

REUSE ASSESSMENT

Holcomb Creosote Site Yadkinville, NC

JULY 2024

OVERVIEW

EPA sponsored a reuse assessment for the Holcomb Creosote Company site (the Site) in Yadkinville, North Carolina, located at 5016 U.S. Highway 601. It is bordered by the Grace Bible Church (formerly the Yadkin Friends Fellowship) to the north, a vacant wooded land and residences to the east, an agricultural field to the south, and U.S. Highway 601 to the west.

From 1951 to 2009, the Holcomb Creosote Company (the HCC) operated a wood treating facility on the property. The HCC manufactured pressure-treated posts and lumber using creosote coal tar solutions. In November 2009, the North Carolina Department of Environmental Quality (NCDEQ) inspected the site property and noted several areas of concern, including a creosote treatment vessel, a 55-gallon sump, a catch basin, a transfer area and underlying soils, a concrete storage pit, aboveground storage tanks, and about 30 55-gallon containers. EPA placed the Site on the Superfund program's National Priorities List (NPL) in 2012 because of contaminated soil, sediment, groundwater, surface water and on-site structures resulting from facility operations. EPA and NCDEQ are working to implement a remedy.

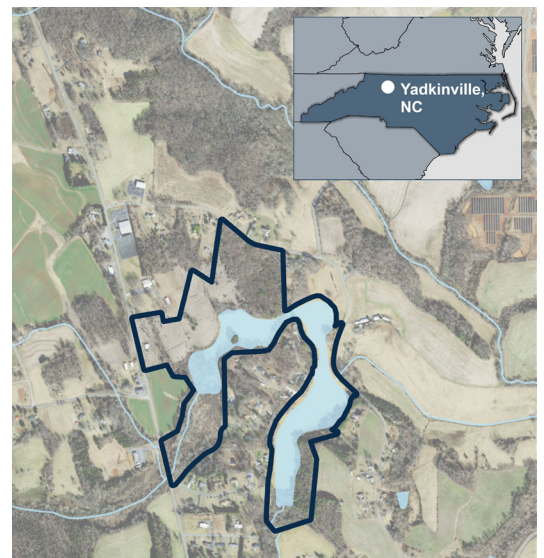


Figure 1. Site location

MUNICIPAL REUSE GOALS

Yadkin County is interested in redevelopment at the Site. This might include residential, industrial or recreational uses. The County aims to encourage a diverse mix of industries and business uses while seeking to find a balance between the benefits of economic development and the possible detrimental impacts that certain types of industry might have on the environment and the quality of life of residents. In a survey of members of the Board of Commissioners and the Planning Board, respondents indicated an interest in recruiting new businesses and commercial development to the area.

The County has discussed multiple options for redevelopment at the Site, including the following:

- Residential uses – redevelopment of part of the Site for housing.
- Industrial uses – construction of a warehouse or distribution center.
- Recreational uses – access to Dobbins Pond and surrounding grassy areas for fishing and other recreational activities.

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CLEANUP STATUS

EPA and NCDEQ are implementing a remedy at the Site that includes a landfarm, containment cell and surface impoundment. Remedial action began in February 2023, and EPA anticipates it will be complete in late 2024. It included demolition of the remaining building, groundwater treatment, excavation of contaminated soil and sediment, installation of a RCRA Subtitle C-compliant landfill cap, construction of a fence and application of institutional controls (ICs).

The major components of the selected remedy include:

- Excavation of contaminated soil and backfill with uncontaminated soil obtained from an off-site borrow source.
- Disposal of excavated soil in an on-site RCRA Subtitle C- compliant capped containment cell.
- Maintenance of existing RCRA caps including annual inspection.
- In-situ groundwater treatment and in-situ enhanced bioremediation (ISEB) injection to reduce contaminants of concern (COCs) to below cleanup levels.
- Groundwater monitoring to verify the effectiveness of the containment cell, soil stabilization and groundwater treatment.
- Implementation of ICs to restrict the property to industrial/commercial uses in areas that don't allow for unrestricted access and use, prohibit excavation and construction over capped areas, the installation of new water supply wells within the plume area and prohibit the use of groundwater for drinking water supply within the plume area.
- Engineering controls, such as fencing, around the containment cell, closed landfarm and closed surface impoundment.

Future uses of the Site will need to comply with these remedial components and ongoing requirements.

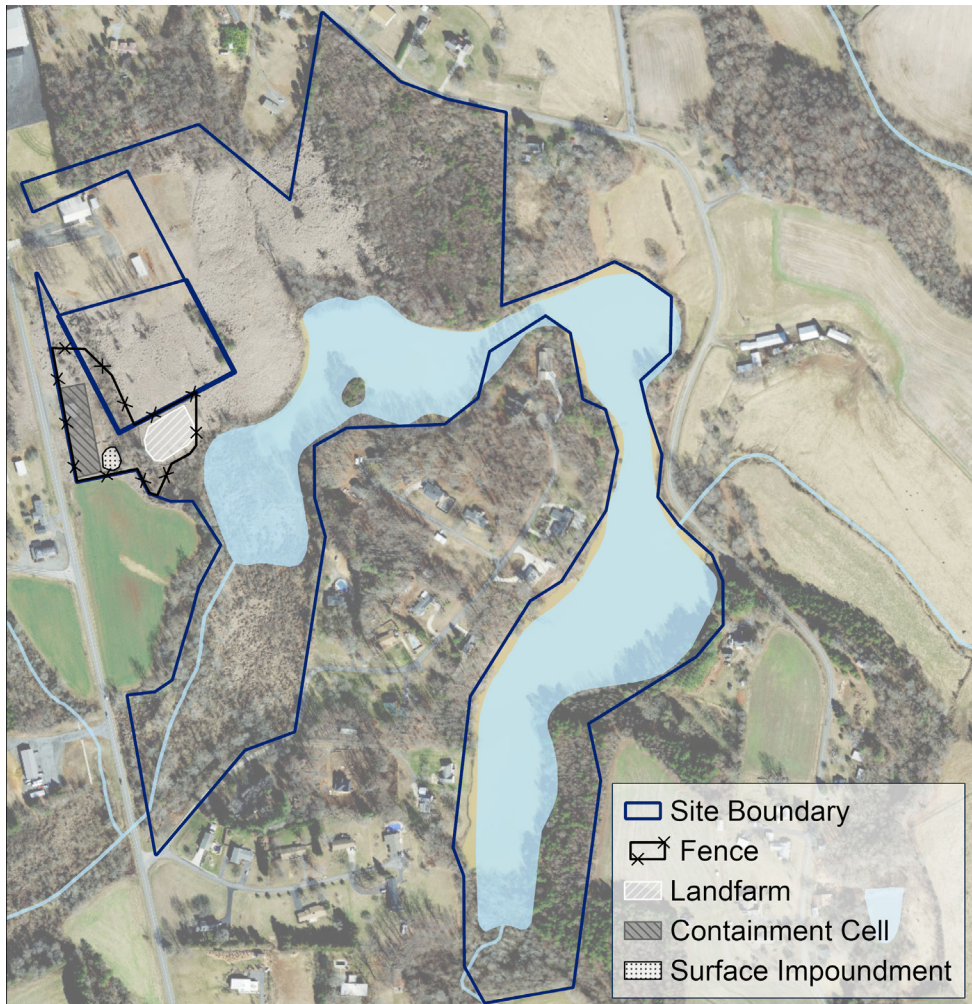


Figure 2. Remedy features at the Site

OWNERSHIP AND ACCESS

The HCC owns the Site. They were identified as the potentially responsible party (PRP). The HCC went out of business and ceased wood treating operations on the property in February 2009 and subsequently sold its assets at auction later that year.

The former HCC property consists of three parcels of land:

- Parcel 131133 is about 3.8 acres in the western portion of the property and includes the former wood treating facility, former operations area and the closed RCRA surface impoundment (landfarm).
- Parcel 131135 is about 8.9 acres in the northern portion of the property and is partially forested.
- Parcel 131163 is about 61.7 acres in the northern, eastern, and southeastern portions of the property and includes Dobbins Pond.

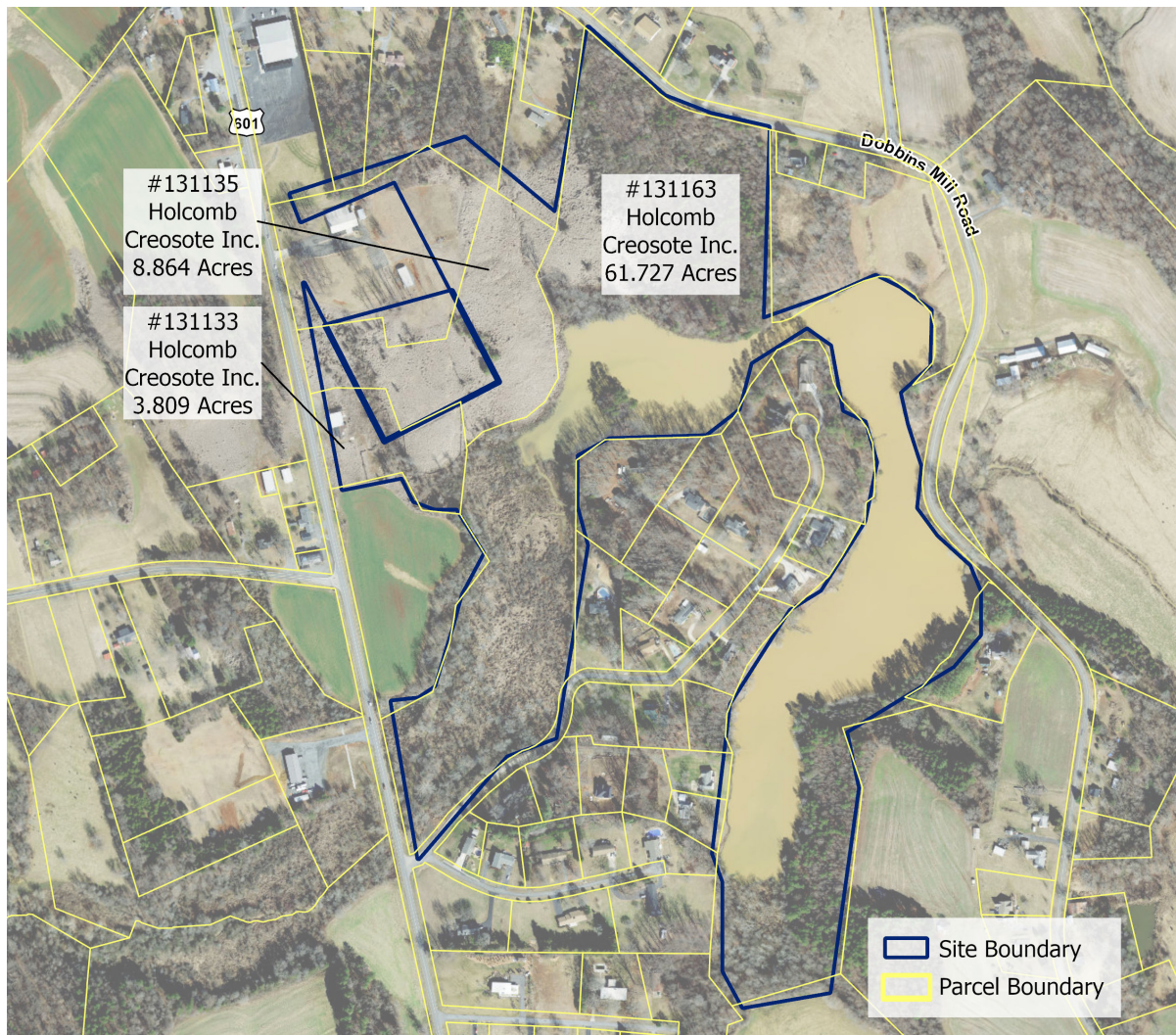


Figure 3. Parcels and ownership at the Site

EXISTING LAND USE

The Site is zoned primarily Rural Agriculture District (RA) with portions on the western edge zoned Highway Business District (HB) and Manufacturing Industrial District (MI-2). The County has indicated that zoning is not a barrier to reuse. Parcels can be rezoned to accommodate uses.

Land uses surrounding the HCC property are predominantly agricultural, residential and light industrial. An unnamed tributary of North Deep Creek flows through the Site, between the former wood treating operations area and the landfarm, enters a marshlands area and feeds into Dobbins Pond.

The HCC operations area and landfarm property will remain industrial through the implementation of ICs such as deed restrictions. Most of the HCC property boundary is not fenced and remains accessible to the public. However, in 2011, fences were installed on certain areas of the property to limit access to the closed surface impoundment, the landfarm, and a portion of the unnamed tributary of North Deep Creek. The proposed cleanup will be protective for all commercial and industrial future uses.

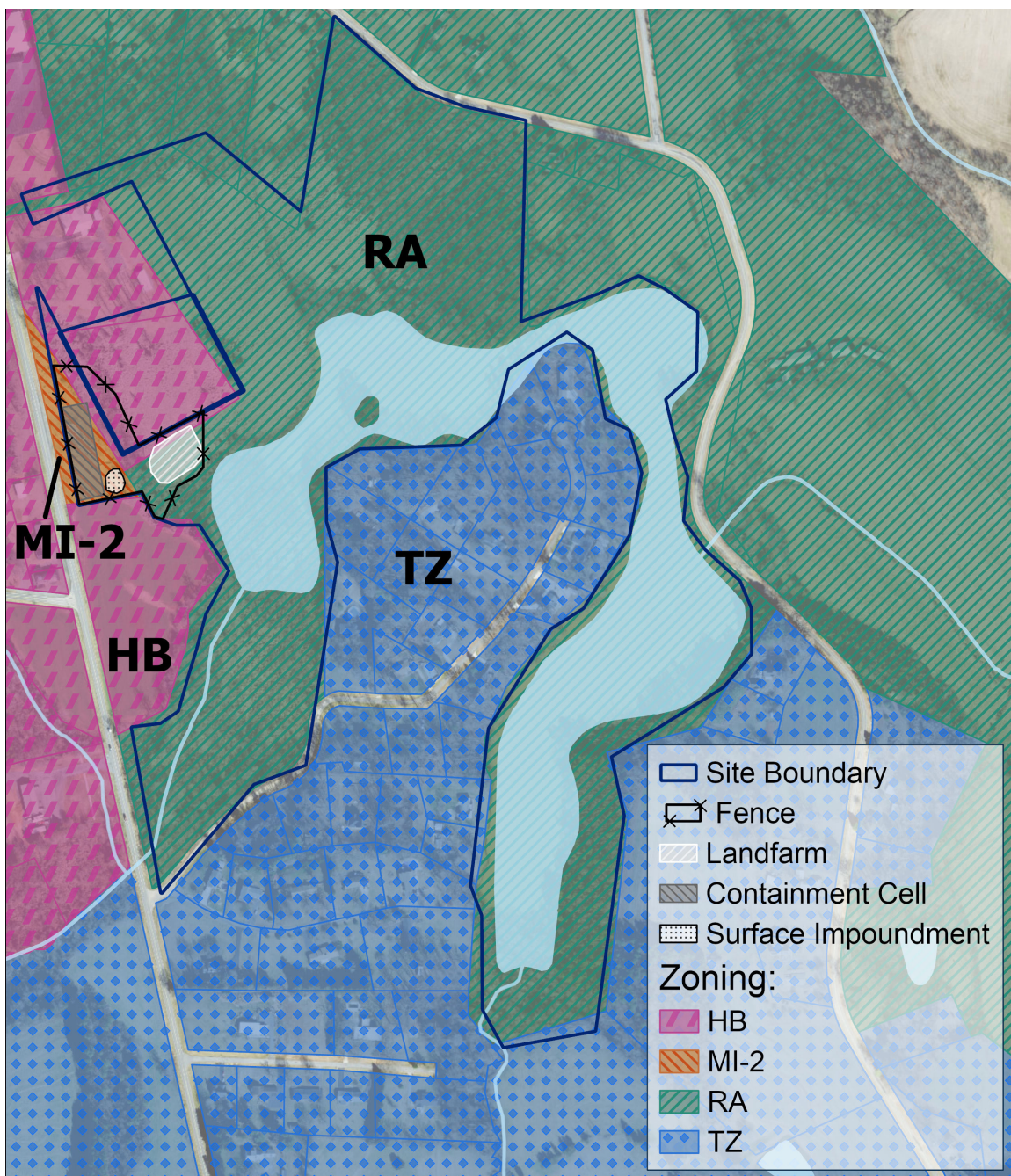


Figure 4. Zoning at the Site

REUSE SUITABILITY

Parts of the Site have different characteristics that can inform redevelopment opportunities. The map and table below highlight future use zones based on site features and remedy components.

The Remedy Operations Zone (Zone A) includes the landfarm, containment cell and surface impoundment. The area is fenced and remedial action is ongoing. This zone is not available for redevelopment.

The Potential Development Area (Zone B) borders Highway 601 and is zoned Highway Business District (HB). Highway Business District zoning is intended to accommodate the development of retail service and related businesses along major roadways throughout the county which cater to the traveling public. Water and sewer line extensions would be needed to support highway commercial development on-site.

The Rural Residential Zone (Zone C) comprises the forested south-sloping area that borders Dobbins Mill Road (C-1) and the partially forested area between the Potential Development Area and the Marshlands Zone (C-2). The area is zoned Rural Agriculture District (RA). Rural Agriculture District zones have a minimum lot size of 20,000 square feet (0.46 acres). The Rural Agriculture District is intended to maintain a rural development pattern where single-family housing is intermingled with agricultural uses and does not require access to public water and sewer systems. This zoning designation is also designed to protect rural areas from the intrusion of nonagricultural land uses that could create a nuisance, detract from the quality of life or present a danger to the natural environment.

The Marshland Zone (Zone D) includes Dobbins Pond as well as the areas surrounding it. This area is also zoned Rural Agriculture District (RA) and has potential for recreational access.

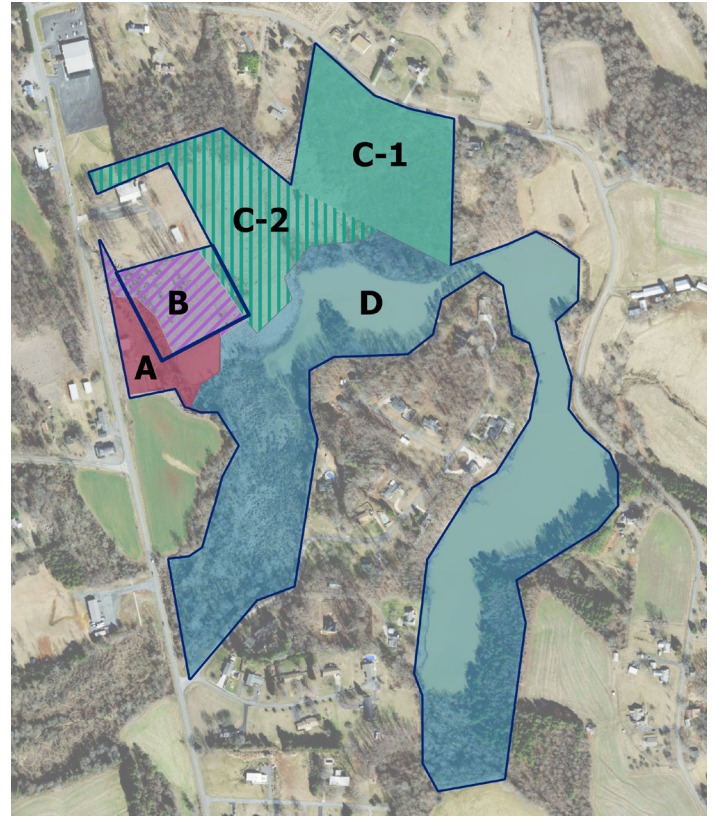


Figure 5. Reuse suitability zones

Zone	Remedy Components and Limitations	Land Use Considerations
A - Remedy Operations Zone 3.30 acres	<ul style="list-style-type: none"> Excavation and construction over capped area is prohibited Installation of new water supply wells is prohibited Fenced to prevent public access Groundwater use for drinking water supply is prohibited within the plume area 	<ul style="list-style-type: none"> Not available for reuse
B - Potential Development Area (developable area outside of fence) 8.9 acres	<ul style="list-style-type: none"> Groundwater use for drinking water supply is prohibited within the plume area 	<ul style="list-style-type: none"> Meadow area Zoned Highway Business District (HB) Potential for commercial/industrial reuse
C1 - Rural Residential Zone (bordering Dobbins Mill Road) 10.7 acres	<ul style="list-style-type: none"> Groundwater use for drinking water supply is prohibited within the plume area 	<ul style="list-style-type: none"> Zoned Rural Agricultural District (RA) Forested south-sloping area Potential for residential development
C2 - Rural Residential Zone (bordering Marshland Zone) 10.1 acres	<ul style="list-style-type: none"> Groundwater use for drinking water supply is prohibited within the plume area 	<ul style="list-style-type: none"> Zoned Rural Agricultural District (RA) Partially forested, bordering Marshland Zone Potential for residential development
D - Marshland Zone 48.2 acres	<ul style="list-style-type: none"> Groundwater use for drinking water supply is prohibited within the plume area 	<ul style="list-style-type: none"> Zoned Rural Agricultural District (RA) Pond and surrounding areas Potential for recreational access, including kayaking and swimming*

* There is an existing statewide fish consumption advisory due to mercury, not related to the Site.

Table 1. Reuse suitability summary table

REUSE SCENARIOS

Considerations for different areas of the Site can inform redevelopment. As part of this effort, a detailed review of the Site's 2016 Human Health Risk Assessment (Versar) and the 2020 Public Health Assessment (North Carolina Department of Health and Human Services) was conducted to inform potential reuse scenarios. The following scenarios describe opportunities for reuse at the Site.

Residential Reuse

Description: Community planning documents highlight demand for additional housing in Yadkinville. The Town of Yadkinville has a 93.5% occupancy rate for residences. This is higher than the state average. Northern areas of the Site could provide space for residential development.

Considerations: The northern portion of the Site (Zone C) comprises two areas. Zone C-1 is 10.7 acres, forested and south facing. It borders Dobbins Mill Road across from private residences. Zone C-2 is 10.1 acres in size, partially forested and borders the Marshland Zone. Both areas are zoned Rural Agricultural District (RA). This designation is intended to maintain a rural single-family development pattern intermingled with agricultural uses. Rural zoning restricts intense subdivision and limits housing density between one and two dwelling units per acre depending on open space. Rezoning is required to subdivide into four or more lots.

According to the 2025 Master Plan, Yadkinville intends to prioritize residential development in areas with existing utilities, including water and sewer. Homes in the area operate septic tanks and wells. The Site will need utility installations for wastewater and municipal water connections for any future residences or businesses. Groundwater within the plume area should not be used as a drinking water source.



Industrial Reuse

Description: There are few properties available for industrial use in Yadkinville. Local government officials expressed interest in redeveloping a portion of the Site for industrial use or as a business park. This type of development would provide tax revenue to the town and create jobs.

Part of the Site could be leased for solar development. Several solar fields exist in the Town of Yadkinville, including a 60-megawatt solar farm operated by Pine Gate Renewables.

Considerations: The Potential Development Area (Zone B) is nearly eight acres and has few limitations related to the remedy. It is zoned Highway Business District (HB). This zoning designation is intended for higher intensity, primarily commercial, uses adjacent to major highways. A portion of the zone lines Highway 601 and the area is adjacent to the Remedy Operations Zone. Groundwater within the plume area should not be used as a drinking water source. Although the Site borders a major road, it lacks amenities including water and sewer. This would increase the cost of industrial development.



Yadkin County has experienced significant growth in the solar renewable energy development sector; the county currently produces 156,591 MWh of solar. There are less than ten acres of land currently suitable for solar on-site, which could support a 1,000 kW solar project. Transmission lines adjacent to the Site are operated by a rural electric cooperative. Due to lack of significant acreage and structure of the local utility, potential for solar development at the Site is limited.

Recreational Reuse

Description: A large portion of the Site is occupied by Dobbins Pond and the surrounding area. Dobbins Pond could provide a recreational amenity for the surrounding community.

Considerations: The pond and surrounding area (Zone D) occupy 48.2 acres in the southeastern portion of the Site. This zone is east of the partially forested area (Zone C -2). Both areas are zoned Rural Agricultural District and would need to be rezoned to allow recreational reuse. Dobbins Pond is a locally recognized fishing spot. A state-wide fish advisory for mercury applies to the Pond, but is not related to the Site and groundwater within the plume area should not be used as a drinking water source. County Parks and Recreation have three existing parks and would consider creation of another. According to the 2012 Yadkin County Parks Master Plan, there is a demand for water-based recreational activities.



NEXT STEPS

EPA discussions with Yadkin County to date highlight potential opportunities for rural residential development, recreational use of Dobbins Mill Pond, and small footprint industrial uses with limited infrastructure requirements.

Recommendations include:

- The Site and community would benefit from a future site boundary clarification that identifies portions of the Site which are subject to the Superfund designation and institutional controls.
- Future residential, highway commercial or industrial development require infrastructure improvements such as water and sewer extensions. However, the Site lies just outside of the area designated for public utilities. Future discussions among county stakeholders is warranted to determine options for infrastructure improvements in the Site's vicinity.

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