



Apr 24th, 12:00 AM

The Bridge

T.J. Peeler

Follow this and additional works at: <https://digitalcommons.winthrop.edu/source>

Peeler, T.J., "The Bridge" (2020). *Showcase of Undergraduate Research and Creative Endeavors (SOURCE)*. 182.

https://digitalcommons.winthrop.edu/source/SOURCE_2020/allpresentationsandperformances/182

This Poster Presentation is brought to you for free and open access by the Conferences and Events at Digital Commons @ Winthrop University. It has been accepted for inclusion in Showcase of Undergraduate Research and Creative Endeavors (SOURCE) by an authorized administrator of Digital Commons @ Winthrop University. For more information, please contact digitalcommons@winthrop.edu.

Abstract

Rock Hill is expanding. Long term projections for growth in and around the City of Charlotte means that people will continue to move to the City of Rock Hill. Recently the Carolina Panthers announced the purchase of 200 acres for development of a practice facility, restaurants, hotels, office space, and residential expansion. Rock Hill has hosted national competitions in numerous sports and has recently hosted a world competition in biking. Infrastructure must be improved to help support a growing population and increased visitation. This project focuses on the location of a new bridge crossing over the Catawba river between the 21 bypass bridge and the highway 5 bridge which would help connect the Indian Land, Weddington, Waxhaw, and Monroe areas to Rock Hill. This bridge would promote visitation to the soon to be 1,900 acre destiny park that will be constructed at the end of Neely store road. It also has the potential to increase Rock Hill's economic interest by allowing easier access to Destiny park, the Panthers practice facility, and Rock Hill shopping areas. Using geographic information systems and public data I investigated a potential bridge site to identify sensitive habitats, parcel ownership, and accessibility.

Note: In images A,B, and C there are two yellow highlighted roads. The road on the left side of each map is Dave Lyle Boulevard and the road on the right side of each image is Charlotte highway (US 521). The bridge would seek to connect these two roads.

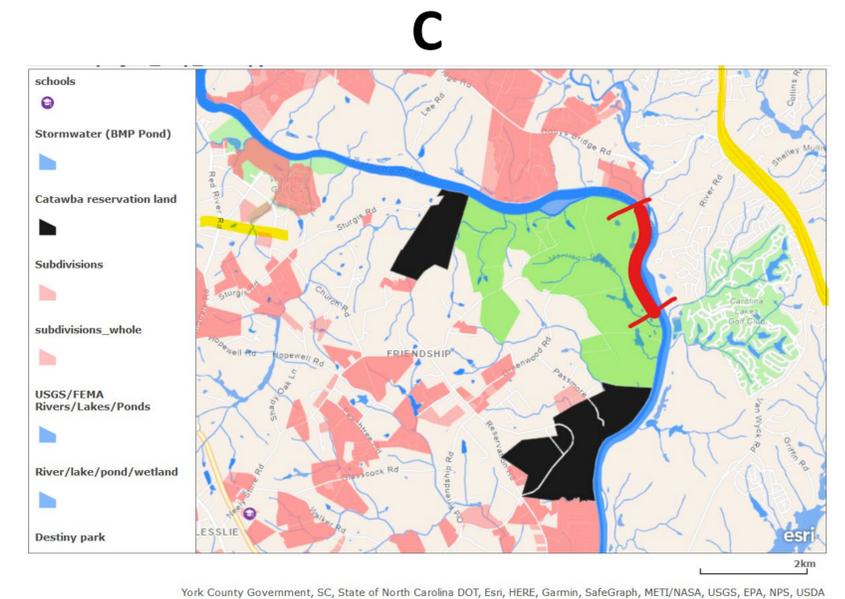
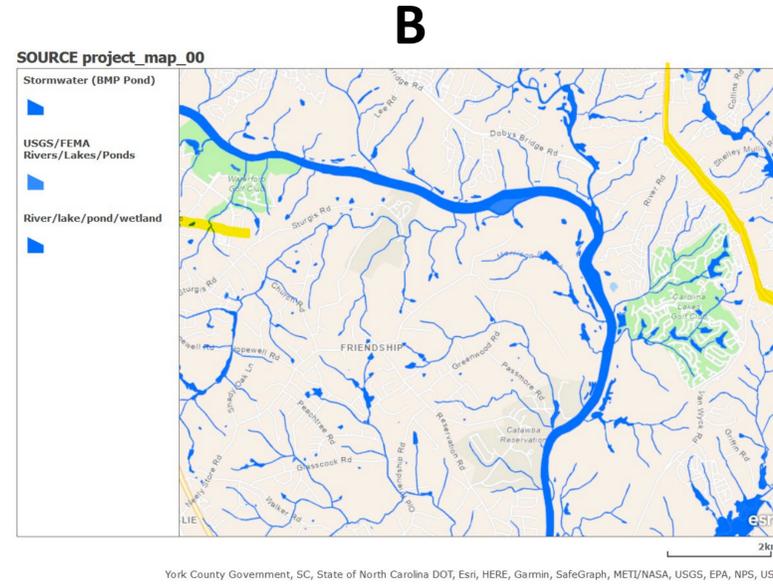
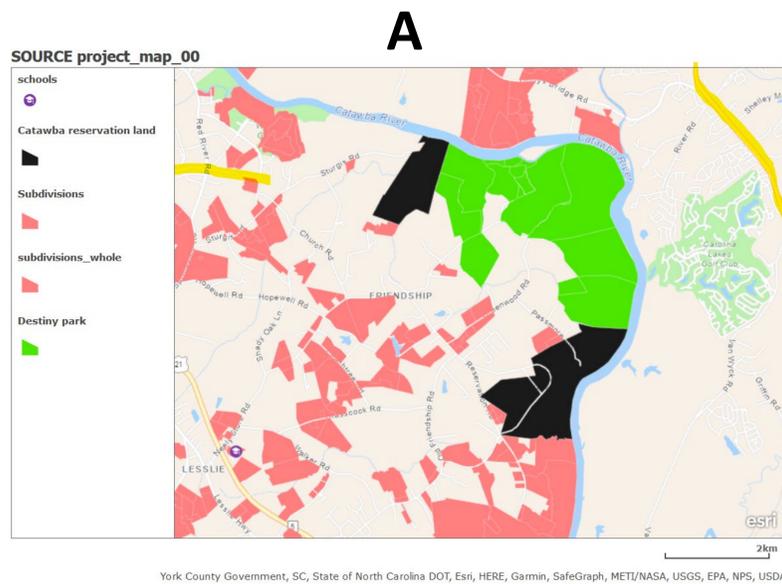


Image A

This image displays Schools, subdivisions, and Catawba reservation land that are in the area of interest. These locations must be avoided when narrowing down the exact location of the roads leading to and from the bridge. Also included in this image is the future Destiny park land (green). The roads leading to the bridge will run through the middle of this area.

Image B

This image contains the Catawba river as well as existing wetlands and waterways in the area of interest. Although these areas can not be avoided it is important to understand their location to form a proper environmental impact statement.

Image C

This image is a combination of image A and B. Once all concerned areas are displayed the most logical location for the bridge sight is along the stretch of river highlighted in red.

Further investigation

To further narrow down the possible locations for the bridge research would need to be conducted on local endangered species, slope data (topographic data), subterranean utility lines, and parcel ownership. This should be done for the bridge sight itself as well as the land that would support the roadway connecting to the bridge.