

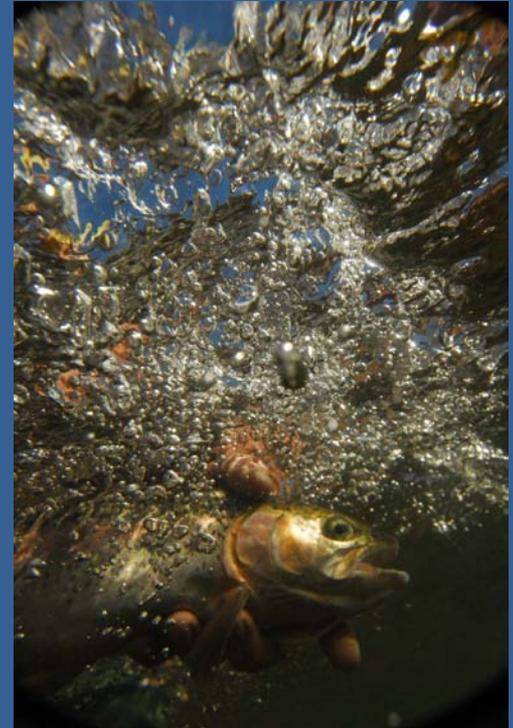
Grand Canyon Rainbow Trout 2012 Monitoring Results

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Research Branch



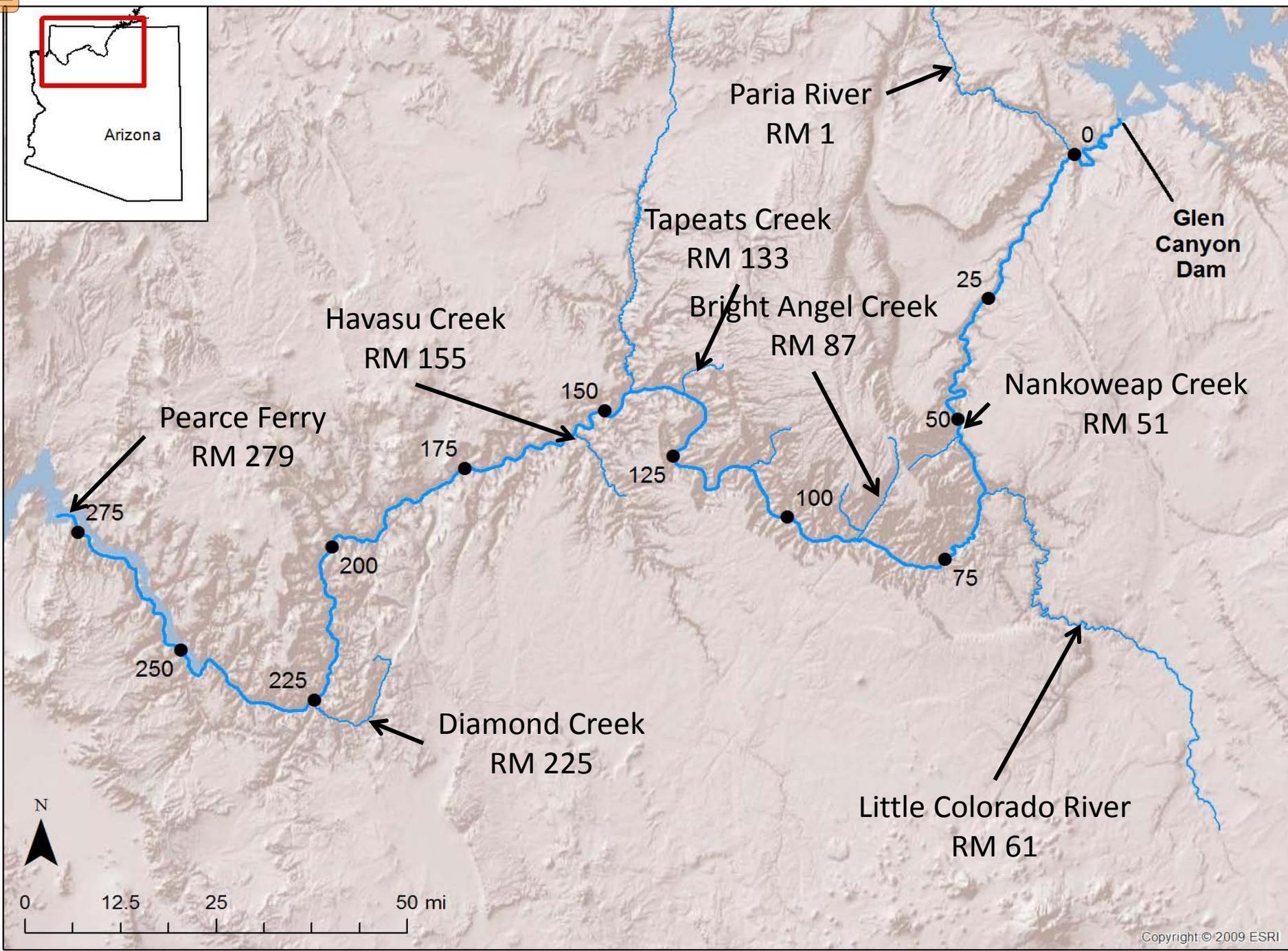
AGFD Rainbow Trout Monitoring

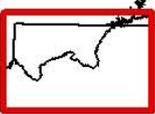
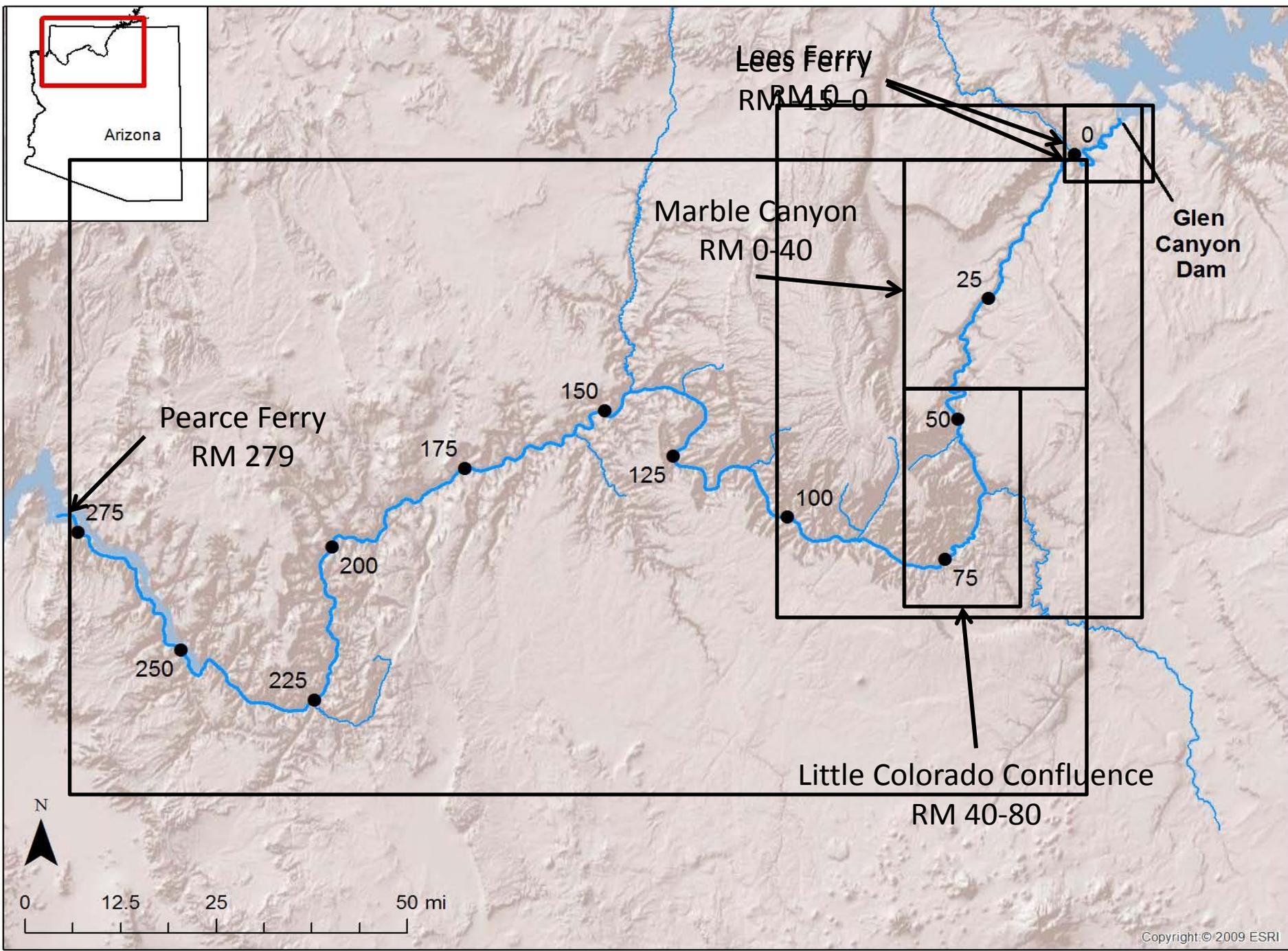
- Lees Ferry: 1991-2012
 - Seasonal sampling
 - Electrofishing
 - Angler Creel
 - Whirling Disease
- Marble/Grand Canyon: 2000-2012
 - Yearly sampling
 - Electrofishing





Arizona





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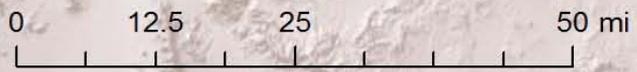
Lees Ferry
RM 0-15

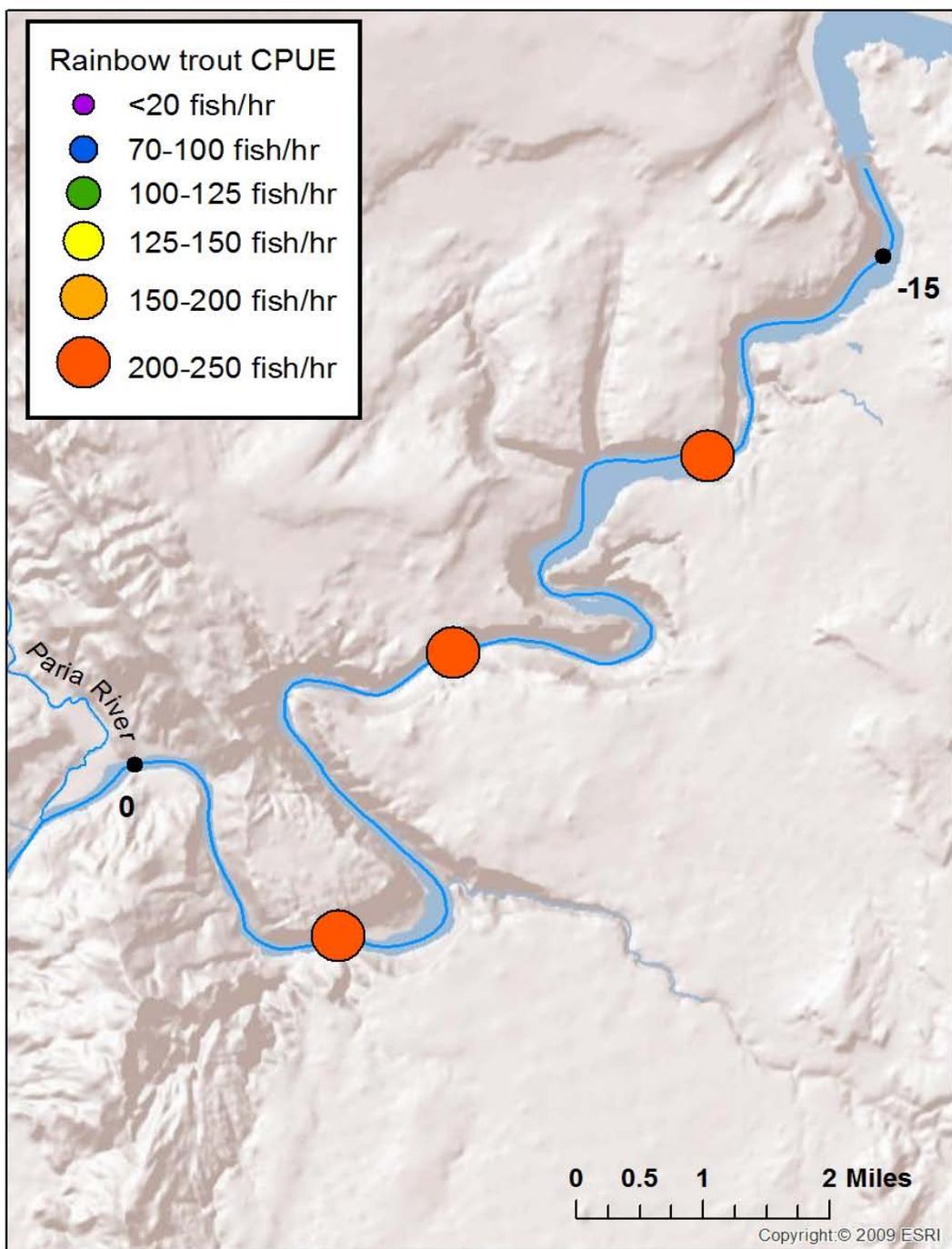
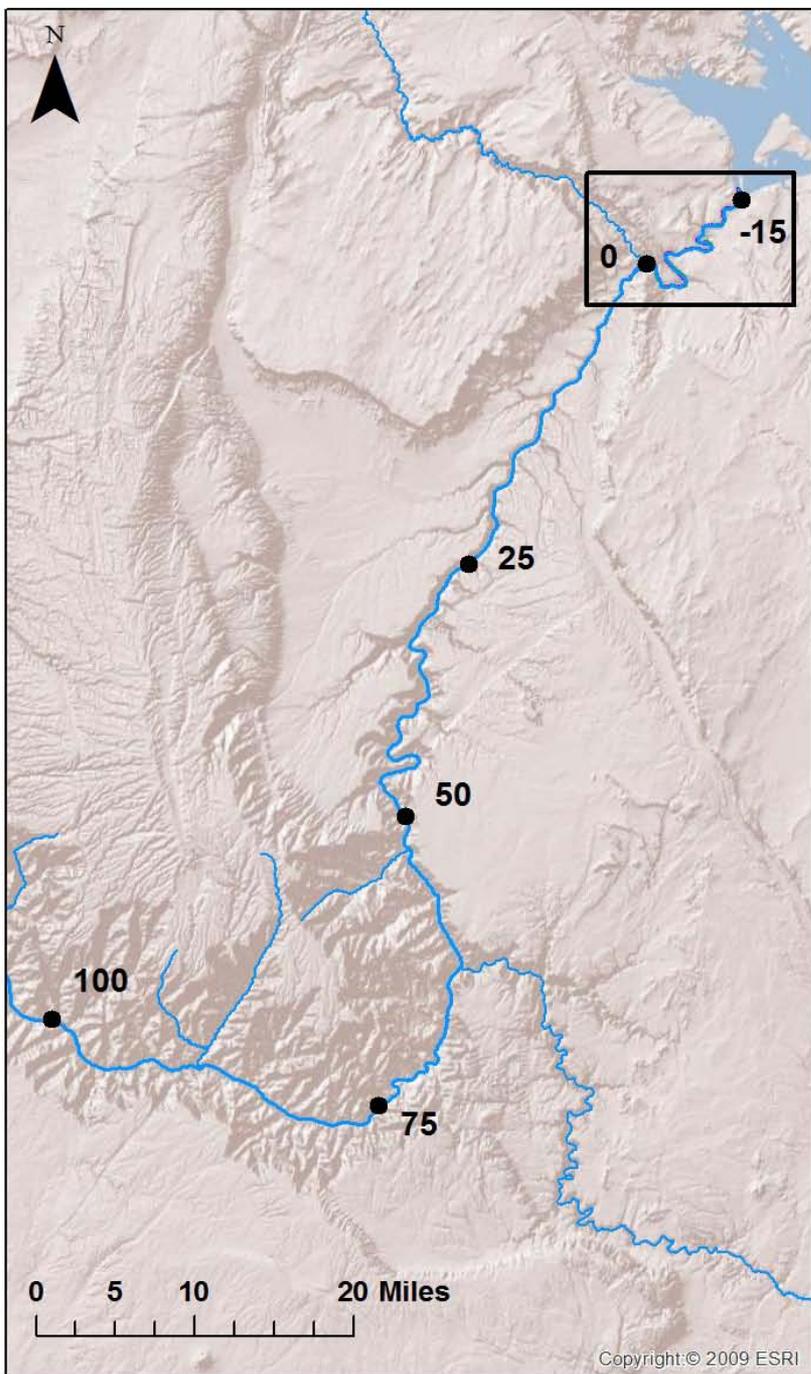
Marble Canyon
RM 0-40

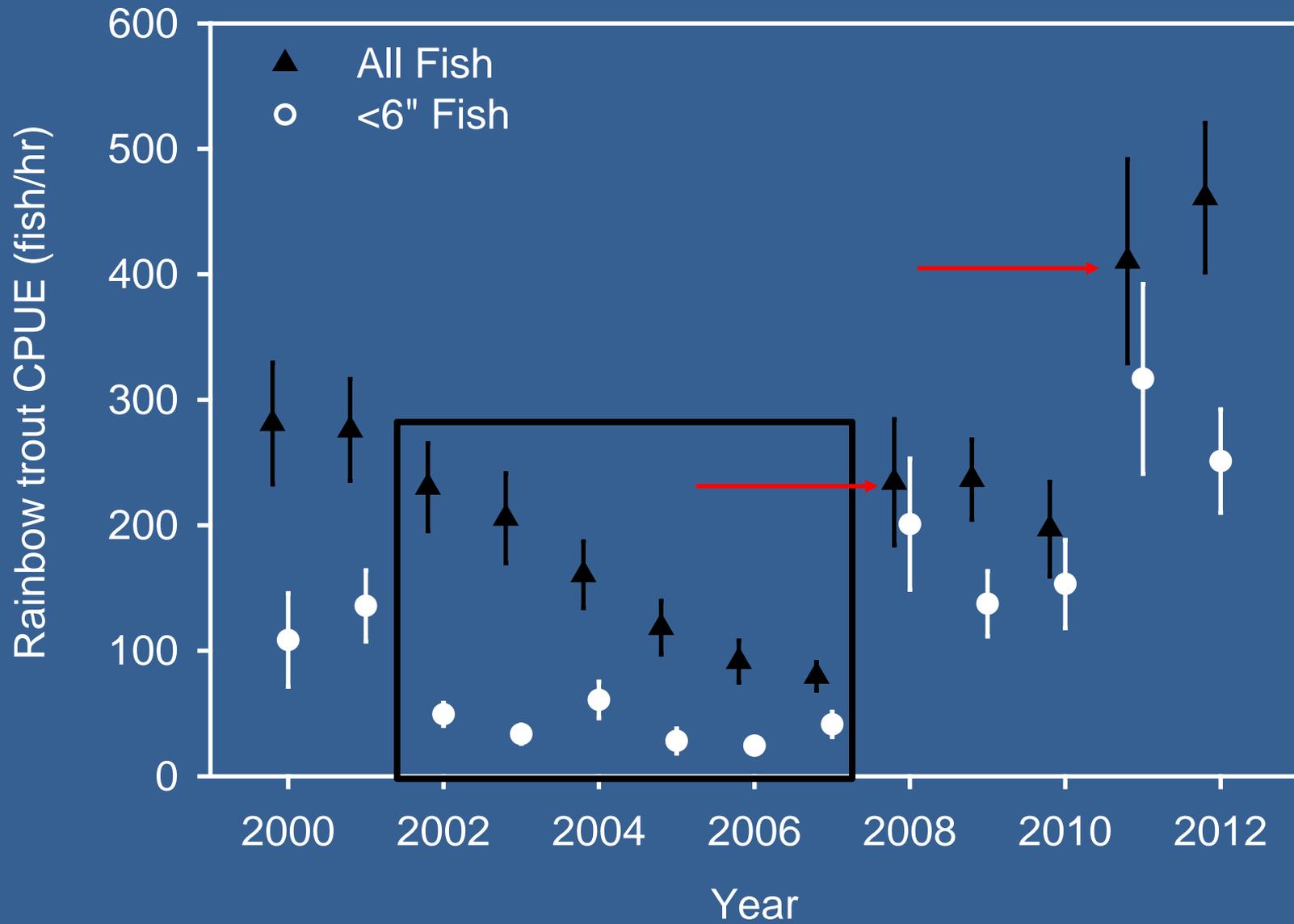
Pearce Ferry
RM 279

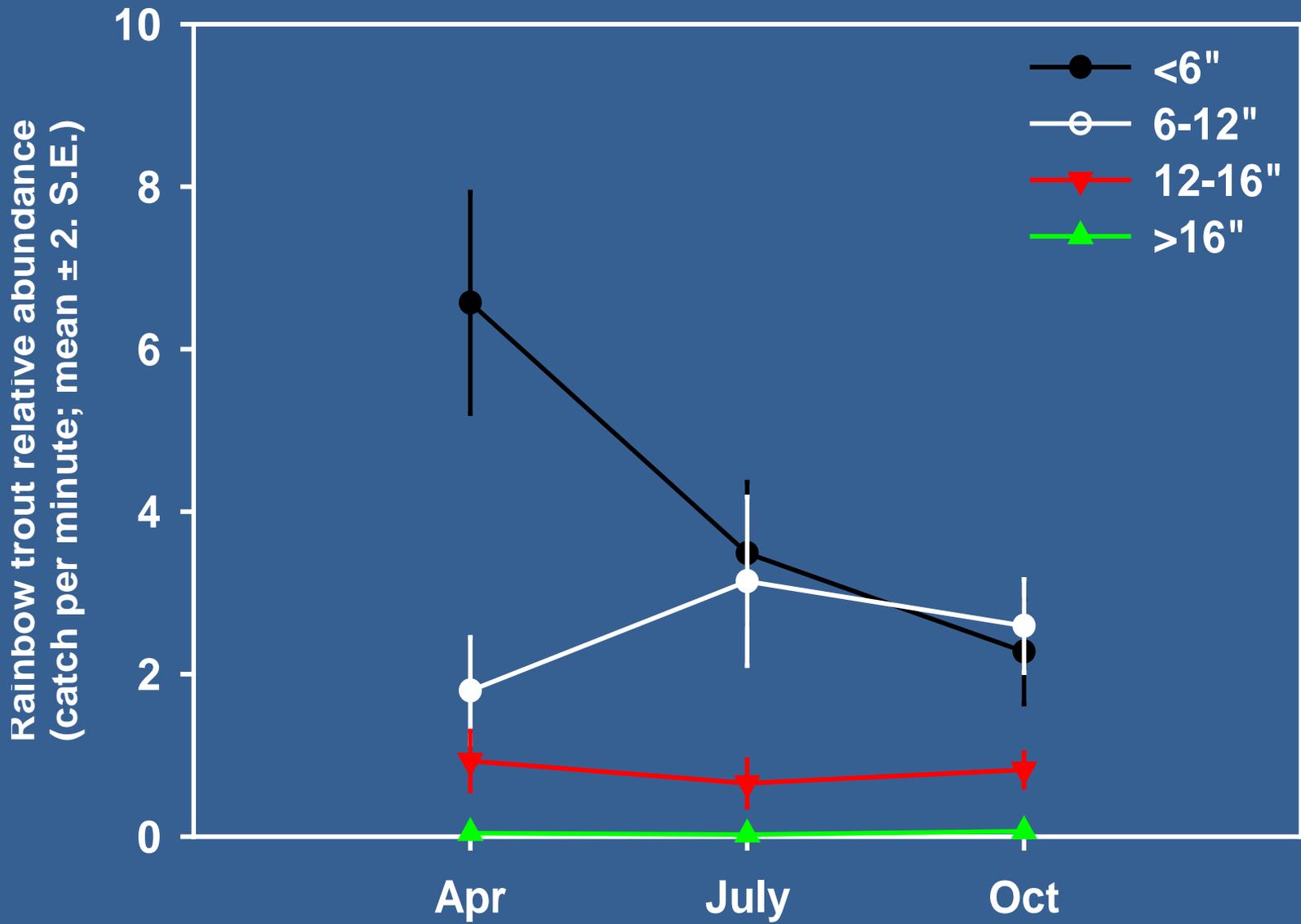
Little Colorado Confluence
RM 40-80

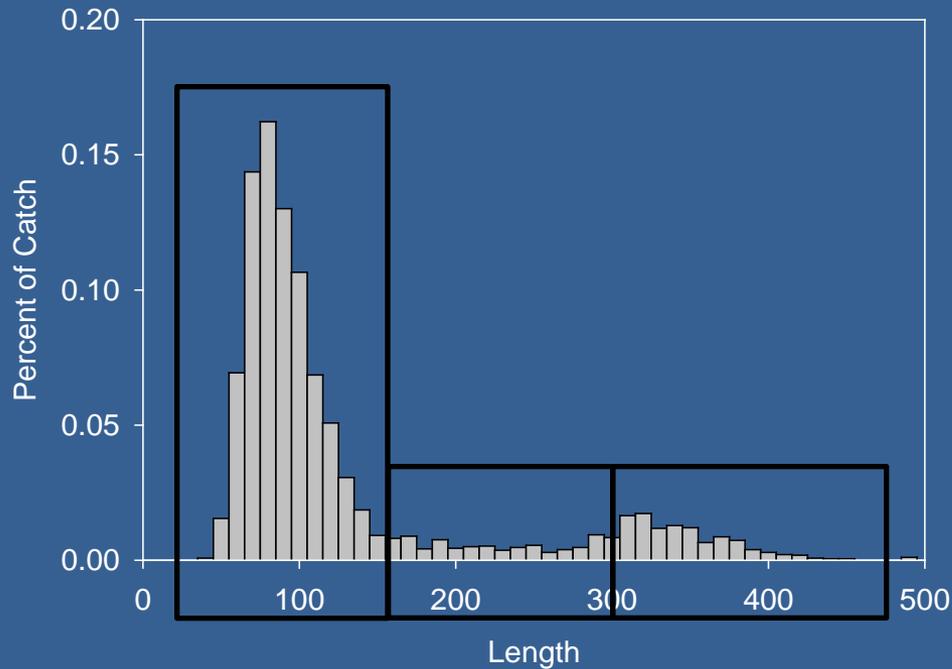
Glen
Canyon
Dam



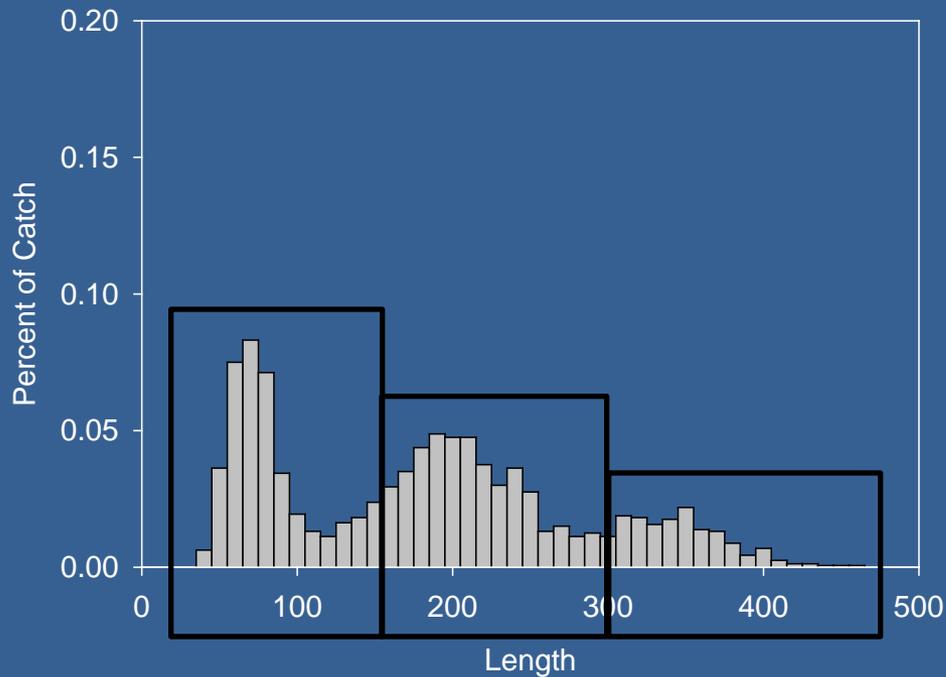




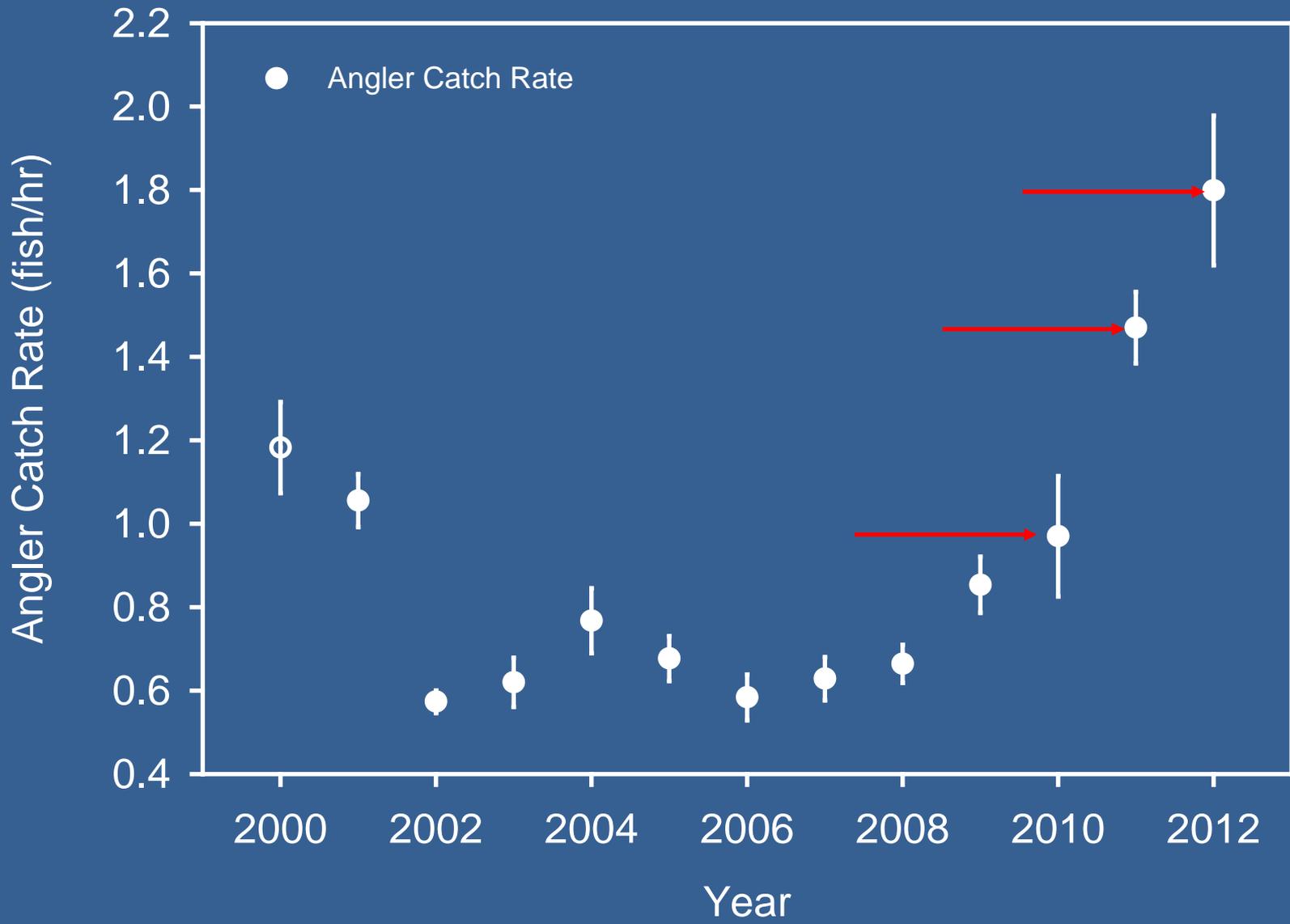


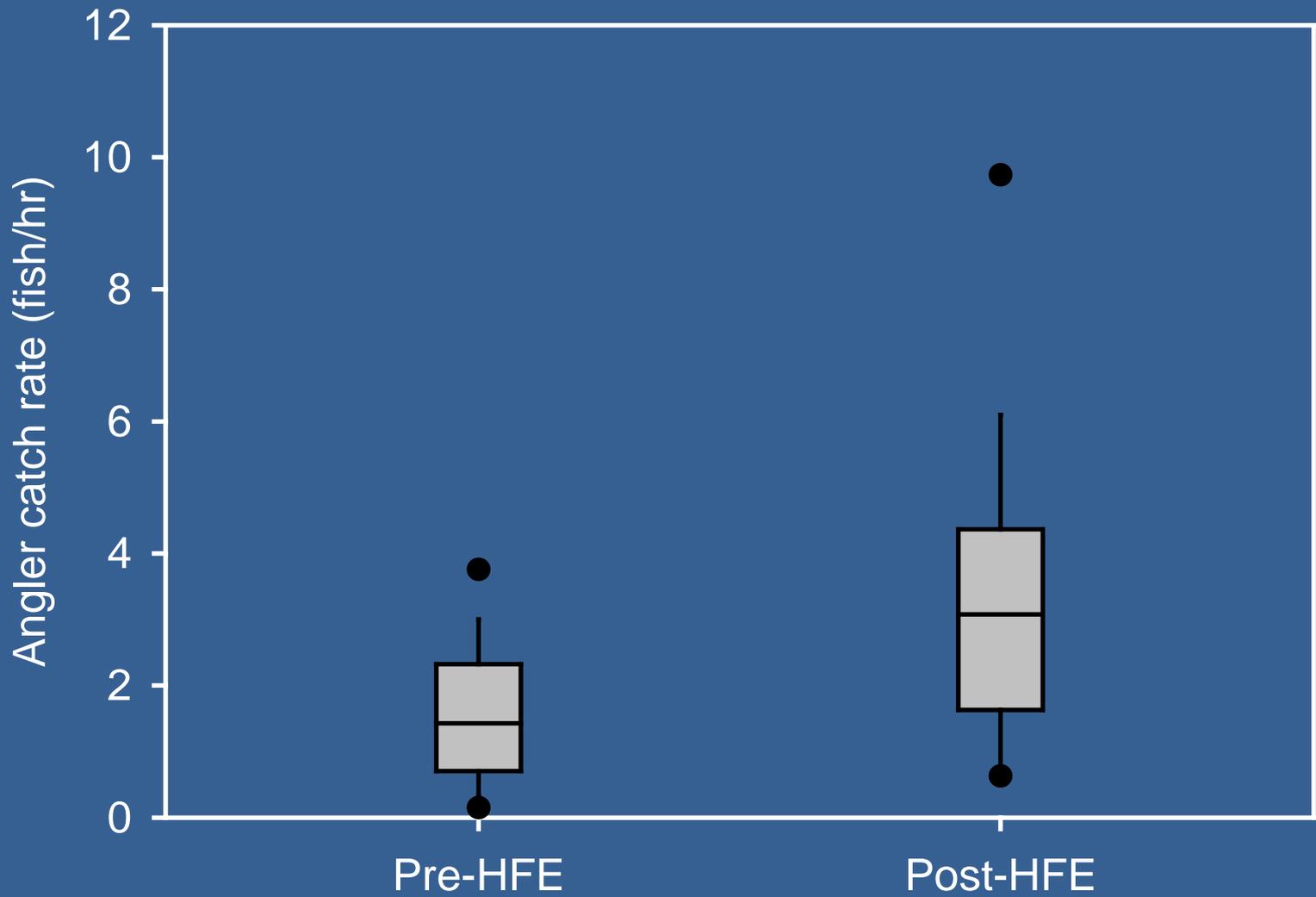


- 2011
 - 133 ± 2.8 mm
 - 80% <150 mm
 - 8% 150-300 mm
 - 12% >300 mm



- 2012
 - 185 ± 4.3 mm
 - 40% <150 mm
 - 45% 150-300 mm
 - 15% >300 mm

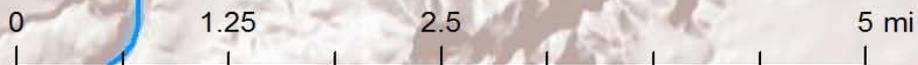


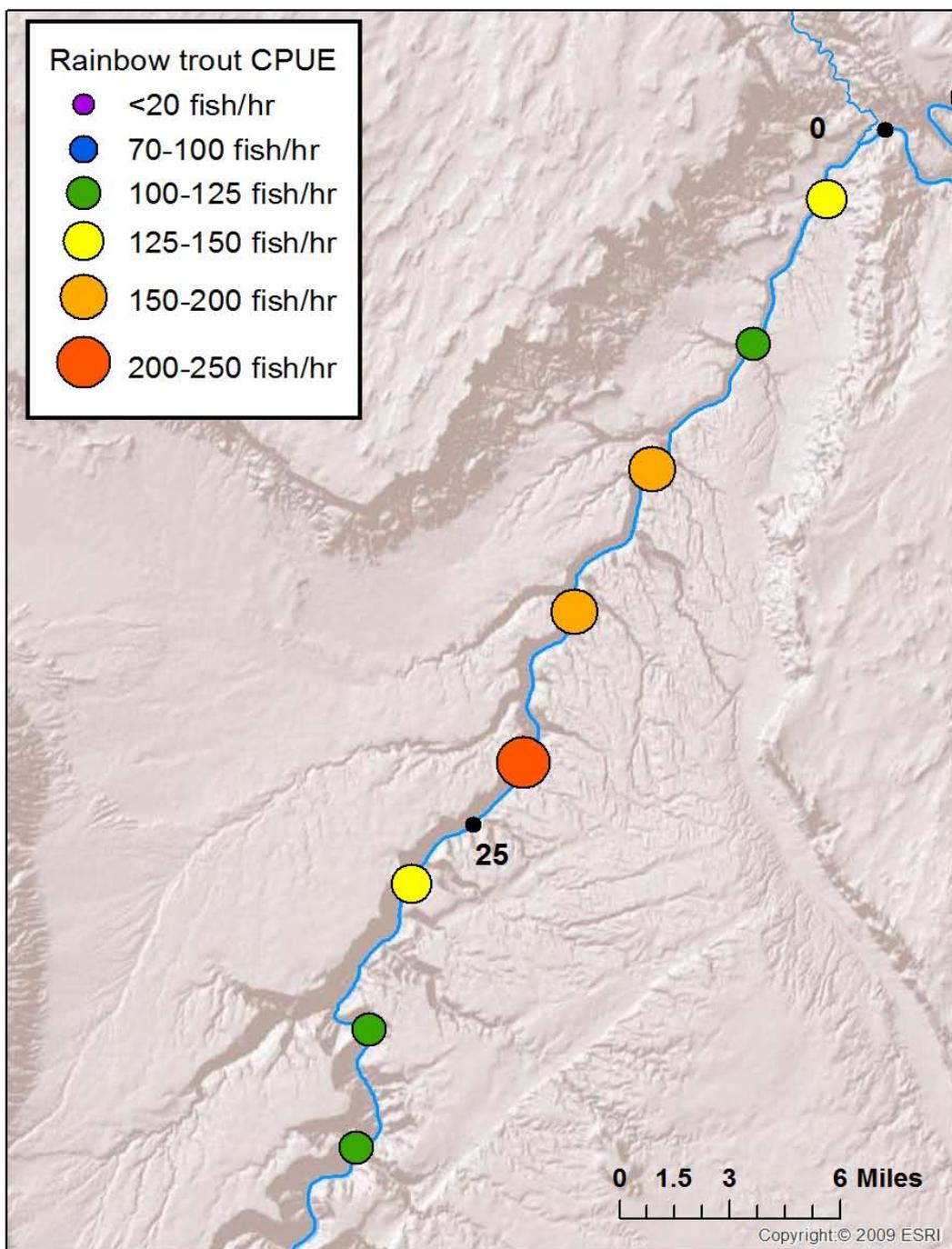
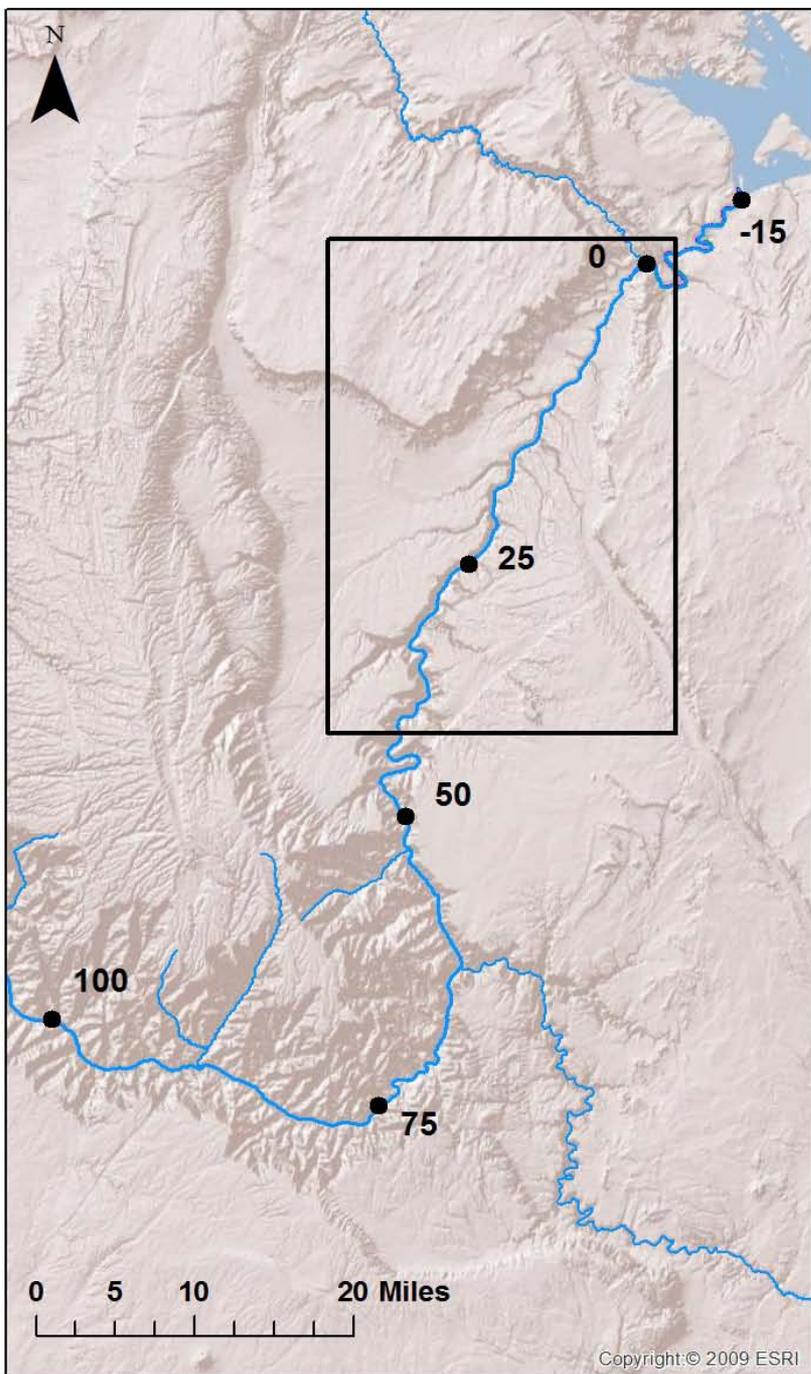


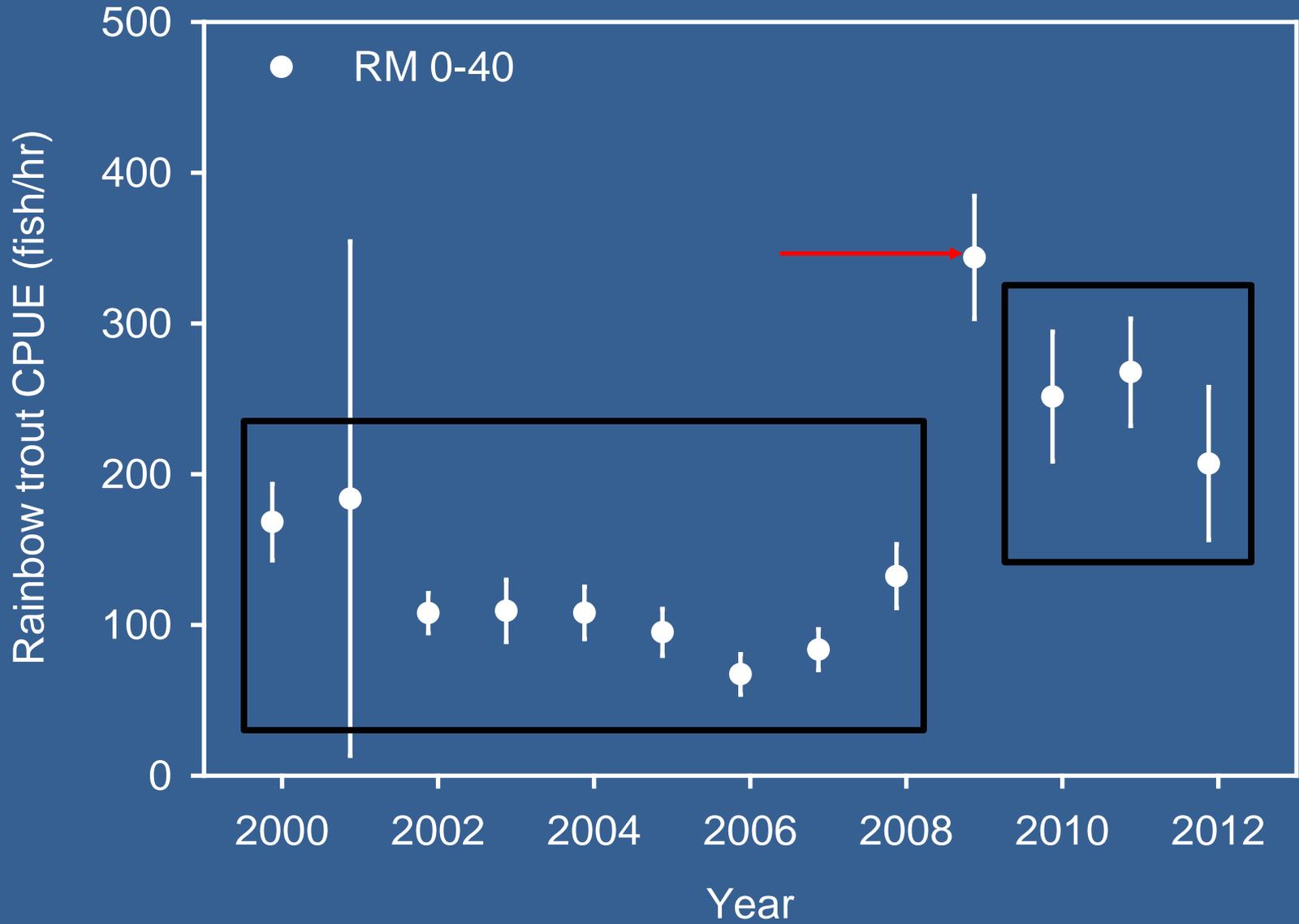
Whirling Disease

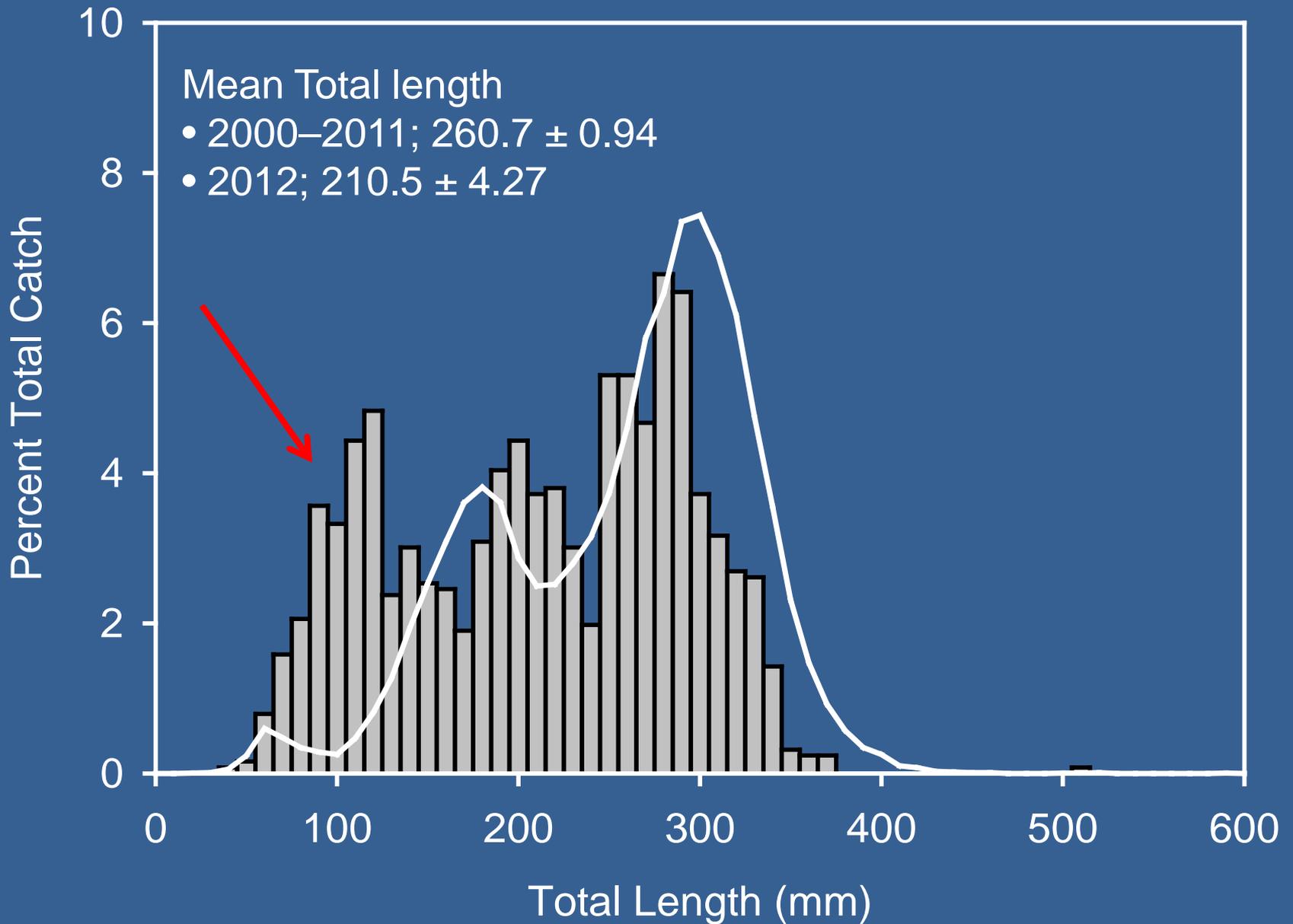
- Batch testing
- Individual testing

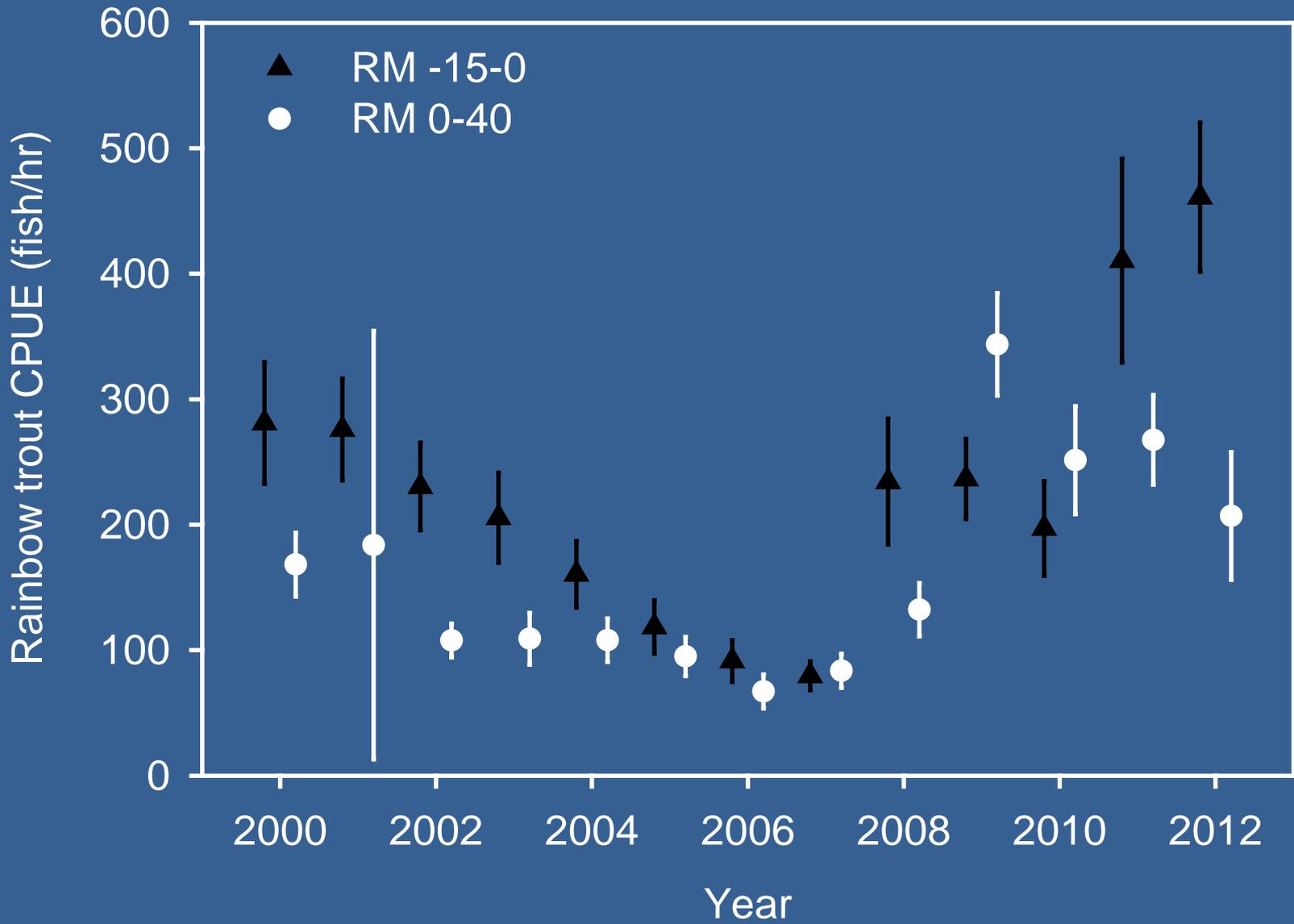
- 1999-2006 - Not Detected
- 2007 - Detected through PCR technology
 - Not confirmed by histology
- 2008-2010 - Not Detected

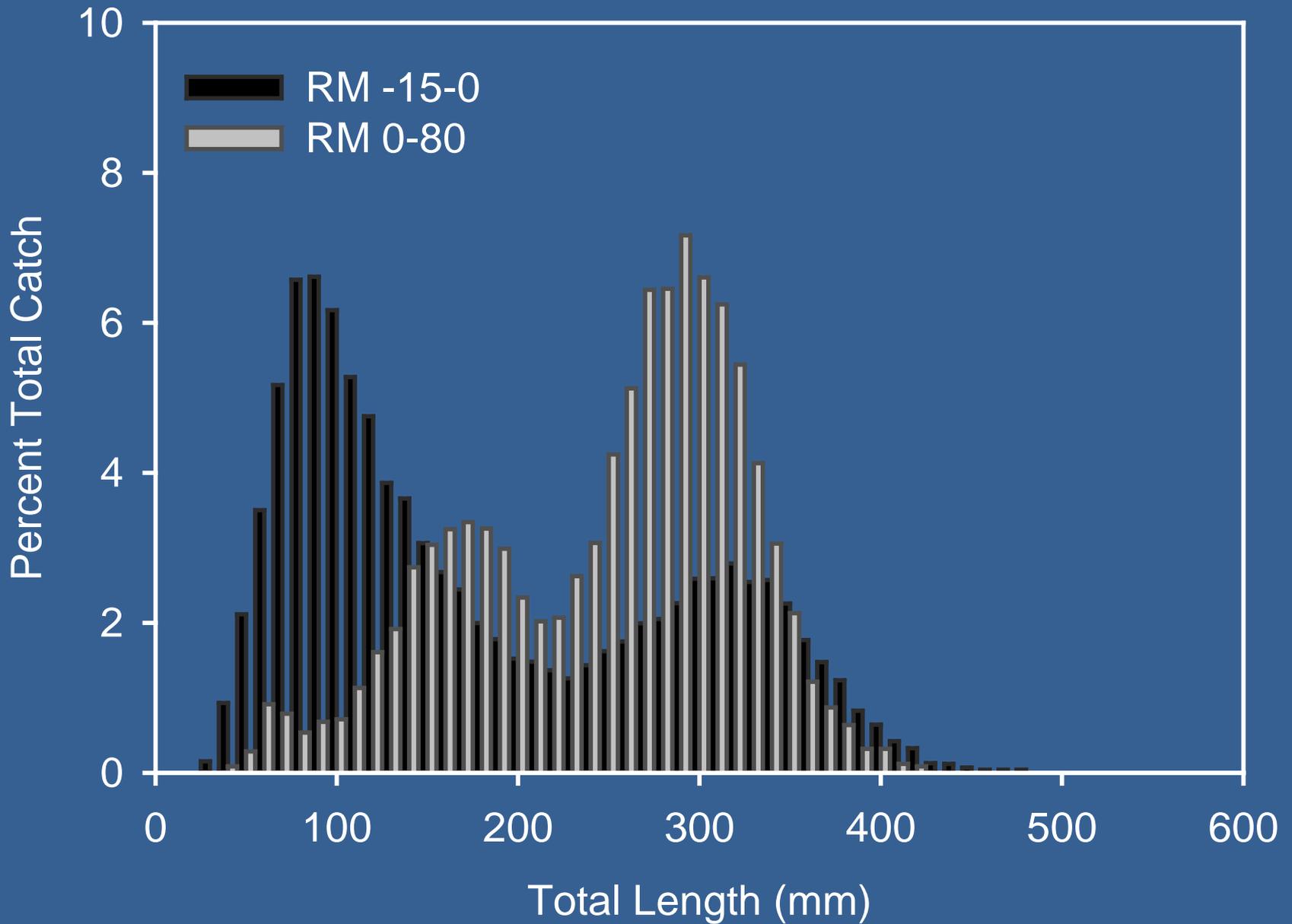


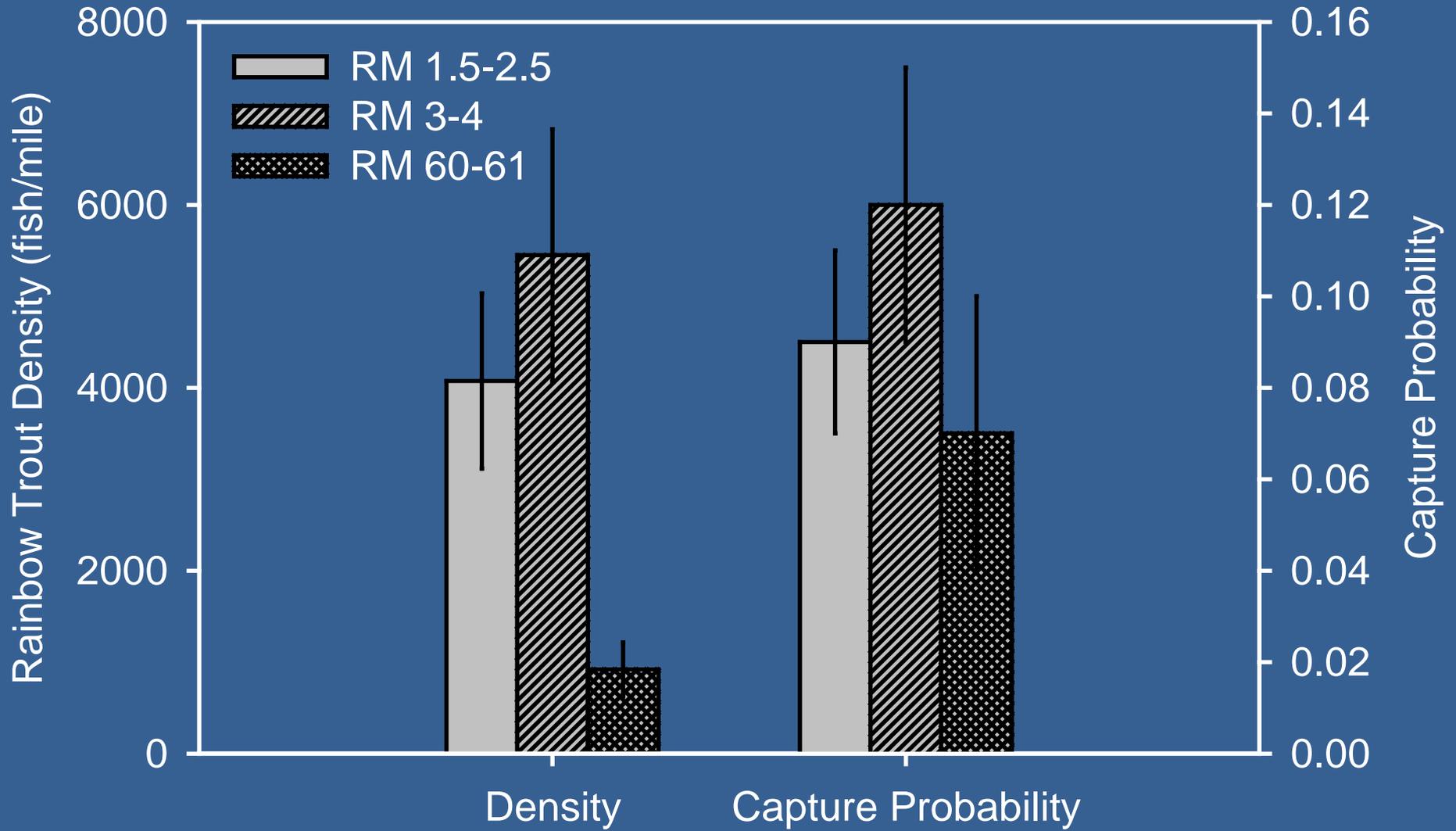


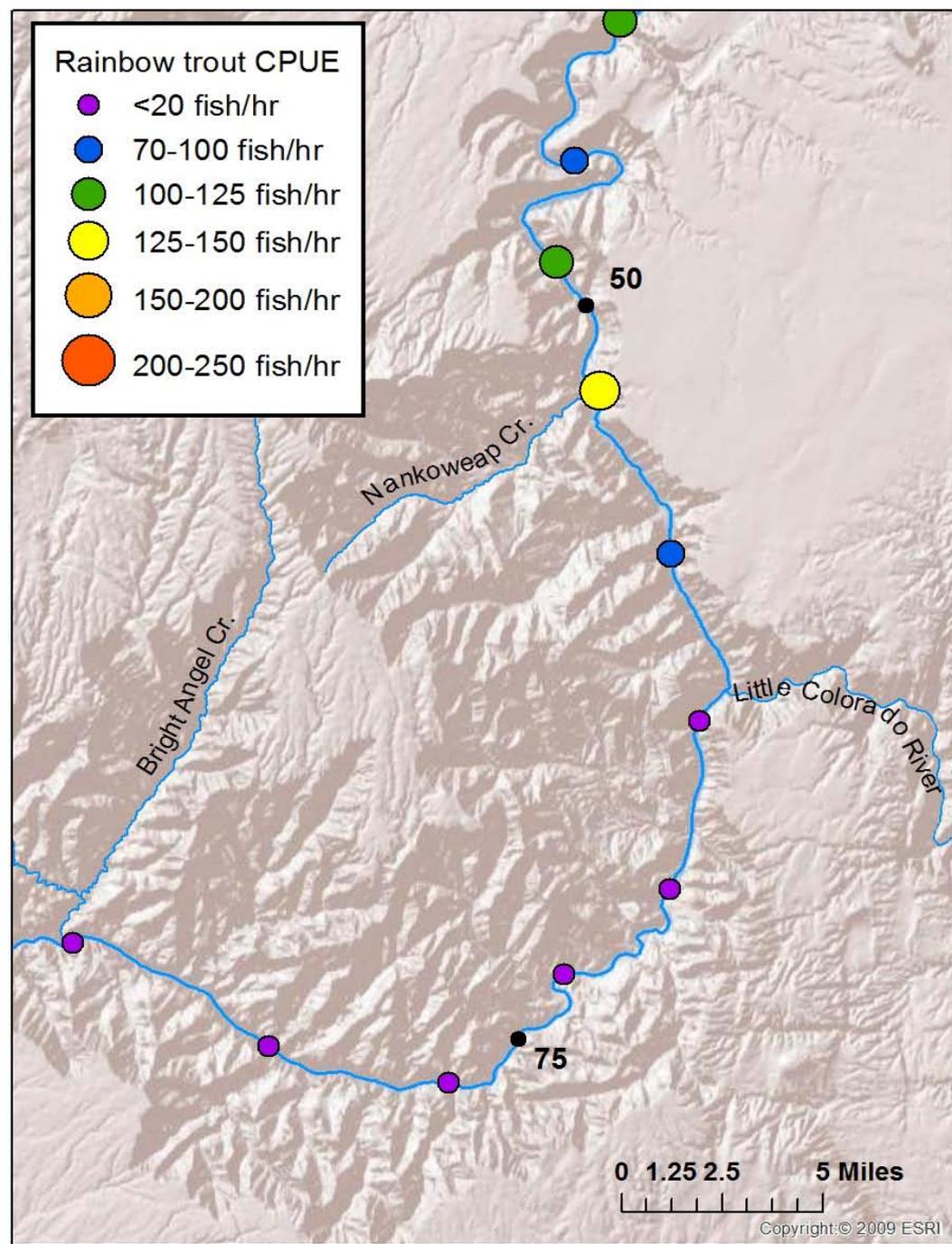
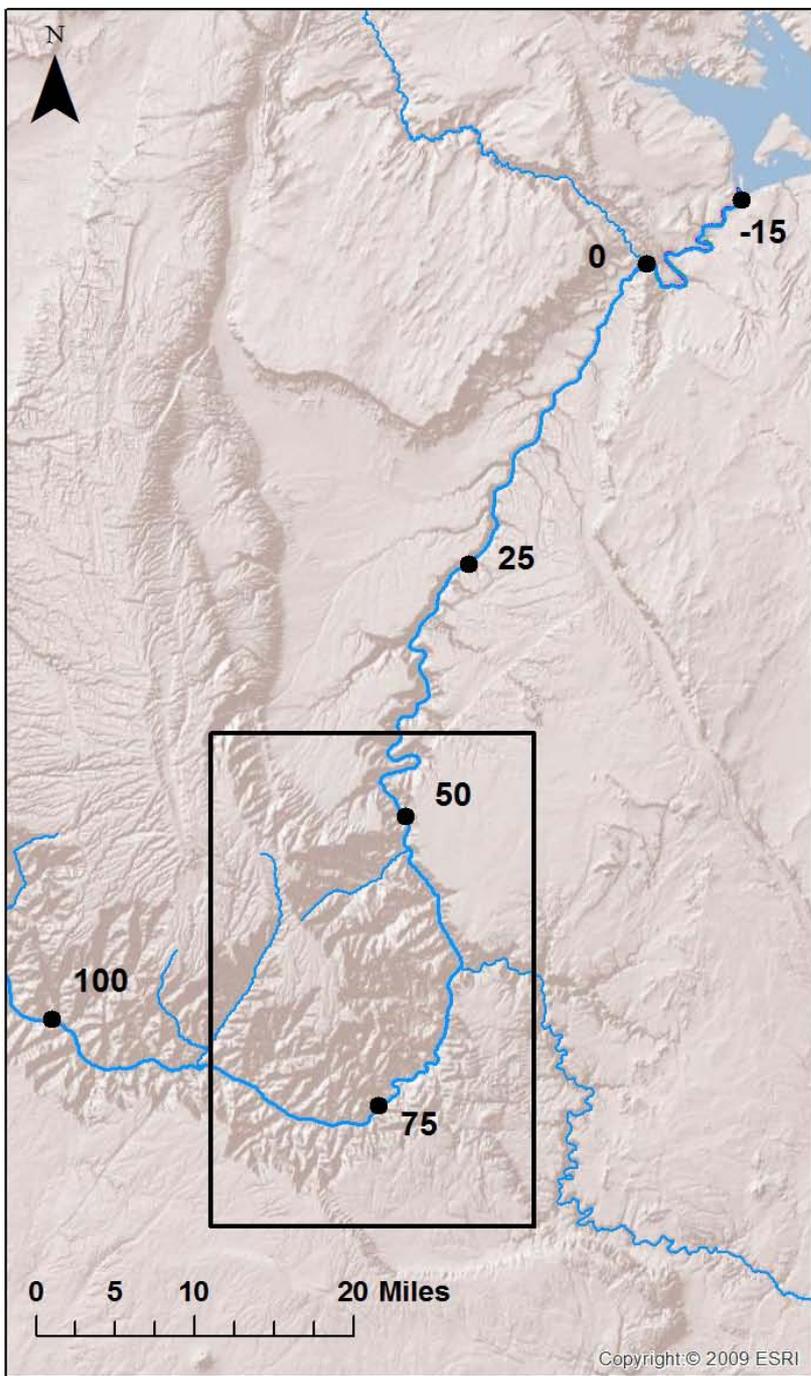


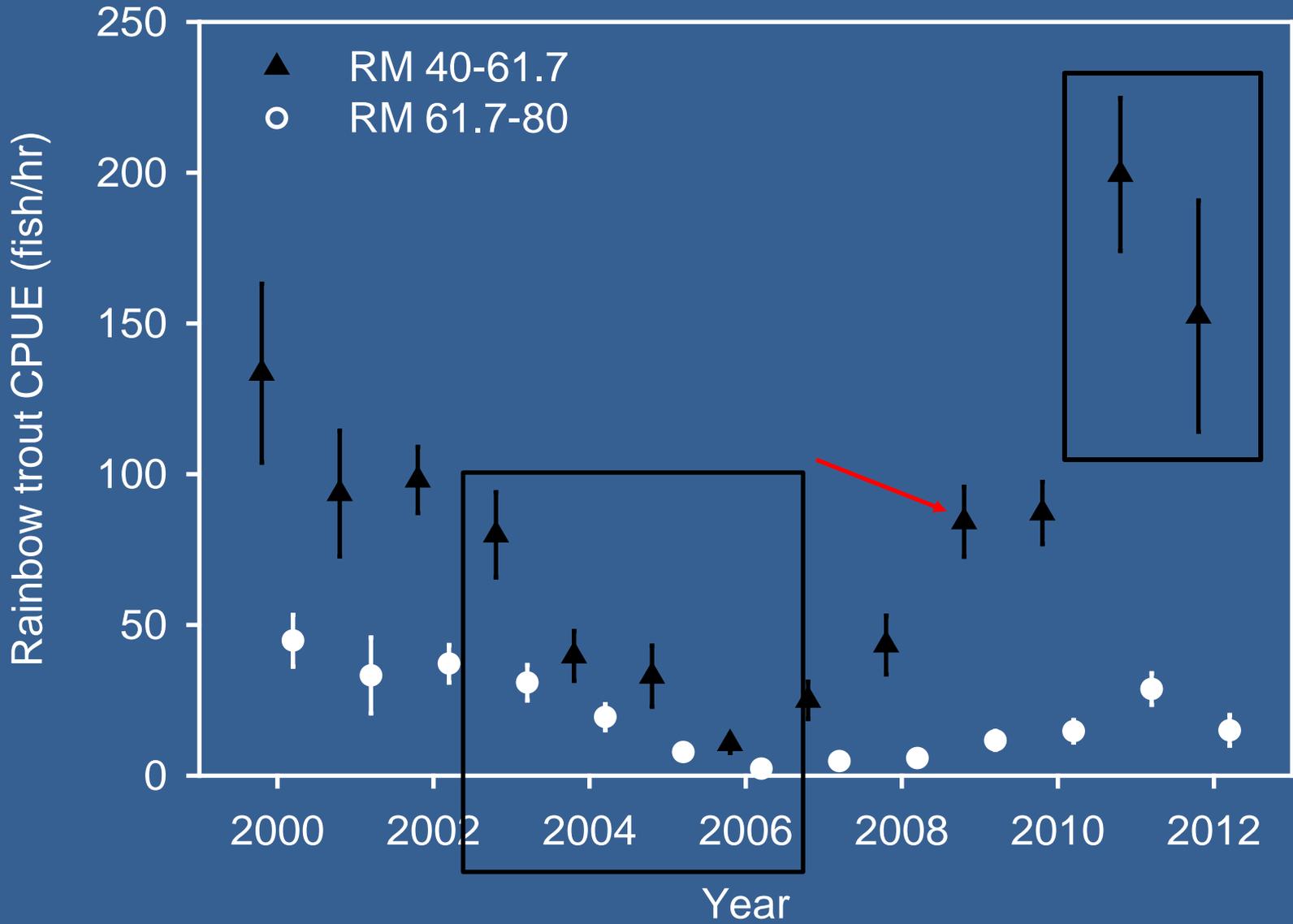






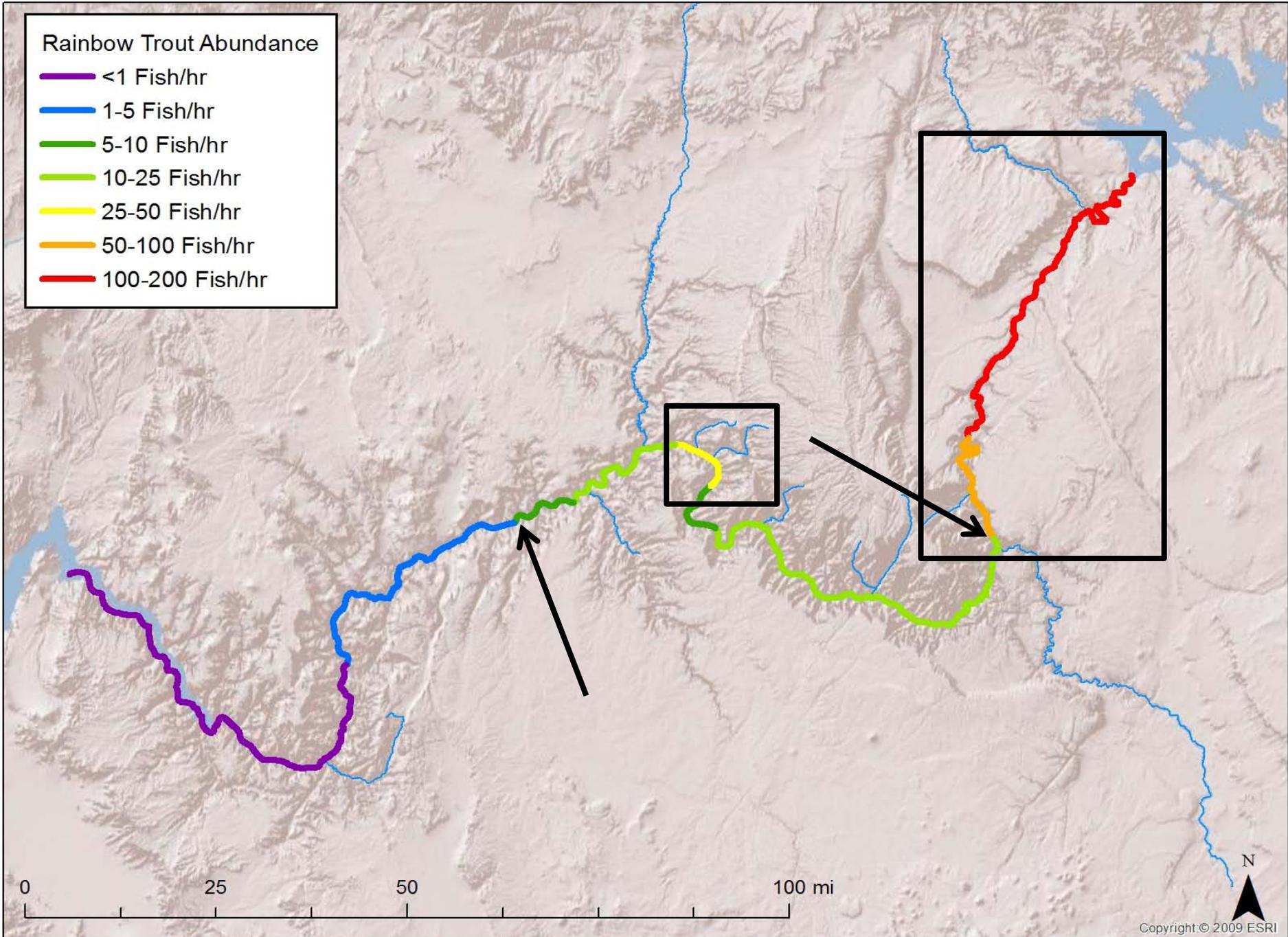


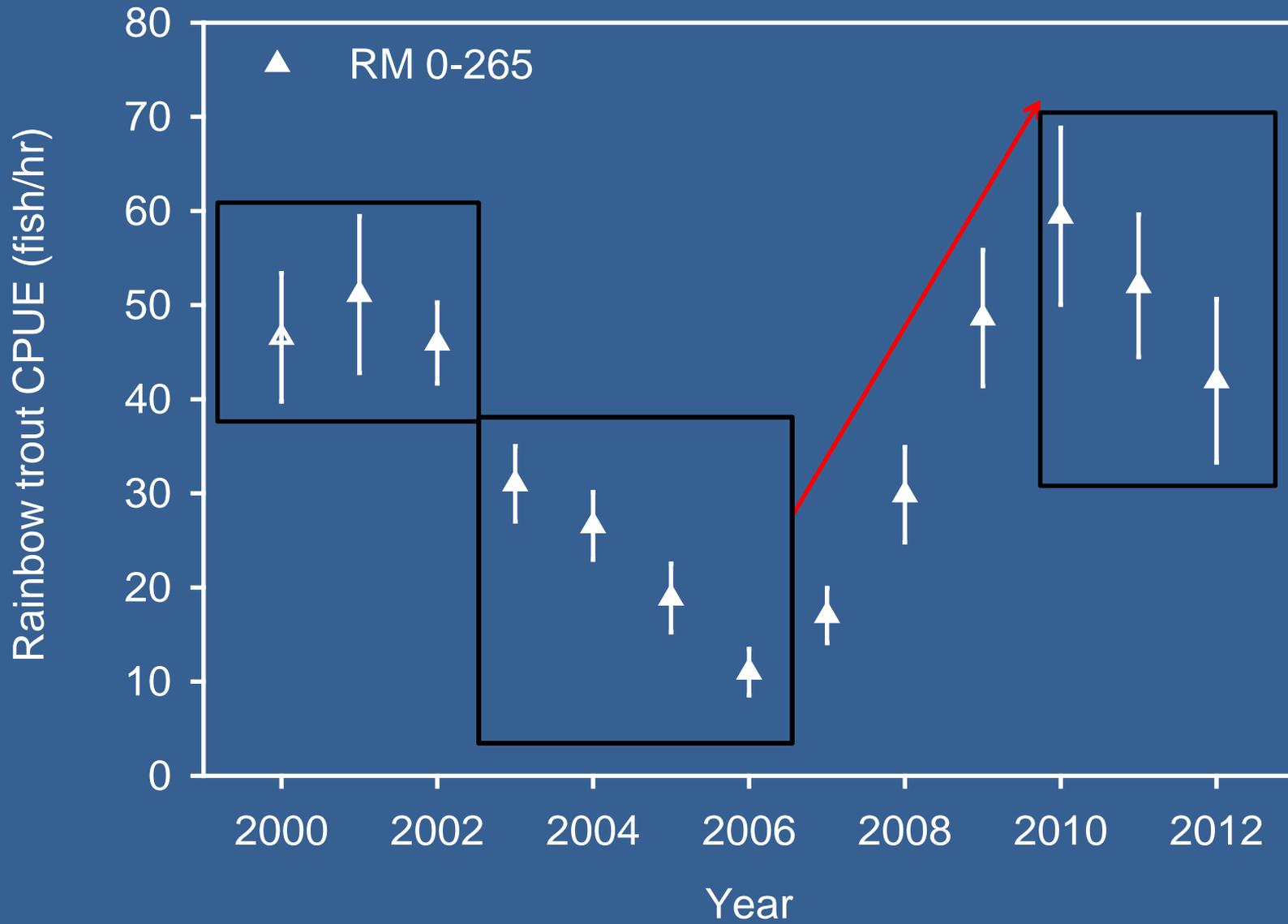




Rainbow Trout Abundance

- <1 Fish/hr
- 1-5 Fish/hr
- 5-10 Fish/hr
- 10-25 Fish/hr
- 25-50 Fish/hr
- 50-100 Fish/hr
- 100-200 Fish/hr







2012 Summary

- Lees Ferry
 - 2008 High flow event
 - 2011 Equalization flows
- Marble Canyon
 - Larger size
 - Similar abundance to Lees Ferry
- Grand Canyon
 - Decreased abundance downstream of LCR
 - Tributary influence

Questions?

