

Fish assemblage, abundance, growth, and habitat in Rattlesnake Creek prior to the reintroduction of anadromous fish above Condit Dam

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Rattlesnake Creek Project

Funded by:



UNDERWOOD
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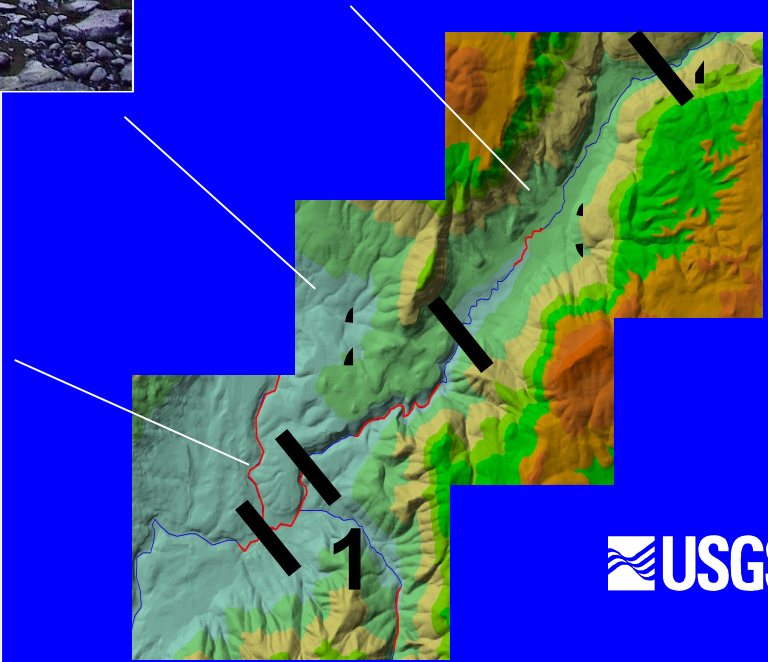
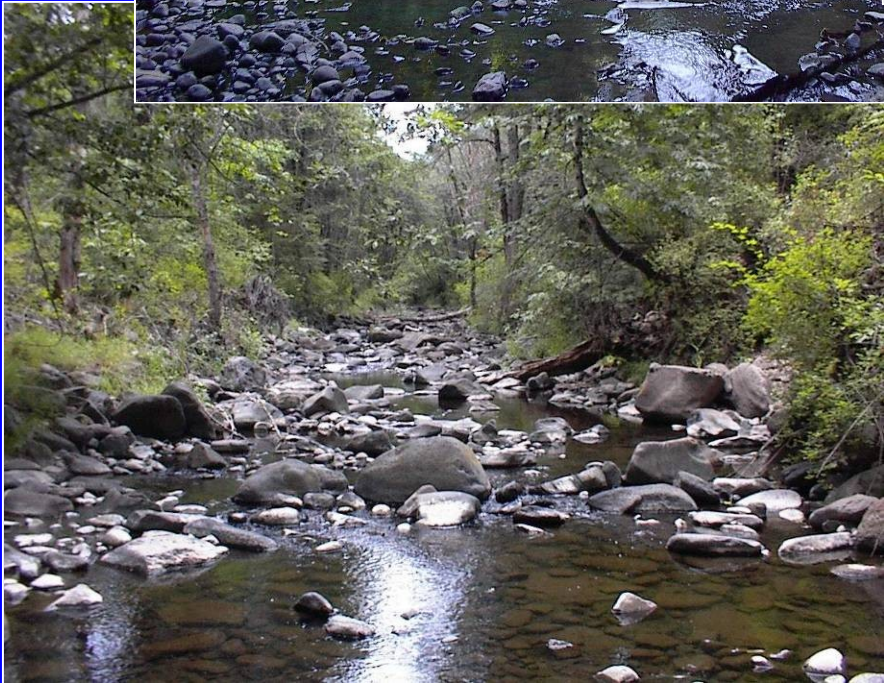
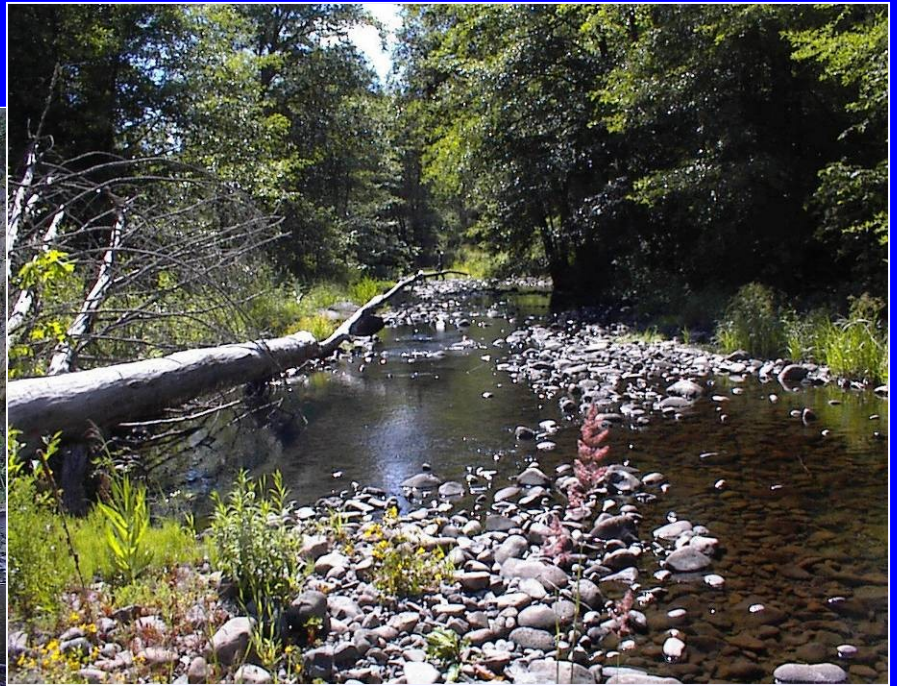


Bonneville Power
Administration



WDFW

4 Geomorphic Reaches



RKM 2.4

3.6-m waterfall



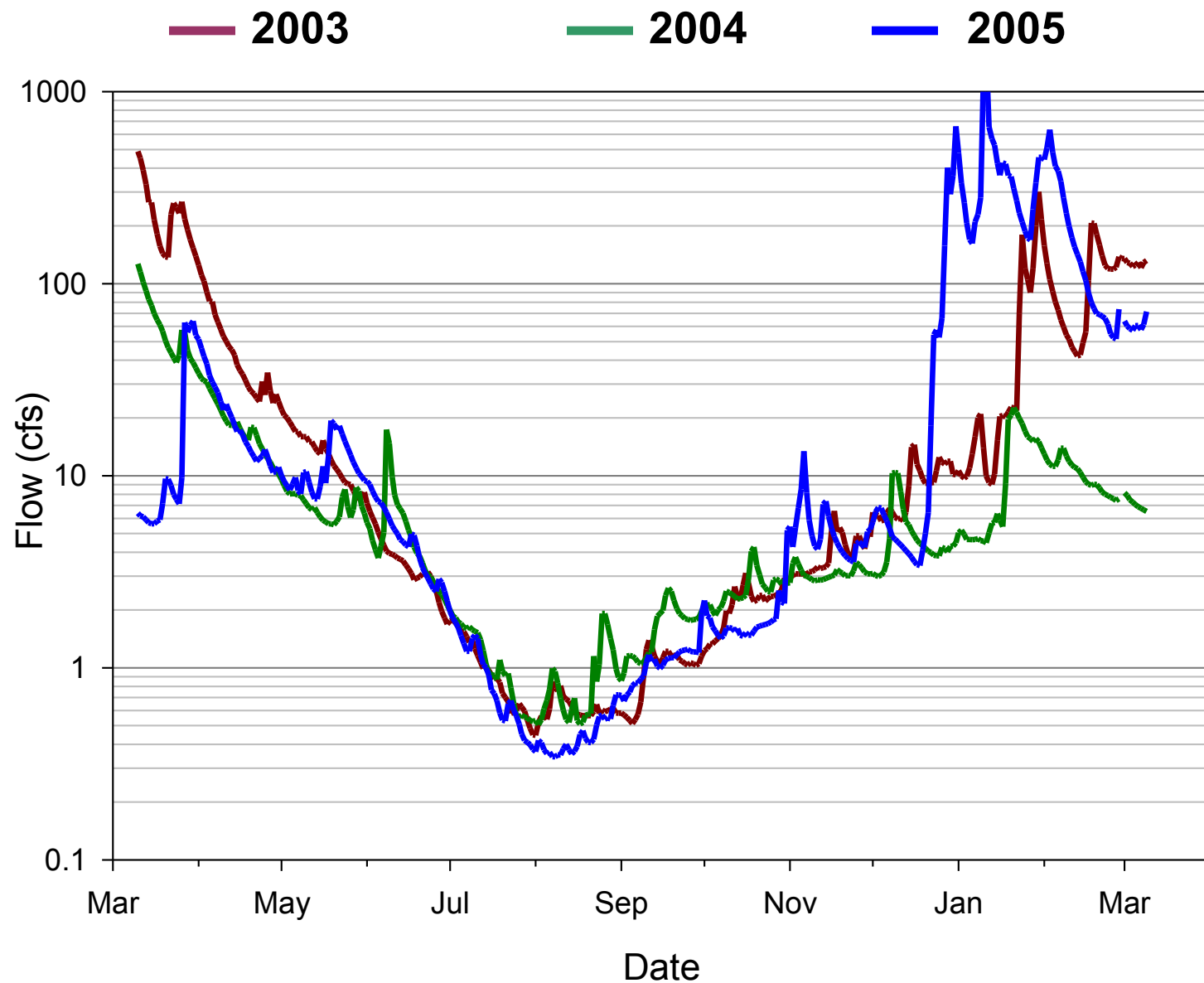
RKM 17

22-m & 25-m

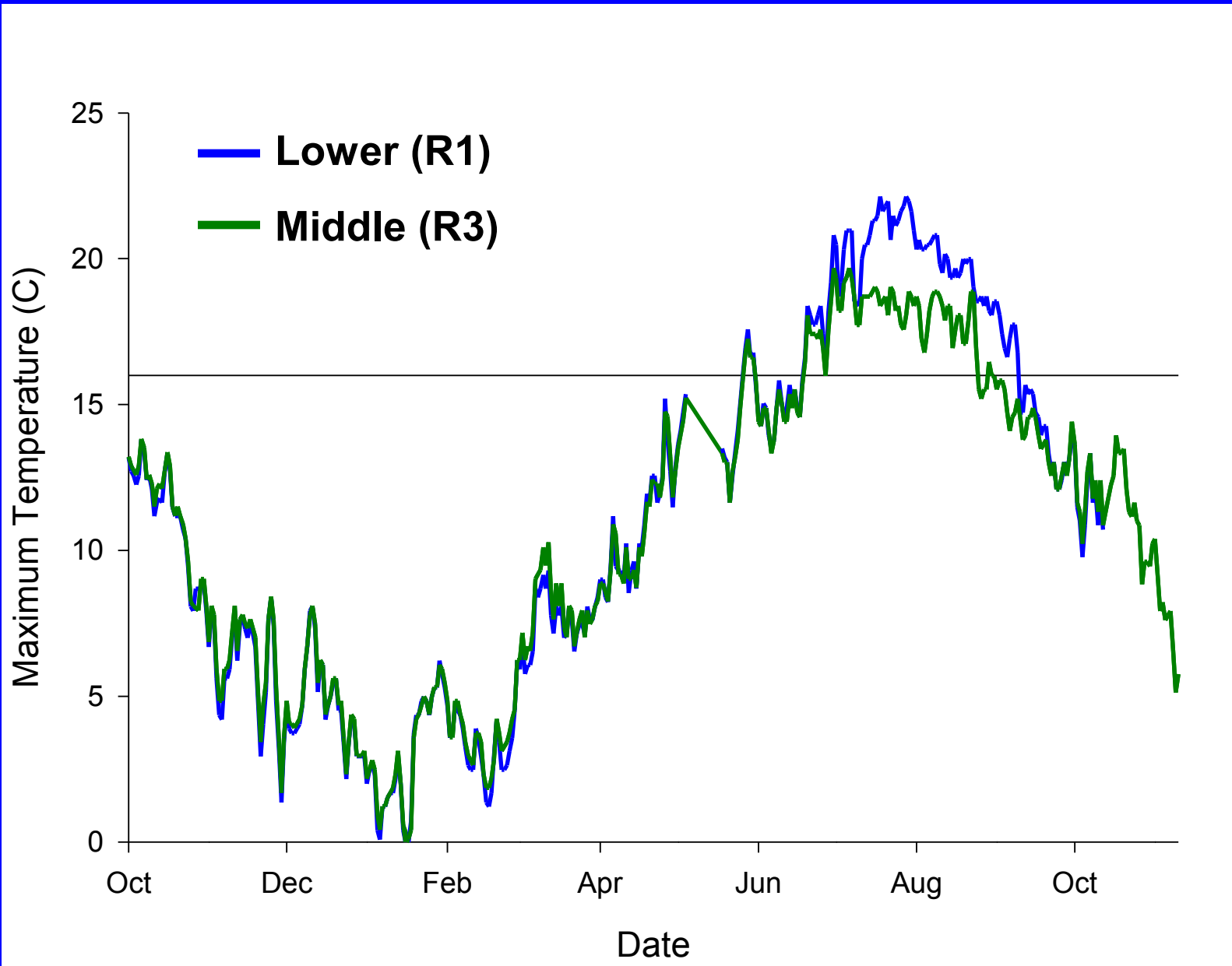
waterfalls



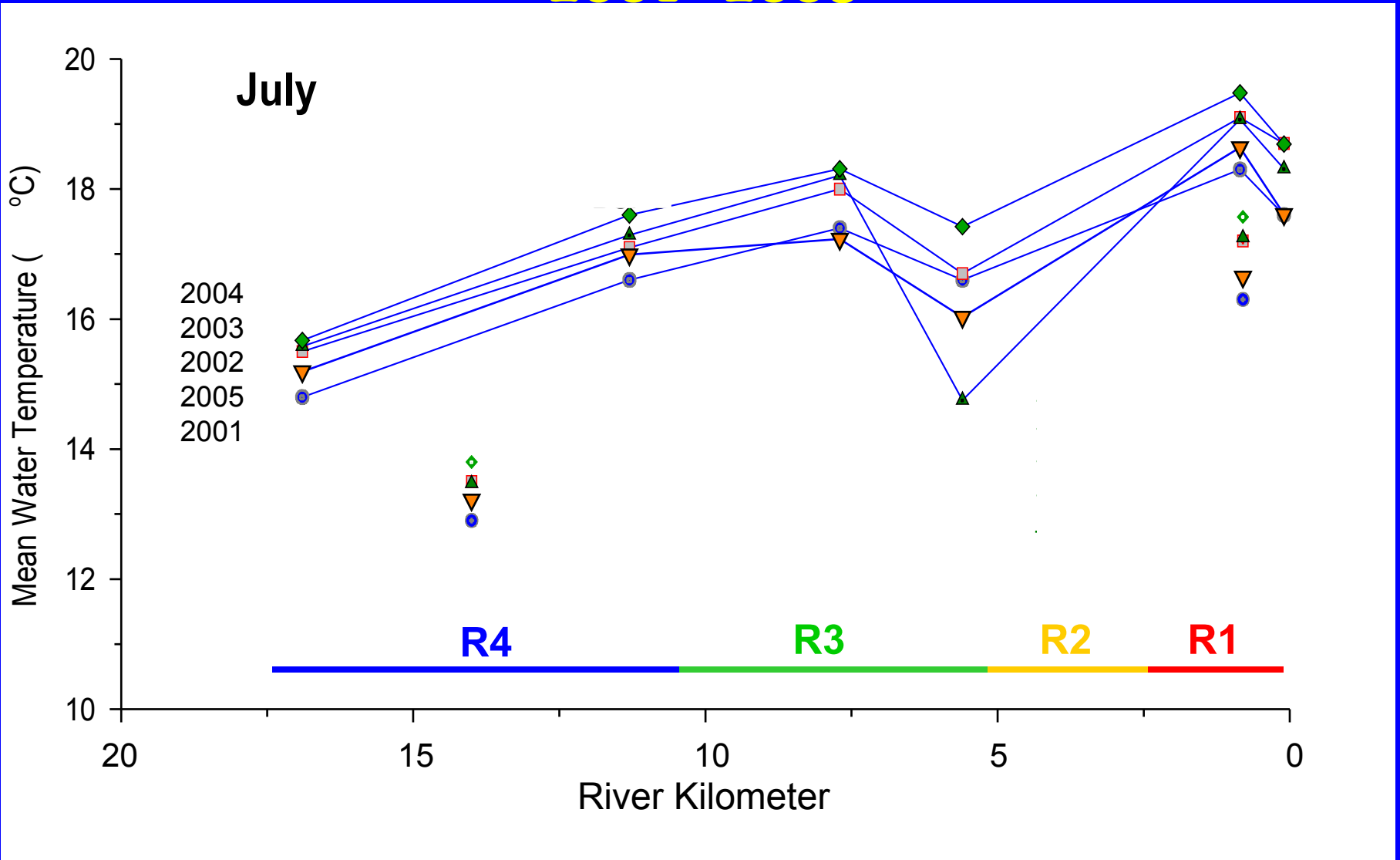
Rattlesnake Creek Flow



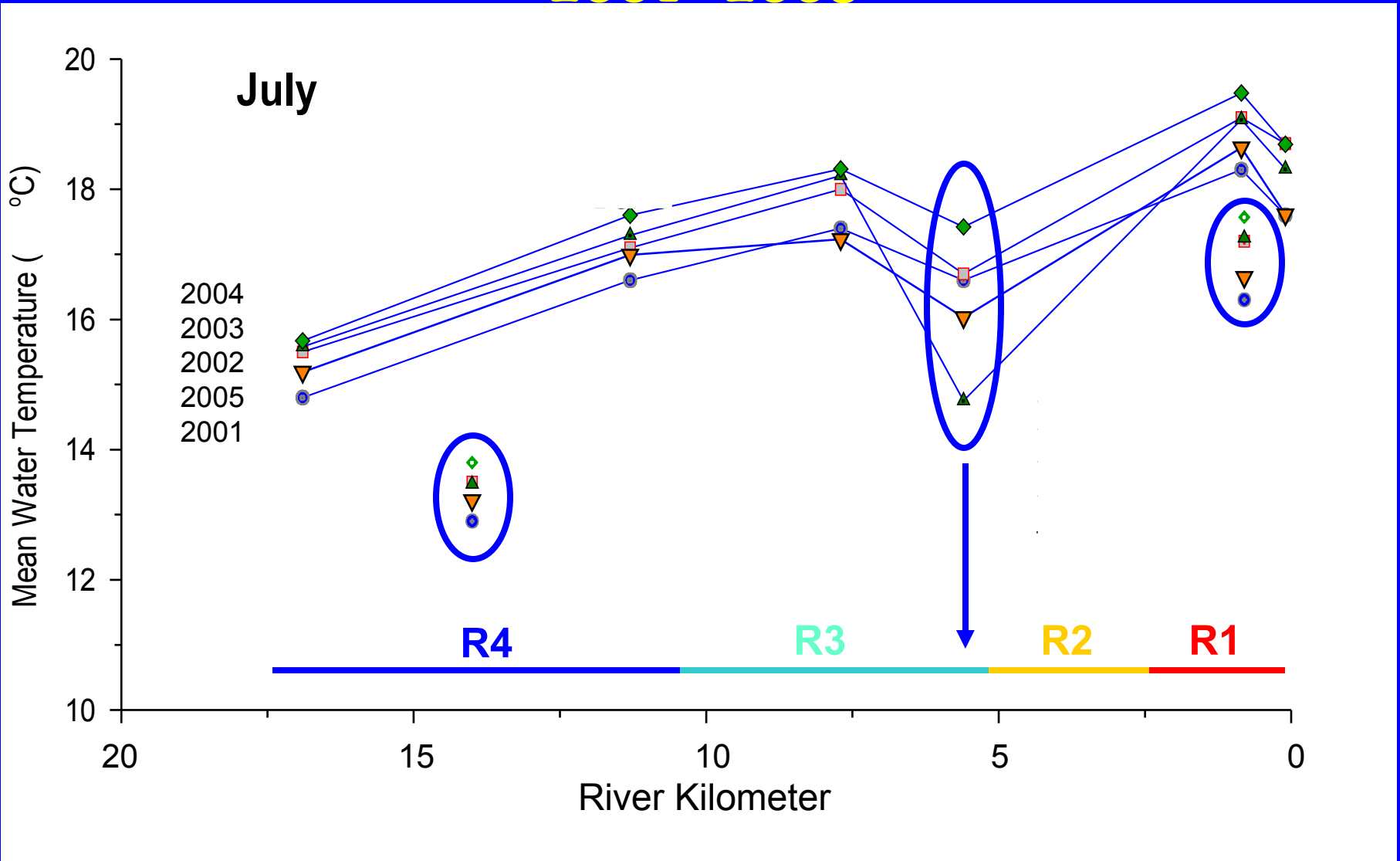
Stream Temperature, Oct 2004 - Oct 2005



Rattlesnake Creek Temperature 2001-2005



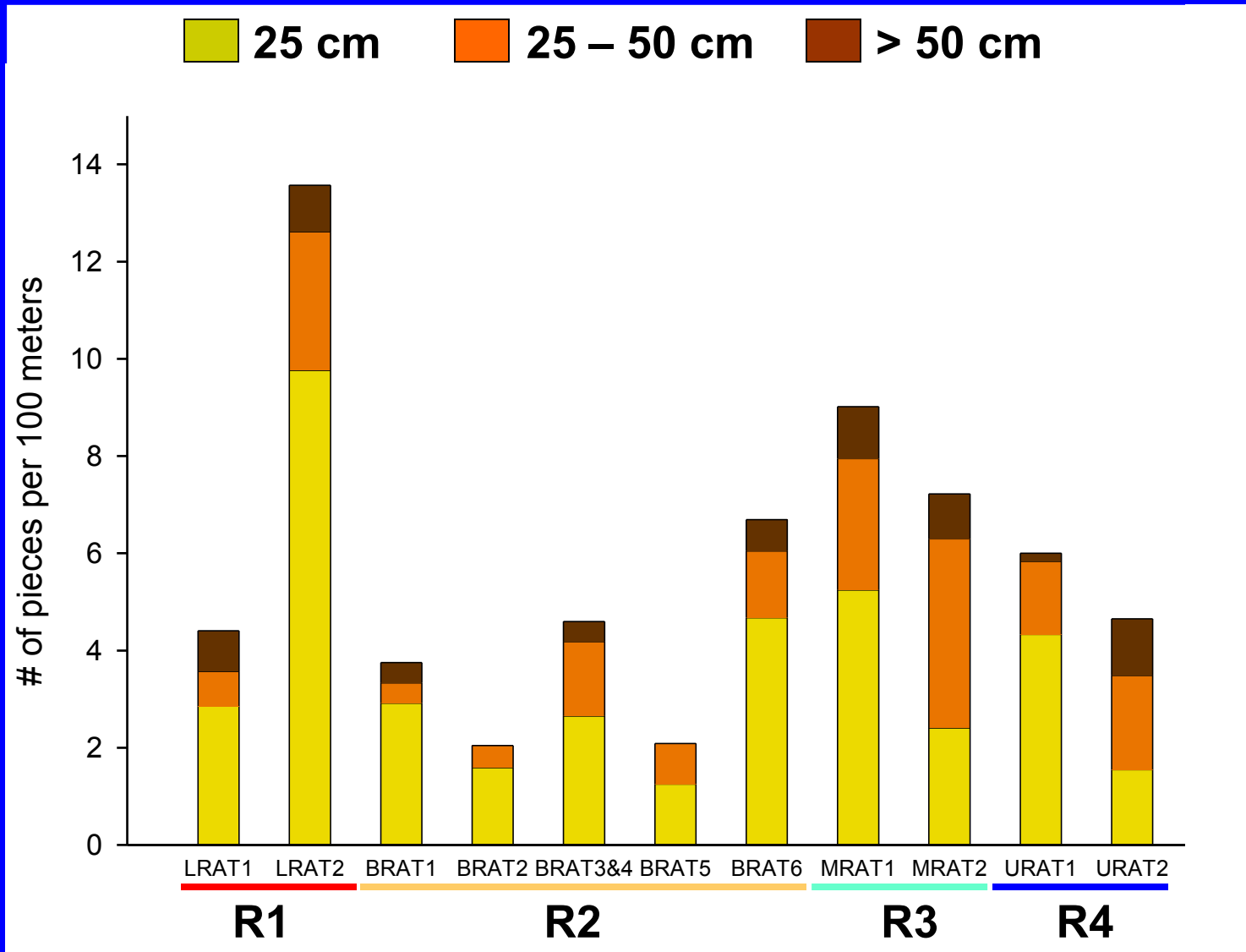
Rattlesnake Creek Temperature 2001-2005

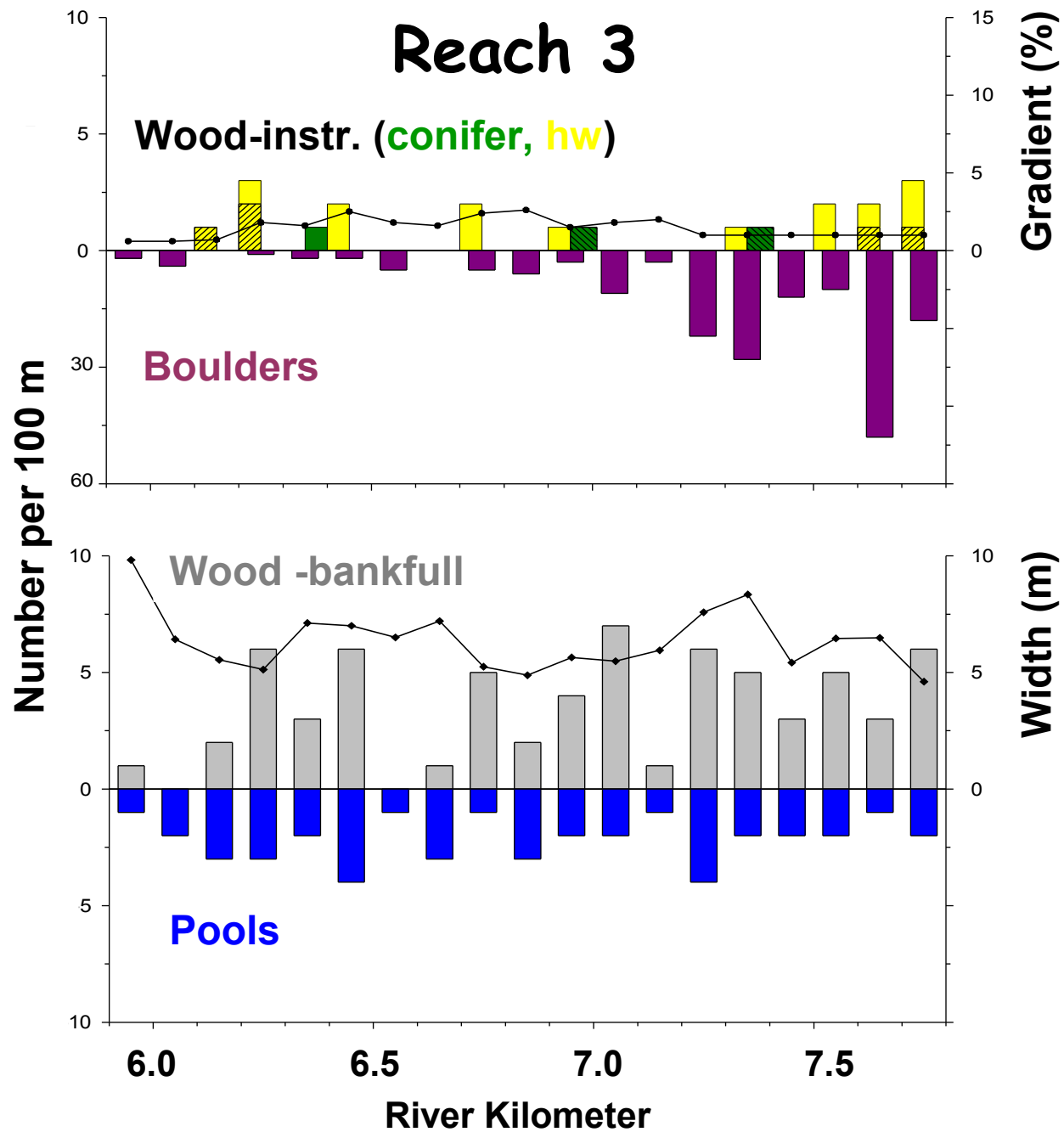


Reach 3

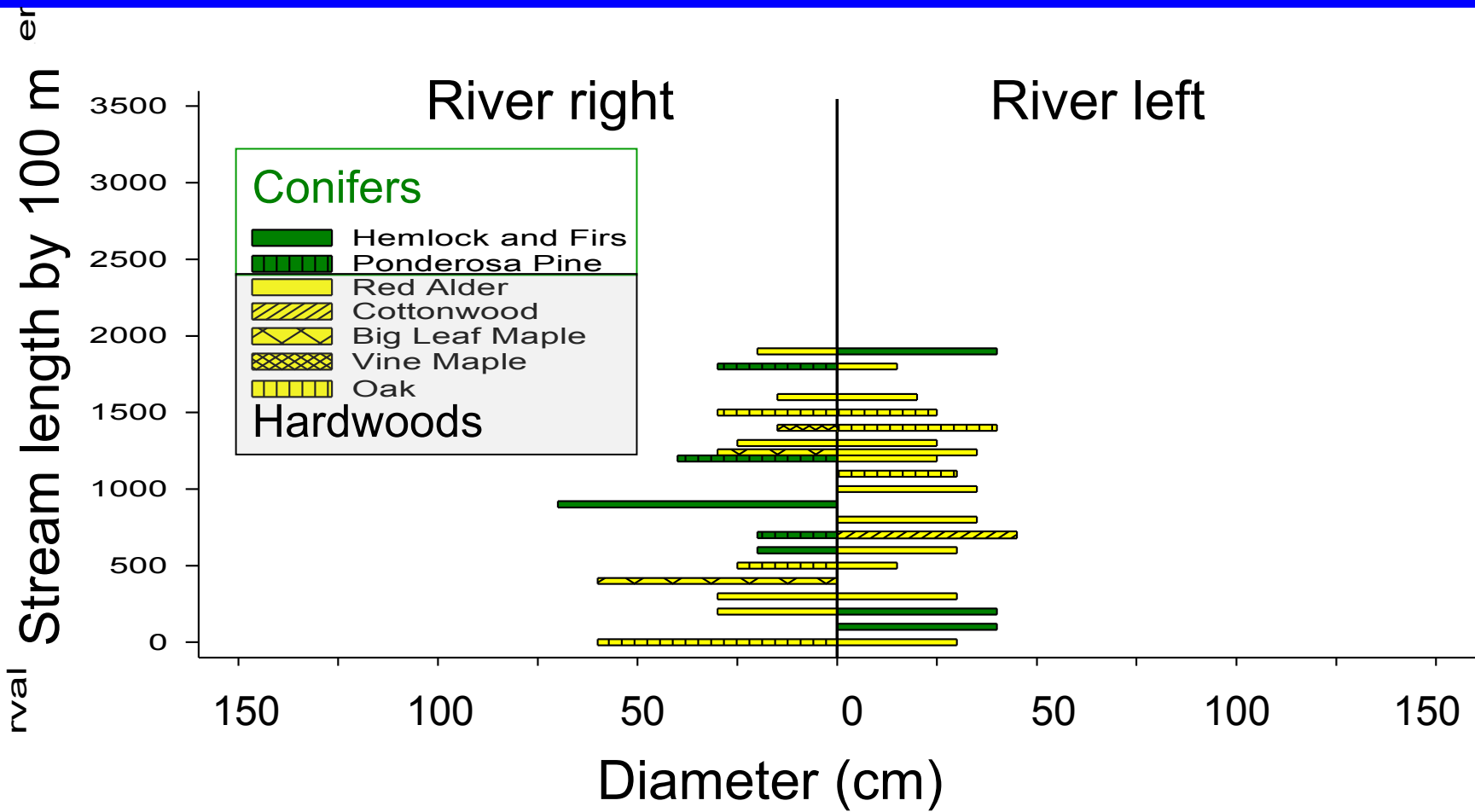


Wood in the Streambed





Reach 3: Riparian species and size (within 3-10 m of stream)



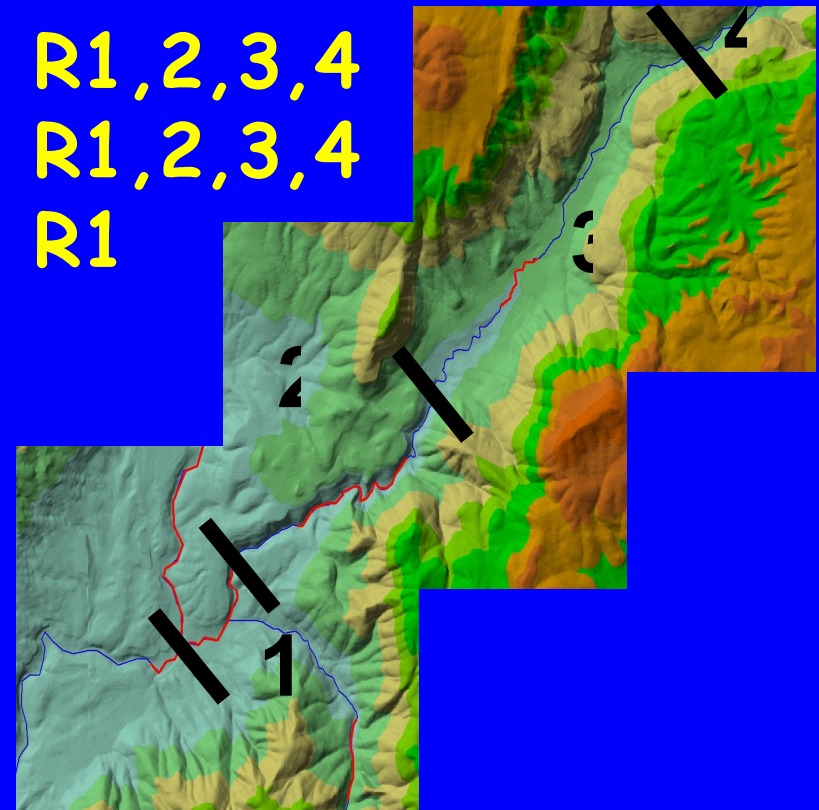


Fish Assemblage

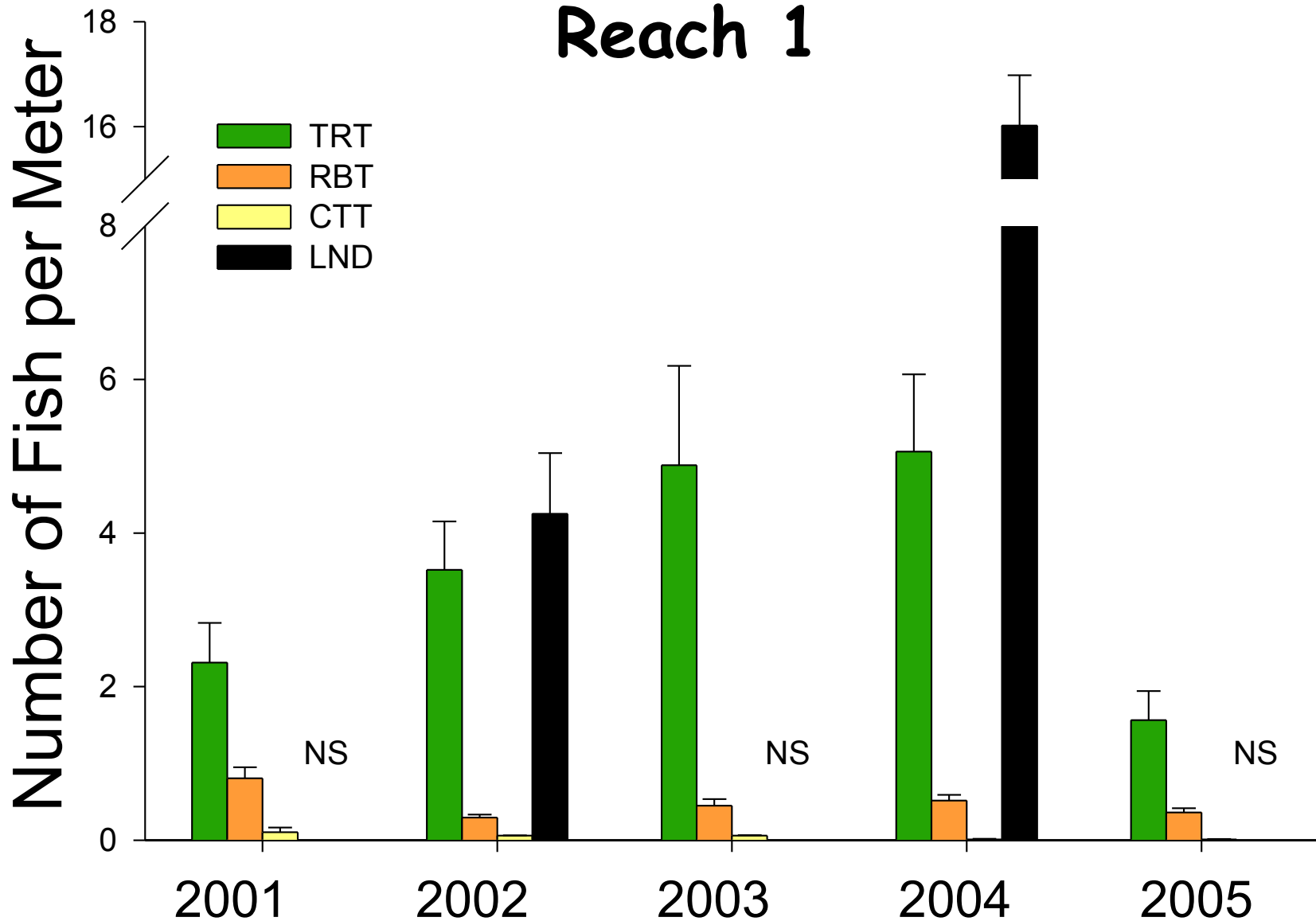


Fish Assemblage

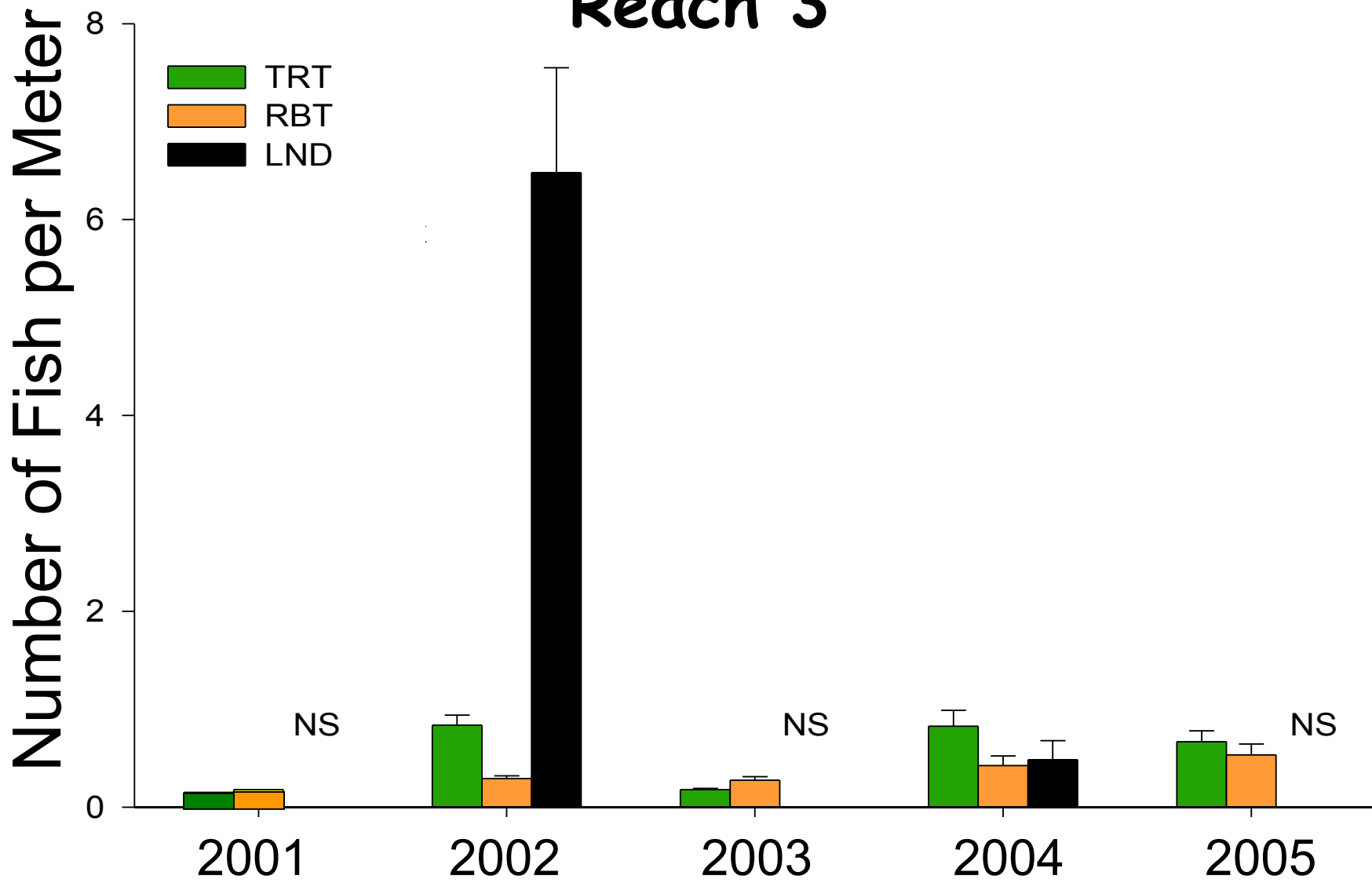
Rainbow trout	R1,2,3,4
Cutthroat trout	R1
Brook trout (n=2)	R1
Longnose dace	R1,2,3,4
Shorthead sculpin	R1,2,3,4
Western brook lamprey	R1



Reach 1



Reach 3



Findings

- Habitat conditions:
 - High summer water temperatures
 - Low summer flows, high winter flows
 - Low habitat complexity
 - Limited large woody debris
(esp. large pool-forming conifer pieces)
 - Low recruitment potential for large wood
- Fish populations:
 - Reach 1: High age-0 RBT; High LND; CTT present
 - Reach 3: Low age-0 RBT; High LND;

Conclusions about Potential of Rattlesnake Cr. for Anadromous Salmonids

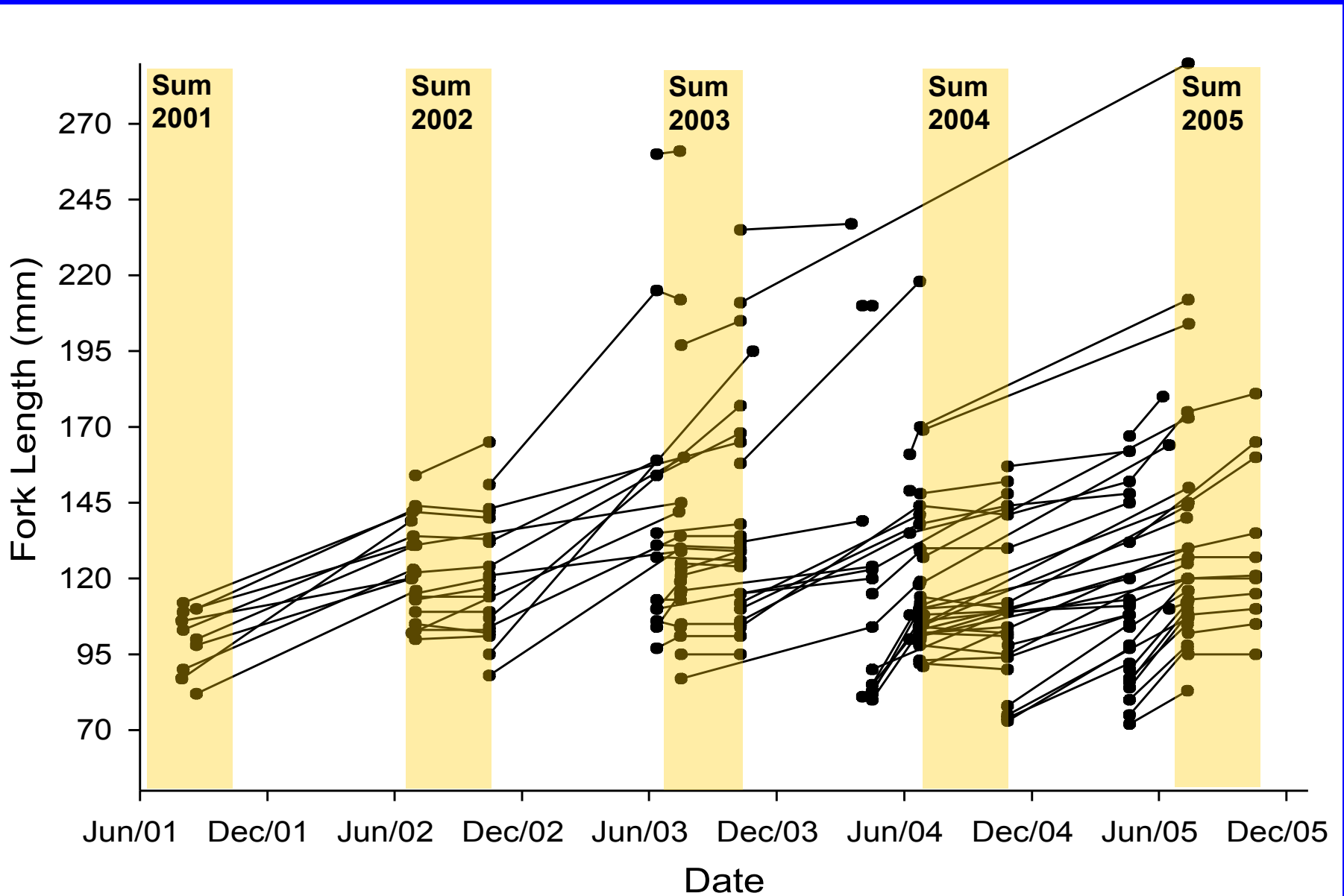
•Currently:

- Moderate to high fish production (esp. LND, RBT)
- Limited habitat for anadromous fish

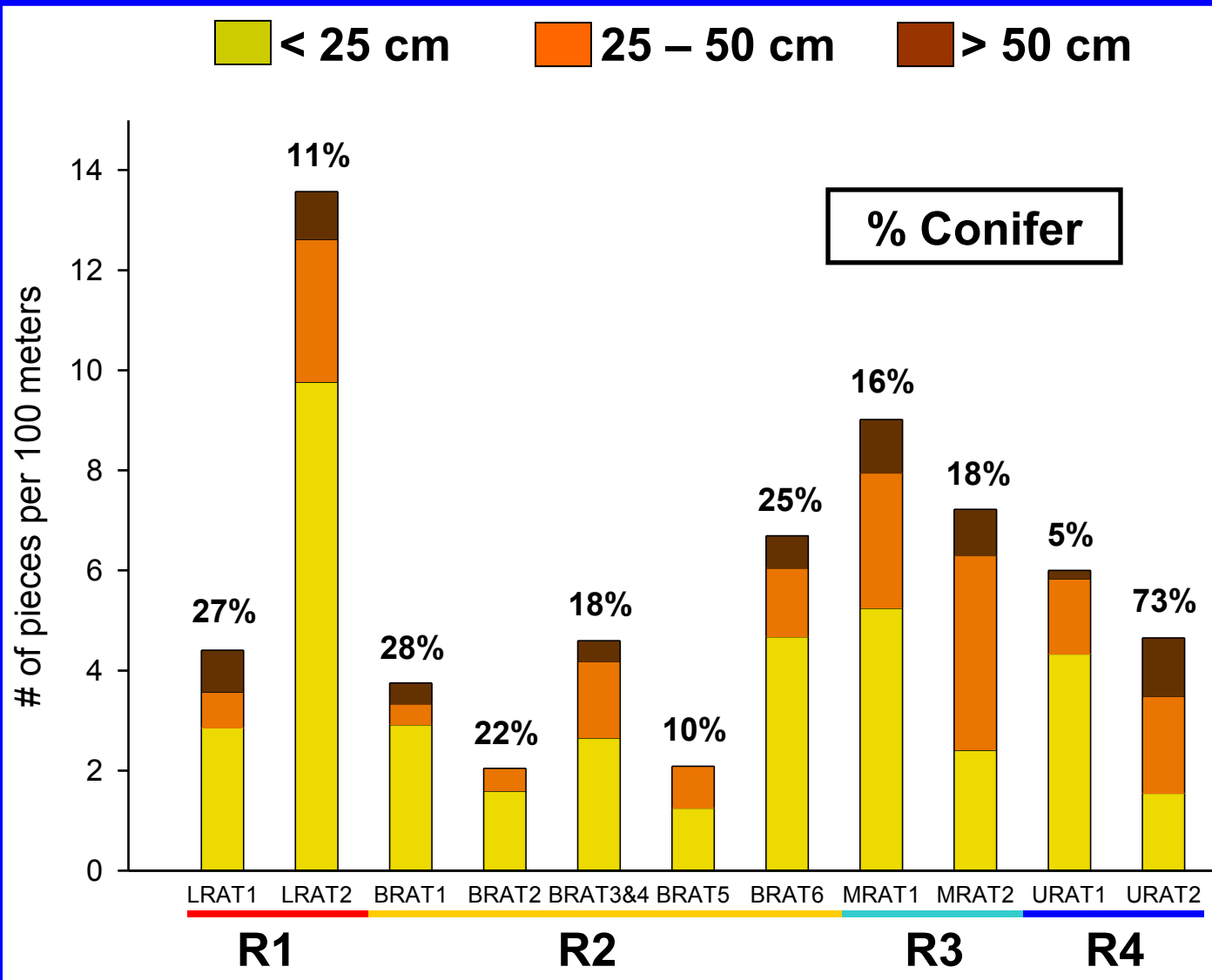
•With Restoration:

- Good rearing potential for juvenile steelhead

Seasonal growth of PIT-tagged RBT in lower Rattlesnake Creek



Wood in the Streambed



The USGS Crew

Brian Beardsley

Jodi Charrier

Joe Feldhaus

Ian Jezorek

Kyle Martens

Carrie Munz

Brien Rose

Sarah Rose

Chris Schafer

