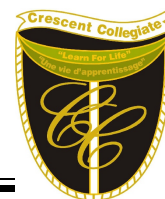


**Science 8**  
**Unit 1: Water Systems**  
**Worksheet 4: Freshwater System Links**



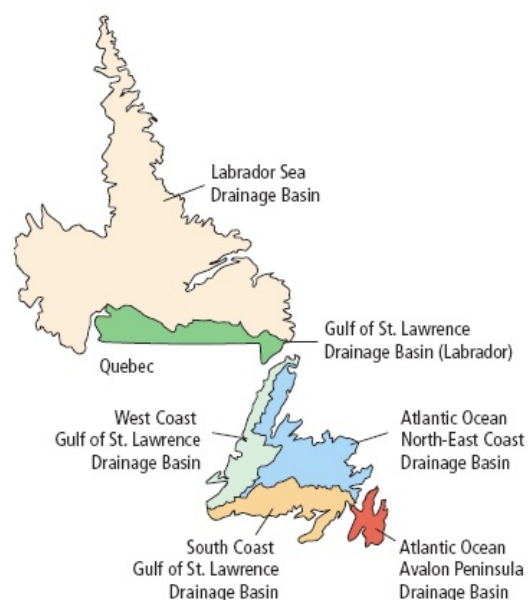
How are the different sources of fresh water, linked together

- 1) **Drainage Basins** (watershed) is the area of land that drains into a body of water, such as a river, pond, lake, or ocean

Divide refers to an area of high ground that separates one drainage basin from another

Newfoundland and Labrador has **6 major** drainage basins.

1. Labrador Sea
2. Gulf of St. Lawrence
3. West Coast Gulf of St. Lawrence
4. South Coast Gulf of St. Lawrence
5. Atlantic Ocean Avalon Peninsula
6. Atlantic Ocean North-east Coast



- 2) **Run-off** refers to water that flows across the earth's surface into streams, rivers and other bodies of water

Factors That Affect Runoff:

- i) Nature of the ground material

Ground covered in rock = more runoff

Ground mostly soil = less runoff ( water absorbed)

- ii) Amount of Rain

Heavy rain mean more runoff

- iii) Length of time it rains

Longer it rains => More runoff

- iv) Slope of the Land

Steeper the land, faster the water will flow

- v) Amount of Vegetation

Little vegetation = greater runoff

## PART A: MULTIPLE CHOICE

- Which of the following refers to an area of land that drains into a body of water, such as a river, pond, lake, or ocean?
  - Wetland
  - Drainage Basins
  - Sublimation
  - River
- What is another name for a watershed?
  - Lake
  - Drainage Basins
  - River
  - Wetland
- What separates one drainage basin from another?
  - An area of high ground.
  - An area of ocean.
  - A river.
  - A collection of small streams.
- How many major drainage basins are found in Newfoundland and Labrador?
  - 0
  - 1
  - 3
  - 6
- Which of the following environments would be best at absorbing water and reducing run-off?
  - A steep, rocky slope.
  - A large, flat forested area.
  - A hill that has recently been logged.
  - A shopping mall with a large parking lot.
- Which of the following is not a factor that affects run-off?
  - Amount of vegetation.
  - Length of time it rains.
  - Amount of rain.
  - Atmospheric pressure.
- Which term is used to describe an area of high ground that separates one drainage basin from another?
  - Hill
  - Divide
  - Mountain
  - Valley

1. What is a drainage basin?

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2. What is the Continental Divide?

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3. Explain what run-off is.

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4. What force pulls run-off to the lowest possible point?

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5. Name four factors that affect run-off.

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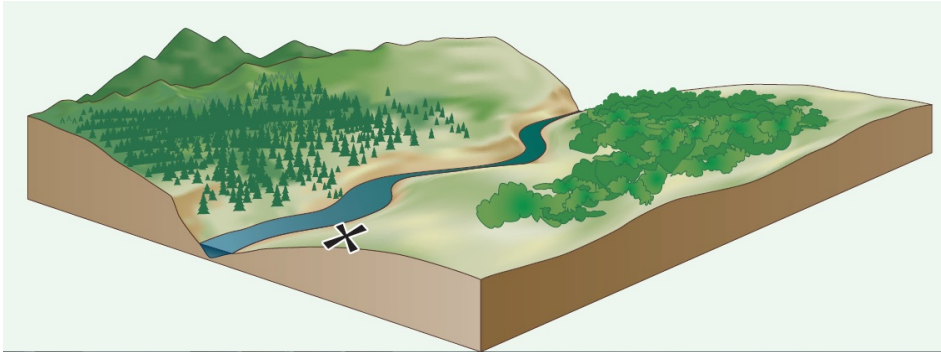
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### GROUP ACTIVITY

Whenever people change Earth’s surface, they change a natural balance. Therefore, if they are planning a development and want to clear land for it, they must first consider the long-term effects their actions may cause. Imagine you have been hired by a community that has several plans for development in the area shown below.

Your job is to review what the community plans to do and help it identify any run-off-related consequences that could result from their development. Here is the list of community plans:

- A small group of houses will be built on the bank of the river, near the area marked with an X.
- The forest on the far slope of the river will be clear cut (entirely logged) and then replanted.
- The bushes to the right of the river will be removed.
- The area to the bottom right will become a shopping mall with a parking lot.



Proposed action by the community	Possible consequences related to run-off	Possible solutions