



THE OHIO STATE UNIVERSITY

Scioto Brush Creek and South Fork Scenic River Designation

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Criteria and Findings for Scioto Brush Creek

Scenic River Designation Criteria

Criteria 2: *Roads are permissible within 300 feet of the river but may not comprise more than 25% of the scenic river segment length.*

Findings: Does not meet Criteria 2. The roads within 300 feet of the Scenic River segment are 27.4% of the proposed Scenic River segment length. Specifically, we found that a total of 57 road segments intersected the 300 feet buffer from the stream (Figure 1). The total road length within 300 ft was 18.82 km, while the scenic stream segment length is 68.59 km. Because the percentage is very close to the 25% recommended, we recommend exception to Criteria 2. Alessandra Bertucci and Jalen Smith, both master students in Ecological Engineering at Ohio State University, performed this analysis using the Ohio Department of Transportation Road segment dataset.

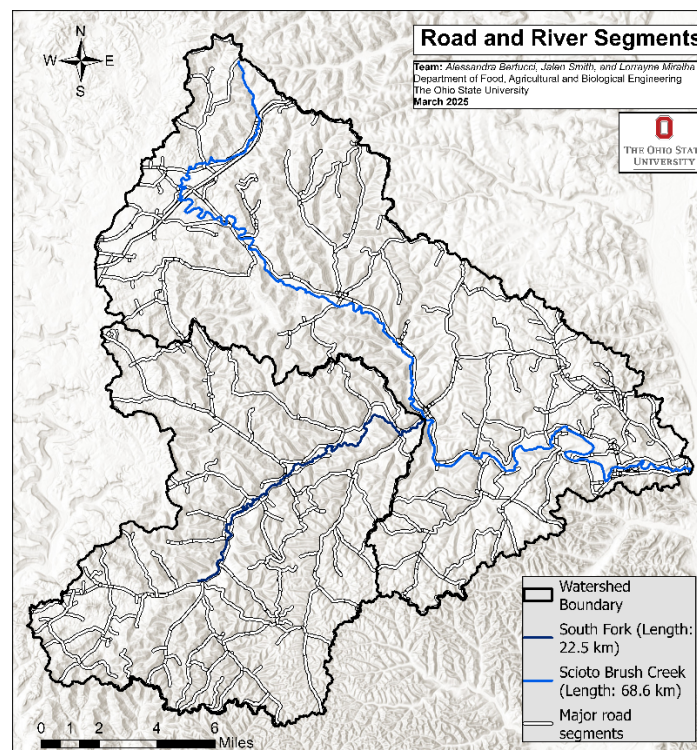


Figure 1 Map illustrates that major roads intersect with both the Scioto Brush Creek and South Fork river segments.

Criteria 4: *Some commercial, industrial and other types of development may occur within 300 feet of the river. However, this development shall not be of such a density as to negatively impact the habitat and quality of the stream and its floodplain. No more than 10% percent of the river's watershed upstream and adjacent to the scenic river segment may be covered with impervious surfaces at the time of designation. If the upstream and adjacent watershed is at 10% impervious cover and is contained within an urbanizing area, then that river segment may not be considered for designation.*

Findings: Meets Criteria 4. Figure 2 illustrates the overall land use percentage category for the entire watershed. Some commercial buildings occur within 300 feet of the proposed Scenic River segment, but most of the development is of low intensity. The most populated area is the upstream portion of the watershed in the first 10 miles of the river segment. Approximately 6.7% of the Scioto Brush Creek’s adjacent and upstream watershed has impervious surfaces. Therefore, development in the watershed does not exceed the 10% recommended. This analysis was performed by Layla Ramsey, undergraduate honors student at Ohio State University, using the 2023 National Land Cover Database.

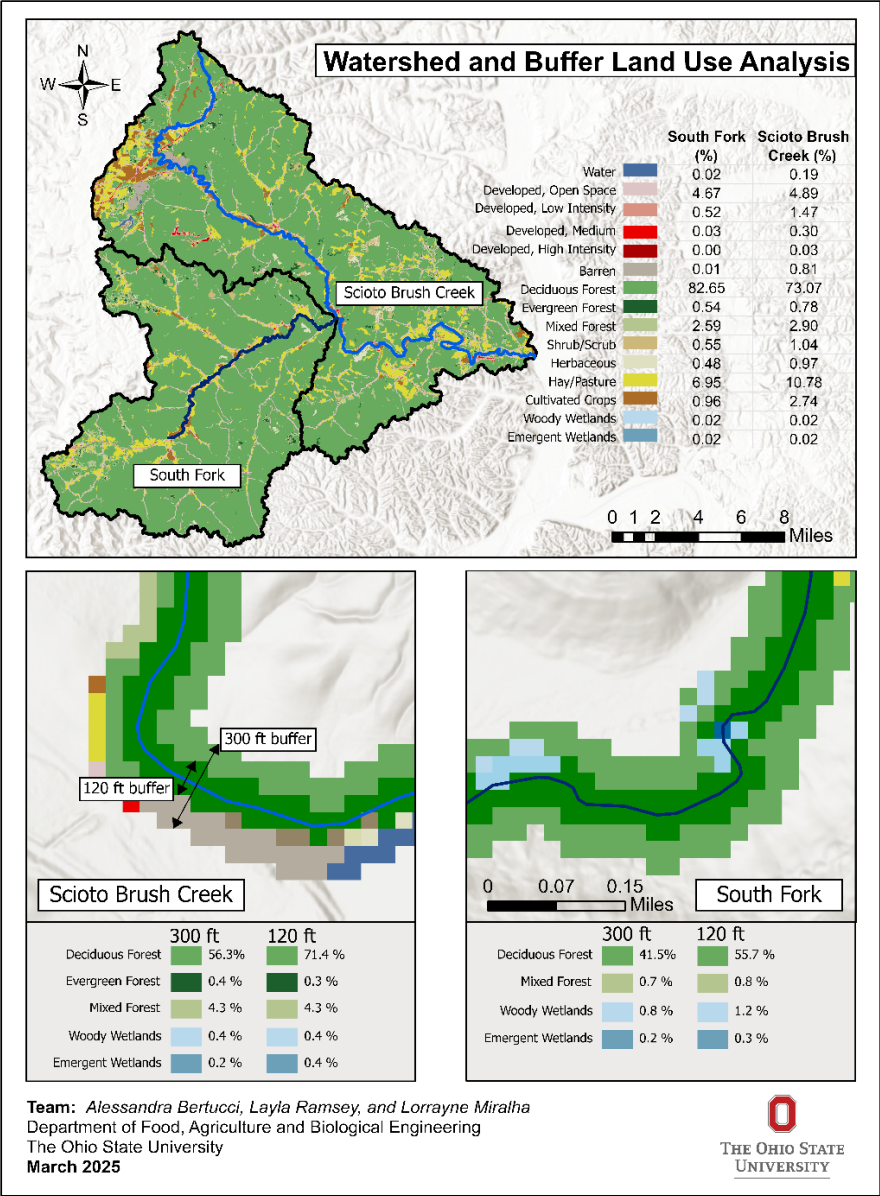


Figure 2 Watershed and buffer scale analysis of the land use categories occupying the upstream and adjacent areas of both the Scioto Brush Creek and the South Fork river segments for scenic designation.

Criteria 5: *The area adjacent to at least 25% of the stream length, considering both banks, shall be in native forest or wetland, outward from the river to a depth of 300 feet or greater. In addition, 50% of the remaining corridor shall be in native forest or wetland outward from the river to a depth of 120 feet or greater.*

Findings: Meets Criteria 5. Approximately 61.7% of the shoreline is in a natural condition within at least 300 feet of Scioto Brush Creek and 76.8% of the corridor is in native forest or wetland outward from the river to a depth of 120 feet or greater (Figure 2 – bottom). This analysis was completed by Alessandra Bertucci, master student in Ecological Engineering at Ohio State University using the 2023 National Land Cover Database.

Criteria and Findings for South Fork

Scenic River Designation Criteria

Criteria 2: *Roads are permissible within 300 feet of the river but may not comprise more than 25% of the scenic river segment length.*

Findings: Does not meet Criteria 2. The roads within 300 feet of the Scenic River segment are 45.4% of the proposed Scenic River segment length. Specifically, we found that a total of 16 road segments intersected the 300 feet buffer from the stream (Figure 1). The total road length within 300 ft was 10.21 km, while the scenic stream segment length is 22.51 km. Alessandra Bertucci and Jalen Smith performed this analysis using the Ohio Department of Transportation Road segment dataset.

Criteria 4: *Some commercial, industrial and other types of development may occur within 300 feet of the river. However, this development shall not be of such a density as to negatively impact the habitat and quality of the stream and its floodplain. No more than 10% percent of the river's watershed upstream and adjacent to the scenic river segment may be covered with impervious surfaces at the time of designation. If the upstream and adjacent watershed is at 10% impervious cover and is contained within an urbanizing area, then that river segment may not be considered for designation.*

Findings: Meets Criteria 4. Some commercial buildings occur within 300 feet of the proposed Scenic River segment, but most of the development is of low intensity. The most populated area is the upstream portion of the watershed in the first 5 miles of the river segment. Approximately 5.2% of the South Fork's adjacent and upstream watershed has impervious surfaces (Figure 2). Therefore, development in the watershed does not exceed the 10% recommended. This analysis was performed by Layla Ramsey, undergraduate honors student at Ohio State University, using the 2023 National Land Cover Database.

Criteria 5: *The area adjacent to at least 25% of the stream length, considering both banks, shall be in native forest or wetland, outward from the river to a depth of 300 feet or greater. In*

addition, 50% of the remaining corridor shall be in native forest or wetland outward from the river to a depth of 120 feet or greater.

Findings: Meets Criteria 5. Approximately 43.2% of the shoreline is in a natural condition within at least 300 feet of South Fork, and 57.9% of the corridor is in native forest or wetland outward from the river to a depth of 120 feet or greater (Figure 2 – bottom). This analysis was completed by Alessandra Bertucci, a master's student in Ecological Engineering at Ohio State University, using the 2023 National Land Cover Database.