

# APPENDIX M

## UPDATED ENVIRONMENTAL RESOURCE MAPBOOKS



D.C. TO RICHMOND SOUTHEAST HIGH SPEED RAIL

# Appendix M

## UPDATED ENVIRONMENTAL RESOURCE MAPBOOKS

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The Draft Environmental Impact Statement (EIS)<sup>1</sup> presented mapping of environmental resources in Chapter 3 (Affected Environment), Chapter 4 (Environmental Consequences), and throughout its technical appendices. This appendix presents updates to the environmental consequences mapping for those resources that have changed since the publication of the Draft EIS, based on the Final EIS limits of disturbance (LOD)<sup>2</sup> for the Preferred Alternative.

- If an updated map is not presented herein, a reference is given to the appropriate section(s) of the Draft EIS where the reader can find the original figures or mapbooks.
- The majority of the mapping of environmental resources in the Draft EIS either did not show the Project LOD, or were presented at a scale where the minor changes in LOD since the publication of the Draft EIS (as described in Chapter 4 of this Final EIS) are not discernable. Additionally, some mapping was specific to Build Alternatives that are not part of the Preferred Alternative. Accordingly, these maps are not reproduced herein as the original mapping remains accurate or no longer relevant.

The updated Preferred Alternative mapbook, which shows the LOD and related engineering improvements, is presented separately in Appendix L of the Final EIS and does not include any environmental resources or their Project impacts.

Below is the list of environmental resources, as presented in order in Chapter 5 of the Final EIS, with the locations of where to find related mapping noted. **The mapping of environmental resources that is updated in the Final EIS, whether in this appendix or other locations, are emphasized in bold text on the following pages.** For environmental resources that did not need to be updated, the reader can use Appendix L in a side-by-side comparison with the resource mapping from the Draft EIS, as referenced below, to view the Preferred Alternative LOD relative to the locations of existing environmental resources.

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<sup>1</sup> The Draft EIS for the DC2RVA Project was published on September 8, 2017, and is available on the Project website: <http://dc2rvarail.com/draft/>

<sup>2</sup> Physical impacts to environmental resources are estimated within the LOD, which are defined as the boundary within which all construction, materials storage, grading, landscaping, and related activities will occur. Refer to the introduction of Chapter 5 of the Final EIS for full details.

### **Water Resources (Final EIS Section 5.1)**

- **Surface waters/major rivers, streams, wetlands, Chesapeake Bay Resource Protection Areas (RPAs), and impaired waters: Refer to this Final EIS Appendix M1 for an updated mapbook showing the Preferred Alternative impacts**
- Watershed boundaries: Refer to Draft EIS Figure 3.1-1
- Floodplains and impaired waters: Refer to Draft EIS Figure 3.1-3
- Virginia’s Coastal Zone: Refer to Draft EIS Appendix M, Figure 3-3

### **Topography, Geology, and Soils (Final EIS Section 5.2)**

- Physiographic Provinces: Refer to Draft EIS Figure 3.2-1

### **Agricultural Lands (Final EIS Section 5.3)**

- Farmland Soils: Refer to Draft EIS Appendix N, Figure N-2 mapbook, for mapping of Prime Farmlands and Farmlands of Statewide Importance
- Agricultural and Forestal Districts: Refer to Draft EIS Figure 3.3-1 (note that this resource only occurred in Build Alternatives 5C and 5C-Ashcake, which are not part of the Preferred Alternative)

### **Mineral Resources (Final EIS Section 5.4)**

- Mines and Mineral Resources: Refer to Draft EIS Figure 3.4-1 (note that this resource only occurred in Build Alternative 3C, which is not part of the Preferred Alternative)

### **Solid Wastes and Hazardous Materials (Final EIS Section 5.5)**

- **Hazardous Materials Impacts: Refer to this Final EIS Appendix M2 for an updated mapbook showing the Preferred Alternative impacts**
- Hazardous Materials Sites: Refer to Draft EIS Appendix O, Figure O-1 mapbook

### **Air Quality (Final EIS Section 5.6)**

- NAAQS Nonattainment Areas: Refer to Draft EIS Figure 3.6-1

### **Noise and Vibration (Final EIS Section 5.7)**

- Noise:
  - Refer to Draft EIS Figure 3.7-2 for Noise Measurement Locations
  - Refer to Draft EIS Appendix P (Noise and Vibration Technical Report) for Noise Impacts and Impact Contour Mapbook attachments, as follows:
    - Attachment A, Noise Analysis Area 1
    - **Attachment B, Noise Analysis Area 2; refer to this Final EIS Appendix M3 for an updated Sheet 1 (Crystal City)**
    - Attachment C, Noise Analysis Area 3A & 3B (includes Preferred Alternative 3B)
    - Attachment E, Noise Analysis Area 4
    - Attachment F, Noise Analysis Area 5A, 5B, & 5D (includes Preferred Alternative 5A)
    - **Attachment N, Noise Analysis Area 6F; refer to this Final EIS Appendix M3 for an updated Sheet 4 (Hermitage Road)**

- **Vibration:** There are no changes to the vibration impacts mapping as presented in Draft EIS Appendix P (Noise and Vibration Technical Report). For Vibration Impacts and Impact Contours, refer to the Appendix P Mapbook attachments, as follows:
  - There are no vibration-sensitive receptors within Area 1
  - Attachment P, Vibration Analysis Area 2
  - Attachment Q, Vibration Analysis Areas 3A & 3B (includes Preferred Alternative 3B)
  - Attachment S, Vibration Analysis Area 4
  - Attachment T, Vibration Analysis Areas 5A, 5B, & 5D (includes Preferred Alternative 5A)
  - Attachment W, Vibration Analysis Areas 6B-S Line, 6D, 6F, 6G (includes Preferred Alternative 6F)

**Aesthetic and Visual Environment (Final EIS Section 5.9)**

- Refer to Draft EIS Section 3.9 for maps and photos related to the visual environment

**Biological Resources (Final EIS Section 5.10)**

- **Submerged Aquatic Vegetation:** Refer to this Final EIS Appendix M4 for an updated mapbook showing the Preferred Alternative impacts
- **Bald Eagle Nests:** Refer to this Final EIS Appendix M5 for an updated mapbook showing the Preferred Alternative impacts
- **EcoRegions:** Refer to Draft EIS Figure 3.10-1
- **Designated Wildlife Areas:** Refer to Draft EIS Figure 3.10-2
- **Anadromous Fish Waters:** Refer to Draft EIS Appendix M, Figure 3-8

**Community Resources (Final EIS Section 5.11)**

- **Community Facilities:** Refer to Draft EIS Appendix Q (Community Impact Assessment Technical Report), Figure 3-1

**Title VI and Environmental Justice (Final EIS Section 5.12)**

- **Environmental Justice Census Tracts:** Refer to this Final EIS Appendix M6 for an updated mapbook showing the Preferred Alternative impacts

**Archaeological/Aboveground Cultural & Historic Resources (Final EIS Section 5.13)**

- Refer to Appendix D of the Final EIS for the updated cultural resource reports and summaries, which includes locations of the 120 properties that were identified in the Area of Potential Effects (APE) for the Preferred Alternative, including those that have been identified since the publication of the Draft EIS
- Refer to Chapter 6 of the Final EIS for maps of the historic properties that are adversely affected by the Project

**Parklands, Recreational Areas, and Refuges (Final EIS Section 5.14)**

- Refer to Appendix A of the Final EIS for an updated Draft EIS Figure 3.14-1 mapbook
- Refer to Chapter 6 of the Final EIS for maps of parks that were considered during the Section 4(f) Evaluation for the Project

### **Transportation Facilities (Final EIS Section 5.15)**

- **Public and Private At-Grade Crossing Improvements: Refer to Appendix L of the Final EIS, which includes symbology of proposed crossing treatments as part of the Preferred Alternative for the Project**

The following environmental resource areas do not have any maps associated with them, either in the Draft or Final EIS:

- Energy (Final EIS Section 5.8)
- Utilities (Final EIS Section 5.16)
- Safety and Security (Final EIS Section 5.17)
- Construction Impacts (Final EIS Section 5.18)
- Indirect and Cumulative Impacts (Final EIS Section 5.19)
- Relationship between Short-Term Impacts and Long-Term Benefits (Final EIS Section 5.20)