

Tending to the Heart of Rural Community in a Changing Landscape

City of Aztec Comprehensive Plan Update

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Prepared for:

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I. INTRODUCTION & BACKGROUND

As a number of community members tell it, the area surrounding the City of Aztec has always been a rural ranching and farming community that complemented and extended the small town flavor of Aztec. Regulations were traditionally as sparse as residential subdivisions. The rural landscape was maintained by a mutual respect for the rural lifestyle, the land, and the relationships that sustained all who lived on it. The lifeblood of this landscape was the water of the Animas River and its nerve center was Aztec. The irrigation system that connected the Animas River to the fields of the working farms and to the cisterns of the residences in Aztec was the product of a strong civic sense, cooperation and pride. It is symbolic of the close-knit connection of the rural landscape to the city of Aztec.

Today, water remains just as important as it ever was in the relationship between town and country. And yet, much has changed in the area outside of Aztec over the last half century. Farming and ranching have declined dramatically, while the number of people living on the land has increased dramatically. Between 1990 and 2000, the City of Aztec grew by a modest 10.1%, while neighboring rural areas grew by almost 65%.

The oil and gas industry has replaced agricultural pursuits as the dominant employer and productive use of the landscape. Residential housing on the land is rapidly growing. Country roads have become highway corridors flanked by strip malls. Formerly large agriculture and ranching landholdings are being subdivided into increasingly smaller parcels. Aztec now refers to itself as a city, and along with other municipalities in the region has been aggressively annexing neighboring areas.

In the process, "newcomers" have moved into the area, changing the face of the community in many ways. And yet, to their credit, members of the greater Aztec community still view themselves as a rural small town community. According to several community members, whether you are embraced as a member of the community depends more on your attitude and your participation in community life than on your place of birth. One person concluded, "If you come in and act like a Californian, you will be treated like a Californian."

This sense of community has roots in a time when members of the community collectively built and maintained the irrigation system upon which the historic town and rural landscape depended. In the face of recent dramatic changes, this attitude has been



Figure 1: Cottonwood, Acequia & Mobile Home Court



transformed into a kind of spirited activism that transcends many political and ideological boundaries in an effort to 1) hold local government and big business accountable for abuses, and 2) find a common ground that will allow for change and yet preserve the essential small town rural community character. Greater Aztec is not alone in this struggle – many other rural places in New Mexico and nation-wide are struggling with many of the same concerns.

In this spirit, the City of Aztec has undertaken an open-ended comprehensive planning process to develop an approach to dealing with change in the surrounding area that is rooted in local community values. By law, the city has the authority to plan for impacts of growth in the community in the three-mile area surrounding the city known as the Planning and Platting Jurisdiction, or PPJ (see Figure 3).

The specific values, priorities and preferences of people who live in this area are not well understood. Also unknown is how residents perceive the impact of growth on what they value, and potential land use controls that could be used to manage it. In the past, some people have loudly expressed concern that growth threatens Aztec's quality of life. Others have objected equally loudly to efforts by the City of Aztec to extend its regulatory control over development occurring beyond the city limits.



Figure 2: Recent Development on Crouch Mesa

But by and large, the attitudes of most residents are just not known. As a result, the bedrock for this planning process has been to provide a public forum for the community to discuss the issues, concerns and approaches to future change in the greater Aztec area.

Also missing from the discussion so far has been a detailed description of recent development activity in the PPJ. Many if not most people probably have an intuitive grasp that significant changes are happening in the community, and some aspects of this growth are readily evident to

anyone who drives through the countryside surrounding Aztec. But to understand the full extent of the changes that are occurring, a more systematic investigation of growth trends and impacts in the area is needed. Consequently, another key purpose of this planning process has been to provide a comprehensive description and analysis of growth in the PPJ in order to inform the community's discussion about what the future should be for Aztec and its surroundings.

The following problem statement was developed to guide this comprehensive plan update:

The community's values regarding development in the City of Aztec's 3 -mile extraterritorial jurisdiction are unknown. As a result, it is unclear whether the c urrent



pattern of growth and development is in keeping with the community's preferences for the area.

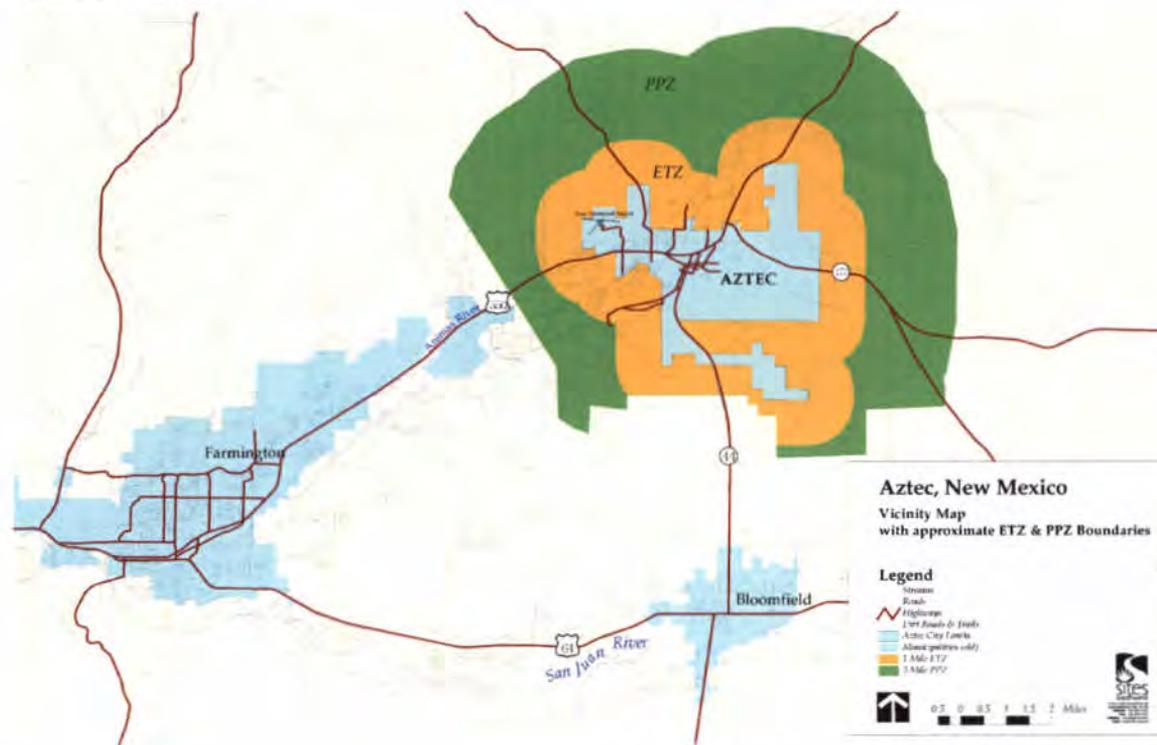
The purpose of the planning process was to:

1. Work with the greater Aztec community to understand the development trends in Aztec's extraterritorial jurisdiction;
2. Develop a vision for future growth based on community values; and
3. Advise the City on how it can best accomplish this vision.

The key questions that needed to be answered in the planning process were:

1. What do people in the Aztec area value in their community and local landscape?
2. What impact has recent growth had on the things that people value?
3. What kind of growth does the community want in the future - where should development happen and what should it look like?
4. What can the City do to get the re?

Figure 3: The PPJ



II. COMMUNITY VALUES

As noted above, the City of Aztec identified community input as a critical component of the Plan Update effort. The City planning staff and Commission were interested in who the community of the PPJ is, what they value and what their vision of future growth is. With this in mind, a four-pronged strategy was designed to secure the greatest possible input during the planning effort: 1) a series of public meetings 2) a community survey, 3) regular steering committee meetings; and 4) interviews with local stakeholders (business and real estate people, school officials, and local government officials.)

A particular effort was made to obtain as broad a participation process as possible from residents of the PPJ. The main outreach strategy was to work through the area's water user associations, whose membership encompasses most of the households in the PPJ. Meeting notices and the community survey were distributed with the monthly association newsletters.

The following discussion summarizes the community input that was received through the public meetings and the community survey.

What Places are Important to the Community?

In the first public meeting, people were led through a community mapping process in which they were asked to identify spaces and places of significance in the community landscape. They were then asked to prioritize and weight their value. The goal of these exercises was to get important geographical information about the community, such as landmarks, shopping, recreation, resource areas, and a sense of what the people valued in the community landscape.

Most of the participants reside in the PPJ, although there are a number who live within Aztec proper. Few of the participants work in Aztec. Most work in Farmington, Bloomfield or have local businesses that they operate out of their homes in the PPJ. Several participants are retired and a few are homemakers.

For the participants, notable local geographic landmarks such as the La Plata River, the hill coming into Aztec, Main Street and the Animas River created a sense of home for them.



Figure 4: Main Street Aztec



Several community members mentioned the Safeway in Aztec as their favorite shopping place. Apparently, this is a place to hear a lot of community news, and the some participants even mentioned it as a community gathering place as well. Another large contingent indicated that they did their shopping at various places in Farmington. A few mentioned downtown Aztec generally as their favorite shopping area and also as a key community gathering place. Other community gathering places included the Civic Center, a church, the ball fields at the municipal park, and the controversial Aztec Speedway. Historic/ cultural places identified by the participants included the Old Courthouse, Main Street Downtown, and the Aztec Ruins.

Favorite recreational areas of the participants included the Animas River, Navaho Dam, the Glades area northwest of town, and the Alien Landing site northeast of town. Favorite scenic roads were Ruins Road, the road to Navaho Dam and Southside River Road. People also mentioned farms in the Animas River Valley as important features, especially the Blancett Ranch and the Emory Farm southwest of town. The favorite water feature in the area was the Animas River, followed by Navaho Lake. The principal water source identified by people was the Animas River, as well as the various rural water associations, all of which draw water from the Animas River and/or wells in the River corridor.

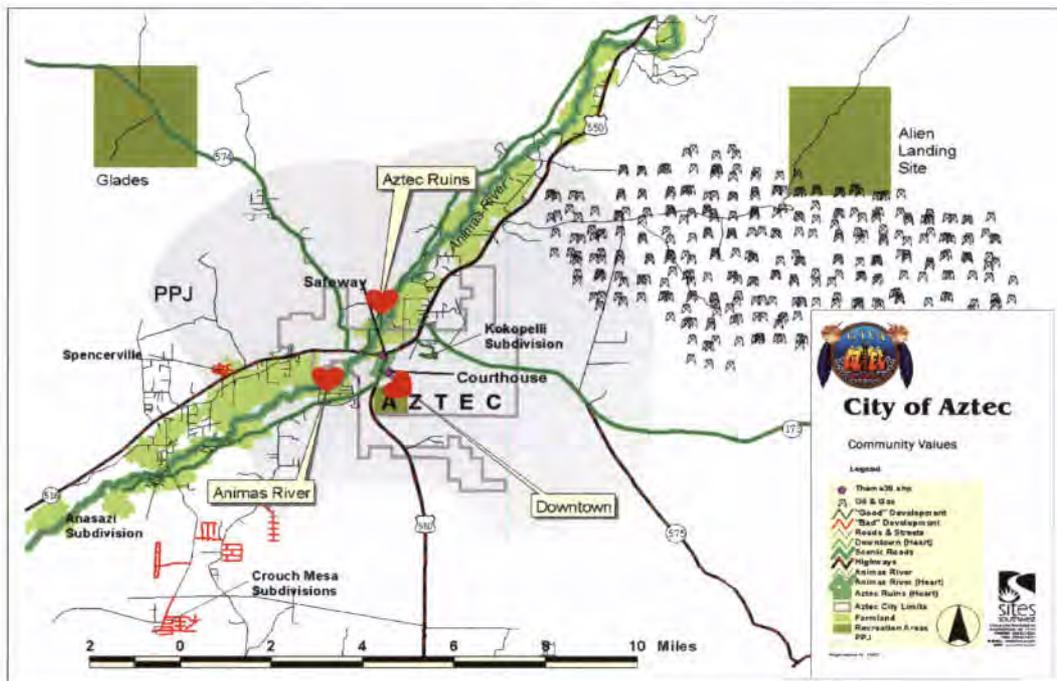


Figure 5: Community Values

Important natural resources with economic value in the area are the rich oil and gas deposits. The Animas River, Navaho Lake, open space generally, the air and the land itself were also mentioned as important natural resources. Environmental concerns of the participants also centered on the oil and gas industry and the power industry, and the potential impact on air quality and water quality/quantity in the Animas River. A couple of people even mentioned long-term sustainability as a significant concern.



Mobile home subdivisions on Crouch Mesa and residential development along the river were the prime examples cited for poor development. The oil and gas industry and Spencerville were also mentioned as types of development of which the participants would like to see less. The participants identified the Kokopelli Subdivision and downtown redevelopment as positive types of development.

At the end of this exercise, people were asked to share what they considered to be the "heart" of the Aztec community. The people, the rural lifestyle, Main Street, the Aztec Ruins, the Animas river and clean air were identified individually by a number of the participants as the heart of the community. The Community Values Map shown above synthesizes all of the input from this exercise.

What do Residents Value Most in Their Community and Landscape?

Community members were also asked what they value most in their community. Key features of the landscape were frequently mentioned, including the Animas River corridor, the adjoining bluffs and ridges, public parks, "green areas", plentiful open space (including public lands) and southwestern looking residential landscapes. One person remarked that "With all the public land, I have the biggest backyard in the country." The friendly people, the ability to know one's neighbor, the rural lifestyle, and main street preservation were also highly valued. Finally, many people agreed that water is the area's most important resource. On the other hand, the idea of Aztec, with its shopping and public services, serving as the center for the surrounding community received little support.

How is Growth Affecting the Things that the Community Values?

Community members identified the revitalization of Main Street, a good grocery store, increases in property values and tourism as positive effects of the area's growth. The list of negative impacts of growth is longer. Key negative effects include increasing traffic congestion, worsening air quality, higher property taxes, loss of agricultural lands and open space, more people, and less privacy for long-time residents.



What is the Community's Vision the Future of Aztec and the PPJ

Figure 6: Rangeland and Residential Development

Many people envision the greater Aztec area in the future as a place that has preserved its rural atmosphere, agricultural areas and open space. Specific improvements that they would like to see include a public swimming pool and that there be a synergistic development of public and private projects to further revitalize downtown and establish linkages with the river, parks and the Aztec Ruins. Many residents expressed a desire that



the community to be a place in which the public can have confidence in the accountability of the political process. To begin with, this would involve ensuring that Commission meetings were open to the public.

What Should Aztec Do to Achieve the Desired Vision for the Community?

Many community members strongly supported changes in Aztec’s current land use policies in the PPJ, including putting an end to annexations and developing rural subdivision standards. Further discussion revealed that they were concerned about maintaining their property rights, and that in general, less regulation was preferable to more regulation. Some people went further and expressed opposition to any regulation by the city of activities in the PPJ. This negative perception appeared to reflect both a general distrust of governmental entities and a specific distrust of Aztec, due to what are seen as the sometimes secretive practices of the City Commission, the apparent inability of the City to provide services and infrastructure to areas that it has annexed, and the City’s overly restrictive land use regulations. Not surprisingly, they also manifested a clear desire for an open public process with real public accountability with respect to planning related activities.

Not everyone saw Aztec in such a negative light. Some people indicated that Aztec should continue its efforts to plan for growth in the area. Other possible Aztec initiatives that received support were constructing a loop road for trucks around Aztec to relieve congestion on Main Street and promoting redevelopment/infill development in the city, including renovation and reuse of the old Courthouse.

To sum up, community members identified the area’s natural features and open areas, a rural lifestyle, and the people of the community as the qualities that they most value about the area. They are most concerned about increasing traffic congestion and the loss of farmland, open space and the area’s rural/small town character. They generally oppose new, more restrictive land use regulations for the PPJ, valuing the freedom to be able to do as they please with their property. At the same time, they would like to see the Animas River valley and open space elsewhere in the PPJ protected from development, and infill development encouraged in the city.



Figure 7: Community Members Visioning the Future



A. GROWTH ALTERNATIVES FOR AZTEC AND THE PPJ

In order to further explore community attitudes about growth and development, three different growth scenarios for Aztec and the PPJ resulting from different regulatory regimes and policies were presented for public review and comment: 1) a trend, or "no change" alternative, which provides for continued growth under existing land use regulations; 2) a "managed rural growth alternative," which permits a more rural style of growth in the PPJ while preserving important values such as active farms, the opportunity for rural living, and the river valley; and 3) a "compact urban growth alternative," which greatly restricts growth outside the current Aztec boundaries. The basis for these alternatives was community input on its values and an analysis of existing environmental conditions (see Section III below). Maps of the growth alternatives and more detailed descriptions can be found in Appendix F.

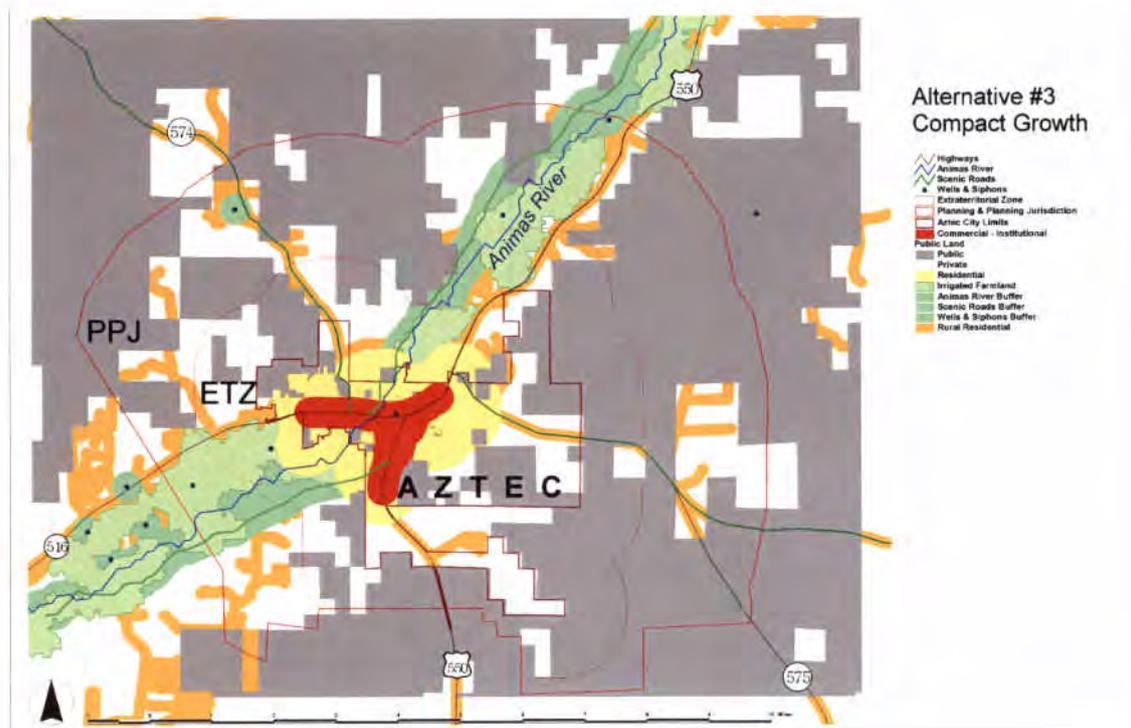


Figure 8: Compact Growth Alternative



Somewhat surprisingly, none of the growth alternatives received strong support from the public, despite an attempt to represent a full spectrum of growth characteristics. In each case, one or more aspects of the alternative elicited strong objections. For many people, the land use pattern of the Compact Urban Growth Alternative resonated most with their sense of current conditions of the PPJ and what they hope it would be like in the future, i.e., few people, lots of open land, and future growth concentrated in Aztec's newly annexed areas or in the vicinity of existing infrastructure. Yet the associated land use policies and regulations – continued enforcement of Aztec's subdivision ordinance in the PPJ, aggressive annexation, and zoning throughout the PPJ—were soundly rejected. The Managed Rural Growth Alternative received little support, despite its more flexible development standards and provisions for rural living, because people thought that it would encourage widespread development throughout the PPJ. The Trend Alternative seemed for many to represent the worst of both worlds, combining uncontrolled growth with Aztec's objectionable land use policies – annexation and enforcement of its subdivision ordinance in the PPJ.

More frequently, however, people opposed all of the alternatives. They indicated that the City of Aztec should not in any way be regulating or planning in the PPJ. A number of people asserted that the City should not worry about the PPJ as long as it was not willing or able to "taking care" of the existing area within the city limits (many people were not hooked up to sewer and water as yet). Finally, there was a concern that PPJ residents have no representation in the planning process that affected them ("regulation without representation"). In general, their point of view can be summarized as follows: "We chose to live outside of Aztec for a reason."

Generally speaking, community members were most in favor of growth occurring within the city of Aztec, near existing roads, utilities, and on recently annexed land. For many people, this seemed to mean "as far away from me as possible." They also expressed support for developing additional affordable and multi-family housing in Aztec. Conversely, they were most opposed to growth occurring within the Animas River corridor, on farmland, and in a widely dispersed way throughout the PPJ. Hence, they expressed support for the idea of protecting farmland along the river.

Community members were overwhelmingly against the specific land use policies and regulations associated with the growth alternatives. A majority of people viewed annexation by Aztec as an anathema and opposed land use controls even

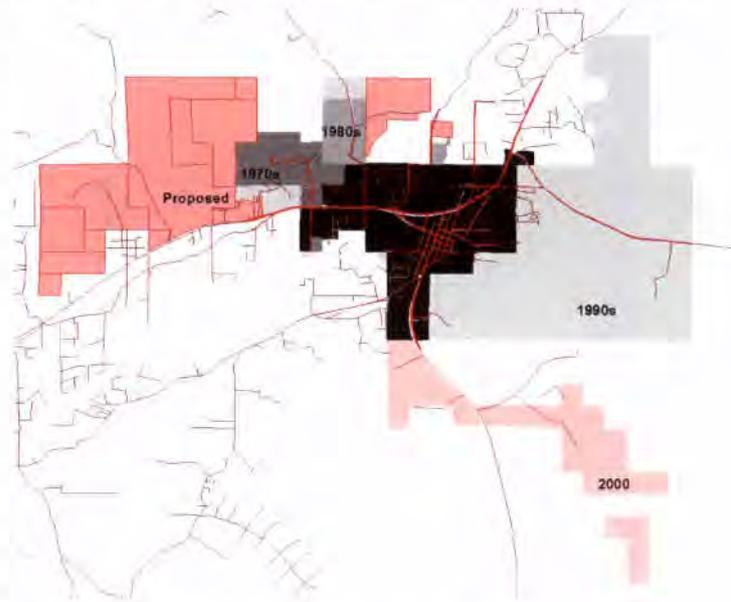


Figure 9: Recent Annexations by the City of Aztec



when they were aimed at preserving the rural landscape and rural lifestyle of the PPJ (e.g. rural subdivision regulations and rural/agricultural zoning regulations). Even non-regulatory efforts to encourage private and public conservation, such as voluntary land swaps with the BLM and conservation easements to protect farmland, were viewed negatively.

In seeming contradiction to the general preference for limited growth outside of the city, many people supported continuing the city policy of providing water through its system to the water user associations in the PPJ without restriction.

The Dilemma: What does Rural Lifestyle Really Mean?

To sum up, members of the community feel strongly that growth and development should occur closer in to the city of Aztec and opportunities for rural living should be preserved. They would like to see farmland and open space somehow kept from being developed. They want things to remain as they are. On the other hand, they strongly oppose the stricter land use policies and regulations that would be necessary to accomplish that objective.

Beneath these contradictions are the multiplicity of meanings and values that underlie the concept of "rural lifestyle." It is more than just open space and traditional agrarian uses. The following list is meant to summarize from the various comments and input of members of the community some of those meanings.

Rural Landscape	Rural Lifestyle vs.	Rural Freedom
open space		individual freedom and responsibility
a mixture of uses		no annexation
mostly agriculture & ranching		minimal regulations
limited on-site infrastructure		no land use planning
larger and fewer lots		
few residents & few neighbors		
few outsiders		
little growth and turnover		

Perhaps the fundamental, unresolved contradiction in the community's vision for the future is the desire on the one hand for limited regulations and the freedom to do as one wishes with one's property, and the desire on the other hand for an open rural landscape, with irrigated farmland, rangeland, and large spaces between dwellings.

The fundamental reality is that growth is happening in the PPJ. It is producing dramatic changes in the rural landscape and having a negative impact on the qualities that people in the area value most highly. The extent and impacts of this growth are revealed more specifically below. Yet there is no clear public consensus about what should be done. Many residents of the PPJ are torn between a desire to preserve the rural character of the



area and a strong dislike of land use regulations that restrict the rights of property owners. These attitudes cannot be reconciled completely, however, given the growth trends in the region.

At one time, say forty years ago, when the population of the region was smaller and the pace of growth was slower, it would have been possible to maintain both of these attitudes without apparent contradiction. At such a time it would have been hard to imagine an Aztec where open space would be disappearing and traffic congestion would become a problem. That time has now arrived, however, and the City of Aztec is confronted with a difficult choice between conflicting values.

In the long run, though, only one choice is reasonable. Allowing growth to continue unchecked preserves individual property rights for a while, but it will certainly result in the eventual loss of much of the area's rural character. It may also bring in newcomers who are more inclined to support typical urban and suburban land use regulations. The long-term result could be the loss of both the rural landscape and the chance for a rural lifestyle that is relatively free from regulatory control. The opportunity for rural living cannot long survive the loss of a healthy rural landscape.

On the other hand, managing growth in the PPJ will place additional limits on individual property rights, but it can be a way to validate and protect activities that are characteristic of rural living from future efforts to regulate them out of the landscape. It can preserve the right of residents to use their property in ways that have long been part of the area's customs and culture.



Figure 10: Rural-Urban Edge



III. EXISTING CONDITIONS & THE IMPACT OF GROWTH

In recent years, the pace of growth in the Aztec area has accelerated, fueled by a strong regional economy and an influx of newcomers drawn to the region's natural beauty, pleasant climate and good quality of life. Most of this growth has been concentrated outside of the city of Aztec in the PPJ. Areas that were once open range land or river valley farmland are now increasingly the sites for new subdivisions as people seek out appealing natural settings to live in, or affordable home ownership opportunities. Meanwhile, oil, gas, coal and power generation industries have become the primary economic engine for the area, bringing a very different use to the open rural landscape from agriculture. This shift has implications for environmental health and has attracted additional newcomers to fill jobs in the industry. Both types of growth will in all likelihood continue for the foreseeable future, bringing further changes to the qualities that many people value in the area: its rural landscape, small-town character and rural way of life.

The following section summarizes the nature and extent of this growth. It reviews several factors pertaining to development in the PPJ, including:

- Land Use Planning and Regulation
- Recent and Projected Population Growth
- The Location and Character of Residential Development
- Economic Development and Changes in Land Use
- Water and Existing Infrastructure
- Roads and Traffic
- Public lands and Open Space
- Community facilities and services
- Environmental Health

A more detailed description of existing conditions in the PPJ is contained in Appendix A.

A. LAND USE PLANNING AND REGULATION

The City of Aztec has authority to regulate varying aspects of land use within the PPJ. By state statute, the city's planning and platting authority extends to all territory within three miles of its municipal boundary. The City is empowered to adopt a master plan for the physical development of the municipality and those areas within the three-mile planning and platting jurisdiction that in the City's judgment bear a relationship to the planning of the municipality.

The City also has joint authority with San Juan County to review and approve subdivision plats in the PPJ. New subdivision proposals must meet the requirements of both the City's and the County's subdivision ordinances. However, in certain key instances the City and County differ as to how this review process should occur. For instance, the County interprets the relevant state statutes to mean that its subdivision requirements for so-called summary subdivisions take precedence of the City's requirements. Unlike the City, the



County does not require such subdivisions to provide improvements such as streets, water systems, or waste treatment systems. Likewise, the County holds the position that the exemptions contained in county subdivision ordinances in the state of New Mexico should apply in the PPJ. These exemptions include, among others, creating a parcel for an immediate family member or creating a single parcel for sale.

In keeping with its interpretation of state statutes, the County permits subdivision plats in the PPJ approved under its summary review process to be filed in the office of the county clerk without approval by the City. It also does not discourage exempt subdivision activity in the PPJ.

B. POPULATION GROWTH AND DEMOGRAPHIC CHANGE

Between 1990 and 2000, San Juan County's population grew at the fairly rapid rate of 24.2%, from 91,605 people to 113,801 people. In the same period, the city of Aztec grew at a more moderate rate of 10.1%, from 5,792 people to 6,378 people. Within the PPJ, however, population growth far outpaced both the city and the county. Total population went from 2,982 people to 4,913 people -- an increase of 64.8%. Figure 11 below shows this change with most significant change happening in the PPJ. Of course, the PPJ had a small population base to begin with, so a higher growth rate is not surprising; but even considering the absolute growth in population, the net population increase in the PPJ was three times greater than in the city of Aztec (1,931 vs. 586).

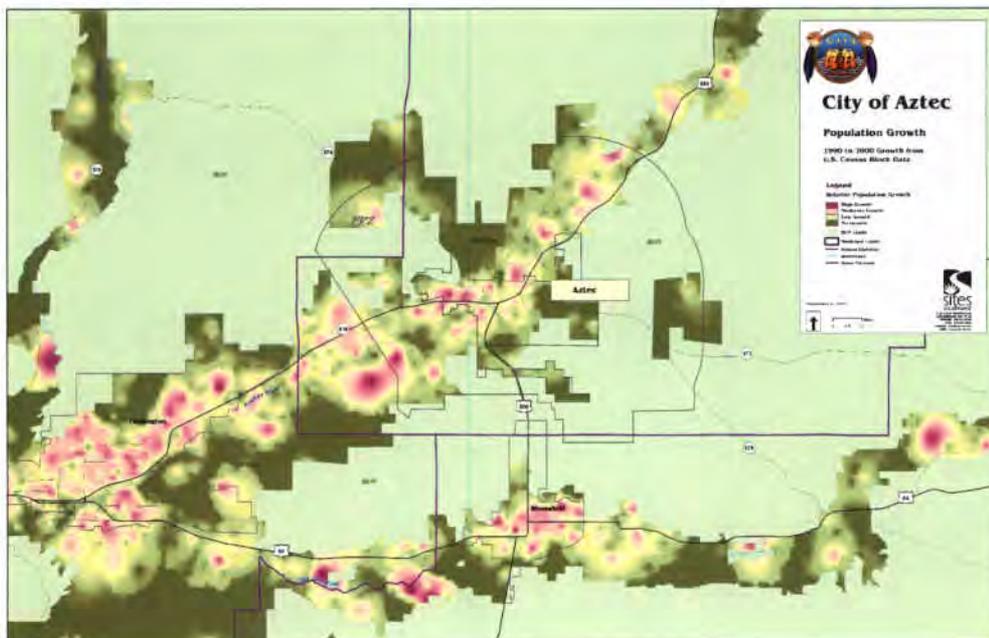


Figure 11: Map of Recent Population

In addition, the number of people over the age of 50 grew by over 30% between 1990 and 2000 in the greater Aztec area. Figure 12 shows that the majority of these new arrivals are concentrated in the Aztec PPJ.



Aztec's appealing climate, rural small town character, and available services and retail in the region make it an ideal retirement destination. Families with transportable careers seeking a change from suburbia are drawn to the community's proximity to public open space, small town quality of life and a good school system. The current trend for the development of bedroom communities in the greater Aztec area for Farmington will also likely continue. Farmington continues to grow as a regional employment and economic center for the Four Corners area. Finally, as noted below, the oil and gas industry is likely to increase production in the coming decade, causing an in-migration of additional workers.

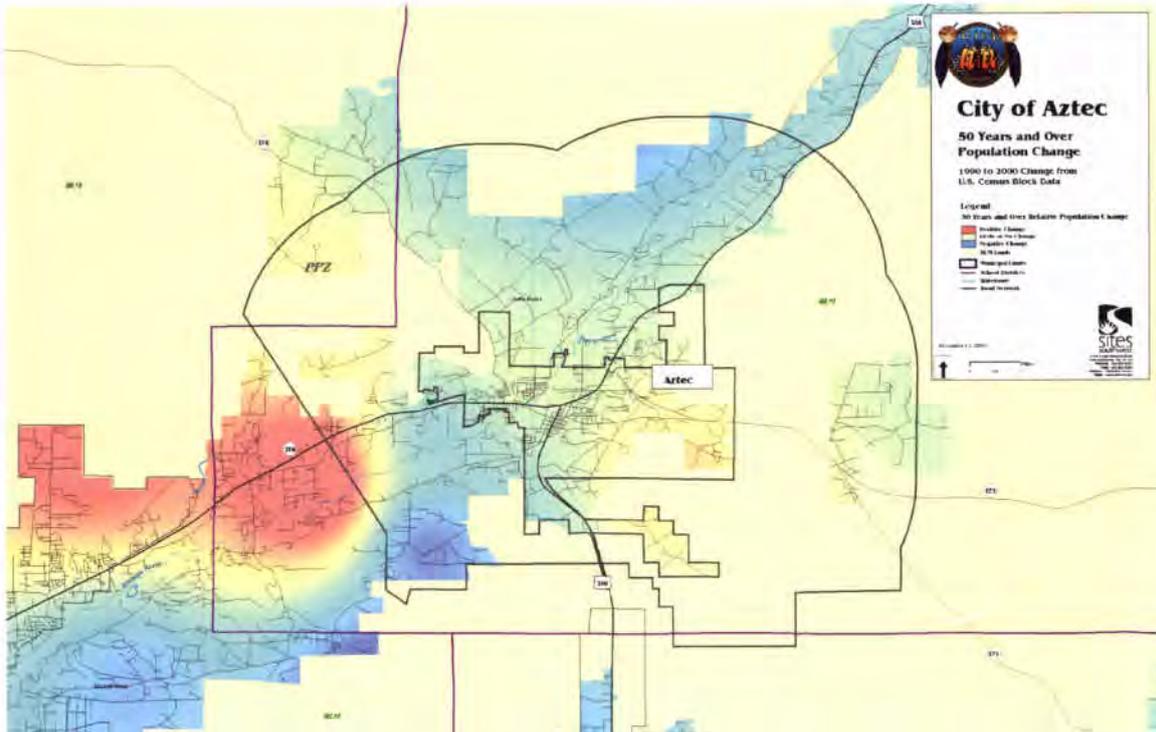


Figure 12: Spatial Distribution of Growth in Over 50 Persons

By the year 2020, population in the PPJ is expected to grow 37.7% to 6,766 people. The city of Aztec is expected to grow another 8.8% to 6,940 people. Depending on assumptions about average lot size for residential development and the amount of related commercial, office and institutional development, this population growth could translate into 1,000-2,000 acres of additional developed land in the Aztec area.

C. RESIDENTIAL DEVELOPMENT

Development in the PPJ has consisted largely of residential development. Some commercial development has occurred along the main highways, particularly between Aztec and Farmington, but very little elsewhere in the PPJ. The main locations of residential development in the PPJ are discussed below. Figure 13 is a map showing the locations of new subdivisions.



Crouch Mesa

One area that has seen significant growth is Crouch Mesa. Located in the middle of the triangle formed by the cities of Aztec, Bloomfield, and Farmington, and lying partly within each city's PPJ, Crouch Mesa has seen a significant amount of mobile home subdivision development. One county official estimates that as many as 2,500 lots have been developed on Crouch Mesa in the past eight years. In the typical case, mobile homes on 3/4 to 2 acre lots are sold through real estate contracts for as little as \$300 down and \$300 a month. This makes them more affordable than the cheapest rental housing in the area. Many of the residents of Crouch Mesa are employed in the oil and gas industry, holding down relatively low-paying jobs that often come and go with the boom-and-bust cycles of the energy industry. According to a number of community members, many of them prefer the option of home ownership on three-quarters of an acre on Crouch Mesa to an apartment in Aztec or one of the other municipalities.

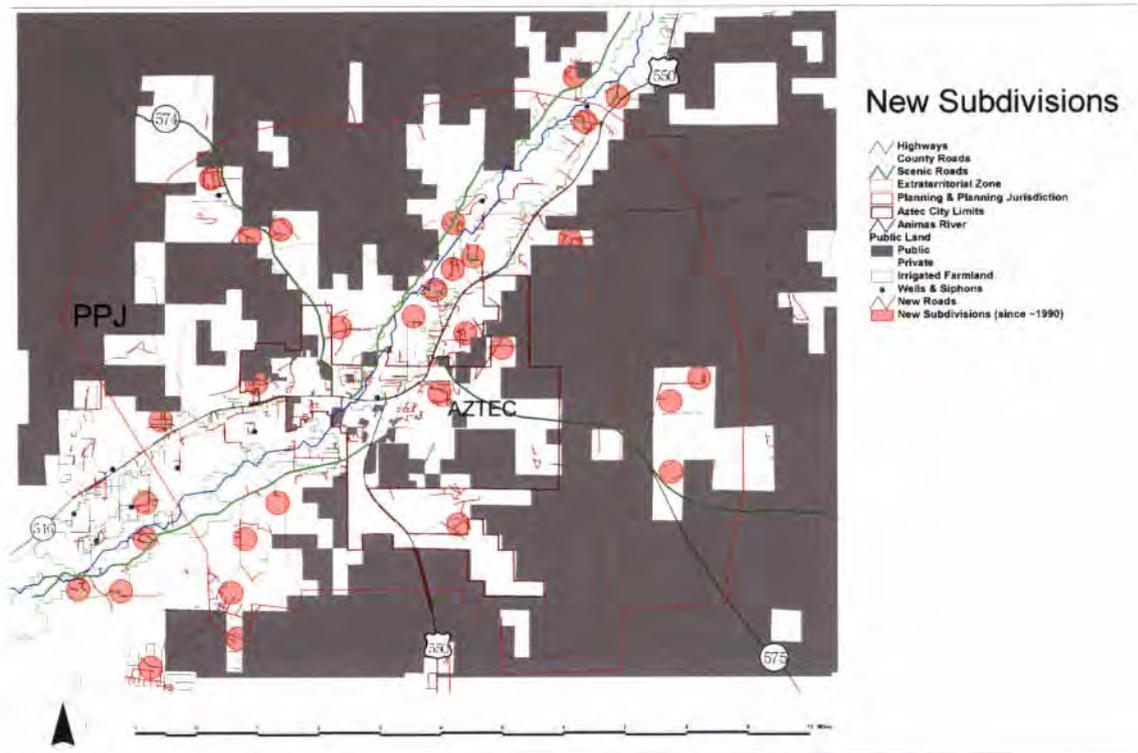


Figure 13: Map of New Subdivisions

These subdivisions impact the rural landscape because their density and aesthetic quality are out of keeping with the rural landscape. The subdivisions themselves are often poorly built and the residents often do not have the means or the desire to maintain their lots. Due to the boom and bust nature of the oil and gas industry, the migratory nature of this type of employment, and the structure of the financing arrangements, owners often abandon their lots and mobile homes when times change.



Animas River Corridor

Although not as dramatic in appearance as the changes on Crouch Mesa, the impact of development on community and environmental values is potentially much greater in the Animas River Corridor. Older communities such as Flora Vista, Spenserville, and especially Cedar Crest just north of the PPJ have experienced significant growth. However, the fastest growing areas appear to be just northeast and southwest of the City. There is also significant development on the bluffs on the southeast side of the corridor and in the vicinity of the National Monument. In general, this development includes a greater diversity of housing types than on Crouch Mesa. There are site-built single-family homes as well as mobile home subdivisions. The larger subdivisions appear to be happening up on the bluffs, while smaller subdivisions and mobile home courts seem to be the pattern in the valley. The Kokopelli subdivision and others like it are viewed by many community members as model subdivisions.

All the river corridor developments impact the rural quality of life by displacing the traditional farming and ranching activities, which are essential to the community's long term sense of identity. Above the flood plain, the newer bluff subdivisions affect the overall visual quality of the corridor. Most of the housing being developed in the corridor is either on the upper or lower end of the housing market, and it tends to be acquired by "outsiders" who, according to long-time community members, do not necessarily value the rural quality of life or the small town community.



Figure 14: Recent Residential Development in the Animas Corridor

Opportunities and Constraints for Future Residential Development

Many of the growth trends described above are likely to continue. A key question confronting the greater Aztec community is the following: where can, and should, this new growth occur? The opportunities for and constraints on development in Aztec and the PPJ are discussed below.

Several factors affect the suitability of a given tract of land for development. The cost to build is lower in areas that are close to existing road, water, and sewer infrastructure. Areas with views of the river and areas adjacent to public open spaces are desirable for amenity reasons. In the Aztec area, these factors would tend to favor upland areas located along the main roads, the river valley, and, to a lesser extent, areas closer in to the City and its water and sewer systems and other community services. The pattern of growth in recent years bears out this conclusion.



Potential constraints on development include the limited supply of private land, environmentally sensitive areas, arable farmland, and important community values. As noted below, approximately 55% of the land in the PPJ is publicly held and therefore not

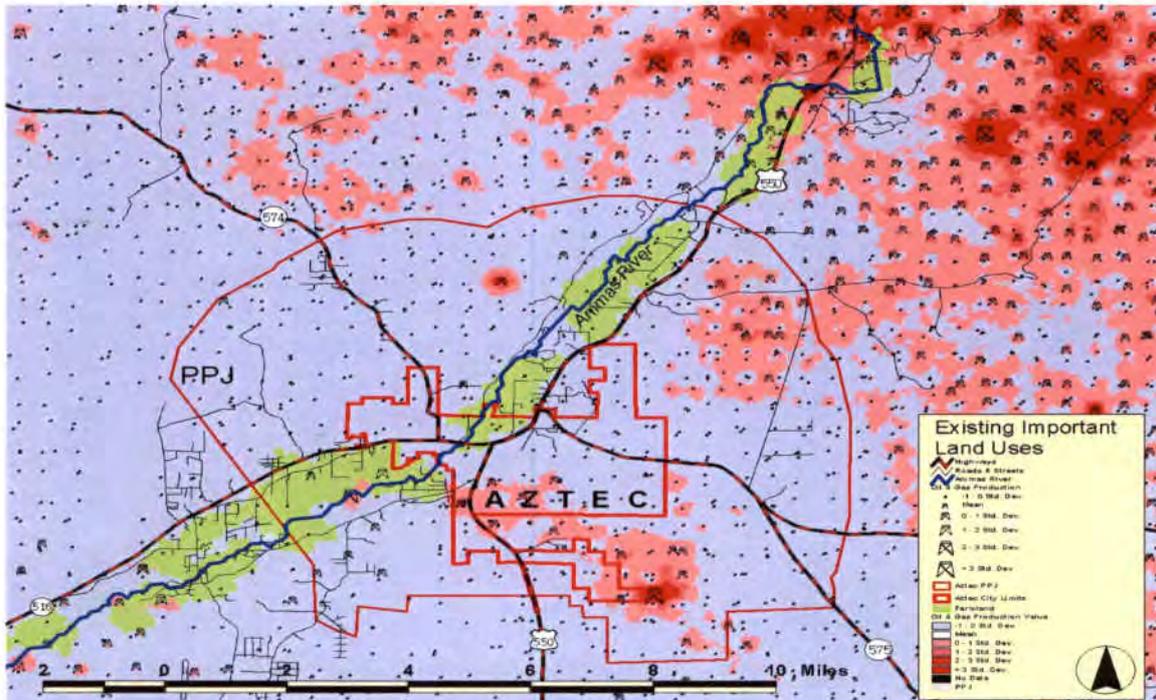


Figure 15: Existing Important Land Uses

developable except as a public resource. Environmentally sensitive areas include lands along the Animas River and other riparian areas that play an important role in the hydrologic system or provide key wildlife habitat. Arable farmland is land primarily along the Animas river corridor with very productive soils and access to irrigation water. This area is also the most readily identifiable rural landscape for the community, based on these factors.

The greatest potential constraints to development also occur in the Animas River corridor. This analysis highlights a difficult dilemma for the community: the Animas River valley is both a highly desirable location for new development and the most environmentally sensitive and highly valued landscape in the area.

D. ECONOMIC DEVELOPMENT AND LAND USE CHANGE

The principal growth engine in recent years has been the oil and gas industry. Service industries and jobs have also increased, while agriculture and other industries continue to decline. Figure 15 above shows the location of new and the traditional extractive industries in the area. This shift has important implications for the rural lifestyle that is so



highly valued by members of the greater Aztec Community. As farms and ranches sell out or go out of business, their land is often purchased and over time developed into subdivisions, replacing fields and grazing livestock with homes and cars.

The oil and gas industry has a more complex impact on the rural lifestyle. The industry provides jobs directly and indirectly through services required by the industry and its employees. The industry also pays a significant portion of local taxes, reducing the burden on the residential tax payers. Much like the low cost and abundance of water outlined below, the oil and gas industry functions as subsidy for rural residents, defraying the actual cost of public services and infrastructure. However, the oil and gas industry negatively affects the aesthetic qualities of the rural landscape, through the plethora of unsightly and loud drilling sites with their rigs, as well as the large number of storage facilities for spare parts,

equipment, petroleum products and refining operations. Exploration and drilling operations are expected to increase significantly in the next decade, which will compound the positive and negative impacts on the greater Aztec community. A key issue is what will happen to the local economy when the resource begins to be depleted in the next twenty years, or if energy prices dip significantly in the interim.

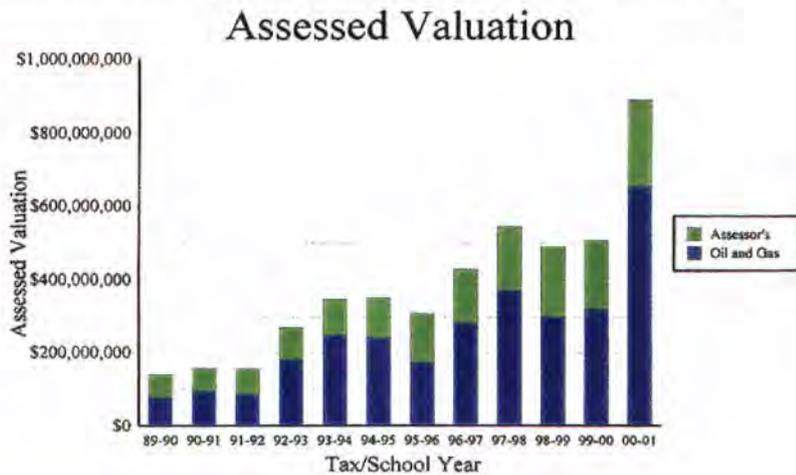


Figure 16: Assessed Valuation for Oil and Gas

E. WATER RESOURCES & RELATED INFRASTRUCTURE

The Animas River and the aquifer underneath the river corridor are the principal sources of water for the greater Aztec area. Water quality and quantity for the area is by and large good. The City of Aztec and several private water user associations are the dominant players in the water system. The former owns significant priority water rights in the area and sometimes supplies local rural water users associations when they are unable to meet customer demand.

Water service in the PPJ is provided largely through the rural water user associations and other private water providers. Below are the three primary providers of water in the PPJ and their size and growth rates in numbers of house holds (hh):

<i>Name</i>	<i>Founded</i>	<i>Size</i>	<i>Growth</i>
Flora Vista Water Users Association	1967	1100hh	40-60hh/yr
North Star Water Users Association	1981	765hh	60-70hh/yr
Southside Water Users Association	1966	408hh	14hh/yr



The water for all for all of the associations is either diverted from the Animas River or mined from the aquifer underneath the river. Some of the water, including all of the water supplied by the Southside Water Users Association comes from the City of Aztec Water System.

The rural water user associations are eligible to receive grants and loans to develop water systems from the Rural Utilities Service, an agency of the U.S. Department of Agriculture. This financial arrangement is a key factor underlying rapid growth in the PPJ. By enabling rural water associations to expand their water systems into outlying areas, it greatly facilitates residential development in places that otherwise would have no water service, or would require costly individual wells. At this point in time, the City of Aztec has little control over the extension of water service in the PPJ; limits on the sale of water to local water associations by the City of Aztec Water System could slow down the "water-association-suburban-growth-machine" described above. Over the long term, the current rate of growth will be difficult to sustain with existing water resources and rights associated with them.

Wastewater Treatment

Most wastewater treatment in the PPJ is accomplished by means of individual on-site septic systems. Because of New Mexico Environment Department requirements for septic systems, the minimum allowable lot size is 3/4 acre.

In most cases, septic systems appear to be an adequate approach to wastewater treatment, given the soil types and depths to groundwater that prevail in much of the PPJ. In areas with high water tables in Animas River riparian zone, however, such as Flora Vista and Kirtland, there have reportedly been some problems with groundwater contamination. On Crouch Mesa, depth to bedrock is reportedly minimal, requiring excavation into the soft underlying sandstone to provide adequate area and depth for percolation for on-site systems. If highly concentrated development continues throughout this area, then this could pose a potential problem for ground and surface water contamination. Higher than normal water temperatures and nutrient loads measured near the confluence of the Animas and the San Juan suggest this may already be a problem.

Wastewater that is a byproduct of some oil and gas operations may also have an impact on surface water quality, through increasing the level of salts found in surface water sources.

Storm Water Management

Most storm water is managed on-site or within major subdivisions through inexpensive bar ditches that divert the water off-site into adjacent undeveloped areas. As the development increases flows will increase in size and concentration, resulting in erosion and negative impacts to water quality. In some areas, in subdivisions built on the bluffs and adjacent to the river may have already resulted increased erosion and sediment loads.



F. ROADS AND TRAFFIC

According to the Public Works Department, the County has built only one new road since 1990. Virtually all of the new roads in the PPJ are residential subdivision roads built by developers or new residents. In addition, hundreds of miles of dirt roads crisscross San Juan County. In most cases, these roads were put in to facilitate oil and gas exploration.

Currently there are plans to construct a four-lane road from Flora Vista to US 64. The proposed alignment extends for eight miles across Crouch Mesa and is located outside of Aztec's PPJ. The final review and approval of this road project was a controversial process, with local residents, community and environmental watch-dog groups voicing concern and opposition. Residential lands in the vicinity of Flora Vista will have to be condemned in order for this roadway to be completed, and an enlarged bridge will impact Animas River riparian zone. The only proposed long-range road project is the construction of



Figure 17: Storm Water Swale

Highline Parkway, which would extend east from County Road 3500 to US 550. The start of this project is at least five years off.

Earlier this year, San Juan County revised its road policy to require asphalt paving on subdivision roads. Between 1998 and this year, the San Juan County Road Policy permitted roads with a chip seal surface instead of asphalt paving. Before 1998, the Road Policy had no paving requirement for subdivision roads. As a result, many subdivisions in the PPJ and elsewhere in the County lack paved roads. Once again, because the roads are the province of the county, the City of Aztec has little control over the extension of these facilities within the PPJ.

The chief impact on the road system of recent development has been increased traffic congestion and maintenance costs associated with the enlarged network, as well as wear and tear. Growth in the Oil and Gas industry has resulted in negative impacts to the Main Street area of Aztec due to increased truck traffic. There are currently several proposals afoot to divert truck traffic around Main Street and downtown.

G. PUBLIC LANDS AND OPEN SPACE

Within the PPJ, the majority of the land, or approximately 55%, is publicly owned. Public agencies with holdings in the PPJ include the Bureau of Land Management (BLM), the New Mexico State Land Office (SLO), San Juan County and the National Park Service



(NPS). The overwhelming majority of this public land is managed by the BLM, followed by the SLO. SJC owns only a small amount of land and the NPS land consists of the Aztec National Monument.

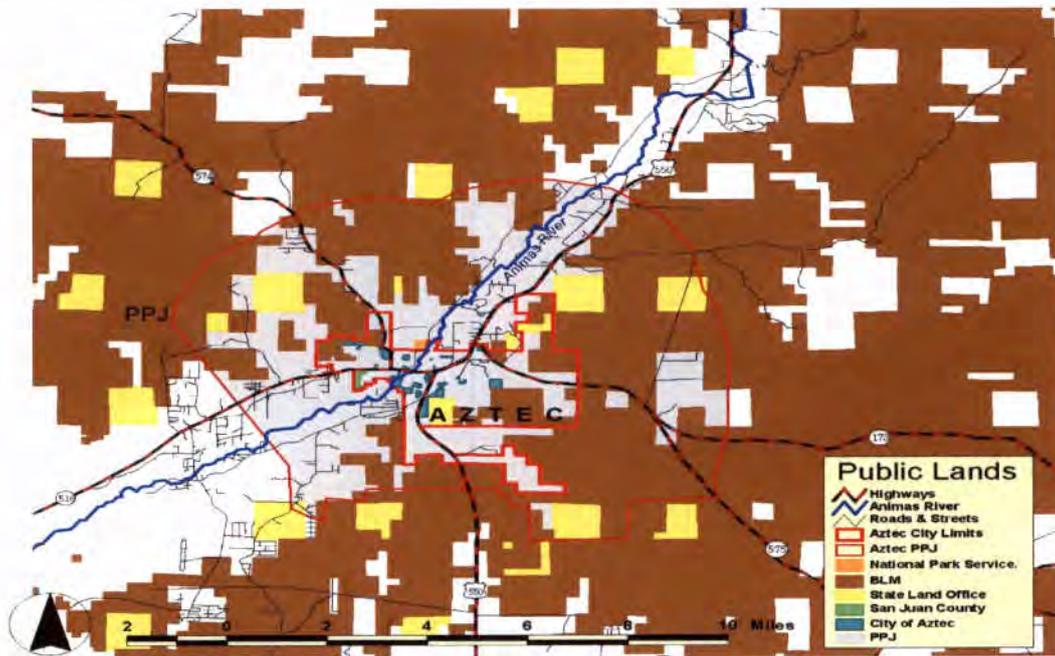


Figure 18: Public Lands in the Aztec Area

The predominant uses of these lands in the Aztec area are for oil and gas industry drilling and ranching. Because of the nature of disturbance and noise, this type of development has negatively impacted the quality of open space in many places. Another primary use, which has only recently been embraced by these agencies, is as public open space. Many local residents use the lands for various recreational purposes ranging from hiking, horse riding and camping to ATV riding, hunting and fishing. Places such as the Glades and Navaho Dam area seeing a steady increase in usage resulting from the increasing number of residents in the area. BLM lands in the area also provide critical habitat to at least three endangered species. One proposed use of the BLM land is for community centers or parks/open space for the PPJ.

H. COMMUNITY FACILITIES AND SERVICES

One concern raised by the City of Aztec about growth in the PPJ is that residents place an increasing demand on City infrastructure, facilities and services but do not pay taxes to the City. The following section considers the main city utilities and services to determine the extent of this problem.

Water and Wastewater

The city wastewater treatment system provides service only within the city limits. The city water system also mainly serves the city. In those cases where it provides water to rural



water user associations, the associations pay for the water and are responsible for building and maintaining the distribution system outside of the city.

Police and Fire Protection

The City of Aztec Police Department has law enforcement authority only within the city limits. The City of Aztec Fire Department, a volunteer organization, has one fire house in the PPJ. This is primarily staffed by people living in the PPJ. Continued growth at the current rate will necessitate the construction of additional fire houses northeast and southwest of town.

Schools

The Aztec school district, which includes all of the PPJ, is one of the better ones in the state and a prime attraction for immigrant families. There are no school buildings in the PPJ, but all district residents pay property taxes to support the system. Recent development has not greatly impacted the schools. The net number of pupils has not increased and Title I and Title II



Figure 19: School and Irrigation Ditch

services have only increased slightly, suggesting a marginal increase in the number of impoverished students. Transportation service costs have increased, with additional buses being required for the Crouch Mesa and Cedar Crest portions of the district. If current trends of development continue, these trends are also likely to continue.

Parks

The City of Aztec's park facilities receive a significant amount of use from outside of the city. Residents of the PPJ, according to the Parks and Recreation Director, account for as much as two-thirds of total park use, mainly through participation in athletic leagues. This use places a significant demand on department staff time for scheduling and maintenance. Increased growth in the PPJ will exacerbate this situation, and new parks may need to be constructed in the PPJ to increase recreational capacities.

Library

The Aztec Public Library likewise is heavily used by county residents. Of roughly 11,000 people with library cards, about 4,500 people, or 41% of the total, live outside of the city. San Juan County currently gives the library \$1,000 each year to partially defray the cost of this usage, but this is just a token amount. The Aztec library is working with other libraries across the state to persuade the state legislature to establish county library districts with taxing and bonding authority. The current growth trend is only likely to increase the burden on the library.



Roads

Finally, PPJ residents use city of Aztec roads, although how much has not been quantified. This use presumably increases the amount of required road maintenance.

In summary, growth in the PPJ appears to be having at most a moderate fiscal impact on city of Aztec facilities and services. In many instances, the city does not provide service to the area, is able to charge the users, or (in the case of the school system) tax the residents. In the case of the park system, the city could reduce the impact of non-resident use by restricting the parks to city teams only or by charging user fees for non-city teams. Likewise, the city library could charge user fees for non-city residents.

I. ENVIRONMENTAL HEALTH

Air Quality

Air quality is one of the heart qualities of the greater Aztec landscape. Traditionally high air quality associated with high elevation arid landscape of the Colorado Plateau has been undermined by recent developments. Increased production by the oil and gas industry, as well as the related power industry has dramatically negatively affected the air quality of the region. Increased numbers of vehicles associated with increased numbers of residents is also impacting air quality, especially in the Animas River valley. If the projected trends continue with respect to both oil and gas industry expansion and increased residential development, air quality will likely continue to deteriorate.

Wildlife

The riparian areas with their fecund bosques, marshes, wetlands and neighboring agricultural fields are critical habitat for a number of resident and migratory species, including two endangered species. Residential and commercial development in the Animas River corridor is having a negative impact on wild life in the area. This impact is likely to increase if the current rate of development continues.



Figure 20: Bald Eagle



IV. GOALS AND RECOMMENDATIONS

A. GROWTH MANAGEMENT GOALS FOR THE PPJ

This comprehensive plan update recommends that Aztec adopt additional policies and regulations to manage growth in the PPJ, but in a way that preserves and strengthens the rural identity of the area.

If policies of the City of Aztec over the last decade are any indication, there will be either little or no development at all in the PPJ, or in the alternative uncontrolled development. This outcome will depend entirely on the willingness of Aztec to enforce its current onerous subdivision regulation in the PPJ. Figure 21 on the next page represents a typical area in the PPJ with a few houses on large lots. If the City of Aztec continues to enforce its subdivision regulation as it does now in the PPJ, then there is unlikely to be any change to this area other than the occasional lot split off of a larger lot. If the City opts to no longer enforce its subdivision regulation as it once did, then sprawl similar to areas closer to Farmington is the likely outcome. Such development will result in a loss of the rural landscape and its current uses to the community, as well as an influx of outsiders who do not share the values of the community. In the worst-case scenario, subdivisions such as those built on Crouch Mesa could be platted and built resulting in a pattern similar to Figure 22. If on the other hand, the community and the City act proactively and plan for growth that is consistent with a rural quality of life, then a pattern similar to Figure 23 could result. Appendix G explains these and other alternatives in greater detail, but based on conversations with members of the community and direct input during the public meetings, the latter result is the most desirable outcome.

The following goals are proposed to guide the City of Aztec in addressing with growth and development in the PPJ.

1. Preserve opportunities for quality rural living in the PPJ.
2. Preserve farmland and open space in the PPJ.
3. Preserve and enhance the undeveloped quality of the Animas River Corridor
4. Develop a cooperative approach with San Juan County to managing growth and development in the PPJ.
5. Educate residents of the PPJ about the consequences of growth and involve them in determining priorities for the community.



B. GROWTH MANAGEMENT RECOMMENDATIONS FOR THE PPJ

The City of Aztec has two options to address the issues of growth and development in the PPJ. It can try to manage growth on its own, or it can find a way to work cooperatively with San Juan County and other regional entities. These two choices are discussed below.

Current Aztec Policies

As mentioned above, Aztec's principal land use policies regarding the PPJ are annexation and enforcement of the city subdivision ordinance in the PPJ. These measures do give the City some degree of control over growth and development in the PPJ. Annexation brings with it the ability to zone land, whereas the subdivision ordinance establishes minimum development standards.

As currently administered, however, these measures are more effective in preventing undesirable development than in encouraging desirable development. For instance, the City has zoned the land it has annexed in recent years so as to prohibit mobile home development. Beyond this, however, it has not yet established priorities for how this land should be developed. Nor has it established policies for extending roads and utilities that could support a given set of land use priorities. Further, Aztec has annexed significantly more land in recent

years than will be required for the City's projected growth in the foreseeable future. It is hard to imagine that it will be able to continue annexing land at the same rate. Most of the land currently in the PPJ will remain outside of the City of Aztec for well into the future.

Likewise, the subdivision ordinance helps to discourage low-quality mobile home development, but it does not directly control the type, density, or location of development in the PPJ. As long as subdivisions meet the

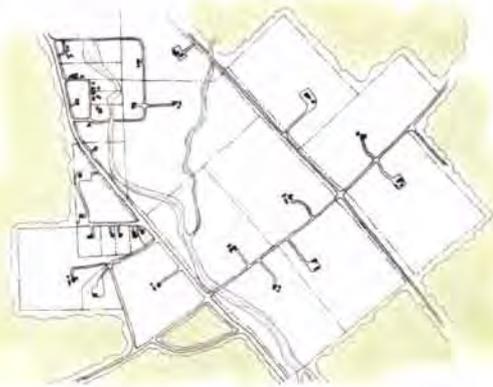


Figure 23: Existing Conditions



Figure 22: Minimum Lot Size Subdivision

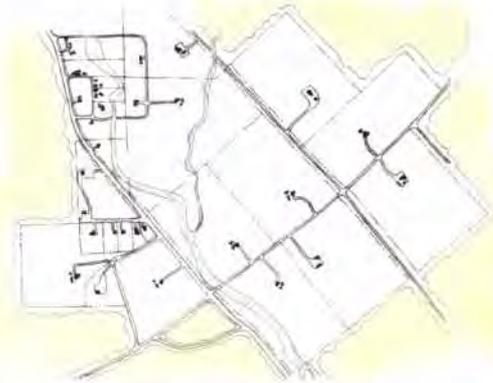


Figure 21: Agricultural Zoning Subdivision



City's design standards, they can go up in sensitive areas such as the Animas River valley or spread out across the PPJ without any restriction.

Further, substandard development that is discouraged in the PPJ can merely move to other parts of San Juan County. The problem is not eliminated, just displaced to other places in the region where land use controls are less stringent.

To conclude, these policies may be necessary stop-gap measures given the pace of growth in the PPJ and the conflicting land use management priorities of the City and County, but they do not take the place of more proactive regional growth management initiatives.

Voluntary Land Protection Measures

In addition to its current land use management policies, Aztec could also encourage and support certain voluntary initiatives to protect farmland in the Animas River valley.

- **BLM land swap/lease back program**

Under this initiative, the City of Aztec would work with the BLM to arrange land swaps with willing property owners. The BLM would trade land of equivalent value elsewhere in the PPJ for farmland in the valley. Ideally, this land would be located near to existing roads and infrastructure. The BLM would then lease the land back as farmland to the current farmers. In this way, farmers could continue to farm, prime farmland would be retained, and property owners would receive fair market value for their property.

- **Conservation easements/Purchase of Development Rights**

Under this initiative, the City or an appropriate non-profit organization would purchase the development rights to farmland, or, alternatively, property owners would donate them in order to obtain a tax benefit. A conservation easement would be placed on the property to prevent future development. The property owners could continue to farm the land, or they could sell it, but only as farmland.

City/County Cooperation

A cooperative effort between the City and the County would offer the best prospects for managing growth in the PPJ. For this to be possible from a political point of view, however, both jurisdictions would have to make compromises in the way they currently regulate development in the area. The County would need to accept a greater degree of land use regulation in the PPJ, while the City would need to acknowledge the validity of a rural lifestyle for much of the PPJ.



Figure 24: Farm Land in the Animas River Corridor



The outlines of a possible compromise might include the following:

- Aztec would agree to support rural development standards within much of the PPJ.
- San Juan County would agree to support urban development standards in those parts of the PPJ that are close to the city limits or that Aztec is likely to annex in the next ten years or so.
- San Juan County would agree to a higher level of planning and land use regulation in the PPJ.
- Aztec would support as a planning goal the protection of the kind of rural living that many residents in the PPJ value.

City/County cooperation in managing growth and development in the PPJ could include one or more of the following measures:

- **A revised subdivision review process**

Design standards for new subdivisions would vary according to a number of criteria, such as:

- Proximity to the city sewer system
- Proximity to the city limits
- Number of lots in the subdivision
- Average subdivision lot size
- Proximity to environmentally sensitive lands

For example, City of Aztec subdivision standards could apply within the one-mile extraterritorial zone (ETZ) and where the City plans to annex within the next ten years. Within the rest of the PPJ, San Juan County subdivision standards could apply.

Small subdivisions would be held to less stringent design standards. For subdivisions of up to about 12 homes, access could be provided through a "country road" finished with a good gravel surface. For subdivisions of up to 5 homes, access could be provided through a common drive.

Exempt land divisions under the County subdivision ordinance would need to obtain City approval. Within the ETZ, they would need to meet the existing city design standards. In the rest of the PPJ, however, they would only need to provide legal access to each lot.

- **Zoning**

The City and County could jointly establish zoning within the ETZ. Zoning in the rest of the PPJ would require a County zoning ordinance.

Opposition to zoning in rural areas often reflects a belief that zoning means the imposition of city standards and restrictions that will eventually make it impossible for residents to enjoy a rural way of life. Yet zoning can be used to protect aspects of rural living that people value. Two types of zoning should be considered for the PPJ.

- **Agricultural Zoning**



This zoning would apply mainly to the agricultural areas along the Animas River. Rural/agricultural land uses would be protected as permissive uses. Property owners would retain the right to maintain livestock, to engage in various home-based occupational activities, and to store related equipment on the property.

There are two basic approaches to agricultural zoning:

Minimum Lot Size - Under this approach, the minimum lot size is set at the minimum farmable tract area for the region. This assures that land is not subdivided into parcels too small to farm. However, it does not prevent the land from being converted to non-farm uses.

Area-Based Allocation Zoning - This approach establishes a low-density requirement and a maximum lot size requirement for non-farm dwelling units (e.g., one acre). Property owners can split off a limited number of lots for retirement purposes or to provide home sites for their children, but most of the property has to remain as farmland.

- **Rural Residential Zoning**

In much of the PPJ, the issue is not so much preservation of actual farmland as preservation of rural living. A zone to protect a rural lifestyle might include the following provisions:

- A relatively large minimum lot size (e.g., two acres)
- Multiple family residences included as permissive uses.
- Various rural/agricultural activities included as permissive uses.
- The ability to store related equipment on the property.

- **Special Zoning Districts**

New Mexico state statutes permit the establishment of special zoning districts in areas without an adopted zoning code, where 51% of the registered voters residing in the area give their approval. A special zoning district would be a way to protect specific areas, such as agricultural land in the Animas River valley, without having to establish zoning for the entire county.

- **Annexation Plan**

The City and County could agree to an annexation plan for Aztec. This plan should specify criteria for annexation, a general timetable, likely areas to be annexed in the near-to-medium-term, and City commitments to provide public facilities and services. This would establish a clear and defensible rationale for Aztec's future annexations and provide County residents some say, through their County officials, in the development of this land use policy.

Ongoing Public Input and Public Education

The cooperative approach discussed above to dealing with growth holds the best prospects for achieving a balance between two basic but conflicting community priorities: the desire on the one hand not to restrict property rights and the desire on the other hand to retain the traditional rural landscape and way of life. Yet given the current relations



between the City and County and existing public opinion, the chances of successfully developing such an approach are slim. The reality is that many residents have not accepted the fact that, in the current circumstances of rapid growth, there are necessary trade-offs between these values. Without a basic understanding of how growth brings these values into conflict, public support for a City/County growth management initiative will be weak.

Another factor that undercuts the ability of the City of Aztec to build support for growth management in the PPJ is the fact that residents do not have political representation in Aztec's land use regulation process. Because residents of the PPJ do not vote for the city commissioners who pass the land use regulations and appoint the city planning commission, they view the process as being unaccountable to them. As long as they lack representation, many residents will remain deeply suspicious about the motives behind any initiative Aztec takes regarding the PPJ.



Figure 25: Structure From the Past

Until Aztec addresses these fundamental problems – the lack of public understanding of the consequences of growth, and the lack of public trust in the land use regulation process – it will have little success in building a regional consensus about growth and development in the PPJ.

Therefore, the City's first step in this effort should be to create a mechanism for PPJ representation in Aztec's existing land use regulation process. This could be done either informally or formally. An informal approach could involve establishing an ad hoc advisory group of PPJ representatives that would advise the City on general land use policies and individual land use cases pertaining to the PPJ. A more formal approach would be to work with the County to establish a separate ETZ planning commission with authority to review development proposals and address other planning issues in the PPJ. (In other New Mexico Communities, such extra-territorial commissions have been established with subdivision review authority only.) This commission would be accountable to both city and county elected officials.

The next step should be to undertake an ongoing public education process to inform the public about the impacts of growth in the area and to consider possible solutions. To obtain significant participation from skeptical PPJ residents and County officials, the City



will need to demonstrate its commitment to make this a truly open-ended process, without a predetermined conclusion. In a series of public meetings, for instance, information could be presented about how growth is affecting the things that people value about their community and what similar communities around the country have done to respond to this growth. Based on this information, discussions could be held to work through the community's conflicting values and build consensus around a vision for the future of the PPJ.



Figure 26: Cottonwoods at the Aztec National Monument

Specific Recommendations

This plan recommends that the City of Aztec pursue the following strategies to address growth in the PPJ.

- 1. Establish an ad hoc PPJ advisory committee to advise the City about growth and development in the PPJ.**
- 2. Initiate a public education process about the impacts of growth in the PPJ.**
- 3. Protect agricultural land along the Animas River Valley.**

The City of Aztec's initial goal should be to address growth and development along the Animas River. This area is probably the most critical part of the PPJ. It is highly valued by residents for farmland, wildlife habitat, and for the river itself. It is also the part of the PPJ that is subject to the strongest development pressures.

Initially, the city should explore the feasibility of the voluntary measures discussed above – land swaps with BLM and conservation easements. If significant numbers of property owners show an interest, the city should work to encourage preservation of farmland in these ways (assuming the willingness of the BLM to cooperate and/or the ability to identify the necessary organizations and resources to purchase conservation easements). This approach has the advantage of offering farmers market value for the development rights in their land, a key factor for farmers who may need that equity to hang on in difficult times.

If property owners do not show an interest in participating in voluntary agricultural land protection measures, the city should consider annexing the river valley in the PPJ and zoning it for agriculture.



The alternative - trying to develop a cooperative approach to the area with San Juan County - might take years to accomplish or might not happen at all. In the meantime, development would continue to consume farmland in the valley.

4. Work with San Juan County to develop a cooperative approach to address growth in the PPJ.

The City of Aztec’s long-term goal should be to find a way to work with San Juan County. This will require a sustained effort of outreach by Aztec’s elected officials to the County leadership in order to achieve the kind of land use policy compromises discussed above. It will also require an ongoing effort by City and County staff to work out the details of new land use policies and regulations. Finally, it will require a public education effort to inform residents of the likely impacts of unrestrained growth in the PPJ, and to persuade them that land use controls can be used to protect the things they value.

Over time, the City should strive to undertake the following initiatives with San Juan County.

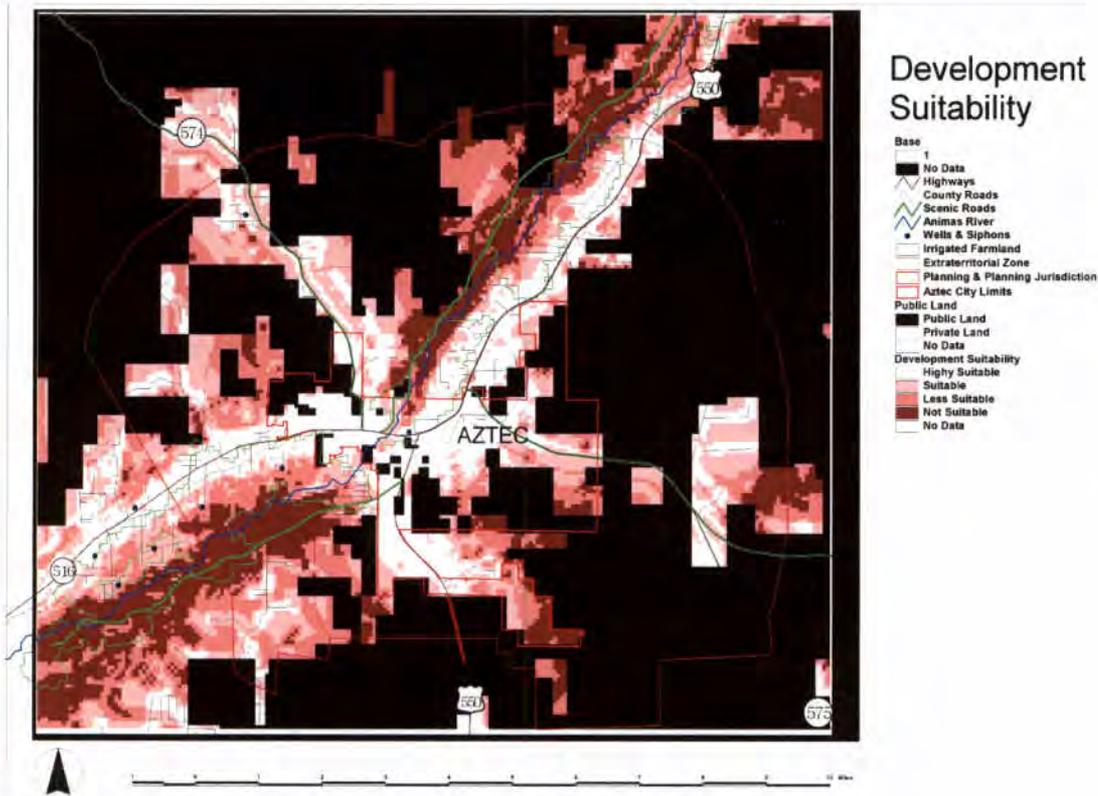


Figure 27: Map of Development Suitability

- *Establish an ETZ Planning Commission.*
- *Undertake a joint City/County planning effort to establish priorities for growth and development in the PPJ.*



- *Develop an agreement on the regulation of subdivisions in the PPJ.*
As discussed above, this agreement would permit rural subdivision standards in appropriate locations in the PPJ.
- *Develop an annexation plan.*
- *Jointly establish extraterritorial zoning in the one-mile ETZ.*

As discussed above, much of this area would be zoned for agriculture or rural residential. Areas identified for annexation within the Aztec Annexation Plan could be given a more urban zoning classification.

- *Establish zoning in the remainder of the PPJ.*

It would probably be most feasible to attempt first to establish special zoning districts in parts of the PPJ. Success with these zones would strengthen the case for a countywide zoning code. Most of this area would be zoned for rural residential.

5. Annex the private land areas of the PPJ and zone for rural residential.

In the event that the City and San Juan County are unable to develop a cooperative approach to address growth in the PPJ, Aztec’s only remaining alternative would be to annex the PPJ. It would be essential for the City to emphasize that the purpose of annexation is to preserve the rural character and way of life that many residents value highly.

C. ADDITIONAL GOALS AND RECOMMENDATIONS

The emphasis of this comprehensive plan update has been on growth management issues for the City of Aztec’s PPJ. This is reflected in the goals and recommendations just described, which focus primarily on controlling the location and character of development in the areas surrounding the city, in light of the community’s values and preferences.



Figure 28: Signs of Change

A full set of goals and recommendation for other topic areas typically addressed in a comprehensive plan have not been prepared, however, for several reasons. First, San Juan County, which shares regulatory authority in the PPJ and is responsible for providing roads, utilities and other public services, has a different sense of how to deal with growth in the area and, further, chose



not to participate in this planning effort. Second, as noted above, the public input received in this current planning process revealed that many residents of the PPJ remain unconvinced of the need to plan and unsupportive of a city-led effort. In addition, there are significant unresolved disagreements and contradictions with respect to the values that people hold.

Given the absence of a key player from the process and the limited public support and readiness at this time for comprehensive planning in the PPJ, preparing a full set of goals and objectives for specific areas such as roads and utilities seemed premature. Indeed, the plan's initial recommendations to undertake an ongoing public outreach and information effort are an acknowledgement of the need for further education, clarification of values, and consensus building. However, a more limited number of goals and recommendations have been developed where there was an opportunity to directly support the growth management objectives presented above. In most cases, the City of Aztec can carry them out without need of significant involvement from the County.

Housing

Goal: Provide affordable housing to meet the needs of the community's lower-income residents.

Recommendations:

- o Seek grants and other funding sources to help finance affordable housing development

- o Provide incentives (for example: density bonuses, streamlined development approval) to encourage affordable housing development

Economic Development

Goal 1: Retain existing economic activity in the PPJ.

Recommendation:

- Prevent the loss of existing farms and ranches in the PPJ (for example, through agricultural zoning, land swaps, conservation easements)

Goal 2: Encourage new economic activity in the PPJ.

Recommendation:

- Provide suitable locations for local-serving commercial uses in proximity to growing residential areas in the PPJ.



Infrastructure

Water

Goal: Provide adequate water service to developing areas, consistent with the growth management goals of this plan.

Recommendations:

- o Work with area rural water user associations to develop policies regarding the extension of water service in the PPJ.

- o Develop policies regarding the extension of City water service to previously and newly annexed areas.

Wastewater

Goal: Provide adequate wastewater treatment service to developing areas, consistent with the growth management goals of this plan.

Recommendations:

- Develop policies regarding the extension of City wastewater treatment service to previously and newly annexed areas.

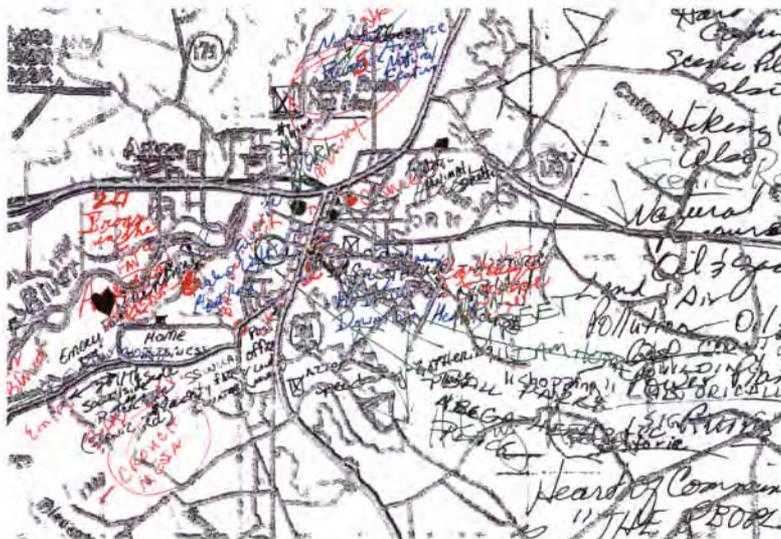
Roads

Goal: Provide a regional system of roads to meet the needs of growing areas in Aztec and the PPJ.

Recommendations:

- o Work with San Juan County to develop a long-range road plan that addresses the future need for roads in the PPJ.
- o Provide a truck bypass route that brings heavy truck traffic around Aztec's main street.

Figure 29: Composite of Community Mapping



APPENDICES



APPENDIX A. PLANNING AUTHORITY & PLANNING AREA (PPJ & ETZ)

The City of Aztec has varying degrees of authority to regulate land use within the city boundaries and surrounding areas.

By state statute, the City of Aztec's planning and platting authority extends to all territory within three miles of its municipal boundary. The City is empowered to adopt a master plan for the physical development of the municipality and those areas within this three-mile planning and platting jurisdiction that in the City's judgment bear a relationship to the planning of the municipality.

Once a municipality adopts a master plan, the planning commission must approve all proposals to build or extend new public roads, public facilities, or utilities (both publicly or privately owned) within the area of the master plan. However, any public agency that is not under the jurisdiction of the municipality can overrule the planning commission and proceed with such a proposal upon a two-thirds vote of its board of directors.

The City of Aztec also has joint authority with San Juan County to review and approve subdivision plats in the PPJ. New subdivision proposals must meet the requirements of both the City's and the County's subdivision ordinances. One area of disagreement between the City and County is the treatment of "summary subdivisions". Under the County ordinance, subdivisions with five or fewer lots, any one of which is less than ten acres in size, are eligible for summary review and are not required to provide improvements such as streets, water systems, or waste treatment systems. Under the City ordinance, in contrast, only subdivisions that create no more than two parcels are eligible for summary review, and these subdivisions still must meet the subdivision design standards of the ordinance for roads and utilities. The County, however, interprets the relevant state statutes to mean that in this case its summary review process should take precedence over the City's summary review process. Accordingly it permits subdivision plats approved only under its summary review process to be filed in the office of the county clerk.

The City and the County also disagree about the treatment of the exemptions contained within county subdivision ordinances. By state statute, thirteen types of land division are exempt from the requirements of county subdivision ordinances, including, for instance, creating a parcel for an immediate family member or creating a single parcel for sale, lease or other conveyance in any five-year period. Here again, the County's position is that these exemptions still apply within the PPJ, despite the fact that the City of Aztec ordinance does not contain them..

Over half of the land within the PPJ is owned by the federal government or the state of New Mexico. As a result, it is largely exempt from local land use regulations.



APPENDIX B. RELEVANT PLANS, ORDINANCES & STUDIES

The following plans, ordinances and studies pertaining to Aztec and the PPJ are summarized below:

- a) Aztec Community Development Plan
- b) Aztec ICIP
- c) Aztec Land Subdivision Regulations
- d) San Juan County Subdivision Regulations
- e) Draft Farmington Resource Management Plan and Environmental Impact Statement

Community Development Plan (1999)

The Community Development Plan is an update of the 1990 General Plan that was developed by the Northwest Council of Governments.

The plan's vision statement for the community of Aztec emphasizes the following qualities:

Aztec's small-town character

A visually inviting community

Durable neighborhoods and commercial districts

Economic growth that is locally-oriented and environmentally-friendly

Aztec's downtown as the symbol of the community

The importance of cooperative participation in planning for change

The plan proposes several guiding principals to help achieve the vision for Aztec, including: encouraging sustainability; establishing a balance between the automotive scale and the human scale; addressing connectivity of streets and neighborhoods and traffic circulation together; promoting development that is harmonious and compatible with adjacent areas and the entire community; requiring growth and development to pay for itself; and making citizen involvement and participation an essential element of the planning and implementation process.

The plan proposes several land use goals:

Goal One: To promote a balance of land use types within and surrounding the city.

Goal Two: To preserve open space within and near the city.

Goal Three: To provide for affordable housing.

Goal Four: To provide adequate transportation.

Goal Five: To maintain community character.

Goal Six: To manage and plan for growth with a Tri-City regional planning effort.

To meet this goal, the plan proposes that Aztec, Farmington and Bloomfield establish a joint committee to address regional growth issues. The plan also recommends that the Tri-Cities prohibit the extension or connection of services to developments that do not comply with regional guidelines and local development regulations.



Goal Seven:To coordinate the timing, location and intensity of growth with the provision of adequate public facilities.

- To meet this goal, the plan recommends the following policies
- Where development at non-urban densities is permitted within Aztec and its extraterritorial jurisdiction, it must be designed to accommodate urban development when urban services are available.
- The City requires adequate public services and facilities to be in place (or a commitment to provide them) concurrently with urban development. This applies to the following services: water, wastewater, streets, fire stations, schools, floodplain development, and storm water management.

The plan notes that San Juan County frequently waives the requirements for subdivisions to provide paved streets with curb, gutter and sidewalks. This presents significant issues for subdivision development in Aztec's three-mile planning and platting jurisdiction. The City of Aztec's subdivision ordinance requires paved streets, curbs, gutters and sidewalks in subdivisions with parcels smaller than 5 acres.

According to the Plan, growth within Aztec's three-mile planning and platting jurisdiction is placing increasing demands upon the City's infrastructure, community facilities and public services without providing additional tax revenues to support that increased demand.

City of Aztec Infrastructure Capital Improvements Plan (ICIP) (2001)

The ICIP presents the proposed capital improvements projects for the city of Aztec through 2005.

The ICIP notes that the area outside of the city limits has experienced significant population growth in recent years. The ICIP suggests that one result of this growth has been an increase in the number of county residents using city facilities and services, without a corresponding increase in city tax revenues.

The plan also recommends that existing city infrastructure should be improved and/or replaced before the city undertakes further system extensions. It notes that much of the city's infrastructure was constructed in the 1950s and in some places is nearing the end of its life expectancy.

City of Aztec Land Subdivision Regulations: Ordinance No. 305

The Land Subdivision Regulations ordinance governs the subdivision of land within the jurisdiction of the City of Aztec. This jurisdiction includes the City's three-mile planning and platting jurisdiction within the County. According to state statute, a subdivision in the PPJ must receive approval from both the city and the county before the plat is file in the office of the county clerk.

The Land Subdivision Regulations ordinance provides the procedure for subdividing; design standards for streets, blocks, lots, easements, improvements, and other components of the subdivision; minimum requirements for plats and data; provisions for obtaining variances; and penalties for violations of the ordinance.



The Land Subdivision Regulations ordinance establishes an urban standard for subdivision improvements. Subdividers must provide paved streets with curbs and gutters, sidewalks, and streetlights. Moreover, every subdivided lot must have access to a publicly dedicated street. Individual lots must also connect to the public sanitary sewer system if it is within 2000 feet.

This ordinance does not distinguish between subdivisions according to number of lots or lot size. Any land division that creates two or more lots is subject to the same set of requirements and standards. In contrast, the subdivision ordinances for Farmington and Bloomfield establish different classes of subdivisions that are subject to different design standards depending on the average lot size. Generally speaking, subdivisions with larger average lot sizes are allowed to meet less stringent design standards for roads, storm drainage and other improvements.

San Juan County Subdivision Regulations

The San Juan County Subdivision Regulations ordinance governs the subdivision of land within the jurisdiction of the County of San Juan.

This ordinance establishes a more rural standard for subdivision improvements. Subdividers are required to provide paved streets and suitable access from the subdivision to an existing public road. They are not required, however, to provide curbs and gutters, sidewalks, or streetlights. Storm drainage is to be handled through bar ditches and culverts.

Draft Farmington Resource Management Plan and Environmental Impact Statement, U.S. Department of the Interior, Bureau of Land Management (2002)

This draft plan identifies the projected development of federal oil and gas reserves within the San Juan Basin in New Mexico and the proposed management direction for administration of public lands in the area administered by the Farmington Field Office of the Bureau of Land Management for the next 20 years. The draft plan focuses on five planning issues and the decisions needed to resolve them: 1) oil and gas leasing and development; 2) land ownership adjustments; 3) off-highway vehicle use; 4) management of specially designated areas; and 5) coal leasing suitability assessment.

To assist the agency decision-makers and the general public in choosing the appropriate solutions to the planning issues, the draft plan proposes and evaluates four alternatives: Alternative A-Current Management; Alternative B-Resource Production Focus; Alternative C-Resource Conservation Focus; and Alternative D-Balanced Approach. Alternative D is the preferred alternative. The intent is to resolve the five issues by providing a combination of resource uses that would protect important environmental values and sensitive resources while also allowing development of mineral resources that provide employment and tax revenues to the region. This alternative incorporates concepts from the resource production and resource conservation alternatives and encourages the use of new technology to lessen conflicts between the emphasis areas.



APPENDIX C. COMMUNITY PLANNING PROCESS

The City of Aztec identified community input as a critical component of the Plan Update effort. The City planning staff and Commission were interested in who the community of the PPJ is, what they value and what their vision of future growth is. With this in mind, a three-pronged strategy was devised to secure the greatest possible input during the planning effort: 1) steering committee meetings; 2) interviews with local stakeholders (business & real estate persons, school officials, and local government officials; 3) public meetings; and 4) a community survey.

STEERING COMMITTEE MEETINGS

The Steering Committee consisted of representatives of local stakeholder groups (Rural Water Associations), representatives of State and Federal Agencies operating in the area (BLM, COG and SWCS) and concerned citizens. The members are listed below. The Steering Committee played a pivotal role in giving guidance to the process. The Committee was a touchstone for validation of the process and many of its products. They also assisted in the interpretation of findings in the analysis phase and in the responses by participants in the public meeting.

Steering Committee Members:

- Ray Barnes, City of Bloomfield
- Edward Bledowski, DLR Group Architects
- Tommy Bolack, San Juan Soil and Water Conservation District
- Anita Choate, Flora Vista Water Users
- Illa Hodges, North Star Water Users
- Shirley McNall, City of Aztec Citizen
- Bob Metzler, ASCE
- Rick Mitchell, Southside Water Users
- Bill Papich, Bureau of Land Management
- Derald Polston, City of Aztec Citizen
- Bob Richards, NW Council of Governments
- Annette Tidwell, City of Aztec Chamber of Commerce

LOCAL STAKEHOLDER INTERVIEWS

Several local stakeholders were interviewed during the course of the planning process: The idea was to glean information and perspective from people who were actively engaged in the community dialogue on development. Some of them were members of the business community, others were government regulatory and agency personnel, and still others were community leaders in the public planning process. Information from these interviews was incorporated into the analysis of existing conditions and was used to identify key issues for the PPJ.

FIRST PUBLIC MEETING

The first public meeting was held on Thursday, June 27, 2002. The meeting was publicized through press releases in the local papers in Aztec and Farmington and flyers that were posted around the community.



First, meeting participants were led through a community mapping process in which they were asked to identify significant spaces in the community landscape on maps. The goal of the exercise was to get important geographical information about the community, such as landmarks, shopping, recreation, resource areas, and a sense of what the people valued in the community landscape. This information would provide critical baseline information for the planning process and help establish the community's sense of place as the common point of departure for the planning effort. The exercise began with the participants drawing in their homes and work places. The participants were then asked to identify specific features in landscape, including following:

- Important shopping areas
- Favorite recreation areas
- Favorite ranch or farm
- A roadway with beautiful views
- The place where your water came from
- A critical environmental issue
- An important community gathering place
- An important source of economic
- An historic/cultural place or building
- Residential developments that you think are positive or negative
- The place or land mark that tells you are home

Most of the participants reside in the PPJ, although there were a number who live within Aztec proper. Few of the participants worked in Aztec. Most worked in Farmington, Bloomfield or had local businesses that they operated out of their homes in the PPJ. Several participants were retired and a few were homemakers. For the participants, notable local geographic landmarks such as the La Plata River, the hill coming into Aztec, Main Street Aztec and the River created a sense of home for them.

Several participants mentioned the Safeway in Aztec as their favorite shopping place. Apparently, this is a place to hear a lot of community news, and the some participants even mentioned it as a community gathering place as well. Another large contingent indicated that they did their shopping at various places in Farmington. A few mentioned downtown Aztec generally as their favorite shopping area and also as a key community gathering place. Other community gathering places included the Civic Center, a church, the ball fields at the municipal park, and the controversial Aztec Speedway. Historic/cultural places identified by the participants included the Old Courthouse, Main Street Downtown, and the Aztec Ruins.

Favorite recreational areas of the participants included the Animas River, Navaho Dam, the Glades area northwest of town and the Alien Landing site north east of town. Favorite scenic roads were Ruins Road, the road to Navaho Dam and Southside River Road. Many farms were mentioned by the participants, most of which are located along the Animas River Valley north and south of town. The Blancett Ranch and the Emory Farm were named more frequently than any other farms. The favorite water feature in the area was the Animas River, followed by Navaho Dam. The principal water source identified by the participants was the Animas River, as well as the various Water Companies (Morning Star,



North Star, Southside and Aztec City), all of which draw water from the Animas River and/or wells in the River corridor.

Important natural resources with economic value in the area are the rich oil and gas deposits. The Animas River, Navaho Lake, open space generally, the air and the land itself were also mentioned as important natural resources. Environmental concerns of the participants also centered on the oil and gas industry and the power industry, and the potential impact on air quality and water quality/quantity in the Animas River. A couple participants even mentioned long-term sustainability as a significant concern. Participants identified mobile home subdivisions on Crouch Mesa and residential development along the river were the prime examples sited for poor development. The oil and gas industry and Spencerville were also mentioned as types of development that the participants would like to see less of. The participants identified the Kokopelli Subdivision and downtown redevelopment as positive types of development.

At the end of this exercise, the participants were asked to share what they considered to be the "heart" of the Aztec community.

The Heart of the Community

The following attributes were identified as the heart of the community:

- Main Street
- Aztec Ruins
- The people
- The river
- Aztec Ruins
- The country lifestyle
- People want to take care of each other.
- Clean air
- People care about what is going on with each other – part of rural living.

Other Comments

- Outsiders just want to make money – to buy and sell our land.
- Whether or not someone is considered an outsider depends on a person's personality. If you come in and act like a Californian, you'll be treated like a Californian.
- It also depends on how soon you're willing to get involved in the community.
- Credit is due to the Aztec School System. It is one reason people move here. The teachers and administration are accessible.

Figure A1 (Community Values in Space) is a summary map based on the collective input from the other maps. Main Street, the Aztec Ruins and the Animas River all have hearts associated with them. It is significant that other core qualities were not tied to specific locations, although anecdotal comments during and after the meeting suggested that these values were associated with the rural landscape. The results of this mapping process were in turn digitized in the project GIS. The values associated with the elements of the landscape shown played a key role in the development suitability analysis (see below) and in shaping the growth alternatives used in the second community meeting.

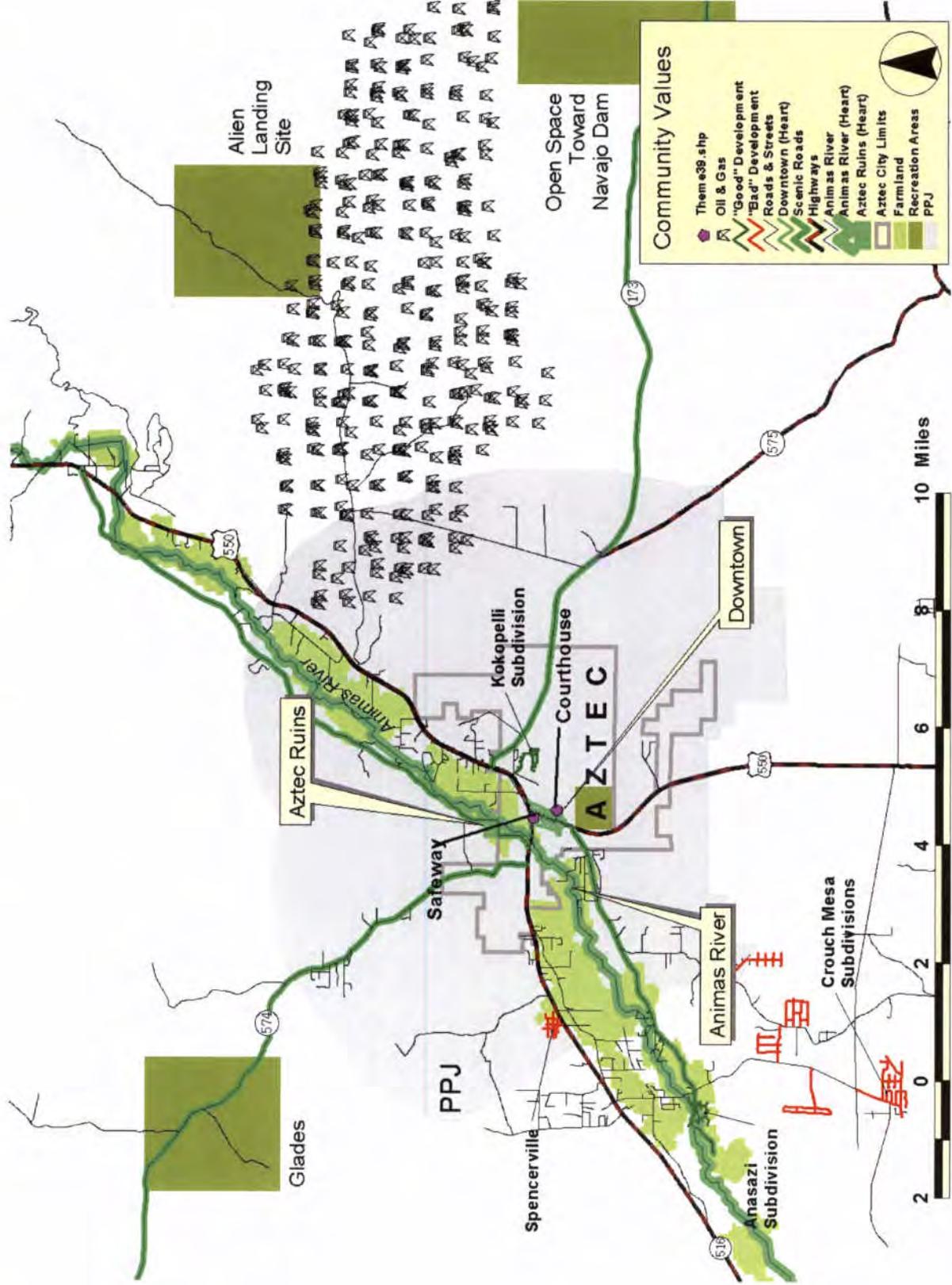


After the community mapping exercise, meeting participants divided into breakout groups and were given the following questions to answer:

- What do you value in your community and landscape?
- How has recent growth in Aztec affected the things that you value (positively or negatively)?
- What things should be done to improve the quality of life, and where?
- What should the community look like in the year 2025?



Figure A1: Community Values in Space



Each group reported its answers to the full group. Participants were then given the chance to evaluate the various comments. Meeting participants were given 7 green dots and 7 red dots and were asked to place them next to statements made during the public meeting to indicate whether they agreed or disagreed. A green dot indicates approval and a red dot indicates disapproval. The responses are summarized below; the number of dots each statement received is indicated in parentheses.

Summary of Responses

1. What do you value in your community and landscape?

- Protecting/embracing the river corridor (4 green dots)
- Parks (4 green dots)
- The people (2 green dots)
- Main street preservation (2 green dots)
- Rural lifestyle (2 green dots)
- Green areas (2 green dots)
- Preservation of bluffs and ridges (2 green dots)
- Southwest natural look (saves water) (2 green dots)
- New subdivisions w/o overhead utilities (1 green dot)

- New and improved golf course (7 red dots, 2 green dots)

2. How has recent growth in Aztec affected the things that you value (positively or negatively)?

Positive Effects

- Revitalizing mainstreet (7 green dots)
- Planning and Engineering involving the community (3 green dots)
- Community involvement in planning: roads, utilities (2 green dots)
- Improved medical facilities (2 green dots) (big enough to attract good physicians)
- A good grocery store (2 green dots)
- Projects that create quality of life (1 green dot)

Negative Effects

- Rush hour traffic (6 green dots)
- Air quality/ozone problems (3 green dots)
- Increased traffic (2 green dots)
- Growth has caused traffic problems (2 green dots)
- Lack of resources – water (2 green dots)
- Loss of open space (2 green dots)
- Increased property taxes (2 red dots)

The following statements received a mixture of positive and negative responses:

- Tourism for economic growth/quality of life (3 green dots, 1 red dot)
- Good developments, e.g., Kokopelli (2 green dots, 2 red dots)
- Racetrack (3 green dots, 15 red dots)



3. *What things should be done to improve the quality of life, and where?*

- No more annexation by Aztec (7 green dots)
- Do something with the Courthouse (3 green dots)
- Encourage infill development on available land closer in to the city (2 green dots)
- Do not develop wetlands or the floodplain (2 green dots)
- Leave open spaces in the county (2 green dots)
- Westside Plaza Safeway New Courthouse (2 green dots)
- Stop mobile home cities like Crouch Mesa (1 green dot)
- Plan to control junkiness (1 green dot)

The following comments received a mixture of positive and negative responses.

- Highway loop around Aztec (5 green dots, 1 red dot)
- Restricting the height of buildings (3 green dots, 1 red dot)

4. *What should the community look like in the year 2025?*

- Aztec has a public swimming pool (6 green dots).
- Commission meetings are open to the public (5 green dots).
- There are linkages between natural amenities like the river, downtown Aztec, and the ruins, etc. (4 green dots).
- Locate development projects to create a synergy (greater than individual projects) (4 green dots).
- Create and keep our "there" places (3 green dots)
- Utilities must be in first (before annexation?) (3 green dots).
- Vehicular circulation with good flow (3 green dots).
- Keep a visual separation between Farmington and the satellite cities (2 green dots).
- Create a green link (river corridor) between Farmington, Aztec, and Bloomfield (1 green dot).
- Keep open spaces in the county (1 green dot).
- Paved roads are a must (1 green dot).

The following comments received a mixture of positive and negative responses.

- A vibrant downtown (2 green dots, 1 red dot)

To sum up, participants identified the area's natural features and open areas, a rural lifestyle, and the people of the community as the qualities that they most value about the area. In their view, recent growth has brought benefits such as improved medical facilities and a new grocery store but also has increased traffic congestion, reduced air quality, and caused the loss of open space. They would like to see the Animas River valley and open space elsewhere in the PPJ protected from development, and infill development encouraged in the city. However, they strongly oppose further annexation by the City of Aztec. Looking forward to 2025, they would like to see the town center strengthened by new development projects that reinforce and strengthen existing resources like the main street, the ruins and the river. Finally, they would like the community to be a place in which the public can have confidence in the accountability of the political process.



COMMUNITY SURVEY

A survey was also sent to residents of the PPJ to determine their opinions about recent growth in the PPJ and their preferences for the future growth and development of the area. The survey was mailed to members of two water user associations. An announcement about the survey was placed in the newsletter of a third water user association, and surveys were available at the association offices for people to pick up and fill out. Eighty completed surveys were returned.

The survey asked respondents to evaluate various statements about current and future development in the Aztec area, including statements made by participants in the first public meeting. Respondents used the following scoring system: 1-strongly agree; 2-agree; 3-neither agree nor disagree; 4-disagree; and 5-strongly disagree.

“What things do you value about Aztec and its surroundings?”

- The rural lifestyle 1.16
- Open Space 1.50
- The Animas River corridor 1.79
- Knowing your neighbor 1.90
- The people 2.25
- Main Street downtown 2.41
- The city’s parks 2.62

“What statements characterize your sense of Aztec and the surrounding areas?”

Survey respondents agreed most strongly with the following statements:

- Water is the most important resource in our area. 1.30
- There is a lot of growth on Crouch Mesa. 1.50
- The people are the heart of the community. 1.86
- With all the public land, I have the biggest backyard in the country. 1.99

Survey respondents disagreed most strongly with the following statements:

- Public services and shopping are the basis of Aztec’s community. 3.59
- The City of Aztec should not plan for growth in the area. 3.56
- The City of Aztec is doing a good job planning for growth in the area. 3.40
- Aztec is the center of the community for neighboring areas. 3.37
- The public services in Aztec are better than in neighboring areas. 3.34
- Housing in Aztec is better built than outside of Aztec. 3.33

“How has growth in recent years affected the things that you value?”

Survey respondents agreed most strongly with the following positive effects of growth:

- Aztec has a good grocery store. 1.89
- Property values are increasing. 2.38



- The amount of tourism is increasing. 2.58

Survey respondents agreed most strongly with the following negative effects of growth:

- Traffic congestion is increasing. 1.58
- Agricultural lands are being lost. 1.81
- There is less privacy and more new people. 1.89
- Property taxes are increasing. 1.92
- Open space is being lost. 1.99
- Air quality is declining.

“What should Aztec be like in 20 years?”

Survey respondents agreed most strongly with the following statements:

- Farms and ranches remain in the County. 1.86
- Open space will be preserved in the County. 1.87
- Aztec will have preserved its rural atmosphere. 2.07
- Aztec will have a public pool. 2.12
- Aztec’s road system will provide good traffic circulation and a truck bypass. 2.30
- Development in and around Aztec will be attractive. 2.40
- The Aztec economy will be based primarily on oil and gas. 2.40
- Rural subdivisions without curb, gutter and sidewalks will be allowed in the PPJ. 2.43
- Pedestrian pathways will link the downtown, the ruins and the river. 2.46
- Most roads will be paved. 2.51

“What should be done to preserve and strengthen the quality of life in the Aztec area?”

Survey respondents agreed most strongly with the following statements:

- Ensure that city commission meetings are open to the public. 1.22
- Preserve open space along the Animas River and elsewhere in the PPJ. 1.72
- Preserve working farms, ranches, and prime farmland from development. 1.86
- Encourage infill development. 2.06
- Build a highway loop around Aztec. 2.07
- Develop rural subdivision standards for the PPJ. 2.13
- Secure locations for community facilities in the PPJ. 2.15
- Develop pedestrian pathways to link the downtown, the ruins and the river. 2.18
- Create corridors of undeveloped land linking Aztec, Farmington and Bloomfield 2.21
- Develop apartments and affordable housing in Aztec. 2.25
- Stop annexations by the City of Aztec. 2.37
- Discourage mobile home subdivisions like those on Crouch Mesa. 2.38



Summary

Survey respondents most highly value the area's rural lifestyle, open space, the Animas River corridor, and the ability to know one's neighbor. They are most concerned about increasing traffic congestion and the loss of farmland and open space. In twenty years, they would like Aztec to be a place that has retained much of its farmland and open space and preserved its rural atmosphere. Finally, they would like to see farmland and open space preserved and infill development encouraged within the City of Aztec (including apartments and pedestrian connections to strengthen the downtown/main street area). On the other hand, they also showed support for changes in the Aztec's current land use policies in the PPJ, including developing rural subdivision standards and ending annexations.

SECOND PUBLIC MEETING

The second public meeting was held on Monday, September 9, 2002. This time, in addition to press releases and flyers, the meeting was publicized in the newsletters of the three water user associations that provide service to the PPJ. Together these groups have over 2,300 households as members.

The first part of this meeting consisted of a presentation of existing conditions in the PPJ, as well conditions affecting future growth, including:

- Population growth
- Recent subdivisions
- Water and other infrastructure
- Public land ownership
- A map of "community values" (synthesizing the results of the community mapping exercise from the previous public meeting)
- Land that is desirable for development
- Land that is environmentally suitable for development

In the discussion during and after the presentation, several meeting participants voiced strong objections to the city of Aztec exercising any kind of control over land use in the PPJ. The following comments are representative of the opinions expressed:

- "We can't vote for Aztec commissioners, so why should they be able to tell us what to do?"
- "Aztec has annexed areas that it still isn't serving with water and sewer."
- "We chose to live outside of Aztec."
- "Aztec just wants us for the money."

Next, three growth alternatives for the PPJ were presented:

- A trend, or no change, alternative
- A managed rural growth alternative, in which lower-density development in the PPJ would be permitted, and community facilities to serve it would be planned for
- A compact growth alternative, in which growth would be encouraged within the city and close to existing infrastructure and discouraged in the rest of the PPJ



These alternatives were based on input from the first meeting and a preliminary analysis of existing conditions and current growth patterns. The alternatives are further described in greater detail below.

Participants then divided into breakout groups and discussed the three alternatives.

Group One

The members of this group did not support any of the three growth alternatives. Under the Trend Alternative, they objected to Aztec's current annexation policy and its efforts to enforce its subdivision ordinance in the PPJ. Under the Managed Rural Growth Alternative, they objected to the notion of Aztec developing even more rural subdivision standards in the PPJ, as well as any public effort to preserve farmland along the river. Under the Compact Growth Alternative, they objected to virtually all of the suggested policies: the current Aztec subdivision ordinance, aggressive annexation, restrictions on water sales to water user associations, extraterritorial zoning, and public efforts to preserve farmland along the river.

Group Two

This group preferred the Compact Growth Alternative to the other two options. They were unanimous in supporting the idea of growth near existing sewer lines and within recently annexed areas, and in supporting the protection of sensitive lands. However, most of the group also opposed many of the suggested policies to carry out this alternative: aggressive annexation, enforcement of Aztec's subdivision ordinance in the PPJ, and extraterritorial zoning. One policy they did support unanimously was protection of farmland along the river.

This group objected to the Trend and Managed Rural Growth Alternatives for similar reasons. They saw each of these as permitting or encouraging growth beyond the reach of existing infrastructure. They felt that it was imperative that new development within the city be adequately served by infrastructure before growth happens farther out.

Group Three

This group as a whole did not prefer either alternative. The Compact Growth Alternative resonated with them visually, and some supported the Managed Rural Growth Alternative, because it would enable them to maintain their current rural lifestyle. A majority of the group was opposed to any of the alternatives, on the grounds that they thought the City of Aztec should not in any way be regulating the PPJ. This group consisted of individuals who had specific grievances with the way the city had handled enforcement of its subdivision ordinance. A number of this group were also concerned about the fact that the City was not "taking care" of the existing area within the city limits (many residents were not hooked up to sewer and water as yet) and that they would have no representation in the planning process ("regulation without representation"). Although everyone desired that the PPJ remain rural and that farming and ranching land be preserved, land use controls such as zoning and subdivision regulations were viewed as an anathema. Clearly two very different understandings of the meaning of rural were at play; one involving the idea of limited regulations and the freedom to do as one wishes with one's property, and



another involving a particular kind of landscape, with irrigated farmland, rangeland, and large spaces between dwellings.

Finally, the meeting participants individually evaluated the three growth alternatives. They placed colored dot stickers on display boards of each alternative to indicate their approval or disapproval of the respective characteristics and policies.

Overall, the growth alternatives were evaluated as follows:

- Compact Growth Alternative: 5 approve, 2 disapprove
- Trend Alternative: 2 approve, 6 disapprove
- Managed Rural Growth Alternative: 1 approve, 9 disapprove

The following growth characteristics received the most support:

- Growth occurring near existing sewer lines and roads within the city: 8 approve
- Growth occurring in recently annexed land: 8 approve
- Protection of sensitive lands in the PPJ: 7 approve
- Sites for future community facilities and open space in PPJ identified: 4 approve
- Sites for future commercial development in PPJ identified: 4 approve, 1 disapprove

The following growth alternatives received the least support:

- Significant growth throughout the PPJ: 10 disapprove
- Conversion of farmland to residential uses: 4 approve, 10 disapprove
- Significant growth in PPJ, especially along the river: 1 approve, 6 disapprove
- Decrease in amount of open space around Aztec: 4 disapprove

The following land use policies received the most support:

- Protect farmland along the river: 15 approve
- Develop additional affordable/multi-family housing in Aztec: 13 approve
- Continue to provide water to water user associations: 9 approve
- Address needs in PPJ for community facilities, open space, and commercial development: 4 approve

The following land use policies received the least support:

- Continue to annex aggressively: 29 disapprove
- Extraterritorial zoning: 10 disapprove
- Land swaps with BLM to protect farmland: 9 disapprove
- Zoning to protect farmland: 9 disapprove
- Enforce Aztec's subdivision ordinance in the PPJ: 2 approve, 8 disapprove

In summary, meeting participants felt strongly that growth and development should occur closer in to the city of Aztec and opportunities for rural living preserved. They would like to see farmland and open space somehow kept from being developed. On the other hand, they strongly opposed the stricter land use policies and regulations that would be necessary to accomplish the objectives.



APPENDIX D. EXISTING CONDITIONS

ENVIRONMENTAL CONDITIONS

The PPJ is defined by the Animas River valley and surrounding mesas. The La Plata Mountains to the North, the Knickerbocker Peaks to the East, the San Juan River valley to the South, Crouch Mesa and Farmington urban area to the West serve as landmarks for people living in Aztec and the PPJ. Much of the valley was originally part of the flood plain of the Animas River. The soils through this area are alluvial deposits and once drained are very productive. As is typical throughout much of New Mexico, these soils plus the proximity to water in the Animas River for irrigation provided the original basis for settlement in the area. The location of Aztec ruins and the city of Aztec with its historically extensive ditch and cistern system confirm this pattern. The climate of Aztec and PPJ is arid with only 8 to 10 inches of rain.

The ecosystem in the Aztec area reflects the arid climate, with significant expanses of dry foothill-piedmont grassland on the mesas and greater amounts of woody vegetation in the valleys and mountains reflecting access to increased amounts of moisture. Figure A2 is a Land Use Land Cover Map of the Aztec PPJ. Although, it does not appear so today, many of these areas were probably once healthy grasslands. There are reports of grass as high as a horse's belly on Crouch Mesa just after the Second World War. Since that time, much of this range area has been impacted by fire management, grazing and development practices. Now, these areas in the landscape support significant shrub communities of sage, cholla and juniper. However, it is this range area with its sparse population, plus the larger irrigated tracts of farmland in the Animas valley that the community associates with the rural quality environment, which is fundamental to their sense of place (see Community Process above).

Wildlife diversity also tracks areas of greater moisture in the landscape. Riparian areas and mountain areas support the greatest number of species in the Southwest. North facing bluffs also support larger numbers of species than adjacent irrigated farmland or upland grassland areas. Riparian areas are potential habitat for one endangered species, the Southwestern Willow Fly Catcher. The area is also within the range of the American Bald Eagle, another endangered species. Practices and regulations, which limit development in the riparian zone, on the flood plain and on the bluffs, would have a positive effect on critical wildlife habitat in the region.



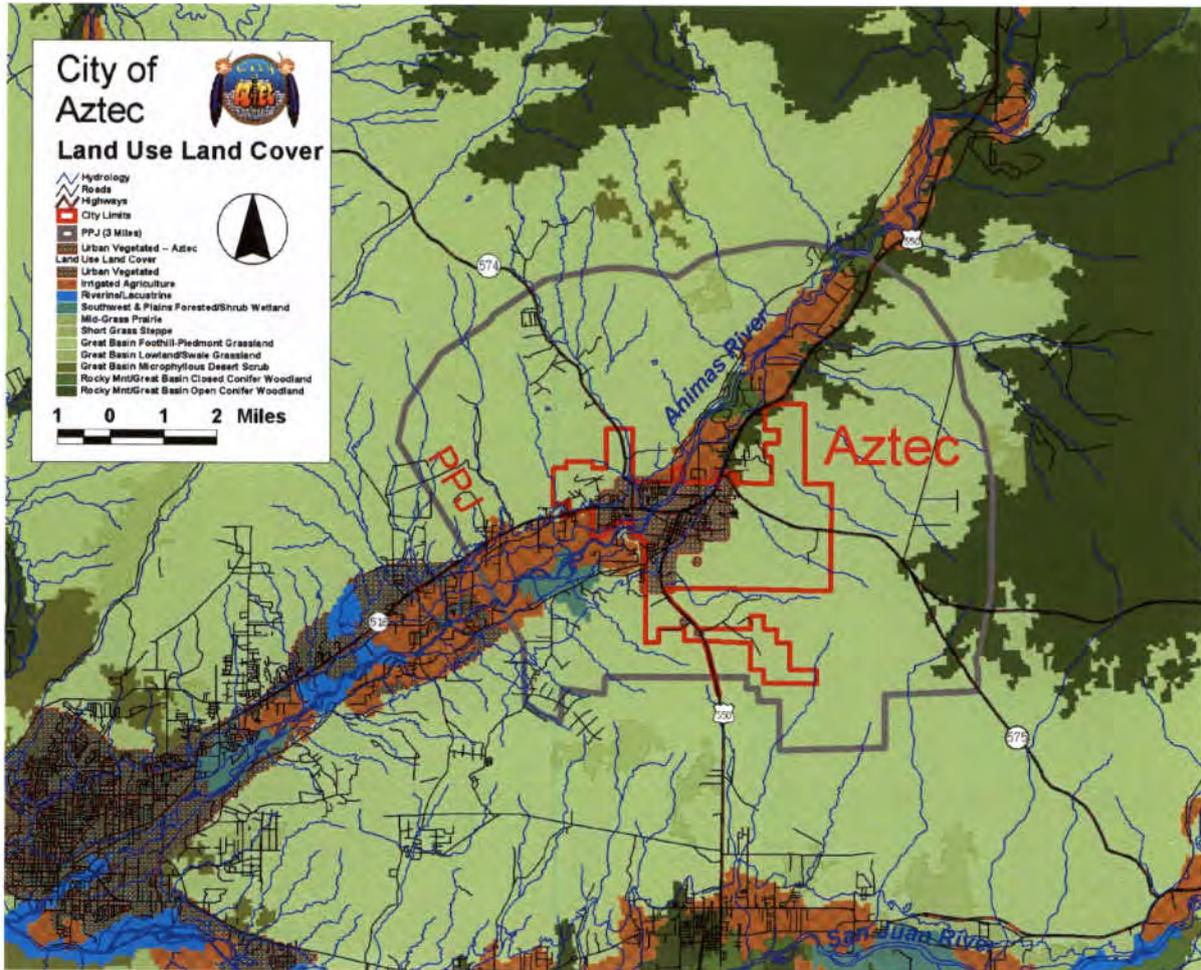


Figure A2: Land Use Land Cover Map



WATER RESOURCES & INFRASTRUCTURE

Hydrologic System

The Animas River is the key to the hydrology and water systems of the area. Aztec and the PPJ are falls within the lower quarter of the Animas River watershed. The watershed is located within both the San Juan River sub-basin of the Colorado River Basin and New Mexico's San Juan Hydrologic Unit. The Animas is permanently running stream that has its headwaters in the alpine elevation mountains above Durango, Colorado. 15 tributary arroyos feed into Animas within the PPJ, including the Barton, Kochis, Estes, Cook, and 10 unnamed arroyos. The largest appears to be the Estes Arroyo on the east side of the River. The total area drained by PPJ portion of the system is approximately 67,000 acres, an area slightly smaller than the total area of the PPJ and the City of Aztec. The Animas River is considered largely a warm water fishery in the New Mexico portion of its reach.

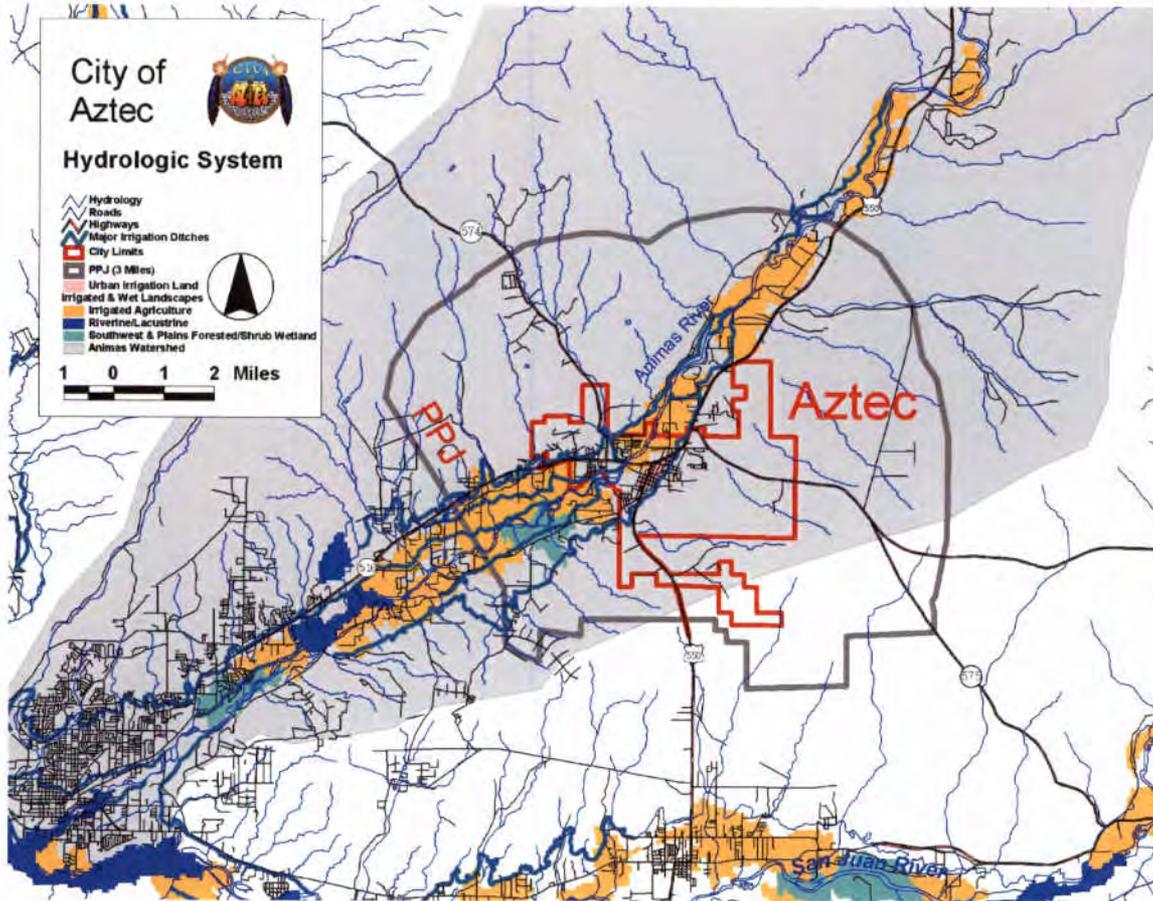
There are three river gauges within the New Mexico portion of the Animas, one of which is found just above the PPJ at Cedar Hill and another a fair distance below the PPJ just above Farmington. Flows at the Cedar Hill gauge have historically ranged from an average low of 15,200 acre-feet in the month of January to an average high of 179,600 acre-feet in the month of June. Other water resources in the area consist of approximately 10,000 acre-feet of ground water in the middle San Juan Basin aquifers.

There are six diversions of water within the PPJ portion of the Animas River for irrigation: the Lower Animas Ditch (including a piece formerly part of the Inca Ditch), the Farmer's Ditch, the Elledge Mill Ditch, the Kello Blancett Ditch, and the Halford Independent Ditch. Approximately 4500 acres of land are irrigated in the Animas River, almost all of which lies within the PPJ northeast and southwest of the City of Aztec. There are three diversions for potable water in the lower Animas River: 1) Aztec Water Treatment Plant, which draws water off of the Animas River, the Aztec Ditch and the Lower Animas Ditch; 2) the Farmington Water Treatment Plant which draws water from the Animas River, Farmington Lake and the Willett Ditch; and 3) the Flora Vista Water Treatment Plant, which draws water off of the Animas River. In addition, there is water drawn from seven production wells in the PPJ, five of which are located along the Animas River Corridor. There are reports of several other smaller residential wells northwest and southeast of the City. Figure A3: Hydrologic System is a map of the hydrologic system.

According to City of Aztec Water officials, water supply is currently not an issue in the area at least in the near term, provided reasonable conservation measures are maintained and the City continues to purchase senior water rights. In the absence of a major drought, water resources and rights to those resources are sufficient to comfortably accommodate projected growth. According to the Water Supply Assessment for the San Juan Hydrologic Unit Regional Water Plan prepared by the San Juan Water Commission, the principal threats to water quality in the reach of the Animas that includes the PPJ are phosphorous loading upstream of the Cedar Hill gauge, high fecal coliform counts and excessively high temperatures at the Farmington gauge. Long term water quality will greatly benefit from vegetated buffers along the river and arroyos that decrease water temperatures, as well as limit development next to hydrologic features, thereby reducing the impact of storm water runoff and onsite septic systems.



Figure A3: Hydrologic System



Water System

There is an extensive existing water infrastructure in the PPJ. Water is provided largely through rural water user associations and other private water providers. In some areas, the Cities of Aztec and Farmington are the providers of the water, either directly or indirectly through purchase by the local water association. Figure A4 is a map of the approximate districts and systems of the various water providers. The public sewer system is also shown in this map and public production wells are also shown on the map. This map was generated based on information from San Juan County and representatives of various water user associations.

The rural water user associations are eligible to receive grants and loans to develop water systems from the Rural Utilities Service, an agency of the U.S. Department of Agriculture. Grants may be made for up to 75% of eligible project costs.

City of Aztec Water Treatment System

The City of Aztec obtains all of its water from the Animas River. The City's water system currently has a capacity of about 5 million gallons per day. Proposed improvements to the existing treatment plant will expand system capacity to about 6.5 million gallons per day. In 2001, the system produced about 400 million gallons of water, or an average of 1.1 million gallons per day. Peak demand in the summer, however, amounts to about 3 million gallons per day.

The City of Aztec has about 3,500 acre-feet of water rights at present. For perspective, total water use for 2001 amounted to about 1,200 acre-feet. The City continues to buy water rights on a regular basis.

Recently, Aztec has entered into an agreement with the City of Bloomfield that enables it to buy up to 1 million gallons of water per day from Bloomfield in an emergency. Aztec has built a pipeline connecting the Aztec water system to the Bloomfield water system, which draws its water from the San Juan River.

The City of Aztec requires purchasers of new homes in the city to also purchase water rights. The City typically charges the homeowner about \$700 to cover the cost of one-half acre-feet of annual water rights, plus the original meter charge. These fees go into a fund that the City uses to purchase the highest-quality water rights that are available.

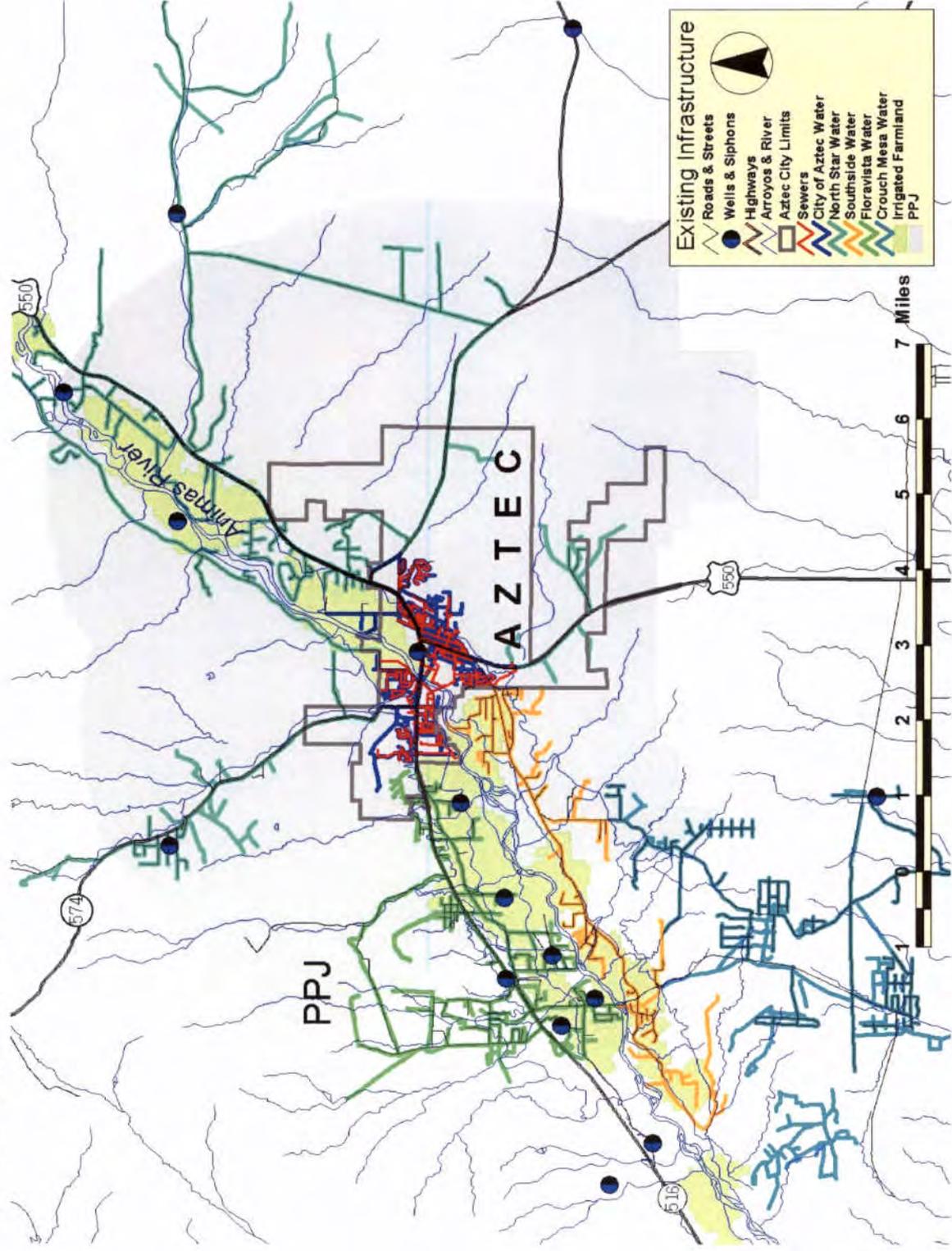
Flora Vista Water Users Association

The Flora Vista Water Users Association was incorporated in 1967. Its service area extends from the Animas River north to County Road 3566, in the portion of the PPJ west of the City of Aztec.

Flora Vista obtains its water from a well field located along the Animas River. It is also connected to both the Aztec and Farmington municipal water systems, from which it can obtain supplemental water. It is considering building a seasonal surface treatment plant to address the demand spikes that occur during the summer.



Figure A4: Existing Infrastructure



Flora Vista currently provides service to about 1,100 households. It has been growing recently at a rate of 40-60 households per year. It has sufficient capacity in its system to serve at least twice the current number of households.

North Star Water Users Association

The North Star Water Users Association was incorporated in 1981 and began providing water in 1982. Its service area encompasses much of the northern and eastern portions of the PPJ.

North Star obtains its water by means of withdrawals from the Animas River. It is currently building a new treatment plant with a capacity of one million gallons per day. It is also constructing a storage pond for raw water with a capacity of 50 acre-feet, which will provide at least three month's worth of storage. With these new facilities, North Star estimates that it could serve a total of 4-5,000 members.

According to the association director, North Star's membership has been growing in recent years at a rate of about 15% per year. The number of members has increased from 348 to 765 since 1995. A similar rate of growth is expected for the foreseeable future.

Southside Water Users Association

Southside Water Users Association was incorporated in 1966. Its service area extends from the Animas River south to the top of the bluffs above the valley in the PPJ west of Aztec. Southside obtains its water entirely from the Aztec municipal water system. Southside currently provides service to 408 households. It has been growing recently at a rate of about 14 households per year.

Wastewater Treatment

Most wastewater treatment in the PPJ is accomplished by means of individual on-site septic systems. As a result, the minimum allowable lot size is $\frac{3}{4}$ acre, as mandated by New Mexico Environment Department requirements for septic systems.

In most cases, septic systems appear to be an adequate approach to wastewater treatment, given the soil types and depths to groundwater that prevail in much of the PPJ. In areas with high water tables in Animas River riparian zone, however, such as Flora Vista and Kirtland, there have reportedly been some problems with groundwater contamination. On Crouch Mesa, depth to bedrock is reportedly minimal, requiring excavation into the soft underlying sandstone to provide adequate area and depth for percolation for on-site systems. If highly concentrated development continues throughout this area, then this could pose a potential problem for ground and surface water contamination.

There is an existing public sewer in Aztec, which treats wastewater from the majority of residents within the city boundaries. Aztec's wastewater treatment system currently has a capacity of about 750,000 gallons per day. Wastewater flows into the system amount to about 650,000 gallons per day on average, although the daily volume in the summer can approach the total system capacity. Over the next two years, the City plans to make



improvements that will expand the capacity of the system to about 1 million gallons per day.

Many city residents, however, do not have a public sewer and have petitioned the city to include them in the public sewer system. The complaint most often voiced with respect to annexation is the failure of the City of Aztec to provide city water and sewer services to its new residents. Currently there are no plans for extension of the sewer system. Given the nature of recent development and the environmental conditions in the Animas River valley, an extension of the sewage system to accommodate these residents and future development would go a long way to garner additional public support for the city's efforts to manage growth, by appeasing land owners and ensuring the long term ecological health of the riparian corridor. However, any extension of the sewer system would need to be incorporated into the overall growth management strategy for the greater Aztec area.

Drainage and Stormwater Management

Other than in the city of Aztec proper, storm water is typically managed onsite. The city and smaller subdivisions in the river valley typically pipe storm water directly into the river. Depending on where these outfalls are located (in the bosque or directly on the river), this will increasingly affect downstream water quality as development in the valley increases. Bluff subdivisions and upland development will impact storm water quality and quantity if they do not retain it onsite, but rather release onto the bluff or into an arroyo. In both cases, over time, erosion processes will be greatly increased.

Roads & Traffic

According to the Public Works Department, the County has built only one new road since 1990. Virtually all of the new roads in the PPJ are residential subdivision roads built by developers.

In addition, hundreds of miles of dirt roads crisscross San Juan County. In most cases, these roads, which were put in to facilitate oil and gas exploration, lack easements or public rights-of-way.

Currently there are plans to construct a four-lane road from Flora Vista to US 64. The proposed alignment extends for eight miles across Crouch Mesa and is located outside of Aztec's PPJ. The final review and approval of this road project was a controversial process, with local residents, community and environmental watch-dog groups voicing concern and opposition. Residential lands in the vicinity of Flora Vista will have to be condemned in order for this roadway to be completed and enlarged bridge will impact Animas River riparian zone.

The only proposed long-range road project is the construction of Highline Parkway, which would extend east from County Road 3500 to US 550. The start of this project is at least five years off.

The San Juan Policy Road Policy specifies that roads must consist of asphalt concrete on a properly prepared base course. Driving surfaces must be 26 feet wide and crowned a minimum of 2%. Shoulders should extend 5 feet on each side and must be constructed of



asphalt, concrete, or properly compacted base course. The right-of-way must be at least 60 feet in width (30 feet from the centerline).

Earlier this year, San Juan County revised its road policy to require asphalt paving on subdivision roads. Between 1998 and this year, the San Juan County Road Policy permitted roads with a chip seal surface instead of asphalt paving. Before 1998, the Road Policy had no paving requirement for subdivision roads. As a result, many subdivisions in the PPJ and elsewhere in the County lack paved roads.

San Juan County's maintenance classification system divides county roads into three categories:

County Maintained Roads

These roads have been accepted for full county maintenance. County maintenance activities include routine maintenance, dust control, replacement of base course, installation and repair of drainage structures, snow removal, pothole repair, bridge construction and repair, signage, and resurfacing.

County Lesser Maintained Roads

These are roads with a gravel surface that have been accepted for limited County maintenance. The county will grade the roads twice annually if all of the adjacent property owners agree to grant the required easement.

Non-County Maintained Roads

These roads have not been accepted for County maintenance. They are assigned a number, however, and marked with a sign.

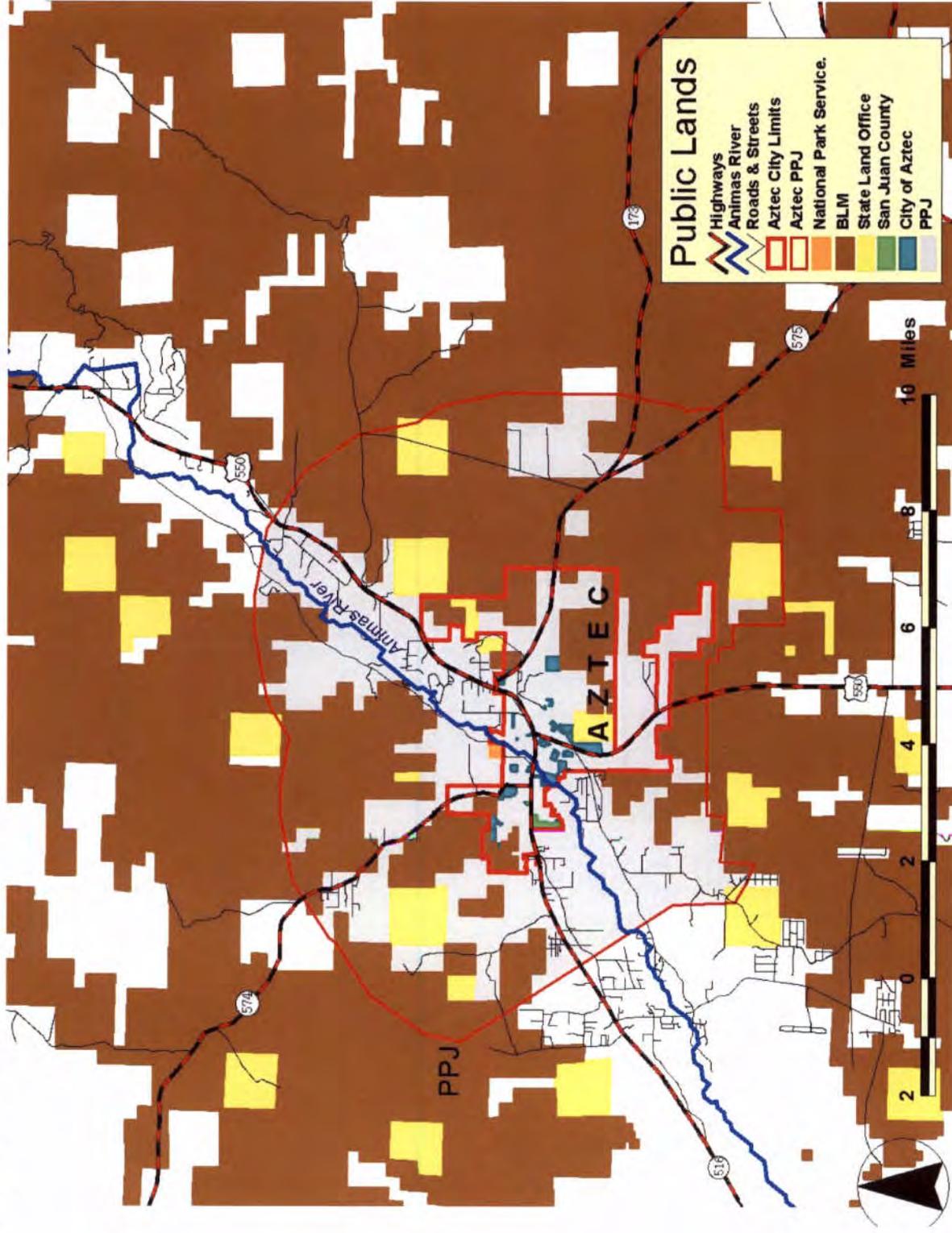
Land Ownership

Within the PPJ, the majority of the land is publicly owned. Public agencies with holdings in the PPJ include the Bureau of Land Management (BLM), the New Mexico State Land Office (SLO), San Juan County and the National Park Service (NPS). Figure A5 is a map of public land ownership in Aztec and the PPJ. The overwhelming majority of this public land is managed by the BLM, followed by the SLO. SJC owns only a small amount of land and the NPS land consists of the Aztec National Monument.

The BLM and the SLO lands may be leased for long terms to local municipalities and in some cases to developers. Both agencies also make land swaps, in order to aggregate their holdings and let go of small fragments of land, which have a relatively higher per unit management cost. The predominant uses of these lands in the Aztec area are for oil and gas industry drilling and ranching. Another primary use, which has only recently been embraced by these agencies, is as public open space. Many local residents use the lands for various recreational purposes ranging from hiking, horse riding and camping to ATV riding, hunting and fishing. BLM lands in the area provide critical habitat to at least three endangered species. One proposed use of the BLM land is for community centers or parks/open space for the PPJ.



Figure A5. Public Lands



Land Use and Natural Resources

The dominant land use within the PPJ is still open range, which is managed primarily for grazing and oil and gas production. This area also functions as a defacto open space for different recreational and sporting activities, from hiking, hunting and fishing to ATV and horse riding. As one local official put it, "I have the biggest back yard in the country." Farming in the valley and residential uses throughout the PPJ especially along existing roads represent the next most dominant uses. Figure A6 is a land use map based on the City of Aztec's land use map and digitization from the aerial photographs. Of the land uses, farming and ranching are key to the sense of place for much of the community and the oil and gas industry is the economic engine in the region.

Population, Demographics & School District Data

Between 1990 and 2000, San Juan County's population grew at the fairly rapid rate of 24.2%, from 91,605 people to 113,801 people. In the same period, the city of Aztec grew at a more moderate rate of 10.1%, from 5,792 people to 6,378 people. Within the PPJ, however, population growth far outpaced both the city and the county. Total population went from 2,982 people to 4,913 people -- an increase of 64.8%. Of course, the PPJ had a small population base to begin with, so a higher growth rate is not surprising; but even considering the absolute growth in population, the net population increase in the PPJ was three times greater than in the city of Aztec (1,931 vs. 586). Figure A7 is a representation of growth in the Aztec area based on census block group data.

Figure A8 is a map of the change in the number of school age children from 1990-2000, again based on census block group data. Notice once again that the most significant increases are in the PPJ, while in Aztec proper there appears to have been a decline. The buses in the map represent additional bus routes added by the Aztec School district. Again, all of these are in the PPJ or areas beyond. Two bus routes were added to Crouch Mesa alone.

A review of the school district data for the Aztec schools shows that there has been no net increase in the number of students. A review of the different measures of relative poverty of the student body (USDA Free and Reduced Lunch program and Title I Special Education Services) is inconclusive with respect to an overall change in the amount of services by the district, which would be suggestive of a demographic shift in the make-up of the student body. Only the Title I Services suggest an increase in the need for services. Thanks to the oil and gas revenues, there has been a net decrease in school taxes for the district given adjustments for inflation. The district has been able to retire debt earlier than expected decreasing the probability of future tax increases, an important concern of local community members.



Figure A6. Existing Important Land Uses

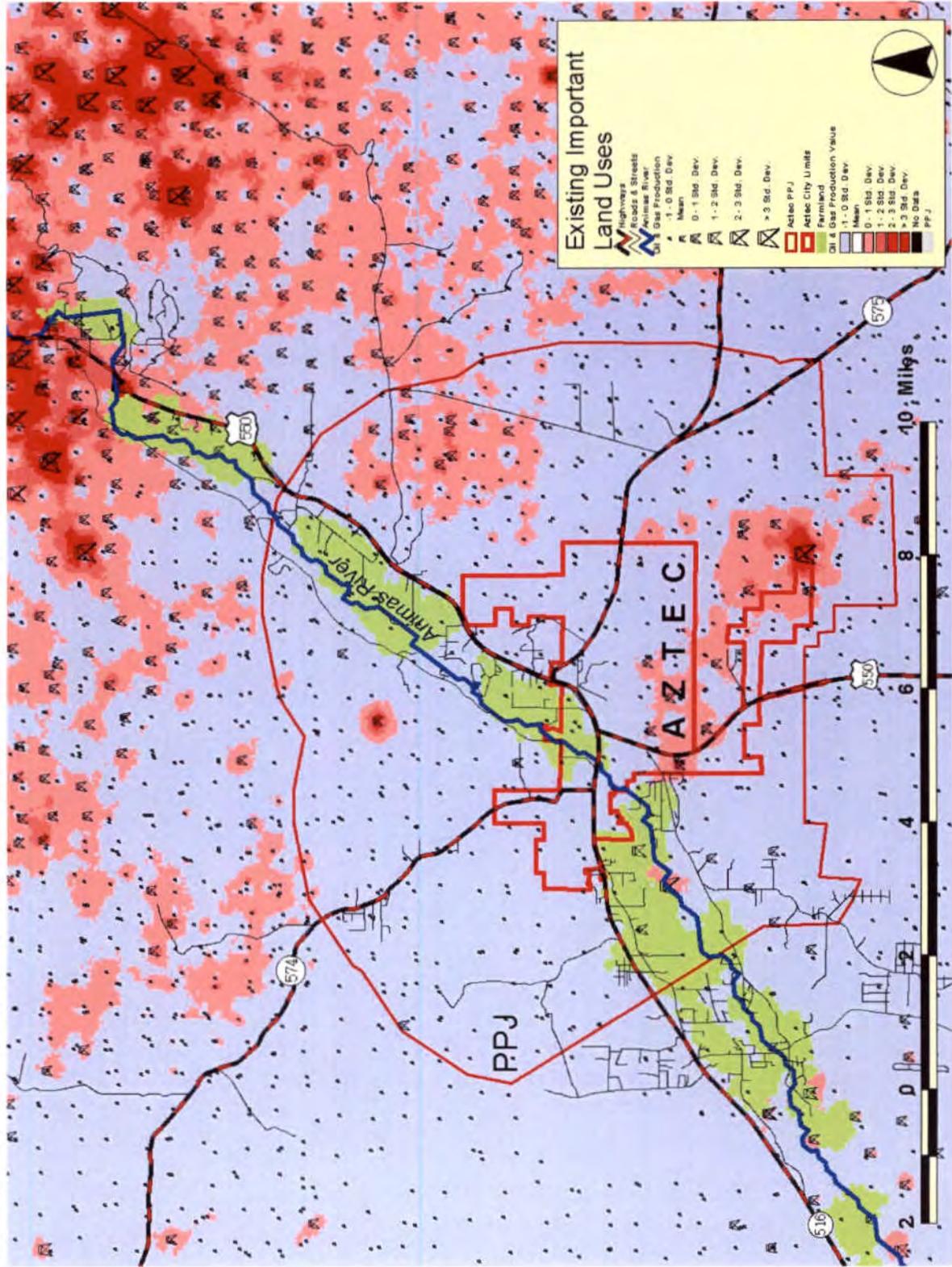


Figure A7. Population Growth

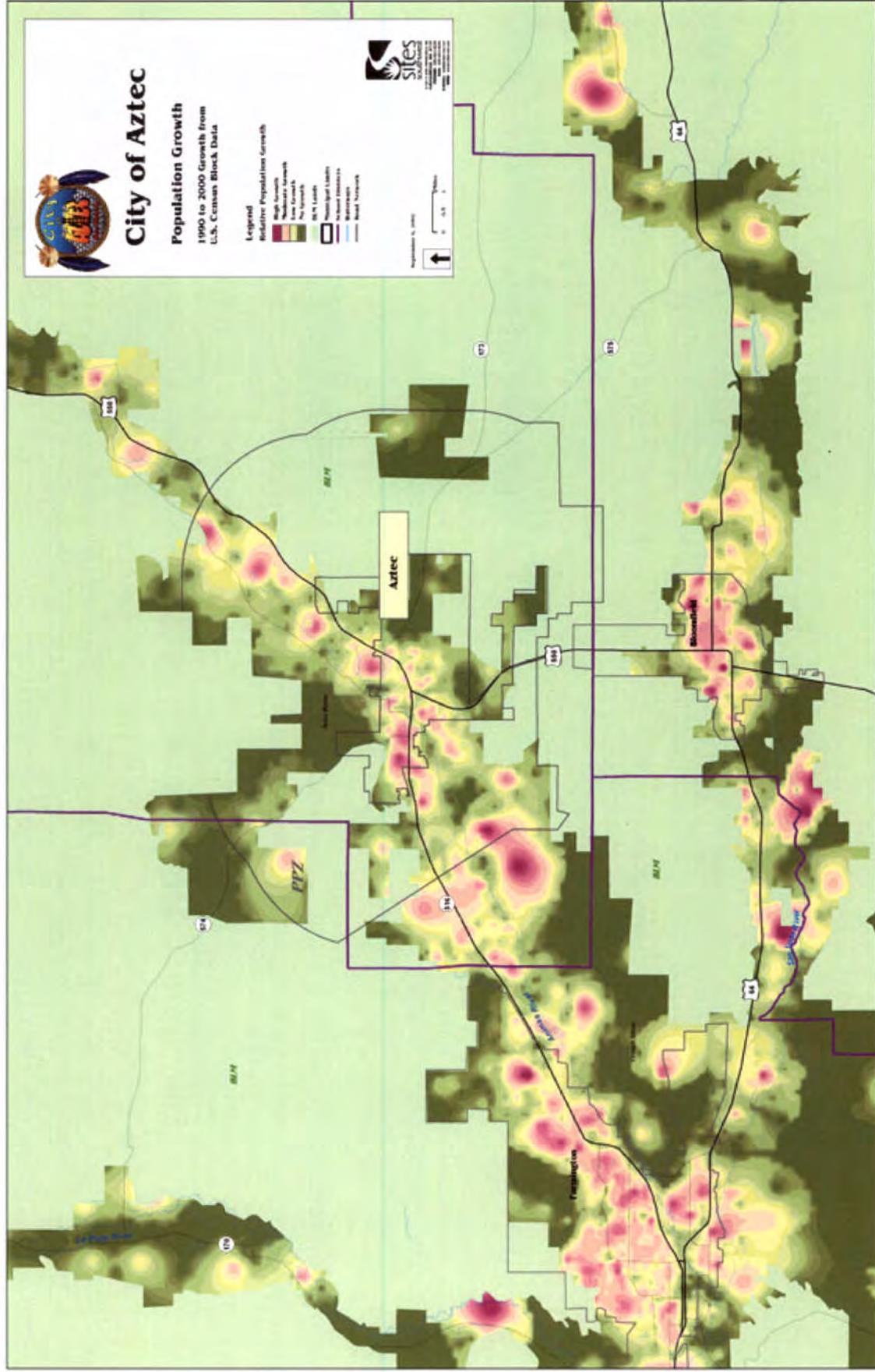
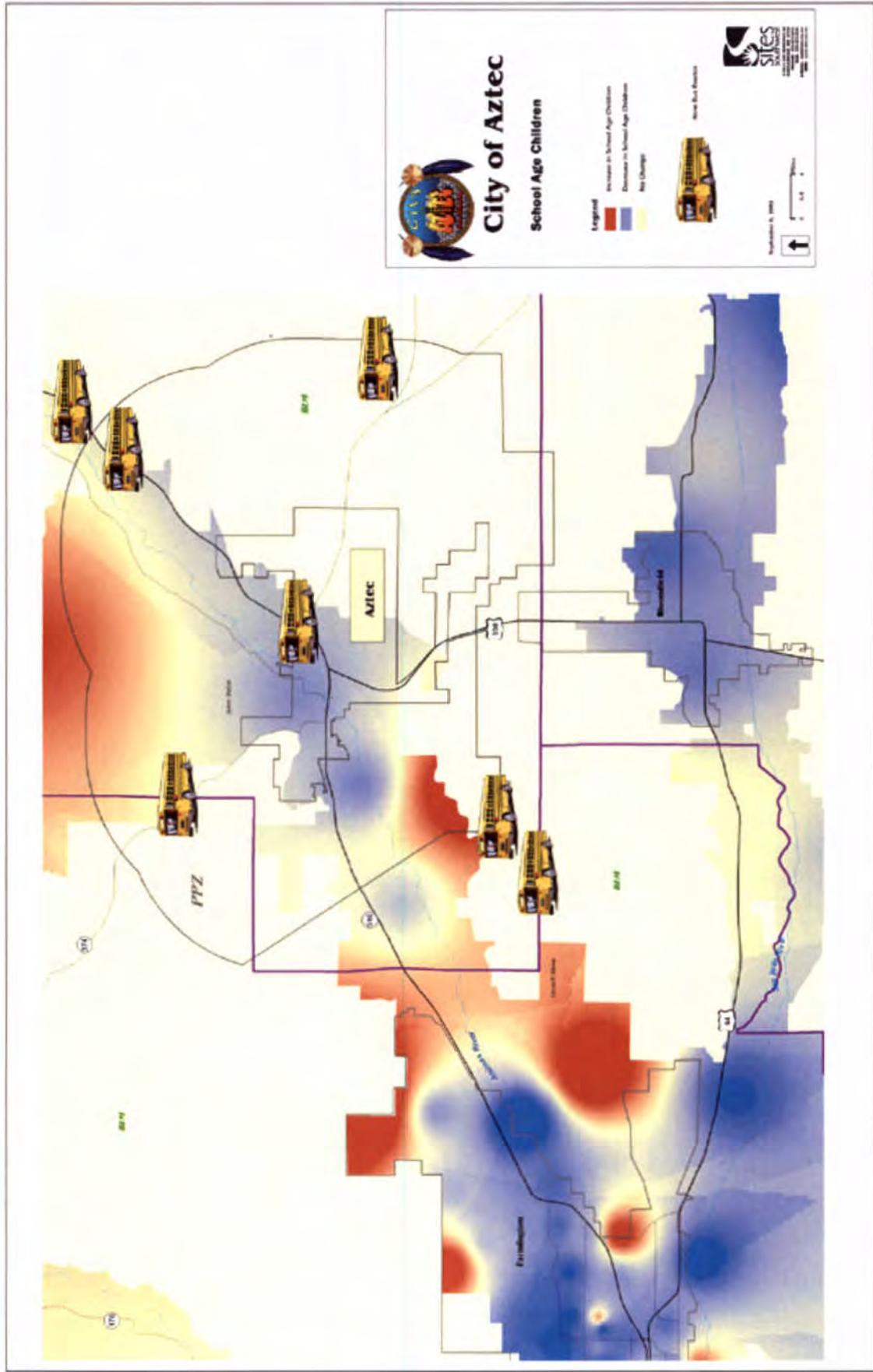


Figure A8. School Age Children



Historic & Current Residential Development Patterns

As shown by the population growth figures noted above, the PPJ has seen a substantial amount of development since 1990. Much of this growth has occurred in the Animas River valley on what was once farmland. Other growth areas are located along the highways that radiate out from the center of Aztec.

A map of the larger subdivisions was constructed with input from Riley Rowland (director of the Aztec School Busing System) and participants at public meetings (Figure A9). This map also includes new County roads built since 1990, which is another spatial indication of subdivision activity.

General Housing Trends

Table A1 shows data from the US Census Bureau regarding housing by type for the PPJ and Aztec. Mobile homes make up a significant and increasing majority of the housing units in the PPJ, growing from 51.7% to 64.0% of the total between 1990 and 2000. A total of 439 new mobile homes were built in the PPJ in that period according to this data. The rest of the housing units are single-family site-built homes; there are no multi-family housing units. In contrast, mobile homes made up just 24.6% of the housing units in Aztec in 2000, a slight proportional increase from 1990. Still, mobile homes represent 36.9% of all new homes built in Aztec between 1990 and 2000. Over half of the housing in the city consists of single-family site-built homes. Further, multi-family housing units make up approximately 20.0% of the total throughout this period.

Table A1 Housing by Type, for the PPJ and Aztec, 1990 and 2000.

Housing Type	PPJ				Aztec			
	1990		2000		1990		2000	
Single Family	623	48.3%	622	36.0%	1129	52.3%	1370	53.8%
Multi Family	0	0.0%	0	0.0%	465	21.5%	492	19.3%
Mobile home	668	51.7%	1107	64.0%	483	22.4%	626	24.6%
Other	0	0.0%	0	0.0%	81	3.8%	58	2.3%
Total Housing Units	1291		1730		2158		2546	

Source: US Census Bureau, Sites Southwest

According to a local realtor, as much as 80% of the housing on Crouch Mesa consists of mobile homes. Prices for these units range between \$20,000 and \$100,000, with a median price of about \$75,000. Only three site-built homes have been built in the Crouch Mesa area over the past three years. Prices for these homes ranged between \$60,000 and \$195,000.

For comparison, the price range for houses that sold in Aztec in the past three years was \$20,000-\$280,000. The median and average sales prices for these homes were \$94,400 and \$106,500, respectively. Nicer homes generally fall in the \$130,000-\$200,000 price range.

In the opinion of this realtor, there is a continuing unmet demand for reasonably-priced housing in the Aztec area, meaning housing that oil and gas industry workers could



afford on wages of \$8-\$9/hour. He added that he receives at least two calls a week inquiring about rental housing.

Crouch Mesa

One area of particular concern is Crouch Mesa. Located in the middle of the triangle formed by the cities of Aztec, Bloomfield, and Farmington, and lying partly within each city's PPJ, Crouch Mesa has seen a significant amount of mobile home subdivision development. One county official estimates that as many as 2,500 lots have been developed on Crouch Mesa in the past eight years. In the typical case, mobile homes on ¾-acre lots are sold through real estate contracts for as little as \$300 down and \$300 a month. This makes them as affordable as the cheapest rental housing in the area.

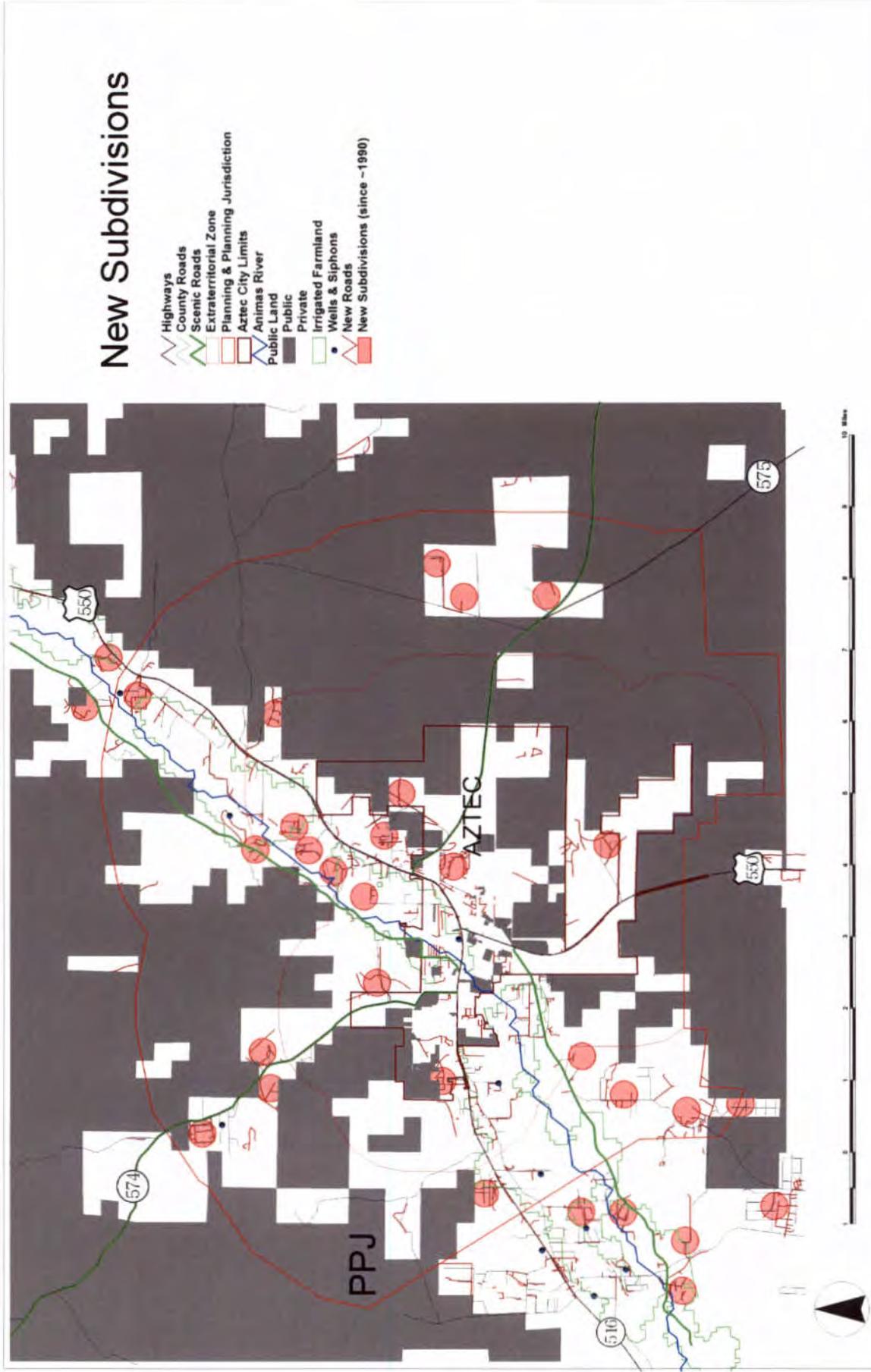
Water service is provided through private water systems; wastewater treatment is handled through individual septic systems. In keeping with San Juan County subdivision standards, many subdivision streets are unpaved, or paved with a chip-seal surface, and do not have curbs, gutters, or sidewalks. Drainage is handled by means of bar ditches and culverts.

These subdivisions reportedly have a higher than normal turnover rate; with little equity in their properties, homeowners can walk away from their real estate contracts with little economic penalty. Another criticism is that many homeowners lack the means to maintain their properties, so the subdivisions quickly take on a run-down appearance.

On the other hand, these developments are undoubtedly meeting a real demand for affordable housing in the area. Many of the residents of Crouch Mesa are employed in the oil and gas industry, holding down relatively low-paying jobs that often come and go with the boom-and-bust cycles of the energy industry. They have to live somewhere; and it is not altogether surprising that they might prefer the option of home ownership (however tenuous) on three-quarters of an acre on Crouch Mesa to an apartment in Aztec or one of the other municipalities.



Figure A9. New Subdivisions



Animas River Corridor

Although not as dramatic in appearance as the changes on Crouch Mesa, the impact of development on community and environmental values is potentially much greater in the Animas River Corridor. Older communities such as Flora Vista, Spenserville, and especially Cedar Crest just north of the PPJ have experienced significant growth. However, the fastest growing areas appear to be just northeast and southwest of the City. There is also significant development on the bluffs on the southeast side of the corridor and in the vicinity of the National Monument.

Development on the Animas River corridor reflects a greater diversity of housing types than on Crouch Mesa. There are mobile home subdivisions as well as stick built single family homes. The larger subdivisions appear to be happening up on the bluffs, while smaller subdivisions seem to be the pattern in the valley.

The Kokopelli and Anasazi subdivisions are viewed by a number of members of the community as model subdivisions. These developments are on the upper end of the greater Aztec housing market, catering to migrant retirees and commuter service professionals. They appear to be fairly well designed and planned, with large floor plan adobe style houses and high-end xeriscaped landscaping.

A key issue with all the river corridor developments is the impact on the rural quality of life described by a number of community members as the key to life in the PPJ. The river corridor has traditionally been the locus of the farming and ranching activities and sensibilities that are essential to the community's long term sense of identity. All of the oldest families are farmers and a large portion of the community remembers when the primary source of livelihood was farming and ranching. Further, the community views both of the main roads in the corridor as key scenic routes in the area.

The community also rightfully identifies the river corridor as the key to their water quality. Given the prevalence of septic systems and the increased loading of storm water run-off, the long term impact of this kind of development will be a reduction in water quality of the Animas River. The problems are not limited to development on the flood plain: the newer bluff subdivisions affect the overall visual quality of the corridor and impair fragile adjacent slopes with increased storm water flows. Finally, the majority of the housing being developed in the corridor is either on the upper or lower end of the housing market, and they tend to be acquired by "outsiders" who according to long-time community members do not necessarily value the rural quality of life, nor the small town community. As a result, each development within the river corridor and valley represents a loss of what the rural community of the PPJ values most about their shared landscape.

ECONOMY

Economy

Economic activity in the PPJ is dominated by the oil and gas industry. The longstanding tradition of farming and ranching continues primarily in the Animas River valley. Some commercial development is also located along NM 516 between Aztec and Farmington and NM 550 northeast of town.



Oil and Gas

There are approximately 18,000 active gas wells in the New Mexico portion of the San Juan Basin. In the vicinity of Aztec, the most productive wells are concentrated in the northeastern and southeastern portions of the PPJ (see Figure 7).

A recent study by New Mexico Institute of Mining and Technology projects that a total of 12,461 new wells will be developed in the San Juan Basin over the next 20 years, an increase of 69%. Of these, 9,970 will occur on federal land; the remaining 2,491 will occur on private land. About 56% of the wells are expected to involve new surface disturbance. The remaining 46% will be developed on existing disturbed sites. Each new well pad will average two acres in size and will involve another acre of disturbance for road and pipeline right-of-way. As a result, this new well development will disturb over 20,900 acres of land.

Farming

San Juan County had a total of 666 farms (including ranches) comprising about 84,000 acres of cropland in 1997, according to the US Census of Agriculture. Most of these farms are small operations; 85% had fewer than 180 acres, and 77% had annual sales of less than \$10,000. On the other hand, 50 farms have 500 or more acres, and 16 farms have annual sales of more than \$100,000. Hay, cattle and sheep are the principal farm products in the County.

Most active farms in the PPJ are concentrated in the Animas River Valley. There are approximately 4,500 acres of farmland along the river, representing 6.6% of the irrigated farmland in the County. According to some community members, the area had several dairies and orchards as recently as the mid-1980s, but virtually all of these operations have since closed down. The most common crop is alfalfa.

Commercial Development

Most commercial development in the Aztec area is located within the city of Aztec along NM 550 and NM 516. This consists mainly of convenience commercial establishments such as a Safeway supermarket, a hardware store, a feed and supply store, a discount retail store, various personal and financial service establishments, auto supply and repair businesses, banks, and restaurants. Tourist-oriented businesses include two motels, a bed-and-breakfast, art and antique galleries, trading posts and gift shops.

There are also a number of businesses involved in oil and gas exploration and related services.

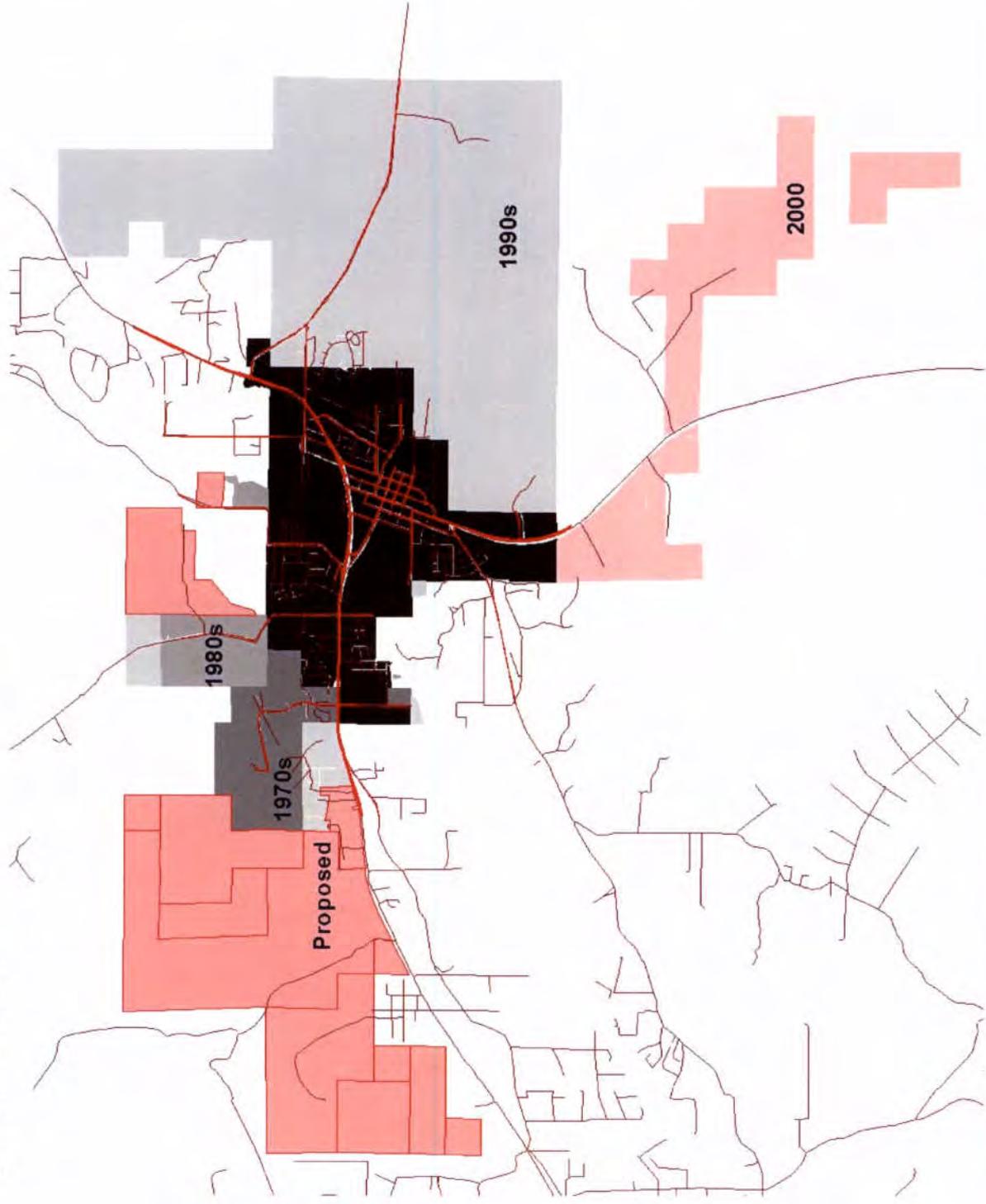
For comparison shopping (e.g., for clothing, house wares, appliances, and other higher-ticket items), most residents of Aztec and the PPJ go to Farmington, where there are stores like Wal-Mart, Target, Home Depot, Dillard's, and J.C. Penney.

Annexation and Growth Management

The City of Aztec has nearly doubled in size over the last two decades. Figure A10 is a map of various annexations since the 1970's.



Figure A10. Annexations



APPENDIX E. OPPORTUNITIES & CONSTRAINTS FOR FUTURE GROWTH

FUTURE GROWTH

By the year 2020, population in the city of Aztec is expected to grow another 8.8% to 6,940 people. The PPJ is expected to grow 37.7% to 6,766 people. However, the recent rate of growth in both the southwest generally and the Aztec area specifically, was not predicted some decades ago. Many of the national trends that have fed recent growth in the region show no sign of relenting. Consequently, this growth rate is likely to be a conservative estimate.

Like many areas in the Southwest, the Aztec area will continue to receive considerable retiree in-migration. Aztec's relatively mild winters and low-humidity summers, as well as its rural small town quality and the level of services and retail it supports, make it an ideal retirement destination. Approximately 20% of those showing up to the community meetings for the planning process were recent retirees or people with transportable careers that had made a move in preparation for retirement. Overlapping with this trend is the in-migration of families also with transportable careers seeking a change of venue from suburbia. The proximity to public open space, small town quality of life and a good school system are features these families find attractive.

The current trend for the development of bedroom communities in the greater Aztec area for Farmington will also likely continue. Farmington continues to grow as a regional employment and economic center for the four corners area. A number of participants at the community meetings commuted to work in Farmington. In contrast to Farmington, Aztec continues to maintain a rural small town atmosphere, which many people increasingly prefer. In addition, to being a bedroom community for Farmington, Aztec will also be a residential area for workers in the oil and gas industry.

The oil and gas industry is slated to double production in the area over the next 10 years, adding approximately another 20% more wells than currently exist. This will provide more jobs, many of which will be filled by people moving to the region. Other industries that could see growth include tourism and specialty farming/ranching, as well as services to meet the needs of the in-migrants, e.g. health, legal, financial, design, etc.

OPPORTUNITIES FOR FUTURE RESIDENTIAL DEVELOPMENT

Potential opportunities for development relate to areas are related to cost and desirability for residential development. Proximity of existing water, sewer and road infrastructure are more easily developable given the relative cost. Areas with views of the river and areas adjacent to public open spaces that are not heavily developed for oil and gas are desirable for amenity reasons. Proximity to main roads and distance to downtown Aztec, the locus of community services, are also important factors related to access and transportation. Figure A11 is a map of opportunities of development based on the above factors. These factors tend to favor areas proximate to main roads, closer into town,



because these roads are key for reasons of both infrastructure and access. Lighter areas are key development areas, whereas darker areas are less desirable for development.

CONSTRAINTS ON FUTURE RESIDENTIAL DEVELOPMENT

The potential constraints for development include the existing private land base, environmental sensitive areas, arable farmland and community values. As is noted above, approximately 55% of the land in the PPJ is publicly held, and therefore not developable except as a public resource, e.g. community center, community service (post office, fire, police, etc.) or park. Environmentally sensitive areas are areas that should not be developed because of the impact it would have on the hydrologic system or key wildlife habitat, and include the following: steep slopes, floodways and up to 100-year flood plains, habitat that is unique in the area or supports listed wildlife species, and riparian areas (rivers, wetlands, arroyos and acequias). Riparian areas and wells should have at least a 100 foot buffer between them and any other land use to ensure water quality and permit ground water recharge. Arable farmland is the land along the Animas river corridor where there are both very productive soils and access to irrigation water. Values expressed during the community process included preservation of the rural quality of life, including its open space and aesthetic qualities, the integrity of river corridor and its agricultural landscape, and the integrity and viability of downtown Aztec.

Figure A12 is a map of constraints to development. Blacked out areas are public lands. The darker areas represent those areas where there are larger amounts of development constraints. This map was constructed based on the values expressed by the community, which put a premium on the river corridor, open space and certain scenic routes, as well as the environmentally sensitive areas (arable agricultural areas, steep slopes, T & E species, key wildlife habitat). The latter had two values (sensitive or not sensitive) and the former had two values (highly valued or not highly valued). The process tends to weight the river area higher than other areas, because this corridor is the locus for farmland, important habitat, hydrologic function and community value.

SUMMARY OF FUTURE RESIDENTIAL DEVELOPMENT SUITABILITY

Figure A13 is a map of overall development suitability, based on a synthesis of Figures A11 and A12. In general, the upland areas are more suitable than the valley. This is largely due to the community, agricultural and environmental values associated with the Animas River Corridor. The areas least suitable for development include the slopes and valley south of the river southwest of Aztec and north of the river northeast of Aztec. The areas most suitable for development are upland areas in the neighborhood of existing road and water infrastructure.



Figure A11. Development Desirability

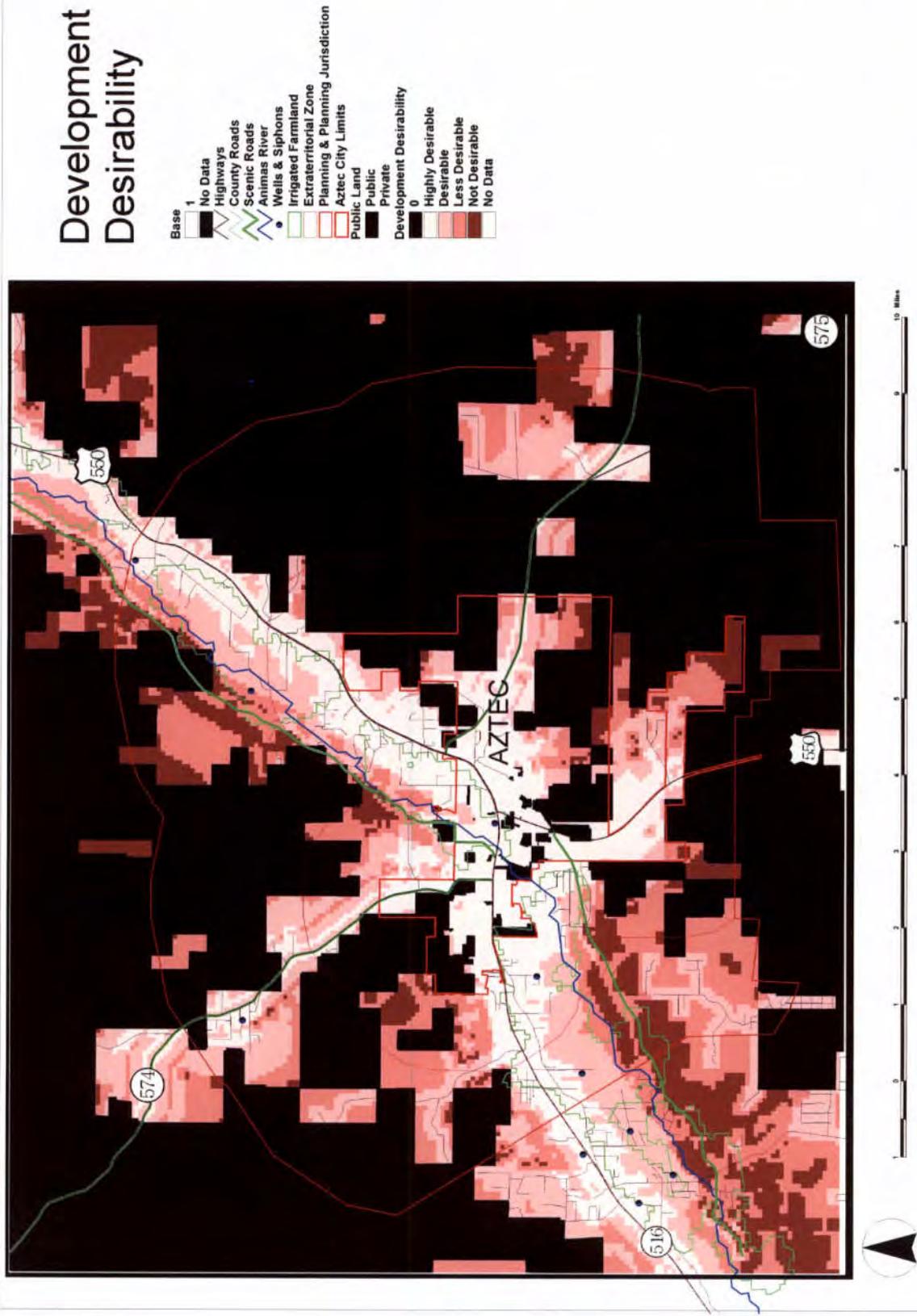


Figure A12. Development Constraints

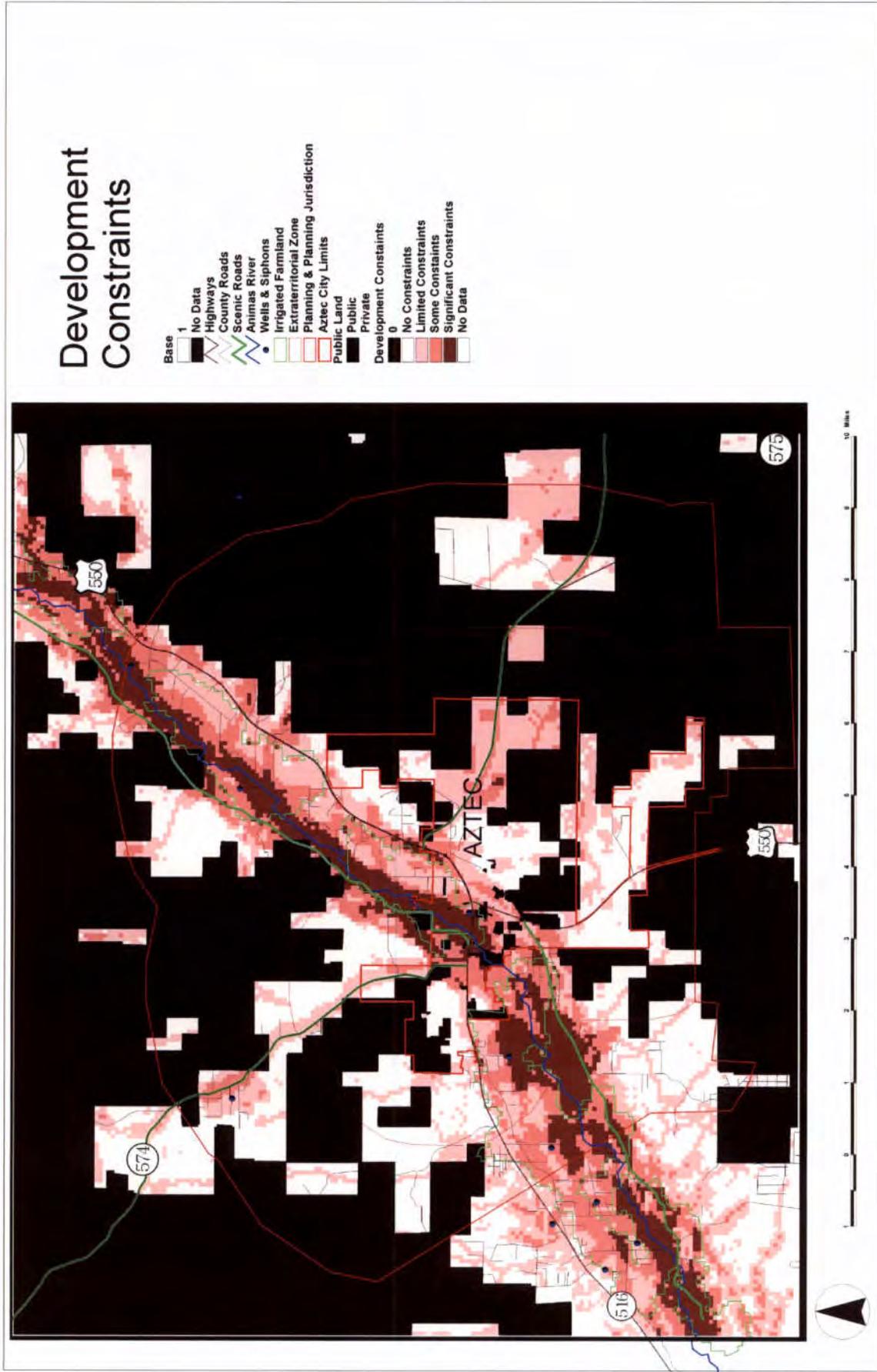
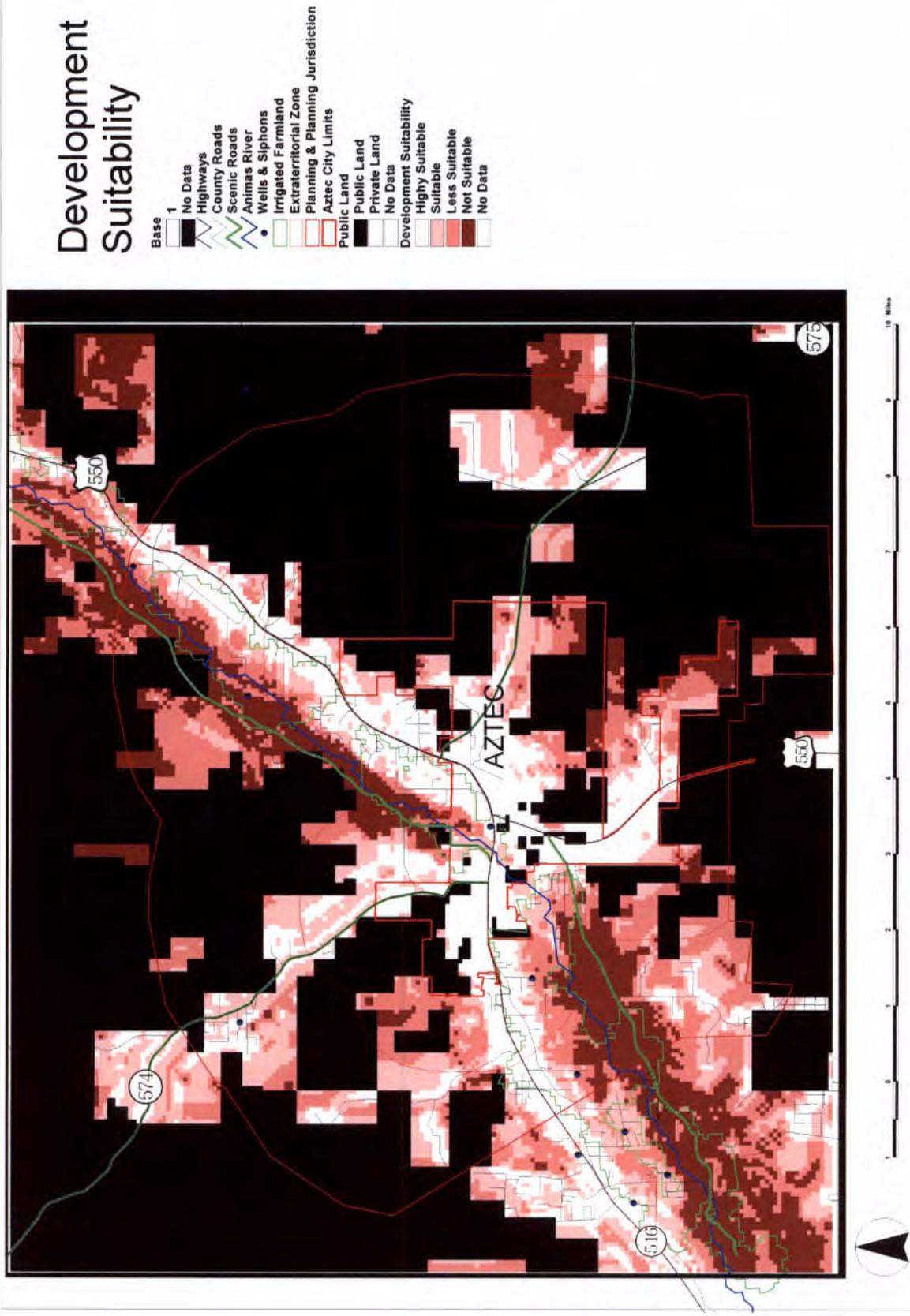


Figure A13. Development Suitability



APPENDIX F. GROWTH ALTERNATIVES

Three future growth alternatives for Aztec and the PPJ were developed to illustrate the range of possible development patterns and land use policies that Aztec could choose to carry out in the PPJ.

TREND ALTERNATIVE

The Trend Future Growth Alternative would allow the current pattern of growth and development in the Aztec area to continue. No effort would be made to change how development is currently regulated or how growing areas are provided with roads, utilities and public services. Figure A14 shows the areas where growth would occur under this alternative.

Policies

Aztec would continue to enforce the following ordinances and policies.

- Continue to enforce the Aztec subdivision ordinance in the PPJ.
- Continue to annex aggressively.
- Continue to provide water to water user associations.

Characteristics

- Significant growth in the PPJ, especially along the Animas River
- Limited growth in Aztec
- Conversion of farmland to residential uses
- Decrease the amount of open space and undeveloped land surrounding Aztec

Land Use Requirements

Table A2 shows the projected land use requirements for the Trend Growth Alternative through 2020.

Table A2. Land Use Requirements, Trend Growth Alternative

Types	Acres
Residential land in Aztec (average density of 4 du/ acre)	56 acres
Residential land in the PPJ	
with .75-acre average lot size	554 acres
with 2-acre average lot size	1,476 acres
Commercial land	396 acres
Office/institutional land	93 acres
Total Land Requirements	1,099-2,021 acres

MANAGED RURAL GROWTH ALTERNATIVE

The Managed Rural Growth Alternative would permit a more rural style of growth and development in the PPJ while protecting what many residents have identified as important values, such as active farms and ranches, the opportunity for rural living and the Animas River corridor. It also would include planning of public services and community facilities to serve the growing residential areas in the PPJ. Figure A15 shows the areas where growth would occur under this alternative.



Figure A14. Alternative #1 Unmanaged Growth

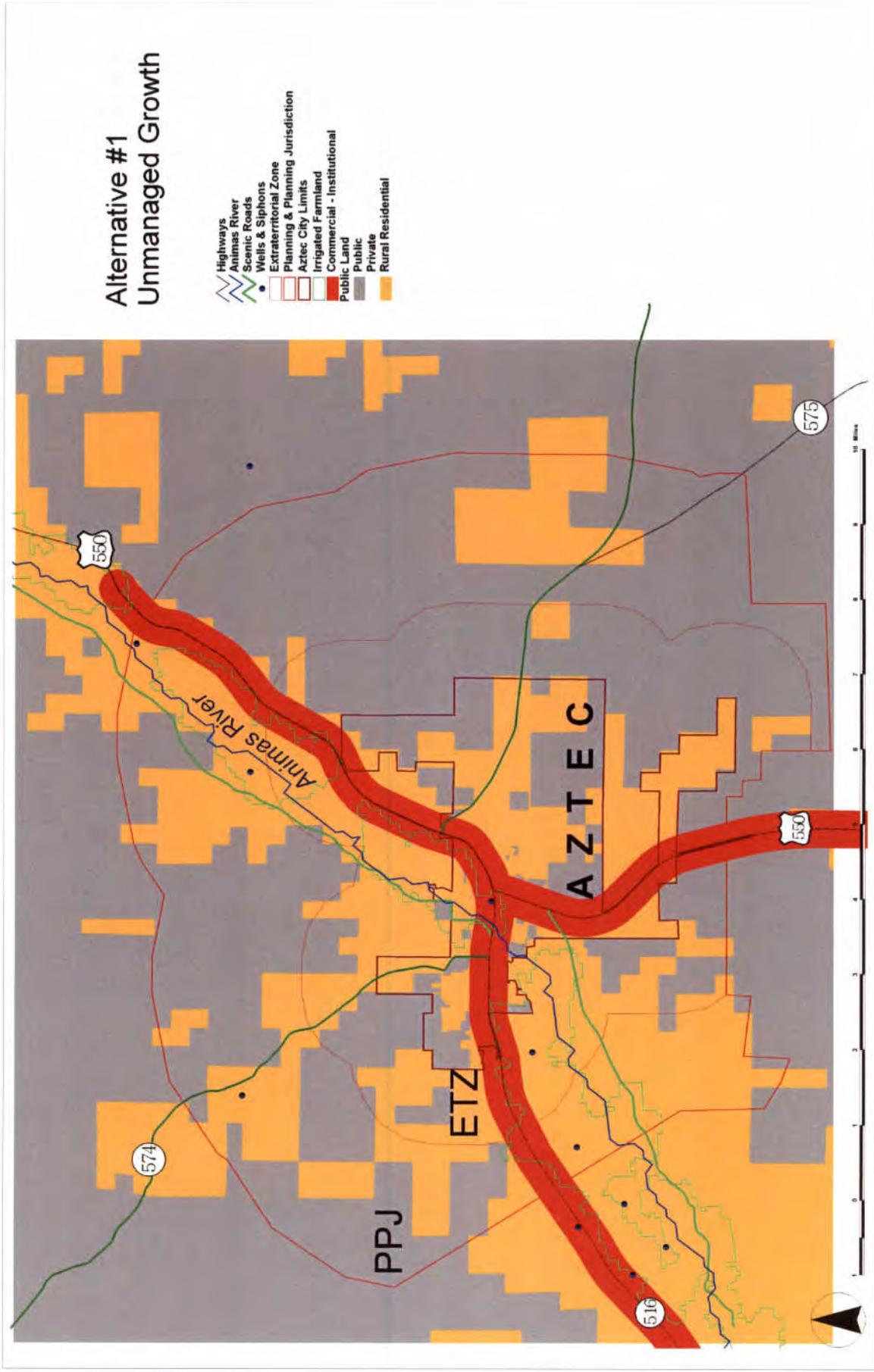
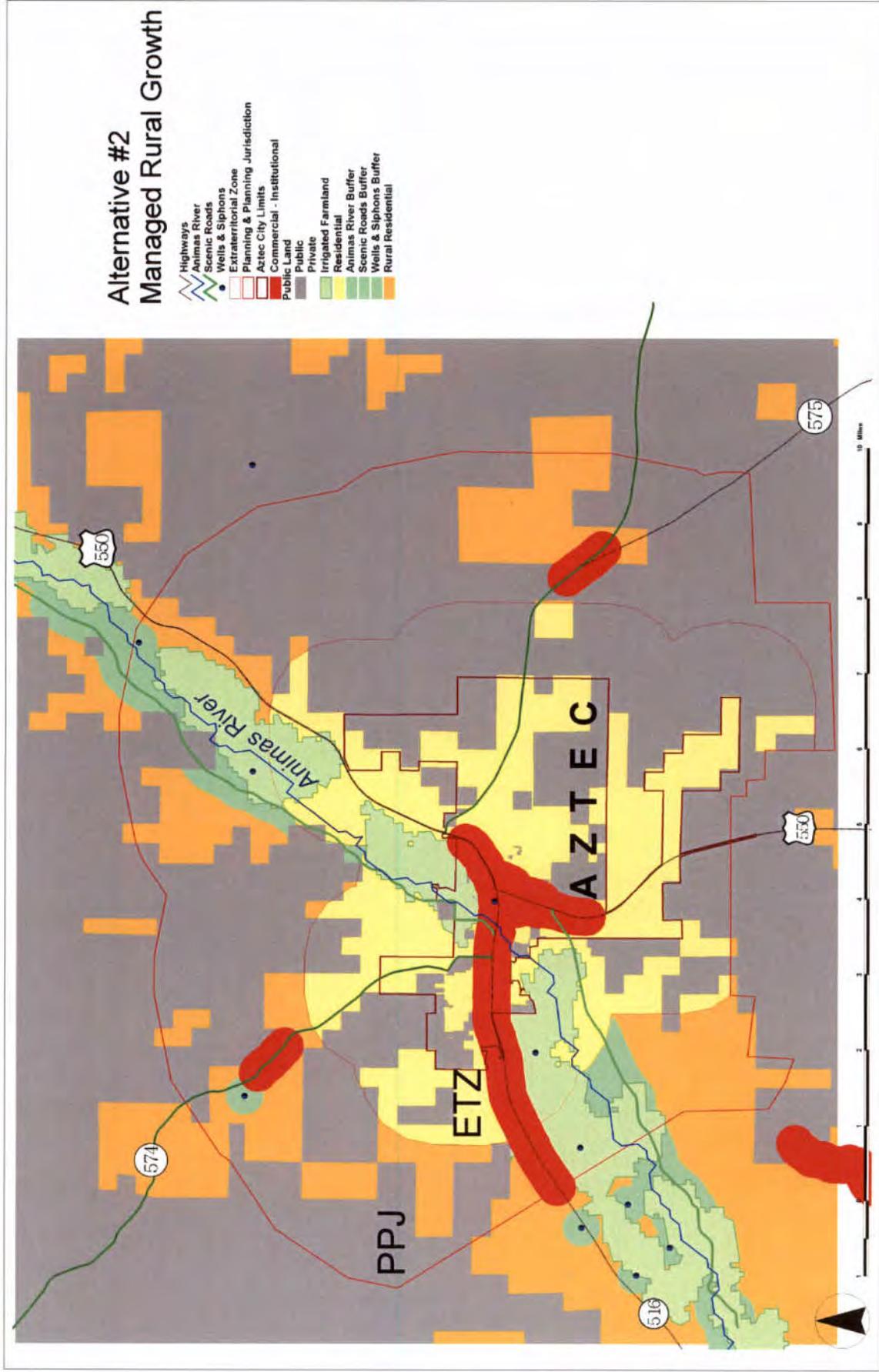


Figure A15. Alternative #2 Managed Rural Growth



Policies

Aztec would carry out the following ordinances and policies:

- **Established rural subdivision standards to apply in appropriate parts of the PPJ.**

Rural subdivision standards like those in the San Juan County subdivision ordinance would apply in most of the PPJ. New subdivisions would have to provide paved roads but would not be required to install curbs, gutters and sidewalks. Wastewater treatment would continue to be provided through individual septic systems.

Close to the City of Aztec, new subdivisions would have to meet the standards of the City Of Aztec subdivision ordinance. This could apply within Aztec's one-mile Extraterritorial Zone (ETZ) and in areas that the City plans to annex within the next ten years. New subdivisions in this area would have to provide curbs, gutters and sidewalks. They would also have to hook up to the City's sewer system if they are within 2000 feet of a sewer line.

- **Protect farmland along the Animas River.**

Aztec would encourage voluntary efforts to protect farmland in the Animas River valley. One option would be to work with the BLM to arrange land swaps with willing property owners. The BLM would trade land of equivalent value elsewhere in the PPJ for farmland in the valley. Ideally, this land would be located near to existing roads and infrastructure. The BLM would then lease the land back as farmland to the current farmers.

- **Work with San Juan County and the BLM to address needs for community facilities, open space, and commercial development.**

Aztec and San Juan County would identify appropriate locations for parks, schools and other public facilities to serve the growing population in the area. In keeping with current BLM policy, these facilities could be located on BLM under long-term leases. The City and County would also identify suitable sites for commercial uses in proximity to these public facilities and encourage their development over time through provision of utility service.

- **Work with water user associations to identify preferred growth areas in the PPJ.**

Characteristics

- The rate of growth within the Animas River corridor would be reduced.
- Significant growth would occur throughout the PPJ, radiating out from existing maintained roads and water lines.
- A limited amount of growth would occur in Aztec.
- Sites for future community facilities and open space would be identified (e.g., on BLM land)
- Sites for commercial development would be identified.



Land Use Requirements

Table A3 shows the projected land use requirements for the Managed Rural Growth Alternative through 2020.

Table A3. Land Use Requirements, Managed Rural Growth Alternative

Type	Acres
Residential land in Aztec (average density of 4 du/ acre)	56 acres
Residential land in the PPJ	
with .75-acre average lot size	554 acres
with 2-acre average lot size	1,476 acres
Commercial land	396 acres
Office/institutional land	93 acres
Total Land Requirements	1,099-2,021 acres

COMPACT GROWTH ALTERNATIVE

In the Compact Growth Alternative, growth is discouraged in most of the PPJ and encouraged within Aztec and close to its boundaries. Open space and agricultural lands are protected. Figure A16 shows the areas where growth would occur under this alternative.

Characteristics

- Growth would occur near existing sewer lines and city roads within City.
- Growth would occur within recently annexed land.
- Sensitive lands in PPJ, such as the Animas River corridor, and open space would be preserved.

Policies

The City of Aztec would need to adopt a series of aggressive land use regulations to achieve the land use pattern of the Compact Growth Alternative.

- Continue to enforce the Aztec subdivision ordinance in the PPJ.
- Continue to annex aggressively.
- Establish zoning in the PPJ.

Most of the PPJ would be zoned to discourage subdivision activity. This could involve establishing a very large minimum lot size, say ten acres.

- Protect farmland along river.

Aztec would encourage voluntary measures such as land swaps with the BLM to protect farmland in the Animas River Valley. It would also work with San Juan County to establish agricultural zoning in the valley to discourage the conversion of farmland to non-farm uses.



- Restrict water sales to water user associations.
- Develop additional affordable/multi-family housing in Aztec.

Land Use Requirements

Table A4 shows the projected land use requirements for the Compact Growth Alternative through 2020. These estimates assume that 75% of the population growth projected for the PPJ would occur instead within the city of Aztec.

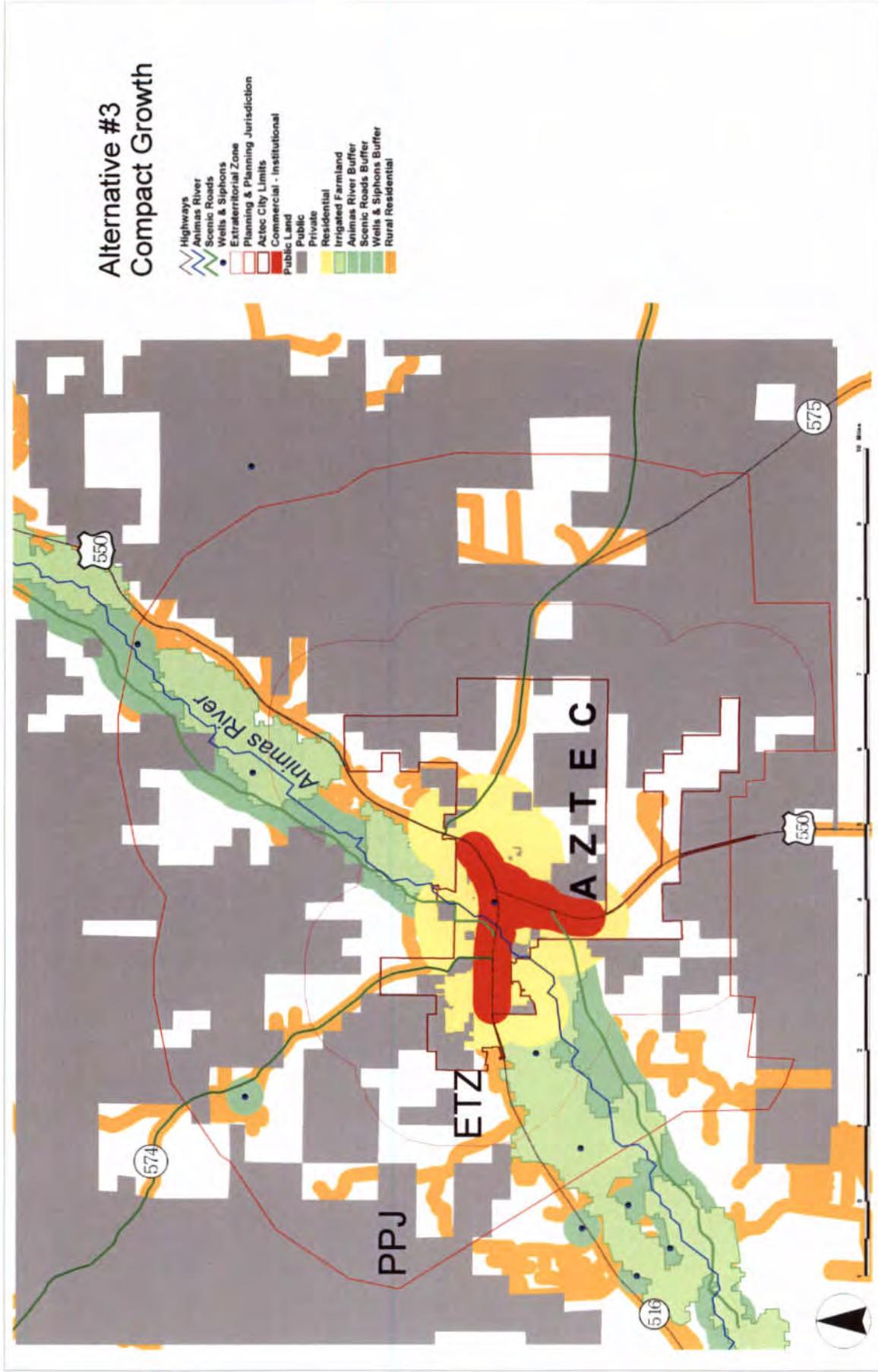
In fact, it may be more realistic to assume that much of the growth projected for the PPJ would move to other parts of San Juan County rather than shifting to the city of Aztec. In that case, the land use requirements for the Compact Growth Alternative would be reduced significantly within Aztec and the PPJ.

Table A4. Land Use Requirements, Compact Growth Alternative

Type	Acres
Residential land in Aztec (average density of 4 du/ acre)	194 acres
Residential land in the PPJ	
with .75-acre average lot size	138 acres
with 2-acre average lot size	369 acres
Commercial land	396 acres
Office/institutional land	93 acres
Total Land Requirements	821-1,052 acres



Figure A16. Alternative #3 Compact Growth



APPENDIX G. VISUALIZING THE IMPACT OF FUTURE GROWTH

The following set of drawings portray the potential impacts of future growth on a typical area in the PPJ under various regulatory scenarios described above in the Recommendations Section of the Report. The first drawing (Figure A17: Existing Conditions) shows the existing conditions typical of a number of areas of the PPJ: There is scattering of various kinds of development and subdivisions occupying the private land wedged in between larger tracts of public land. A group of recently subdivided lots vary in size from approximately five acres to 10 acres and have relatively nice houses or doublewide mobile homes. These people would have bought and built their homes to enjoy range lifestyle. They like their privacy and manage horses, livestock, and/or businesses that they operate from their homes. The next set of figures show the potential impacts and patterns of various other regulatory strategies:

Enforcement of Aztec's Current Subdivision Regulations:

If the current regulatory regime of enforcing an onerous subdivision regulation is not changed, then growth is likely to be limited to a few lots here and there leaving the area relatively unchanged from Figure A17: Existing Conditions. The other possible outcome is that a high end subdivision will be built like the Kokopelli or Anasazi subdivision which will result in a pattern similar to the Upscale Subdivision shown in Figure A18: Upscale Subdivision with acreages of 1.5 to 3 acres. Although this subdivision would certainly be more aesthetically pleasing, it would not be affordable to most of the members of the existing community of Greater Aztec. In all likelihood, they would be purchased by outsiders who are either retirees or commuters to employment centers in Farmington or Durango. In either case, these people would very likely have different experiences and values with respect to the rural landscape than the existing community. For example, they may very well have moved from suburban communities where strict subdivision and zoning regulations were commonplace. Over the long term, they could pressure the County or City via annexation to put in place Zoning restrictions that limit uses to only residential, and forbid operation of businesses, ATVs and the holding of livestock on the premises. This kind of regulatory regime is fairly common in suburban areas in the US. The net effect is that long-standing members of the community who originally moved to this area to enjoy the rural lifestyle many years ago, would now be consigned to some aesthetic version of this lifestyle, but not the functionality of the rural living or the ways they were used to.

No Enforcement of Aztec's Subdivision Regulations:

This is the "do nothing" approach and let the County rules rule. In this scenario, the worst case development would be one similar to Crouch Mesa, which would result in a pattern similar to that in Figure A19: Minimum Lot Size Subdivision. The average size of the new subdivision would be the legal minimum of 3/4 of an acre, substantially smaller than the original large parcels. Both the aesthetic qualities and the nature of the rural lifestyle would change dramatically for those original community members. They would now be in the thick of a well-trafficked series of pre-fabricated or mobile home subdivisions. The incumbent loss of privacy and rural community is apparent. Again, a number of the people moving into this area into these very affordable would most probably be outsiders. If it were to be similar to the Crouch Mesa subdivision there would



Figure A17: Existing Conditions

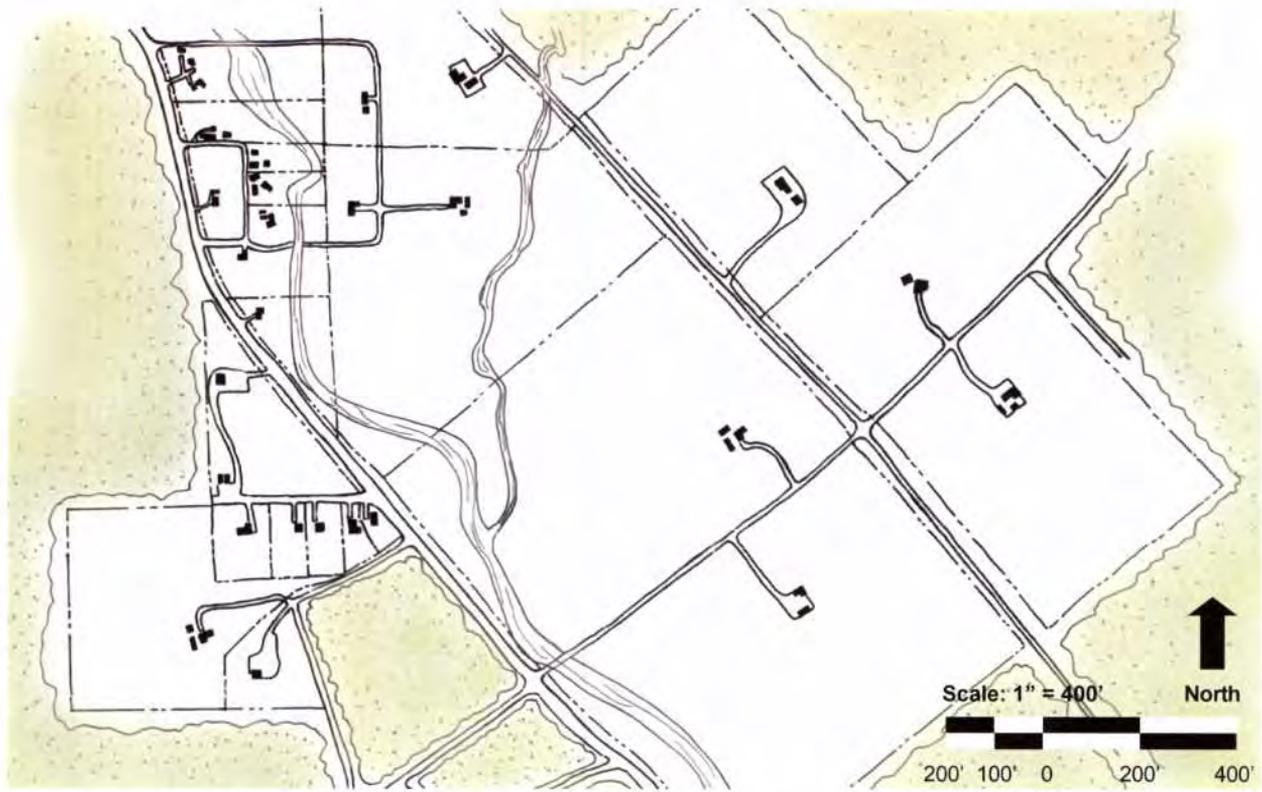
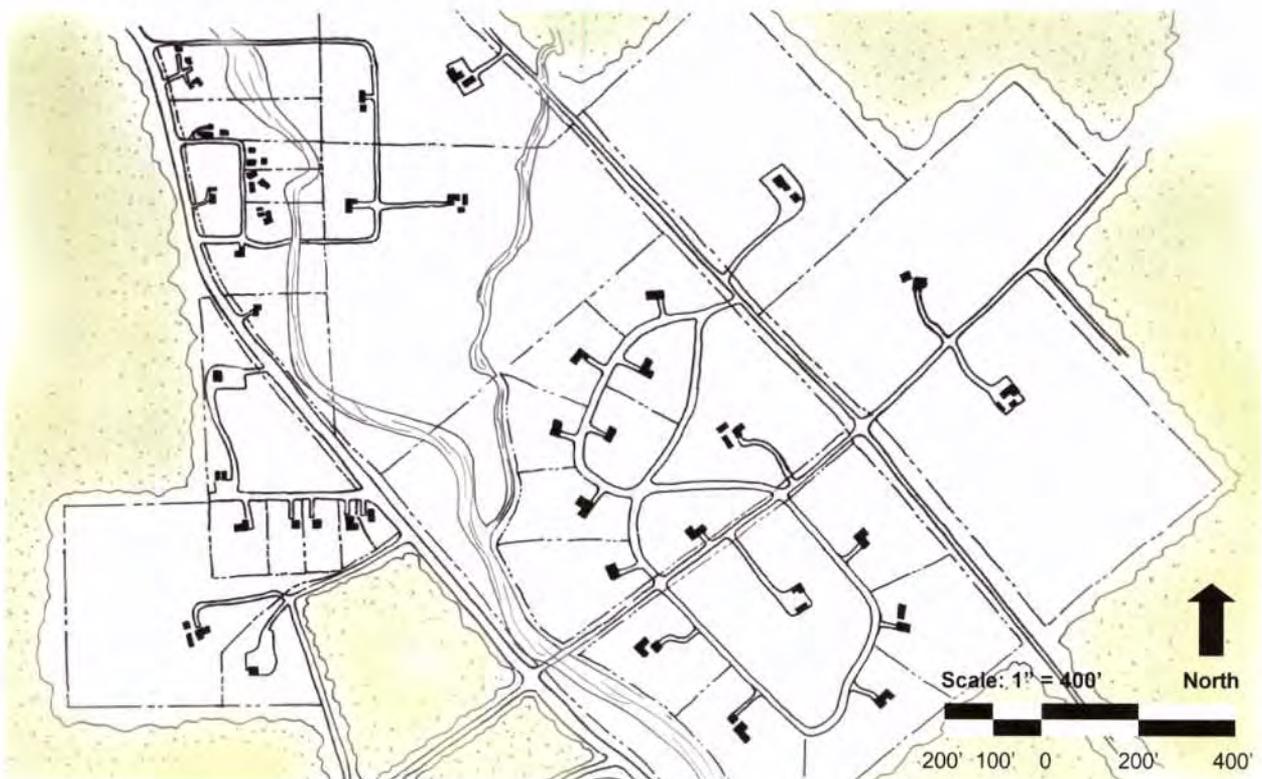


Figure A18: Upscale Subdivision



be little personal resource to maintain these properties and little incentive to stick around when their job ended or the place was trashed. Environmental quality would deteriorate over time, and the original sense community and rural lifestyle would be lost.

No Enforcement of Subdivision Regulations but Extend Sewer and Water

Another possible "no enforcement" outcome is suggested by Figure A20: Trailer Park Development. In this case, water and sewer would be extended out to this area using USDA, State, County, City and/or developer funds. The area could then be developed at a much higher density than the 3/4 acre necessary for an onsite sewer system. Such a development would dramatically alter the community rural landscape in this area. In all likelihood, these new Trailer Parks would become de facto low-income housing for outsiders who had moved to the area to take advantage of oil and gas industry jobs and driving out or overwhelming the original rural community members. In addition, the open rural landscape would be replaced by a more urban form – the trailer park.

Agricultural or Rural Zoning and Subdivision Standards

A valid functional approach to the issue of maintaining the original rural lifestyle and community landscape in the face of certain change is the adoption of agricultural or rural zoning and subdivision standards. The pattern and outcome of this regulatory strategy is shown in Figure 21: Agricultural Zoning. In this scenario, only lots 10 acres or larger could be subdivided and the resulting minimum lot size of both parcels would have to be 5 acres. As a result in this area, under this scenario, only three new lots and houses could be created. This would preserve the aesthetic and functional qualities of the rural community landscape by maintaining the overall low density, which in turn maintains the all-important rural sense of privacy and independence with respect to the use of one's land, while at the same time limits the number of new comers. In addition, such a zoning regulation and the corresponding subdivision regulation would provide for the continued usage of the land for livestock and home businesses. Rural roads could remain as they are, largely unpaved without curbs, gutters and sidewalks, and sewer systems could remain onsite. Each person's connection to the "great back yard" of the adjacent BLM land would be maintained.

Conservation Subdivisions

This scenario involves a slightly different strategy to allow for more subdivisions, while also protecting and enhancing the function of important ecological and recreational assets. The pattern resulting from this scenario is portrayed in Figure A22: Conservation Subdivision. This scenario would allow for one lot to be subdivided for every five acres a landowner has. The minimum lot size in this instance, however is 1 acre, instead of 5 acres and the new subdivisions would be encouraged to be platted to be away from the existing home and access area. Notice that a number of the existing lots are 10 acres or more in size have been subdivided twice. The open qualities and privacy of the rural landscape are maintained. Another aspect of this scenario is the conservation of the riparian areas through a subdivision regulation that forbids construction within the 100 year flood zone or 100 ft. from the center line of the arroyo. This would protect the ecological integrity of the arroyo and the quality of its water. It would also permit the designation and maintenance of a series of trails, which would ensure that all members of the subdivision would have ready access to the "great backyard" of the BLM lands.



Figure A19: Minimum Lot Size Development

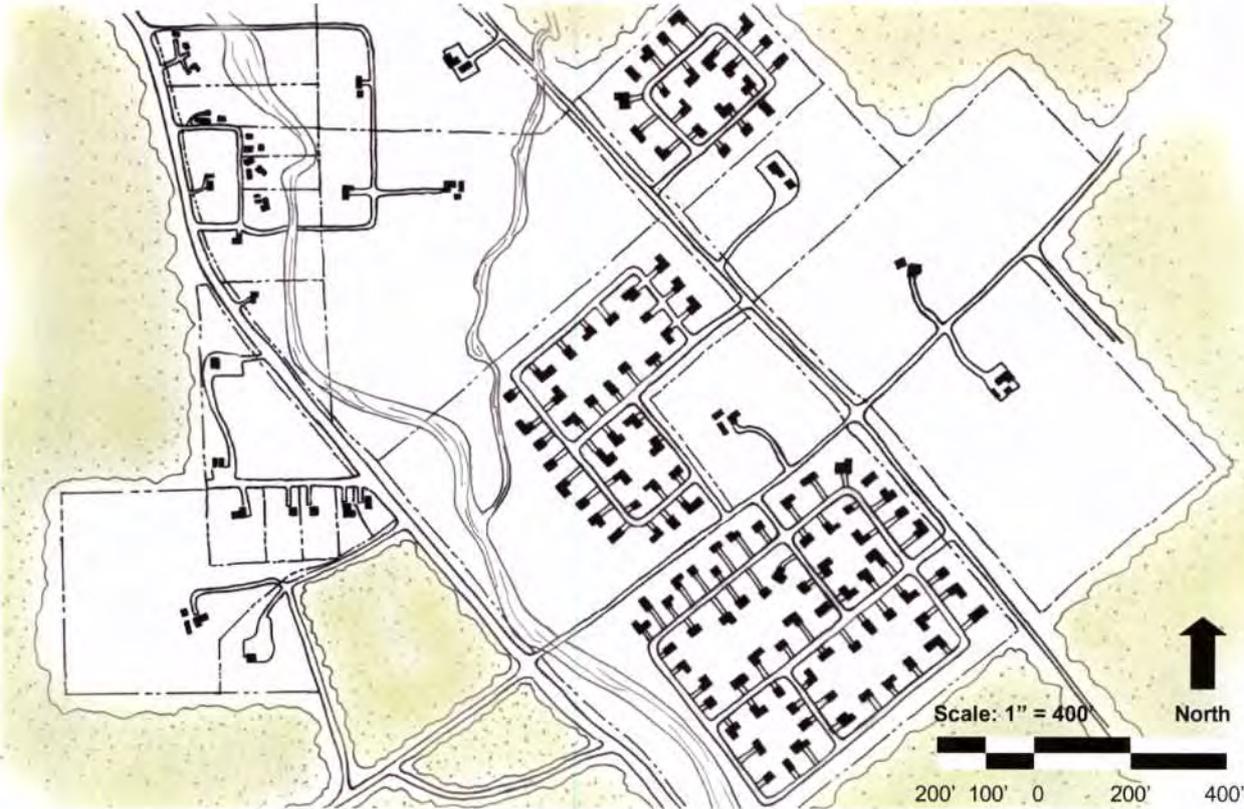


Figure A20: Trailer Park Development

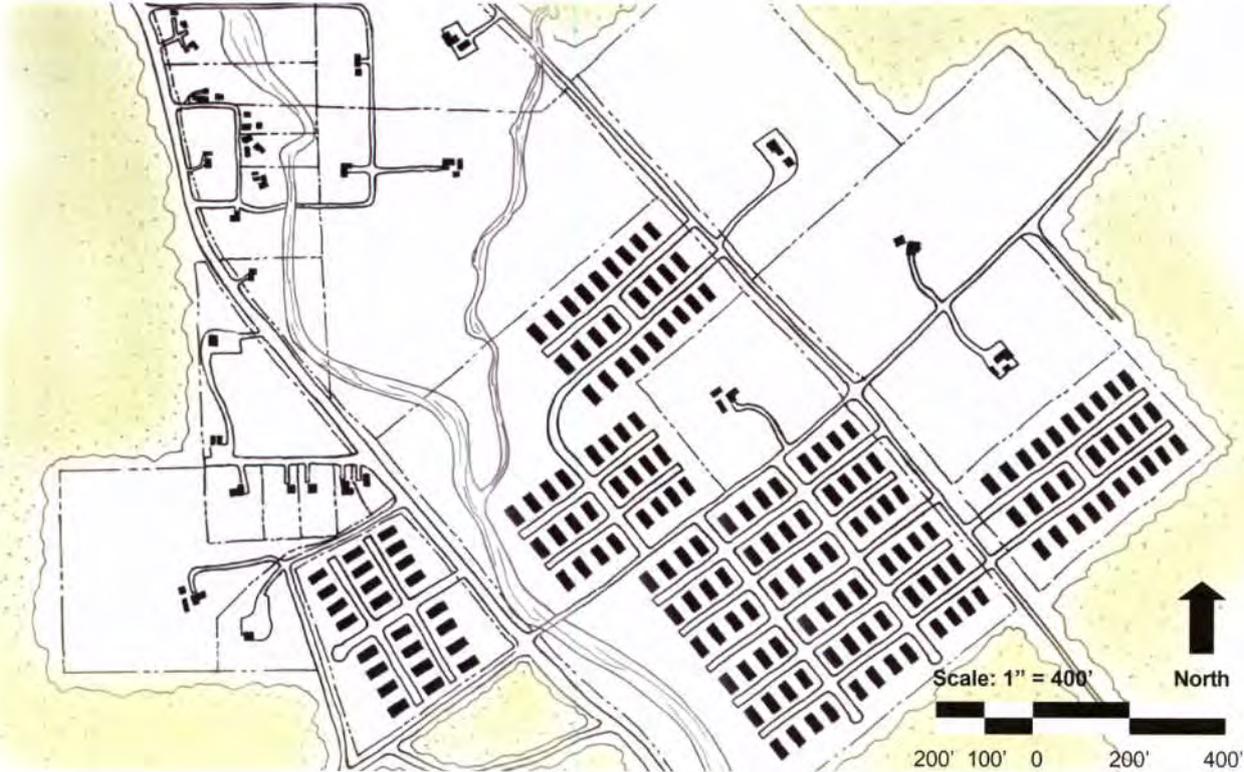


Figure A21: Agricultural Zoning

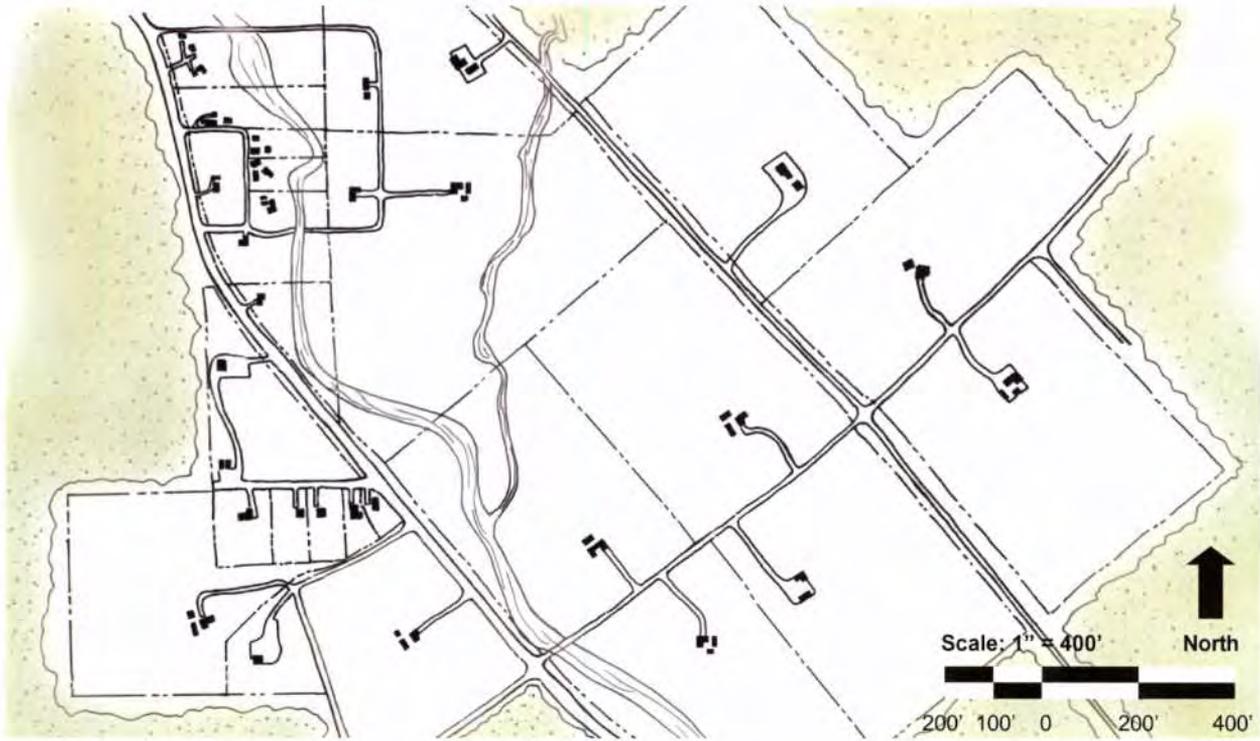
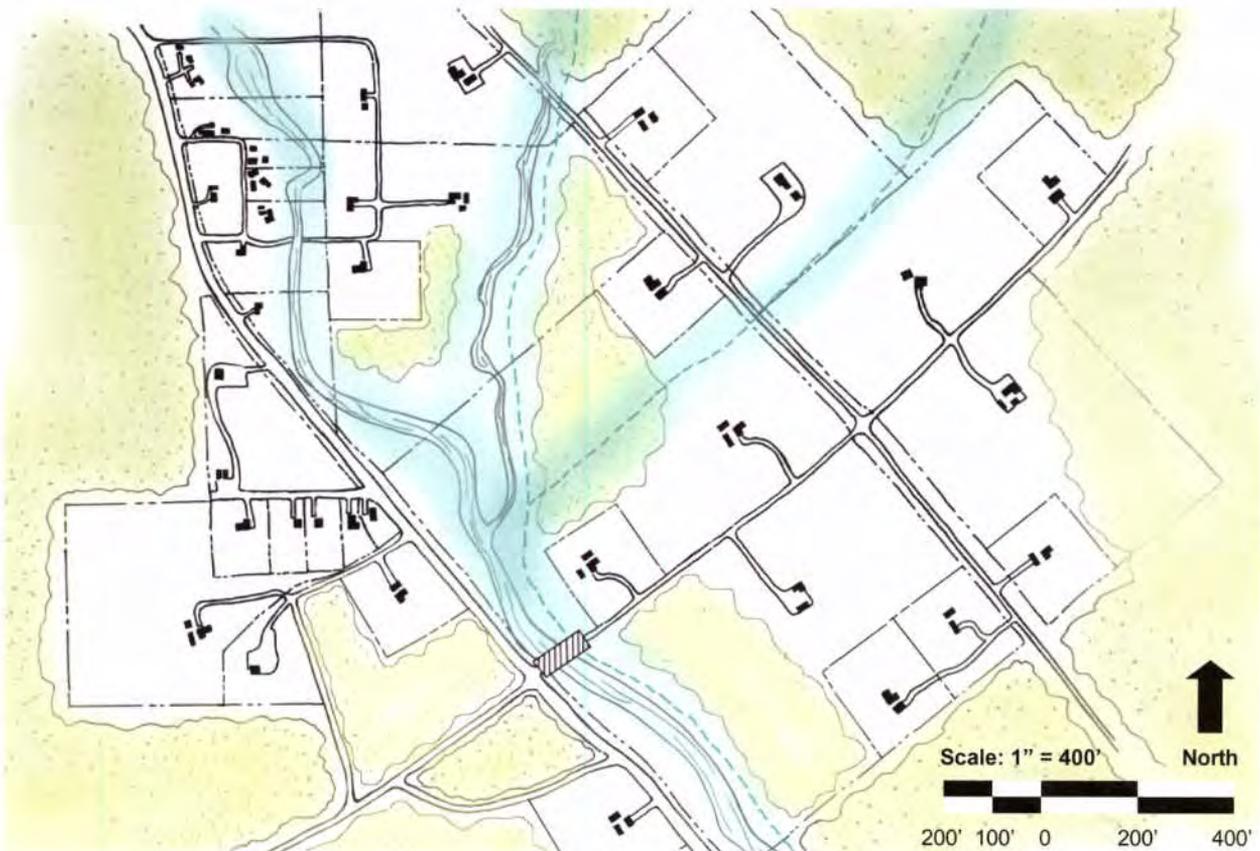


Figure A22: Conservation Subdivision



APPENDIX H. REFERENCES

Plans and Regulations

City of Aztec Community Development Plan, 1999

City of Aztec Infrastructure Capital Improvement Plan (ICIP), 2001-2005

City of Aztec Land Subdivision Regulations (Ordinance No. 305)

Comparison of Subdivision Regulations: San Juan County, City of Aztec, City of Bloomfield and City of Farmington, January 2002

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