

# REPORT TO RESIDENTS ON ELK RIVER HEALTH

## VALLEY BOTTOM ASSESSMENT



Photo by Dave Thomas



THANKS TO OUR FUNDERS

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### What is the Report to Residents on Elk River Health?

Residents of our watershed have communicated clearly the value of a healthy watershed in a variety of public input forums. Directed by community at the *Elk River Watershed Dialogue* in May 2012, the Elk River Alliance (ERA) initiated a reporting program, starting with a first indicator of watershed health, assessment of valley bottom land cover.

## What is a watershed?

The area where water droplets or snow melts on the height of land above flows into streams and creeks and eventually into the Elk River.



## Why report to residents on the health of the Elk River watershed?

- People want to know about the quality of their water.
- Promote understanding of current watershed conditions.
- Identify issues and help focus on human actions that are having positive and negative affects.
- Track the impact of decision-making on the watershed over time.

“Healthy watersheds protect human health.”



## Who is the Elk River Alliance (ERA)?

A non-profit community based water group formed in 2010 promoting a holistic approach to management in our watershed. Our aim is connecting people to the Elk River watershed ensuring healthy water quality and it is fishable and swimmable for future generations. ERA has 3 main goals: 1) increasing watershed literacy, 2) support meaningful community conversation and participation in sustainable water decision making, and 3) engage cooperation in the monitoring, enhancement, restoration and stewardship of our watershed.

## Benefits of a healthy valley bottom:

- Plants in the riparian forests in the valley bottom filter out silt and other contaminants.
- Deep/dense root structures stabilize riverbanks to prevent erosion.
- Provide migration corridors for wildlife.
- High wildlife habitat supporting fish and wildlife biodiversity.
- Retain or slow down water during high flow periods.
- Provide space for natural stream channel processes.
- Recreational locations for walking and biking trails, as well as wildlife viewing.

## Results:

**Elk River Valley Bottom Assessment Report Card**

Indicators	Thresholds (%)			Valley Bottom Results				
	Good	Fair	Poor	Overall	RDEK	Elkford	Sparwood	Fernie
<b>Total Disturbance</b>	<50	50-90	>90	36%	35%	19%	40%	64%
<b>Total Vegetated Cover</b>	>50	25-50	<25	77%	81%	79%	66%	39%
<b>Total Forest Cover</b>	>35	15-25	5-15	45%	47%	48%	37%	22%
<b>Forested Riparian</b>	>50	25-50	<25	74%	77%	61%	69%	77%
<b>Total Water</b>				14%	13%	17%	8%	14%

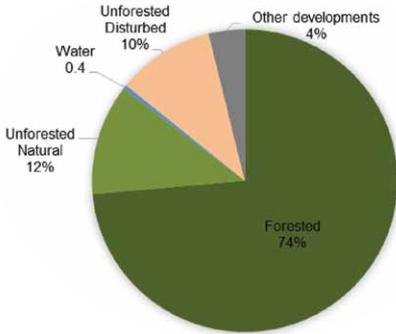
## Current valley bottom stressors:

With increasing population and urbanization, environmental stress increases. Stresses may result from direct habitat removal or other impacts such as increases in impervious, or hardened surfaces. Hardened surfaces restrict water from infiltrating into the ground, and can lead to increases in pollutants entering streams, increased stream temperatures, and flood risk. Limiting further urbanization within the valley bottom would be favourable to biodiversity, ecosystem health, and watershed function.

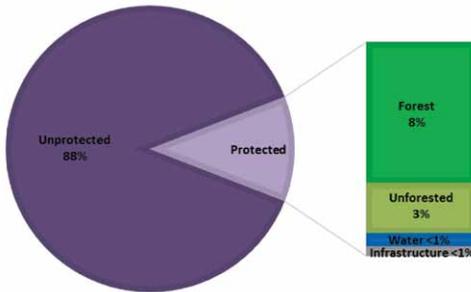


To access the full report visit:  
[www.elkriveralliance.ca](http://www.elkriveralliance.ca) and click on the **Resources** tab.

## More Results



Natural and developed area within the 30 m riparian zone for the valley bottom study area



Habitat protected through conservation and park lands in the valley bottom between Elkford and Elko

## How do we monitor the health of the valley bottom?

- Used 2011 and 2012 GIS maps (orthophoto and lidar images) between Elkford and Elko.
- Literature review of current information about valley bottom health.
- Analysis of the percentage of valley bottom that is: 1) natural features (water, forested area, unforested natural), 2) developed (unforested disturbed, vegetated recreation, road, railway, build up, industrial) and 3) other unvegetated (river banks, gravel bars, gravel parking lots).

## Be part of a healthy valley bottom!

- Share this report card with your watershed friends, neighbours and local decision makers.
- Leave natural vegetation in the valley bottom especially in the 30m riparian zone.
- Help youth in your family to understand where their water comes from, goes and how it is a collective responsibility to protect watershed health.
- Live as if water is life; pass on high quality water to downstream users.
- Volunteer with ERA projects, contact us at [www.elkriveralliance.ca](http://www.elkriveralliance.ca)
- Become a member of ERA or donate to our community-based water monitoring efforts.

