

## LOWLAND & MOUNTAINOUS: Forest Lands Upstream of Agriculture and Urban

### Common Problems for this WMU scenario:

- Upper Basins – Forestry practices in upper watershed can cause increased surface runoff and sediment delivery
- Lower Basins – Urban and residential development in the lower basins results in loss of forest cover and increased peak flows to tributary streams. Lack of floodplain storage in lower watershed due to channel confinement
- Lower Basins - Stream hydrology is flashy with increased peak flows, rapid increases and decreases in flow rate, and reduced base flows. Channels tend to widen and incise through bank erosion and bed scour

### Understanding implications of watershed integrity:

Processes are not intact in the lower watershed due to confinement of the river channel and lack of floodplain processes. Processes are generally intact in the mountainous upper watershed. Restoration efforts in the lower watershed will have a higher chance of success.

### General Management Recommendations

#### Upper Watershed (Green AUs prioritized for Protection)

- Employ forestry practices that maximize cover and minimizes roads and erosion
- Minimize/reduce channel and floodplain constrictions

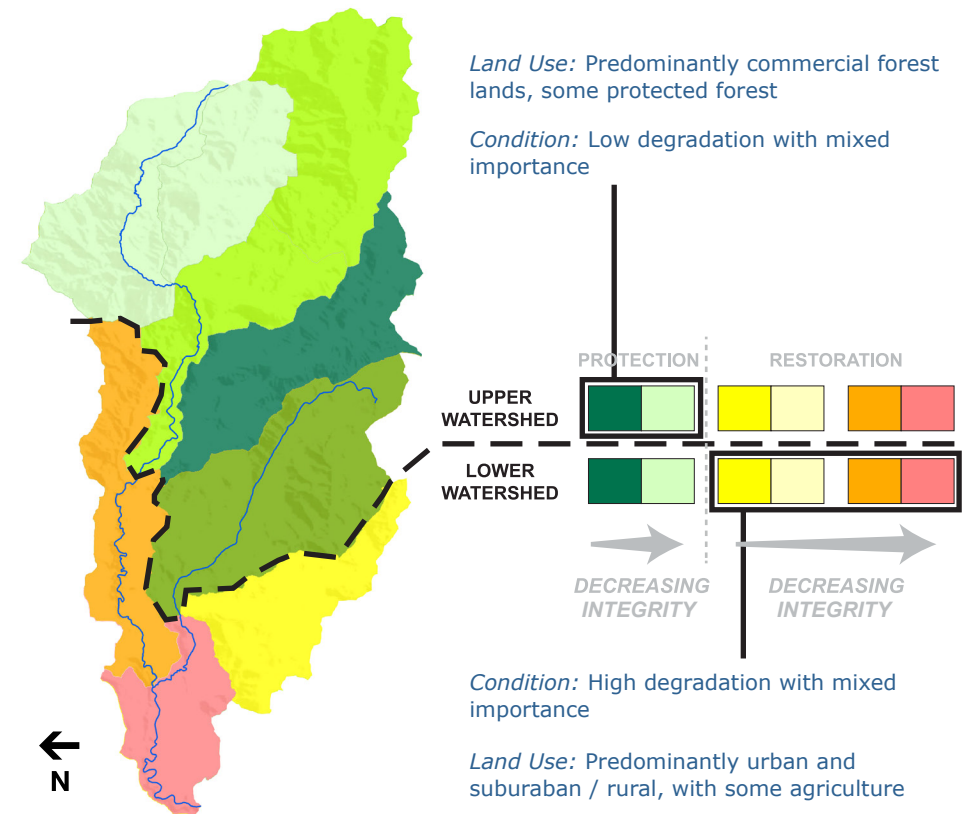
#### Lower Watershed (Red and orange [prioritized lower for Restoration] and yellow [prioritized higher for Restoration]):

- Restore floodplain processes (e.g. reconnect river to floodplain)
- Urban and rural areas restore reach scale processes (e.g. reconnect stream to floodplain)

[Click here to review other potential management strategies.](#)

[Click here to consider other WDFW and Ecology guidance.](#)

## Mashel River (WRIA 11)



		HIGH	
		Highest Protection	Highest Restoration
		High Protection	High Restoration
		Low Protection	Low Restoration
		Lowest Protection	Lowest Restoration
	LEVEL OF IMPORTANCE		
LOW			HIGH
		LEVEL OF DEGRATION	