is a combined effort of:**

- Alberta Environment
- Alberta Agriculture, Food and Rural Development
- Alberta Sustainable Resource Development

Fisheries and Oceans Canada is on the project Steering Committee.

**For more information contact:**

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*South Saskatchewan River Basin water management plan* Web site:

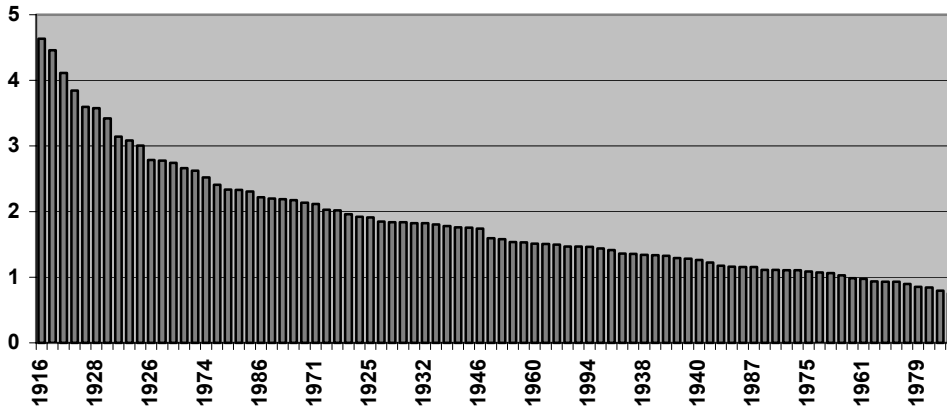
[www.gov.ab.ca/env/water/regions/ssrb/](http://www.gov.ab.ca/env/water/regions/ssrb/)

*Water for Life* Web site:

[www.waterforlife.gov.ab.ca](http://www.waterforlife.gov.ab.ca)

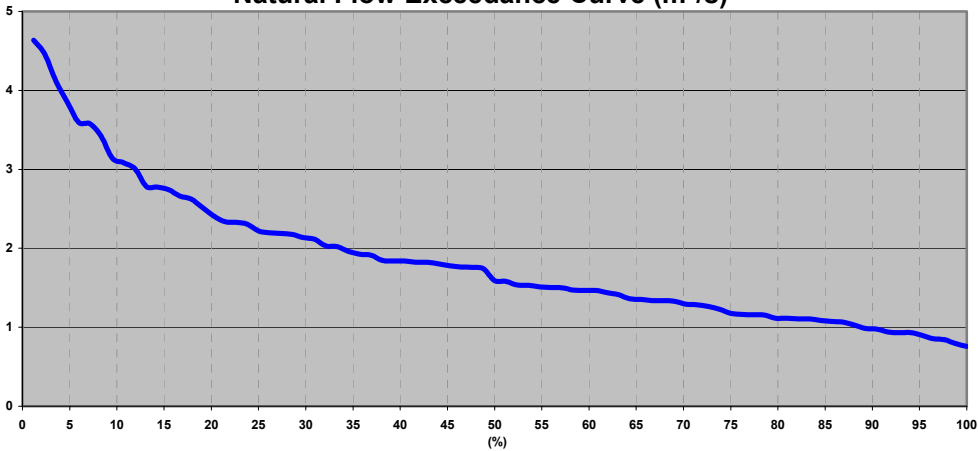


### Example River Ranked Historical Natural Flow, Week 25 (m<sup>3</sup>/s)



The values at the bottom of the graph (or x-axis) are then changed to a percentage of time. To simplify the graph, a line is drawn along the tops of the histogram bars:

### Example River Natural Flow Exceedance Curve (m<sup>3</sup>/s)



An exceedance curve therefore shows how often (% of time) the flow exceeds a value.