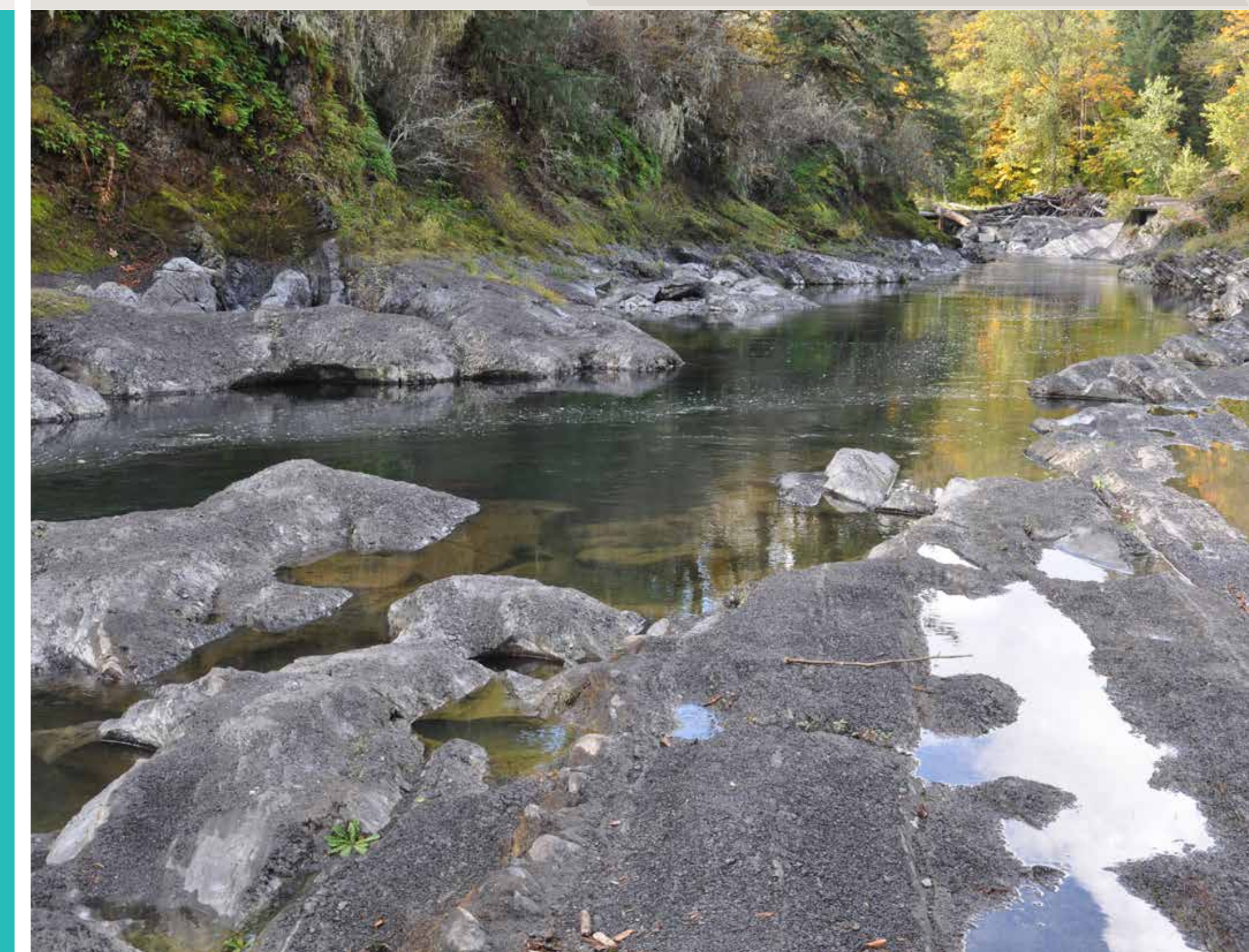


# WATERSHED STRESS

## *Cowichan issues*



Changing climate conditions, growing populations and increasing demand are putting stress on the Cowichan watershed.



### The state of the watershed

- ➔ Clearing land, building roads and other hard surfaces, and filling creeks have altered streams and wetland systems, and impacted the absorption of water into the landscape
- ➔ Low flow in Cowichan River in summer jeopardizes:
  - ➔ Agricultural productivity
  - ➔ Groundwater supply
  - ➔ Industrial operations, sewage dilution and fish survival
  - ➔ Drinking water supply to the town of Crofton
- ➔ During drought conditions:
  - ➔ Water temperatures rise and fish are stressed
  - ➔ Fire risk increases and water supply for fire fighting is limited
  - ➔ Wells are stressed and may lose capacity
  - ➔ Recreational access to lakes and rivers is impacted due to low water levels
  - ➔ Water temperatures increase and trigger algae blooms impacting both drinking water and safe recreation

### Cowichan watershed's 'new normal'

- ➔ Not enough water during summer months to meet both human and ecological needs
  - ➔ Summer rain is projected to decrease an average of 17% by the 2050s
- ➔ A growing population, coupled with climate projections for drier summers, suggest that demand for water will be far greater than supply
- ➔ The high rate of groundwater extraction in the region increases pressure on an already-limited summer water supply
- ➔ Average inflow to Cowichan Lake has decreased by 33% since the weir was built



#### Did you know?

Salmon returns to the Cowichan are an important factor in setting the number of fish that can be caught under the US/Canada Pacific Salmon Treaty. Low water in late summer and early fall prevents or delays their critical migration and results in poor returns.