Table 6. Watershed sensitivity and resilience types categorized by basin type, dominant processes and potential for change, geomorphic sensitivity, and ecological resilience. The primary management implications are provided for each watershed type.

Watershed Type and Basin Type	**Dominant Short-term Processes & Potential for Geomorphic and Vegetation Change**	**Long-term (decadal) Geomorphic Sensitivity to Disturbance**		**Ecological Resilience to Disturbance**	**Restoration and Management Implications**
		Incision	***Avulsion***	***Incision and/or Avulsion***	
Flood-Dominated Type A_1	• Highly dynamic • Frequent; avulsions and associated incision continuously rework valley floor and change channel form • Short-term sensitivity is very high • Riparian vegetation is typically adapted to the dynamic conditions	Low to moderate (Incision associated with avulsions)	Low to moderate (Avulsions and valley floor reworking continues, but processes and form remain the same)	Moderate to high	• Valley floor is highly unstable and likely will remain so for decades • Roads and infrastructure should be located off of the valley floor • Maintaining bridges and road crossings may be difficult • Low potential for channel stabilization or restoration following disturbance
Armored Type A_2	• Channel change by incision is common, but rate is limited by immobile bedrock or large clasts • Avulsions typically are absent due to lack of mobile sediments • Woody vegetation types dominate, with meadow types in understory	Low	Low	Moderate to high	• Disturbances are unlikely to have a significant effect on these systems • Excellent potential for stream restoration
Fan-Dominated Type B	• Slow but continuous incision produces inset terraces, knickpoints, and lowered groundwater tables • Rare, localized avulsions occur upstream of side-valley fans	Low to moderate	Low to moderate	Moderate to high	• Relatively slow rates of incision often allow for significant restoration potential, including of meadows upstream of side-valley fans that act as base level controls • Upland disturbance has potential to influence runoff-recharge

	• Meadow types occur upstream of fans; woody types downstream of fans • Progressive incision can result in lowering of water tables and changes in plant species composition				relations that may influence ground water hydrology • Management and restoration strategies focused on stabilizing channels adjacent to fans can limit incision
Deeply Incised Type B or C	• Deeply incised channels that may be locally stable with inset floodplains • Prone to rapid, renewed incision that lowers groundwater levels, reduces riparian corridor extent, and alters riparian species composition • Avulsions are rare due to rapid incision • Plant species composition depends on stream gradient, water table depth, and sediment size	Moderate to high	Low	Low to moderate	• Channels prone to renewed incision given additional upland or channel disturbances • Channels, riparian ecosystems, and wet meadows likely to be difficult to restore due to significantly lowered water tables and unstable and widening trench walls • Restoration potential depends on stream gradient, local groundwater conditions, and sediment size
Pseudo-stable Type C	• Stable channels with potential to undergo rapid, deep incision; systems likely to remain unstable for decades • Woody vegetation types dominate, with meadow types in understory and occasional meadows • Avulsions rare • Incision lowers groundwater levels, reduces riparian corridor extent, and alters riparian species composition	Moderate to very high	Low to moderate	Low	• Channels and riparian ecosystems prone to extreme change • Potential upland and channel disturbance should be minimized with aggressive management strategies • Potential for restoration of destabilized systems is very low