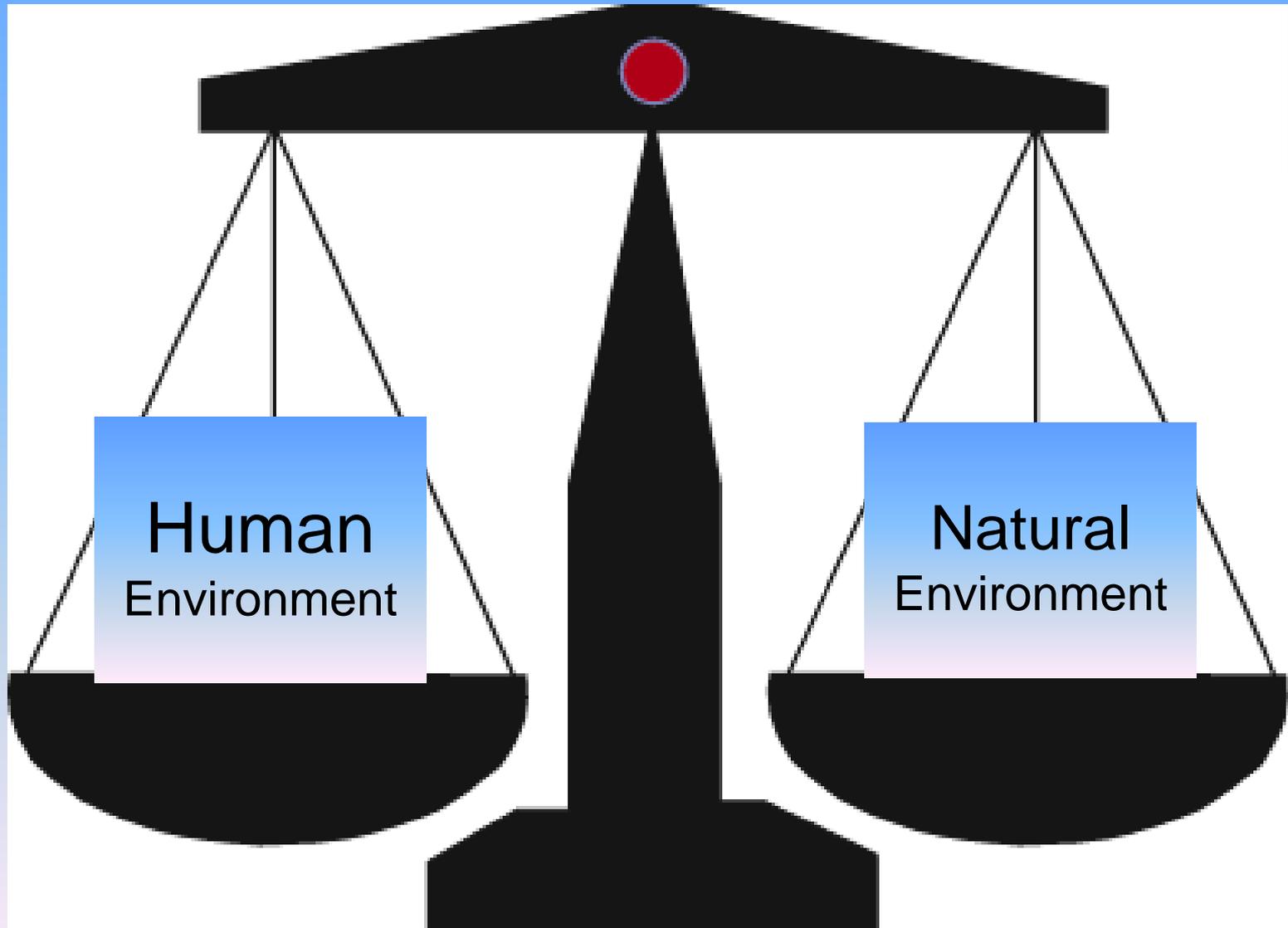


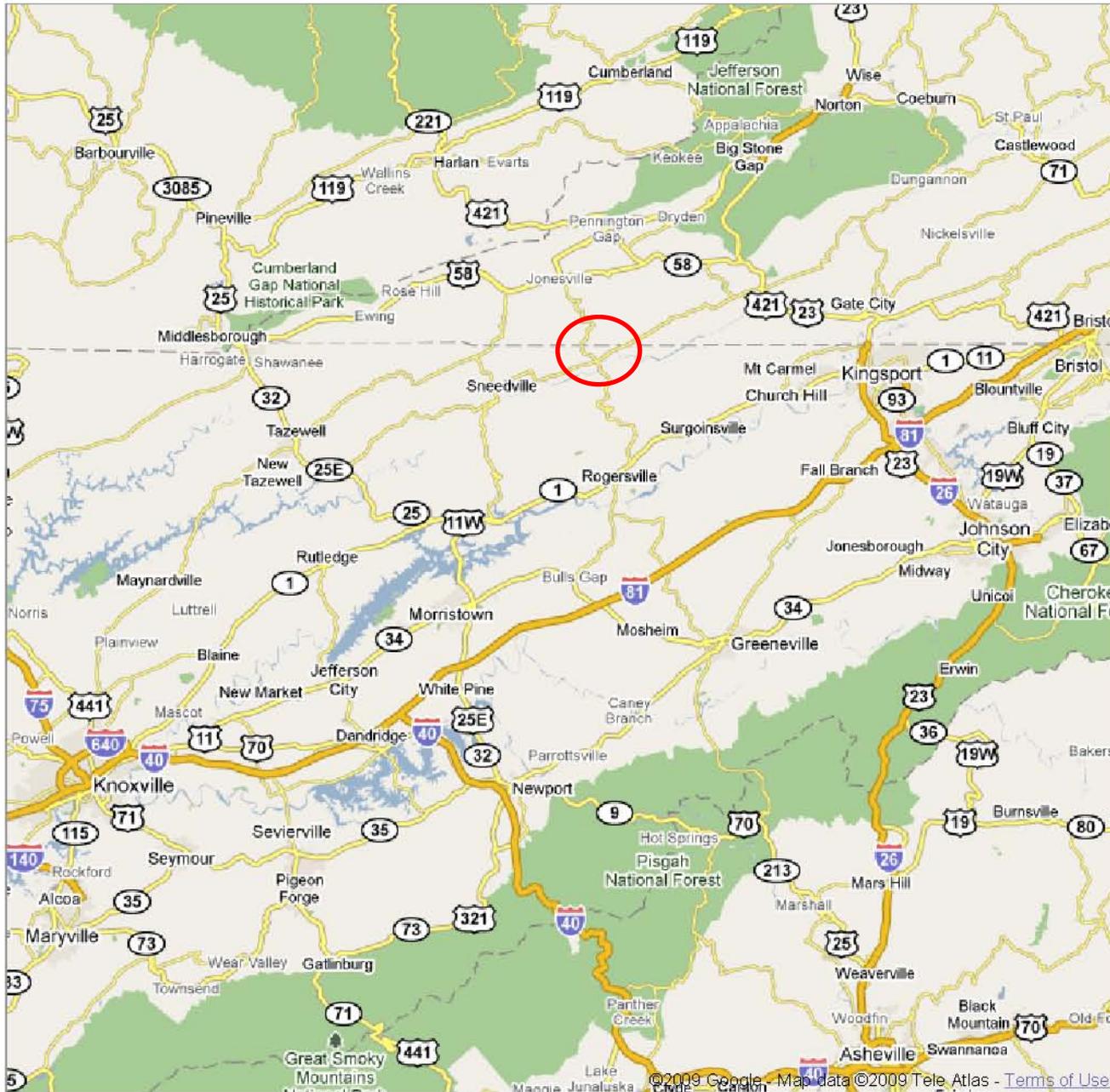


Rebuilding the Kyles Ford Bridge: People, Environment, History



Balance





Built in 1928 through a unique funding program, the state legislature authorized the construction of 18 toll bridges. Kyles Ford was the last operational bridge of the group.



The Need

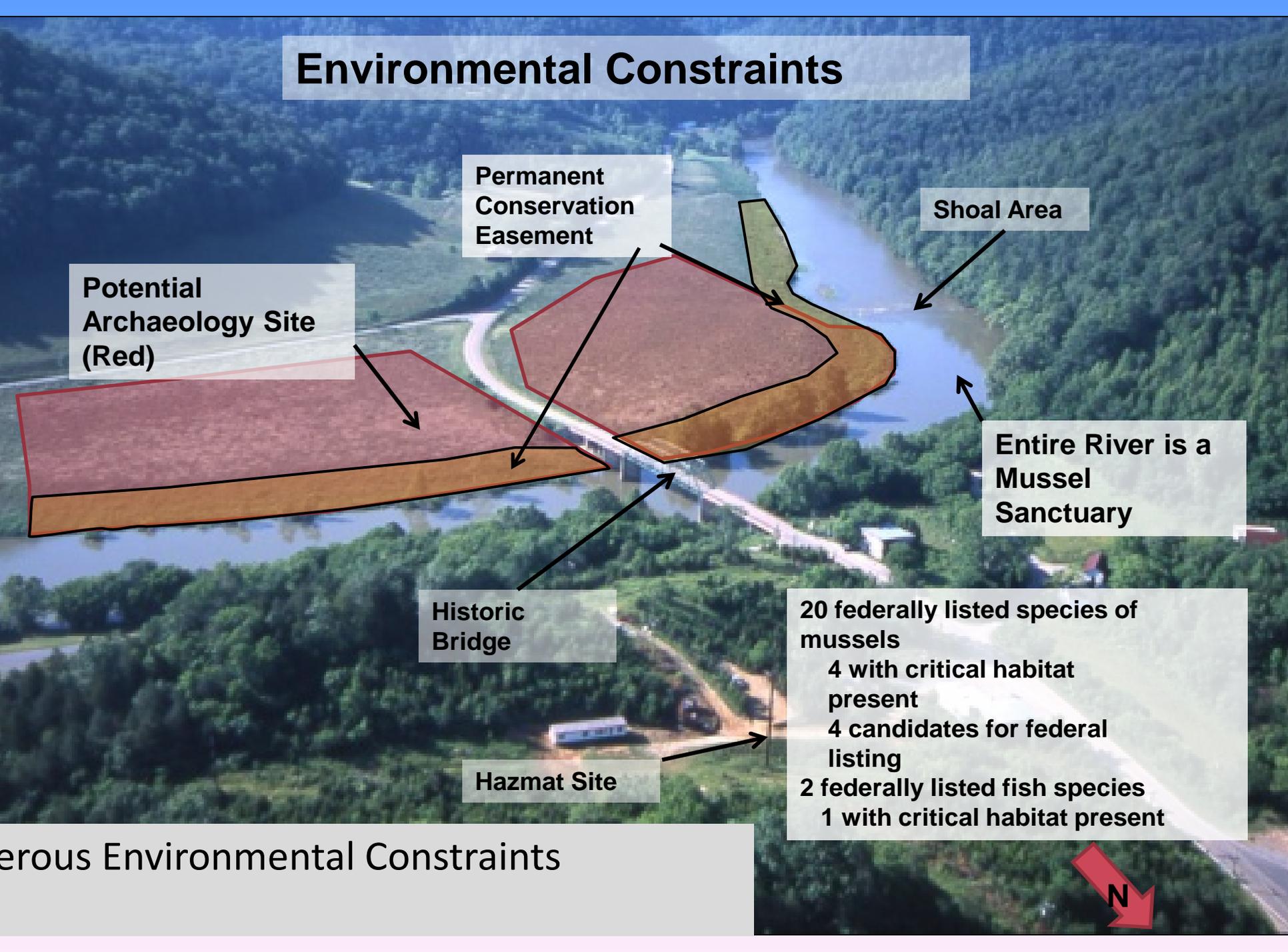
- The bridge was structurally deficient with a sufficiency Rating of 6 out of 100



Options

- Replace with a new bridge on current alignment
- Rehab/repair existing bridge
- Construct new bridge adjacent to existing

Environmental Constraints



Permanent
Conservation
Easement

Shoal Area

Potential
Archaeology Site
(Red)

Entire River is a
Mussel
Sanctuary

Historic
Bridge

20 federally listed species of
mussels

4 with critical habitat
present

4 candidates for federal
listing

2 federally listed fish species

1 with critical habitat present

Hazmat Site

erous Environmental Constraints

N

Human Environment Impacts

- Long commuter detours (1 of 2 bridges in Co.)
- Substantial economic impacts to commuters
- Impacts to emergency services
- Impacts to schools
- Local business/tourist impacts

Detour Route

Kyles Ford to Rogersville



Sheet piling installed to prevent runoff into the Clinch River



Drilling shaft for pier on Kyle's Ford bridge



Pier drilled and poured



North pier cap of Kyle's Ford bridge formed and ready to be poured



Cap for north pier of Kyle's Ford bridge completed



Setting beams on Kyle's Ford bridge.







Beams were erected by cranes working from the banks on both sides of the river. No work in the water.



Setting beams on Kyle's Ford bridge.



Deck being poured on Kyle's Ford bridge.



During concrete pours, containment materials were placed under the bridge



Bridge beams were too long for narrow switchback roads leading over the mountain to Kyles Ford causing numerous delays





Project Complete!



Mussel and madtom impressions on
Kyle's Ford bridge rails.



Success

- By working closely with agencies, TDOT was able to design and build a new bridge adjacent to the existing structure
- Historic bridge will remain as a tourist attraction
- Detour need was eliminated
- Business impacts reversed
- Emergency service options maintained