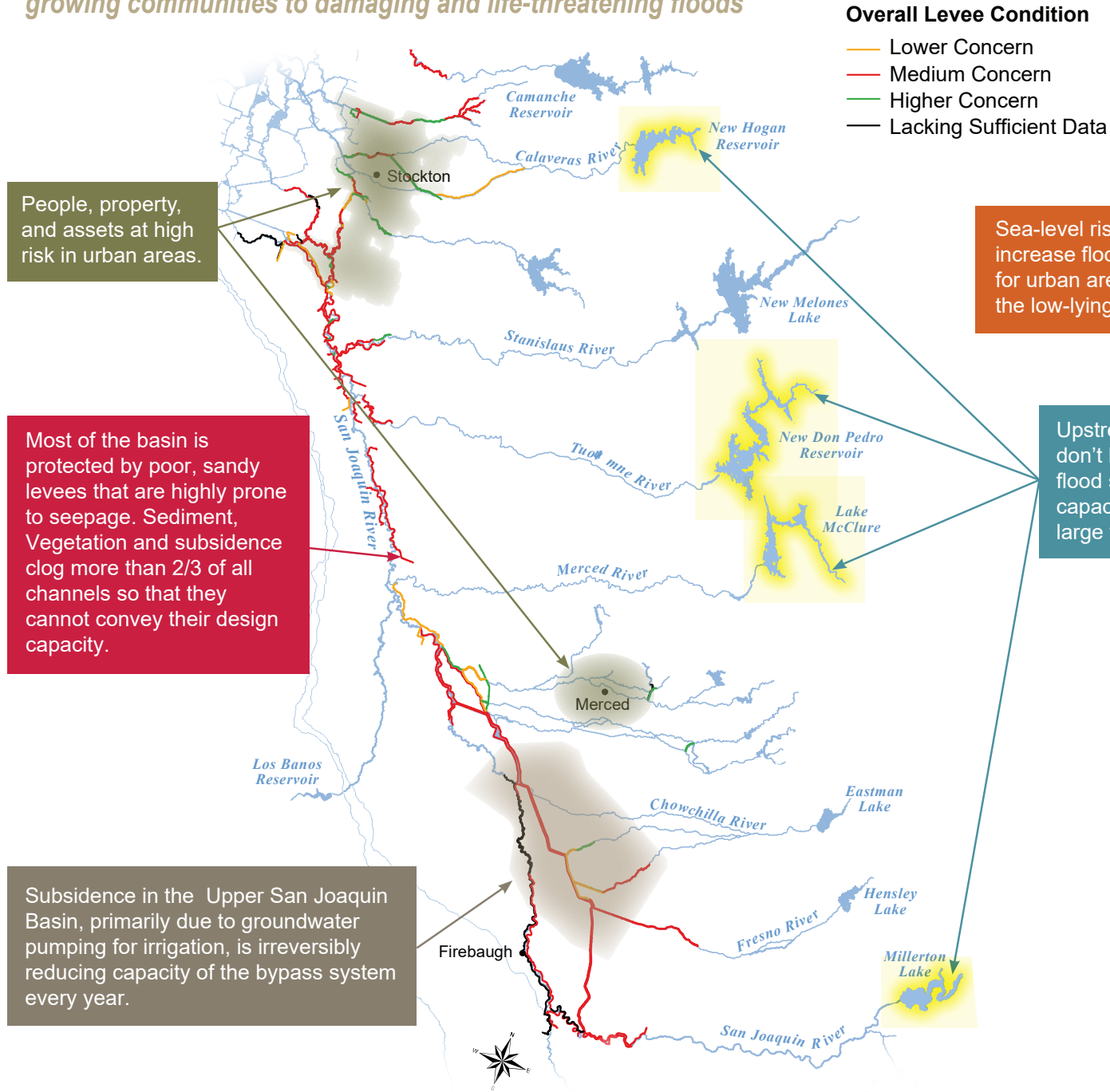


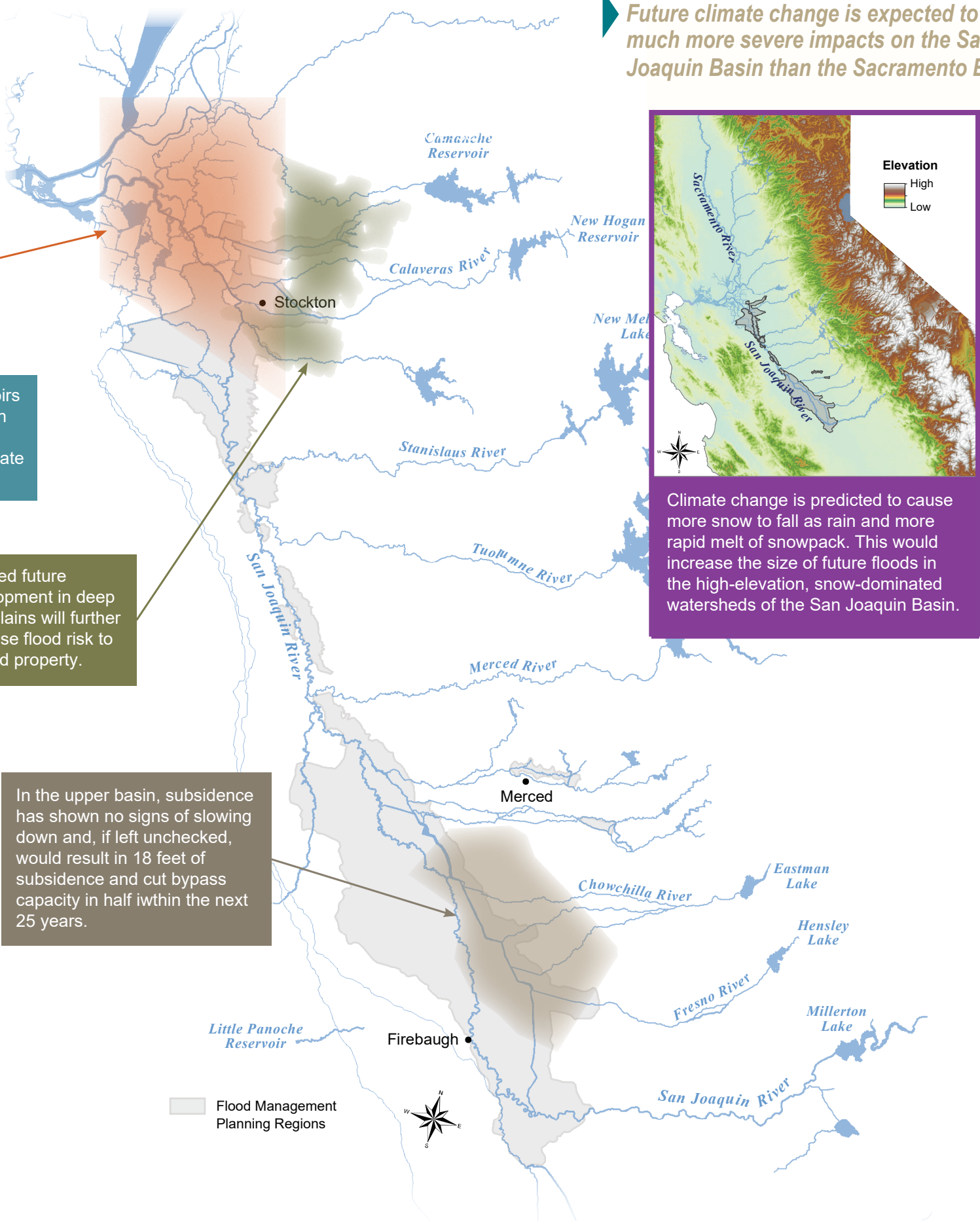
A Detriorating Flood System

All of these factors dramatically increase the vulnerability of growing communities to damaging and life-threatening floods



Future Trends Compound the Problem

Future climate change is expected to have much more severe impacts on the San Joaquin Basin than the Sacramento Basin.



Limited Reservoir Flood Storage for Large Flood Events

		Calaveras River	Stanislaus River	Tuolumne River	Merced River	San Joaquin River
Average 3-Day Reservoir Inflow Volume for Various Flood Events (TAF)	1% chance Flood Event	167	364	513	299	332
	0.5% chance Flood Event	188	479	648	361	427
	0.5% chance Flood Event with Climate Change	242	836	1,188	638	514
Reservoir Flood Storage Capacity (TAF)		165 New Hogan Reservoir	450 New Melones Reservoir	340 New Don Pedro Reservoir	350 Lake McClure	170 Millerton Lake

Degraded Ecosystem

Riparian and Wetland Habitats

Relative to historic conditions, 95% of riparian and wetland habitats have been lost. Most riparian exists as narrow strips and fragments, and many wetlands are isolated from rivers.

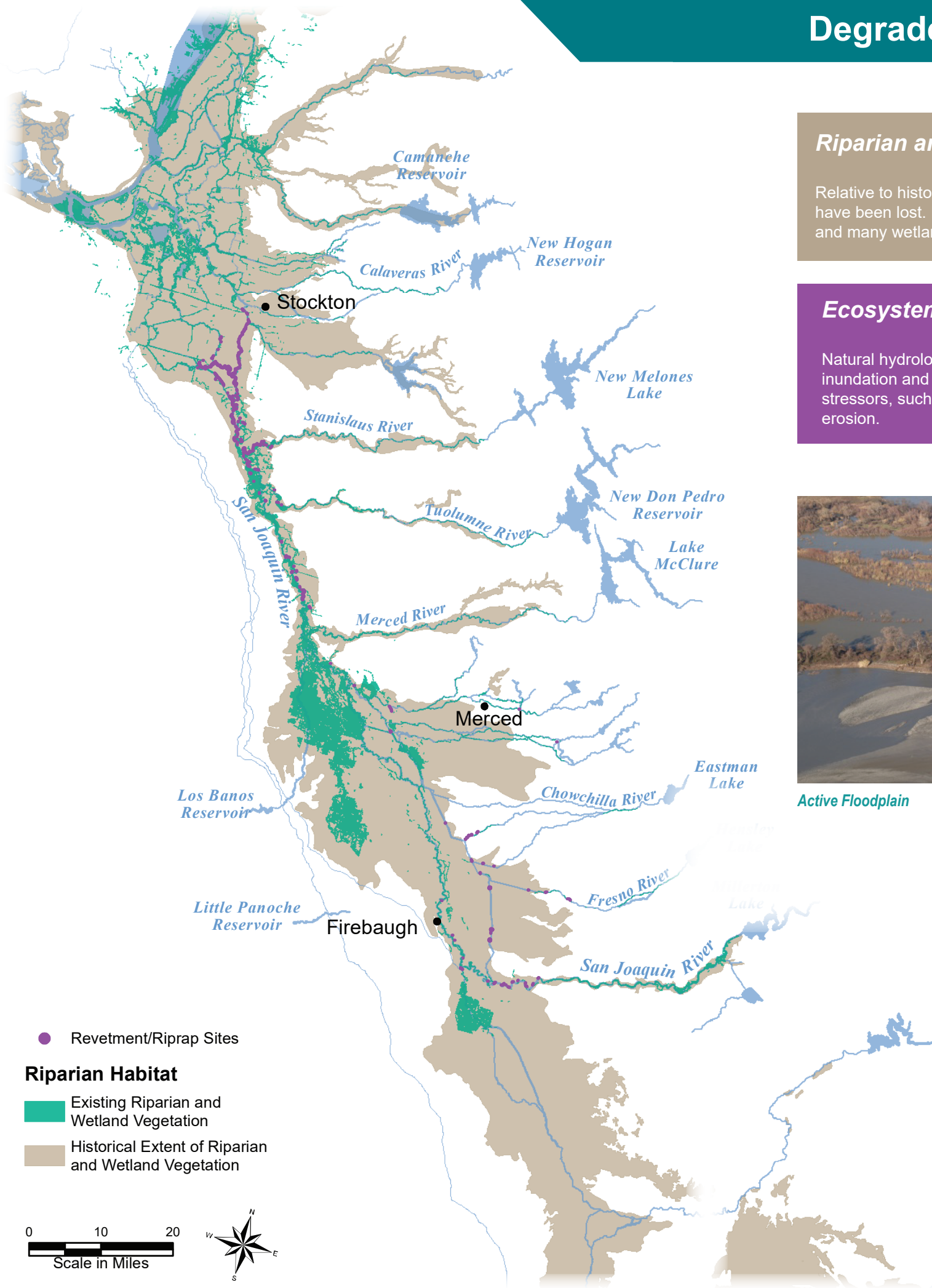
Ecosystem Processes

Natural hydrologic and geomorphic processes, such as floodplain inundation and channel meander, have been severely limited by stressors, such as levees and rock revetment designed to prevent erosion.

Species

Reduced habitats, limited ecosystem processes, and increases in stressors have resulted in declines of sensitive species, including those targeted by the Central Valley Flood System Conservation Strategy:

- Delta button-celery
- Slough thistle
- Valley elderberry longhorn beetle
- California Central Valley steelhead DPS
- Fall-/late fall-run Chinook salmon
- Spring-run Chinook salmon
- Green sturgeon-southern DPS
- Giant garter snake
- California black rail
- Greater sandhill crane
- Least Bell's vireo
- Swainson's hawk
- Western yellow-billed cuckoo
- Riparian brush rabbit
- Riparian woodrat



Active Floodplain



Typical Rock Revetment



Source: River Partners; reprinted with permission.

The riparian brush rabbit is a federal and State endangered species that resides wholly with the San Joaquin basin



Source: Florence Low; Reprinted with permission.



Source: Scott McCreynolds; Reprinted with permission.

The greater sandhill crane and spring-run Chinook salmon, once abundant in the San Joaquin basin, are State-listed threatened species.