

Stream Relocation Guidelines

NOTE: These guidelines are for the piedmont and coastal regions. While these guidelines are similar to the trout county requirements, they do not replace the existing process for trout counties. This guidance is to be followed **prior to the permit process** to facilitate that process and to minimize impacts

"Minor Relocations"

Applicable when:

- Less than 100 feet of total relocation is required at a given crossing (from the end of the structure, including headwalls), and no more than 50 feet is relocated on any one side (upstream or downstream)

Technical guidelines:

-Relocation should be similar to original channel in
 Width
 Depth
 Gradient
 Substrate
 -Bank vegetation should be re-established, but no specific planting regime is required

Co-ordination with WRC field staff:

-No coordination is required unless in High Quality Waters(HQW), critical habitat(as mapped by WRC), or at locations involving Federal/State listed species. Treat these cases as "Standard Relocations".

Note: WRC coordination will be welcomed even on "Minor" projects.

"Standard Relocations"

Applicable when:

- Greater than 100 feet of total relocation is required at a given crossing (from the end of the structure including headwalls), Or more than 50 feet is relocated on any one side (upstream or downstream)

Technical guidelines:

-Relocation should be similar to original channel in
 Width
 Depth
 Gradient
 Substrate

For the following items, site specific requirements will be determined through coordination with the WRC field staff. These items will follow WRC's established guidelines and will incorporate any highway specific guidance jointly developed between WRC, Hydraulics, and Roadside Environmental:
 - Re-establishment of bank vegetation with planting regime required
 - Meanders and habitat structures (root wads, wing deflectors, etc.) approximating the original stream

Co-ordination with WRC field staff:

-Coordinate the relocation with the appropriate WRC district fisheries biologist

General Guidance: Minimize instream activities during peak spawning periods (April-June)

- Schedule instream activities during periods of low flow as much as possible
- Use vegetation to stabilize streambank vs. riprap to the maximum extent practicable
- Minimize use of fertilizer adjacent to stream
- Use native woody/shrub like species with small basal width within 25-50 ft. of the structure to reduce clogging. Beyond that distance use native tree species.
- It is preferred that bank vegetation be re-established prior to introducing flow into the channel.
- For reference utilize NC Wildlife Res. Comm. document "NC Stream Protection and Improvement Guidelines"

NOTE: Coordination with WRC on projects covered by nationwide permits (outside the 25 trout counties) is **voluntary**. This is a proactive effort by NCDOT and WRC minimize habitat impacts from highway projects and to facilitate communication and understanding at the field level.