



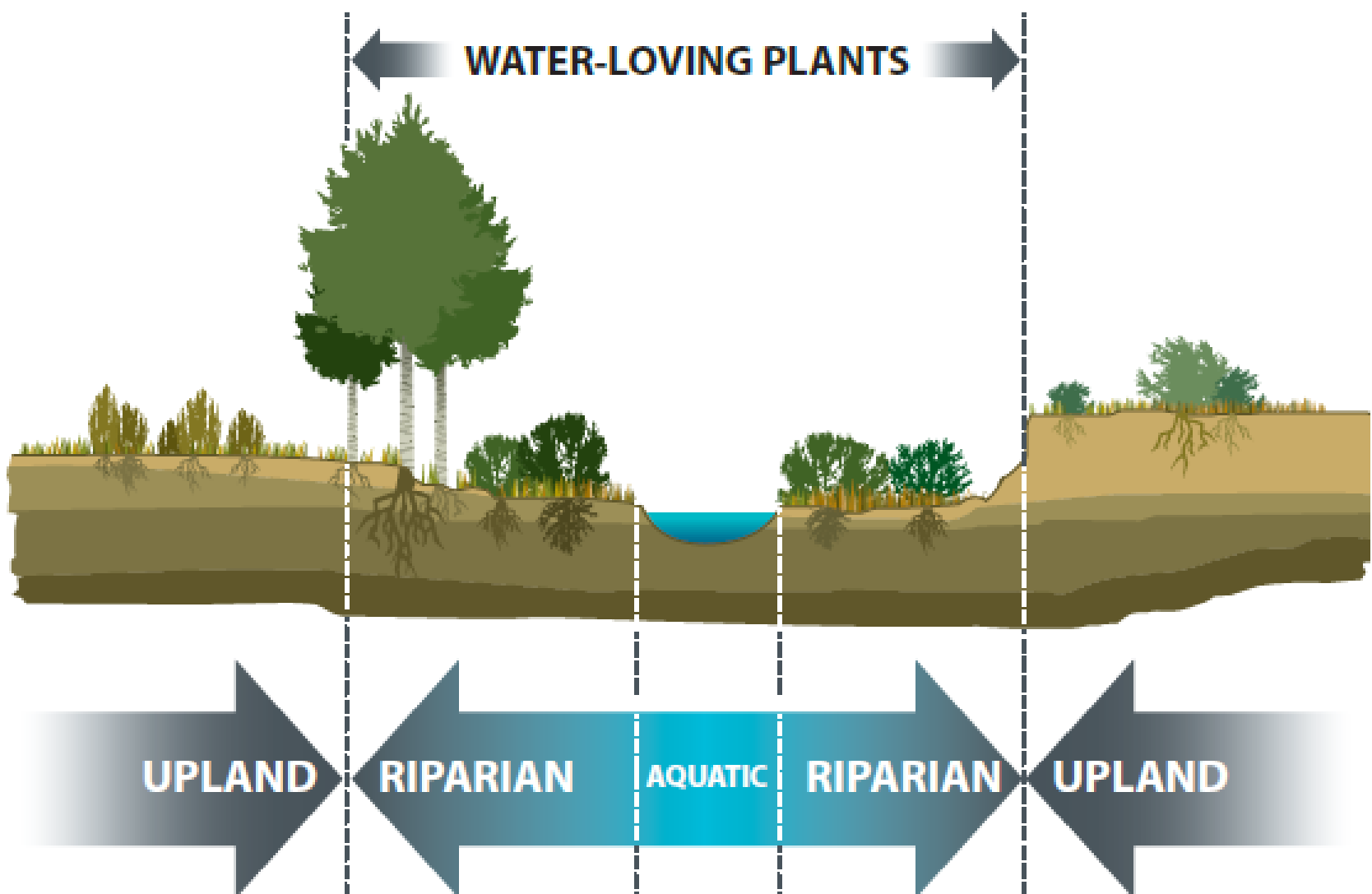
CALGARY
RIVER
VALLEYS

We are the voice of our rivers

What is a Riparian Zone?

www.CalgaryRiverValleys.org

- Riparian zones are the spaces where land and water interact, a transition zone with wet soil
- “Riparian” is from the Latin *ripa*, meaning river
- These varied-width riparian zones are “ribbons of green” that border rivers, creeks, and other water bodies, and are the floodplain for that water body, supporting the growth of water-loving plants



- Trees and grasses in riparian areas hold the soil in the bank together and reduce floodwater energy, resulting in reduced damage both there and downstream
- Riparian zones are wild and alive and among the most biologically diverse and productive places in Alberta

Main Benefits of a Healthy Riparian Zone:

- 1. Flood Risk Management** – varied height vegetation increases friction with water to absorb (rather than rebound) water energy during high water events, reducing downstream impacts to safety and infrastructure
- 2. Erosion Control** – native riparian plants have deep roots to help reduce erosion and bank failure
- 3. Biodiversity** – Almost all fish and wildlife depend on riparian areas for some part of their life cycle; riparian zones are often wildlife corridors, providing food, shelter and water
- 4. Water Quality** – riparian vegetation filters out contamination from land run-off and also traps sediment within rivers and creeks, making them cleaner
- 5. Water Quantity** – sponge-like riparian soil stores water during high water, refilling the underground aquifer, and releasing water to the river or creek during droughts

Riparian Health Assessments – surveys to determine the riparian zone's ecological health; conducted by a variety of organizations including Calgary River Valleys. Categorized as:

- **Healthy:** Deep-rooted **native plants** strengthen the riverbank, preventing erosion and loss of land. Great habitat is provided for fish and wildlife.
- **Healthy with Problems:** Native vegetation is starting to disappear, being replaced with bare soil or **invasive species**. The bank will be prone to washouts with high water, while providing minimal habitat for fish and wildlife.
- **Unhealthy:** Exposed soil and short-rooted invasive species puts the riverbank and adjacent land at great risk at all times of the year. **Habitat loss** for fish and wildlife.

**Help us with our riverbank restoration projects! Contact us at:
CalgaryRiverValleys2@outlook.com**