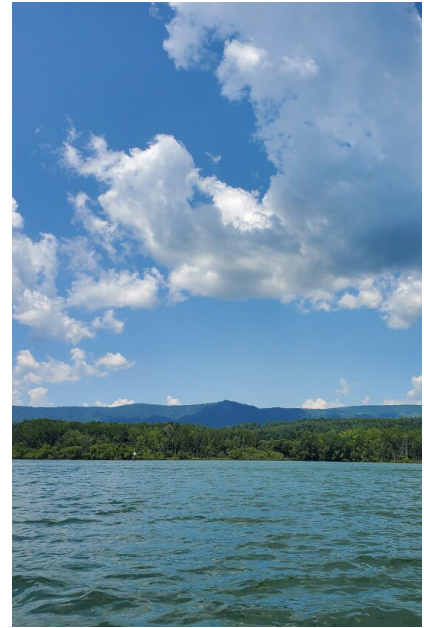


Great Meadows Megosite Burke County, North Carolina



Proposed Conservation Site Plan

February 20, 2024

Prepared By





Cover Letter:

Catawba Riverkeeper, Foothills Conservancy of North Carolina, and Lake James Environmental Association have been closely following the Great Meadows Megasite Project in Burke and McDowell counties and have created a site conservation plan to offer guidance for the protection of the environment and the local community.

Proposed industrial development of the site in close proximity to Lake James, Muddy Creek, and the City of Morganton's drinking water supply raises legitimate concerns. Lake James is a major economic driver for the region due to its excellent water quality, limitless recreational opportunities, and substantial tax base for Burke and McDowell counties.

This proposal contains a variety of guidelines and standards including, but not limited to, stream buffers, permanent land conservation, setbacks for the community and viewshed, and public recreation access all designed to protect the environment and local community. This plan was developed using a combination of publicly available GIS data and multi-disciplinary expertise from staff members of three respected environmental organizations. Our goal is to present a plan that focuses on protecting the human and natural environments around the site while accommodating development.

Partners Involved:

Catawba Riverkeeper is a 501(c)(3) non-profit with over 7,500 members whose mission is to preserve, protect, and restore the waters of the Catawba-Wateree River basin for all through education, advocacy, and engagement.

Foothills Conservancy of North Carolina is a nationally accredited nonprofit land trust that has permanently protected over 70,000 acres of land in its 8-county service area, which includes Burke and McDowell counties, through land transactions and conservation easements that preserve land and water for the benefit of people and all living things.

Lake James Environmental Association is a 501(c)(3) non-profit dedicated to protecting and enhancing the long-term environmental health and natural beauty of Lake James and its watershed.

Executive Summary:

This conservation site plan and its recommendations propose limiting industrial development to portions of five contiguous parcels of land and implementing environmental restrictions on the undevelopable portions of those parcels. The remaining nine parcels that comprise the site are proposed for permanent conservation, whether easements or fee simple donations, to be held by Foothills Conservancy of North Carolina (FCNC).

Development on the industrial zoned parcels will be limited to building envelopes that are surrounded by vegetated buffers designed to minimize noise and visual impacts. Additional vegetated streamside buffers and conservation restrictions on upland acreage are proposed for all properties to protect water quality onsite and downstream.

A rail connection is omitted from this plan as it would likely cross and impact the most environmentally sensitive parcel, which includes a significant 3.5-acre wetland, and the rugged terrain of that area of the site is not conducive to rail access. The plan also proposes the establishment of recreational assets for use by employees of future industries as well as the local community. Active construction sediment and erosion control measures and post-construction stormwater control measures should exceed minimum requirements and include green infrastructure.

Purpose and Objectives:

Catawba Riverkeeper (CRF), Foothills Conservancy of North Carolina (FCNC), and Lake James Environmental Association (LJEA) evaluated the proposed development of the Great Meadows Megasite as presented by Burke County and Burke County Development, Inc. The following site conservation plan offers guidance on how this project can be undertaken to best protect water quality, the local community, and the environment.

Our organizations recognize that this project can be transformational for the County and the region, but it must be done responsibly. It is not the intention of this report to be misconstrued as any of our organizations taking a stance on the project. Rather, FCNC, CRF, and LJEA are offering solutions to protect the integrity of the human and natural environments of the site itself, and of the immediate vicinity adjacent to the proposed Megasite should it be developed.

Background:

In October 2023, the North Carolina State Legislature allocated \$35.8 million to Burke Development Inc. (BDI), a quasi-governmental 501(c)(3) organization that was created to promote economic growth in Burke County. The funding is for the acquisition and infrastructure planning/development of 14 parcels of land in Burke and McDowell counties totaling



just over 1,300 acres. The land is intended for the creation of an industrial Megasite, known as the Great Meadows Megasite project. The 14 parcels are currently owned by a private entity, Great Meadows, Inc, which is requesting that all the land be purchased by BDI as a package deal. As the organization in charge of the Megasite project, BDI is seeking to rezone some of the parcels in advance of the land purchase. While some of these parcels are already zoned for industrial use, others are zoned for residential and general business.

Location:

The proposed Great Meadows Megasite Project (1,343 acres +/-), located primarily in western Burke County (including about 199 acres in McDowell County) is mostly forested adjoining light residential, agricultural, industrial use (Bridgewater’s Chip Mill), and other limited commercial business uses. It offers a predominantly distinct low-density, rural character typical of small communities with 150+ years of history.

The parcel assemblage adjoins I-40 and Highway 70, which serve as the main thoroughfares for area residents, numerous visitors, and recreationists traveling to Lake James, one of Burke County’s most valuable natural resources. Located just 3 miles from I-40, Lake James is a major recreation destination for the region, and a source of hydroelectric power generation (Linville River dam). The first in a chain of eleven Duke Energy impoundments on the Catawba River, Lake James is arguably the cleanest of all of these reservoirs because of its headwater position and because of the conserved forestlands bounding numerous clean tributary streams that feed it, including Burke County’s Paddy’s Creek, White Creek, and the state-designated natural and scenic river, Linville River (both creeks originate on public conservation lands). The lake is also fed by and drains into the Catawba River, classified by the State as “trout waters,” and is a popular paddling and fishing destination. The Catawba River and surrounding subwatershed areas are classified as a “water supply watershed” for the City of Morganton (NC DEQ classification -” WS-IV” and “Trout.”) Morganton’s drinking water intake is located approximately 10 miles downstream from Lake James (see **Fig 1**).

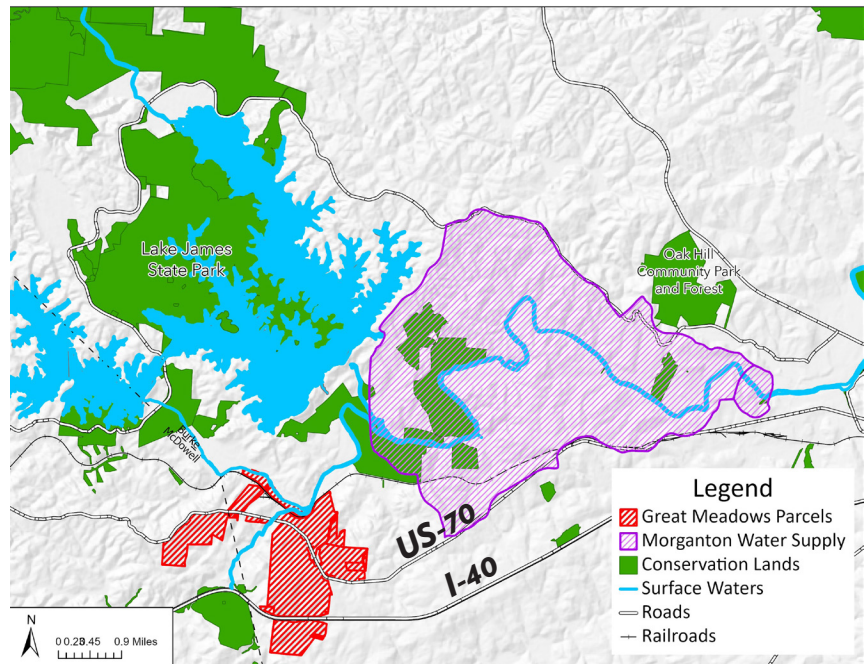


Fig 1 - Area Map

A significant tributary of the Catawba River near Lake James is Muddy Creek. The Great Meadows properties drain into the Catawba River via Muddy Creek which borders some of the parcels. The Muddy Creek Watershed Restoration Initiative was formed in 1998 to address severe sedimentation issues in the Muddy Creek watershed and its impacts on the Catawba River, which are NC Wildlife Resources Commission hatchery-supported trout waters. A watershed restoration and feasibility study, completed in 2003, followed in the next decade by plan implementation, led to over \$18 million in investment and over 20 miles of stream restoration and enhancement. Adjoining one section of the Great Meadows Megasite, the Muddy Creek Recreational Access Area was funded by Duke Energy and was constructed by the NC Wildlife Resources Commission to provide public access to Muddy Creek in accordance with Duke Energy’s Catawba-Wateree Project Comprehensive Relicensing Agreement and FERC license.

Recreation and Tourism:

Lake James and the surrounding areas are a major economic driver for Burke County and the region. The lake is home to Lake James State Park, one of the most popular Parks in North Carolina, with over half a million visitors annually. It is also home to Fonta Flora County Park and the Fonta Flora State Trail, which is a multi-use trail system circumnavigating the lake with planned future connections to Morganton and Asheville. One of the two major tributaries to Lake James is the Linville River, which is designated as a Wild and Scenic River by the State. The Linville River flows through the Linville Gorge, a Congressionally-designated Wilderness Area which is part of the Pisgah National Forest along much of the region's Blue Ridge Mountains Escarpment. Hundreds of thousands of acres of public lands administered by the Pisgah National Forest and N.C.'s Division of Parks & Recreation and Wildlife Resources Commission are accessible by roads and trails around Lake James. Lake James is a popular boating area with several active commercial marinas. Multiple residential developments around Lake James provide a substantial tax base for Burke and McDowell counties along with a handful of small businesses.

Methodology:

Our recommendations for this site plan were developed using a combination of publicly available GIS data and multi-disciplinary expertise from staff members of our three environmental organizations. Our goal was to develop a conservation site plan that would focus on protecting the human and natural environments around the site while still allowing for its economic development. Below are our recommendations for the site development that would protect our most valuable resources and the local community should the Great Meadows Megasite move forward.

Permanent Protection and Conservation:

The land in this area is generally characterized by steep rolling hills with defined drainages making broad development of the parcels challenging and in some cases infeasible. Development on steep slopes can lead to severe erosion and stream sedimentation resulting in extreme impacts for miles downstream, affecting both water quality and aquatic wildlife.

Parcels 1, 2, 3, 4, 5, 6, 7, 9, and 14 are poor candidates for development due to their steep slopes as well as their proximity to wetlands, rural open space, roadways, existing recreational access areas, and streams. As such, these parcels are proposed for permanent conservation by FCNC through either a conservation easement, comparable property restrictions (e.g. Declaration of Covenants & Restrictions) or fee simple donation (see **Fig 2**). Conservation of these parcels would protect water quality of downstream public drinking water supplies, sensitive habitats, significant aquatic and riparian buffer resources (and/or sensitive watershed area), locally significant cultural resources (Bridgewater community) and rural heritage characteristics of western Burke County. Such measures will decrease impacts from increased commercial traffic along US 70 and Snowhill Church Road that would accompany industrial development.

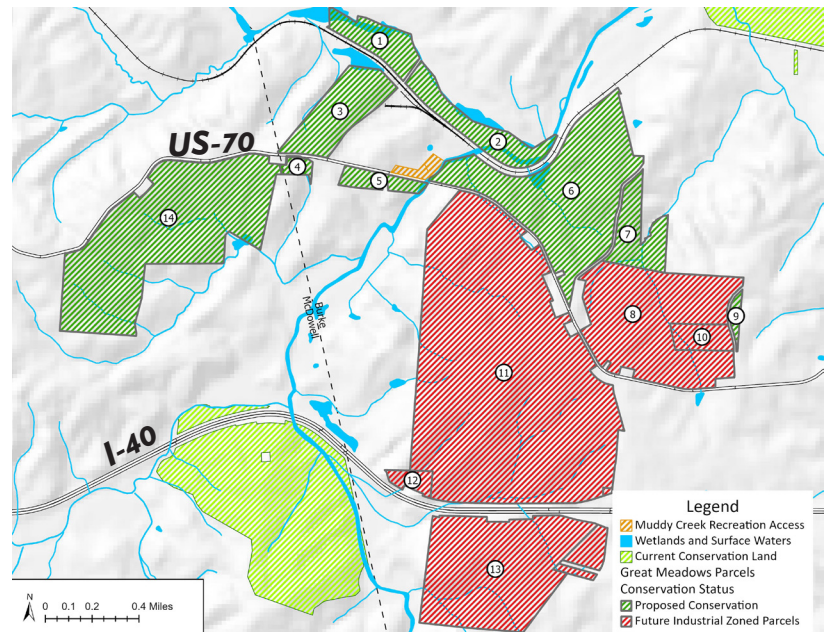


Fig 2 - Parcel Map

Retaining the forested landscape on undevelopable areas, whether streamside or upland, is crucial to ensuring long-term forest coverage, wildlife habitat, and preserving the rural character and viewshed aesthetics of the area. Land Stewardship plans prepared by professional, registered foresters with input from FCNC’s natural resource professionals are requested for both the conservation and development parcels. Forest management activities included in these plans should focus on forest health, stormwater management, water quality, surface water protection, habitat conservation, and rural viewshed vistas, rather than maximizing financial return from commercial timber harvest. These plans should also include strict oversight of forest management activities by consulting forestry firms and/or FCNC staff.

Water Quality and Stream Buffers:

Stream buffers are critical for protecting downstream uses such as recreation, drinking water, and aquatic life. We propose that a 300-foot minimum buffer or the 100-year floodplain, whichever is greater, be placed along all surface waters and wetlands on the parcels (see **Fig 3**). Stream buffers will be placed in conservation easements, to be held by FCNC, on any and all surface waters on the Great Meadows Megasite. During the development activities, sediment control measures will be designed at a minimum for the 25-year storm. Post construction stormwater control measures will be sized to capture and treat the first 1.5 inch of rain at a minimum.

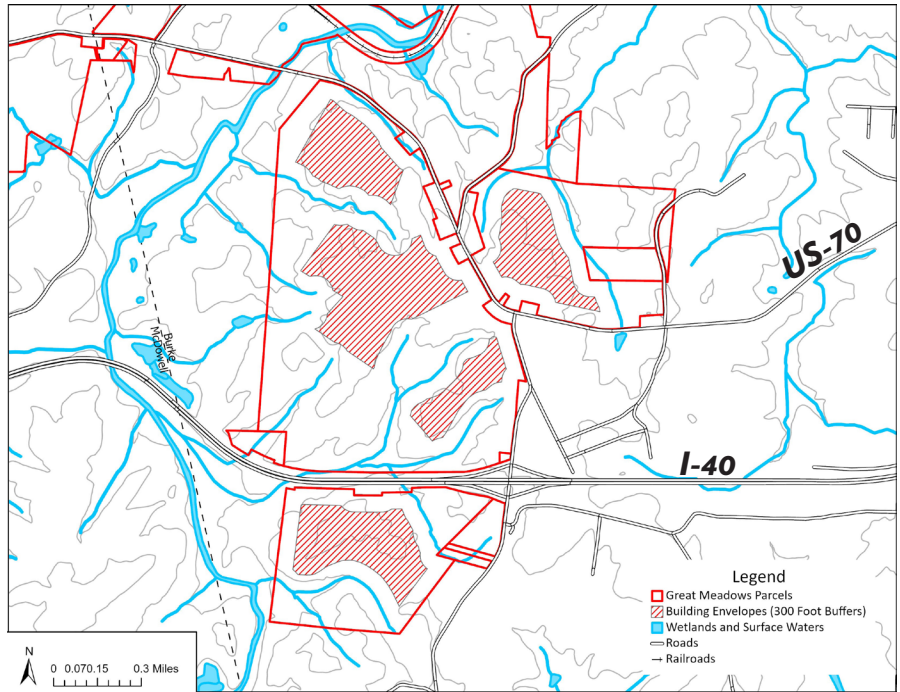


Fig 3 - Building Envelope Map

The use of green infrastructure such as, but not limited to, rain gardens, cisterns, and permeable pavement to minimize stormwater runoff is crucial to protecting water quality and should be included.

Local Community Protections:

The local community and residents will be impacted by the creation of the Great Meadows Megasite. To alleviate issues with industrial practices, 300-foot minimum forested buffers along Highway 70 and other public roads are proposed to ensure the viewshed of the Lake James area and existing residential areas adjoining the proposed site in order to reduce impacts on local residents (see **Fig 3**). Further studies on the potential impacts of increased commercial traffic should be included. To further protect the viewshed of Lake James and the Blue Ridge Mountains, building/ structure heights should be limited, and lighting requirements should be implemented to reduce visibility from adjoining public roads, residential areas, and surrounding public conservation lands for the benefit of local residents and visitors.

Use of the Great Meadows Megasite should be prohibited by any substantially risky or heavy industrial users such as landfills, metal plating companies, or by any industry that would produce hazardous waste, air emissions, or potential discharges (to surface and subsurface waters) that could adversely impact the downstream water quality and aquatic life or threaten the City of Morganton’s drinking water supply.

This proposed site conservation plan highly encourages omitting any rail spur connection to the Megasite. While some of the parcels for the rezoning request adjoin the existing railway line, they are all environmentally sensitive and would be significantly impacted by rail development and expansion. In order to connect parcel 11 to the railroad, the spur line would need to be at least 2 miles long to gain sufficient elevation at a maximum grade of 3%. The likely connection point would be through parcel 6, which is the steepest parcel and also contains a sensitive wetland.

To further protect the rural character and nearby public recreation accesses or conservation lands, any site development should follow dark-sky best practices including downward-facing lights. This will preserve night sky viewing of stars and decrease the negative effects of ambient and direct light pollution in the area. Additionally, noise pollution should be minimized to lessen impacts on the surrounding community. Access to the property should be located as close to I-40 as possible to minimize heavy traffic in residential and rural areas.

Public Recreation :

Public recreation has been a focus for Burke County through its park system and the creation of the Fonta Flora State Trail. Outdoor recreation has a host of benefits related to mental & physical health and quality of life for area citizens. Conservation easements do not preclude the development of trail systems or other recreational access. The undeveloped lands should be used to create trails for the benefit of the local community as well as for use by the employees of future industries. Studies have shown that employees are happier, healthier, and more productive when they exercise during the day. The addition of recreation assets is a positive way to give back to the community by allowing access and connection to the land.

The existing river access near the property on Duke Energy land could be complemented by a small trail system that highlights the unique features of some of the site parcels. A trailhead could be developed adjacent to a public road to provide the public with access to the trail network. Additional trails could be built on the developed parcels so that employees would not have to travel offsite to recreate.

Conclusion:

Burke County is an area rich with natural resources, recreation opportunities, and clean water. This is not by accident; rather, this has been achieved through continued protection and stewardship of these resources by local government, state and federal natural resource agencies, non-profit organizations, and the citizens who call this place home. Without continued conservation and protection of these resources, they can quickly degrade. This document is not intended to be the only considerations for site development, nor an endorsement or critique of proposed development. Should the project move forward, it is our hope these recommendations provide guidance on how to maintain the health, vibrancy, and essence of Burke County.

Figure 1 - Area Map

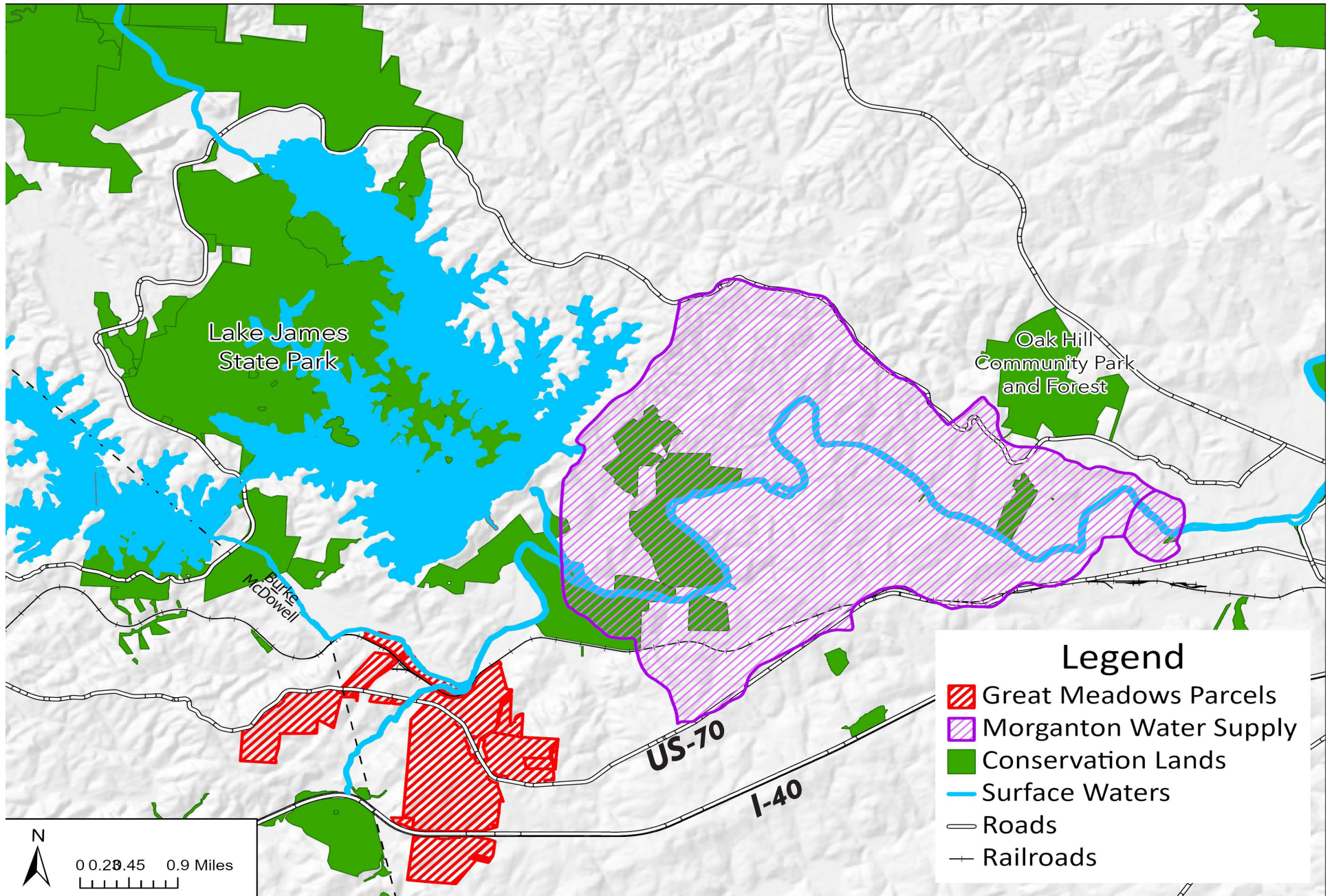


Figure 2 - Parcel Map

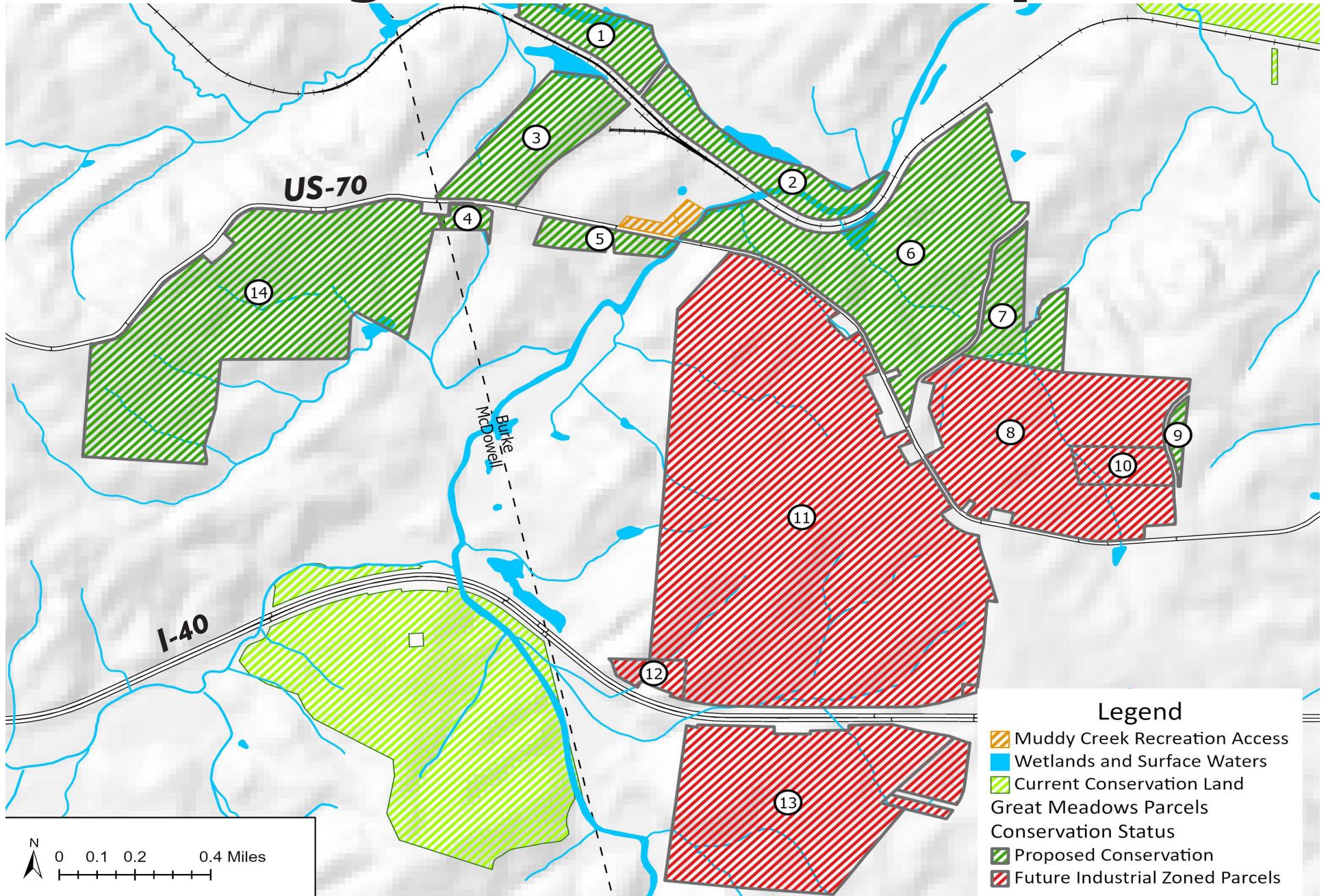


Figure 3 - Building Envelope Map

