

# Central Lowlands Ecological Region Overview

## What are important/unique features and functions within this Ecological Region?

- Abundant wetlands and beavers were likely key components of historical conditions on the small, low-gradient streams.
- This Ecological Region has important spatial diversity areas for many species.
- There is a significant wood duck population along Lincoln Creek.
- Climate change will increase the frequency of high flows and low flows with associated bed/bank scour and drying of streams. Wood, wetlands, and riparian forest areas could moderate this effect, but may also increase flooding (i.e., water elevation).
- Restoring slough habitat with groundwater inputs may provide chum salmon spawning habitat, increasing the overall spatial footprint used by the Grays Harbor chum salmon population.
- Consideration may need to be given to identifying a subset of streams for restoration combined with protection. Such a strategy should be weighed against doing less intensive work over a larger number of streams.

## What is working? What is broken?

- Bunker, Lincoln, Independence, and Garrard creeks have extensive floodplains and wetlands (proportionately large for the streams). Floodplain functions are frequently compromised by agricultural practices.
- The Ecological Region is lacking wood and beavers.
- Poor riparian conditions or young trees exist in many locations.
- Floodplain development is relatively low.
- Substantial channel length lacks stable gravel.
- There are invasive exotic plant species including reed canarygrass.

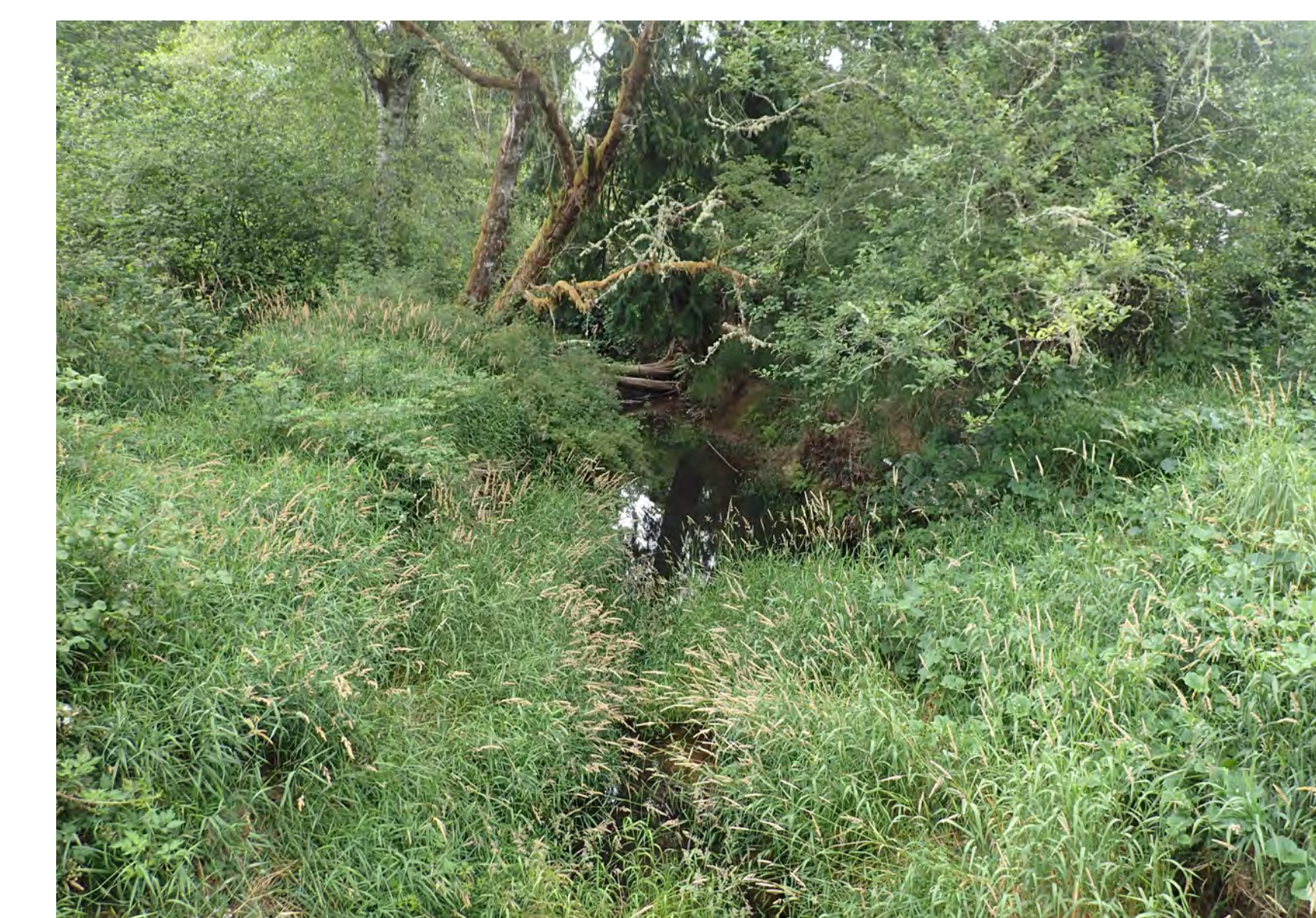
## What are your thoughts about some of the protection and restoration strategies and actions we feel are important for this Ecological Region?

- Protect existing riparian forested areas.
- Install large wood; this Ecological Region has the advantage that small streams don't need as large of wood to be stable.
- Encourage beavers, restore willows and other food for them, and install beaver dam analogs.
- Examine opportunities for greenbelts (riparian areas) because development is minimal.
- Prioritize Bunker, Lincoln, and Garrard creeks for channel, floodplain, and riparian restoration
- Restore confluence areas where creeks join the mainstem Chehalis River. Bunker Creek could be a cold-water holding area for spring Chinook salmon, and Deep Creek could also be considered.
- Focus on headwater streams (mostly first-order streams) for acquisition and protection because of their sensitivity to climate change.

(large wood, floodplain reconnection, invasive control, and riparian management).



*Bunker, Lincoln, and Garrard creeks are priorities for channel, floodplain, and riparian restoration. Existing riparian forested areas should be protected and beavers (or the use of beaver dam analogs) should be encouraged.*



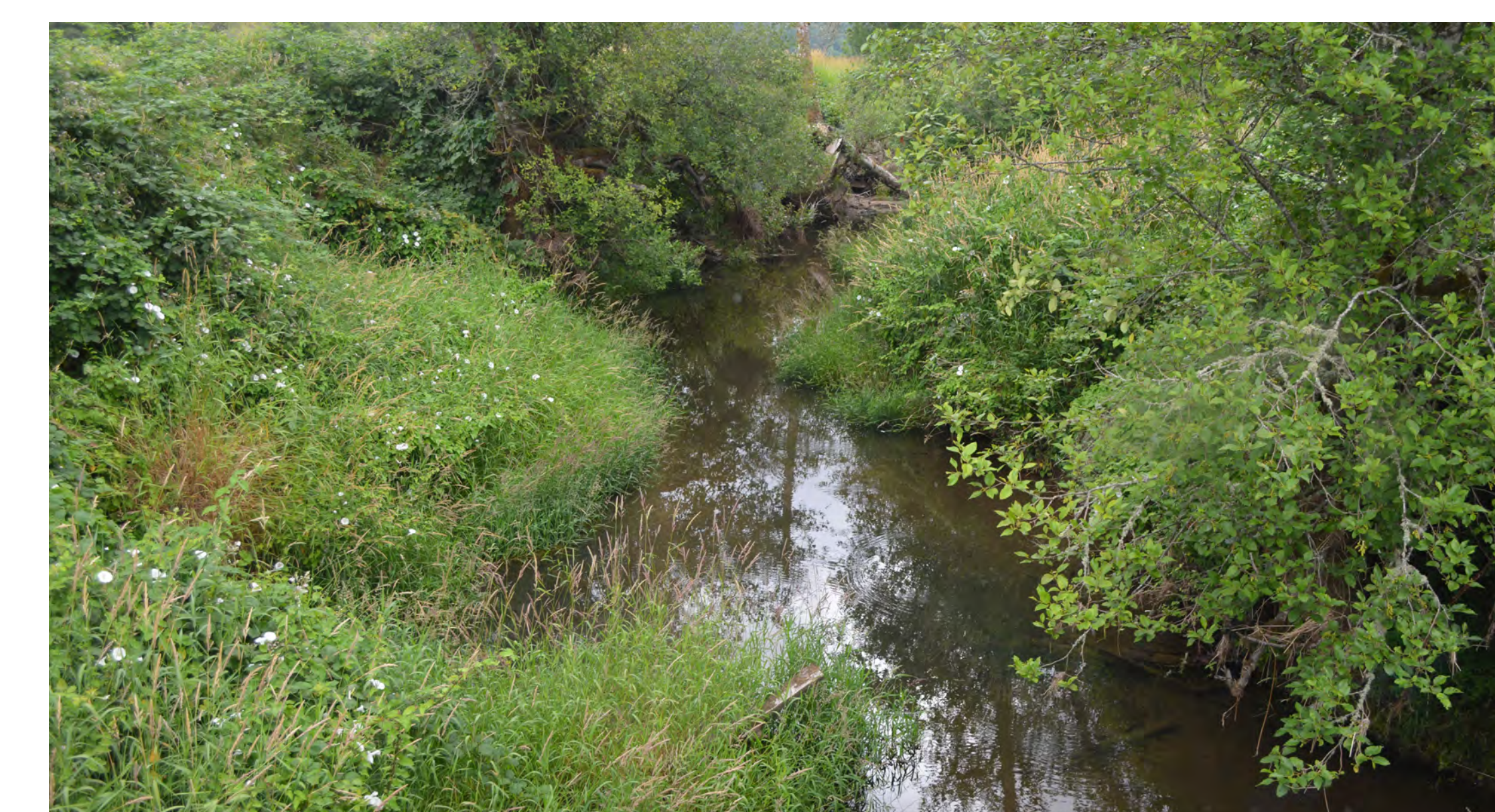
*Larger streams in the Central Lowlands Ecological Region—such as Bunker, Lincoln, Independence, and Garrard creeks—have relatively extensive floodplains and wetlands that should be protected and enhanced.*



*Climate change will increase the frequency of high flows and low flows with associated bed/bank scour and drying of streams. Wood, wetlands, and riparian forest could moderate this effect.*



*More intensive residential or small farm development could harm instream flows as well as limiting options for restoration. There is a potential for riparian easements along the tributary streams; this could retain farming and provide an opportunity for greatly improved habitats.*



*There is a significant contrast between stream reaches with only limited riparian zone and areas with riparian forested habitat. Riparian cover also tends to support more spawning than areas with less cover.*