

FORSYTH COUNTY WESTERN RURAL AREA

DEVELOPMENT ASSESSMENT

Background

- ⦿ Summer 2010 – Commissioners requested staff study development potential of the Western Rural Area of Forsyth County
- ⦿ Response to concerns expressed by towns about the potential loss of rural character in western Forsyth county
- ⦿ 33,236 acre study area

Existing Land Use

- ⦿ Field survey conducted in fall 2010 – parcels mapped according to current use
- ⦿ Existing land use patterns are predominantly residential and agricultural in nature
- ⦿ 32% agriculture
- ⦿ 28% large lot residential
- ⦿ 14% single-family
- ⦿ These uses account for 74% of the Western Rural Area

Existing Land Use

- ⦿ Agricultural and residential uses throughout the area – more conventional residential subdivisions close to limits of Clemmons, Lewisville, and Winston-Salem
- ⦿ 21% of the area is vacant land
- ⦿ The rest of the area consists of nonresidential development and public rights-of-way
- ⦿ Only 2% of land in the area is nonresidential

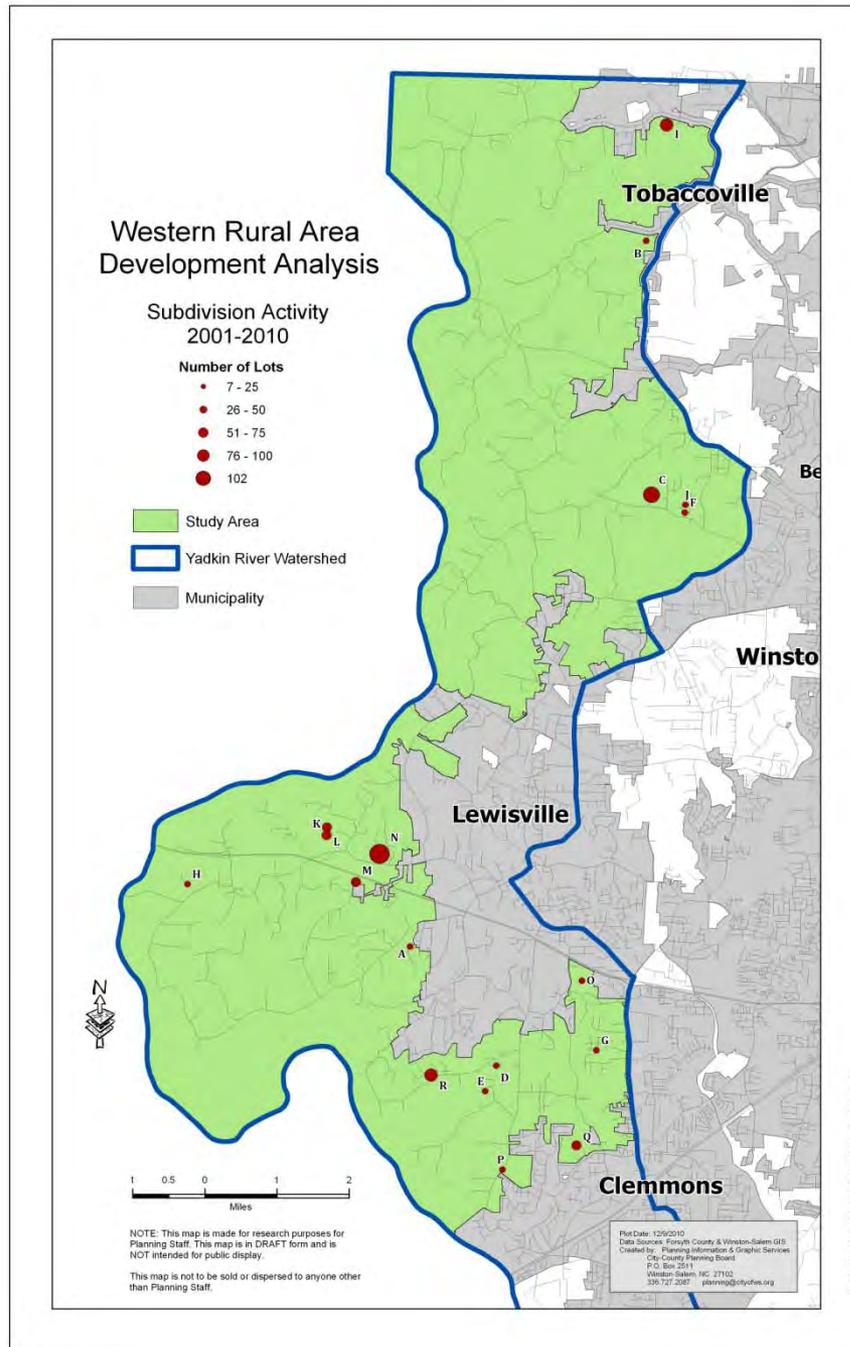
Recent Subdivision Activity and Demand

- ◎ Only 18 subdivisions approved here since 2001
- ◎ Majority located near Lewisville or Clemmons
- ◎ Most subdivisions have few lots - only 4 with +40 lots
- ◎ 569 lots approved on 717 acres – approximately 70% still vacant
- ◎ Overall average density of new subdivision lots approved here is 1.26 units/acre

Recent Subdivision Activity and Demand

- ⦿ Sewer necessary to serve such low density
- ⦿ Lissara (2009) - largest single development approved since 2001 - 102 lots on 150 acres
- ⦿ Subdivision demand in Rural Area has been low for the last 10 years
- ⦿ Current supply of lots should be able to meet demand for 10+ years at current demand

Recent Subdivisions



Filter Mapping Process

- ◎ Staff completed GIS filter mapping analysis
- ◎ Land with a variety of development limitations mapped and separated from remaining developable land
- ◎ Water-related development limitations filtered out
- ◎ Land in lakes, ponds and rivers; land in the reservoir protection area; land in the YR zoning district; land in the 100-year floodplain and floodway
- ◎ Land with these features exists throughout the study area

Filter Mapping Process

- ⦿ Steep slopes (greater than 20%) and poor development soils were also filtered out
- ⦿ These features make large-scale residential development difficult
- ⦿ Steep slopes more common in northern part of study area; poor soils common in the southern part

Filter Mapping Process

- ⦿ Developed land, vacant land, land in agricultural programs identified, with developed land being filtered out
- ⦿ Land in the agricultural tax program was considered developable because it could be converted into subdivision land if back taxes were paid
- ⦿ Developed land includes any parcel with a structure on it, except residential parcels +5 acres with investments under \$300,000
- ⦿ Agricultural land exists all over, concentrated near West Bend and the northern half of the area
- ⦿ Developed land exists all over the area

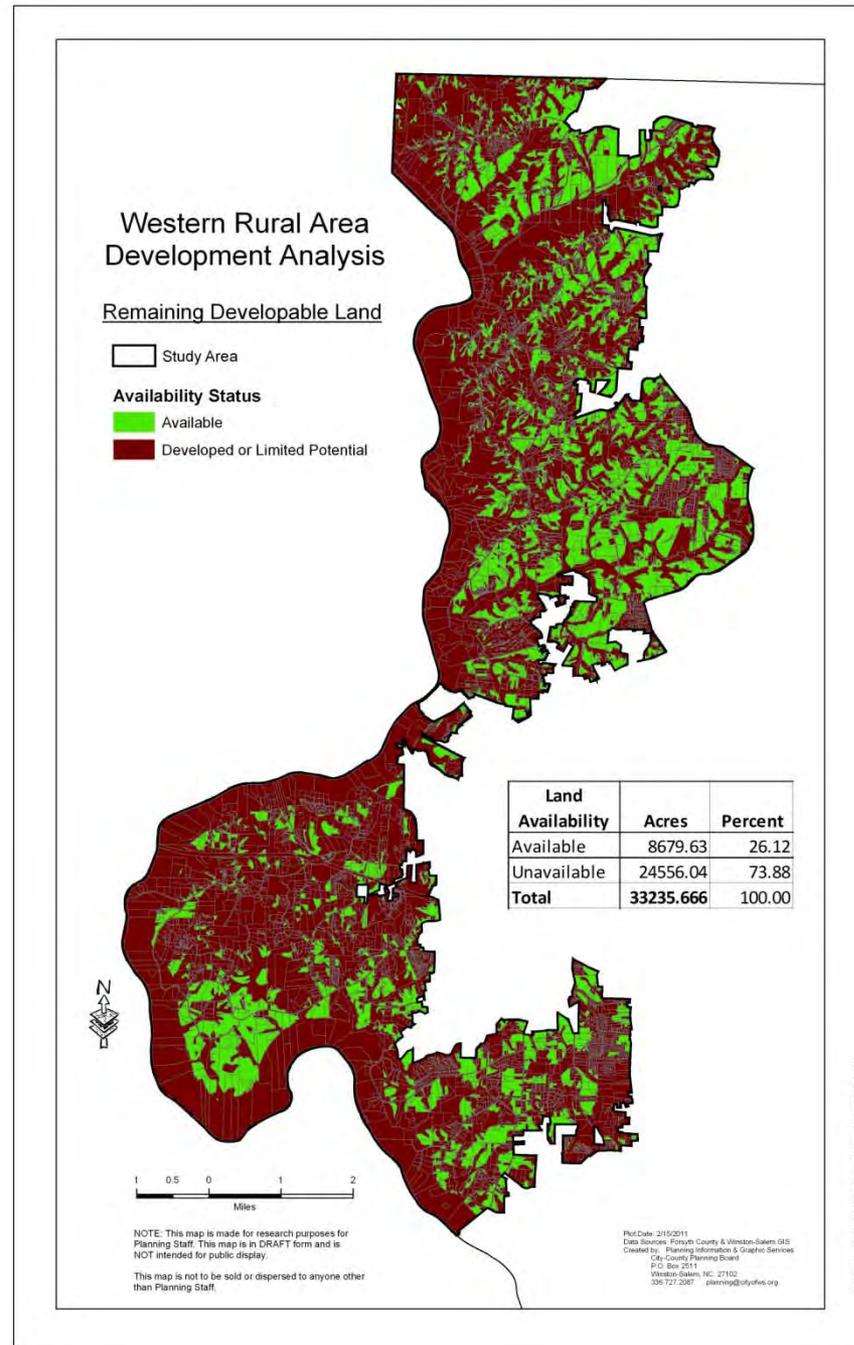
Future Development Analysis

- ⦿ After each of the filter analyses were completed, development limitations were overlaid on the Western Rural Area boundaries
- ⦿ 26% of the Area, or 8,679 acres, has no significant natural constraints and is ideal for future development
- ⦿ This land is scattered throughout the area - more developable land exists in the southern and northeastern area

Future Development Analysis

- ⦿ Steep slopes, poor soils, and water features are common – area development has been scattered large lot residential subdivisions served by on-site septic tanks because of this
- ⦿ Based on these patterns, extending sewer to the area would not be financially justifiable to the City-County Utilities Commission

Remaining Developable Land



Public Sewer Constraints

- ⦿ Extension of public sewer to the Area would be very expensive
- ⦿ Significant future development would be necessary to make a business case
- ⦿ Recent demand has been for larger lots which do not need sewer
- ⦿ Some interest in developing cluster subdivisions, but many would be necessary to pay for the cost of sewer extension
- ⦿ This cost would be passed on to the developer and subdivision residents
- ⦿ Subdivisions could likely be served by package treatment plants or individual septic systems instead of gravity sewer

Public Sewer Constraints

- ⦿ Future sewer extension here unlikely in the near future – Utilities Commission
- ⦿ Existing lines near the area are undersized for expansion
- ⦿ Existing lines do not have capacity to accommodate both infill development in the Muddy Creek basin and additional areas outside the basin
- ⦿ New outfalls and interceptors would be needed parallel to existing sewer lines - pump stations would have to be enlarged for additional capacity
- ⦿ Treatment plant capacity also insufficient to handle both infill development and development outside the basin

Public Sewer Constraints

- ⦿ Utilities Commission staff estimates serving this area would cost 4-10 times more than existing sewer cost
- ⦿ The Commission does not have a policy of proactive expansion - sewer in the area would require a developer, citizen or municipality petitioning the Commission
- ⦿ The Western Rural Area is outside the Muddy Creek basin and is not recommended for sewer service in *Legacy*

Private Sewage Disposal

- ⦿ Public sewer extension probably unlikely in the Area – however, private sewer options exist
- ⦿ Individual wastewater systems on individual home sites would be the preferred option (County Health Dept.)
- ⦿ Use of open land would also be an option for the installation of wastewater systems
- ⦿ This method of sewage disposal could be used with conventional subdivisions or conservation design which clusters land and preserves open space

Private Sewage Disposal

- ⦿ An alternative option to subsurface wastewater treatment would be package treatment plants (regulated by DWQ)
- ⦿ Package plants not usually viable options due to state regulations making operation and installation costs very high
- ⦿ Both public and private treatment plant regulations in North Carolina will likely become tougher in the next 5-10 years
- ⦿ The County Health Dept. feels private wastewater system installations are a viable option in the study area

Agricultural Concerns

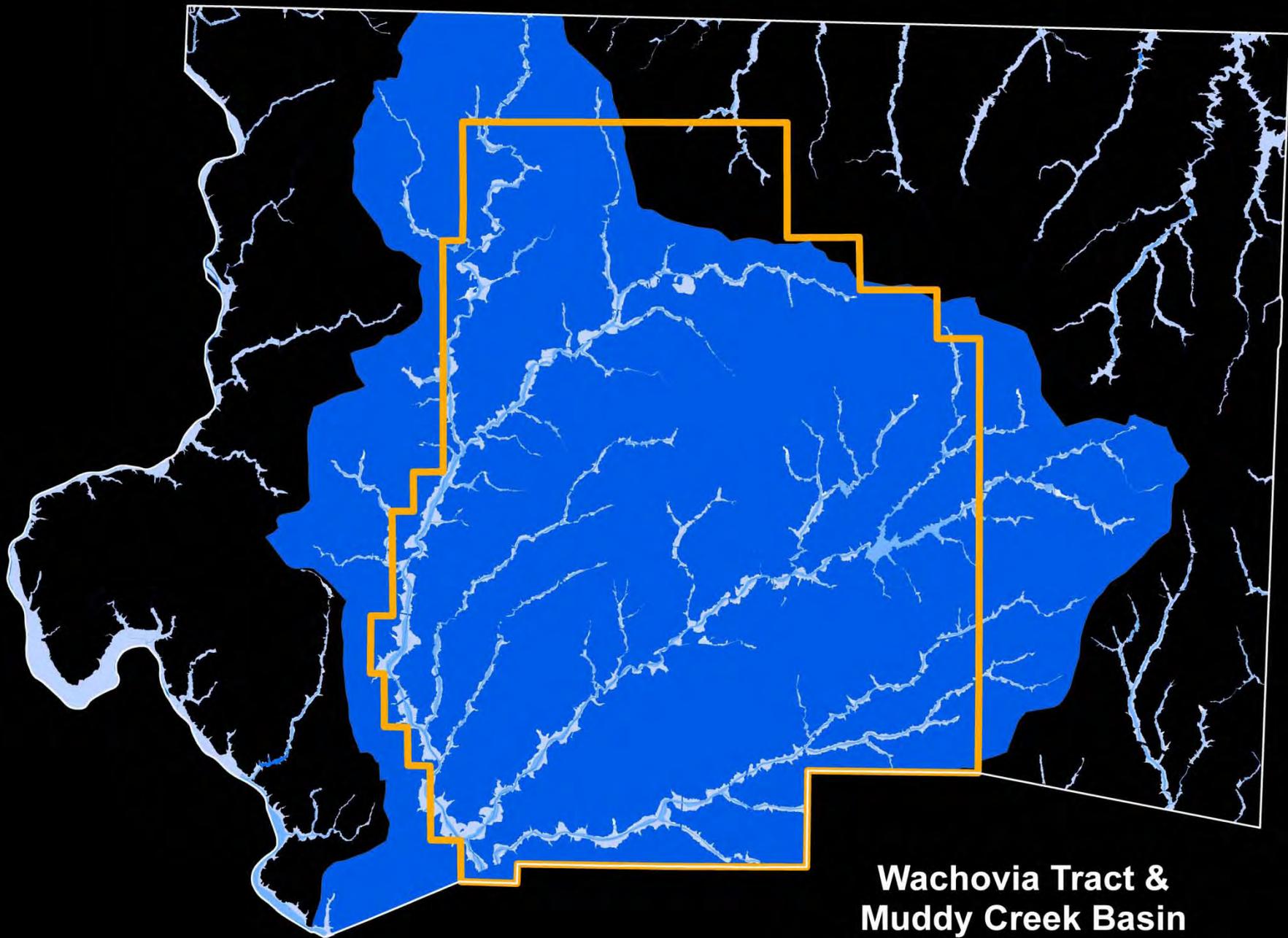
- ⦿ The installation of sewer in this area could lead to suburban-style subdivisions
- ⦿ Such development could reduce the viability of agriculture in the area
- ⦿ According to the County Cooperative Extension staff the area still has active agriculture
- ⦿ Prospects for agriculture remaining are good if current conditions remain
- ⦿ Suburbanization of the area may make it difficult for farmers to continue their activities

Conclusions

- The area is sparsely developed - 74% of the land has significant environmental constraints, is currently developed, or has lots greater than 5 acres with homes valued greater than \$300,000
- Significant natural constraints – water based limitations, soil limitations, and steep slopes affect a large amount of the area
- The land that is least constrained for development is scattered with few concentrated areas
- Extension of public sewer into the area would be very expensive due to sewer infrastructure construction needs
- Septic tanks are the best private sewer options- they favor a very low density of development

Conclusions

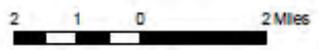
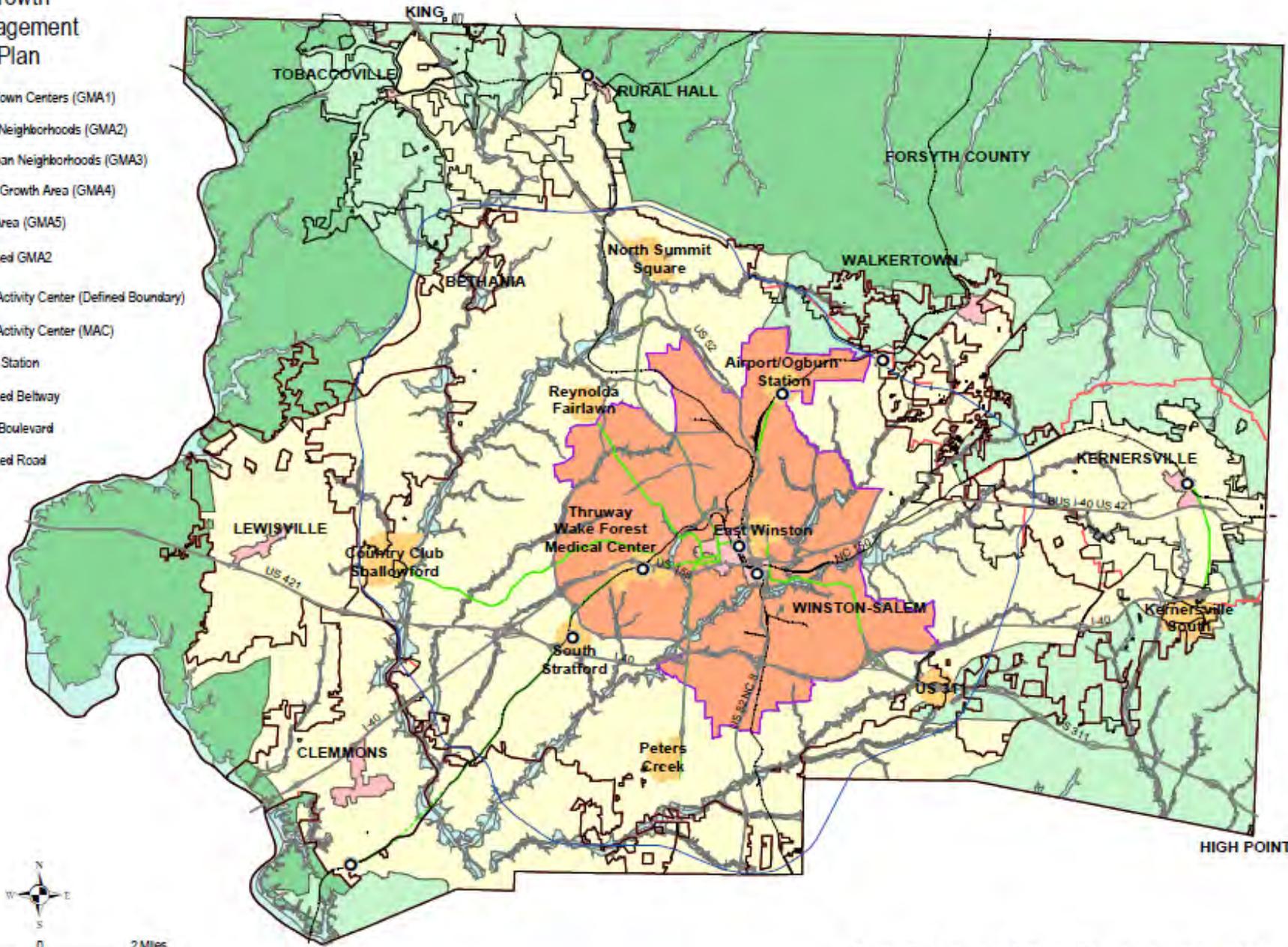
- ⦿ These factors should keep the rate and amount of development low here
- ⦿ The absorption of already subdivided lots is low, and there is a multi-year supply of lots available to build on
- ⦿ Planning staff does not believe that creating an overlay district with further development controls is necessary
- ⦿ The combination of natural constraints, sewer issues, and existing large lot and agricultural zoning should ensure that current rural character stays intact in the near future



**Wachovia Tract &
Muddy Creek Basin**

Growth Management Plan

- City / Town Centers (GMA1)
- Urban Neighborhoods (GMA2)
- Suburban Neighborhoods (GMA3)
- Future Growth Area (GMA4)
- Rural Area (GMA5)
- Proposed GMA2
- Metro Activity Center (Defined Boundary)
- Metro Activity Center (MAC)
- Transit Station
- Proposed Beltway
- Urban Boulevard
- Proposed Road



Forsyth County Growth Management Areas