



A G E N D A

Goal 4 Workgroup

August 9, 2022

10:00 A.M.

- I. Welcome**
- II. Approval of July 26th Meeting Summary**
- III. Sewerability**
- IV. Map Overlays**
- V. Next Steps**
- VI. Upcoming Meeting Dates (August 23, September 6 and 20)**
- VII. Adjourn**

Goal 4 Work Group
July 26th, 2022,
Meeting Minutes

Attendance

Members: Vice Mayor Steve Kay (Phone); James Brown, 1st District Council Member; Amanda Bledsoe, 10th District Council Member; Kathy Plomin, 12th District Council Member (Phone); Stephen Howard; Bessie Jackson; Nick Nicholson; Bill Witt; Judy Worth; Anthony Wright; Rusty Underwood.

Staff: Nicole Saitta, Legislative Aide to the Vice Mayor; Eve Miller, Legislative Aide to Kathy Plomin; David Harris, Legislative Aide to Amanda Bledsoe; Jennifer Sutton, Council Core Staff; Tyler Morton, Intern to James Brown; Jim Duncan, Division of Planning; Chris Woodall, Division of Planning; Shaun Denny, Council Core Staff; Kenzie Gleason, Metropolitan Planning Organization; Casey Smith, Kentucky Transportation Cabinet District 7 Office.

Others: Liz Sheehan, 5th District Council Member; Ashleigh McGuire Dunsmoor, Fayette Alliance; Gillian Stawiszynski, CivicLex; Beth Overman, PDR Director.

Welcome and Review of the Agenda

Councilmember Brown welcomed everyone to the meeting around 10:10 a.m. and reviewed the agenda for the meeting. The next meeting in August will be focused on sewerability of the rural area.

Before beginning the discussion on roads and construction projects, Vice Mayor Kay reminded the attendees that this is a public meeting. The meeting information and packets are on the city's Sustainable Growth [webpage](#). He asked that individuals requesting more information to reach out to [Jennifer Sutton](#), and she will pass around a sign-up sheet for contact information.

Roads - Continued Discussion

Kenzie Gleason introduced herself and Casey Smith from the state. She works for the [Metropolitan Planning Organization](#) (MPO). The MPO is a federally required organization that helps to forecast and plan for transportation needs between the Jessamine and Lexington-Fayette counties. Staff help identify projects with the state's transportation cabinet that would be most beneficial for federal funds. Gleason brought a map to the meeting that displayed committed short-range projects and long-range planned projects for the two counties. She noted that she was told that the workgroup was interested in those projects adjacent to the urban service boundary and she briefly outlined those projects she thought were relevant.

The major arterial, minor arterial and collector roads in Lexington-Fayette County are maintained by the state. Rural roads are maintained by the County Fiscal Court. The MPO is looking at extending New Circle Rd between Newtown Pike and Russell Cave Rd. Similarly, they are also looking at widening New Circle from Leestown Rd to Georgetown Rd. Smith noted the transportation cabinet is currently working with a contractor to expand Winchester Rd from the I-64 interchange to Haley Pike. The state is also looking at long-term plans to expand the highway from Kearney Hill to Iron Works Pike area. The process for the state to complete these projects first begins with the request for right of way funding, then acquiring the land, acquiring the funds for the project, and acquiring utility permits. Most projects must be done in pieces. The state uses federal funding for many of these projects because of cost of materials. Gleason noted that the Kentucky State Legislature just updated the two-year plan, and the MPO looks at that plan to establish the regional transportation plan. Because of the way the plan is established, along with the state's biannual budget, they realize that the plan and funding fluctuate, and staff must be flexible with the process.

Anthony Wright asked Smith about the difference between a project design phase and funding the actual construction. Smith responded that they go hand-in-hand, but the time between each phase could be anywhere from months to years because of right-of-way transfers. Councilmember Bledsoe noted that she serves on the MPO board, and they discuss local plans, but ultimately the state can push forward or backward any plans they have. Right of way transfers can hold up a project for years if a property owner is not willing to settle. Judy Worth asked if staff could put together a brief overview of what the MPO does and how they interact with the state's offices. Gleason said that staff would complete that in the next few weeks.

Gleason reviewed other projects for which the MPO has long-range plans. The city has plans to extend lanes on Liberty Rd to Richmond Rd. Further down Richmond Rd, the state has plans to soon [install R-cuts](#) for safer left turns. The city has also been researching how to improve the Nicholasville Rd corridor with a rapid bus transit system. Smith stated that the state has plans in place to improve the Paris Pike and Newtown I-64 and I-75 interchange. This fall, they will secure contract and possibly beginning work in the spring of next year. Gleason then shared that the state and the MPO would like to construct a tunnel at Sir Barton to alleviate congestion on Winchester Rd and Polo Club Blvd. It was not funded this cycle. The only new road planned in the county is an extension between Winburn Dr. to Citation Blvd, and then from Newtown Pike to Russell Cave Rd.

Wright asked if the red lines on the map were funded projects. Gleason responded that yes, those are committed projects. The Winburn project will be overseen by the city and their Division of Engineering. Currently, designs are being planned and right of way discussions are taking place. They will use some Covid relief funds, and they hope to have it completed in about four years. Wright asked if they run into issues with property owners. Gleason stated that yes and gave the example of Polo Club and Deer Haven Lane a few years ago, which was in court for several years.

Councilmember Brown asked about connections to Jessamine County. Gleason responded that currently Brannon Rd, a state road, is built out to Tates Creek Rd. They eventually would like to see Brannon Rd extended through the Overbrook property inside the Urban Service Boundary when it is developed and connect to DeLong Rd. This is a long-range plan. The state recently looked at improving the southernmost area of Lexington-Fayette County connectivity, including Jacks Creek Pike and Shelby Lane. Gleason stated that although a connection to I-75 through this area has been indefinitely postponed, Jessamine County is still interested in a connection to the highway but may go through the south, through Garrett County. Bill Witt mentioned that he had some of his neighbors attend the community meeting that the state held last year.

Councilmember Brown asked about rural roads, how they are maintained and if staff had an opinion on it. Gleason responded that she does not have a lot of knowledge about the County Fiscal Court. She knows that they do not receive a lot of money for maintenance. The MPO works with federal and state monies. Councilmember Plomin gets a lot of calls about maintaining those roads. Smith noted that the County Fiscal Court receives rural aid fund and municipal funds through the state through a formula. The funding allocation is based on population land area, miles of routes that the county maintains. There is a discretionary fund at the state level to which municipalities can request more funds and there is also a rural secondary fund, which are state-maintained rural roads.

Wright asked Councilmember Plomin if this discussion had met her expectations for roads in the rural area and she responded yes.

Updated Rural Property and Zoning Map

James Duncan walked the workgroup through the conservation map that was included in the packet. The map lists current Purchase of Development Rights, or PDR farms. It also lists federal, state, and LFUCG owned property. There are 4 Rural Activity Centers (RAC) in the rural areas that are beyond the Urban

Service Area. Duncan discussed each activity center identified on the map in clockwise order. The top right section is the Avon industrial area. This covers a larger, like the airport, and the state and federal government own several parcels adjacent to it for several military and research projects. The next section highlighted in pink is the Athens Boonesboro community straddling the I-75 interstate. There are hotels, gas stations, a private industrial park and city-owned baseball fields in the area. The yellow and red section is the Bluegrass Airport on Versailles Rd., the official property is marked, but the official designation is that it is zoned as Agricultural-Rural, not industrial. The blue area in the top right of the map is the Spindletop property, owned by the University of Kentucky and the state, and the Kentucky Horse Park, owned by the state. Duncan noted that there are other activities, such as the federal prison that exist in the rural areas but do not have exclusive zoning. He also identified city owned parks, including Hisle Park, Raven Run Nature Sanctuary, the newly acquired riverfront property, and Kearney Hill Golf course.

Steven Howard asked if Keeneland should be identified on the map because of its large land mass and importance. Duncan responded that it is identified on the Cultural Icons map the workgroup received at the July 12th meeting.

Worth passed around a soil conversation map from the National Resource Conservation Service from 1967 displaying the quality of soils in the county. She requested that map be used in place of the one originally provided. There was consensus in the workgroup.

Howard inquired about obtaining an aquifer map of Lexington-Fayette County. He noted that Scott County uses the Royal Springs aquifer, and any development should take that into consideration. Councilmember Brown agreed and asked that staff work on preparing a map for the next meeting.

Councilmember Brown reviewed the workgroup's current criteria they are considering and noted there should probably be a category of environmental considerations, which would include soil quality, tree canopy, and aquifers. Howard also suggested including topography in this classification.

Nick Nicholson noted that the Royal Springs Aquifer looks at each development submitted that is in the vicinity. They analyze how the development would impact the system on a case-by-case basis. Duncan also noted that the aquifer currently extends all the way to 7th Street in Lexington, so development already exists on top of it currently.

Bill Witt stated that what is unique about our region is not only the soil but also our tree canopy, not only the pastureland of the bluegrass region.

Howard shared that the workgroup must also consider large properties that are not likely to change in the future, like the Lexington Country Club, among others. The group needs to keep in mind the potential for those properties to change hands and have the option of developing.

Wright appreciated the information about the tree canopy and the aquifer. It would be negligent to not include these as criteria for deciding where to grow as a community. Howard noted that the development community would agree with this sentiment.

Chris Woodall shared that the Purchase of Development Rights and the Rural Land Management Plan has contingencies for protecting trees that are 40 years or older. They also have maps that depict focus areas for conservation. Duncan said that Charlie Martin can address sewerability, areas good for infrastructure, and watersheds at the next meeting.

Worth stated that while are soils are good for developments, they also can never be replaced. With climate forecasts, we know that more wet weather will come our way and if we are going to be required to do more local food production in the future, we should keep soils in mind. Wright agreed and said that the group should specifically state that this factor is important.

Vice Mayor Kay and Councilmember Brown said that GIS can prepare maps and overlay layers to display this information the group has discussed. Howard noted that he wants to learn more about how the aquifers and watersheds are protected. Councilmember Plomin commented that perhaps staff could discuss each watershed's sensitivity or other environmental concerns. Vice Mayor Kay reiterated that development already exists on the aquifers and watersheds, and we have a committee that evaluates any proposed development. It is relevant, but it may not be as high on the list as some other criteria the workgroup has discussed.

Worth asked Councilmember Brown where the workgroup's recommendation will go to after they complete their work. Councilmember Brown notes that when the workgroup's work is complete, it will go both to the Planning Commission and the Council.

Worth asked if the group could see where utility lines exist in the rural areas, including water and internet. Nicholson notes that for any development plan proposed, the developers and engineering work with utilities to map out where they will go and create a master plan for utility easements.

Nicholson noted there are lessons that could be learned from the last time the Urban Service Boundary was expanded, and property owners have a strong claim on how the county grows. Worth stated she would like to learn more about that history.

Duncan briefly reviewed the final map given to the workgroup that outlines zoning in continuous counties along the border with Lexington-Fayette County. Eve Miller and Dustin Baker worked together to develop this map and generally outlined the zoning uses in each surrounding county to agricultural, industrial, residential, and commercial. The majority of adjacent county zoning is agricultural. The exception being that there is a large residential development along the Madison County line across the river. State statute does require that on an adjacent border that jurisdiction will notify that other jurisdiction of the zone change application.

Next Steps and Upcoming Meetings

The next meeting will discuss sewerability. The meeting following that will begin to talk about the cost of development. Meeting will be held at 10:00 a.m. on Tuesdays at city hall in the 5th floor conference room on the upcoming dates: August 9th and 23rd, and September 6th and 20th.

Adjournment

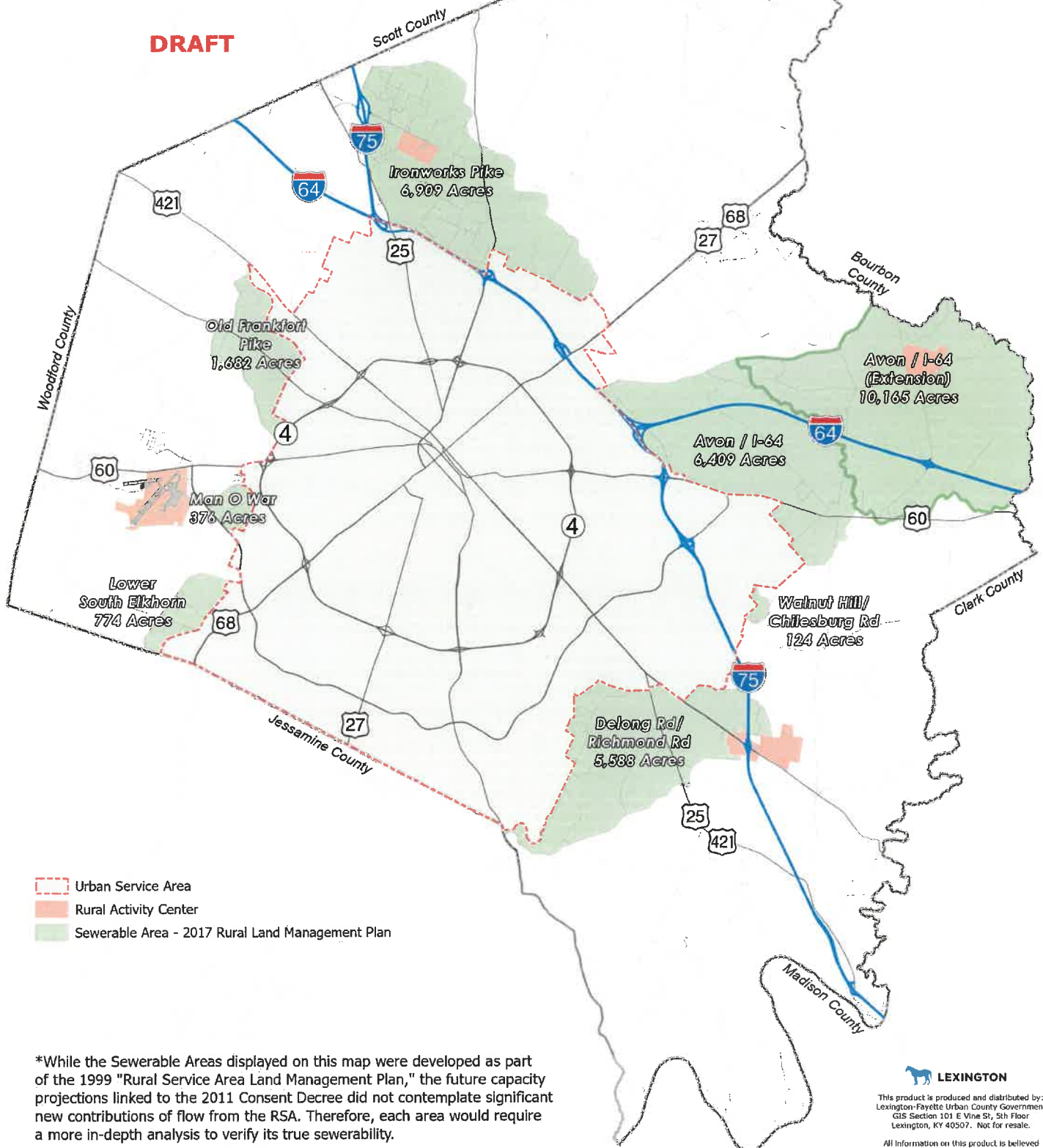
The group adjourned around 11:20 a.m.



Goal 4 Workgroup

Sewerable Areas* within the Rural Service Area
July 12, 2022

DRAFT



*While the Sewerable Areas displayed on this map were developed as part of the 1999 "Rural Service Area Land Management Plan," the future capacity projections linked to the 2011 Consent Decree did not contemplate significant new contributions of flow from the RSA. Therefore, each area would require a more in-depth analysis to verify its true sewerability.

 **LEXINGTON**

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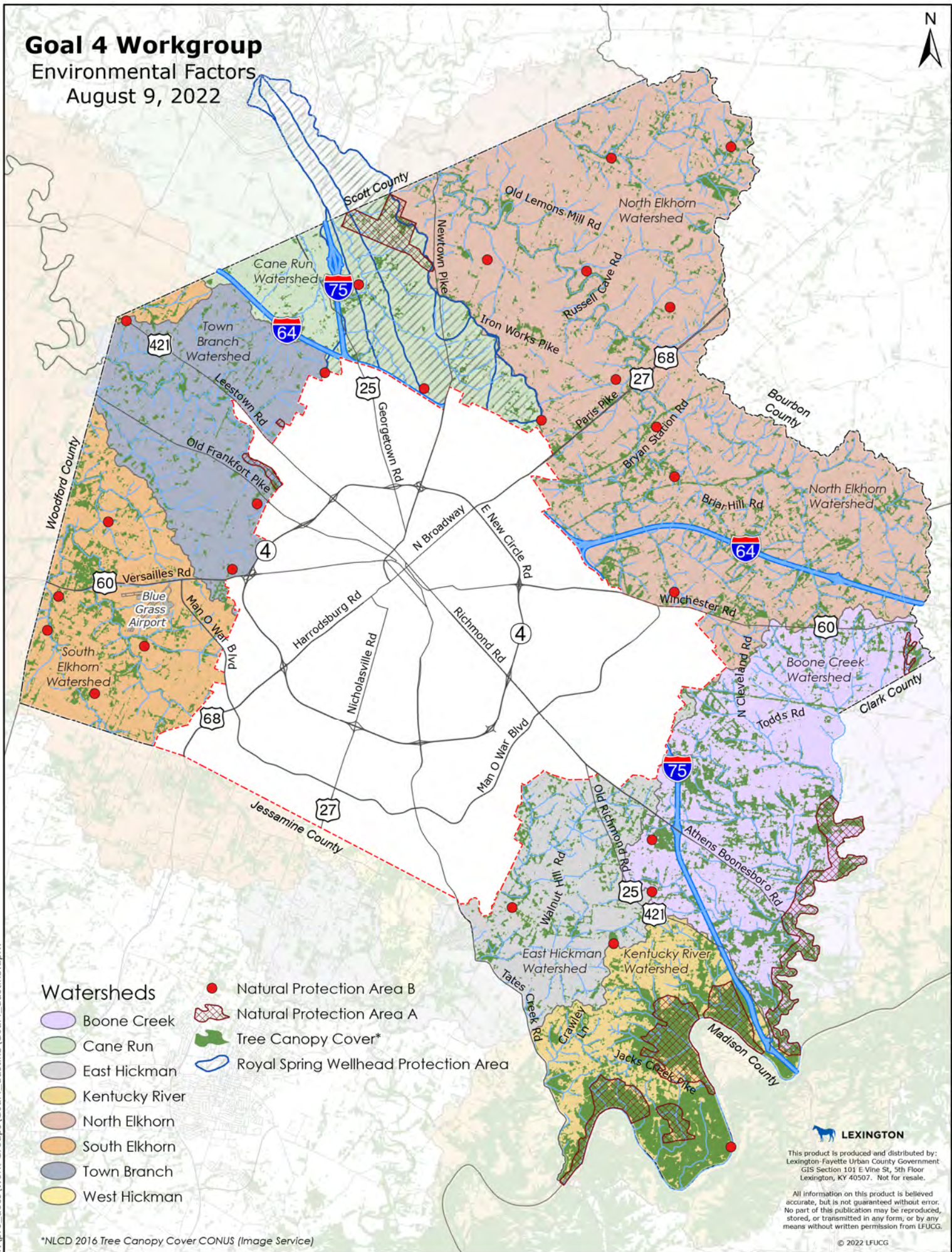
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Goal 4 Workgroup

Environmental Factors

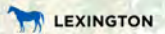
August 9, 2022



Watersheds

- Boone Creek
- Cane Run
- East Hickman
- Kentucky River
- North Elkhorn
- South Elkhorn
- Town Branch
- West Hickman

- Natural Protection Area B
- Natural Protection Area A
- Tree Canopy Cover*
- Royal Spring Wellhead Protection Area



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*NLCD 2016 Tree Canopy Cover CONUS (Image Service)

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both wildlife and recreational corridors. Access to nature provides many benefits to the public, and an appreciation for nature is necessary for securing the public support needed to protect these areas.

Numerous voluntary programs through the U.S. Department of Agriculture, the Commonwealth of KY and U.K.'s Cooperative Extension Service provide financial and/or technical assistance to landowners towards conservation practices to improve soil, water quality, habitat or agricultural production on their farm or forestland.

Just as we preserve historic buildings, archeological sites, stone fences and other man-made remnants of our past, we must also preserve our natural history.

Special Natural Protection Areas

The 1999 Rural Service Area Land Management Plan provided a list of 38 Special Natural Protection Areas. It was recommended that these isolated areas be designated a priority for the PDR Program or placed in a special conservation easement program. They have opportunities to provide educational and ecotourism (including hiking and biking trails) opportunities, and should be a priority for LFUCG acquisition. The Nature Conservancy evaluated the top eleven sites on the list; however, they no longer keep the list. All but a few of the areas are on private property so it is not possible to determine if any of them still exist.

The PDR Program recognizes the Special Natural Protection Areas and awards points for them; therefore, a list and map can be found in Appendix D. Protection of these areas should be given when their existence is verified. Regardless of the status or exact locations of the listed Special Natural Protection Areas, the original 1999 Plan's established criteria should continue to be used to guide the protection of the areas that meet the standards, as the criteria are still valid. The criteria are as follows:

- A solid block of wooded areas over 10 acres in size with native trees at least 40-50 years old
- Woodland pastures of 10 acres or more with venerable native trees at least 150 years old
- 100 acres or more of abandoned fields, thickets or young forest where native plants dominate
- Areas with state or federally designated endangered or threatened species
- Areas with a group of species that have become threatened or endangered within Fayette County, but not necessarily rare elsewhere in the state
- Well-forested riparian forests, especially near the Kentucky River

Since the 1999 Plan, nine of the original 38 Special Natural Protection Areas have been preserved by development easements. Seven of these nine are preserved by PDR, one is preserved by the Bluegrass Conservancy and one is preserved within Floracliff Nature Sanctuary.

Additionally, the PDR Ordinance grants points for applications where it is demonstrated that the property includes rare or unusual flora or fauna, special indigenous plants, wildlife habitat, or wildlife ecosystem linkages.

Conservation Easements

The PDR Program is the primary conservation mechanism for the protection of natural resources in the Rural Service Area. Besides farmland protection, the 1999 Plan recommended that natural areas be prioritized for PDR based on locations that can best preserve environmental quality, protect habitat for flora and fauna, and be part of a network of preserved land, which can serve multiple purposes. As a result, the PDR Ordinance outlines natural resources that can receive points towards acceptance into the Program, including the following:

- Quality Soils - up to 30 points
- Environmentally Sensitive Areas - up to 5 points
- Designated Rural Greenways - up to 5 points
- Special Natural Protection Areas or other areas not on the list - up to 5 points

D. Special Natural Protection Areas

The “A” sites are those with the highest priority for preservation and are as follows:

- Area 1** - A portion of the Horse Park contains a concentration of a blue ash and oak savanna-woodland trees on this 1,000-acre site. In fact, this is the most outstanding concentration of this type in Fayette County. LFUCG should work with this state park to ensure the preservation of this resource.
- Area 2** - Masterson Station Park contains a 10 to 20-acre area that is used by rare birds.
- Area 3** - Mare Haven Farm contains approximately 2 to 3 acres of canebrake and 20 to 30 acres of other native plants. This is the largest known canebrake in the county.
- Area 4** - Todds Road near the Fayette/Clark County line contains a 200-acre swamp forest. This area contains green ash and swamp white oaks.
- Area 5** - Canebrake Farm contains several patches of cane totaling 5 to 10 acres.
- Area 6** - Raven Run Nature Sanctuary contains several rare species of plants.
- Area 7** - Boone Creek contains the only known post oak in the county, as well as other rare plants.
- Area 8** - Sulphur Well Road at the Fayette/Clark County line is the location of an area of approximately 40 acres containing an undisturbed natural pond.
- Area 9*** - Elk Lick Creek is the location of an area that is already preserved through a conservation easement donated to LFUCG. Much of the area is undisturbed by farming and contains numerous native wildflowers.
- Area 10** - Spears Palisades includes about 2 miles of frontage along the Kentucky River Palisades. Several rare species of plants are found at this site.
- Area 11** - Dry Branch Road has a beech-tulip forest of 10 to 20 acres as well as several rare species of plants.

The “B” sites are those with a slightly lower priority for preservation and are as follows:

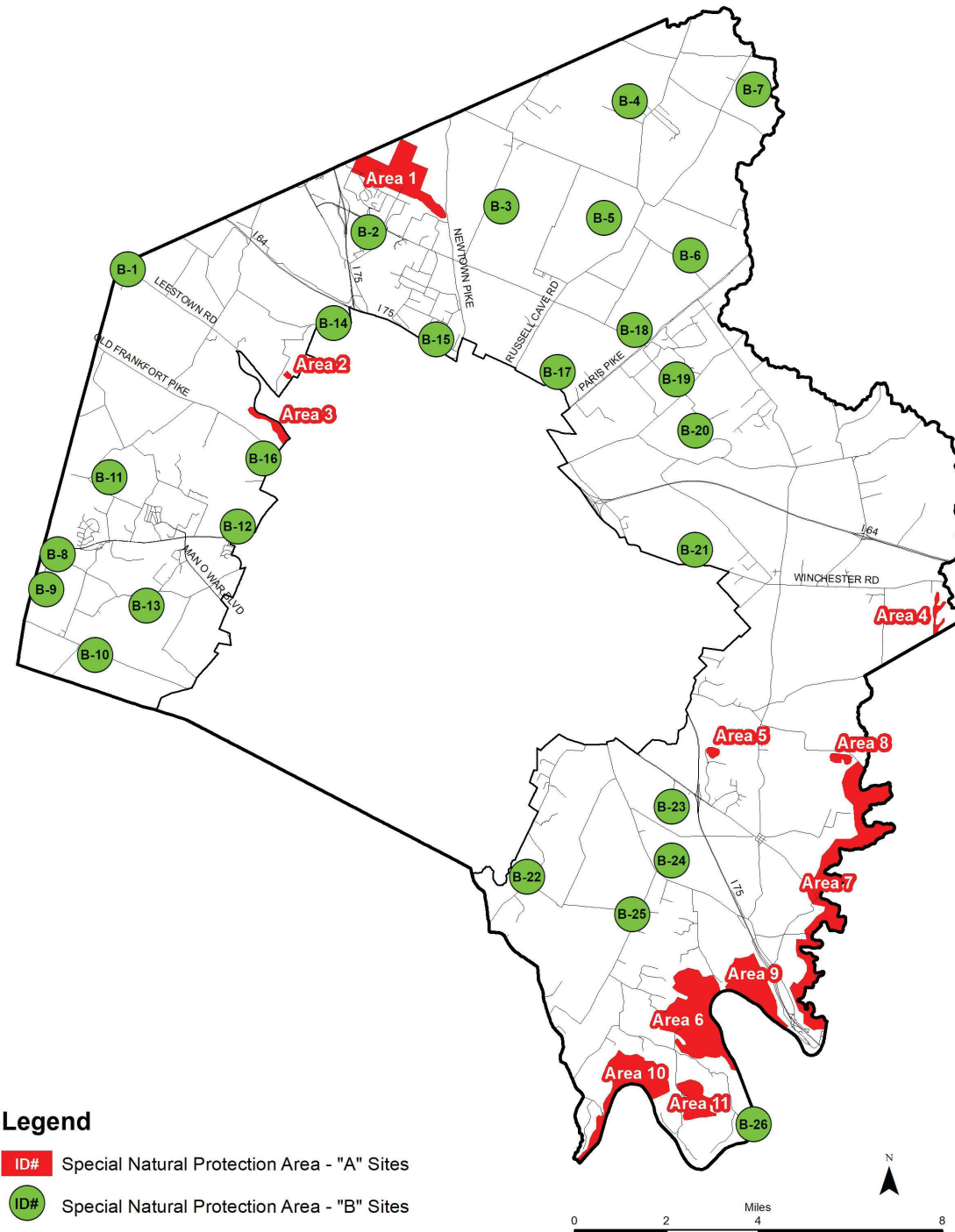
- Area B-1*** - Leestown Road at the Fayette/Scott County line (30 acres)
- Area B-2** - Ironworks Road south of the Horse Park (two areas totaling 50 acres)
- Area B-3** - Mt Horeb Road near Ironworks Road (150 acres)
- Area B-4*** - Goose Creek near Russell Cave Road (200 acres)
- Area B-5** - North Elkhorn Creek near Russell Cave Road (150 acres)
- Area B-6** - Hughes Lane (70 acres)
- Area B-7** - Greenwich Road opposite Jimtown Lane (600 acres)
- Area B-8** - South Elkhorn Creek near Frogtown (120 acres)
- Area B-9** - Shannon Run (100 acres)
- Area B-10*** - Little Texas (50 acres)
- Area B-11*** - Elkchester Road (40 acres)
- Area B-12** - Calument Farm (400 acres)
- Area B-13** - Cave Creek (300 acres)
- Area B-14** - Spurr Road on the Blackburn Correctional Facility (20 acres)
- Area B-15** - Cane Run on Coldstream Farm (200 acres) (Most of this area is located inside the Urban Service Area on the Coldstream Farm. A small area is located north of I-75.)
- Area B-16*** - Viley Road at Old Frankfort Pike (30 - 40 acres)
- Area B-17** - North of Swigert Avenue (120 acres)
- Area B-18** - North Elkhorn Creek/Elmendorf Farm (450 acres)
- Area B-19** - North Elkhorn Creek/Gainesway Farm (350 acres)
- Area B-20*** - Bryan Station Road north of Briar Hill Road (300 acres)
- Area B-21** - Winchester Road east of I-75 (60 acres)
- Area B-22** - East Hickman Creek west of DeLong Road (250 acres)
- Area B-23*** - Athens-Walnut Hill Road near I-75 (350 acres)
- Area B-24*** - Old Richmond Road near I-75, a.k.a. Boggs Fork Woods (150 acres)
- Area B-25** - Shelby Lane (100 acres)
- Area B-26** - Jacks Creek area including river slopes (600 acres)

**Site is preserved by a PDR or other easement.*

Map 17

Special Natural Protection Areas

October 2017



MPO Transportation Plans

The **Lexington Area Metropolitan Planning Organization (MPO)** is the federally-designated transportation planning agency for the Lexington Urbanized Area which includes Fayette and Jessamine Counties and a small portion of Scott County. The MPO develops a long-range **Metropolitan Transportation Plan (MTP)** that identifies regional transportation challenges and makes project and policy recommendations to address those challenges. The MTP also guides how federal highway and public transportation funds will be allocated over the next 25 years. The MTP is required to be updated every 5 years and was last updated in 2019. The MPO will begin updating the MTP in 2023 - looking ahead to the year 2050. This will be an opportunity to review how any transportation priorities may have changed in response to updated Comprehensive Plans in both Fayette and Jessamine County.

The MPO also develops and updates the **Transportation Improvement Program (TIP)** for the MPO area. The TIP lists the programs and projects that transportation funds will be allocated to in the near-term. Projects in the TIP are ready for some stage of implementation and also have a formal commitment of funding in the next 4 years. These are the highest-priority projects identified in the MTP, as well as within the State Highway Plan. The TIP is re-evaluated and updated every 4 years.

The **State Highway Plan** covers a six-year period and is updated by the KY Transportation Cabinet and enacted by the KY Legislature every two years. The MPO coordinates with KYTC to advance local priorities in the plan, however, the ultimate decision-making resides with the State Legislature. Since the plan is updated every two years, the projects that fall within the first two years of the plan (often referred to as the “biennium”) are those that will move forward with some phase of implementation in the near term. Projects in the State Highway Plan must be included in the MPO’s MTP and TIP in order for federal funding to be allocated to the project.

Transportation Projects

The following map summarizes the long-range projects currently in the MTP (referred to as Long-Range) and short-range projects in the TIP and State Highway Plan (referred to as Committed and Under Consideration Projects). A listing of the higher priority, short-term projects on major arterials that carry regional commuter traffic both within Fayette County, and between Fayette and surrounding counties, are highlighted below to inform your discussions.

1) Interstate I-64/I-75 Common Route Improvements

The project includes minor widening to add additional capacity and improve weaving areas between entrance and exit ramps. KYTC has split this project into three sections. Construction on Section 2 is expected to begin this year. Section 3 is their next priority, but a schedule for construction has yet to be determined.

- Section 1 - Northern split to Newtown Pike
- Section 2 - Newtown Pike to Paris Pike
- Section 3 - Paris Pike to the Southern split

2) Newtown Pike

The KYTC has completed design and is currently acquiring right of way to widen Newtown Pike from I-75 / I-64 to New Circle Rd. The corridor has both heavy commuter and freight traffic as a primary connection between Lexington, the Interstate, and Bluegrass Parkway. Construction is anticipated in 2023.

3) New Circle Rd – Leestown Rd to Georgetown Rd

The KYTC has completed design and is working to acquire right of way to widen New Circle Rd to six lanes between Leestown Road and Georgetown Road. Coupled with the two six-lane widening projects that have already been completed along New Circle Road, both east and west of this segment, this section will complete the continuous six-lane section between Newtown Pike and Versailles Rd in order to accommodate increasing traffic between I-75 / I-64 and the Bluegrass Parkway.

4) New Circle Rd – Woodhill Dr to Trade Center Dr

The KYTC is scheduled to begin preliminary design for improvements to New Circle Rd from Woodhill Dr to Trade Center Dr in 2023. The MPO, City of Lexington and KYTC are currently working on a land use and transportation plan for the signalized section of New Circle Rd which will help inform preliminary design concepts.

5) Liberty Rd

The KYTC has completed design to widen Liberty Road from New Circle Road to Graftons Mill Rd (near Liberty Elementary). Construction is anticipated to begin in 2025. This year, the City of Lexington will begin design for upgrades to Liberty Rd between New Circle Rd and Winchester Rd. The City section is not a major widening project.

6) Richmond Rd / Athens Boonesboro Rd

At the request of the KYTC, the MPO is currently considering programming federal funds within the MPO's TIP to install Reduced Crossing U-turn intersections along Richmond Rd / Athens Boonesboro Rd from Yorkshire Blvd to the Brenda Cowan Elementary School entrance. Aphids Way will also be re-aligned at Old Richmond Rd. The goal is to improve safety and traffic flow between both Hayes Blvd and Man O War Blvd, but also for commuter traffic between Lexington and I-75. If approved by the MPO, the KYTC will begin construction in 2023.

7) Winchester Rd (US 60)

The KYTC is in the preliminary design phase to examine improvements to Winchester Rd from Polo Club Blvd to Haley Road (which connects to the Bluegrass Station exit on I-64). Increasing traffic is expected in the area as the Polo Club/Winchester Rd corridors continue to develop. While not part of the current design phase, KYTC has expressed a longer term desire to continue improvements from Haley Road to the Winchester Bypass.

8) Hamburg Tunnel

A feasibility study was completed to construct a road between (under) I-75 from Polo Club Blvd to Sir Barton Way to alleviate traffic on Winchester Rd and Man O War Blvd near the I-75 exits. Design funding is identified in the State Highway Plan for 2025.

9) Georgetown Rd - Spurr Road to Iron Works Pike

The KYTC has sought to improve Georgetown Rd between Spurr Rd and Iron Works Pike for many years as traffic volumes continue to increase and serious injury crashes continue to be problematic. However, the project carries a heavy price tag, requiring 4 bridge repairs and extensive right of way acquisition. Due to cost, the KYTC has split the project into 2 sections with the goal to begin right of way acquisition for Section 2 in 2023.

- Section 1 - Spurr Rd to Kearney Rd
- Section 2 - Kearney Rd to Iron Works Pike

10) US 27 (Nicholasville Rd) – Man O War to Brannon Rd

The KYTC has completed preliminary design to improve access management both along the corridor and at intersections to preserve and enhance the corridor's ability to accommodate heavy commuter traffic along Nicholasville Rd. KYTC is working to identify funding for the design phase for this project.

11) US 27 (Nicholasville Rd) – Downtown Lexington to Brannon Rd

The MPO and City of Lexington completed a corridor land use and transportation plan for the heavy commuter corridor in 2020. In 2022, the City, MPO, KYTC and Lextran will cooperatively conduct a detailed traffic and transit analysis of concepts presented in the plan including access management, innovative intersection improvements and enhanced transit service, including bus-rapid transit. These concepts are intended to address mobility options and traffic congestion as Jessamine and other counties to the south of Lexington continue to grow.

**Transportation Projects
Planned or Under Consideration**

Committed Short Range Projects
Under Consideration
Long Range Projects

0 2 4 8 Miles

7-27-22

7-27-22

Sanitary Sewer Overview

Goal 4 Committee Meeting
August 9, 2022

Charles H. Martin, P.E. Director
Division of Water Quality



AGENDA

- Area by Area Discussion of “Sewerable” Areas (2017 Rural Land Management Plan).
 - Eight specific geographic locations.
 - Overview of existing / proposed sanitary sewer infrastructure needs impacting each location.
- Interim Questions
- Final Questions.

First Key Point

Sanitary Sewer Remedial Measures Plan

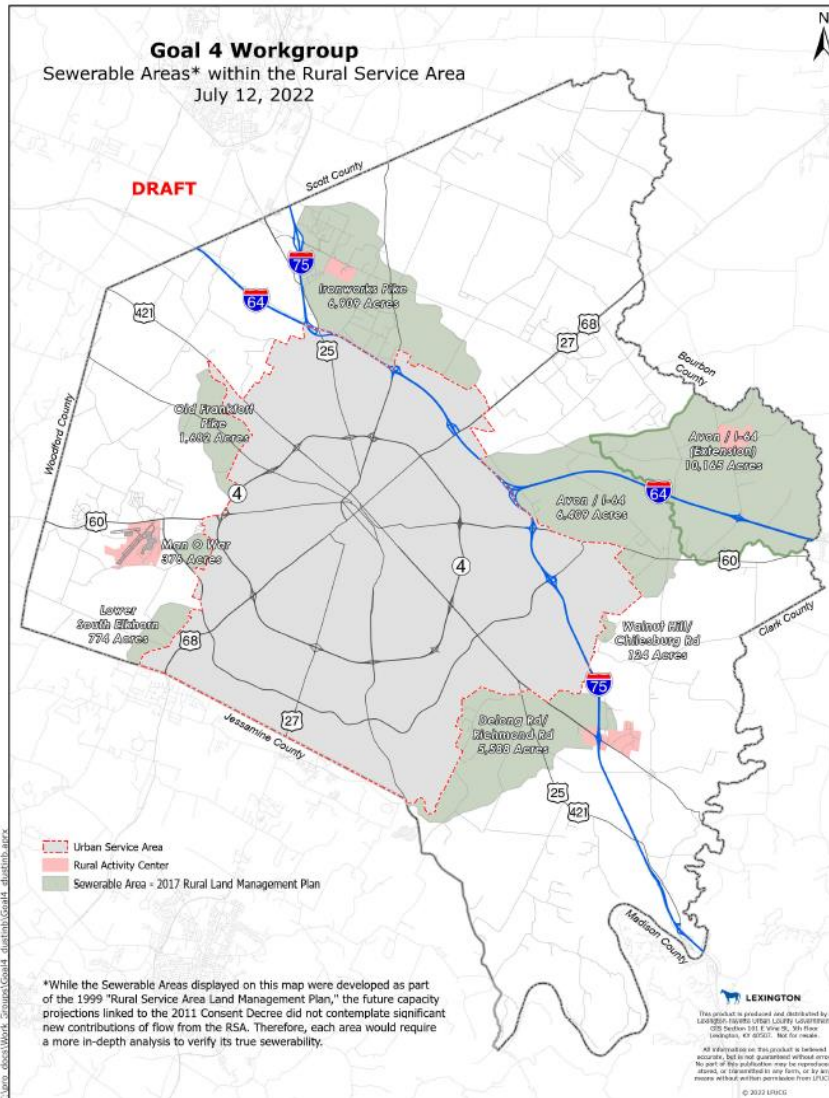
The Consent Decree sanitary sewer capital improvement program did not include capacity for expansion of the USA, it only considered the 2035 full development projection for the existing USA boundary.

Second Key Point

- Sewer service areas are best defined by the topography of the land.
- Sanitary sewer pipelines mimic streams, they just drain a different kind of liquid.
- Unlike most major cities, Lexington doesn't have a river running through it.
- With eight major watersheds and only two treatment plants, we must pump from one watershed to another.



*Gravity is your friend, its free and it
never takes a day off.*



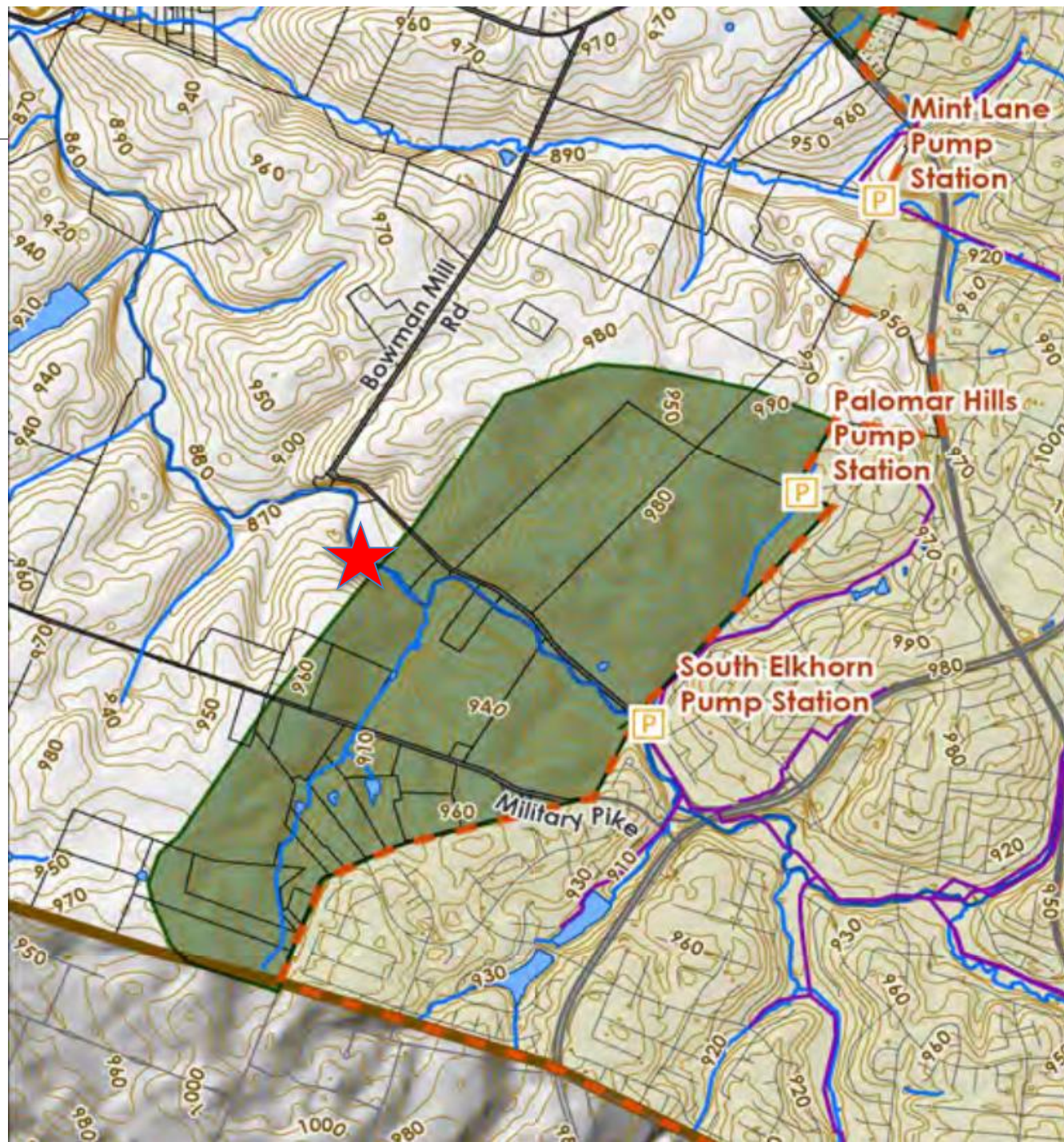
- Eight specific geographic locations.
- Overview of existing / proposed sanitary sewer infrastructure needs impacting each location.
- Following slides keep referring back to this map.

Lower South Elkhorn (LSE) Area

Existing Infrastructure Upstream From LSE.

- South Elkhorn Pump Station / Force Main
 - Expanded in 2010 (\$16 M investment).
 - Even with expansion, still presents operational challenges.
- Palomar Pump Station
 - Vintage 1980's station serving small area.
 - Must access via a residential homeowner's driveway.

Goal 4 Meeting:
08/09/2022



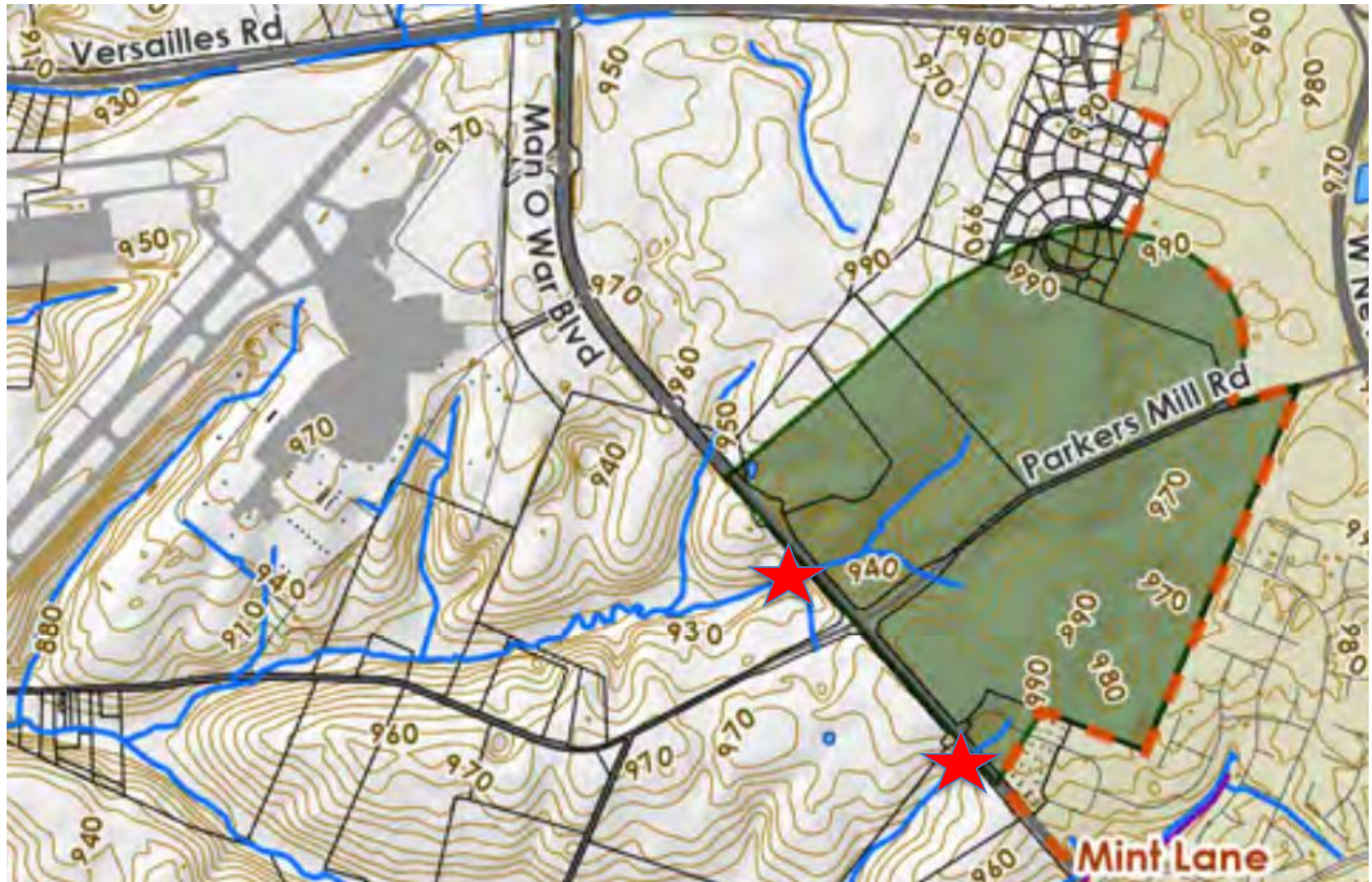
Lower South Elkhorn (LSE) Area Considerations for Future Inclusion in the USA.

- The potential “win” in converting Palomar PS to gravity.
- The potential “loss” by abandoning recent investment in SE Pump Station.
- Need for off-line storage so that 3 mile SE force main to West Hickman WWTP can still be used.
- Potential Jessamine County service impact.
- How far downstream do you go?

Man O War (MOW)

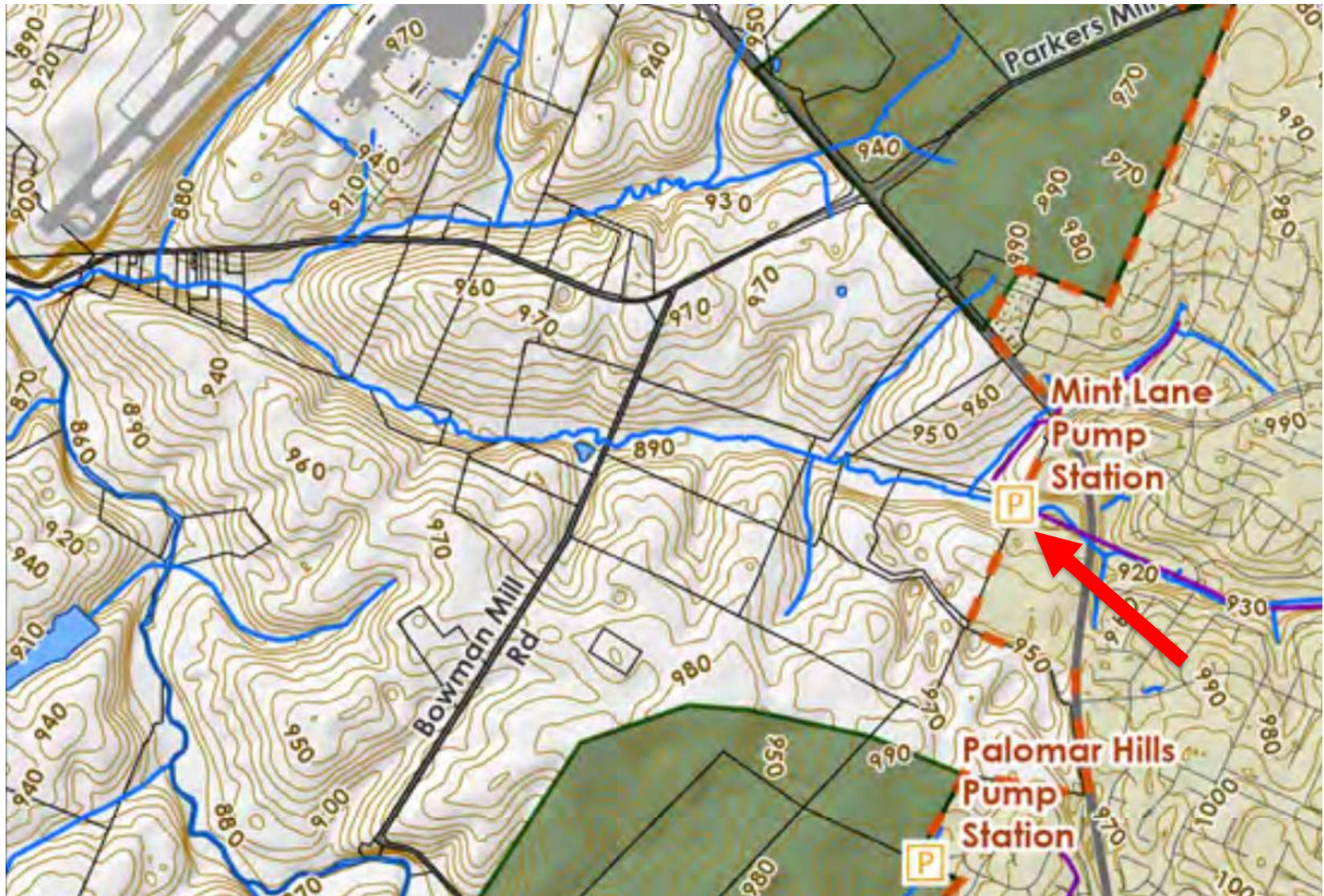
Existing Infrastructure Upstream From MOW.

None – this area is the top of a sub-catchment. Sanitary sewer service for this area would likely require a new pumping station (or two).



South Elkhorn Service Area “Wrinkle” to Consider

- Existing Mint Lane PS (ML PS) serves a sub-catchment located between LSE and MOW.
- Expansion of ML PS is a requirement of the Consent Decree.
- Current options for expansion are “location challenged”.
- Overall question for South Elkhorn – how far do you go?

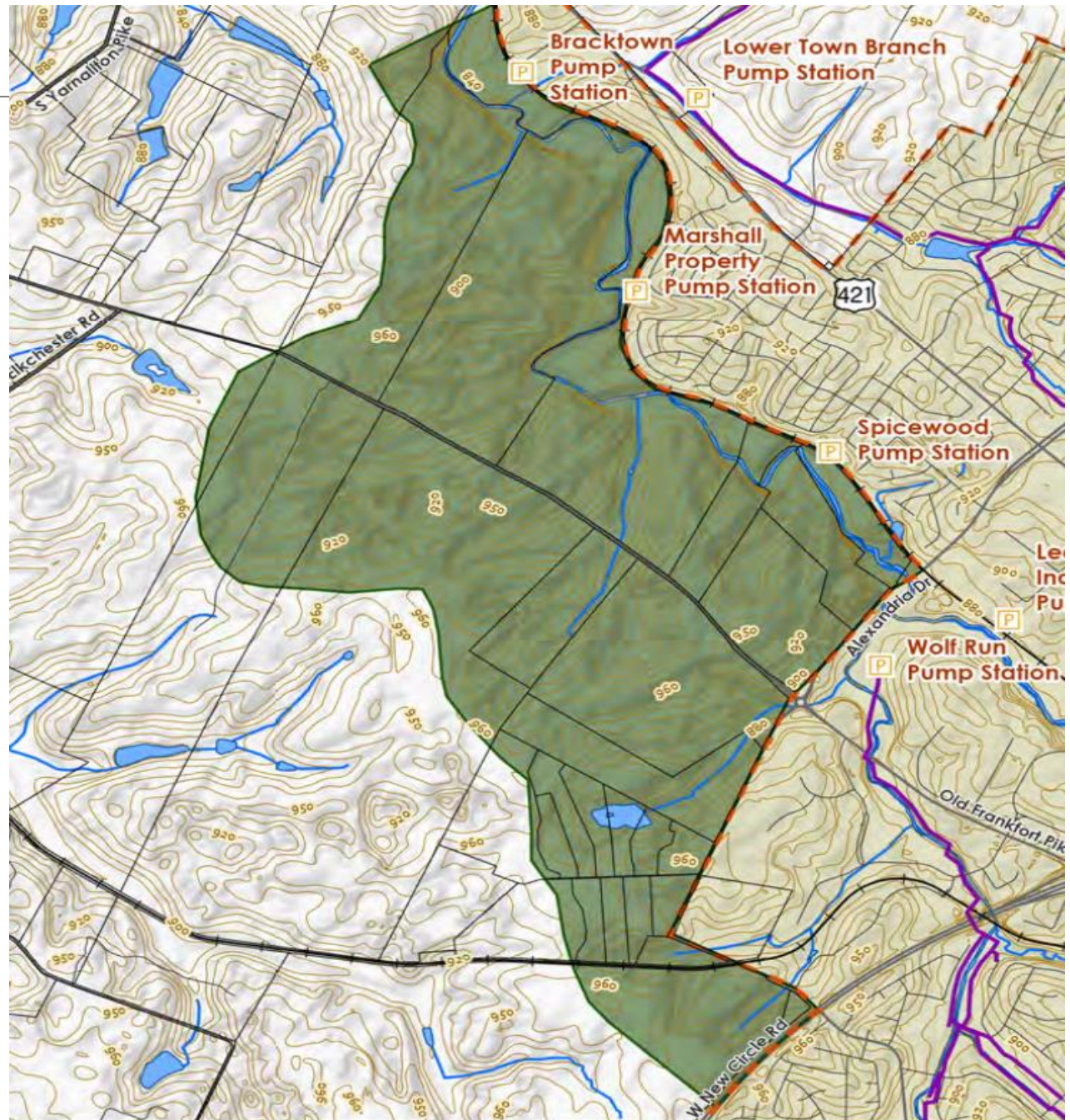


Old Frankfort Pike (OFP) Area

Existing Infrastructure Upstream From OFP.

- Town Branch WWTP.
- Wolf Run PS / Force Main - Expanded in 2015 (\$8.6 M investment).
- Lower Town Branch PS / Force Main – vintage 1990's.
- Three smaller pumping stations (all less than 23 years old).

Goal 4 Meeting:
08/09/2022



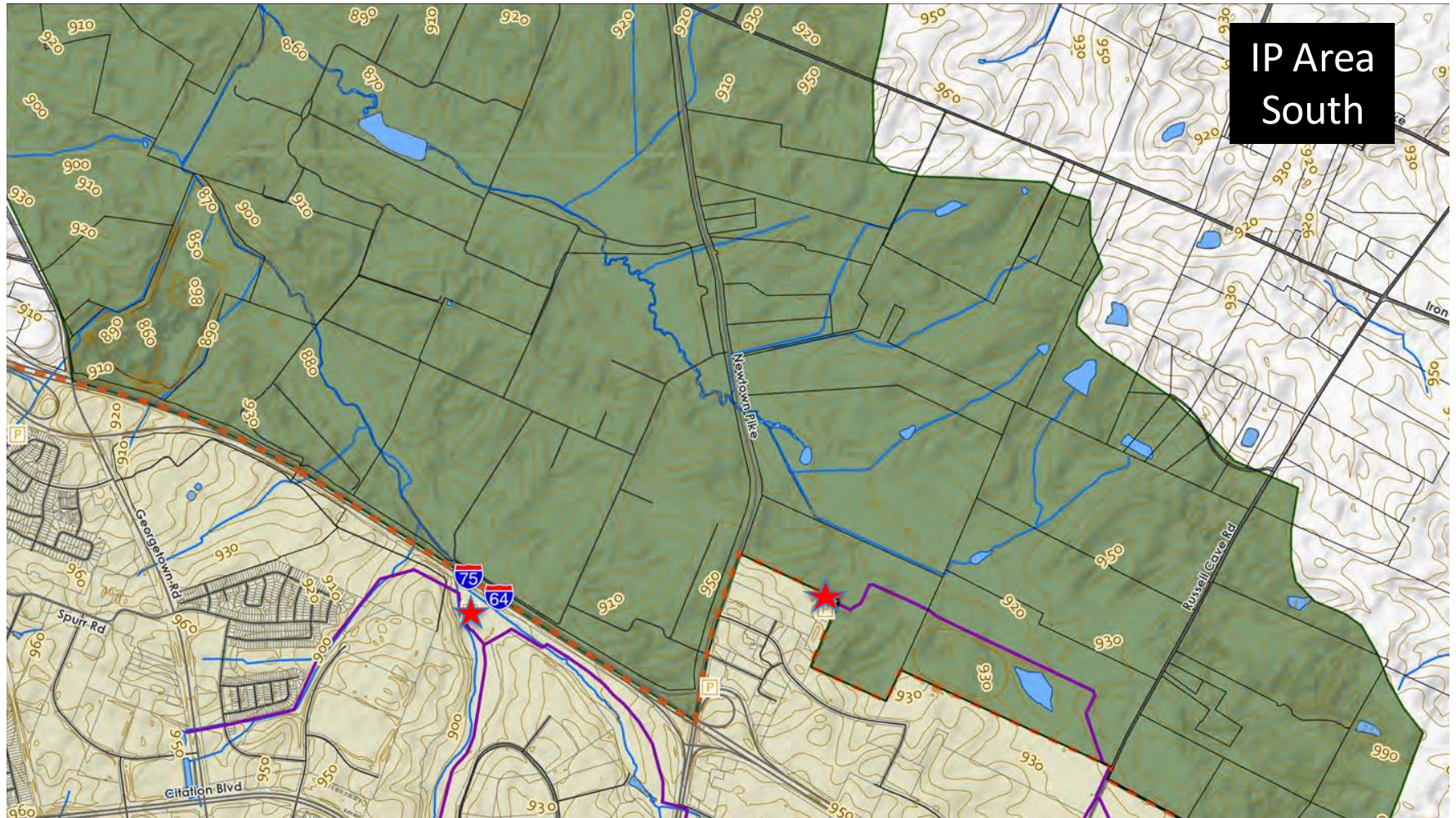
Old Frankfort Pike (OFP) Area

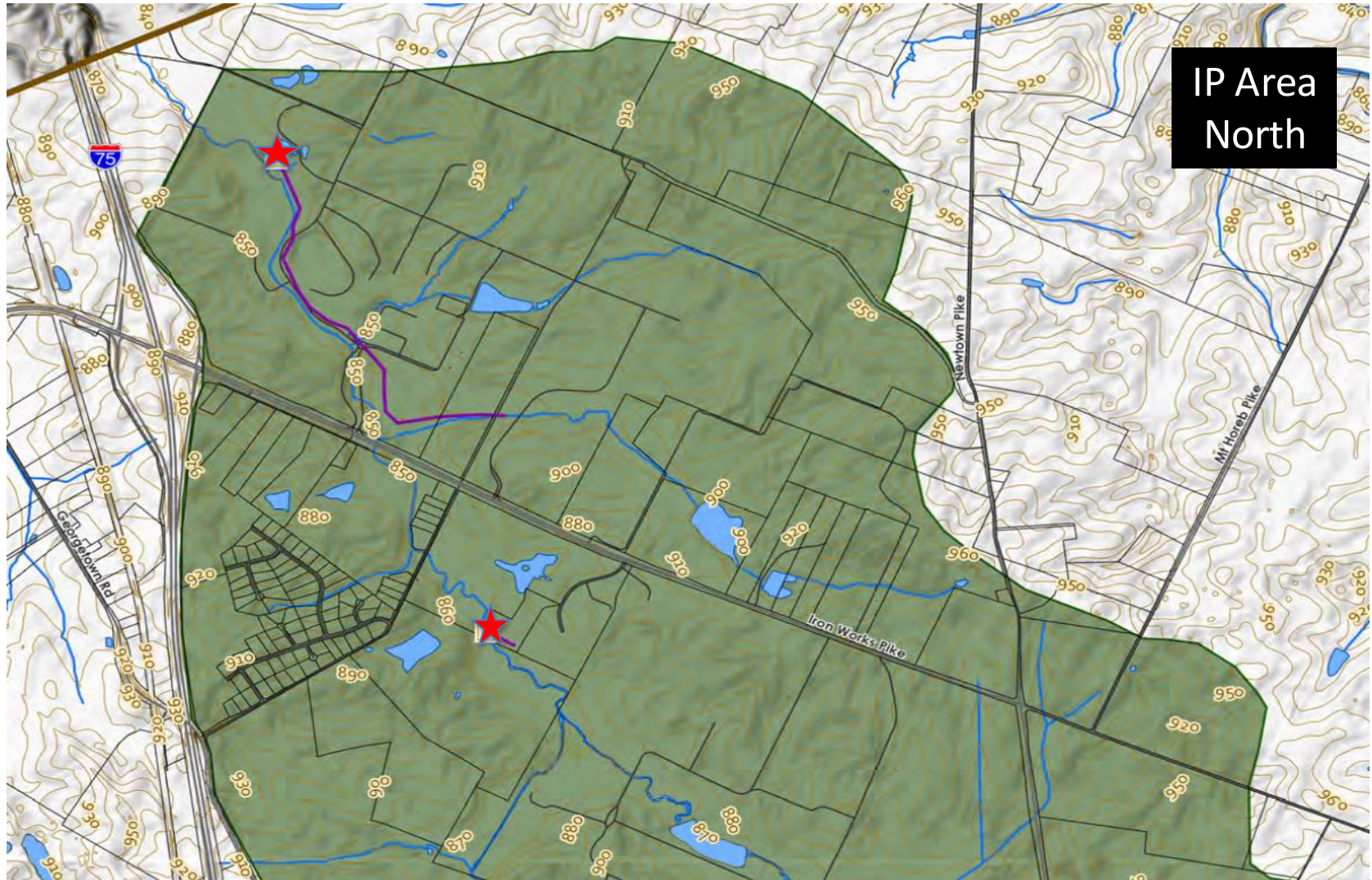
Considerations for Future Inclusion in the USA.

- The “win” in trading five existing pump stations for one new station.
- The “loss” by abandoning recent investment in Wolf Run Pump Station.
- The efficiency of moving further downstream and pumping back to the treatment site in use since 1918?
- How far downstream do you go?

Ironworks Pike (IP) Area

- Existing infrastructure *upstream* From IP:
 - Existing EA3 pump station (built in 2020 for \$5.8 M).
 - Lower Cane Run pump station and Lower Cane Run Wet Weather Storage (built 2018 for \$12.3M).
 - Lower Cane Run 2 pump station.
- Existing infrastructure *downstream* from IP: Spindletop and Horse Park pump stations.





Ironworks Pike (IP) Area

Considerations for Future Inclusion in the USA.

- Plan for future elimination of existing facilities in a 25 year plus planning horizon.
- Abandonment of existing pumping stations serving state facilities.
- Royal Springs aquifer.
- How far downstream do you go?

Avon / I 64 Area

Existing infrastructure upstream From Avon / I 64.

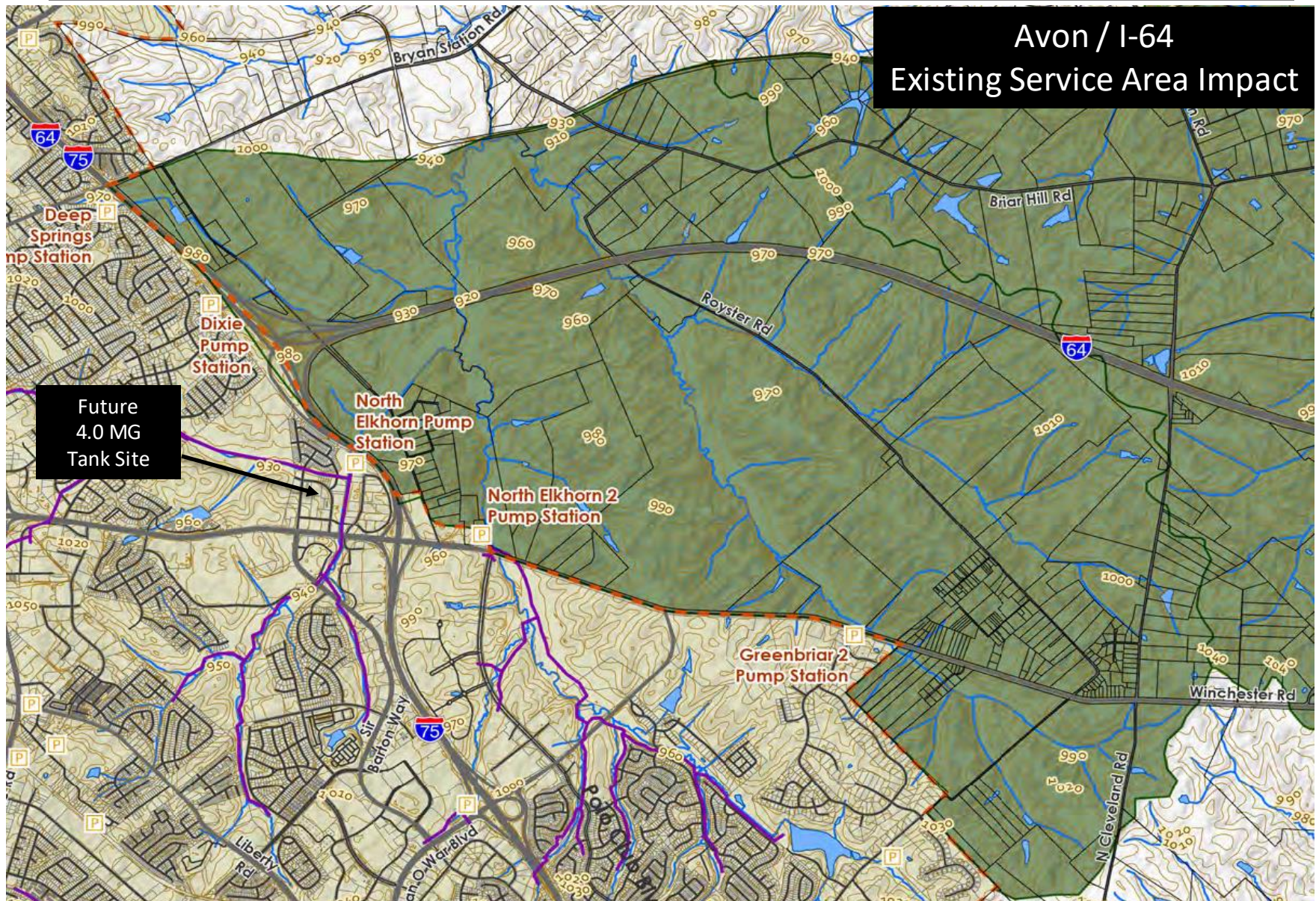
- **North Elkhorn pump station / force main** (expanded 2009 - \$15.8 M).
- **Deep Springs pump station** (expanded 2012 - \$2.3 M)
- **Dixie pump station** (expanded 2012 – \$0.5 M)
- **EA2 pump station / force main** (built 2015 - \$7.2 M).
- **Greenbriar 2 pump station** – vintage late 1970's can-style station scheduled for replacement as part of the Remedial Measures Plan (RMP).

Avon / I 64 Area

- **NOTE:** A 4 MG wet weather storage tank is scheduled to be constructed as part of the RMP. Proposed location is near the I-75 / Winchester Road interchange.
- Due to overall size of area, breakdown is in three sub-areas:
 1. Existing Service Area Impact
 2. Royster Road Tributary Area
 3. Avon / Haley Pike Landfill Area

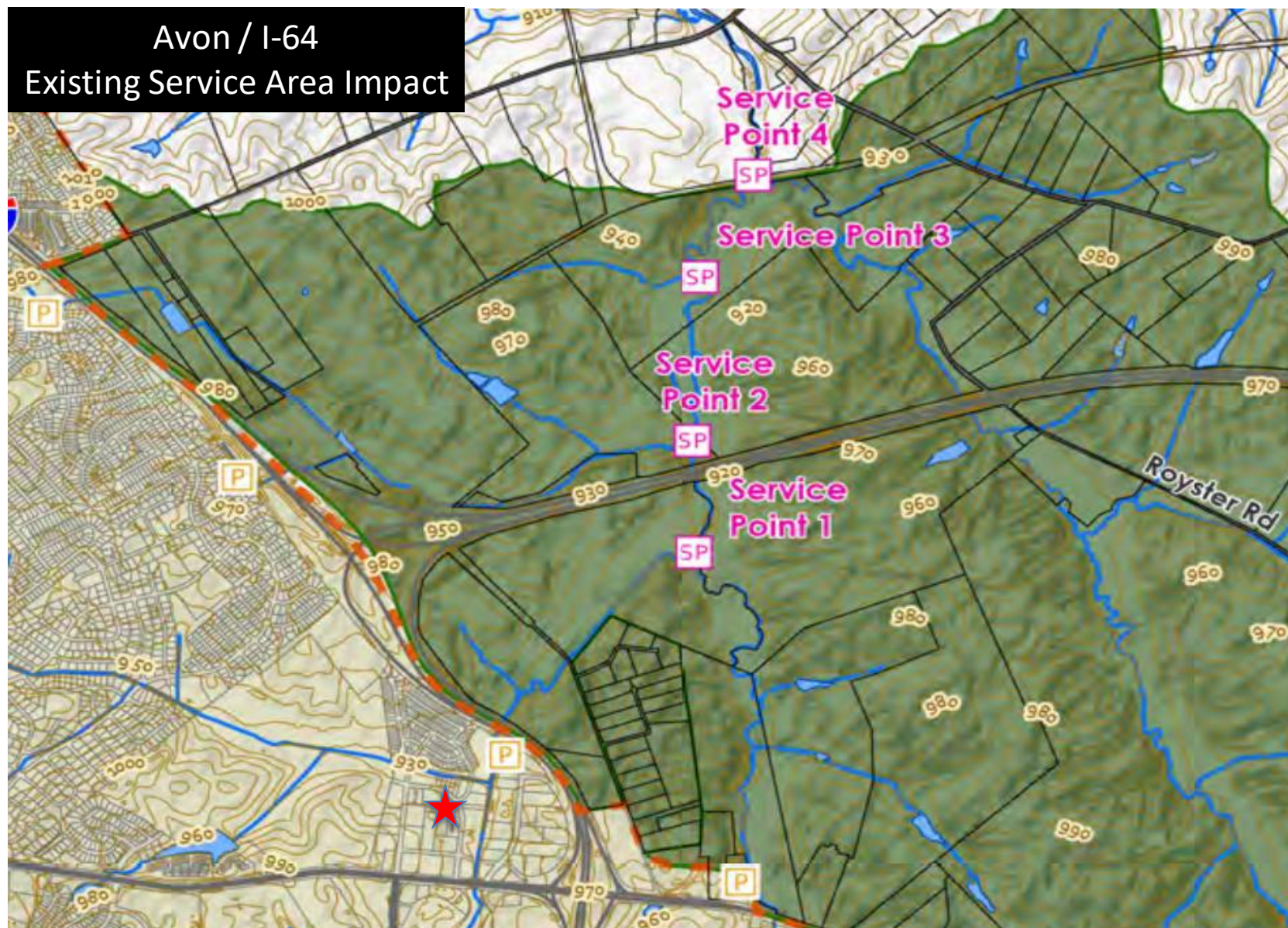


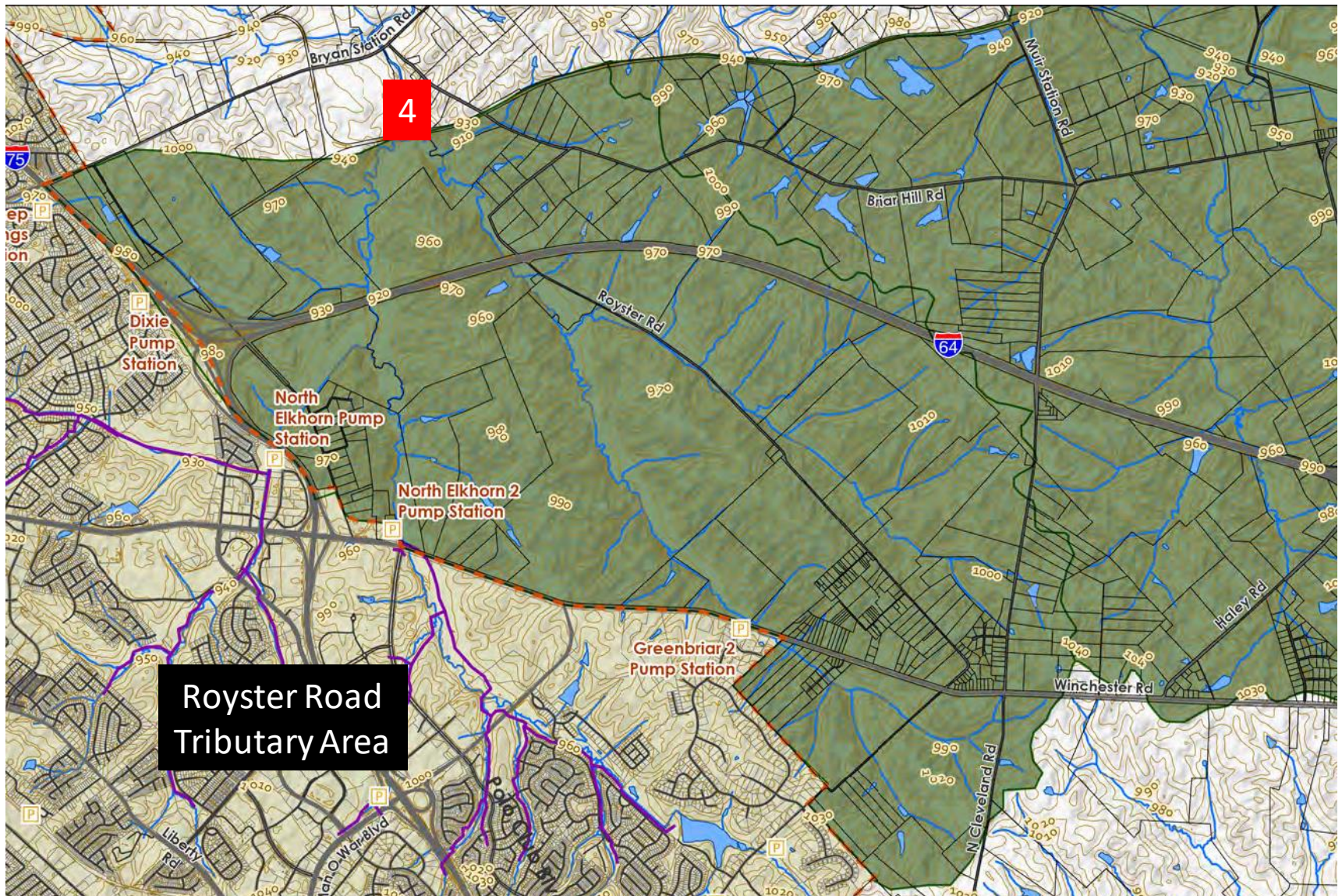
Avon / I-64 Existing Service Area Impact



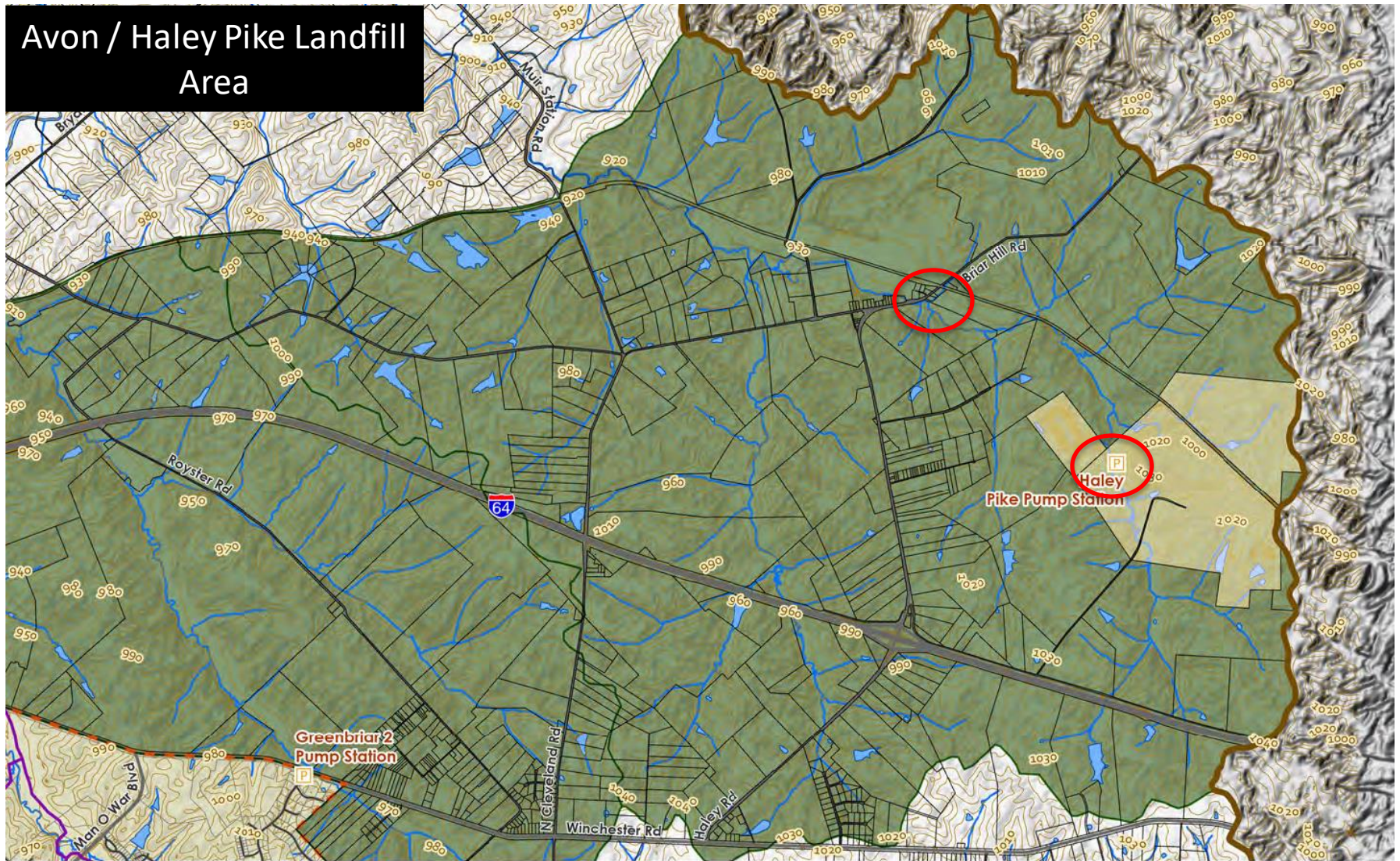


Avon / I-64
Existing Service Area Impact





Avon / Haley Pike Landfill Area



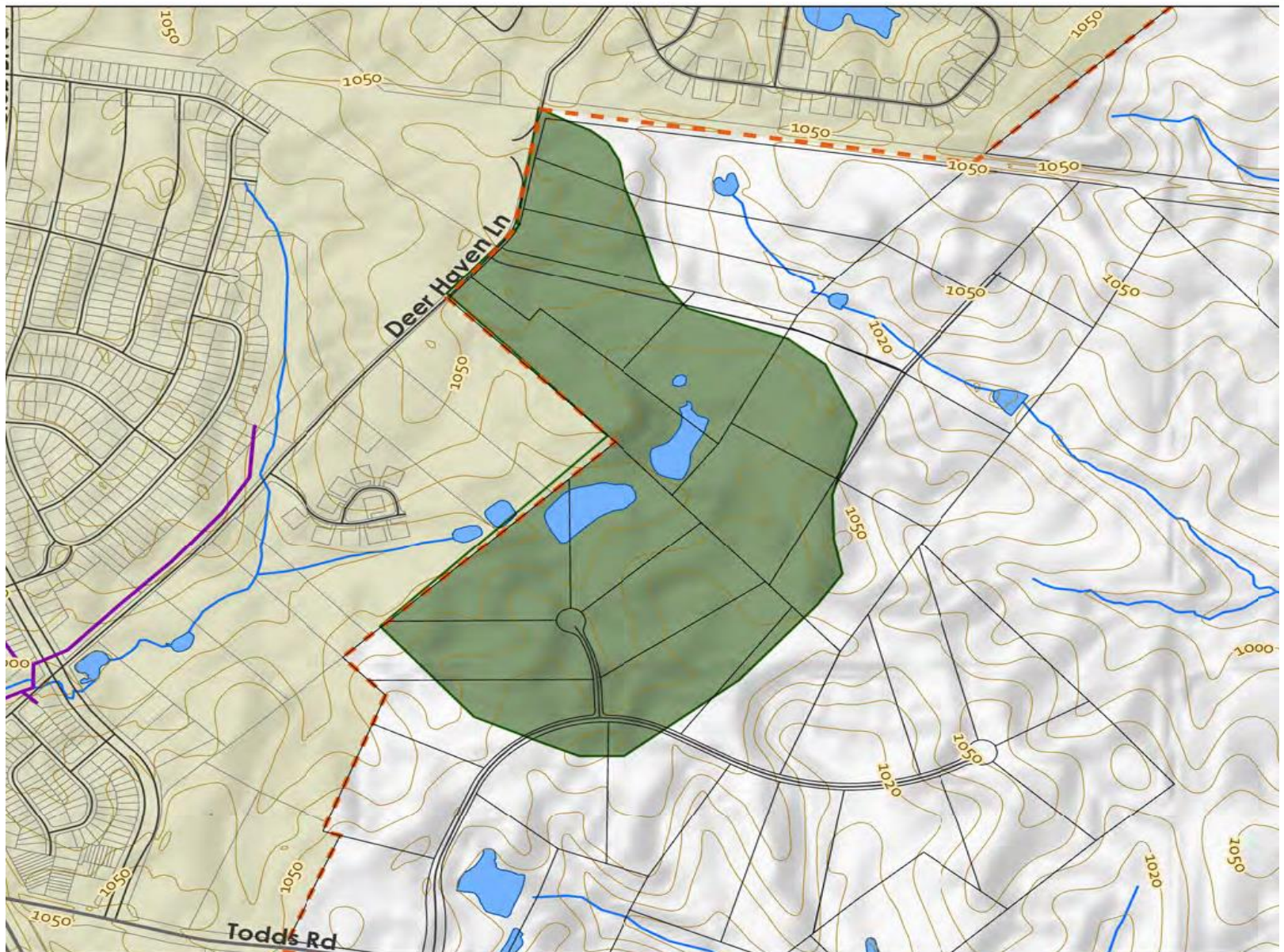
Avon / I -64 Area

Considerations for Future Inclusion in the USA.

- Plan for future elimination of existing facilities in a 25 year plus planning horizon.
- Opportunities to combine two future Consent Decree obligations with growth strategy.
- The “*how far downstream do you go*” question seems amplified in this area. Expanding the service area inclusive of Avon and Haley Pike landfill presents potential solutions to lingering water quality risks.

Walnut Hill – Chilesburg Road Area

- Existing Infrastructure Upstream - none.
- Existing Infrastructure Downstream – existing 12-inch gravity trunk sewer 0 – 2,500 linear feet away.
- Capacity and grade verification needed, otherwise no identified influencing factors.



Delong / Richmond Road Area

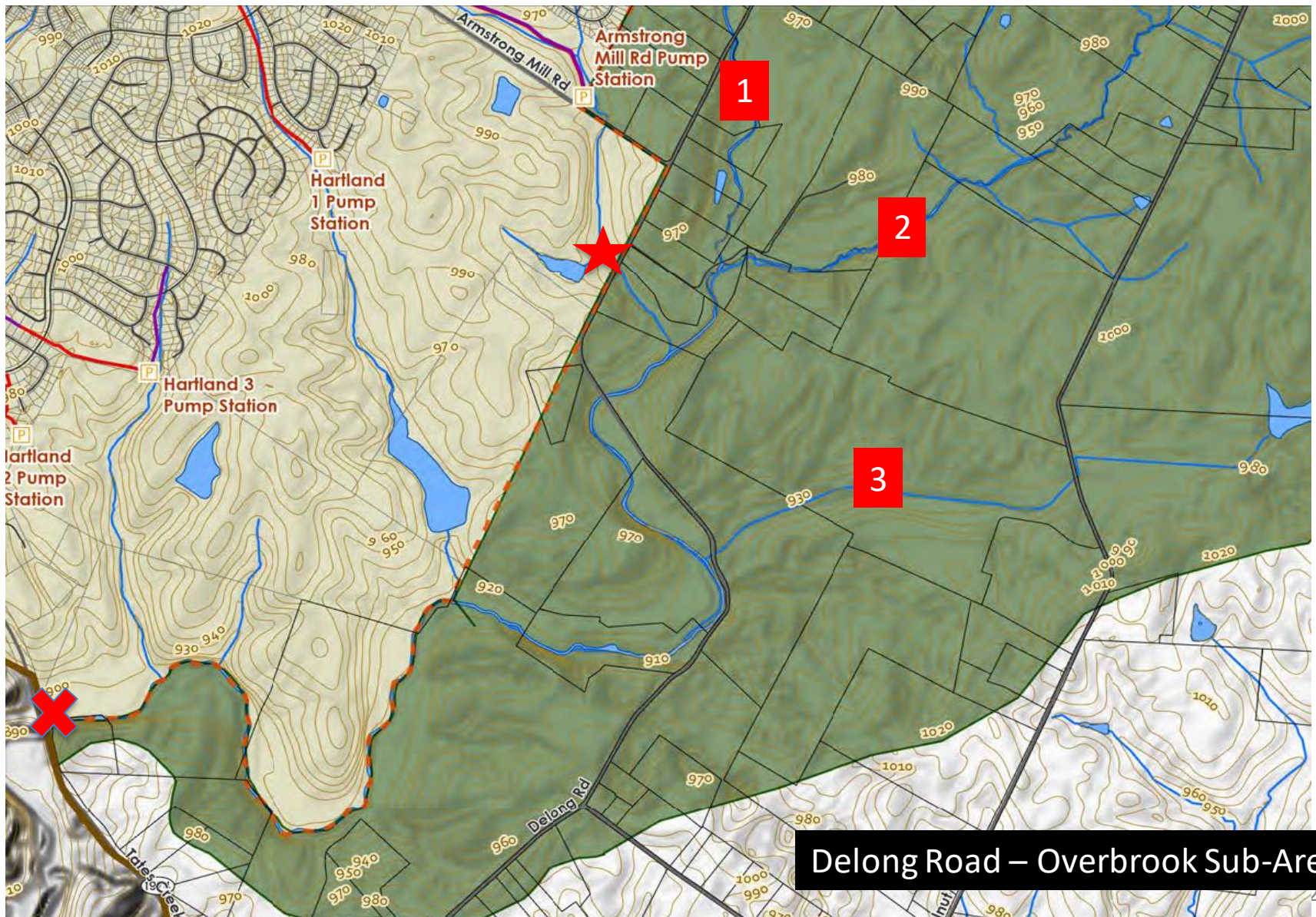
Majority of this area is tributary to a point on Tates Creek Road south of East Brannon Road.

Due to overall size and topography of area, breakdown is in three sub-areas:

- A. Delong Road – Overbrook Sub-Area
- B. Old Richmond Road Sub-Area
- C. Athens – Boonesboro Road Sub-Area

Delong Road – Overbrook Sub-Area

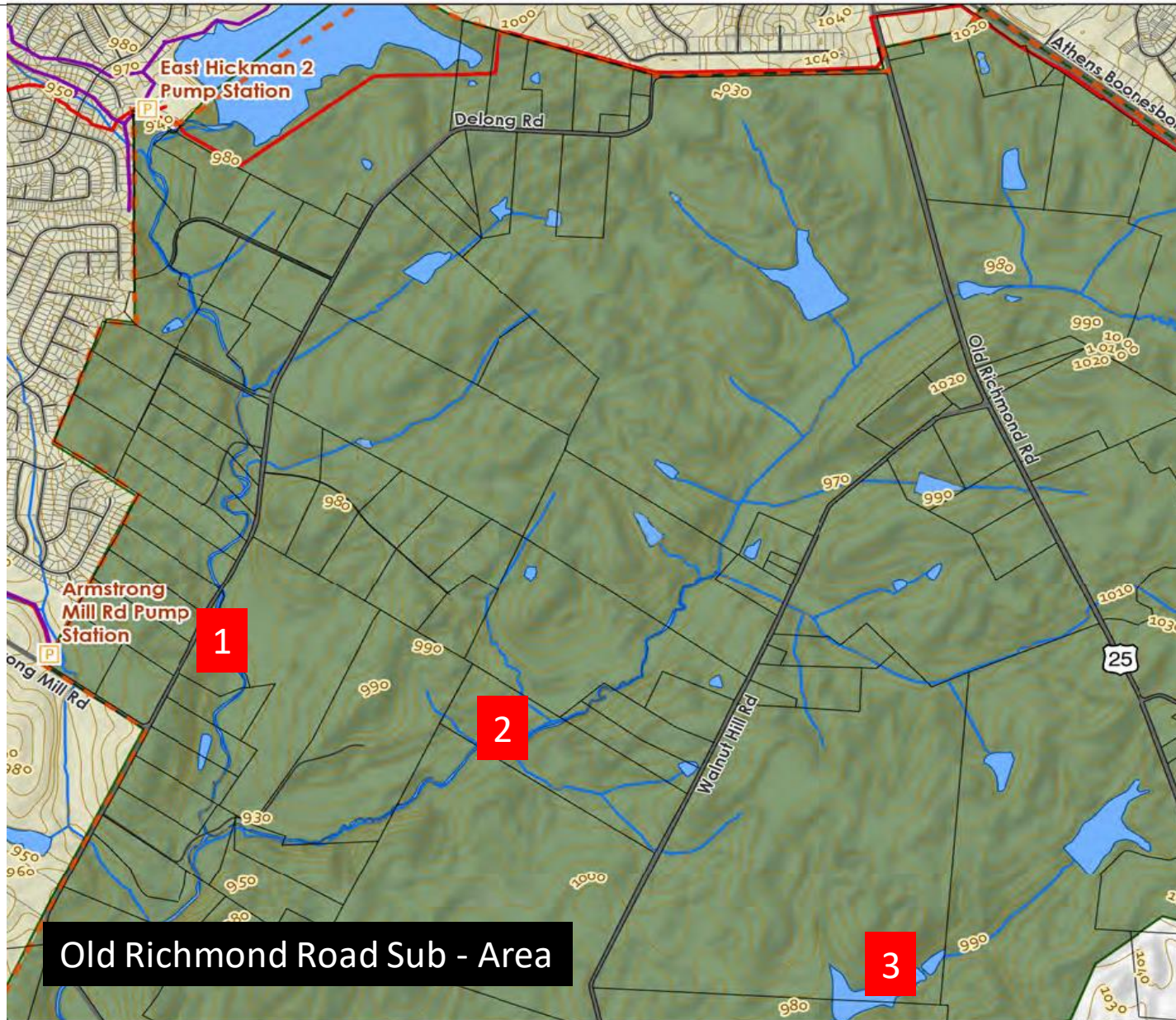
- Existing infrastructure *upstream* from Delong - Overbrook:
 - Three Hartland pump stations buffered by undeveloped farm land.
 - Armstrong Mill pump station (relocated pump station to be in service by 2024 per Consent Decree).
- Proposed infrastructure, including the Overbrook pump station would be necessary to efficiently service this sub-area.
- How far upstream do you want to go (sub-catchments 1, 2 and 3)?



Delong Road – Overbrook Sub-Area

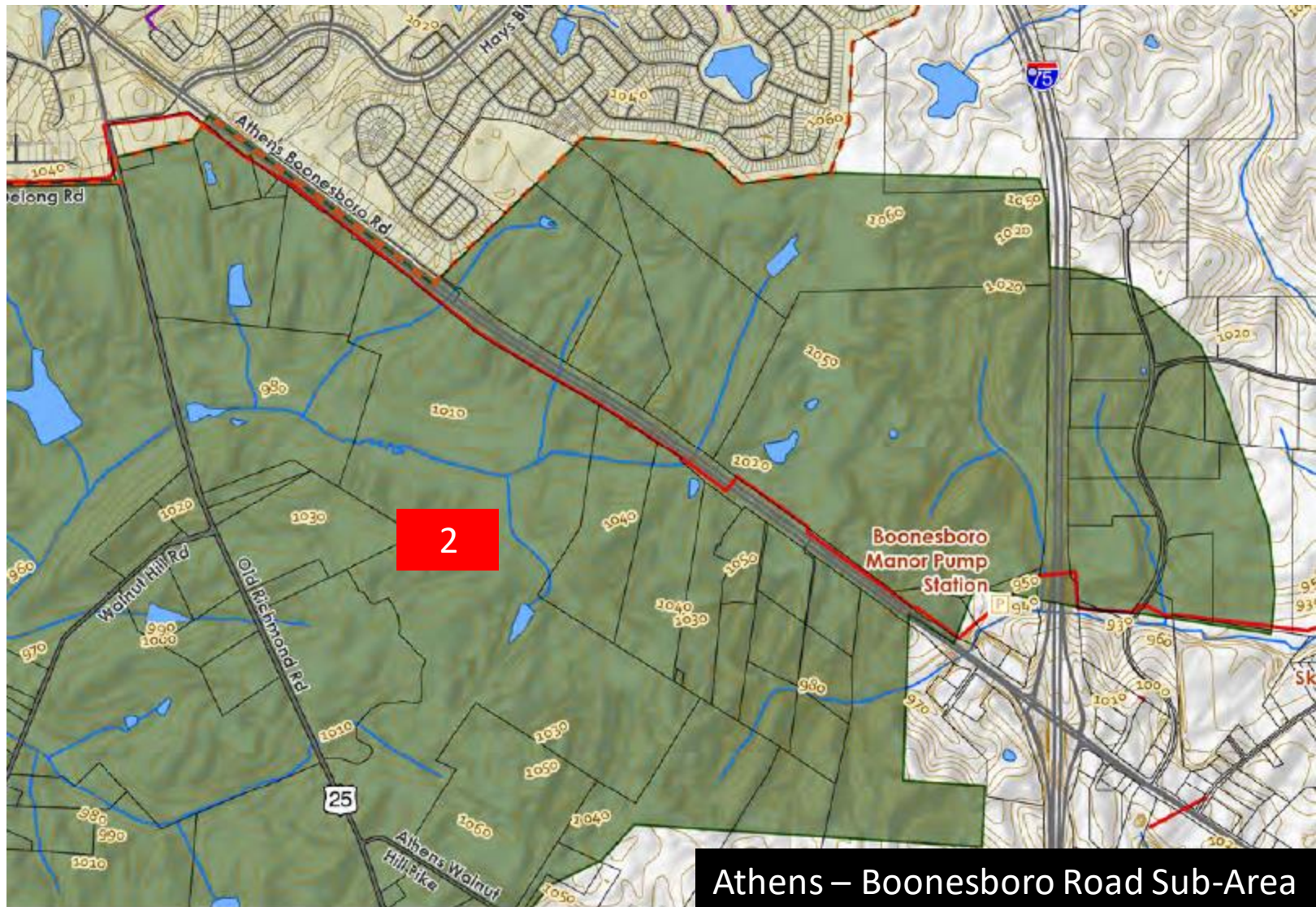
Old Richmond Road Sub-Area

- Sub-catchment 1 : leads to the East Hickman pump station and wet weather storage facility - placed into service in 2020.
- Sub-catchment 2 and 3 : drains the broader area up to Old Richmond Road and Athens Boonesboro Road.



Athens – Boonesboro Road Sub-Area

- Represents the far upstream area tributary to sub-catchment 2 and the entirety on Delong Road / Richmond Road area.
- Exception: locations with access to capacity available in the Blue Sky force main and/or the Boonesboro Manor pump station.



Delong Road / Richmond Road Area

Considerations for Future Inclusion in the USA.

- Near-term Consent Decree driven projects makes planning for future elimination of existing facilities less cost efficient.
- Future decisions on inclusion would impact prior plan for a future Overbrook pump station.
- The “*how far upstream do you go*” question greatly influences how sanitary service is provided.
- Athens-Boonesboro Road corridor inside I-75 likely has a more direct path to sanitary sewer service.

Division of Water Quality Requests for Consideration

- ✓ Service area planning should equally consider topography along with property lines and roadways to achieve the most efficient system possible.
- ✓ As recommendations are being formulated, please give appropriate consideration to the Mint Lane pump station and Greenbriar 2 pump station improvement requirements and how they might impact both the Consent Decree requirements and any Goal 4 recommendations.
- ✓ The farther away from our treatment facilities we get, the harder it is to provide service while minimizing risk.

Further Questions?

