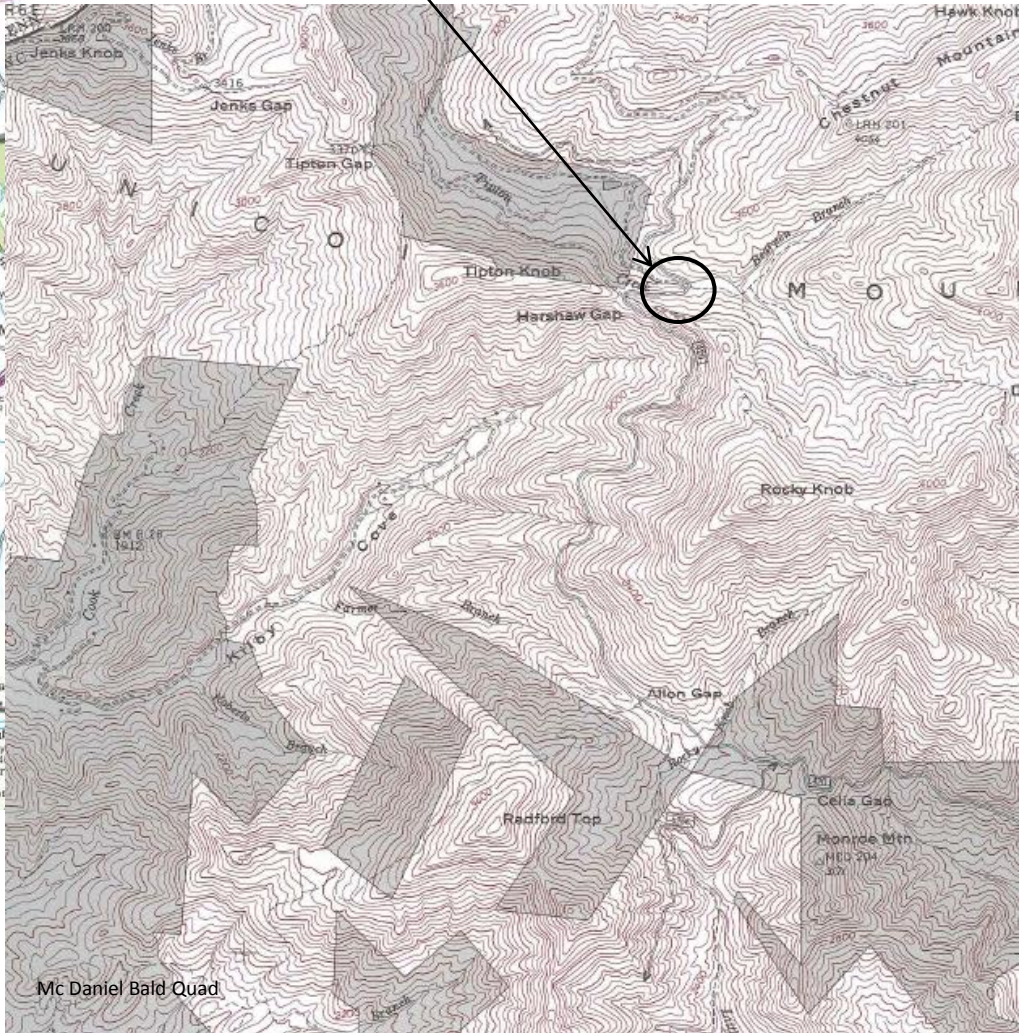
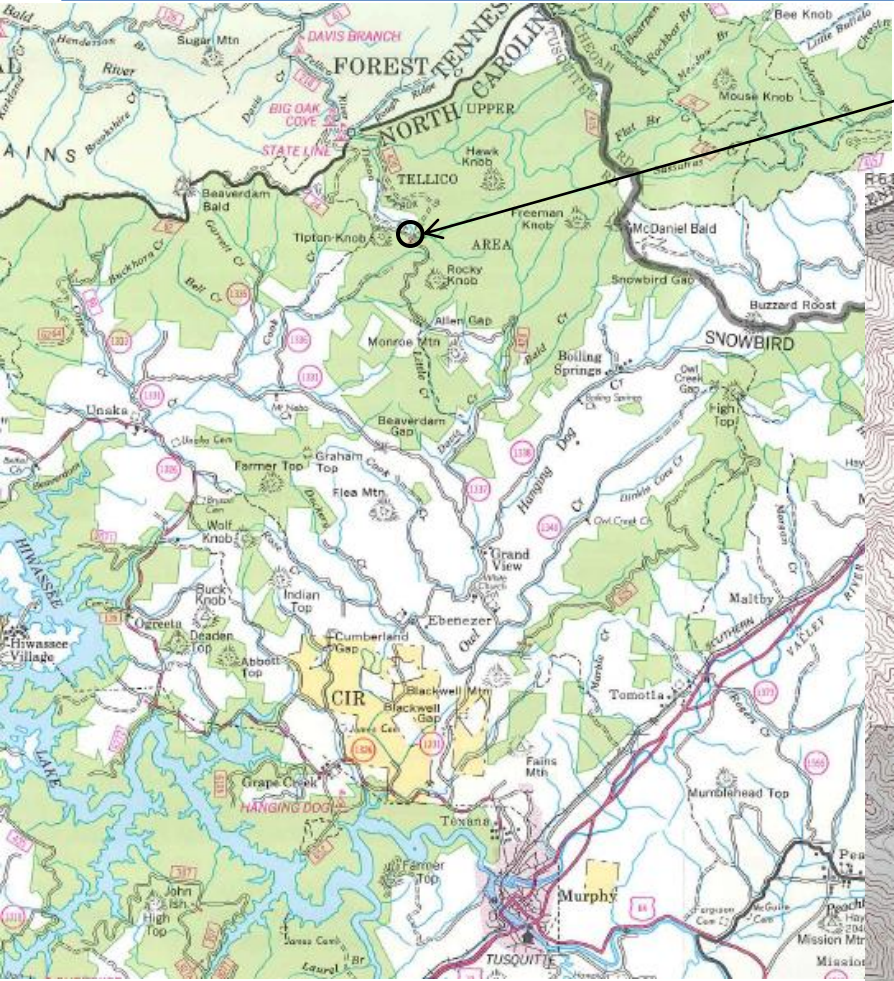


TIPTON CREEK CULVERT REPLACEMENT TIPTON CREEK - AQUATIC ORGANISM PASSAGE PROJECT 2011 PROJECT SUMMARY

PROJECT LOCATION



Date:

Looking upstream at outlet

Other

Looking downstream at inlet

Pre-
Removal



August
23, 2011



Site Description:

In the summer of 2011 the culvert at the Davis Creek Road (FSR 420) crossing of Tipton Creek was removed and replaced with a concrete arch, stream simulation crossing for the purpose of passing aquatic organisms, where the existing culvert was known to be a barrier to aquatic passage due to velocity and outlet drop. The crossing was sized using the 100-year flow calculation derived from the USGS Regression Equation for the mountains of North Carolina. Additionally, the width of the crossing was designed to accommodate a bankfull flow channel dimension plus a small area of floodplain. The channel was reconstructed through the crossing using the dimension, pattern, and profile of the reference reach upstream. The new channel was constructed using imported boulders and onsite alluvial materials. Grass seed was sown, and trees and shrubs were planted, both potted and live-stakes. Over the last year since construction, the site has experienced several small flood events. The site remains stable, passable to all aquatic species, and looks more and more natural every year as planted and natural vegetation establishes.

June 4,
2012

