

Catchments and Waterways

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OVERVIEW

- A catchment is an area of land where all surface water, or runoff, drains towards a common outlet.
- Catchment characteristics such as topography, land use, storms and floods, droughts, and connections between waterways from the headwaters to the outlet influence runoff, river flow, sediment transport, and contaminant movement.
- The position of a nursery within a catchment, such as near the headwaters or outlet, affects water quality and likely storm and flood impacts (**Figure 1**).

HIGHLIGHTS

- The position of a production nursery in a catchment influences storm and flood hazards.
- Upper catchment sites tend to have water quality issues due to local erosion and storm runoff.
- Middle catchment sites may receive water and contaminants from upstream and yield them to downstream areas.
- Lower catchment sites may have long floods and can receive contaminated water from upstream.

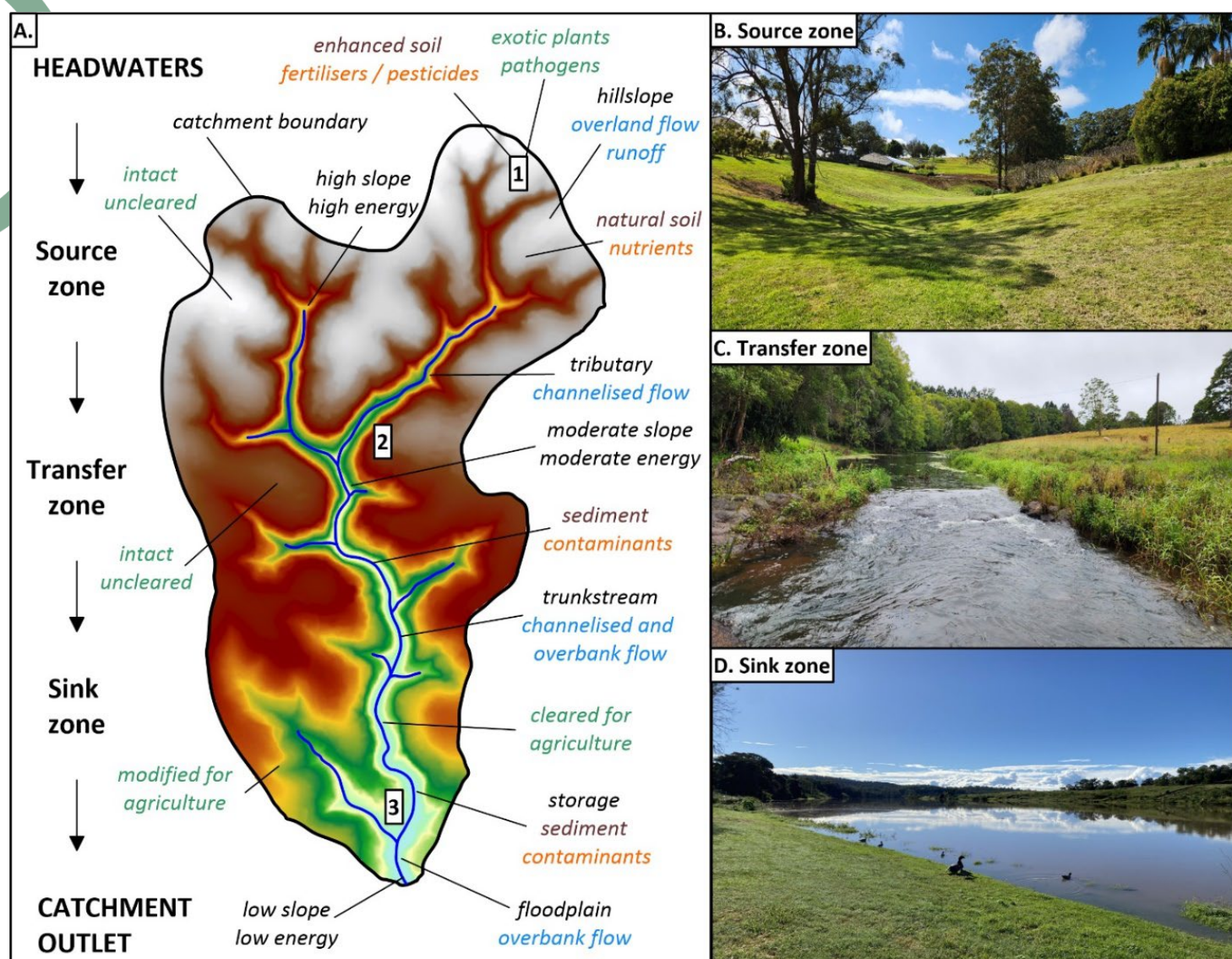


Figure 1. A typical catchment (A) with zones to indicate how water, sediment, and contaminants may move from high-elevation headwaters to a low-elevation outlet, past production nurseries at locations 1, 2 and 3. Example photographs of (B) a small waterway in a source zone, (C) a moderate waterway in a transfer zone, and (D) a large river in a sink zone (Gomes et al., 2025).