CHAPTER 4: ANALYSIS OF LAND USE AND DEVELOPMENT

Analyzing existing land use provides a snapshot of growth and development patterns within a particular jurisdiction and at a specific time. When analyzing this data, it allows a community to better understand the development trends that have occurred over time and those that may be likely to continue into the future. Put simply, the existing land use analysis is a description of the development that exists today. For example, if a parcel is developed with a single-family home, then the corresponding existing land use classification is single-family residential.

An analysis of vacant land and future development potential based upon zoning classification is provided in this section. The information in this Section is used in establishing the City’s Future Land Use Map.

More specifically, included in this Section are:

- A description of the land use analysis process;
- Tables listing existing land use and zoning statistics;
- Graphics and maps showing the existing land use and vacant lands by zoning district; and
- A build-out analysis.

SOURCE OF EXISTING LAND USE ANALYSIS AND MAP

The Existing Land Use Map and associated analysis and tables were created by the Cape Fear Council of Governments using Brunswick County Tax Records, aerial photos, and a review of past land use plans.

LAND USES IDENTIFIED IN THE PLANNING JURISDICTION

The existing land uses in the planning jurisdiction include:

- Single-Family Residential
- Commercial
  - Retail shops/stores
  - Convenience stores
  - Restaurants
  - Hotel/motel
- Recreation (park, golf course, clubhouse and/or common area)
- Office and Institutional (office, church, or governmental building)
- Vacant (undeveloped land)
**EXISTING LAND USE ANALYSIS AND MAP**

The existing land use map for the City displays the same general pattern of development as previous land use plans (see Map 4.1). Single-family residential development accounts for the greatest percentage of developed land within the corporate limits. However, close to 90% of land within the corporate limits is currently undeveloped. Much of this vacant acreage is owned by the State of North Carolina and is managed for conservation purposes. Of the more than 14,000 acres of vacant land in Boiling Spring Lakes, more than 6,400 acres are located in conservation easements and are thus unlikely to be developed. These lands are located primarily on the western portion of the City. For more information please see Map 3.2.

Non-residential development is mostly located along NC 87 and West Boiling Spring Road. The commercial core of Boiling Spring Lakes is found in the vicinity of City Hall and between the NC 87 intersections of Boiling Spring Road and North Shore Drive (see the inset on Map 4.1). Residential land use patterns are oriented to the lakes and the golf course. The majority of developed land is located east of NC 87. More than 200 acres of land are allocated to recreational use in the City. The largest contributor to this land use category is the Lakes Country Club.

**Table 4.1: Boiling Spring Lakes Existing Land Use**

Source: Brunswick County Tax Records, Aerial Photos, Cape Fear Council of Governments.

<table>
<thead>
<tr>
<th>Existing Land Use</th>
<th>Acres</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>42.58</td>
<td>0.27%</td>
</tr>
<tr>
<td>Office and Institutional</td>
<td>86.58</td>
<td>0.55%</td>
</tr>
<tr>
<td>Recreation</td>
<td>216.70</td>
<td>1.37%</td>
</tr>
<tr>
<td>Single-Family Residential</td>
<td>1,399.26</td>
<td>8.85%</td>
</tr>
<tr>
<td>Vacant</td>
<td>14,068.97</td>
<td>88.96%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,814.09</strong></td>
<td><strong>100.00%</strong></td>
</tr>
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</table>

**LAND USE TRENDS**

The City’s 1998 Land Use Plan is the most recent plan to provide a comprehensive analysis of existing land uses. At the time the plan was adopted, there were 612 acres of single-family-residential housing in the City. As of 2016 that number has increased to nearly 1,400 acres, more than doubling the amount of acreage dedicated to single-family housing in 1998. During that same time, the amount of commercial development nearly doubled from 22 acres in 1998 to more than 40 acres as of January 2016. These trends coincided with the substantial increase in population that occurred from 2000 to 2014.

The ratio of commercial development to the number of supporting City residents has remained nearly identical for the last fifteen years. In the year 2000, there were approximately 135 residents for every acre of commercial development in the City. According to the most recent population figure and acres of commercial development in the City, approximately 135 persons per acre of commercial development is still accurate. By utilizing this ratio it is possible to roughly forecast the amount of commercial
development that may occur over the next twenty to thirty years. Should the same ratio of commercial development to residents hold true over the next twenty years then an additional 25 acres of commercial development may be constructed within the City by 2035. This estimate is based upon the population projection provided on page 2-2. While this estimate is a mere approximation, it still provides the City with an understanding of the potential demand for new commercial development.

More than 600 acres of vacant commercially zoned land currently exists within the Boiling Spring Lakes City boundary. Land that is zoned for commercial use in the C-1 and C-1A districts do not permit residential uses. Based on the estimates above, it may be unrealistic to require only commercial uses in these districts. The creation of a new district or the permitting of residential uses along the commercial corridor may enhance the viability of these vacant lands for development.

As for housing permits and trends, from 2010 to 2015 there were 111 permits for new home construction. Building permits for new housing have increased in the last two years, however, with more than 40 housing units permitted in 2015. Permits for new homes were very limited from 2010 to late 2015. Data obtained from the 1998 land use plan show that building permit activity was higher from 1992 to 1997 than at any time from 2010 to 2015. In 2015, the average construction value for new homes was $128,000.

**ZONING AND DEVELOPMENT POTENTIAL**

**ZONING DISTRICTS**

The City of Boiling Spring Lakes has thirteen separate zoning districts: two commercial, one office/institutional, one industrial, six residential, one conservation district, and one recreational. Further detail regarding each zoning district can be found in the City’s Unified Development Ordinance (UDO). Map 4.2 displays the zoning district locations within the City boundaries.

Single-family and two-family dwellings are permitted with supplemental regulations in the residential and conservation districts. Manufactured housing is permitted in the R-5 and R-6 zoning districts. The C-1, C-2, and C-1A zoning districts serve as the primary commercial districts in the City. The C-1 zoning district allows for commercial development along the NC 87 corridor. The C-1A district allows for non-residential uses that will generate fewer vehicle trips. The C-1A district is located on West Boiling Spring Road west of NC 87. County wastewater service is available for land in both commercial zoning districts.

**DEVELOPMENT POTENTIAL**

As mentioned previously, there is a vast amount of vacant land available for development within Boiling Spring Lakes. While much of the vacant land is undevelopable due to conservation easements, there still remains more than 6,300 acres of land that is available for development. In the future, vacant lands zoned for residential uses may be limited in their ability to obtain a septic permit from the Brunswick County Environmental Health
Department. A site evaluation must be conducted by the Health Department prior to issuance of a building permit. Please see Map 3.1 for more information regarding soil suitability for residential development.

Map 4.3 displays vacant land by the applicable zoning district in Boiling Spring Lakes. The map and acreage tables below only depict land that is vacant and not managed for conservation purposes. More than 600 acres of vacant commercial land exist along the NC 87 corridor. Much of this acreage is located in the C-1 commercial district. Barring extreme population growth, much of this vacant commercial acreage will remain undeveloped for the foreseeable future.

To encourage additional development along NC 87, the City should consider allowing multi-family residential development south of Boiling Spring Lake. Standalone residential development should not be allowed within the existing commercial core, but should be permitted in areas where commercial development may be less feasible. Considerations for multi-family development should also be explored north of Miller Road. Standalone residential development should not be allowed within the existing commercial core displayed on Map 4.1. However, mixed-use development that includes a vertical mixture of uses would support the existing retail businesses in the commercial core and should be allowed. Such a mixture of uses should require that all ground floor uses be non-residential and that upper stories be occupied for residential use.

Table 4.2: Boiling Spring Lakes Vacant Land in Non-Residential Districts
Source: Brunswick County GIS, Cape Fear Council of Governments (conservation easement lands not included).

<table>
<thead>
<tr>
<th>Non-Residential Zoning District</th>
<th>Vacant Acreage</th>
<th>% of Total District</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>595</td>
<td>72%</td>
</tr>
<tr>
<td>C-1A</td>
<td>17</td>
<td>76%</td>
</tr>
<tr>
<td>REC*</td>
<td>487</td>
<td>74%</td>
</tr>
<tr>
<td>Total</td>
<td>1,099 Acres</td>
<td>N/A</td>
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</table>

*Uses within this district support golf course recreation and lake areas.

As shown in Table 4.3, there are more than 5,200 acres of vacant land that are zoned for residential purposes. In order to determine future growth impacts it is possible to estimate the total number of housing units that will be located within a given jurisdiction based upon the availability of residentially zoned vacant land. To do so, the minimum lot size requirement is used to calculate the total number of lots that could be subdivided for future housing units. This methodology does not, however, take into account environmental constraints such as septic suitability, 404 wetland delineation, and/or the presence of endangered wildlife. As such, the calculations shown in Table 4.3 should be viewed as merely an estimate of development potential.

Based on the minimum lot size requirements, it is estimated that an additional 9,961 housing units would be constructed in the City once built-out. Again, this number is exaggerated as environmental constraints and septic limitations would likely lower the total number of housing units that could be constructed in the City. Nonetheless, should
this figure come to fruition, it is estimated that an additional 25,000 residents would inhabit the City. Comparatively, based on the five-year trend of building permit activity, it is estimated that only 660 additional houses will be constructed over the next thirty years.

*It should be noted that the addition of 25,000 residents would coincide with the development of roughly 185 acres of commercial land uses (based on the existing per capita ratio of commercial development). This would still leave more than 420 acres of vacant commercially zoned land in the City. This is a clear indication of the excess supply of commercially zoned land in the City.*

Table 4.3: Boiling Spring Lakes Vacant Land in Residential Districts

<table>
<thead>
<tr>
<th>Residential Zoning District</th>
<th>Vacant Acreage</th>
<th>Potential Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-1</td>
<td>892</td>
<td>3,012</td>
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<tr>
<td>R-2</td>
<td>1,199</td>
<td>4,050</td>
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<tr>
<td>R-3</td>
<td>311</td>
<td>1,051</td>
</tr>
<tr>
<td>R-4</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>R-5</td>
<td>397</td>
<td>1,340</td>
</tr>
<tr>
<td>R-6*</td>
<td>2,340</td>
<td>468</td>
</tr>
<tr>
<td>CON*</td>
<td>85</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>5,231 Acres</td>
<td>9,960 Housing Units</td>
</tr>
</tbody>
</table>

*Minimum lot size is five acres.

**HISTORICAL, CULTURAL AND SCENIC RESOURCES**

According to the 2010 Comprehensive Historical/Architectural Site Survey of Brunswick County, there are no historically significant sites in Boiling Spring Lakes. On the NC State Historic Preservation Office online map there are two bridges and a dam that are shown as historic resources. Based on data from the NC State Historic Preservation Office, there are no structures listed in the National Register of Historic Places.

**SUMMARY**

- Single-family residential development accounts for the greatest percentage of developed land within the corporate limits. However, close to 90% of land within the corporate limits is currently undeveloped.
- Non-residential development is mostly located along NC 87 and West Boiling Spring Road. The commercial core of Boiling Spring Lakes is found in the vicinity of City Hall and between the NC 87 intersections of Boiling Spring Road and North Shore Drive.
- More than 600 acres of vacant commercially zoned land currently exists within the Boiling Spring Lakes City boundary. Only 42.58 acres of land is currently used for commercial purposes.
• Potentially, more than 9,500 new housing units could be constructed in the city. The analysis does not account for environmental constraints. This estimate is unlikely to occur within the next 30 years.