

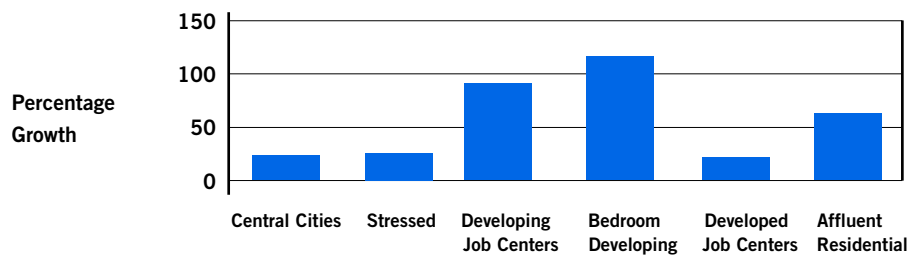
SENSITIVE NATURAL AREAS AND GROWTH

The final step in the analysis was to examine the relationships among projected growth patterns, the community classification, and the sensitive natural areas mapping in order to explore questions such as:

- *What types of communities are projected to grow more or less quickly than the region as a whole? Do these communities contain sensitive natural areas?*
- *If new growth proceeds in the future at densities like the recent past, will there be enough available land – land that is not sensitive, protected or already urbanized – in fast growth communities to accommodate future growth while also conserving sensitive natural areas for their many benefits?*

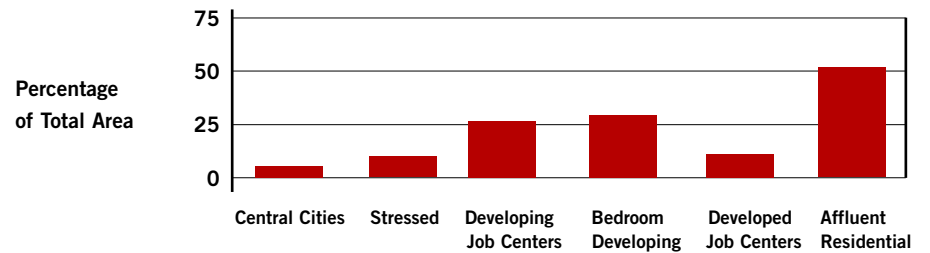
Much of the region's future growth is expected to occur in the 7-county core area. Of the projected 1,073,000 new residents in the 17-county Central Region, nearly 900,000 are expected in the core region with another 100,000 expected in the four adjacent collar counties. Figure 2 shows which types of communities in the 7 core counties are expected to show the greatest increases in households between 2003 and 2030. The greatest expected growth rates are found in communities classified as Developing Job Centers and Bedroom Developing. Although these two groups represented just 33 percent of households in the 7 counties in 2003, they are projected to receive 67 percent of growth in the coming decades. In short, much of the region's future growth is expected in relatively low-density, middle class communities at the fringe of the metropolitan area.

**Figure 2: Projected Growth in Households 2003 – 2030 by Community Type
Seven County Core Metropolitan Area**



Source: See Map 3.

**Figure 3: Percentage of Total Area: Non-urban, unprotected and sensitive
by Community Type, 7 County Core Metropolitan Area**



Source: See Map 4.

Figure 3 shows the distribution of unprotected, undeveloped sensitive natural areas across community types for the 7-county region. The Affluent Residential category shows the highest percentage of total land classified as non-urban, unprotected, and sensitive (53 percent) while the Bedroom Developing and Developing Job Center categories are second and third (29 and 27 percent). However, because the latter two classes represent so much more total land area, Bedroom Developing and Developing Job Centers contain fully 85 percent of the 7-county region's non-urban, unprotected, and sensitive areas.

In sum, two of the five community types—Developing Job Centers and Bedroom Developing—contain 85 percent of the area's non-urban, unprotected and sensitive natural areas and are expected to receive 67 percent of the 7-county area's future growth.

Growth produces tax base but it also creates demand for infrastructure, schools and public services. Given that they possess just average fiscal resources, Developing Job Centers and Bedroom Developing Communities are unlikely to be able to protect these sensitive resources alone. The costs of accommodating the bulk of the region's future growth will make it very difficult to also expend scarce local fiscal resources on natural resources conservation.

Tradeoffs that jeopardize important, sensitive natural resource areas can be ameliorated based on how communities grow. This is illustrated by looking at how much currently undeveloped land will be needed if future growth occurs at densities like those of the past.

Table 5 compares the amount of currently available land that will be needed to accommodate new households in each of the community types if each new household consumes as much land as current households.¹³ "Available" is defined as non-urban, unprotected, non-sensitive land. The results show that, although the 7-county area as a whole has enough land to accommodate projected growth, there are shortfalls in available land for three of the six community classes. The most glaring shortfall is in those communities classified as Developing Job Centers—the classification expected to receive the most growth. If growth in these communities occurs at current densities, it would consume 98,000 more acres than is currently available, an area equivalent to the total areas of Minneapolis, St. Paul, and Bloomington combined (97,800 acres).

TRADEOFFS THAT JEOPARDIZE IMPORTANT, SENSITIVE
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Developing Job Centers contain about 118,000 acres of unprotected, non-urban, sensitive land. This means that, if these communities grow in the same manner they have grown in the past, one of two things must happen. Either, new growth will consume most or all of the remaining sensitive natural areas or new growth will be pushed further out into the fringes of the region. Developing job centers form a nearly complete ring around the region's core (Map 18). If they cannot accommodate all of the growth they are expected to receive, the most likely place for it to go is outward into the fringes of the 7-county region and the collar counties. It will be difficult for growth to be pushed inward since the communities inside the ring of Developing Job Centers—central cities, stressed suburbs and developed job centers—already are expected to grow at rates that will consume all, or nearly all available land there. Each of these community types shows either a shortfall or very small surplus of available land for development when sensitive natural areas are removed from development consideration (Table 5).



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Another way to view the potential tradeoffs facing the region is to look at the growth projections in the context of the Metropolitan Council's Metropolitan Urban Services Area (MUSA). The MUSA is perhaps the most important tool that the Council uses to guide development in the region. It defines the area within which the council provides important regional infrastructure like wastewater conveyance and treatment. The primary objective of the MUSA is to ensure orderly, contiguous development as the region moves outward.

The current MUSA line forms a rough circle around the core of the region, passing through Andover, Blaine and Lino Lakes in the north, Woodbury and Lake Elmo in the east, Lakeville and Savage in the south, and around the western end of Lake Minnetonka and through Plymouth and Maple Grove in the west. Sixty-three municipalities lie completely within the current MUSA and another 38 are partly inside it.¹⁴ Eighty-nine communities in the core region lie beyond the MUSA.

The bottom panel of Table 5 places projected population and calculations of available land in the context of the MUSA line. If the MUSA boundary were expanded out to include all of the area in the 38 municipalities currently split by the MUSA, this would add about 280,000 acres of new area inside the MUSA.¹⁵ If each new household projected for this part of the region by 2030 consumes land at rates like the recent past, then there will be a shortfall of more than 115,000 acres of available land inside the expanded MUSA to accommodate future growth. This is true even though the 280,000-acre increase assumed for the purposes of this assessment is substantially more than the Metropolitan Council currently plans for future growth.

The shortfall of 115,000 acres represents about 65 percent of the non-urban, unprotected, sensitive land in these communities. This reinforces the conclusions from the calculations based on the community classification: if the region grows the way it has in the past, future growth will either have to occur beyond the areas targeted for development by the Metropolitan Council—primarily within the current MUSA and in areas immediately adjacent to it—or it will consume much of the region's remaining unprotected, sensitive natural areas.



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The overriding conclusion from each of the simulations is that we must find new ways to grow if we want to both conserve the region's remaining sensitive natural areas and avoid inefficient expansion into the far reaches of the metropolitan area. To do this while accommodating the amount of growth that is currently projected to 2030, new development on currently underdeveloped land must occur at greater densities than in the past or as "infill" development on already developed land. Further, even if new development occurs in ways that consume less land than in the past, it still must be directed to non-sensitive areas as much as possible—natural resource planning must play a significant role in local and regional land-use planning.

Table 5: Land Consumption from Projected Household Growth, 2003 – 2030, by Community Type, 7-County Region

Community Type	Projected Household Growth 2003-2030	Average Households per Acre of Urbanized Land 2002	Land Consumption 2003-2020 at 2002 Densities	Available Land* 2002	Surplus/Shortfall
Central Cities	52,480	4.2	12,698	1,424	(11,274)
Stressed	58,311	2.3	29,521	9,248	(20,273)
Developing Job Centers	228,551	1.3	201,867	103,868	(97,999)
Bedroom Developing	69,304	0.5	138,107	489,204	351,097
Developed Job Centers	43,997	1.8	31,202	35,932	4,730
Affluent Residential	5,820	0.9	9,533	7,770	(1,763)
Total	458,463	1.7	422,928	647,446	224,517

Land Consumption from Projected Household Growth, 2003 – 2030, Relative to the MUSA Line

	Projected Household Growth 2003-2030	Average Households per Acre of Urbanized Land 2002	Land Consumption 2003-2020 at 2002 Densities	Available Land* 2002	Surplus/Shortfall
Inside the Expanded MUSA	366,083	2.0	257,380	138,656	(118,733)
Outside the Expanded MUSA	92,380	2.3	165,539	508,789	343,250
Total	458,463	1.7	422,928	647,446	224,517

* Available lands defined as land that is not urbanized, protected, or sensitive.

Sources: Computed from data from the Twin Cities Metropolitan Council, U.S. Bureau of the Census, University of Minnesota Remote Sensing and Geospatial Laboratory, and Minnesota DNR.

In the 6-county non-metropolitan region, the distributions of projected future growth and sensitive natural areas across community types are different from the metropolitan area in significant ways. Developed Job Centers and Resort areas are expected to grow the fastest (Figure 4). However, because current populations in Developed Job Centers are so much greater than in Resort areas, the bulk of this growth is expected in the Developed Job Centers—61 percent of projected growth is in these communities.

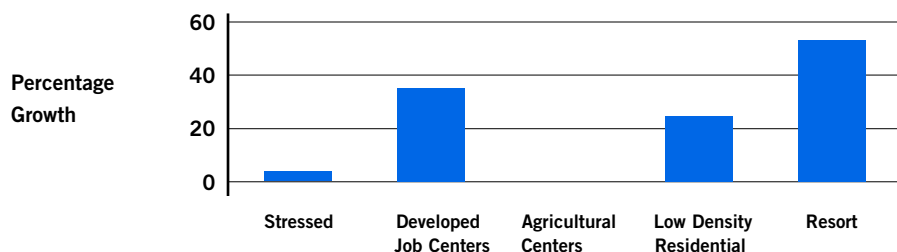
The greatest concentrations of unprotected, sensitive areas, on the other hand are in the Resort and Low Density Residential categories (Figure 5). Between them, these groups contain 83 percent of unprotected sensitive areas.

Thus, the greatest increases in population are expected in areas (Developed Job Centers) with lower than average concentrations of sensitive natural areas. However, the Resorts category both contains sensitive resources and is expected

to expand significantly in the future. Resort communities are among the least-densely settled parts of the 6-county non-metropolitan region. Such high concentrations of sensitive resources imply that careful planning and appropriate private management for sensitive natural resources are very important. The high amenity value of these places clearly creates the potential for growth beyond current projections leading to negative natural resources impacts, such as triple tier lake development. With local tax capacities only moderately above average for the 6-county non-metropolitan region and below the average for the Twin Cities metropolitan area, resort communities might also struggle if left to conserve sensitive areas on their own.

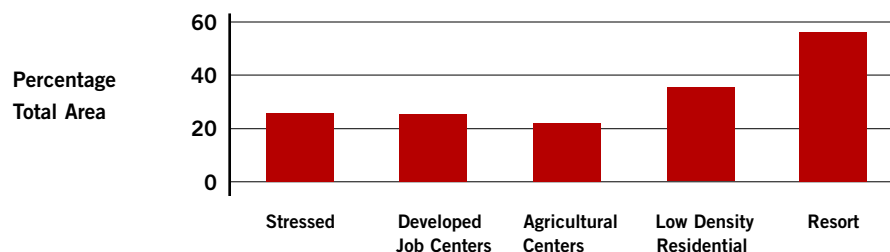
As in the metropolitan area, this assessment clearly suggests that if natural resources are to sustain the region's economy and communities into the future, serious consideration and efforts must be made at all levels to better plan and budget for the conservation of sensitive natural areas.

**Figure 4: Projected Growth, 2003 – 2030 by Community Type
6 Non-metropolitan Counties**



Source: See Map 12.

**Figure 5: Percentage of Total Area Unprotected and Sensitive by Community Type
6 Non-metropolitan Counties**



Source: See Map 4.