

DRINKING WATER

NATURAL AREAS AND OUR WATER

Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.

- Albertans consider fresh water to be our most important natural resource. Yet it is largely activities on catchment areas that affect water quality and quantity.
- Natural areas not only conserve the water, but clean it too, removing silt and toxins. The role natural areas play in the maintenance of these is critical. They also benefit wildlife, habitats, soils, water tables, and recreationists.
- Protecting catchment areas is critical to maintaining healthy drinking water for everyone. Conserving the land in and around key catchment areas is one way to preserve the integrity of our water quality.
- Riparian areas, wetlands and uplands are a few key areas that manage and maintain our water quality.



CATCHMENT AREA

A catchment area is an area that catches and collects water, such as rainfall, and drains it into a larger water basin like a lake, river or the ocean.

Catchment areas are also called watersheds.

SOURCE WATER PROTECTION

Source Water Protection Plans are a planning process done by governments and water utilities to prevent overuse and contamination of drinking water. Conservation of watersheds is part of integrated watershed management and should be considered as a priority. This includes ensuring that nature itself has sufficient water for its ecological services, and protecting the integrity of aquatic systems.

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UPLANDS

Wetlands and riparian areas are important to water quality and quantity because they actively store and manage water. However, though it may seem indirect, upland areas (high or hilly lands) actually have a large impact as well, especially when they are disturbed by human activity.

- Surface water and groundwater systems are connected, so we need to look holistically at watersheds not just at the water itself.
- For example, Edmonton is located in the North Saskatchewan River Watershed. Local municipalities, industry and agriculture developments each have effects on this watershed.
- Pollution with wastewater, pesticides, fertilizers and other chemicals leaking from upland human activity can upset water quality.
- Land uses that can negatively impact water quality include: urban development, industrialization, agriculture and mining.
- To adequately care for our catchment areas, and therefore secure quality water for ourselves, livestock, and wildlife we must consider the link between: land and water; water quantity and quality; upstream and downstream interests; green water (involved in plant growth) and blue water (flowing in rivers and aquifers).

GREEN WATER

Green water is the water captured by vegetation, from the air or the soil, and transpired back into the atmosphere.

It is thought that 65% of rain water is cycled through the green water cycle.



BLUE WATER

Blue water is the amount of water that enters rivers, lakes and aquifers.

This water is often managed for industrial and agricultural purposes.

