

## WATER BALANCE OF THE RIVER BASIN

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**Annotation:** The article "Water balance of the river basin" describes the river, river basin and water balance, as well as the water balance of the river basin. This article is important for calculating and managing the amount of water in river basins.

**Annotatsiya:** "Daryo havzasining suv balansi" maqolasida daryo, daryo havzasi va suv balansi, daryo havzasining suv balansi haqida yoritilgan. Bu maqola daryo havzalaridagi suv miqdorini hisoblash va boshqarish uchun muhimdir.

**Аннотация:** В статье "Водный баланс речного бассейна" описывается река, речной бассейн и водный баланс, а также водный баланс речного бассейна. Эта статья важна для расчета и управления количеством воды в речных бассейнах.

**Keywords:** river, river basin, water balance, precipitation, water quantity calculation.

**Kalit so'zlar:** daryo, daryo havzasi, suv balansi, yog'ingarchilik, suv miqdorini hisoblash.

**Ключевые слова:** река, речной бассейн, водный баланс, осадки, расчет количества воды.

**Introduction.** A river is a large body of fresh, flowing water that flows downhill from the force of gravity. A flowing body of water that is smaller than a river is called a stream, creek, or brook<sup>1</sup>. Rivers can be thousands of miles long and have a starting point where water begins its flow called a headwater. The other end of a river is called its mouth, where water empties into a larger body of water such as a lake or ocean<sup>2</sup>.

**The main part:** They are fed by melting snow and ice or by rainwater running off the land. The water follows cracks and folds in the land as it flows downhill. Small streams meet and join together, growing larger and larger until the flow can be called a river. On its way down, the water shapes the landscape by wearing away rock and carving out a network of valleys. Reaching lower ground, the river widens and takes a winding route. Eventually, most rivers empty out into the sea.

A river basin is an area of land drained by a river and its tributaries. It is made up of many different watersheds. A watershed is a small version of a river basin. Every stream and tributary has its own watershed, which drains to a larger stream or wetland. These streams, ponds, wetlands, and lakes are part of a river basin<sup>3</sup>.

The water balance is an accounting of the inputs and outputs of water. It can be determined by calculating the input, output, and storage changes of water at the Earth's surface. The major input of water is from precipitation and output is evapotranspiration<sup>4</sup>

<sup>1</sup> Nationalgeographic.org

<sup>2</sup> Nationalgeographic.org

<sup>3</sup> Internetgeography.net

<sup>4</sup> Geographynotes.com

The balance between inputs and outputs is known as the water balance or budget. The water balance affects how much water is stored in a system.

The water balance can be shown using the formula:

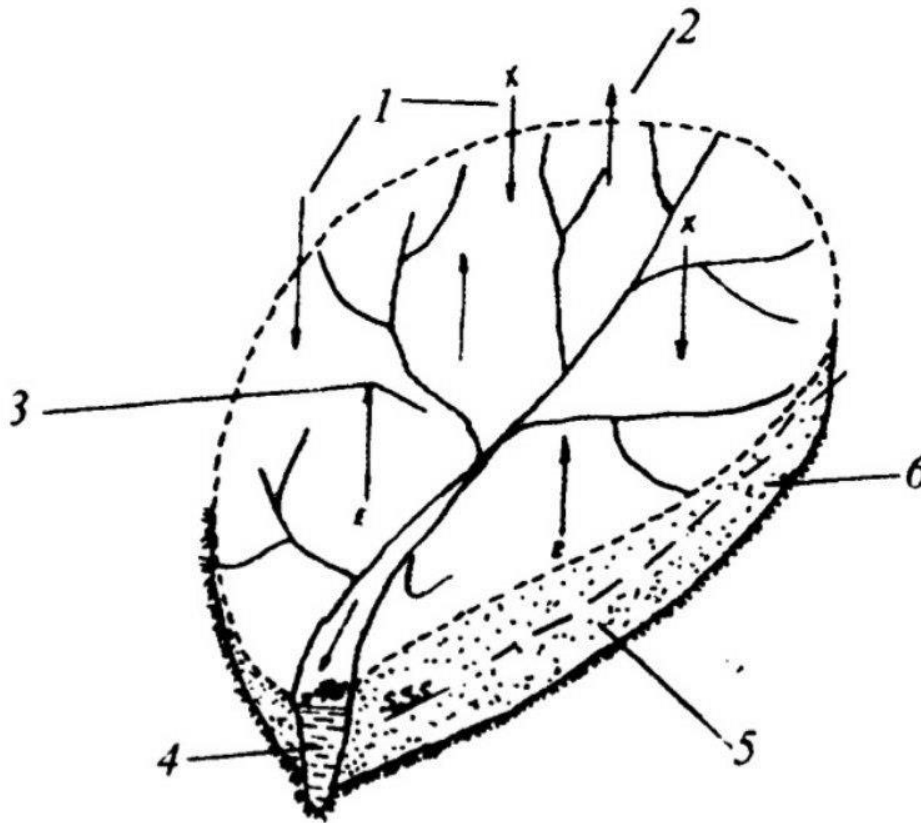
$$P=Q+E+/-S$$

P – precipitation;

Q- streamflow;

E – evapotranspiration;

S - changes in storage;



#### Water balance diagram of the river basin

1-atmospheric precipitation;

2-evaporation;

3- surface current;

4- river flow;

5- underground water flow;

6- waterproof layer

**Summary.** It is very important that the water balance of the river basin is in a normal state. Water balance helps in effective use and conservation of water resources in the river basin. It helps to provide the necessary water for people, plants and animals. For example, water in a river basin is essential for drinking, water-related daily activities, and water-related recreation.

**References:**

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