

# Land Use Appendix

## Introduction

"How shall we grow?" is a recurring theme in communities throughout the United States. Growth can take many forms: more people, more homes, new job opportunities, higher standards of living, increased family wealth and so on. This appendix is a compilation of information used to support the adopted goals and policies of the Land Use Element of the Comprehensive Plan.

Since incremental growth within the City and in the region constantly changes the baseline existing conditions described here, the purpose of the Appendix is to provide a "snapshot" of the City that can be updated whenever new information is available, or when a new city, county or state initiative requires it. The 2000 U.S. Census and the state-mandated "Buildable Lands" Program provide valuable information to support the 2002 Comprehensive Plan Update and position the City to engage in the dialogue to produce new growth forecast targets for all jurisdictions in King County.

## General Land Use Issues

### Vision for Newcastle

The over-arching direction for future land use decisions in the City of Newcastle is the Vision. The Vision describes many land use issues as high priorities for the City of Newcastle. A detailed description of these issues can be found in the introduction to this Comprehensive Plan under the section entitled *Newcastle's Future*.

### "A Small City Nestled in the Hills"

The City of Newcastle planning area has a number of special characteristics. These include its location, the land and its environmental constraints, the nature of existing development trends of recent development, and the anticipated growth over the next 20 years. The following discusses these factors and their relationship to the Comprehensive Plan.

The geographical location of the City of Newcastle is of fundamental importance to the plan concept. It is situated between two existing employment centers, Renton and Bellevue to the south and north, and close to major metropolitan centers, Bellevue and Seattle. Interstate 405, at the western edge of the city, provides access to the adjacent urban centers and forms a strong barrier to Lake Washington. The eastern side of the City is unincorporated rural King County, primarily dedicated to open space as Cougar Mountain Regional Wildland Park. **Figure LU-1** provides an aerial view of the City. (Note, all figures follow the text at the end of the chapter.)

The character of the natural and built environment within the City is diverse. Several stream corridors form distinctive landscape formations with May Creek at the southern edge having a pronounced role in open space and separating Newcastle and Renton. The City consists primarily of small hills and valleys. Most development

has occurred in the western half of the City. Over half of the total land area is constrained by sensitive, or critical, areas.

Geologically, the steep slopes, when combined with certain soil types and surface water, result in hazardous seismic, landslide and erosion conditions. In addition, old abandoned coal mines exist beneath the surface in portions of the City, and air shafts are known to have serviced to mines. These physical constraints have shaped the development and open space patterns.

Newcastle is a fairly mature community in spite of its recent incorporation in 1994. The pattern of land use had been largely established prior to the incorporation by virtue of development approved by King County. Accordingly, the nature of the existing development and the environmental features has produced much of the neighborhood “feel” of the City. Newcastle relies on special purpose districts to provide water and sanitary sewer services. In addition, it receives public education services from the Issaquah and Renton School Districts.

Newcastle functions as a "bedroom community" with its dominant land use being single-family housing. The City's setting in the relatively steep area east of Lake Washington has played a major role in how growth has evolved. There is little area left that is suitable for large-scale development. The nature of the residential neighborhoods will make change difficult and, as suggested in the Vision, many residents are resistant to major change.

A more detailed description of the physical characteristics of the City is included later under “Natural Features.”

## **Land Use Demand and Supply**

### **Population**

An analysis of population growth trends is an important part of the comprehensive planning process. These trends tell us a great deal about future growth in a community. The demand for residential and non-residential land is driven by the market that responds to a complex set of variables such as proximity to jobs and services, congestion, quality of life, economics, and local visions. Because public facilities and services and their costs are based on population, it is very important to make projections as consistent with the trends as possible.

#### *Characteristics of the Population*

This analysis of population characteristics is challenging due to the relative youth of the City. Statistics for the City of Newcastle have been compiled for less than one census period. There are no other historic data for the City. Prior population analysis was based on estimates derived from county and regional studies and service area plans for the service providers.

The following table summarizes characteristics of the current (2000) population.

**Table LU-1: Characteristics of Newcastle Population**

| Factor   | Census 2000 | Notes  |
|--|-------------|--|
| Population   | 7,737       | State OFM annual population estimates for the City were:<br>1995 - 8,052<br>1996 - 8,260<br>1997 - 8,485<br>1998 - 8,605<br>1999 - 8,605<br>2000 - 8,645<br>2001 - 7,815<br>2002 - 8,205 |
| Population in Households   | 7,737       | No persons living in institutional housing   |
| Total Households   | 3,028       |  |
| Family Households  | 2,190       | 1,039 Families with children under 18<br>1,151 Families without children   |
| Non-family Households  | 838         | 620 Single-person Households   |
| Occupied Housing Units   | 3,028       | 97.1%  |
| Vacant Housing Units   | 89          | 2.9%   |
| Owner-occupied Units   | 2,311       | Household Size = 2.72  |
| Renter-occupied Units  | 717         | Household Size = 2.01  |
| Source: Census 2000 and the Washington Office of Financial Management. |             |  |

The discrepancy between the 2000 Census and the OFM annual estimates to 2000 reflect inaccuracies in the estimated population at the time of incorporation. Further analysis of population and housing is included in the Housing Element Appendix.

***Growth Targets***

The King Countywide Planning Policies (CPP) contain growth targets for all of the jurisdictions within the County. The CPP were initially adopted in 1992, and have been amended several times since then. Elected officials from King County, the Cities of Seattle and Bellevue, and the Suburban Cities Association meet as the Growth Management Planning Council (GMPC) and make recommendations to the County Council that has the authority to adopt and amend the CPP. Staff from the County and cities prepare analyses in support of the GMPC. The current adopted household and employment targets for the Year 2012 were adopted in 1998, not long after Newcastle incorporated. No employment target for the City was identified. The household target is a range of 754 to 921 net new units or a 25 – 30 percent increase over the current level. It is less than one percent of the total County household growth target.

As a result of the 2000 Census, and the mandate for updating comprehensive plans, the state Office of Financial Management (OFM) has released new projections for population growth (shown in the table below). These are expressed in ranges by

county. For King County, the high, intermediate, and low 2020 projections are 2,200,518, 2,018,824, and 1,857,318 respectively. The 2025 projections for King County are 2,318,368, 2,092,390, and 1,894,659. The 2000 county population was 1,737,034. Newcastle’s target for the next 20 years has been determined through a process initiated by the GMPC that allocates the OFM projection to all of the jurisdictions. This is based on the buildable land capacity, zoning, and market trends of each. The 2001 – 2022 household target for Newcastle is 863. This would result in a 2022 total of approximately 3,900 households in the City, or a population of just fewer than 10,000 at current average household sizes.

**Table LU-2: Population Projections, King County and Newcastle**

| Range for Projected Number   | OFM Population Projections – King County <sup>1</sup> |                                |
|--|---|--------------------------------|
|  | 2020  | 2025                           |
| High   | 2,200,518   | 2,318,386                      |
| Intermediate   | 2,018,824   | 2,092,390                      |
| Low  | 1,857,318   | 1,894,659                      |
| <b>Newcastle Projections</b>   |   | <b>2002 – 2022<sup>2</sup></b> |
| Projected Additional Households  |   | 863                            |
| Projected Total Households   |   | 3,900                          |
| Estimated Household Size   |   | 2.5                            |
| Projected Total Population   |   | 9,750 <sup>3</sup>             |
| Sources: <sup>1</sup> Office of Financial Management Projections, 2002 (based on 2000 Census data)<br><sup>2</sup> King County Growth Management Planning Council, 2002 (based on OFM projections). Population projections based on estimated household size of 2.5 persons.<br><sup>3</sup> The projected total varies from 9,750 to 9,945 (using the estimated household size identified by the US Census). Many factors go into the development of a “projected population number;” for the purposes of this Plan, the City of Newcastle has rounded this projection to 10,000. |   |                                |

As Newcastle reaches its "build out capacity" based on existing zoning and actual development densities, the Comprehensive Plan must provide recommendations and policies to guide the City on how to either accommodate the additional targeted growth or protect existing affordable housing from escalating property values if additional growth is not targeted. In response to growth beyond "build out capacity," it is unlikely that the City could annex new land outside the current city limits that would accommodate very much more growth. The other option would be to increase densities within the current city limits.

As land supply becomes limited in the face of growth pressure, real estate values will escalate resulting in a slowing of growth. However, along with slower growth comes some important tradeoffs like housing affordability, loss of diversity, etc. unless specific policies and actions are adopted that mitigate these factors.

## Employment

### *Employment Characteristics*

As with population, there are limited historic employment data for the City. As of 2000, there were under 200 “business units” in the City with 980 jobs. Major employers included Rainier Moving Systems, Valley Medical Center, Aviation Supplies and Academics, Inc., Mutual Materials, Airefco, Inc., QFC, Bartell’s, and Safeway. Nearly half (41%) of the jobs were in services, followed by retail (23%), wholesale trade and transportation (11%), government and education (12%), construction (5%), and manufacturing (8%). It is unclear whether these figures reflect home occupations. Given that caveat, the ratio of jobs to residents was about 1/12.

### *Growth Targets*

There were no adopted employment targets for the City until 2002. The 2000 Census baseline information provides a starting point for addressing this. Other information such as the Community Business Center/ Lake Boren Corridor (LBC/CBC) Master Plan and recent development trends provide further bases for forecasting. The Economic Development Element describes the framework that the City may use to establish goals and targets for job creation. The GMPC has established a 2002-2022 job target of 500 for Newcastle.

## Land Use

The land use inventory includes current data that is pertinent to the analysis of the land use and capacity in Newcastle. The following data will be used to establish whether the City of Newcastle currently has enough land to satisfy its future 20-year requirements or whether other approaches to ensure capacity to accommodate the growth targets will be needed.

The inventory includes the existing land use within the City of Newcastle. This information is based on the King County Buildable Lands Inventory, and provides the estimated amount of vacant and redevelopable land available within the City. This section concludes with a discussion of current zoning for the City of Newcastle. This information is based on the City’s 12 zoning classification. The classifications are different from the classifications found in the King County Buildable Lands Inventory. The City of Newcastle’s zoning classification are more current and they identify the type of development will occur on the vacant and redevelopable lands.

### **Existing Land Use**

Land use in Newcastle can be classified as developed, redevelopable, or vacant. (**Figure LU-2** shows the City’s existing land use and relates it to critical areas, as described by the King County Buildable Lands study.) Vacant land may include areas with physical features not suitable for development (steep slopes and unstable soil conditions, drainage basins, etc.) or view corridors, urban buffers and land not classified for either development or parks and recreation use. **Table LU-3** describes the individual land use areas within the City.

**Table LU-3: Existing Land Use Inventory**

| <b>Aggregate Land Use</b>   | <b>Acres</b>   | <b>Percent</b> |
|---|----------------|----------------|
| Single Family and Duplex  | 938.8          | 32.9%          |
| Multi-Family Residential  | 51.2           | 1.8%           |
| Industrial  | 52.9           | 1.9%           |
| Commercial  | 23.9           | 0.8%           |
| Parks/Open Space <sup>1</sup>   | 724.3          | 25.4%          |
| Public Land   | 49.8           | 1.7%           |
| School  | 54.9           | 1.9%           |
| Church  | 7.6            | 0.3%           |
| ROW and Miscellaneous   | 310.5          | 10.9%          |
| Vacant  | 638.0          | 22.4%          |
| <b>Grand Total</b>  | <b>2,851.8</b> | <b>100%</b>    |
| Source: City of Newcastle Staff & King County Buildable Lands Analysis and Geographic Information System calculations |                |                |
| <sup>1</sup> Includes Golf Club at Newcastle  |                |                |

**Table LU-3** was developed using King County Parcel data and King County Buildable Lands data. The following factors affect the totals shown:

- The King County Buildable Lands GIS data is based on King County parcel data information. The two layers provided were for “vacant” and “redevelopable” land only.
- Concurrent to the Buildable Lands Study, the City of Newcastle completed an existing land use inventory based on the KC base data. The data used by the City was slightly more recent (2-3 months) than the data used in the Buildable Lands analysis.
- The City elected to use the “vacant” parcel data identified in the Buildable Lands study, since those parcels had been more carefully evaluated during the Buildable Lands study than the “vacant” parcel data available in the King County base data.
- Parcels tagged as “redevelopable” in the Buildable Lands were disregarded in the final calculations and their existing land use remained the same (most were listed as “vacant” in the King County base data).
- Parcels listed as vacant in the Buildable Lands data that the City had confirmed the use of were not changed (for example, some of the vacant parcels were known to now be developed as single family parcels in new neighborhoods such as the Highlands).

*Residential Land Use*

Within most communities, a range of housing densities is allowed to provide a variety of housing opportunities. The wider the range, the greater the opportunity for individuals to find housing relative to their particular needs, affordability and preference.

Development over the past decade has been heavily concentrated toward the middle and upper level of the price range. Only recently has there been an increase in the development of multi-family housing, an important part of the diversity of housing stock.

The City of Newcastle is predominantly single-family in nature although a number of recent multi-family projects have substantially increased the ratio of multi-family housing to single-family housing. **Table LU-4** depicts the breakdown of housing by types.

**Table LU-4: Housing Units by Type (2000)**

| Type                                    | Number of Units | Percent Total |
|---|-----------------|---------------|
| Single-family                           | 2,347           | 74%           |
| Multi-family                            | 789             | 25%           |
| Mobile Homes                            | 33              | 1%            |
| TOTAL                                   | 3,169           | 100.0%        |
| Source: U.S. Census Bureau, Census 2000 |                 |               |

Between 1995 and 2001, 499 new units were built. This amounts to an increase of 16 percent over 1994 or 2.29 percent average per year. Sixty percent of the new units were single family homes and the other 40 percent were multifamily units. A majority of the new housing development is occurring in the eastern half of the City, with the higher density multi-family development concentrated around the central business district core.

The west side of the City (west of Coal Creek Parkway) is characterized by more "mature" development with less vacant land available for development. Much of the future development in this area will be in the form of "infill" or redevelopment of existing, improved properties. Well-designed infill development can provide affordable housing while maintaining the single-family character of existing neighborhoods.

*Commercial Land Use*

Newcastle's land zoned for commercial use comprises only 28 gross acres in the CB, O, and MU zones. This amounts to less than 1 percent of the total land area. The Comprehensive Plan and Zoning Map restrict the future potential for commercial development to this acreage. Approximately 78 percent of this land is developed, leaving 4.3 acres vacant. Much of the existing area is redevelopable, in that the existing level of development is significantly less than allowed by zoning.

*Industrial Land Use*

The CBC/LBC Plan converted all prior industrially-zoned land to a combination of industrial and mixed use that allows commercial and residential uses in addition to

industry. The market analysis prepared for the CBC/LBC Plan indicated significant demand for commercial uses.

### Land Use Plan and Zoning

The current adopted Land Use Plan provides nine land use designations within the City (**Figure LU-3** shows the current comprehensive plan designations; **Figure LU-4** shows these same designations and relates them to the Buildable Lands data). **Table LU-5** indicates the amount of land within each of these designations.

**Table LU-5: Comprehensive Plan Land Use Designations**

| Comprehensive Plan Land Use   | Acres          | Percent of Total |
|---|----------------|------------------|
| Mixed Use / Industrial  | 91.2           | 3.2%             |
| Commercial  | 24.4           | 0.9%             |
| MFR   | 50.4           | 1.8%             |
| High Density SFR  | 621.9          | 21.8%            |
| Medium Density SFR  | 857.1          | 30.1%            |
| Low Density SFR   | 355.3          | 12.5%            |
| Limited Open Space  | 566.1          | 19.9%            |
| ROW   | 285.4          | 10.0%            |
| <b>TOTAL</b>  | <b>2,851.8</b> | <b>100.0%</b>    |
| Notes: SFR – Single Family Residential<br>MFR – Multifamily Residential<br>ROW – Right of Way<br>Source: King County Parcel Data, 2002, and City of Newcastle |                |                  |

### Zoning

Zoning is the official land use control for Newcastle. It is one means for providing adequate land area for each type of development. It allows the control of development density and intensity in each area so that property can be adequately serviced by public facilities such as sanitary sewer, potable water, stormwater management, streets, schools, recreation, and telecommunications. Zoning should direct growth into appropriate areas, protect existing critical areas, and preserve property values.

The effectiveness of current zoning can be measured by determining the relationship of land zoned for a particular use to the amount of land actually in this use. A persistent discrepancy of availability and actual demand for such a use may require a reevaluation of zoning categories.

Newcastle's Zoning Code contains 12 classifications. The City's Zoning Map (See **Figure LU-5**) includes higher density housing (12- 48 dwelling units per acre) in and around the community business center (CBC/LBC) and residential densities ranging from four to six dwelling units per acre in a majority of the outlying areas. R-1 (low density residential) has been used in areas that require some environmental protection. Mixed Use and Industrial land use are considered one zoning classification. This data will be different than the King County data in **Chart LU-3**. King County did not account for the change/addition in the mixed use and industrial zones. **Table LU-6** describes Newcastle's current zoning designations.

**Table LU-6: City of Newcastle Zoning**

| Zoning  | Zoning Classification    | Acres          | Percent of Total |
|---|--------------------------|----------------|------------------|
| R-1   | Residential, 1 DU/Acre   | 343.8          | 12.1%            |
| R-4   | Residential 4 DU/Acre    | 863.6          | 30.3%            |
| R-6   | Residential 6 DU/Acre    | 620.8          | 21.8%            |
| R-12  | Multi-family, 12 DU/Acre | 5.9            | 0.2%             |
| R-18  | Multi-family, 18 DU/Acre | 1.8            | 0.1%             |
| R-24  | Multi-family, 24 DU/Acre | 40.6           | 1.4%             |
| R-48  | Multi-family, 48 DU/Acre | 2.2            | 0.1%             |
| NB  | Neighborhood Business    | 0.9            | 0.0%             |
| CB  | Community Business       | 18.0           | 0.6%             |
| O   | Office                   | 5.5            | 0.2%             |
| MU/I  | Mixed Use & Industrial   | 91.1           | 3.2%             |
| LOS   | Limited Open Space       | 573.1          | 20.1%            |
| ROW   | Right of Way             | 284.6          | 10.0%            |
| <b>Total Acreage</b>  |                          | <b>2,851.8</b> | <b>100.0%</b>    |
| Rights of way are zoned; however, since they are developed as rights of way and are not developable for other uses they are not included in their respective zoning categories. |                          |                |                  |
| Source: King County Parcel Data, 2002, and City of Newcastle  |                          |                |                  |

Single-family zones constitute the largest classification; its provisions regulate approximately a combined total of 2,002.7 acres or 70.2 percent of all land in the City.

### Capacity for Growth

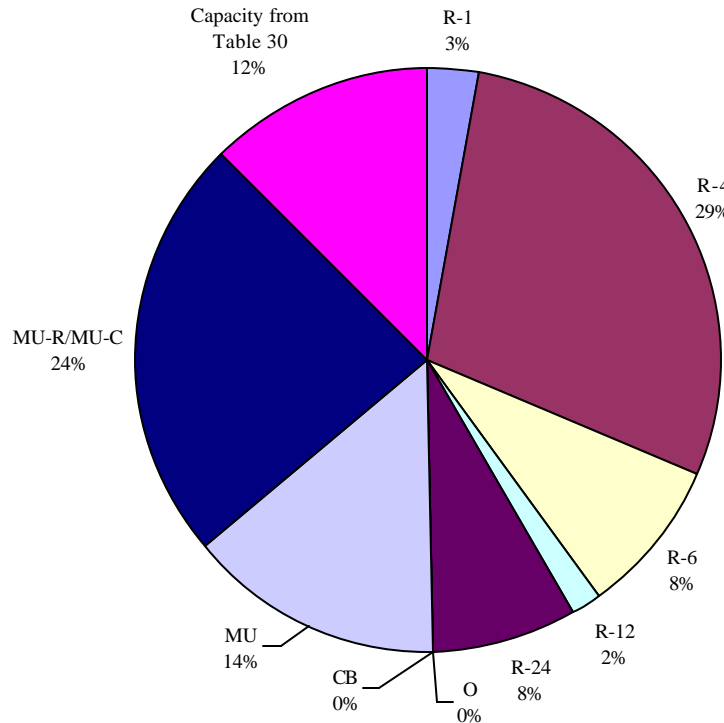
King County/Suburban Cities has compiled data and prepared 2002 estimates of buildable land capacity for Newcastle as part of a countywide study required by the Legislature. This information does not reflect the most accurate as shown on **Table LU-5** and **LU-6**. The following summarizes that information in narrative format. (Note: numbers have been rounded).

#### Residential Land

- All of the information is based on activity for the 5 years 1996-2000. Information for the pre-incorporation years and for 2001 is not included. Summarized Residential Land Capacity data is shown on **Chart LU-1**.
- Slightly more than 400 net buildable acres of residential land remain in the single family, multifamily, and mixed use zones (The analysis uses a non-residential/residential split of 75/25) before a “market factor” is applied. This breaks down into 188 acres of vacant land and 233 acres of redevelopable land. The gross acreage from which this net comes is about 800 acres.
- Factors used to compute net acreages include “constrained land,” rights-of-way, “public purposes,” and market factor, generally - 10%, 5%, and 10-15% respectively. Therefore, the net/gross ratio is 50%, although the presence of critical areas will vary on a site-to-site basis.

- In the subject 5 years, 163 gross acres have been platted for single family residential development. Of this, 74 acres (45%) is constrained resulting in 90 net developed acres. 325 lots were created for an average net density of 3.62 DU/A.
- Multifamily building permits for 190 DU were issued using up 13 gross- and 10 net acres for an average net density of 18.8 DU/A.
- Permits for 486 DU have been issued since incorporation – through 2000.

**Chart LU-1: Residential Land Capacity**



“Capacity from Table 30” refers to the pipeline projects

Source: King County Buildable Lands Report, 2002

- 300 DU were in the pipeline as of January 2001. This included 55 DU at China Falls on 18.3 A; 163 DU at Meadowview Park 2 on 150 A; and 100 DU at the Highlands on 80A. It is assumed that these are all single family units.
- Future density factors for each zone based on this activity or experience in other jurisdictions when there has been no activity in Newcastle are:
  - 1 DU/A – R1
  - 4.56 DU/A – R4
  - 3.43 DU/A – R6
  - 12 DU/A – R12
  - 24.17 DU/A – R24

- 35 DU/A – MU
- Resulting total residential estimated capacity is 2,250 DU, most of which (67%) is in the R4 and MU zones.

### **Commercial Land**

- 28 gross acres of commercial land exist in the CB, O, and MU zones; 20 percent is vacant.
- Development capacity is based on Floor Area Ratio (FAR) factors in similar jurisdictions since there was no Newcastle activity. These are 0.25 in CB; 0.35 in O; and 1.00 in MU zones.
- Estimated commercial capacity is 336,000 S.F. resulting in about 900 jobs.

### **Industrial Land**

- No vacant or redevelopable land capacity is identified in the report since at the time the report was compiled there was no identified in the City's zoning classification.

### *Observations*

- In the five years, the City averaged 65 new lots and just short of 60 new single family dwelling units permitted each year. All 193 multifamily units permitted were in 2000. At that rate, all of the single family capacity could be absorbed in about 15-20 years. If multifamily activity created 100-200 DU/year, that capacity could be absorbed in 6-12 years.
- Single family development has occurred at a very low net density for an urban area.
- The substantial amount of “constrained” land results in considerable open space in new projects. This amounts to nearly a quarter acre per lot in the recorded subdivisions. The extent to which this land may be usable for recreation purposes is not known.
- The ROW and “public land” factors used in the analysis should be carefully considered. Given the amount of “constrained” land in steep slopes and riparian areas, the amount of ROW land necessary to produce streets may be greater than 10% in projects where buildable areas are separated by unbuildable areas. Similarly, if the “public land” factor is intended to account for schools and parks concurrent with new housing, this factor bears some testing.
- Although the CBC Plan did not provide an estimate of market demand for commercial and industrial land, it did change some of the bulk provisions that affect FAR. These increases do not seem to be reflected in the FAR assumptions in the report. Clearly, the Mutual Materials site is a key to creating a significant intensive center for jobs and high density housing.

### *Preliminary Assumptions*

- The 350 acres (w/market factor) of vacant land amounts to only 12% of the total City land area of 2,865 acres.
- In the five years 1996 – 2000, 486 DU or 53 – 65 percent of the adopted 2012 household target of 749-916 DU had been achieved. If that rate were sustained,

more than 1,100 additional units could be created by 2012, exceeding the target. Or, at that same rate, the target would be met by 2005. This raises a number of questions regarding the use (density) of buildable land; what the next round of targets should be; and what this rate of residential growth means with respect to demand for public services and facilities. The 2001 – 2022 King County Growth Management Planning Council (GMPC) Household Growth Target for Newcastle is 863.

- Since the housing vacancy rate at the 2000 Census was only 2 percent, the market factor used in the analysis could be questioned.
- Full buildout of all residential capacity reported would result in 6,000 – 7,000 new residents – nearly doubling the population.
- This many new households and residents will generate demand for schools, parks, utilities, and other public services and facilities.
- Newcastle didn't exist when the employment targets in the Countywide Planning Policies were created, but using a relatively low “jobs/housing” ratio of 1.0 - 1.5, the 2,250 possible new dwelling units suggest a target range of 2,250 – 3,400 new jobs, far more than the capacity estimated in the report. The 2002 – 2022 King County GMPC Employment Target for Newcastle is 500.

## Land Use Issues

### Residential

#### *Residential Neighborhood Design*

Residential neighborhood design is a way to preserve and enhance the quality of our neighborhoods. Outdoor spaces should be usable, attractive, comfortable, and enjoyable. The design of streets, including such features as parking strips and street trees contribute to the character of urban neighborhoods. Careful site planning can adapt to neighborhood features, contribute to aesthetic value, minimize site disturbance, conserve energy, and, in instances, reduce total development costs. Neighborhood residents should be actively involved in generating ideas about how to enhance the community.

#### *Residential Development Standards*

The Plan includes policies that govern Newcastle's land use regulations and functional plans that contain improvement standards and the review of proposed rezones, residential subdivisions, short subdivisions, and construction permits. (See the Transportation Element for detailed residential street classification and improvement policies.)

#### *Infill Development*

The Plan addresses the redevelopment or infill of existing neighborhoods, with a focus on increasing the efficiency of land use. Most growth and development occurs in undeveloped areas. In developed areas, there are many opportunities for increasing density by building upon small vacant parcels (infill) or by redeveloping deteriorating or underutilized parcels (redevelopment), especially in areas with a high level of urban services and infrastructure.

## **Commercial and Industrial Land Development**

Commercial and Industrial land development provides needed services and jobs to Newcastle residents and visitors, as well as providing support to Newcastle's tax base through the sales and property taxes it generates.

### *Neighborhood Commercial Centers*

Neighborhood commercial centers within or adjacent to residential neighborhoods serve a useful function in providing convenient access to neighborhood residents for their "everyday" or "convenience" shopping needs. These centers can serve to reduce the number of automobile trips or at least shorten them by providing services near one's residence. For neighborhood centers to provide these benefits, attention must be paid to ensuring adequate access to these centers from the adjacent neighborhood. However, these commercial areas can also adversely affect a neighborhood by generating traffic and land use conflicts. The Plan's policies address neighborhood commercial centers, including the need for design guidelines to minimize conflicts between these centers and residential neighborhoods.

### *Downtown Newcastle (Community Business Center/Lake Boren Corridor)*

The Community Business Center / Lake Boren Corridor (CBC/LBC) Master Plan was adopted by the City in 2000 to implement the vision of this area. The subarea plan identifies a refined vision for the area, design standards and guidelines, a pedestrian-oriented transportation system, and the policy framework for creating a town center, trails that connect neighborhoods, and additional recreational opportunities. The subarea plan reflects the community's interest in shaping the City's future identity through the development of a healthy and vital downtown.

The CBC/LBC plan promotes the definition and development of "Downtown Newcastle." Downtowns have historically served as the business, cultural, and governmental focal points of their communities. The City of Newcastle evolved as a rural suburb to Bellevue and Renton, rather than a community that grew out from a commercial, business, or governmental core. The main commercial area in Newcastle developed along Coal Creek Parkway. The CBC/LBC area is planned to become develop into a "downtown."

## **Industrial Land**

The City has no land designated for industrial use.

## **Historic District**

The "Old Newcastle Townsite" Historic District area includes the coal mine ruins, an historic road, and the Baima House, the oldest residential structure in the City. The ruins includes the B&R Company coal bunkers, cleaning plant and wooden ruins, some of the last remains of the coal mining operation on Cougar Mountain. The Baima Family House, the last surviving company dwelling, is located on S.E. 71st Street. It is now on the National Historic register and may be one of the oldest buildings in King County still standing on its original site. The north end of 136th Avenue S.E., the Thomas Rouse Road, abuts the Historic District and has been designated as a historic road by King County. This was the first road into Newcastle built in 1880.

## Natural Features

The following section describes the physical landscape that shapes growth and development in Newcastle. These natural features are an essential component of the City's character. The City of Newcastle, which is situated in a deep valley in the foothills east of Lake Washington, has a wide variety of natural amenities and sensitive physical conditions. Critical areas present include wetlands, floodplains, lakes, erosion hazard areas, seismic hazards, coal mine hazards aquifer recharge areas, and fish and wildlife habitat conservation areas.

### Topographic Conditions

The western half of the City is a gently rolling system of hills formerly known as the Newport Hills area. This area is of moderately low relief with elevations ranging from 300 feet in the north to slightly more than 600 feet in the south. The upland is bordered by relatively steep valley sides, sloping down to Coal Creek on the northeast, May Creek on the south, and Lake Washington on the west. **Figures LU-6 and LU-7** show the City's geologic features and slope characteristics respectively.

The portion of the City east of Lake Boren is of much higher relief, reaching beyond the 1000-foot elevation. Hills in this area are comprised of bedrock, some of which is very resistant to erosion, resulting in the formation of steep ridges. Continuing east through the City, the land generally gains elevation up to Cougar Mountain, the highest point just east of the City. A large percentage of the City of Newcastle is comprised of slopes exceeding 20 percent.

The rugged topography is an asset to the City as an amenity, but it is also fragile and subject to degradation. The steep slopes of Newcastle provide attractive development sites because they overlook the community, as well as provide views of distant features such as Seattle, the Cascade Mountains, and Lake Washington. Unfortunately, the steep slopes upon which these homes are built are often quite susceptible to erosion.

A range of mitigation measures to prevent the degradation of the valley walls through clearing and development are available, including: ordinances to protect vegetation and critical areas; mapping and protecting critical viewsheds; application of design standards regarding revegetation; and limitation of development through land-use restrictions.

### Stormwater/Surface Water Management

The City of Newcastle falls within three drainage basins (as defined in King County's "Sensitive Areas Map Folio-December 1990"). These basins are identified as the East Lake Washington, Coal Creek, and May Creek drainage basins. **Figure LU-8** shows the hydrologic features present in the City.

The East Lake Washington drainage basin occupies the western portion of the city (west of approximately S.E. 119th Street). This portion of the city drains west to the eastern shore of Lake Washington. The Coal Creek Drainage Basin occupies the northern portion of the city. Most of the City north of Newcastle Way is included in this basin, which drains into Coal Creek. Coal Creek and unclassified tributaries thereof are the only surface water features within the basin.

May Creek drainage basin occupies the southern-most portion of the City. May Creek, which floods routinely, represents a significant recreational and visual

amenity to Newcastle. Lake Boren is located within this drainage basin and drains into May Creek via Boren Creek.

The entire land area of the City drains into two significant drainage basins, Coal Creek and May Creek. These basins eventually drain into Lake Washington and have been assigned a high priority by King County for stormwater management. May Creek, the larger of the two, is more complex and fragile than Coal Creek. May Creek and Coal Creek are identified as Class 1 salmonid streams.

The surface water system of May Creek and its tributaries includes 26 square miles of mapped streams, two small lakes (including Lake Boren), and more than 400 acres of wetlands.

Over the last century, both Coal Creek and May Creek have been affected by logging and forest removal, coal mining, agricultural activities, and development. These activities have been undertaken without consideration of long-term consequences. These actions have led to denuded slopes, channelized streams, encroachment on floodplains, and a decreased quality of water, which in turn results in erosion, sedimentation of stream channels, flooding of homes, and the degradation and destruction of fish and wildlife habitats.

#### *Groundwater Resources*

The City of Newcastle relies on a potable public water supply from the City of Seattle regional water system that is purchased for and distributed to city residents via the Coal Creek Utility District (CCUD). A very limited number of residents still rely on private wells for their water supply. All parcels within the district and the City are either served or able to be served with public water with the exception of several small parcels along May Valley Road and the Old Newcastle Townsite.

#### **Coal Mine Hazard Areas**

One of the most important and dominant sensitive areas in the City of Newcastle is the coal mine hazard area along the northern and eastern portions of the City. In the late nineteenth century, the Newcastle area was the site of significant underground coal mining activity. Any remaining current coal production is from surface mines, however, nearly all the coal produced prior to about 1970 was from underground workings.

These hazard areas present long-term safety issues for the community. Abandoned subsurface mine workings leave large underground voids, which are hazardous in several ways. Gradual failure of the roof and sides of these voids may result in some subsidence of the ground surface over a large area overlying the mines. Catastrophic failure of the roof can produce sudden and unexpected cave-ins. Noxious gases and “dead air” (lacking oxygen) may also collect in these voids. In addition, animals or people may fall into surface openings, shafts, or tunnels.

While Newcastle residents celebrate the City’s colorful coal mining history, protection of Newcastle’s residents’ safety is also very important. Mitigation of coal mine hazard safety issues include, but are not limited to: mapping and identifying the exact location of the coal mines, maintaining clear policies management of these areas, restricting use through non-use and zoning tools, and public involvement and education.

### Critical Areas - Summary

A variety of critical areas exists within the City. These areas are regulated in accordance with state and federal requirements and standards. The amount and location of lands affected by critical areas affects the City’s development capacity. **Table LU-7** identifies the critical area percentages associated with the City land base using sources available to the City and on the City’s geographic information system. Since the mapping of critical areas is largely generalized, the exact presence and evaluation of critical areas can only be determined on a site-by-site basis.

Approximately 54.4 percent of the entire City contains critical areas. This figure is significant because it means that the development capacity or the ability for the City to absorb future development will be much less due to the constraints represented by physical conditions. This factor will have to be considered in all land use decisions. The land capacity analysis in the land use element of this Comprehensive Plan includes analysis of critical areas that dramatically reduce the overall carrying capacity of the City for future development.

**Table LU- 7: Critical Areas Breakdown**

| Environmental Constraint                                     | Acres | Total      |
|--|-------|------------|
| Floodplain Only  |       | <b>0.0</b> |
| 500 Year   | 0.0   |            |
| Floodway   | 0.0   |            |
| Stream Buffer Only   |       | 59.2       |
| 100 ft   | 25.1  |            |
| 50 ft  | 34.1  |            |
| Coalmine Only  | 419.6 | 419.6      |
| Erosion Only   | 708.3 | 708.3      |
| Landslide Only   | 45.8  | 45.8       |
| Wetlands Only  | 47.0  | 47.0       |
| Multiple Constraints   | 273.4 | 273.4      |
| Total Constrained Land                                       | --    | 1,553.42   |
| Source: King County Parcel Data, 2002, and City of Newcastle |       |            |

### Open Space

The citizens of Newcastle hold “open space” lands in high regard. Open spaces such as the forested hillsides contribute greatly to the vision of “a small city nestled in the hills.” The definition of “open space” is broad and comprehensive. “Open space” refers to critical areas and otherwise undevelopable land that may be owned by the City, other public bodies, or private owners (and regulated by the City) as well spaces that are set aside and developed for recreation. The “universe” of open space lands therefore includes parks, trails, stormwater detention facilities, native growth protection easements, stream and wetland buffers, the Golf Course at Newcastle, and other lands. In Newcastle, there are county, utility, school, private homeowner associations, private commercial operators, and private land owners who own or control a variety of strategically important sites that shape the “open space” system. Frequently, legal agreements outline opportunities for public use or preservation of these lands.

The GMA establishes the following planning goal concerning open space and resource protection: encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.

The City of Newcastle's planning is carried out using the following principles:

- Identify open space corridors within and between urban growth areas
- Use a variety of land development techniques to achieve open space
- Manage the river systems on a watershed basis to protect the resources
- Develop cooperative management plans and implementation strategies for open space areas of interjurisdictional significance

The GMA defines "critical" environmental areas and resource lands not suitable for urban development. These land areas include wetlands, critical recharge zones for aquifers used for potable water, fish and wildlife habitat conservation areas, flood zones and geologically hazardous areas. In addition, the GMA requires special consideration for protection of agricultural, forests and mineral lands. Preserving these types of lands through GMA most certainly adds to the "open space" character of Newcastle. As stated by the National Recreation and Park Association, "natural or open lands of environmental significance cannot be included in a land-based (recreation) standard because these lands have limited capability for recreational use."

The Comprehensive Plan addresses the recreational portions of this open space system in the Parks, Trails, and Recreation Element. This facilitates attention to the recreational needs of the community and provides the linkages between the level of service standards to growth and associated capital facility needs. For open space features such as utility corridors, detention pond tracts, the golf course and protected areas regulated - but not owned by the City, the Land Use Element provides policy direction for the appropriate level of regulation. For open spaces that are city-owned, the Land Use policies address the public responsibilities for stewarding these resources. **Figure PTR-2** in the Parks, Trails, and Recreation Appendix shows the locations of open space, in conjunction with city park facilities.

There is no general standard for the amount of non-recreational "open space" that Newcastle should sustain. Each community determines its own needs based on the natural environment and the vision dependent on the amount of natural resource areas available, the public desire to preserve certain lands and the political will to fund acquisition of strategic open space not under public control.

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