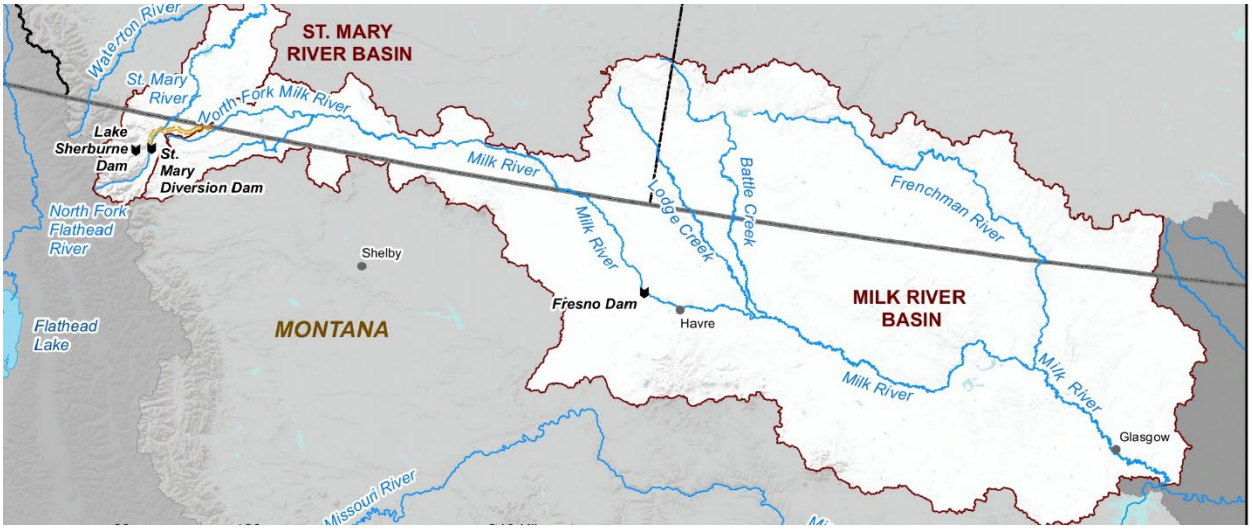
Apportionment of the Waters of the St. Mary and Milk Rivers

Fact Sheet
October 14, 2022



> *"The St. Mary and Milk Rivers and their tributaries (in the State of Montana and the Provinces of Alberta and Saskatchewan) are to be treated as one stream for the purposes of irrigation and power, and the waters thereof shall be apportioned equally between the two countries, but in making such equal apportionment more than half may be taken from one river and less than half from the other by either country so as to afford a more beneficial use to each."*
>
> Article VI, Boundary Waters Treaty of 1909

Introduction

The Boundary Waters Treaty sets the principles the United States and Canada must follow in sharing the waters of the St. Mary and Milk rivers. These rivers and their tributaries are treated as one system when the water is apportioned, or allocated, between the two countries. But one country may take more than half of the water from one river, and less from the other, to make better use of the water.

In order to give effect to Article VI of the Treaty, the Commission issued a 1921 Order which states that the Accredited Officers (AOs) assigned by governments to oversee the operations in the watershed would, until the 1921 Order is varied, modified, or withdrawn by the Commission, jointly make the measurement and apportionment of the waters of the St Mary and Milk Rivers to be used by the United

States and Canada according to the rules defined by the Order. Some specific duties for the AOs are outlined in Paragraph VIII of the 1921 Order including reporting to the Commission on the measurements made; and "…to take such further and other steps as may be necessary or advisable in order to ensure the apportionment of the said waters….".

The treaty also allows the United States to divert, transfer, or convey water from the St. Mary River into the North Fork of the Milk River for use downstream.

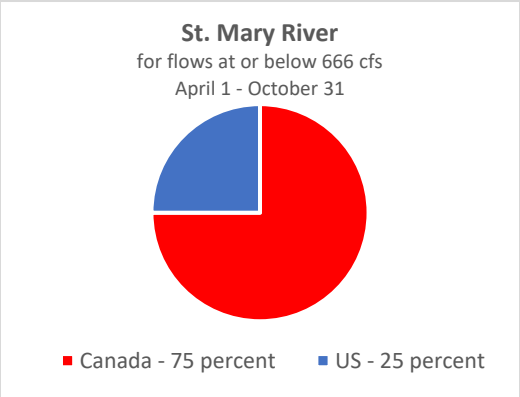
How is the Water allocated between Canada and the United States?

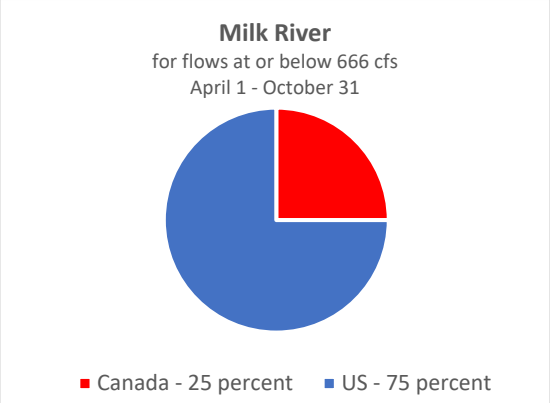
The apportionment rules address: (1) a prior appropriation[1] for the St. Mary and Milk rivers during the irrigation season, (2) other flows during the irrigation season, and (3) flows during other times of the year.

The Boundary Waters Treaty defines the irrigation season as taking place from April 1 through October 31. This is the time of year when water from the rivers was typically used to water crops when the treaty was signed in 1909.

1. Prior appropriation for the St. Mary and Milk Rivers during the Irrigation Season

Each country's prior appropriation for the St. Mary or Milk River *during the irrigation season*[2] is explained in the figures, below. In the figure describing the St. Mary River apportionment (below, left) Canada's prior appropriation for the St. Mary River is 75% of the flow until the flow is more than 666 cfs (75% of 666 cfs is equal to 500 cfs). In this example, the US apportionment of the St. Mary River is 25% until the river rise more than 666 cfs. The opposite apportionment percentages apply with regard to the Milk River, as shown.

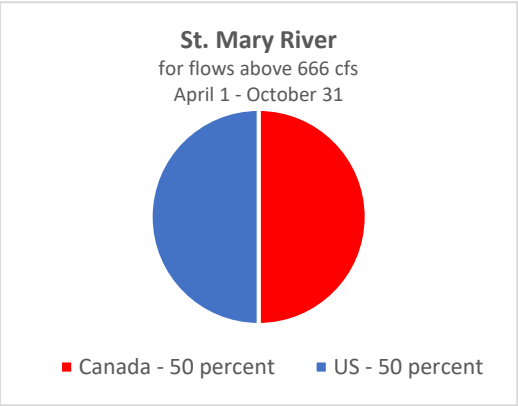


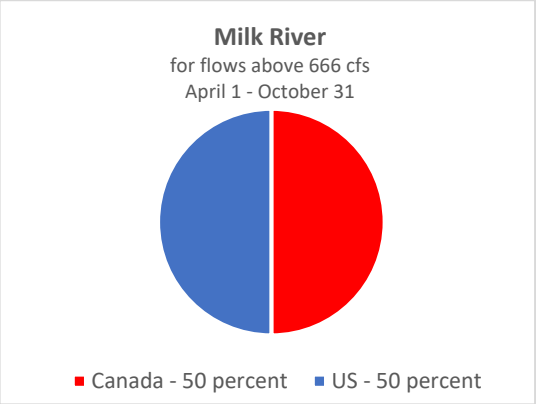


[1] Prior appropriation is defined as the percentage of the natural flow of the river that each country is allowed to take until the volume of flow meets or exceeds 666 cubic feet per second.

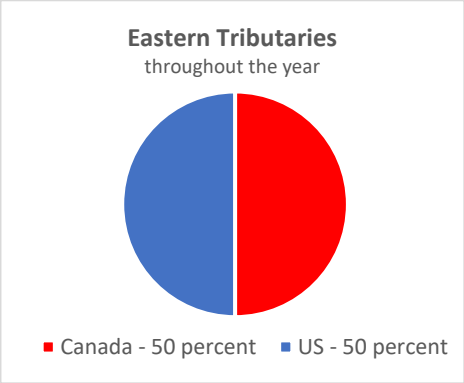
[2] "Irrigation season" is defined in the 1921 Order as "between the 1st of April and the 31st of October" however the Directive for this study allows the study board to give consideration to any necessary changes to this definition.

When the level of flow 666 cfs) is exceeded, each country is then allowed to share the additional flow evenly, as demonstrated in the second set of examples, below. It is the responsibility of the AOs to consistently monitor, validate and document these apportionments.



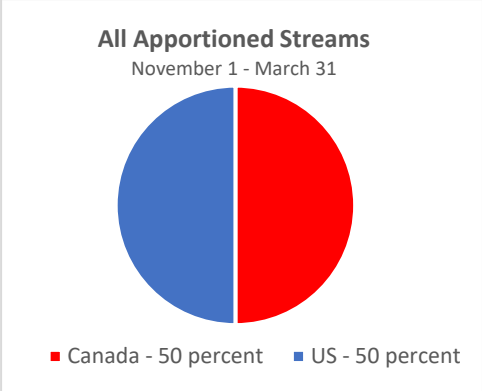


Three other streams, referred to as the Eastern Tributaries of the Milk River, are large enough to be part of the formal apportionment. The natural flow of Lodge Creek, Battle Creek and the Frenchman River is allocated evenly between the two countries during the irrigation season as well as at other times of the year.



2. Flows at Other Times of the Year

The natural flow of the St. Mary and Milk rivers, and the Eastern Tributaries, is allocated evenly between the two countries at any time *outside of the irrigation season* as defined in the Boundary Waters Treaty.



Who Administers the Apportionment?

Two officials known as the Accredited Officers are responsible for the measurement and apportionment of the waters in the St. Mary and Milk rivers' basin. One Accredited Officer is appointed by the Government of Canada and the other is appointed by the Government of the United States. The Accredited Officers carry out their responsibilities under the direction of the International Joint Commission, a binational organization established by the Boundary Waters Treaty.

The amount of water that each country may take is a percentage of the natural flow[3] in the river. Since water is withdrawn at many locations, the natural flow must be calculated. The natural flow is determined using data from a network of streamflow gauges along with estimates of the amount of water consumed by irrigation and other uses.

The Accredited Officers determine the daily natural flows at the border for the St. Mary, Milk, and Frenchman Rivers and Lodge and Battle Creeks. They also determine the amount of water each country may take from these streams and communicate this information to interested parties. Should any disagreement arise between the Accredited Officers, they would seek guidance from the International Joint Commission.

Additional information on appropriation, measurement, and calculation of water within the St. Mary and Milk River Basin is available in a video located on the AO's website.

[3] Natural flow is the amount of water that would have flowed in a river past a particular point of measurement during a particular period if there were no diversions to or from, and no impoundments on, the river upstream of that point. Natural flow calculations are intended to show the flow of water through waters caused by nature.