Public Facilities Element

8. PUBLIC FACILITIES

8.1 INTRODUCTION

The city government of Rio Rancho provides basic public services to its residents through a number of public facilities located around the City. But many public services and facilities in Rio Rancho are provided by a variety of government agencies, often in conjunction with the City government. Planning and funding for City facilities such as roads, drainage, and educational institutions come from outside agencies, such as the Mid-Region Council of Governments (MRCOG), Southern Sandoval County Arroyo and Flood Control Agency (SSCAFCA), Rio Rancho Public Schools (RRPS), the University of New Mexico (UNM), and the Central New Mexico Community College (CNM). Energy and communication utilities are provided by franchise agreements with private corporations that are regulated by City ordinance.

The City government provides police, fire, and emergency service facilities, as well as library, recreation, and senior services facilities to serve its residents. The City also provides water and sewer utilities through an enterprise fund. However, solid waste collection is provided by a private corporation, Waste Management. Both Waste Management and Sandoval County operate sanitary landfills inside the City and provide recycling services. Furthermore, the City's road network depends on planning and funding from MRCOG, which is the metropolitan planning organization (MPO) for the greater Albuquerque area. Likewise, the City's major drainage areas are planned and many of its flood control facilities are funded by another regional agency, SSCAFCA.

Public Service Company of New Mexico (PNM) and the New Mexico Gas Company are the City's primary energy utilities through franchise agreements that allow them to operate electrical and natural gas lines inside the City's right-of-way. Qwest and Cable One are franchised communications utilities that provide telephone, Internet, and cable services inside the City. In addition, there are numerous telecommunications carriers that provide cell phone and wireless Internet services from cell towers, the locations of which are permitted by City ordinance.

Another example is education. RRPS is a school district created by the State of New Mexico for the purpose of providing primary and secondary education for Rio Rancho's children. UNM and CNM are publicly supported institutions of higher education that are in the process of developing campuses inside the City. In addition, several church-based schools provide parochial education to the City.

8.2 EXISTING PUBLIC FACILITIES

8.2.1 LIBRARY AND INFORMATION SERVICES

Goal 5 of the Strategic Plan calls for the City to deliver quality services to meet community needs, assuring that the City is sufficiently staffed, trained, and equipped. Strategy C of Goal 5 is to define a culture of customer service and service delivery. The success of the Rio Rancho public library system is based on these attributes.

In FY 09 the Rio Rancho library system had a visitor count of over 350,000, with over 50,000 reference and service information transactions and over 1 million circulation transactions. The FY 2010 budget for library operations was $2.1 million, which funded 35 staff positions and $336,000 in materials and services.

The Rio Rancho Department of Library and Information Services currently operates three branches: the Loma Colorado Main Library, the Esther Bone Memorial Library, and the Star Heights Learning Center.

The Loma Colorado Main Library opened in 2006. It covers 30,000 sq ft of floor space with a collection of over 115,000 books and periodicals, and provides 38 computers for public use.

The Esther Bone Memorial Library originally opened in 1992, and re-opened in 2008 after being renovated. It covers 12,250 sq ft of floor space and serves as a branch library with a collection of over 57,000 books and periodicals, and provides 10 public computers.

The Star Heights Learning Center opened in 2005. It occupies 1,470 sq ft of space inside the Star Heights Recreation Center, with a collection of over 2,600 books and periodicals for young people in the fifth through ninth grades. It also provides 9 public computers.

Long range library needs are outlined in the 2004 Library Master Plan. In addition to the new main library for Loma Colorado, the plan identified the need for three new branch libraries located at Mariposa, Idalia and NM 528, and Unser and Paseo del Volcan over the next 25 years. However, these facilities were not been programmed into the FY 2010-2015 ICIP since they are outside of the time frame of that planning document.

8.2.2 DRAINAGE AND FLOOD CONTROL

Strategy H of Goal 1: Infrastructure in the City's Strategic Plan calls for the City to "Enhance existing and explore new tools for addressing the drainage needs of the City." At the present time, the drainage needs of Rio Rancho are the responsibility of two different governmental entities: the City and the Southern Sandoval County Arroyo and Flood Control Authority (SSCAFCA). Yet, despite the best efforts of these three governmental entities, serious problems with drainage, erosion, and flood control persist due to chronic underfunding of drainage projects.

The City of Rio Rancho is located on the northwest mesa overlooking the Middle Rio Grande Valley. The dry climate, sandy soil, and hilly terrain of the area are contributing factors to the drainage characteristics of the City. In addition, there is the runoff generated by the built environment inside the City. The City is naturally drained by a series of arroyos, which flow from the higher terrain in the northwest toward the lower elevations in the southeast and empty into the Rio Grande. The arroyos remain dry for most of the year, but they are capable of carrying large volumes of water or flooding during heavy rain storms, which usually occur during the summer months.

There are four distinct arroyo systems or watersheds inside the City: the Venada, the La Barranca, the Montoyas and the Black Arroyo. The far reaches of the Montoyas watershed extend into the unincorporated Rio Rancho Estates area to the west of the City. The "Unnamed Watershed" is a smaller watershed located between the La Barranca and Venada watersheds. In addition, there are smaller tributary arroyo systems. The Panta de Leon and Lomitas Negras, feeds into the larger Montoyas watershed and the Rainbow Tributary which feeds into the Calabacillas Arroyo. There is also a small section of the City in the Mariposa development that drains to the north to the Jemez River. In addition, the city recently annexed two large but undeveloped sections of Bernalillo County known as Paradise West and Quail Ranch. These tracts of land are within the jurisdiction of Albuquerque Metro Area Flood Control Authority (AMAFCA).

The City of Rio Rancho and the Southern Sandoval County Arroyo and Flood Control Authority (SSCAFCA) share jurisdiction over the arroyo watersheds and drainage facilities inside the City. SSCAFCA is a regional flood control agency established by the state of New Mexico, whose boundaries extend west to the Rio Puerco, east to the Rio Grande, north to the Zia Pueblo, and south the Bernalillo/Sandoval County line. This area encompasses the City of Rio Rancho, the unincorporated Rio Rancho Estates area west of the City, Corrales to the southeast, and a portion of the Town of Bernalillo.

In order to prevent flood damage, SSCAFCA has established a series of lateral erosion envelope (LEE) lines along the major arroyos of the watersheds. The Lee Lines act as protective boundaries to prevent development from occurring too close to the banks of an arroyo, which may wash away or be altered by runoff from severe storms. The agency uses the Federal Emergency Management Agency

(FEMA) 100-year storm criteria to calculate the volume of runoff and potential flood hazard generated by a severe storm. A one hundred year storm is a severe storm that has a 1% likelihood of occurring in any given year based on historical records. The amount of precipitation from a 100-year storm is based on a six-hour continuous rainfall that drains into an arroyo or man-made channels inside a watershed, as it flows toward the river.

The assumed level of development that generates the storm water runoff into the watershed is based on the planned build-out of the watershed area. The volume and velocity of runoff inside the watershed produced by this 100-year storm is measured in cubic feet per second (cfs). This standard represents the level of runoff that must be diverted, channelized, or captured by detention ponds to prevent flooding. As a matter of practice, SSCAFCA exercises control over those portions of watersheds and associated facilities that have drainage flows exceeding 500 cfs during a 100-year storm.

Over the years, SSCAFCA has built a number of drainage and flood control facilities around the City of Rio Rancho. There are 24 existing SSCAFCA projects inside the City, including the Upper Venada Dam, Encantada Channel, Joiner Pipeline, Lower Venada Channel, Northern Meadows Channel, Northern Blvd Sedimentation Pond, Sunset Dam, Sugar Dam, and four proposed projects including the Saratoga Road Crossing and Lisbon Dam. However, lack of funding for new projects has been an on-going problem, since the agency must rely on bond issues to acquire the necessary land and build the projects.

In 2007, SSCAFCA authorized the development of a drainage manual in response to the need for a uniform set of engineering criteria for calculating storm water run-off and a standardized set of design guidelines for building drainage structures. This manual was developed jointly with the City of Rio Rancho in order to create a document that would be acceptable to both jurisdictions. The City incorporated it into Part II, Chapter 2 of the Development Process Manual (DPM) to deal with drainage, flood control, and erosion control. As such, the document provides an extensive, if highly technical, engineering treatment of these subjects and a common reference source for both governments. However, it has been the practice of the city to not enforce these ordinances on areas with premature platting (i.e. those areas that were subdivided before the creation of these drainage ordinances.

The City of Rio Rancho is responsible for managing smaller watersheds and facilities within the city limits. Unfortunately, large areas of the City were platted on a bulk land basis with no subdivision improvements such as paved streets or storm drains, which has created severe drainage problems during heavy rainstorms. The City has relied on the creation of special assessment districts (SAD's) to retrofit with road and drainage improvements and water utilities those areas that were prematurely platted. In the summer of 2006, storm water caused $3.4 million in damage to portions of Unit 17. SAD 7 covering a large portion of Unit 17 was originally proposed in response to these floods, but it was scaled back as SAD 7A was approved to address drainage and street paving in parts of Units 10,13 and 16. In addition to the creation of SAD's, the City collects drainage impact fees from the development of prematurely platted lots to help fund system-level drainage improvements in these areas, but the revenue is very limited.

In terms of preventing floods and erosion problems, the City has adopted ordinances governing the creation of subdivisions, flood hazard prevention, erosion control and storm drainage. The subdivision ordinance requires that the Planning and Zoning Board (PZB) approve a preliminary and final plat for the creation of a subdivision containing three or more lots. The preliminary plat is required to show the contour lines at specific intervals that represent the slope of the land, the existing drainage facilities (if any), and provide a storm drainage management plan for land inside a designated flood hazard area. Any subdivision grading and drainage improvements must be approved by the City and conform to the drainage plan.

The flood hazard prevention ordinance aims to minimize potential flood damage to subdivisions and commercial projects by identifying flood hazard areas based on the FEMA flood maps. A special flood hazard zone development permit is required from the City's floodplain administrator before development begins within any area of special flood hazard. The flood hazard reduction measures include redefinition of the special flood hazard area, anchoring and structural designs for buildings to withstand flooding, the use of construction materials and methods that are resistant to flood and erosion damage, and utilities that are located and constructed to minimize flood and erosion damage. In addition, all subdivisions are required to have adequate drainage to reduce their exposure to flood damage, and adequate erosion treatment of channels for the conveyance of storm water. Adopted regulatory floodways are to be kept clear of development unless it can be demonstrated through engineering analysis that the proposed development or encroachment would not result in any increase in flood levels.

In addition to the flood hazard prevention ordinance, the erosion control and storm drainage ordinance provides the City with supplemental regulatory authority to deal with these issues. The stated purpose of the ordinance with respect to storm drainage is to prevent the creation of public safety hazards and to attempt to eliminate existing problems. The intent of the ordinance is to prevent the discharge of storm water runoff from public facilities onto private properties, and to prevent the increased risk of damage to private property caused by storm water runoff from other private property. The ordinance designates the City Engineer (or his appointee) to administer the provisions of the ordinance by issuing construction regulations and permits for grading and paving. All modifications to the public drainage system are subject to the approval of the City Engineer, and SSCAFCA in cases where SSCAFCA has jurisdiction.

In addition to City ordinances and regulations governing drainage and erosion, the U.S. Environmental Protection Agency (EPA) has also issued a series of regulations called National Pollutant Discharge Elimination System (NPDES) for storm water discharges from construction activities. The City created a Storm Water Management Plan (SWMP) in 2008 to establish the six minimum control measures that the EPA expects from local governments. These measures are public education and outreach on storm water impacts, public involvement and participation, illicit discharge detection and elimination, construction site storm water runoff control, post construction storm water management in new development and redevelopment greater than one acre, and pollution prevention/ good housekeeping for municipal operations. The City is expected to modify applicable ordinances to bring them into conformance with NPDES regulations and to institute on-site inspections and enforcement procedures over a five year implementation period.

The regulations require all construction sites of one acre or more inside a city with a population of 50,000 or greater to have a Construction General Permit (CGP) issued by the EPA. To qualify for a CGP, the applicant must prepare a Storm Water Pollution Prevention Plan (SWPPP) in order to discharge storm water from the site. The SWPPP must identify the potential sources of pollutants that may affect the quality of storm water discharges from the site and describe the control measures that will be used to meet the effluent limits set by the regulations. The applicant is also required to file a notice of intent (NOI) with the EPA before beginning construction, and must keep a copy of the SWPPP available because EPA inspectors have the authority to perform on-site inspections to confirm that the SWPPP is being followed.

8.2.3 WATER AND WASTEWATER UTILITIES

Under Goal 1: Infrastructure of the City's Strategic Plan, Strategy F calls for the development and implementation of a plan to finance and build major water and utility infrastructure. In fact, this planning has been on-going since 1995, when the City first acquired the water and wastewater systems from the private owners of the system. But in order to understand the growth and development of these systems, it is necessary to understand the early history of the City.

Rio Rancho began as a real estate marketing venture by the American Real Estate and Petroleum Corporation (AMREP), which acquired some 90,000 acres of ranch land in southern Sandoval County in the 1960's. Through a process of bulk land subdivisions, Rio Rancho was subdivided into thousands of half-acre residential lots that were sold throughout the country. Over 75,000 lots were sold between 1961 and 1977 in what was then known as Rio Rancho Estates, before the City became incorporated in 1981.

The bulk land subdivision process used to create these lots did not contain provisions for standard subdivision improvements, such as water and wastewater utilities. These half acre lots were designed to support their own on-site domestic water well and septic system without the need for City utilities. As a result of this platting, there are over 2,500 homes inside the City with domestic water wells. In addition, there are several thousand homes that are connected to the City's water system, but do not have City sewer and must depend on residential septic systems.

As Rio Rancho Estates continued to grow and develop, AMREP began to build subdivisions with standard improvements. The beginnings of the Rio Rancho water and wastewater systems date back to 1964, when AMREP created the Albuquerque Utilities Corporation (AUC) to provide utilities to residential subdivisions in Rio Rancho Estates. The City incorporated in 1981, but continued to rely on this private utility system until 1995, when it purchased the successor company to AUC, United Water, through eminent domain proceedings.

There are areas of the City, such as Unit 17, that contain large-lot residential platting designed for on site domestic wells and septic system in a semi-rural type of development. Many of these areas are not served by City water and sewer lines. However, in recent years, the City has become increasingly concerned about the impact of domestic wells on the underground aquifer that supplies the City's water. As a result, the City has assumed control

of the permitting process for domestic wells in conjunction with the Office of the State Engineer in an effort to curb the spread of domestic wells inside the City.

The growth of modern subdivisions helped drive the expansion of the City's water and wastewater systems. The City's subdivision ordinance requires that developers undertake a variety of subdivision improvements, including providing water and sewer utilities if the project is within 300 feet of existing water and sewer lines. The City also negotiates proportionate share agreements to extend water and sewer lines to new service areas in order to reduce the dependence on wells and septic systems. It also requires domestic well users to hook up to City water lines instead of allowing them to re-drill wells in cases where the user is located near a water line.

The New Mexico Environment Department (NMED) adopted more stringent permitting standards for on-site septic systems in 2003. The minimum lot size for a single-family home with an on-site domestic well and septic system was increased from one half acre to three quarters of an acre for lots that were platted after 1990. Septic systems permitted by NMED on pre-1990 platting are increasingly required to use advanced treatment technology with pre-treatment systems or septic tanks instead of regular leach fields.

8.2.4 Water and Wastewater Usage and Infrastructure

During 2008, the City supplied almost 4.3 billion gallons of water to its residential, industrial, and commercial customers. The average single family home in Rio Rancho uses 218 gallons per day, based on the total daily residential water consumption divided by the number of single family homes connected to the water system. However, for water system design standards, the City requires a water supply of 300 gallons per day for a single family home, with a peak day demand of 650 gallons during periods of maximum usage and storage requirements of 800 gallons.

The water system has over 29,000 connections to single family homes and over 2,700 connections to multi-family units, serving an estimated residential population of over 78,000 (Map PF-1 Rio Rancho Municipal Water Lines). By comparison, the total number of sewer system connections for all categories of users was under 27,000 due to the number of residences on septic systems. To accommodate growth and upgrade the existing utility system, the FY 2010-2014 Infrastructure Capital Improvements Plan (ICIP) programmed over $231 million for water, wastewater, and reuse projects.

The water and wastewater infrastructure needed to supply the City's needs is extensive and growing. Currently, the City's water system consists of 18 water wells that supply18 steel water tanks with a total storage capacity of 37.7 million gallons. This water is distributed through 395 miles of transmission lines using eight (8) pump or booster stations. The wastewater or sewer system includes 481 miles of collection, interceptor, and force mains that are connected to 24 lift stations and 5 wastewater treatment plants. Map PF-2 identifies the sanitary sewer lines within the City of Rio Rancho.

With the exception of the recycled water (treated wastewater) that is used for irrigation on the Chamisa Hills Golf Course and the Villa Verde Cemetery, most of the City's wastewater is still discharged into the Rio Grande. However, in 2001 the City adopted a resolution with the goal of eliminating wastewater discharges to the river. As a result, the City is instituting conservation measures that will include an expanded reuse system. The reuse system will help recharge the aquifer by using treated wastewater for irrigation, and by direct injection of treated wastewater into the aquifer itself.

8.2.5 Origins of Water Conservation Program

In 2009, Strategy A of Goal 1: Infrastructure in the Rio Rancho Strategic Plan called for developing a plan for water sustainability and conservation to support the growth and development of the City over the long term. In fact, the City embarked on a water conservation and reuse program eight years earlier in 2001, when the Governing Body adopted Enactment 01-004, Resolution No. 4.

The resolution called for the creation of a treated wastewater effluent plan for the City that would address alternative uses of effluent, specifically the reuse of treated wastewater that otherwise would be discharged in to the Rio Grande. The goal of the resolution was to eliminate City wastewater discharges to the Rio Grande in order to avoid the high capital and operating costs of building a series of effluent treatment facilities to remove naturally occurring arsenic from the City's wastewater. In 2001, the resolution estimated the capital costs of building these arsenic treatment facilities at over $90 million and the annual operating costs at over $7 million.

In 2002, the City created the Water Resources Steering Committee in conjunction with the City's Utility Commission to develop a Water Resources Management Plan (WRMP) that would examine alternatives to discharging effluent into the Rio Grande. The plan

developed a series of policy recommendations on water conservation, education, utility system improvements, regulatory and legislative action, growth, and community development. These policy recommendations were incorporated into the plan in 2004. The WRMP explored a number of water resource strategies designed to meet the needs of its future growth and development.

8.2.5.1 CITY WATER SUPPLIES AND CONSUMPTION LEVELS

The opportunities for increasing the City's water supplies are limited because it is dependent on aquifer water to supply its needs. The pumping rights for the existing aquifers in the area have been fully allocated by the Office of the State Engineer (OSE). As a result, there is a shortage of available water rights in sufficient quantities at affordable prices to supply all of the City's future water needs. The City's options are further limited by the fact that Rio Rancho was not incorporated when the San Juan/Chama water pact was negotiated in 1963 to divert surface flows from this river system to downstream users such as Albuquerque. As a result, the City is not eligible for water from this source.

At the present time, the OSE does not have control of brackish water sources located below 2,500 ft that contain more than 1000 parts per million of salt. The City is exploring the feasibility of desalinization with Sandoval County, since the County has discovered brackish water below 2,500 ft, but the drilling and treatment costs for brackish water are significantly higher than for most aquifer water. The City is considering the possibility of using treated brackish water as discharge for return flow credits to the river, provided that the water meets the federally mandated water quality standards and the OSE's approval.

The state of New Mexico operates under a system of water allocation law that is administered by the OSE. The OSE has jurisdiction over most of the surface and underground water sources in the state and issues pumping permits to the various water users in the state. However, the OSE does not sell water rights to water users. Instead, it permits the pumping rights to the existing aquifers and water basins based on the estimated capacity and recharge of those water resources. The water rights needed to offset the effects of these pumping permits must be purchased by the water users by retiring existing water rights from user categories, such as agriculture, or by transferring them from other users.

The amount of water in a pumping permit is measured as an acre foot. As of 2002, the City was pumping approximately 10,500 acre feet per year to support a population of over 50,000. At that time, the City had pumping rights for 14,439 acre feet of water, which was adequate for its short term growth, but not sufficient for the City's long term needs. An OSE application for additional water rights and wells was submitted in 1994. Rio Rancho obtained a permit for an additional 12,000 acre feet of water from the OSE in 2004, for a total of 26,439 acre feet of water annually. The 10 years of work to get the new water rights permit include many legal hurdles of protest and a court settlement with the OSE. This OSE permit is intended to provide the City with sufficient pumping rights to meet projected water demand until 2040, when its population is expected to exceed 123,000.

Under the terms of the 2004 permit, the City must purchase 728 acre feet of water rights every five years over a period of 55 years to help offset the effects of pumping water out of the aquifer. That is a total acquisition of over 8,000 acre feet of water rights by the year 2060. One source of water rights is to purchase them from existing users, especially from agricultural users along the Rio Grande. The City programs funds for purchasing water rights into its Infrastructure Capital Improvements Plan (ICIP), but the process is slow and increasingly expensive due to the competition for the limited supply of water rights by the growing cities in this region. Currently, water rights can cost over $25,000 per acre foot and the transfer process can take a number of years to complete.

8.2.5.2 WATER CONSERVATION AND REUSE

As an alternative to increasing water supplies, water conservation has been successfully pursued by the City through public education programs, xeriscaping, low-flow plumbing fixtures, and improved manufacturing technology. The Utility Division of the City's Public Works Department estimates that the average daily water consumption in Rio Rancho is currently 218 gallons per day (gpd) for a single family home. The City's residential per capita water usage is declining due to conservation measures such as xeriscaping and low flow fixtures. The City is revising its long term water and wastewater system plans for the lower usage levels in order to produce significant savings in capital and operating costs.

The City currently replaces about 38% of the water pumped out of the aquifer as return flow credits by discharging a portion of the treated effluent into the Rio Grande. However, the 2001 resolution adopted by the Governing Body bars the City from continuing to discharge effluent into the river due to the cost of arsenic treatment. Therefore, the City has commissioned a number of studies on the feasibility and costs of a water management program that would achieve the goals of water conservation with no effluent discharges to the river. The most recent of these studies is the 2009 Effluent Reuse Management Plan by Wilson and Company.

Water reuse is considered a conservation measure because it helps save potable (drinking) water supplies by using treated effluent for irrigation and manufacturing. The City also plans to expand water reuse to include direct aquifer recharge through deep injection wells to conjunctively manage the municipal water resources. The ability to store water in the ground is considered superior to surface storage in reservoirs because there is no water loss caused by evaporation. Furthermore, water reuse in Rio Rancho does not depend on water supplies from rivers that are vulnerable to seasonal flows and drought.

The City currently has a reuse program for irrigating Vista Verde Cemetery and the Chamisa Hills Golf Course. Potential future reuse customers include subdivisions in Cabezon, Mariposa, and Loma Colorado, City parks and facilities, school facilities, and Intel. Wilson & Company has estimated that a fully functional water reuse program could save between 3,000 and 7,000 acre ft of water per year, enough water to supply several thousand residents.

However, the City lacks the necessary infrastructure in terms of wastewater treatment plants, storage facilities, and reuse lines for treated effluent to expand the scope of the program beyond its current irrigation uses. To help address this problem, the City's Infrastructure Capital Improvements Plan (ICIP) programmed over $59 million for reuse projects for the 2010 through 2014 period. These projects include a reuse pump station, storage tank, and lines, the expansion of waste-water treatment plan (WWTP) #6 to handle increased reuse demands, a fully instrumented infiltration project at WWTP #5 to monitor recharge of the underlying aquifer, and a subsurface injection project, or deep injection well, that would enable the City to pump reuse water directly into the aquifer.

It should be noted that both the surface infiltration and the subsurface injection projects are pilot projects designed to test the infrastructure and technologies for water reuse. A full scale reuse program will require additional investments that will be determined by the outcome of these pilot projects. The subsurface injection project is especially important to the development of a large scale reuse program because it will become the forerunner of a system of deep injection wells designed to pump treated effluent back into the aquifer for long term storage and reuse as potable (drinking) water. The treated effluent pumped into the aquifer will be of very high quality, and the well water pumped from the aquifer for the City's water system will be continuously monitored for quality to ensure compliance with the Safe Drinking Water Act.

8.2.6 Solid Waste and Landfills

Strategy G of Goal 1: Infrastructure in the Rio Rancho Strategic Plan calls for developing a plan for a recycling center, a single point-of-service for multiple special waste disposal services that would prevent illegal dumping. However, the City of Rio Rancho does not provide garbage collection services or operate a municipal landfill for the disposal of its solid waste. Instead, the City has a franchise agreement with solid waste management contractor (the contractor) for municipal garbage collection, recycling, and a landfill for solid waste disposal.

The contractor operates a fleet of 18 trucks designed for solid waste pick up and recycling, ranging from 4 tons to 10 tons in size, which provide service coverage to the entire City. In addition to its regular garbage collection services, the contractor picks up and disposes of bulk items such as old furniture and appliances, residential yard waste collections to dispose of green waste and yard trimmings, on a monthly basis for a fee, and it conducts monthly. WM also operates a single stream curbside recycling program for paper, cardboard, plastics (but not plastic bags), and steel and aluminum cans and containers. However, the contractor does not recycle glass yet.

The Keep Rio Rancho Beautiful (KRRB) program operated by the City's Parks and Recreation Department promotes recycling and clean-up campaigns in cooperation with the contractor. KRRB also coordinates with other private sector firms and public agencies in recycling and waste disposal of items not accepted by the contractor. Household hazardous waste items such as paints, electronics, medical wastes, fertilizers, and pesticides will not be accepted into the landfill. KRRB holds three household hazardous waste disposal collections per year in April, June and October as a free service for Rio Rancho residents.

The landfill is the contractor's base of operations, and is located at Northern Blvd. and 33rd St. It covers 100 acres and has a permit from the New Mexico Environment Department (NMED) to operate until 2018. The contractor plans to open a new landfill when the current facility is full, or utilize a transfer station to ship Rio Rancho waste to another facility outside of the City. The landfill complies with all applicable federal and state environmental regulations, as well as City ordinances. For example, in 2007 the contractor constructed six drainage ponds along the northern boundary of the landfill to capture storm water run-off.

The volume of solid waste that is deposited at the landfill averages 800 to 1,000 tons per day. In FY 2009, the contractor collected almost 36,300 tons of solid waste from residential customers in Rio Rancho, over 10,500 tons from commercial customers, and over 16,350 tons from construction sites, for a total volume of over 63,000 tons of solid waste. The total volume of recycled materials collected during that year was 4,263 tons. WM disposes of industrial waste that is permitted by the NMED, but it does not accept hazardous waste or untreated medical waste.

In addition to the WM landfill, Sandoval County also operates a landfill in Rio Rancho.

The Sandoval County Landfill (SCLF) was started in 1970, over 10 years before the City of Rio Rancho was incorporated. It is located northeast of Idalia and Iris roads, and currently covers over 120 acres. The existing landfill cells are expected to be operational for another 8 to 10 years. The county is in the process of acquiring an additional 63 acres of land along the northwest boundary of the landfill as part of an expansion project that will enable the landfill to continue operations for 12 to 15 years. The landfill was registered in 1989 and first permitted by the New Mexico Environment Department in 1998. The landfill applied for a new expansion permit in 2004, and it was granted a special permit in 2005 to accept petroleum contaminated soils. The landfill permit will expire in 2025, at which point the County will probably close this site and move to a new landfill.

Currently, the landfill accepts about 250 to 300 tons per day of waste per day, mostly from construction and demolition debris. However, the County does not provide waste collection services to City residents. There are several private haulers operating in Sandoval County, including the contractor, which provide trash collection services to residences and businesses. Instead, it provides a series of waste collection convenience centers to Sandoval County residents at the landfill site, Cuba, Canon, and Pena Blanca. In addition to these convenience centers, the County also operates recycling centers at the landfill, Jemez Valley, Placitas, and Corrales.

The landfill is able to recycle old cardboard, metals, green waste, and electronics at the convenience station via drop off. It also has the only in vessel composting facility in the state, which produces 10 tons of compost per day. Phase II expansion of the composting facility will consist of 16 digesters, 4 bio-filters, and a conveyor to load the digesters, which will produce 40 tons of compost per day when fully operational. The expanded facility will be able to accept waste water sludge and possibly food scraps.

The annual solid waste generation rate for the County population is approximately one ton per capita. With the projected 2010 County population expected to exceed 126,000, this means that the Waste Management and County landfills will need to dispose of over 126,000 tons of solid waste. However, in 2006, the total tonnage of solid waste delivered to the County landfill was 20,470 tons, compared to an estimated County population of over 111,000. In other words, less than 15% of the total solid waste generated by County residents was delivered to the landfill.

An analysis of the composition of the existing landfill contents in 2007 showed that out of an estimated 220,000 tons of waste, about 12% was ordinary municipal solid waste, compared to over 71% construction and demolition debris. The remainder was composed of yard waste, clean fill, and other waste. Special waste handling beyond simple dumping is required for several categories of solid waste. The County landfill is able to provide a wide range of waste disposal services that include recycling, composting, special waste, scrap metal, and hazardous household waste.

Abandoned vehicles are hauled to salvage yards, asbestos is land filled as special waste, construction and demolition debris is land filled in a lined waste cell, wood and yard wastes are composted separately. Household hazardous waste and pesticides are taken to a household hazardous waste facility, white goods (old kitchen appliances) are recycled, and tires are accepted separately. In addition, used oil and batteries are accepted separately and collected by recyclers.

The County landfill is an enterprise fund that relies on gate receipts and recycling revenues to pay the cost of operations. The County has acquired a mobile heavy duty shredder capable of processing 30 to 40 tons per hour of construction and demolition debris and wood products for composting. It will also be capable of reducing the

volume of bulk items in order to extend the useful life of the landfill, and to help clear illegal dump sites in the County. The County is also finalizing the construction of the new entrance, scale house and scales, tipping floor, and composting facility at the current landfill.

The existing landfill will probably be near or at capacity by the time its permit expires in 2025, and it will not have any more room for future expansion after it completes its current expansion project. The County is in the process of acquiring a new landfill site near the Northwest Loop in the Rio Rancho Estates area west of the City for the future. The volume of solid waste generated by County residents is expected to exceed 162,000 tons per year by 2020 and 197,000 tons per year by 2030, and the County must be ready for it. There is also the possibility that Waste Management will co-locate its new landfill at the new County site, since their landfill is expected to close in 7 to 12 years.

8.2.7 Emergency Services

Strategy B under Goal 4 of the Strategic Plan calls for the creation of a plan to meet public safety facility needs. In fact, the City has programmed multiple capital projects for police, fire, and rescue services in its Infrastructure Capital Improvements Plan (ICIP), and it has developed strategic plans for both its police and fire departments. The problem has not been lack of community support for these projects, but lack of funding.

The City of Rio Rancho created a unified Department of Public Safety (DPS) in 1985, four years after the City incorporated in 1981. Prior to incorporation, Rio Rancho depended on Sandoval County for most of its emergency services. A volunteer fire department was established in 1965, but by 1985 the volume of calls exceeded the capacity of the volunteer firefighters to handle them. The incorporation and continuing growth of the City also required the establishment of a municipal police department, instead of relying on the Sandoval County Sherriff's Office for law enforcement.

DPS performed police, fire, and rescue functions for the City for over 20 years, until the growth of the City and need for specialization resulted in the creation of separate police and fire departments in 2007. In 2009, the combined expenditures for police, fire, and rescue services consumed almost half of the City's General Fund revenue.

The newly created departments developed strategic plans in 2008 that identified their future staffing and facility needs. In addition, the strategic plans identified a number of new police and fire facilities that would be needed to accommodate the future growth of the City. As previously noted, these facility needs were programmed into the City's ICIP.

8.2.7.1 Police Department

In FY 2010, the Rio Rancho Police Department had an annual operating budget of over $16.2 million with an authorized staff of 213. As such, the Police Department uses almost one third of the City's General Fund revenues. It also contained eight (8) capital projects with a cost of more than $10.8 million programmed into the FY 2010-15 ICIP. These projects include two police substations for the northern and southern portions of the City, a multi-purpose training complex with driving and firing ranges, a new SWAT vehicle, and a communications center expansion with $3 million of new equipment.

Police headquarters is located on Quantum Road, which it shares with the Municipal Court. It also has an animal control facility on Northern Boulevard. Despite the budget and staffing limitations on the Police Department, the City enjoys one of the lowest crime rates in the state. The department operates a successful community policing program through its law enforcement division, with an 86% solution rate for violent crimes. The department also administers the City's code enforcement, animal control, and emergency communications programs.

8.2.7.2 Fire & Rescue Department

In FY 2010, the Fire & Rescue Department had an annual operating budget of over $8.5 million with an authorized staff of 102, which included two positions for the Emergency Management program. These expenditures represent about 16% of the City's General Fund revenues. The department also had eight capital projects in the FY 2010-15 with a cost of more than $22.8 million. These projects included a new fire-rescue headquarters located near the new Cleveland High School, a new fire station in Vista Hills with four additional stations located around the City, and over $7.6 million of fire engines, fire-fighting and emergency medical services vehicles and equipment.

The department currently operates out of five fire stations around the City, with the main station located on Southern Boulevard. In 2009, it had an average response time of 6.24 minutes to priority 1 fire calls, compared to 9.8 minutes in 2007 when the department was first created. This improvement in response time was achieved while reducing the average operating expenditure per call from $118.65 in FY 2008 to $103.55 in 2009. The department also provides fire prevention services through its fire inspection program, and emergency medical services through its paramedics and fleet of seven ambulances.

The Emergency Management Program is also an important component of the City's emergency services. It was created in response to the Federal Emergency Management Agency (FEMA) requirements for local governments. It is responsible for preparing the City's for an emergency situation and coordinating its response. The two primary categories of threats are natural disasters and terrorist attacks. In the event of an emergency, key members of the City staff would operate out of the Emergency Operations Center (EOC) at the main fire station.

The chief function of the program is to prepare and periodically update the City's Emergency Management Basic Plan, which consists of a detailed operations manual for City departments and staff in the event of an emergency. It also provides emergency management training courses for City staff. The police, fire and emergency medical services personnel are considered first responders in the event of an emergency, but the Emergency Management Program also requires staff from other departments for the EOC.

8.2.8 FRANCHISED UTILITIES

8.2.8.1 ELECTRICITY AND NATURAL GAS

The Public Service Company of New Mexico (PNM) serves over 1.3 million residential and business customers in New Mexico and wholesale power customers throughout the Southwest. PNM obtains power from eight generator plants and transmits it over 17,400 miles of power lines throughout the state. About 16% of these power lines are high voltage transmission lines, which usually carry electricity at either 115 or 345 kilovolts. These transmission lines bring electricity from power plants to a network of substations inside cities and towns, where the high voltage is reduced by transformers and carried by distribution lines to residences and businesses.

PNM is promoting distributed generation, in which customer or utility owned electrical generation is used on-site as an alternative to using electricity from the power grid. It allows at least part of the electricity used by the customer or utility to be generated by renewable resources such as solar and wind power. These alternative energy sources are more expensive than conventional energy sources, such as the coal-fired or nuclear power plants, which are used by commercial utilities to generate electricity.

Most alternative energy users prefer to generate only a portion of the electricity that they use. Distributed generation gives the users the option of purchasing the electricity that they need from the utility and either selling back or receiving a credit for the excess electricity that they generate during periods of low usage. PNM has developed standards for connecting both small and large scale alternative generator facilities for distributed generation. As part of its distributed generation program, PNM has received a federal grant to develop a "smart grid" demonstration project for a photovoltaic system (solar powered generator) and battery for storing solar generated electricity.

The City of Rio Rancho has franchise agreements with the major non-City utility providers for the use of the City's right-of-way and public utility easements. These franchise fees are an important source of revenue for the City. In FY 2010, franchise fees contributed over $3.2 million to the General Fund of the City budget.

PNM is the franchised electricity utility for the City and most of the State of New Mexico. As of 2009, PNM served approximately 2,250 commercial customers in Rio Rancho and 33,250 residential customers in the City (Map PF-3 PNM Electrical Lines in Rio Rancho). The commercial customer base corresponds to the number of businesses served by PNM in the City, while the residential customer base corresponds to the number of households. It should be noted that the overwhelming majority of residential and business customers in the City obtain their electrical power from the PNM utility grid, not alternative sources.

While many Rio Rancho residences are connected to the City's water and sewer utilities, virtually all of its residences are connected to the PNM electrical grid. PNM residential connections are usually made through underground conduits in accordance with the City's subdivision ordinance. By contrast, high voltage transmission lines are routed above ground on utility poles, or in some cases towers, along major transportation corridors and platted utility easements. PNM maintains a system of electrical substations inside the City for its electrical grid, including a switching yard for high voltage lines.

Prior to 2008, PNM was the principal provider of both natural gas and electrical utilities in the State of New Mexico. However, in 2008, PNM sold its natural gas operations to the newly formed New Mexico Gas Company (NMGC), which assumed the role of the principle natural gas utility in the state and provider of natural gas to Rio Rancho. Most of the natural gas consumed is for residential heating, not manufacturing purposes. Not surprisingly, the customer base for NMGC in Rio Rancho closely resembles that of PNM. NMGC serves 30,623

residential customers (households), 861 commercial customers, and 107 transportation customers for a total of 31,591 customers (Map PF-4 NMGC Gas Lines in Rio Rancho).

8.2.8.2 Communications Utilities

Qwest, the successor company to US West, has a franchise agreement to provide land line telephone service to the City of Rio Rancho. Most of the Qwest telephone lines are routed above ground on telephone and utility poles along transportation corridors and public utility easements. Qwest provides long distance telephone, cable television and Internet service to its customers on a subscription basis. Qwest also provides land line connections to telecommunications (cell) towers in the City, so that calls from mobile cell phones can be efficiently transferred to telephones connected to land lines.

In addition to Qwest, most of the major telecommunications carriers such as Sprint, Verizon, Cricket, T-Mobile and AT&T, provide mobile cell phone service in Rio Rancho. These carriers are not franchised utilities in the traditional sense of having a contractual agreement with the City to operate inside the public right-of-way, but they are permitted by the City under the terms of the Wireless Telecommunications Facilities Ordinance.

An increasing number of carriers offer wireless Internet in addition to telephone service. However, the boundaries between various types of telephone, Internet, and cable television services are becoming blurred as digital technology advances. As a result, more companies are able to offer an expanding range of services to their customers on an increasingly competitive basis. Cable One, which has a franchise agreement with the City, offers cable television, telephone and Internet services to its customers. Cable One estimates that it can potentially access 32,000 homes and businesses in Rio Rancho (Map PF-5 Cable One Infrastructure in Rio Rancho).

8.3. Infrastructure and Capital Improvements

The infrastructure and capital improvements section is intended to provide a brief overview of the projected capital improvements specified in the Infrastructure Capital Improvement Plan. Due to the length of this document, the summary sheets of the budgeted capital improvements will be shown as an appendix to this element.

8.4. Implementation

8.4.1 Discussion

Public facilities are the heart of the services a city government provides to its tax paying citizens because they are one of the most visible services a city provides to its constituents. To that end, it is important for the City of Rio Rancho to provide public facilities that adequately meet the needs of current and future City residents. Additionally, it is important for the City of Rio Rancho to provide public facilities that not only meet the current needs of the city, but are planned to meet future while operating its public facilities in a fiscally responsible manner. Therefore, the goals, policies and actions necessary to implement the Public Facilities Element are designed to balance service needs of city residents with fiscal restraint and accountability.

8.4.2 Goals

Goal PF-1: Provide a broad range of services and public facilities that meet the needs of current and future City residents, e.g. libraries, water supply, water and sewer lines, etc.

Goal PF-2: Ensure non-city-operated utility facilities (Cable One, PNM, NM Gas, Qwest) develop, in cooperation with the City of Rio Rancho, level-of- service (LOS), operating criteria, performance standards, or other forms of standardized measurement to ensure facilities like electrical and gas lines, telecommunication lines and solid waste disposal are consistent with Rio Rancho's Strategic and Comprehensive Plans.

Goal PF-3: Provide public facilities that meet or exceeds constituents expectations.

Goal PF-4: Current demand on public facilities should not overburden City public facilities beyond what the City can reasonably provide for future demand.

Goal PF-5: Construct new public facilities to meet demands at least 10 years into the future.

Goal PF-6: Utilize fiscal resources efficiently and ensure that the Infrastructure Capital Improvement Plan correctly identifies and adequately funds necessary public facilities and resources.

8.4.3 POLICIES

Policy PF-1: Base public facilities needs on employment and population projections developed by the city in conjunction with MRCOG estimates.

Policy PF-2: Use adopted Level-of-Service (LOS), operating criteria, or performance standards to evaluate capital facilities needs.

Policy PF-3: Make land use recommendations based on the availability of adequate public facilities necessary to support a proposed land use.

Policy PF-4: Use the city's Infrastructure Capital Improvement Plan to prioritize the financing of capital facilities within projected funding capacities.

Policy PF-5: Ensure the city's post-disaster Response and Recovery Plan is structured and financed in a manner to provide services to facilitate recovery and reconstruction in the event of a disaster.

Policy PF-6: Identify water resources necessary to meet Rio Rancho's long-term growth needs.

Policy PF-7: Study the need for a solid waste management community convenience center.

8.4.4 ACTIONS

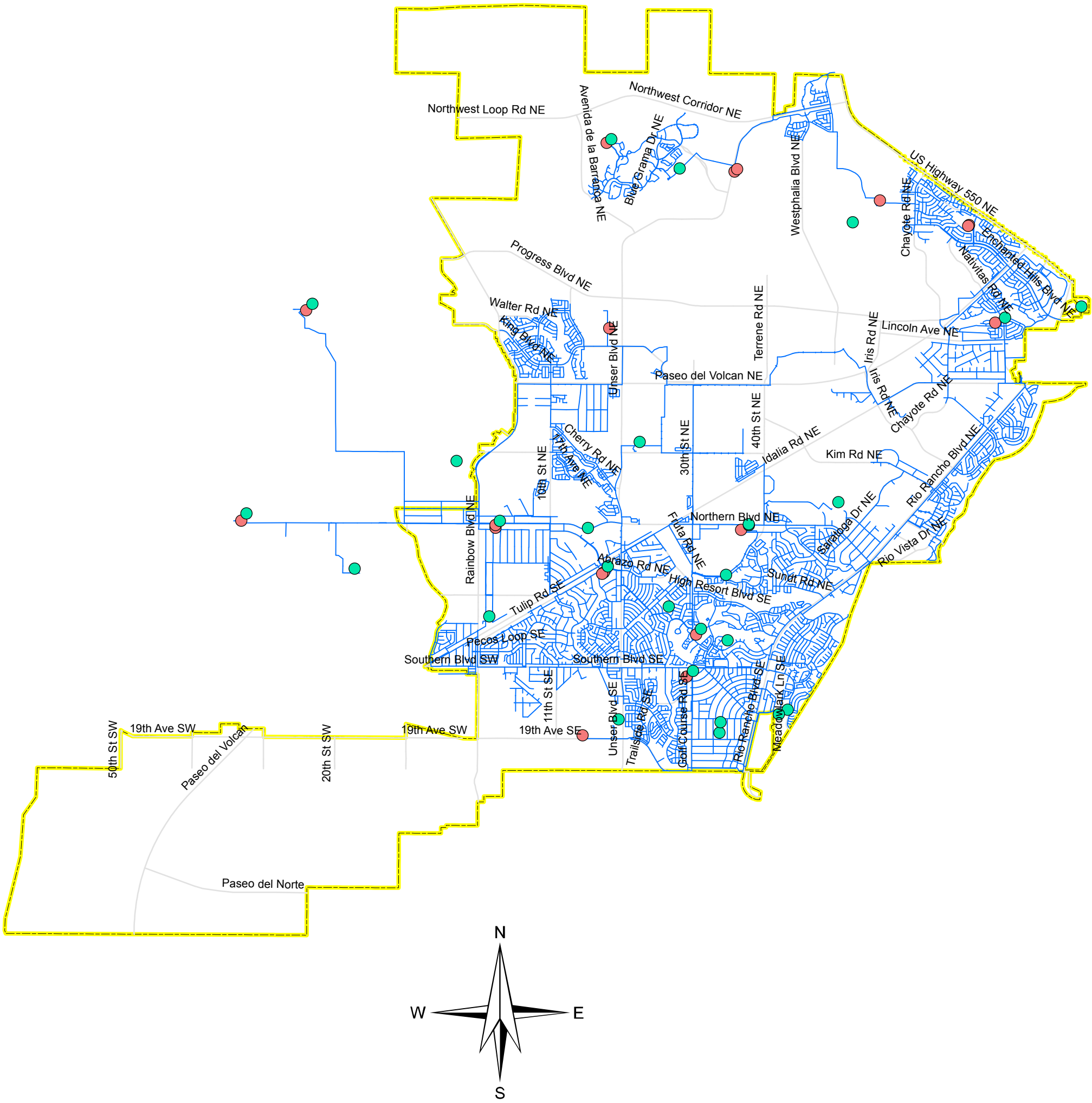
Action PF-1: Use the City's Infrastructure Capital Improvement Program to prioritize the financing of capital facilities within projected funding capacities.

Action PF-2: Reassess Rio Rancho's Land Use Plan and the city's impact fees on a regular basis to ensure that capital facilities needs, financing, and LOS are consistent.

Action PF-3: Adopt a City of Rio Rancho post-disaster Response and Recovery Plan that will structure the city's capability to provide services to facilitate recovery and reconstruction in the event of a disaster.

Action PF-4: Secure additional long-term water sources to meet the City's future water needs.

Action PF-5: Maintain a General Obligation bonding cycle capable of adequately funding the maintenance and expansion of the City's infrastructure.



LEGEND

- Well
- Water Tank
- Water Line
- Rio Rancho Major Roads
- Rio Rancho City Limit

2 1 0 2 4 6 8 MILES

MAP PF-1: RIO RANCHO WATER INFRASTRUCTURE

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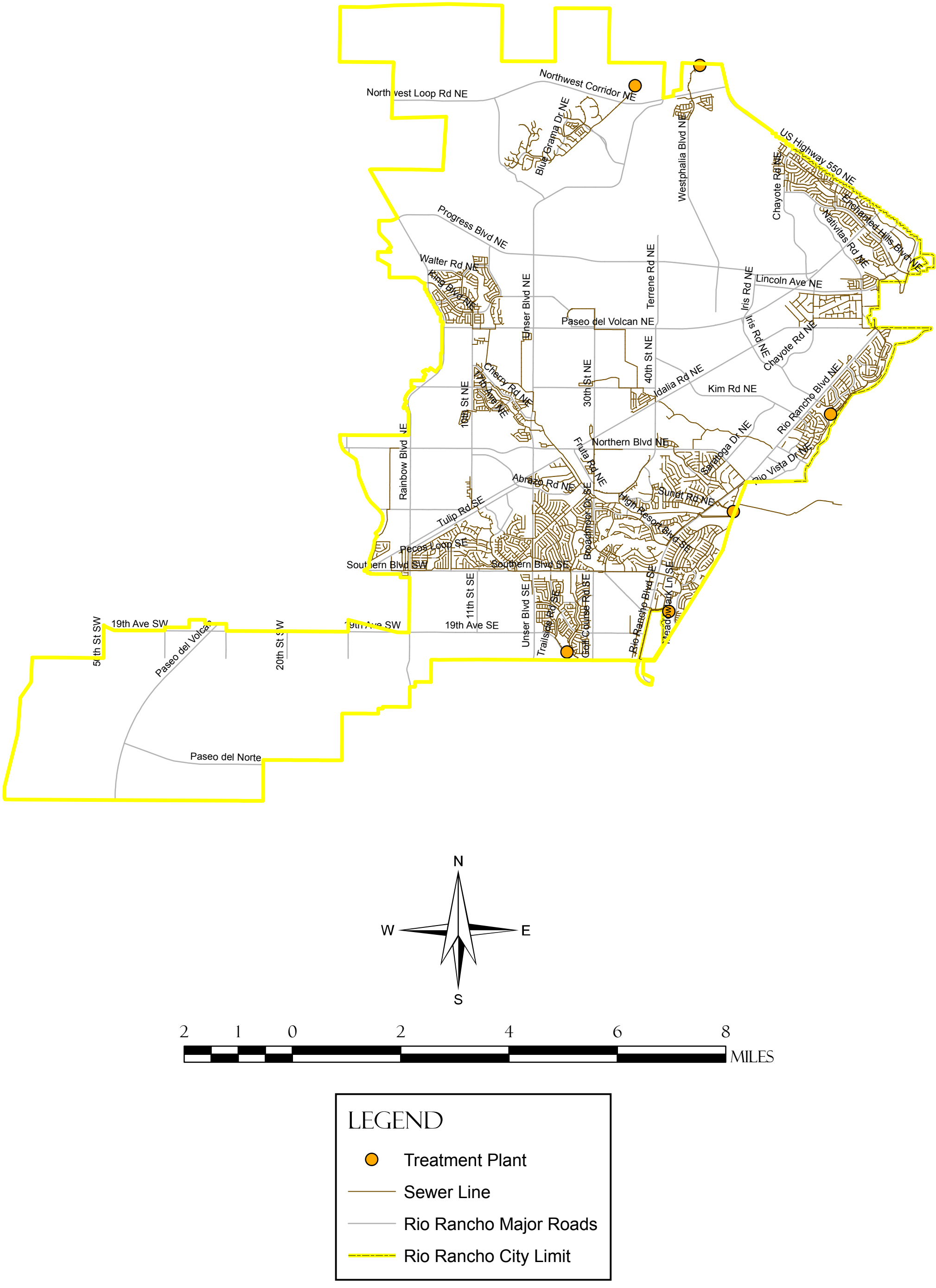

MAP PF-2 RIO RANCHO SANITARY SEWER INFRASTRUCTURE

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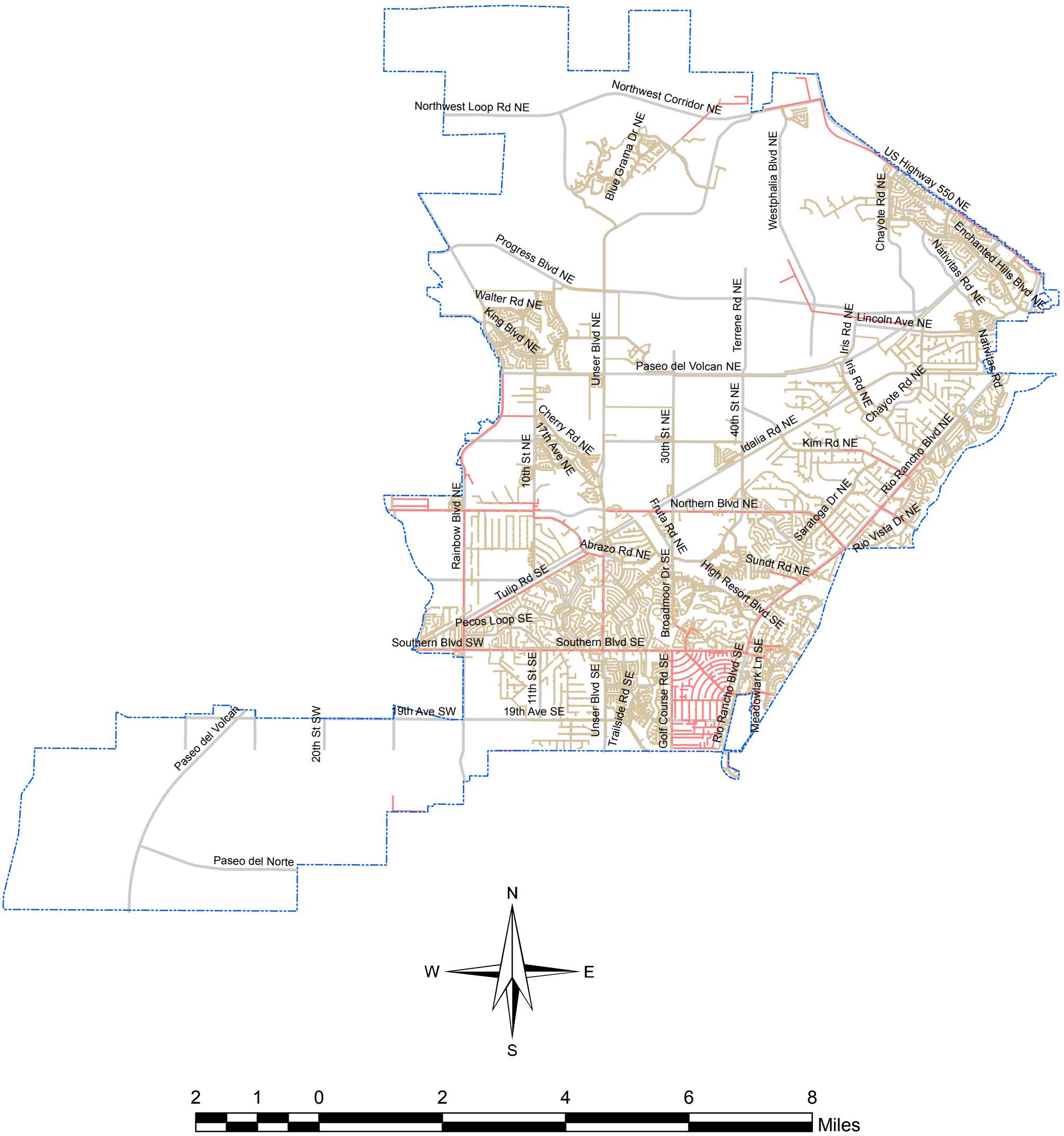

LEGEND

- Over Head
- Under Ground
- Rio Rancho City Limit
- Major Roads

MAP PF-3: RIO RANCHO ELECTRICAL GRID

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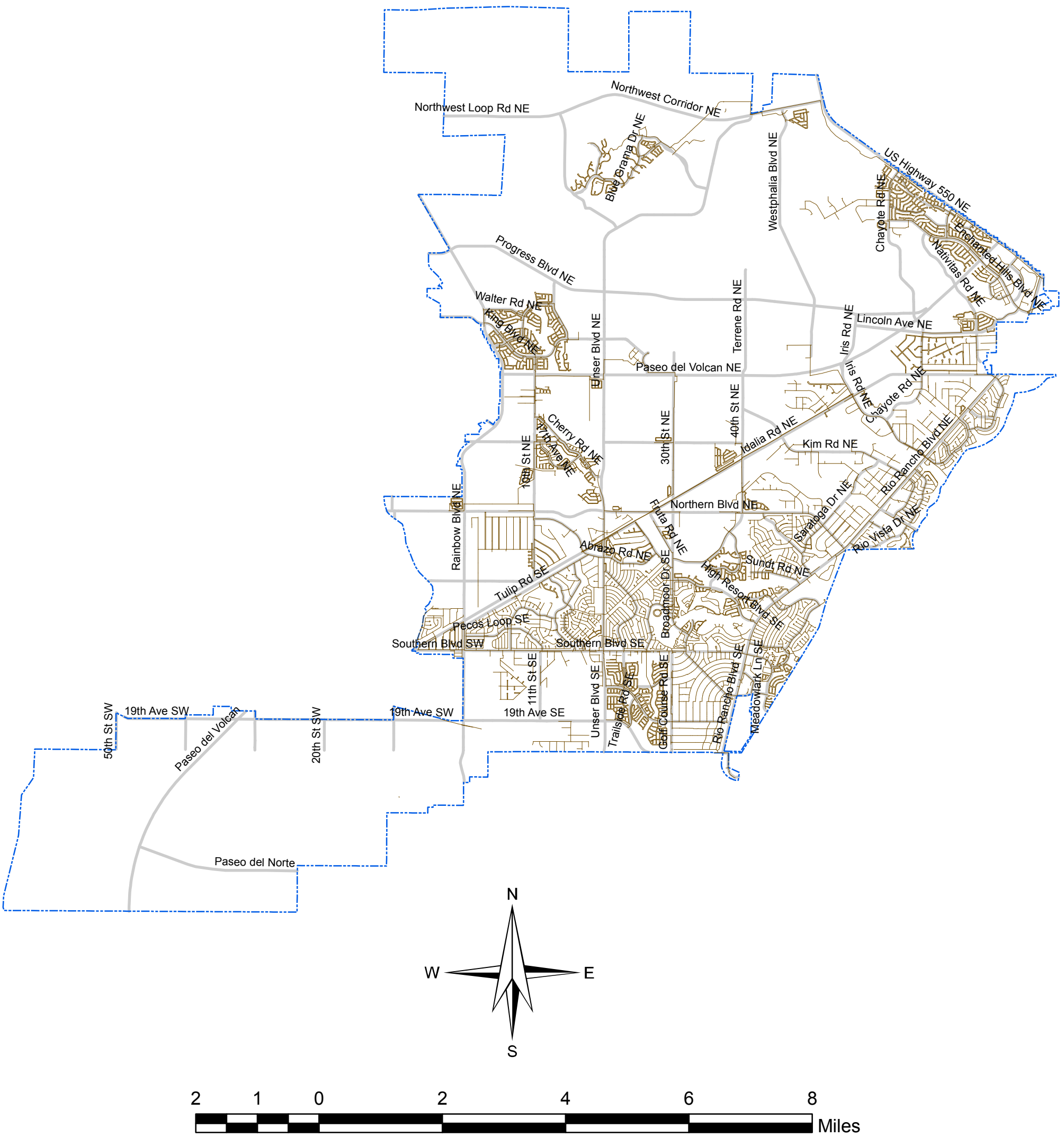

MAP PF-4: RIO RANCHO NATURAL GAS GRID

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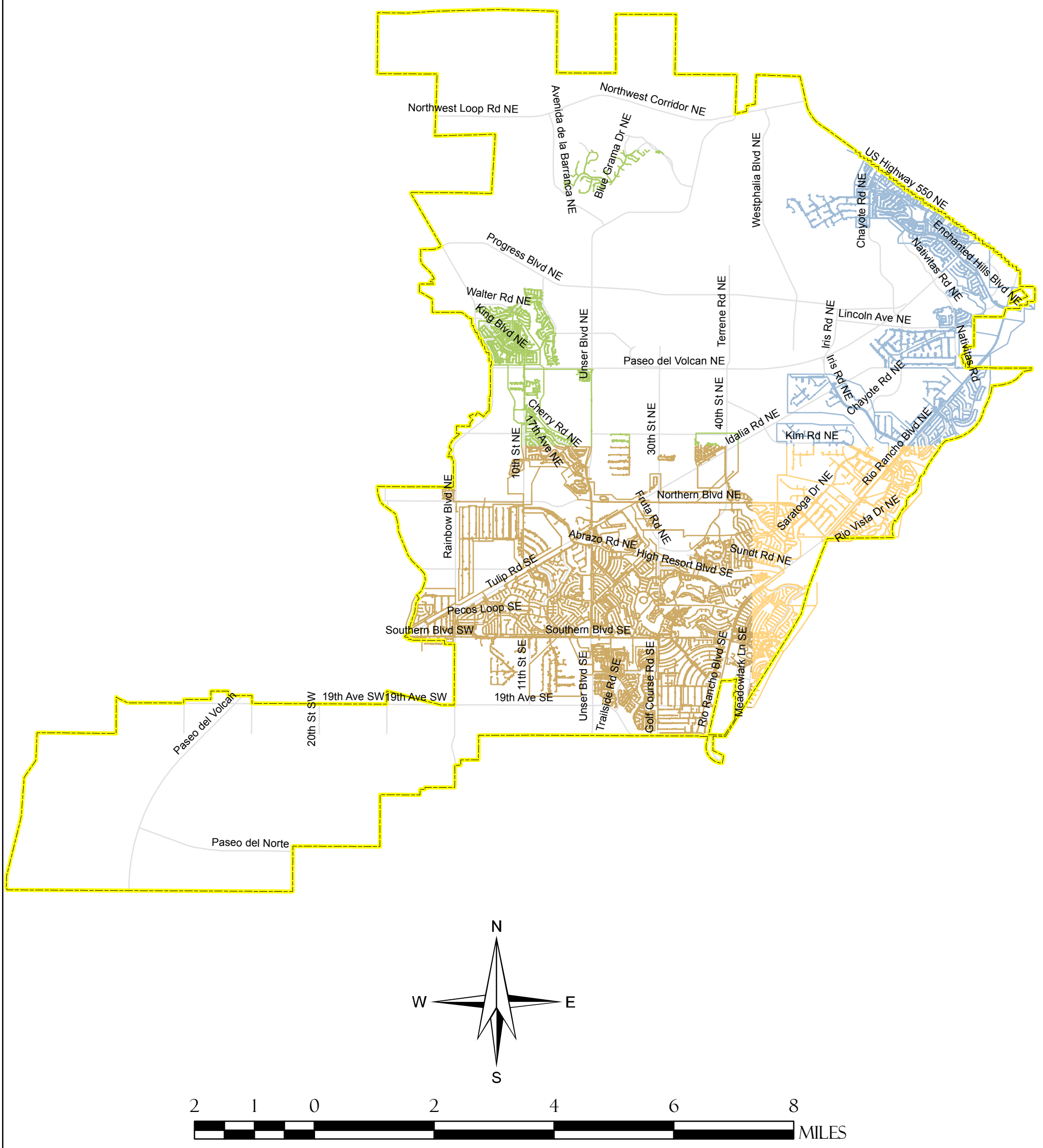

MAP PF-5: RIO RANCHO CABLE TELEVISION/INTERNET INFRASTRUCTURE

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