

## **Appendix L**

# **Assumptions for Environmental Consequences Impact Analyses**



## **APPENDIX L ASSUMPTIONS FOR ENVIRONMENTAL CONSEQUENCES IMPACT ANALYSES**

Calculations for the impact analyses for the floodplains, Gap Analysis Program (GAP) land cover types, Waters of the U.S., and Essential Fish Habitat (EFH) sections of Chapter 4, Environmental Consequences, were made in a Geographic Information System (GIS) using Limits of Construction (LOC) for each alternative. The Alternative 1 (Proposed Project) LOC were provided by Palmetto Railways and were based on construction design files. LOC for Alternatives 2 through 7 were created by Atkins using the assumptions below.

Alternatives 2, 3, and 4 used the LOC boundary from Alternative 1 (Proposed Project) for the Intermodal Container Transfer Facility (ICTF) site. Alternatives 5, 6, and 7 used a buffer of 35 feet around the River Center ICTF Site design area.

All roads were buffered 25 feet from the limits of the design files to create the LOC. All rail tracks (including rail bridges) were buffered 43.9 feet from the limits of design files to create the LOC. These buffer distances were calculated to match the buffer distances provided by Palmetto Railways in the Alternative 1 (Proposed Project) LOC for each feature type (road/rail) as closely as possible. Rail corridors were buffered wider than road corridors to account for laydown areas included in the Alternative 1 (Proposed Project) design.

Each alternative's LOC polygon was divided and classified by impact area. The inclusion of impact areas varies among alternatives. Additionally, some impact areas vary in size and location between alternatives. For example, the Southern Rail Connection for Alternative 3 is shorter than the Southern Rail Connection for Alternative 1 (Proposed Project) due to differences between the Kingsworth / Milford alignments. Another example is that the Southern Rail Connection for Alternatives 3 and 6 passes to the west of Cooper Yard, and to the east for all other alternatives.

Table L-1 shows each alternative's impact areas with shaded cells, and explains how the impact areas were combined to report impacts within Chapter 4. Not all impacts to resources in Chapter 4 are broken out by impact area. Some impacts to resources are reported as a total for each alternative.

Table L-1  
Impact Areas by Alternative

| Impact Area                  | Alternative 1<br>(Proposed<br>Project) | Alternative 2 | Alternative 3 | Alternative 4 | Alternative 5 | Alternative 6 | Alternative 7 |
|------------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Related Activity             |  |               |               |               |               |               |               |
| Drayage Road                 |  |               |               |               |               |               |               |
| Drayage Road<br>Bridge       |  |               |               |               |               |               |               |
| Hobson Bainbridge            |  |               |               |               |               |               |               |
| ICTF <sup>1</sup>            |  |               |               |               |               |               |               |
| Noisette Bridge <sup>2</sup> |  |               |               |               |               |               |               |
| Northern Rail<br>Connection  |  |               |               |               |               |               |               |
| Southern Rail<br>Connection  |  |               |               |               |               |               |               |

<sup>1</sup> Navy Base ICTF Site for Alternatives 1–4; River Center ICTF Site for Alternatives 5–7.

<sup>2</sup> The Noisette Bridge for Alternative 2 differs in size and location from the Noisette Bridge in Alternatives 1–3 and 5–6.