Santa Fe County, New Mexico

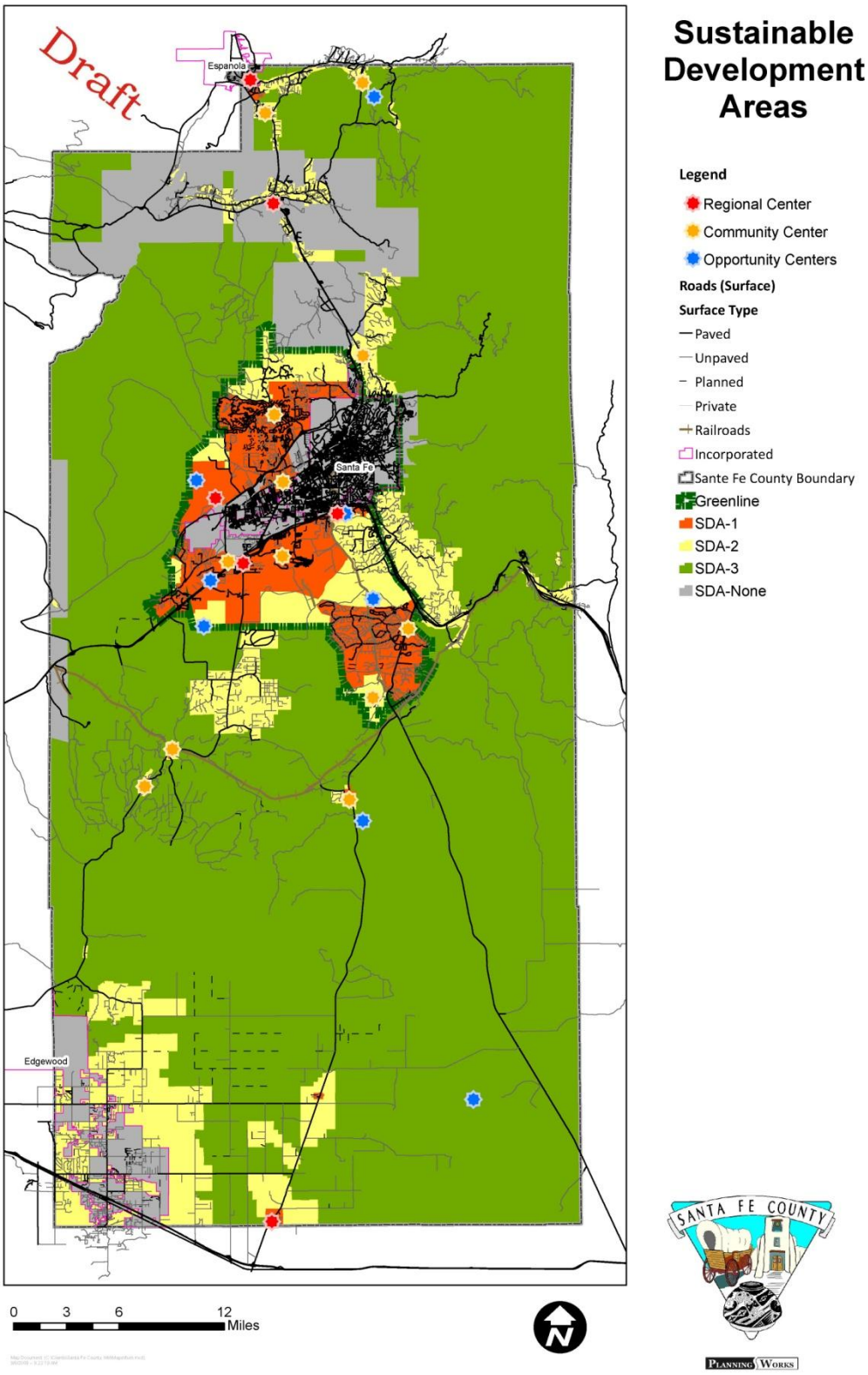
Sustainable Land Development Plan

Map Atlas

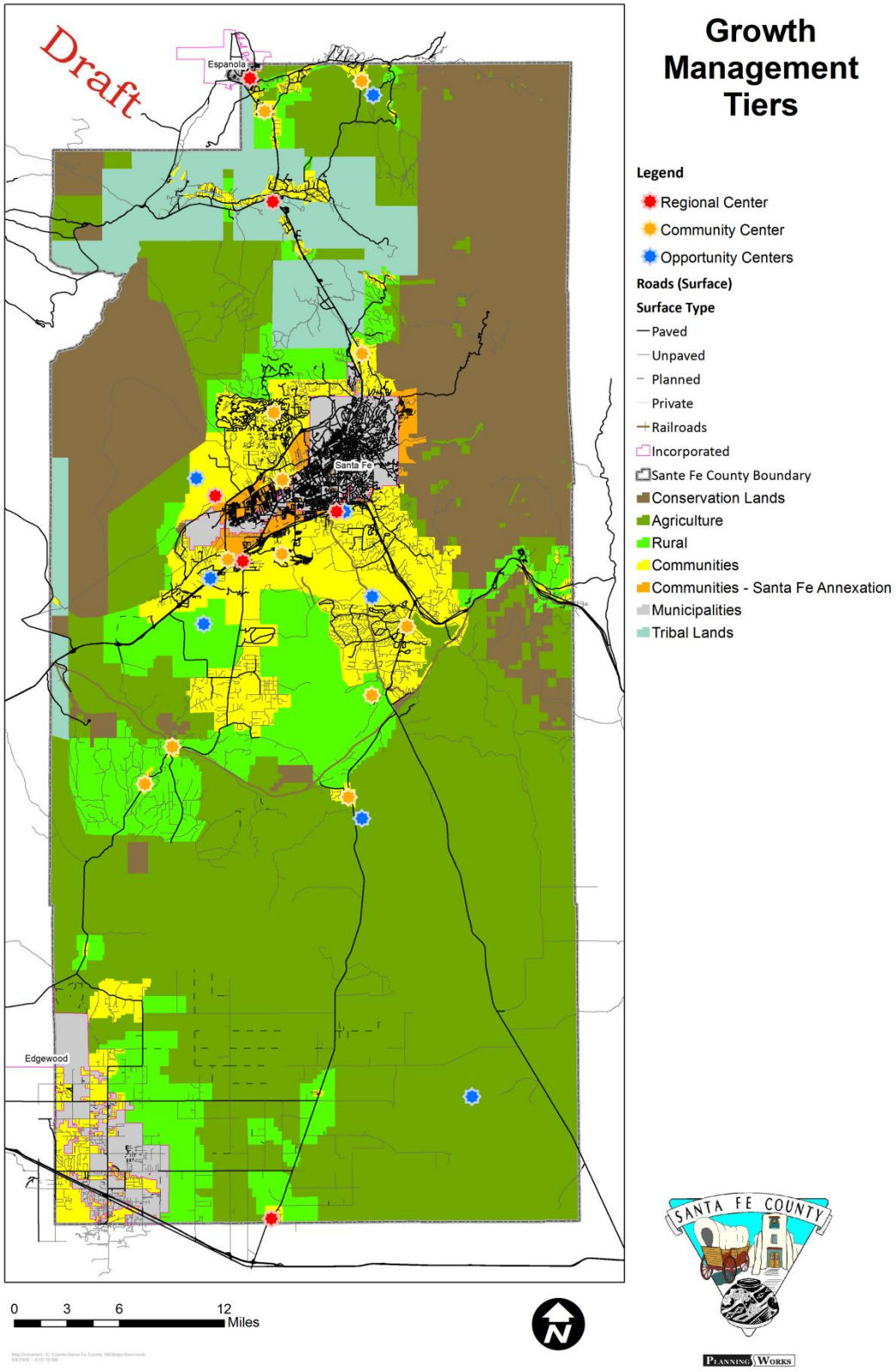
Public Review Draft
October 1, 2009

Planning Team:
Santa Fe County, New Mexico
Freilich & Popowitz, LLP
Planning Works, LLC
Rutgers University Center for Urban Policy and Research

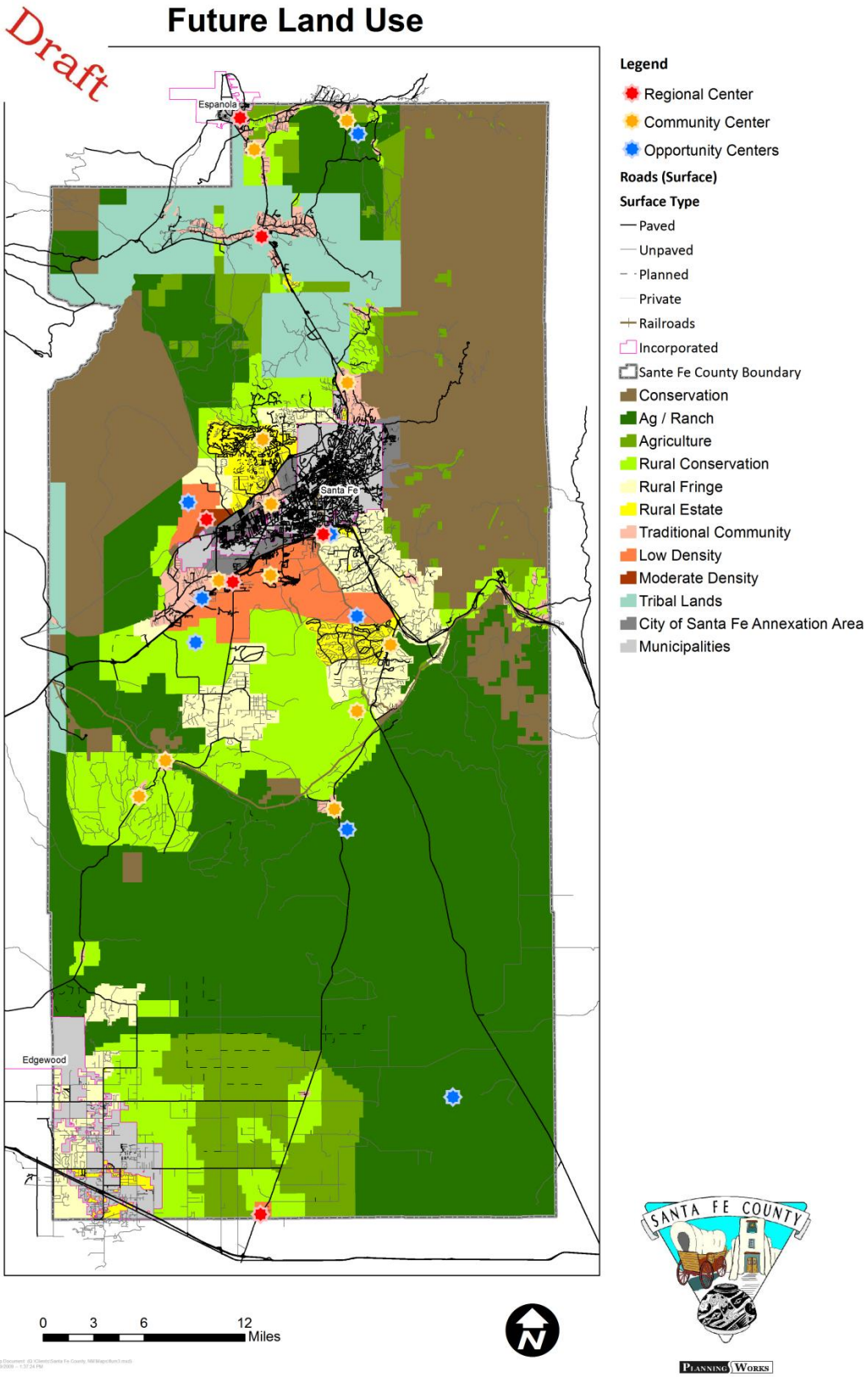
Map 1: Sustainable Development Areas



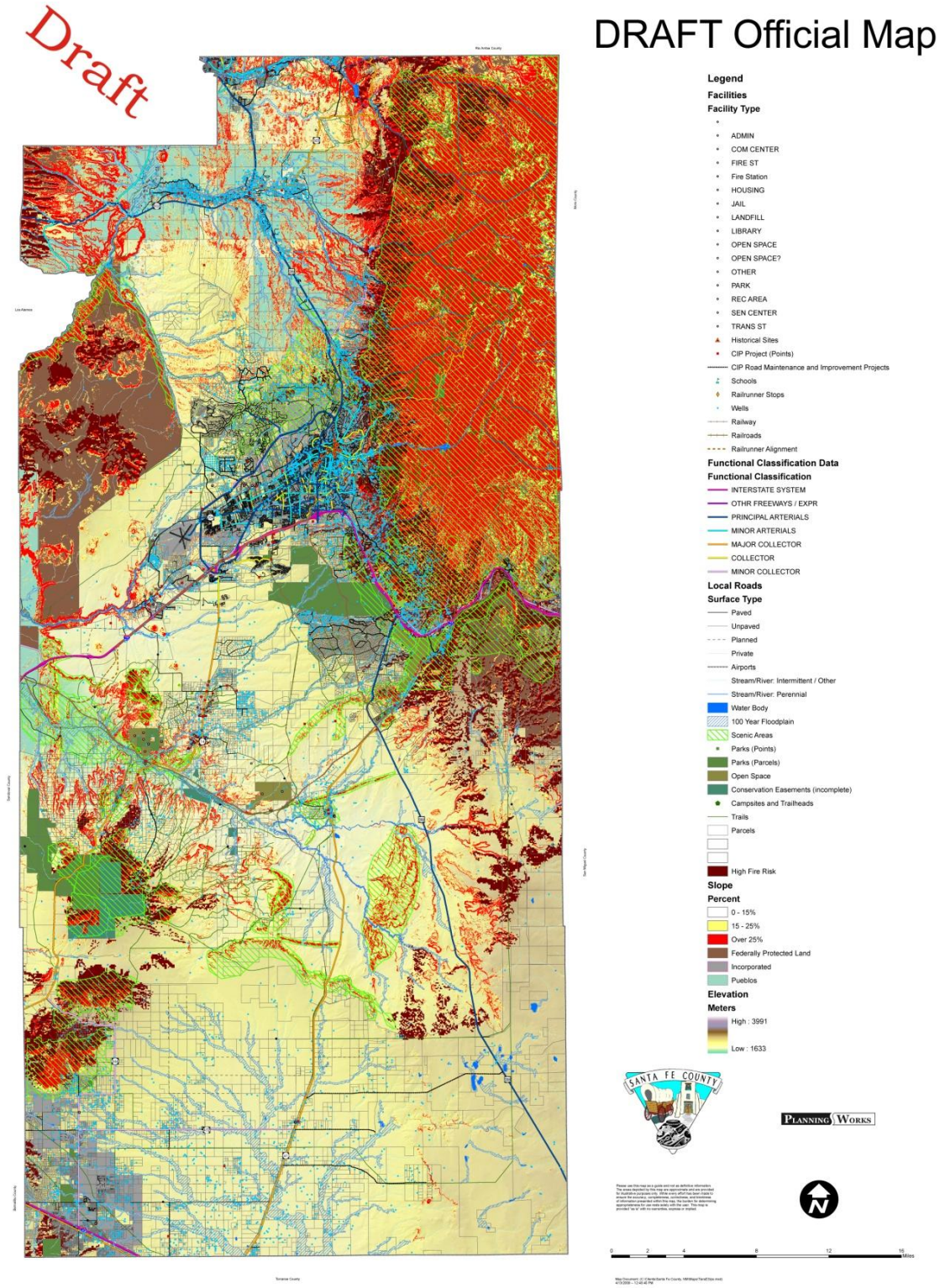
Map 2: Growth Tiers Map



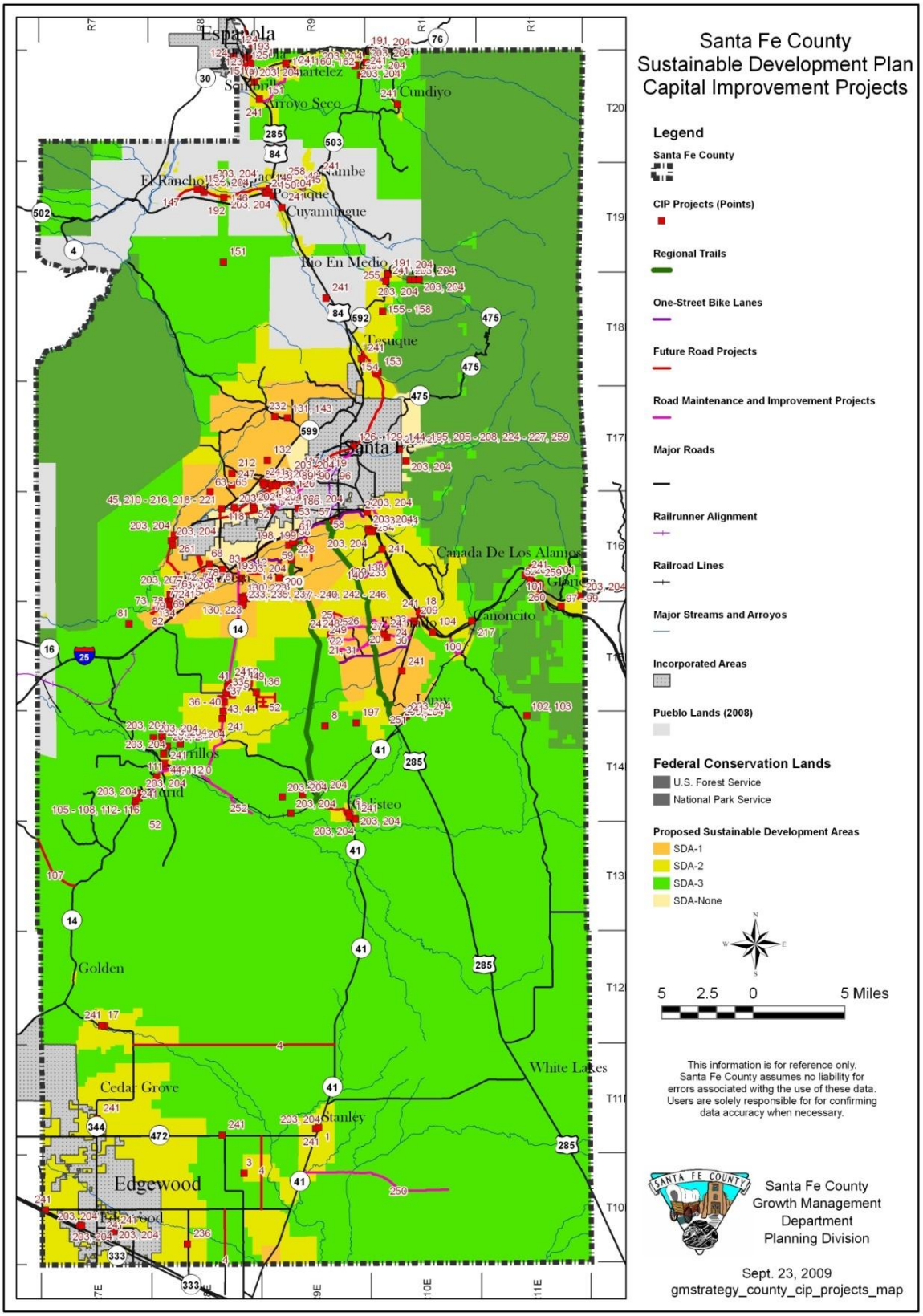
Map 3: Future Land Use Map



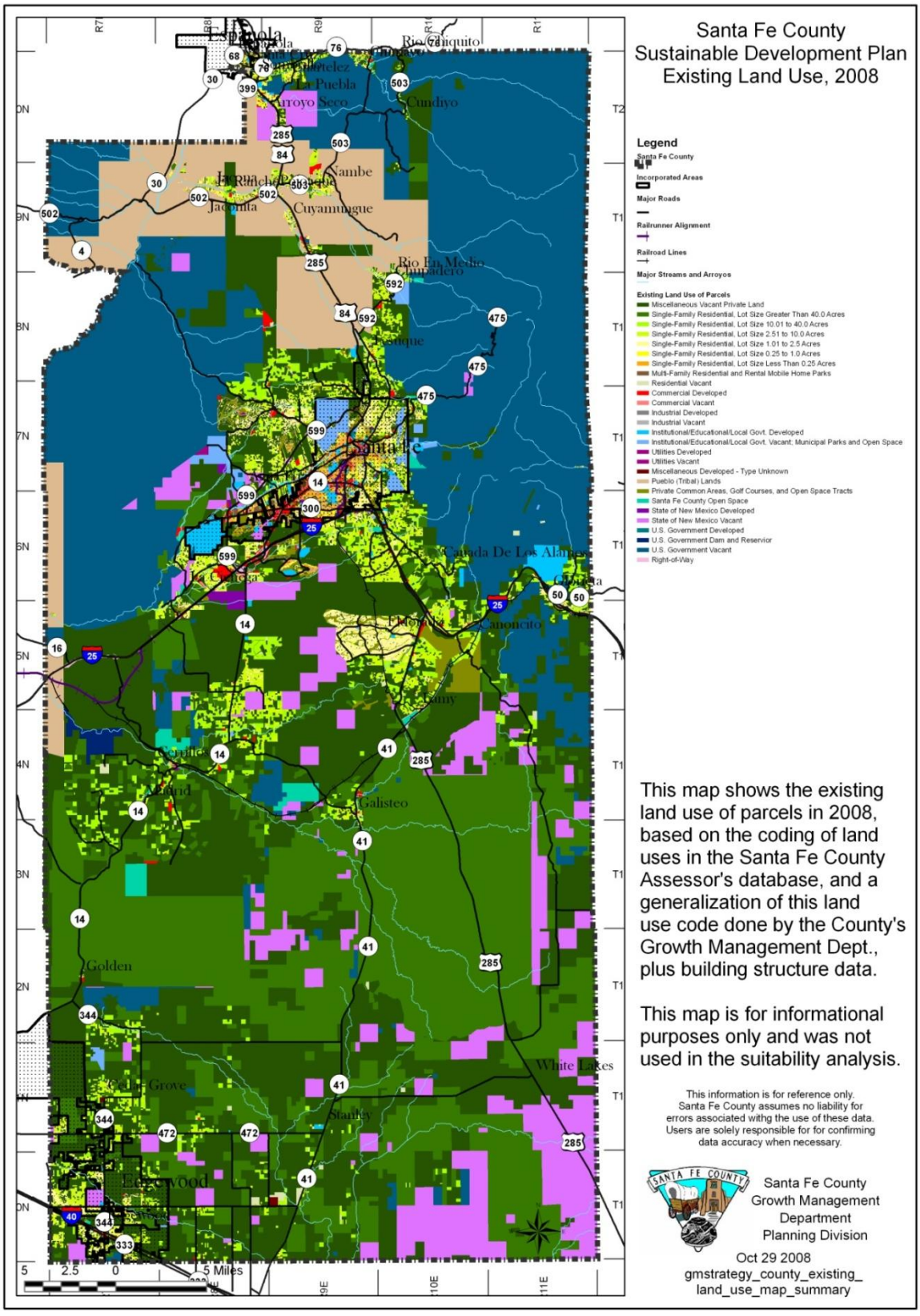
Map 4: Official Map



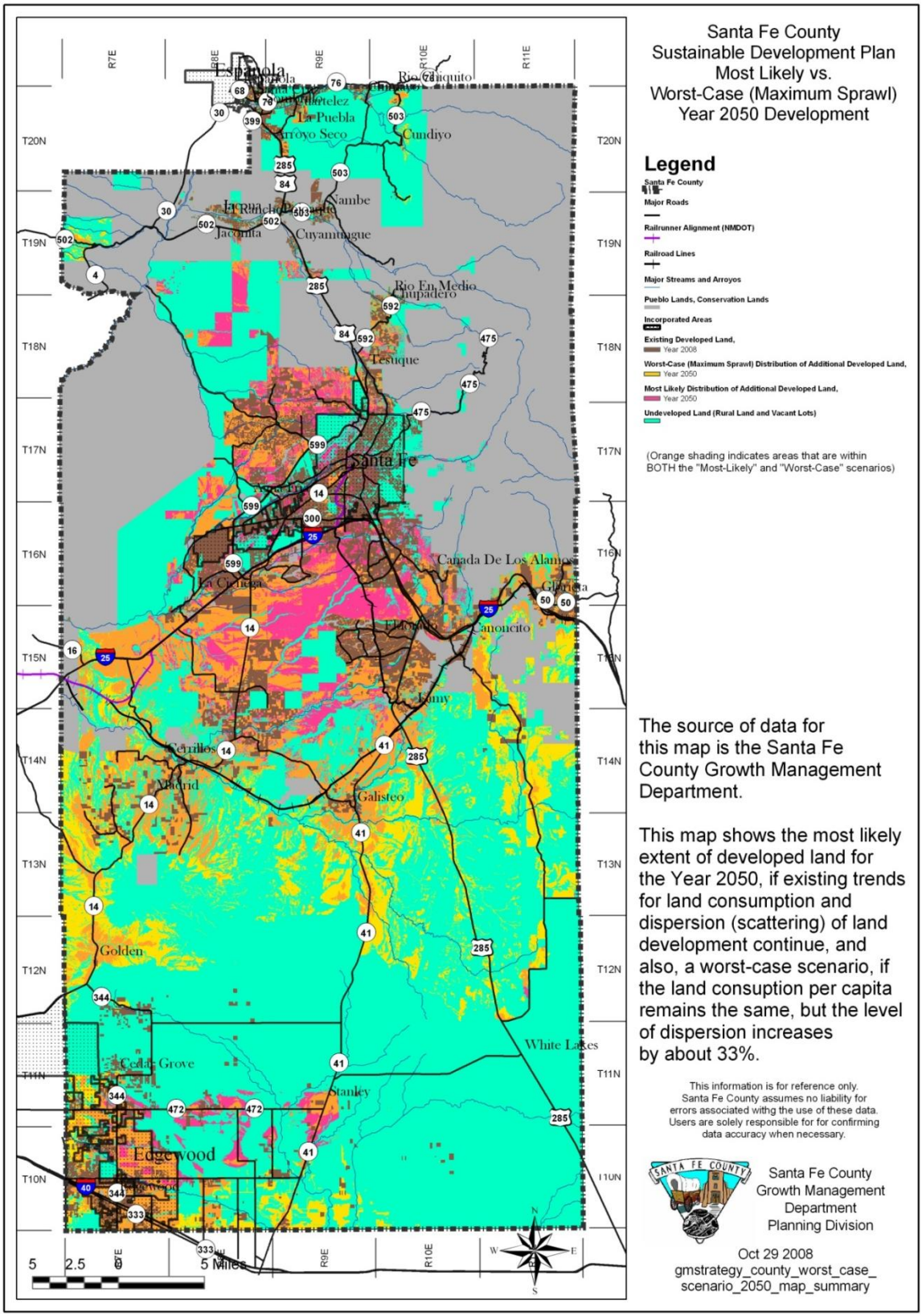
Map 5: Capital Improvements Projects



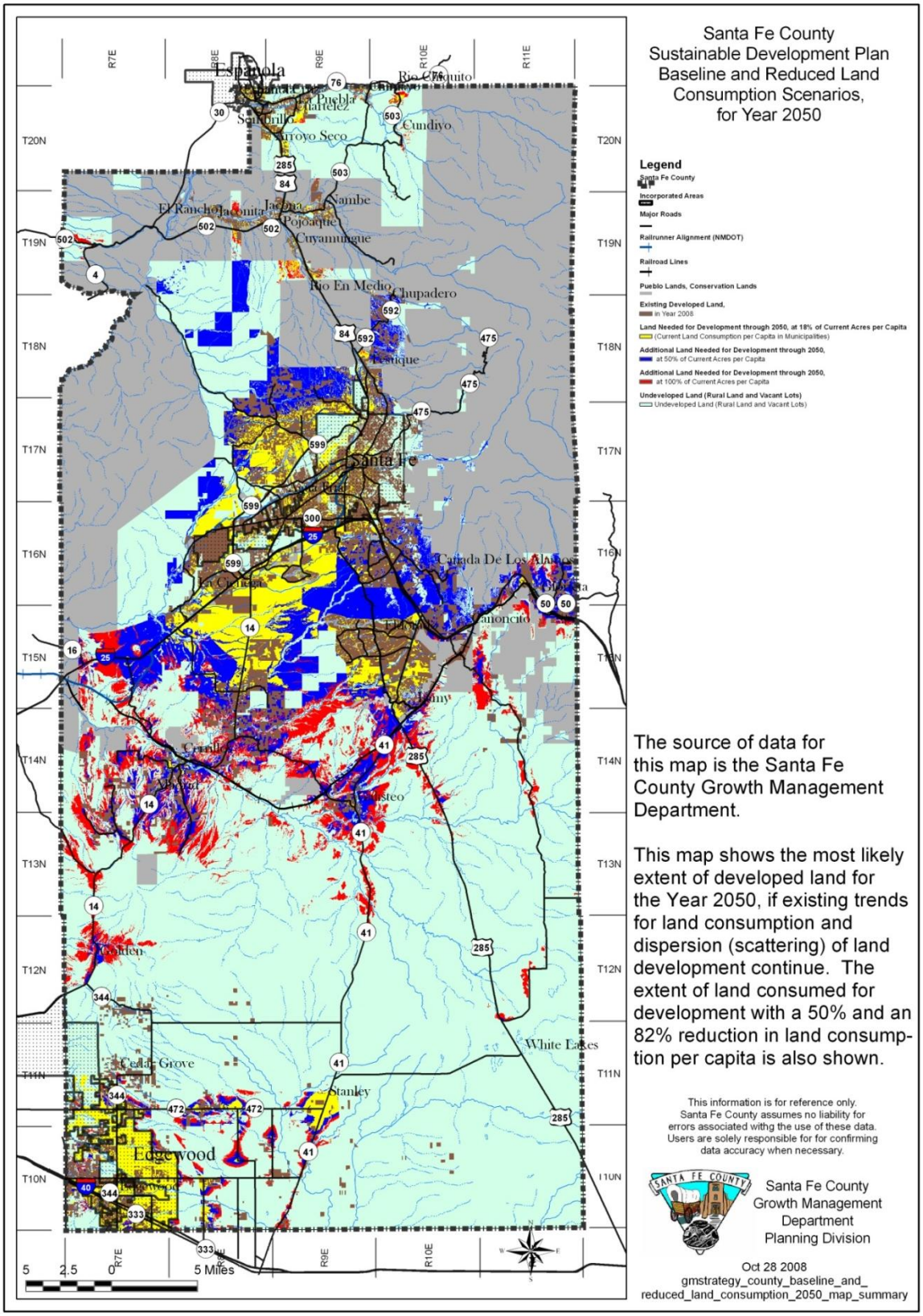
Map 6: Existing Land Use



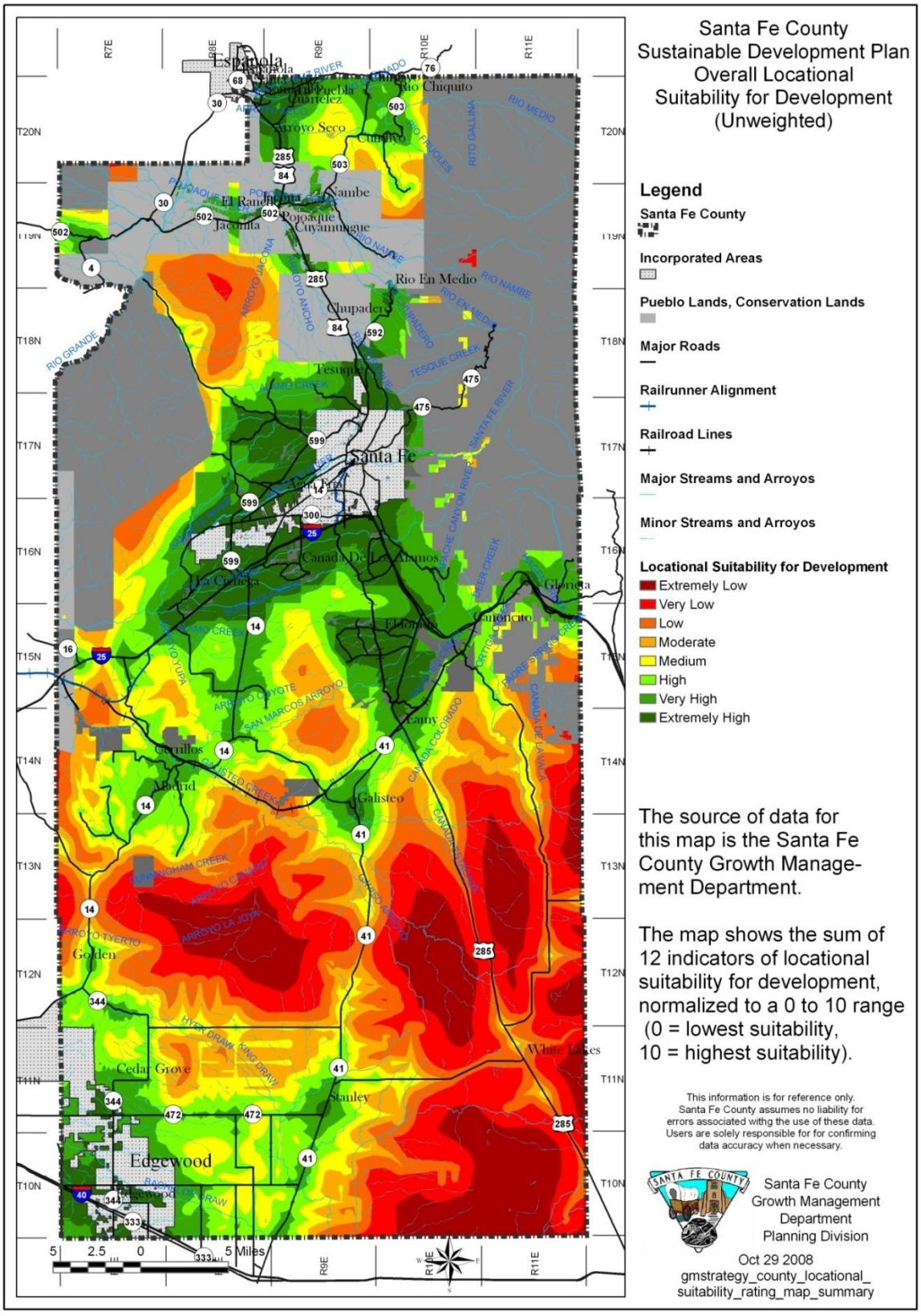
Map 7: Maximum Sprawl Scenario



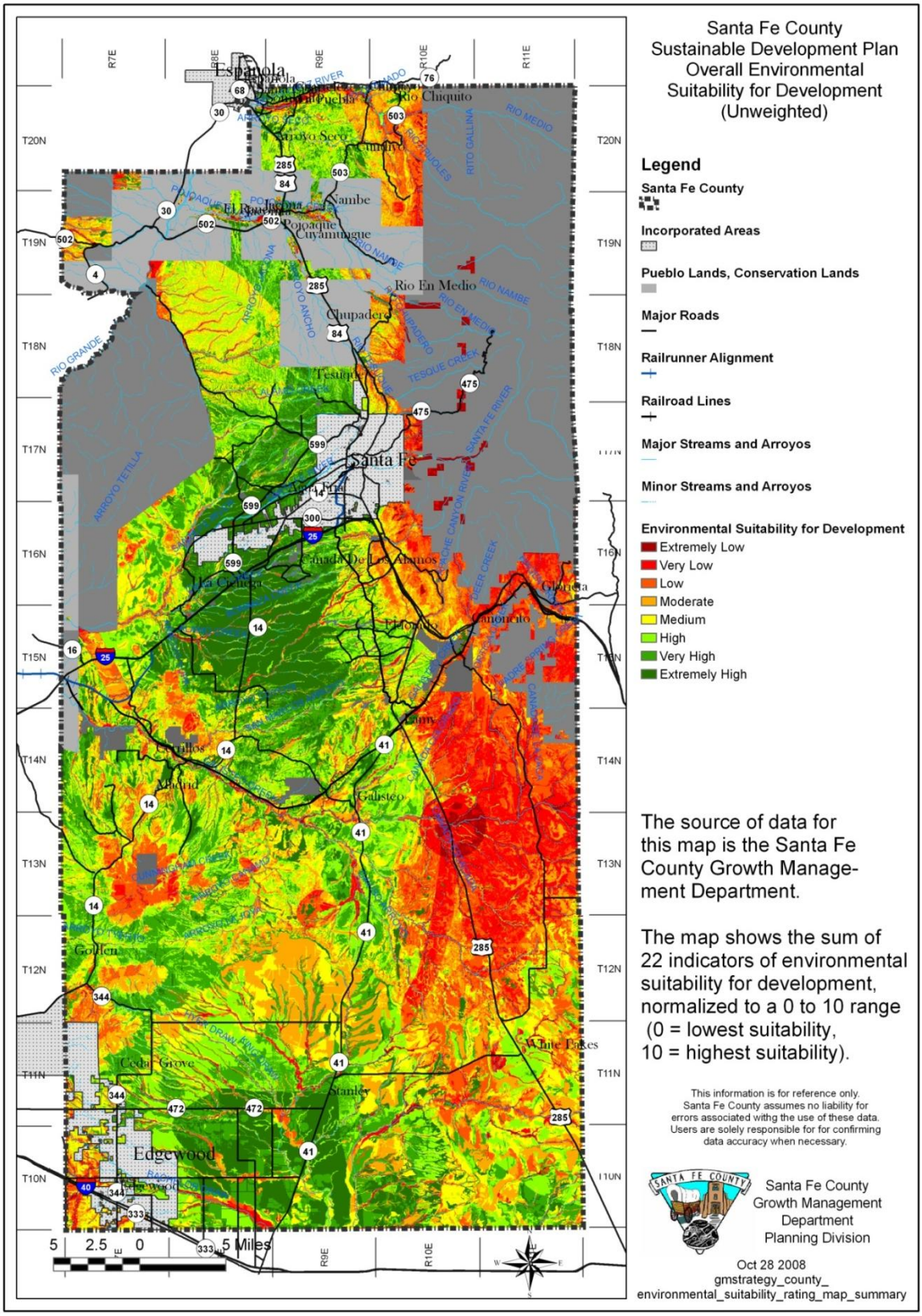
Map 8: Baseline and Reduced Land Consumption Scenario



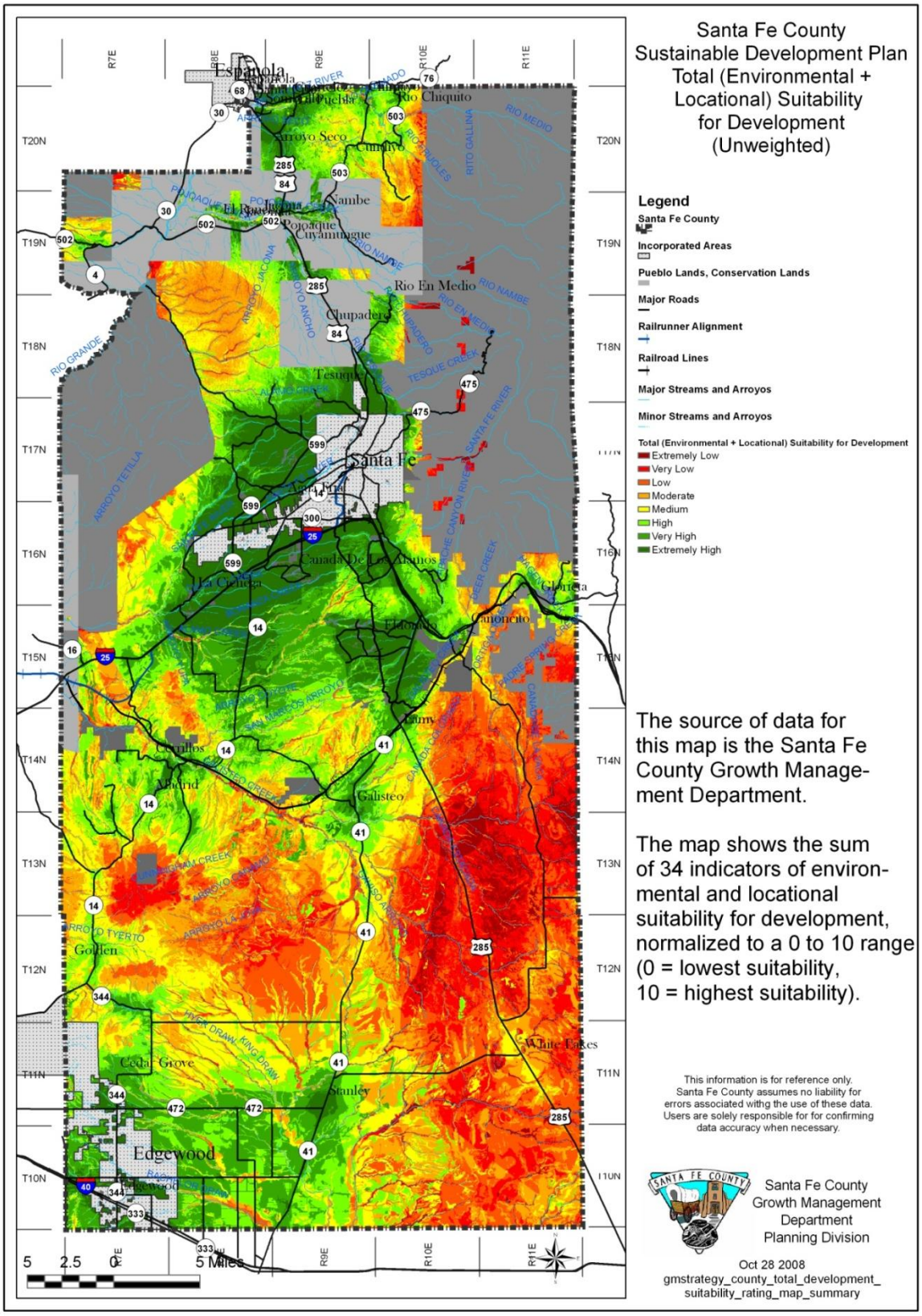
Map 9: Overall Locational Suitability for Development



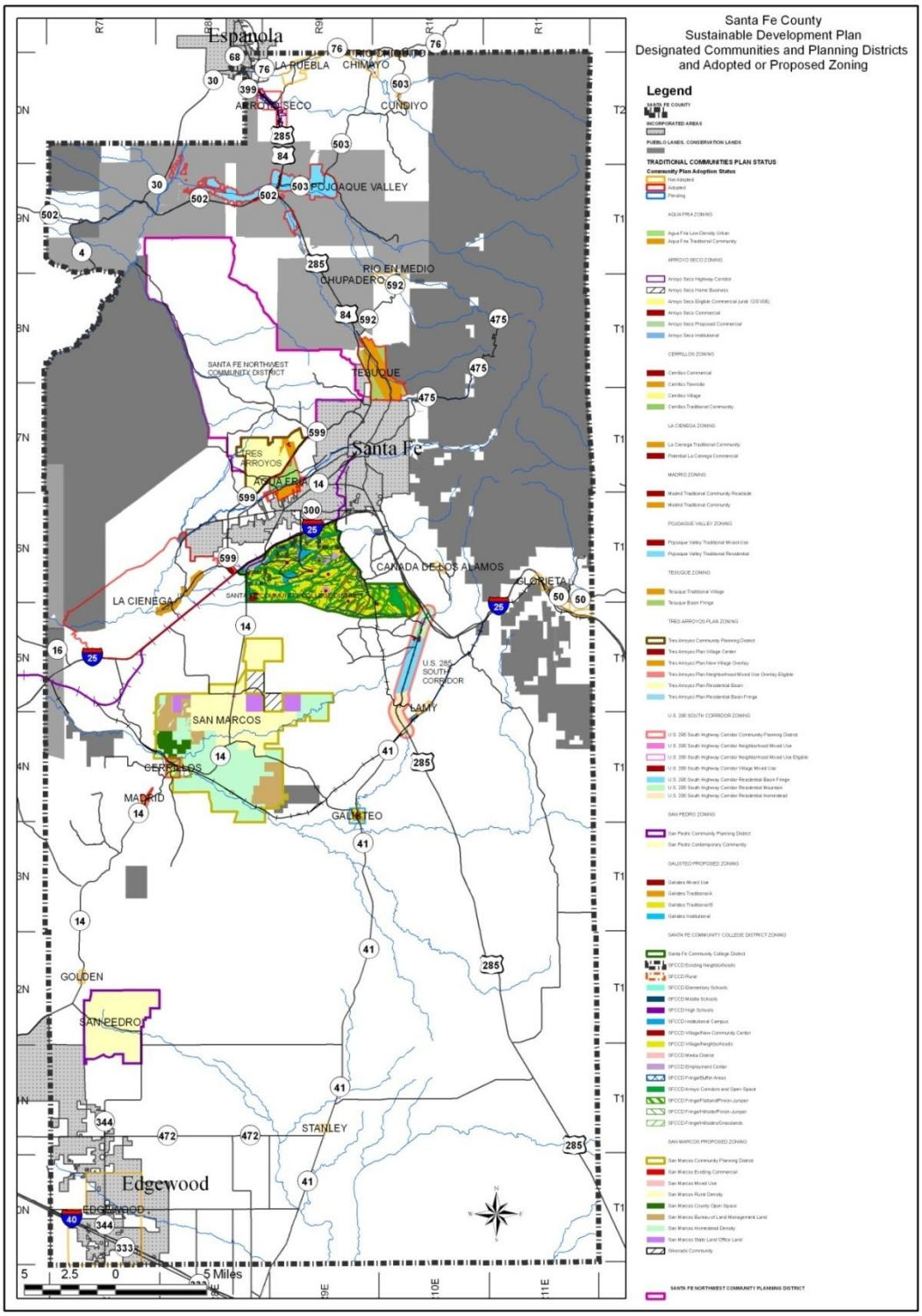
Map 10: Overall Environmental Suitability for Development



Map 11: Total Suitability for Development



Map 12: Designated Communities and Adopted or Proposed Zoning



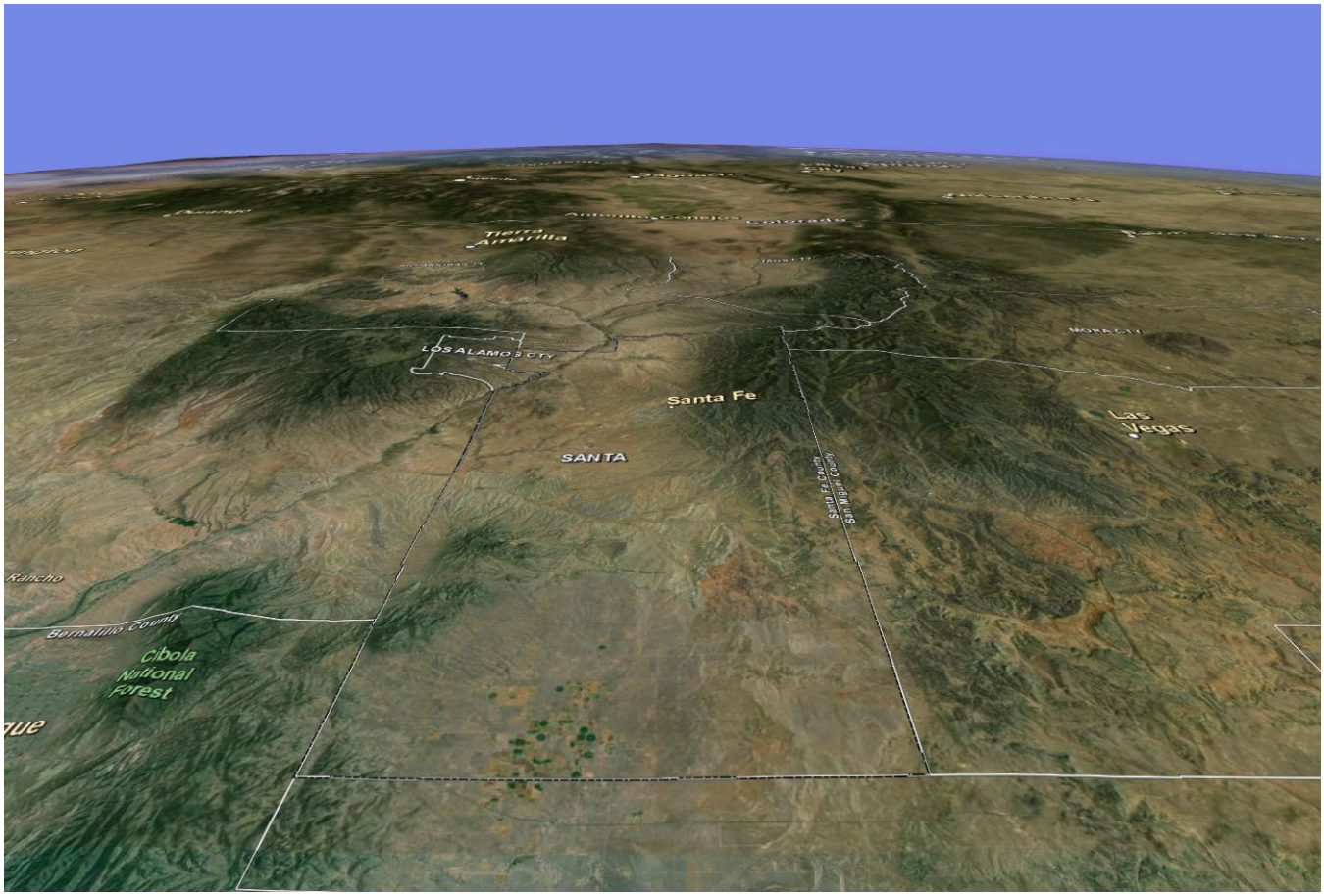
This map shows the location of Traditional and Contemporary Communities that have been designated by the Santa Fe County Commission, and the status of community plans for the Traditional Communities. The adopted or proposed zoning for these communities is also shown.

This information is for reference only. Santa Fe County assumes no liability for errors associated withg the use of these data. Users are solely responsible for for confirming data accuracy when necessary.

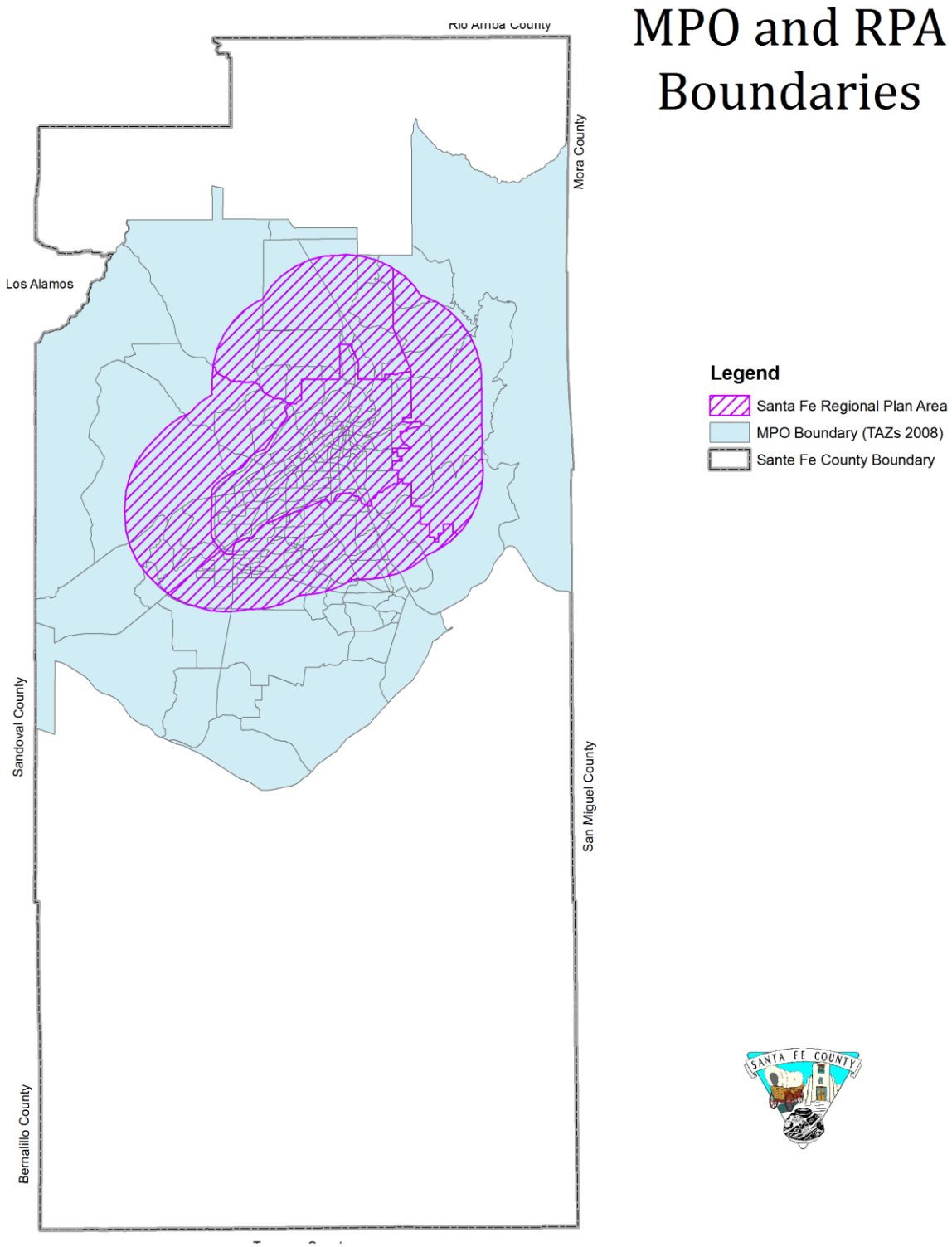
Santa Fe County
Growth Management
Department
Planning Division

May 8 2009
gmstrategy_county_
communities_map_summary.mxd

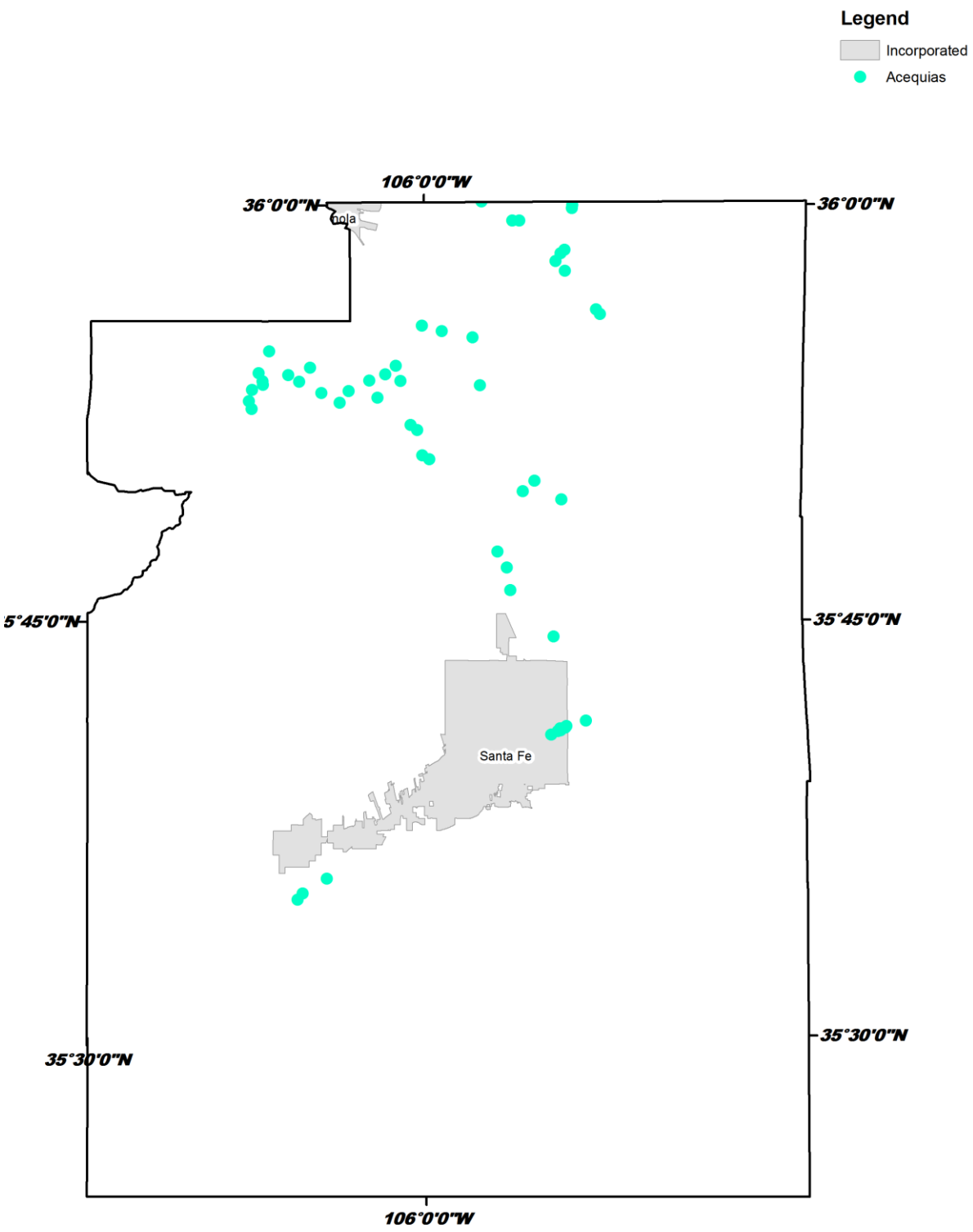
Map 13: Regional Base Map



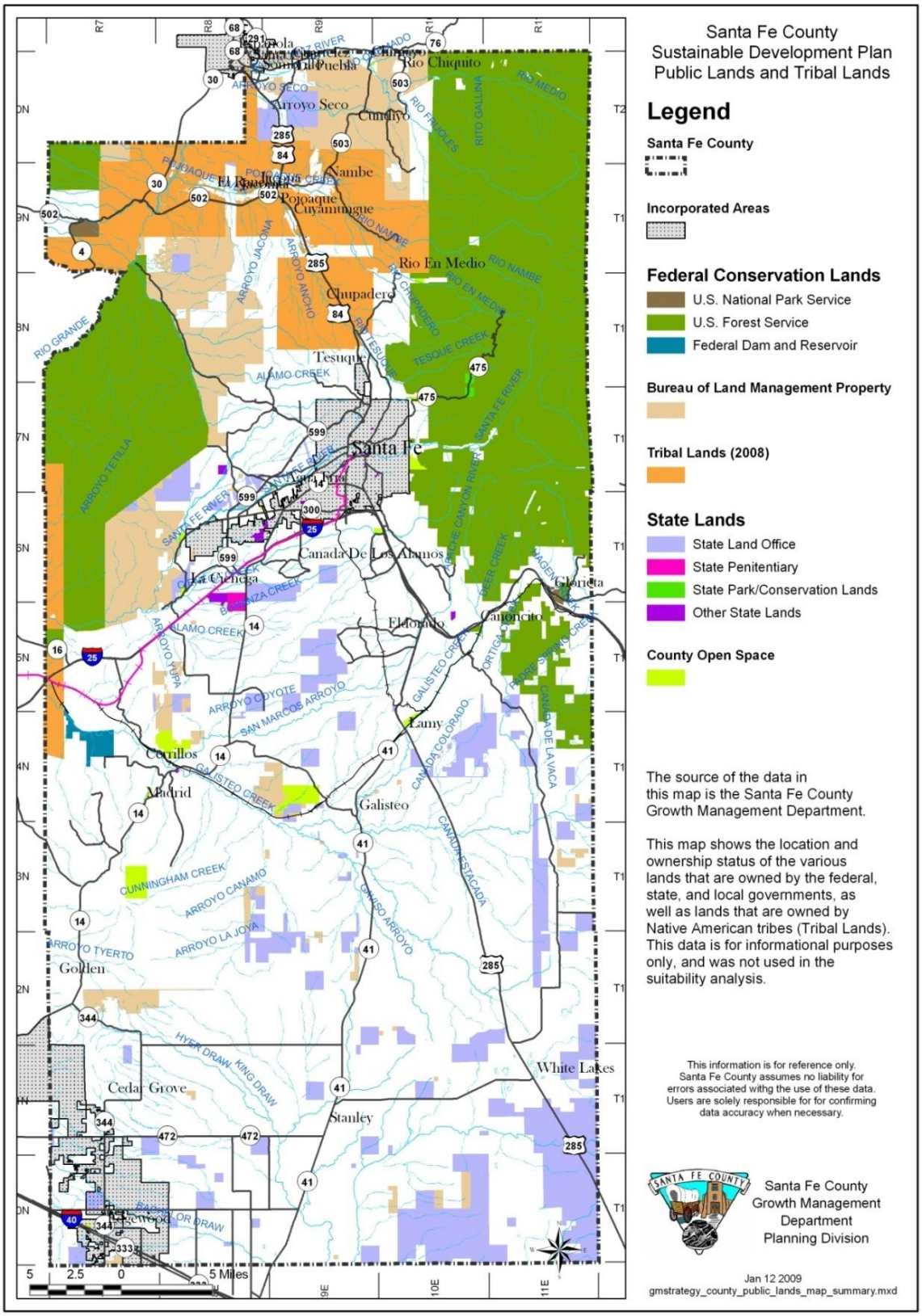
Map 14: MPO and RPA Boundaries



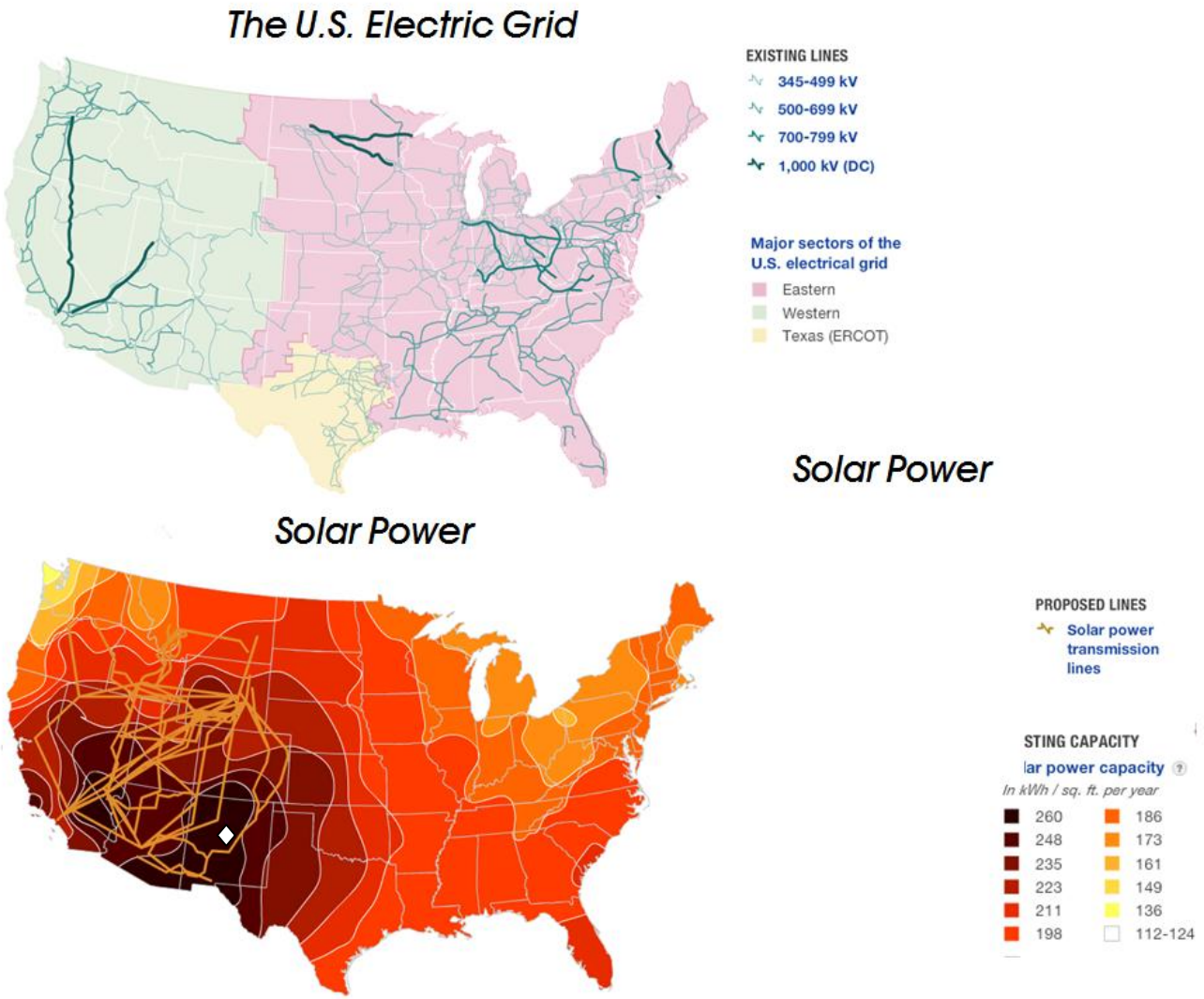
Map 15: Acequia Associations



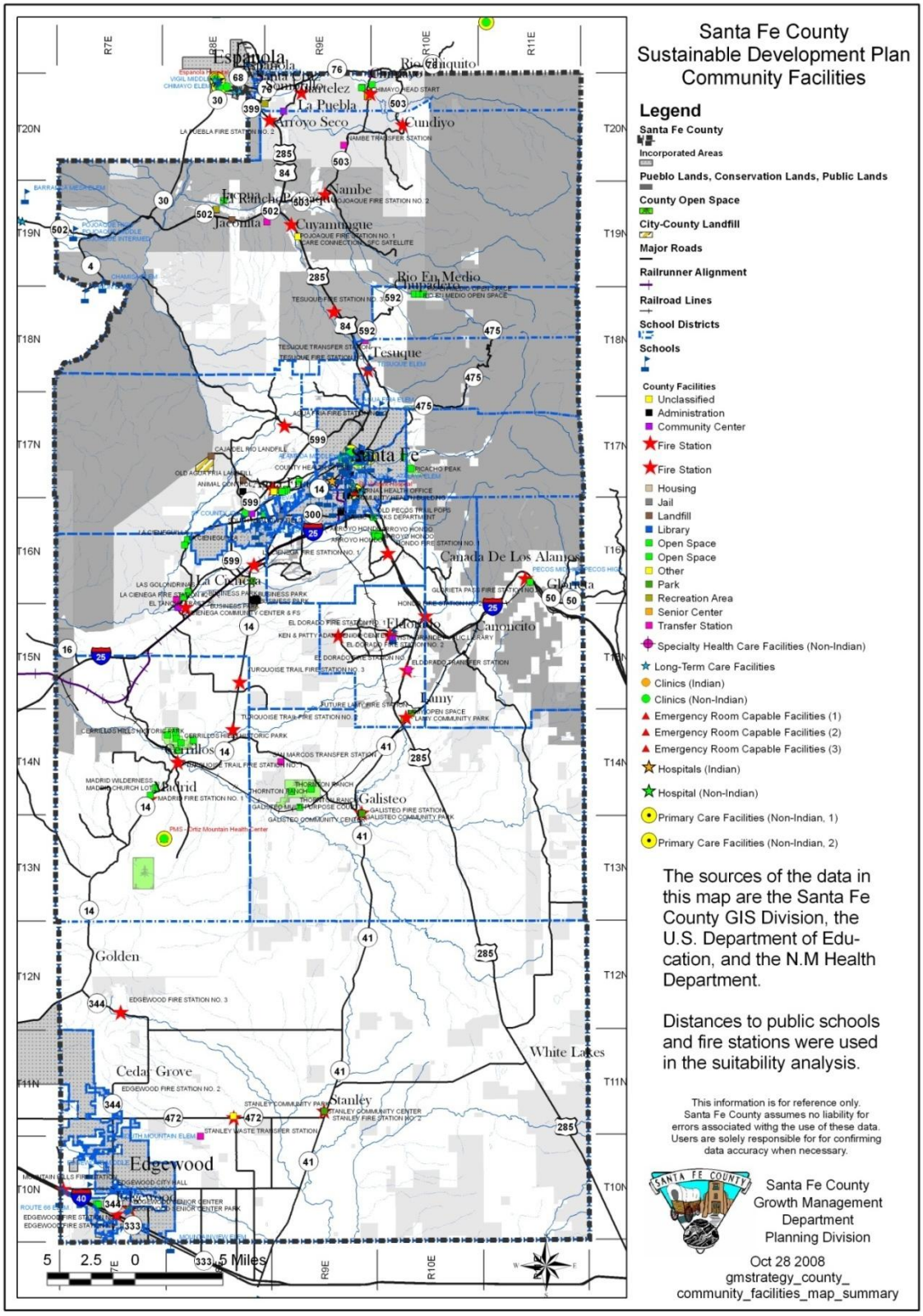
Map 16: Public and Tribal Lands



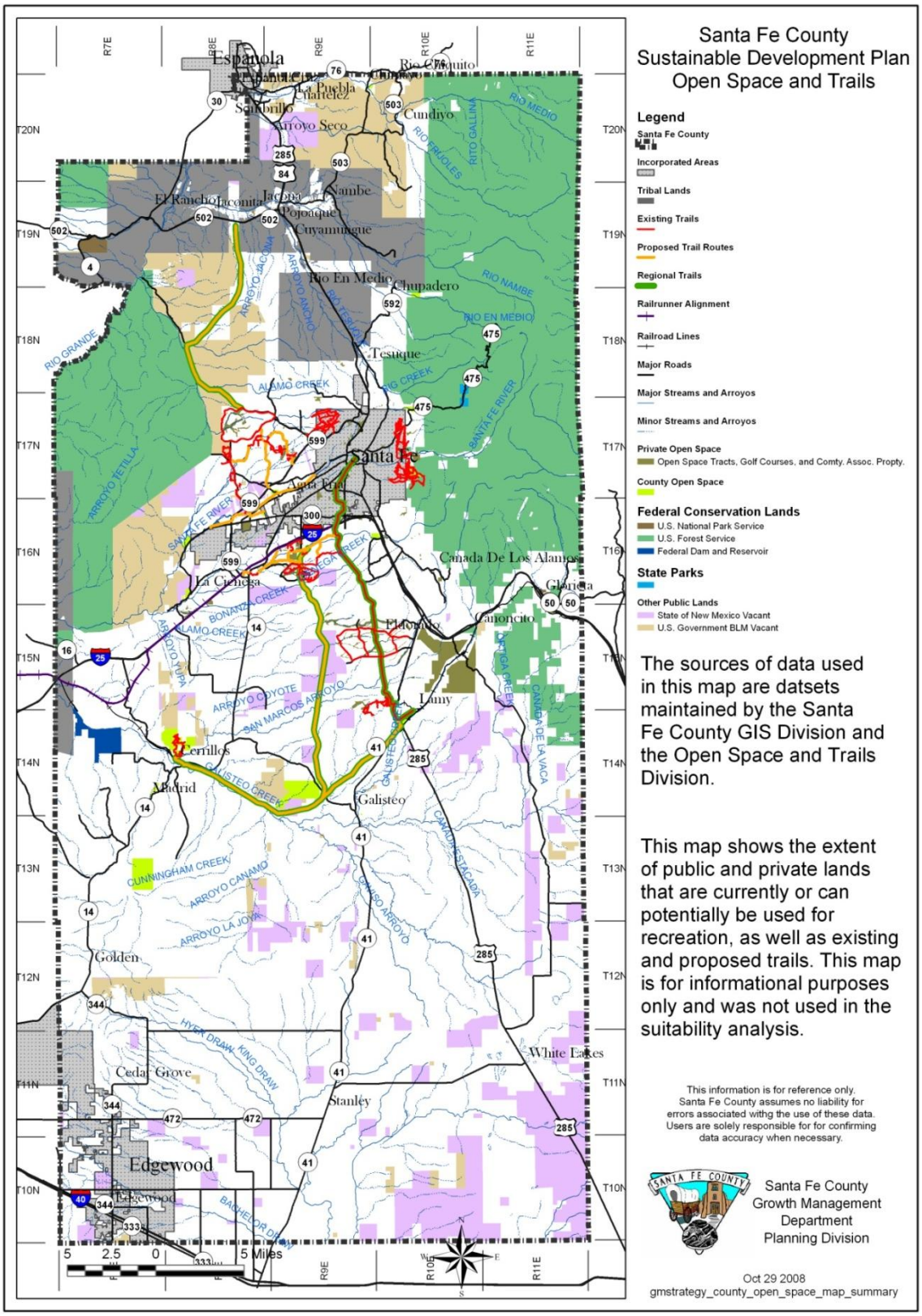
Map 17: Power Lines



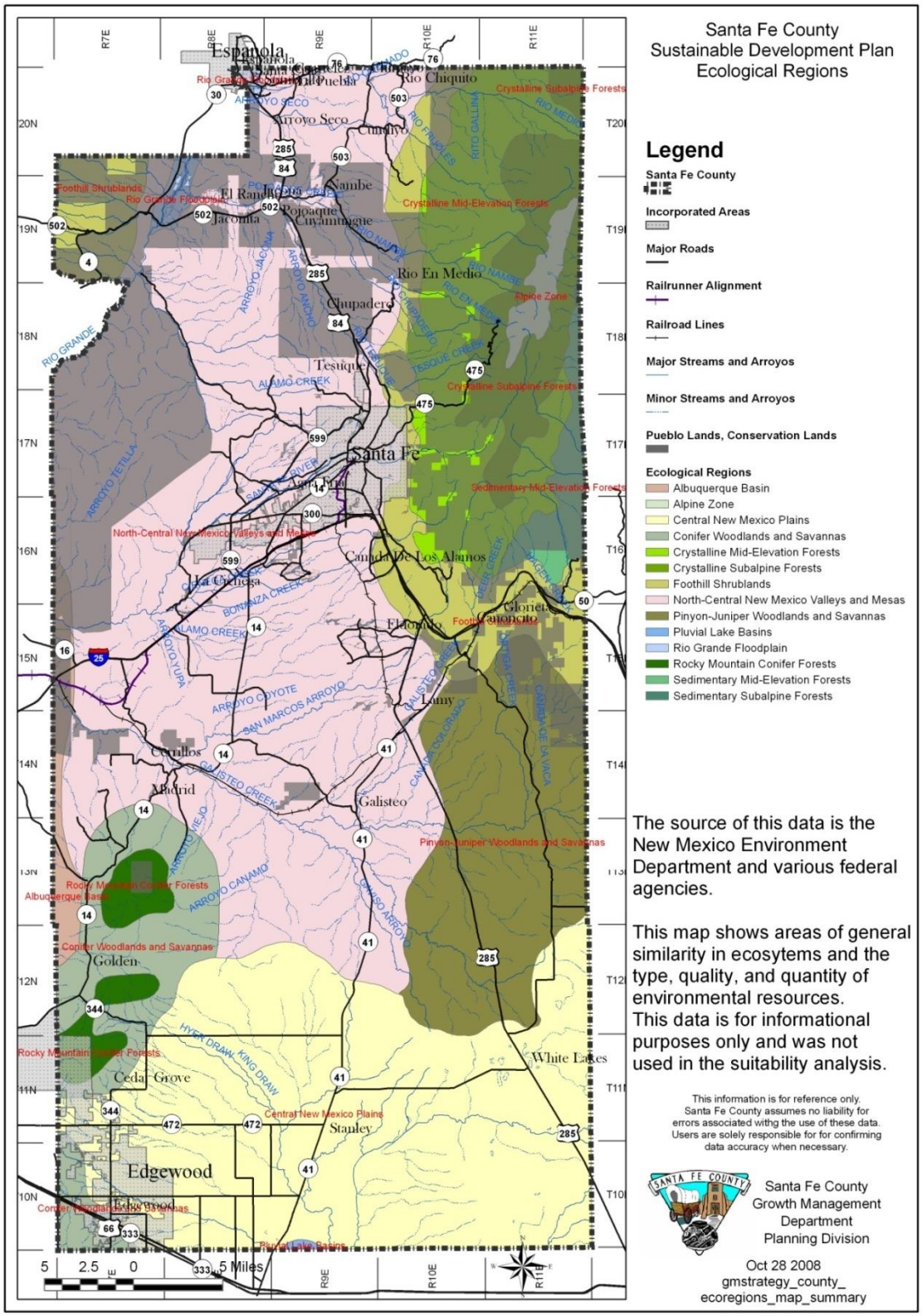
Map 18: Community Facilities



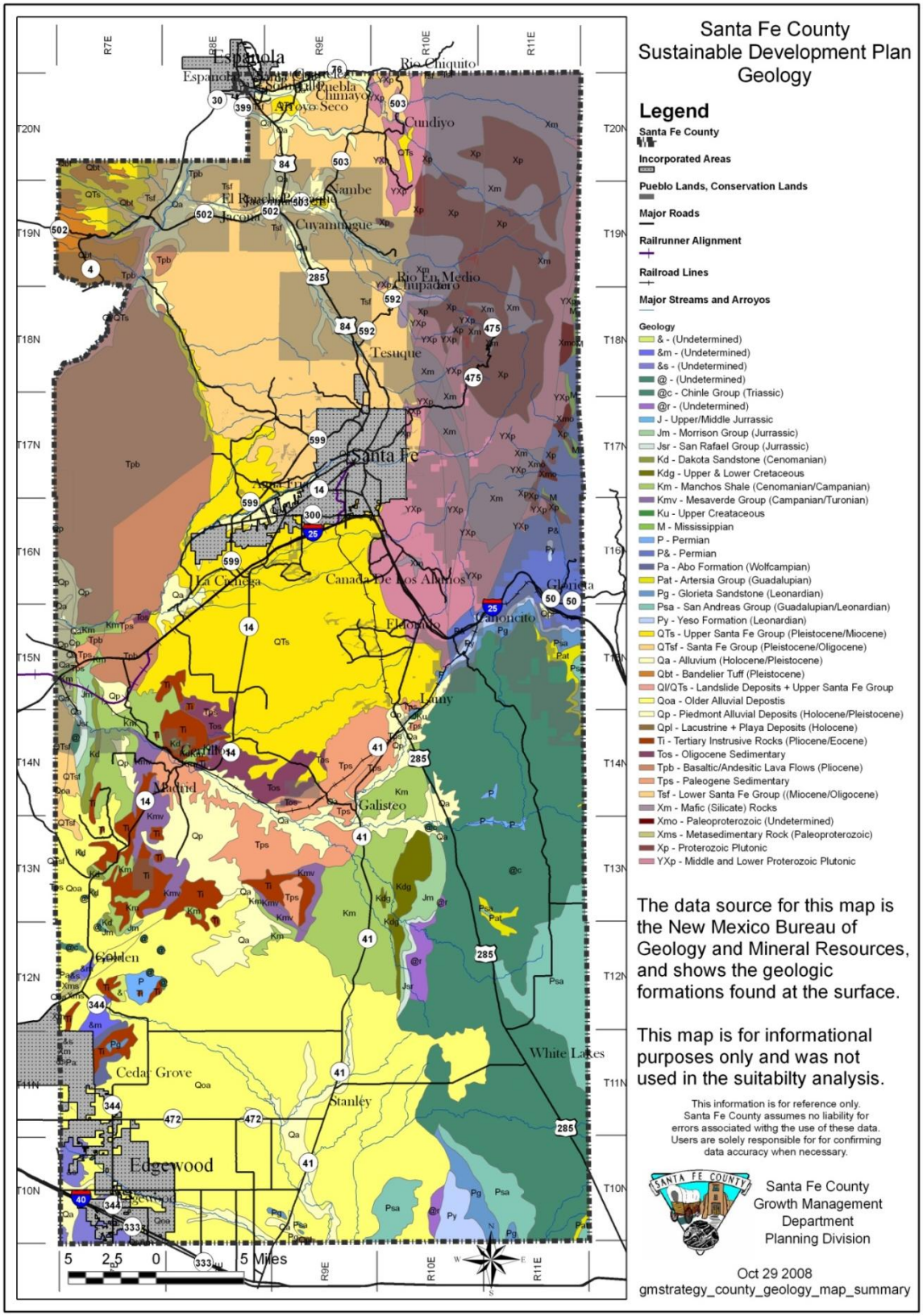
Map 19: Open Space and Trails



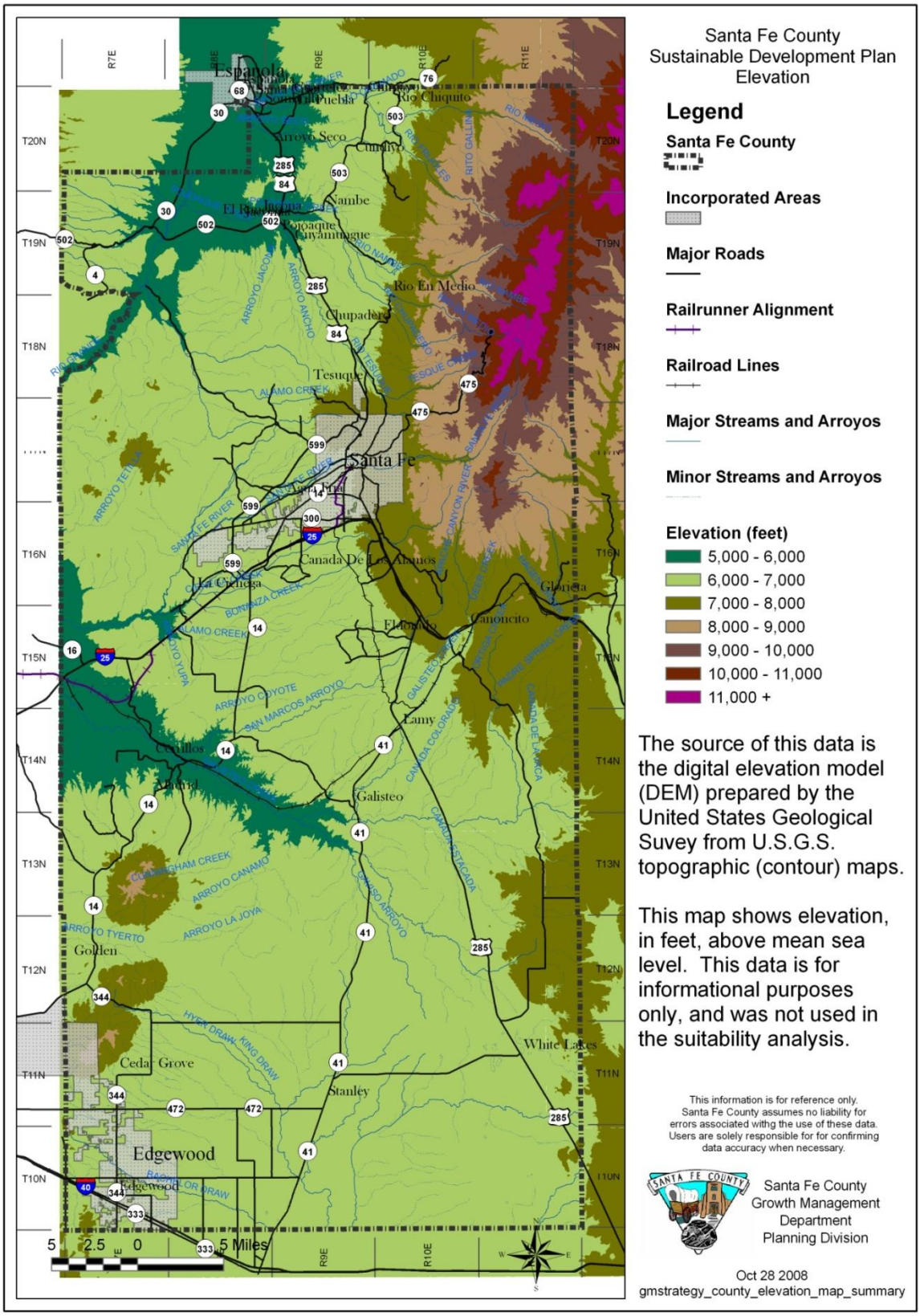
Map 20: Ecological Regions



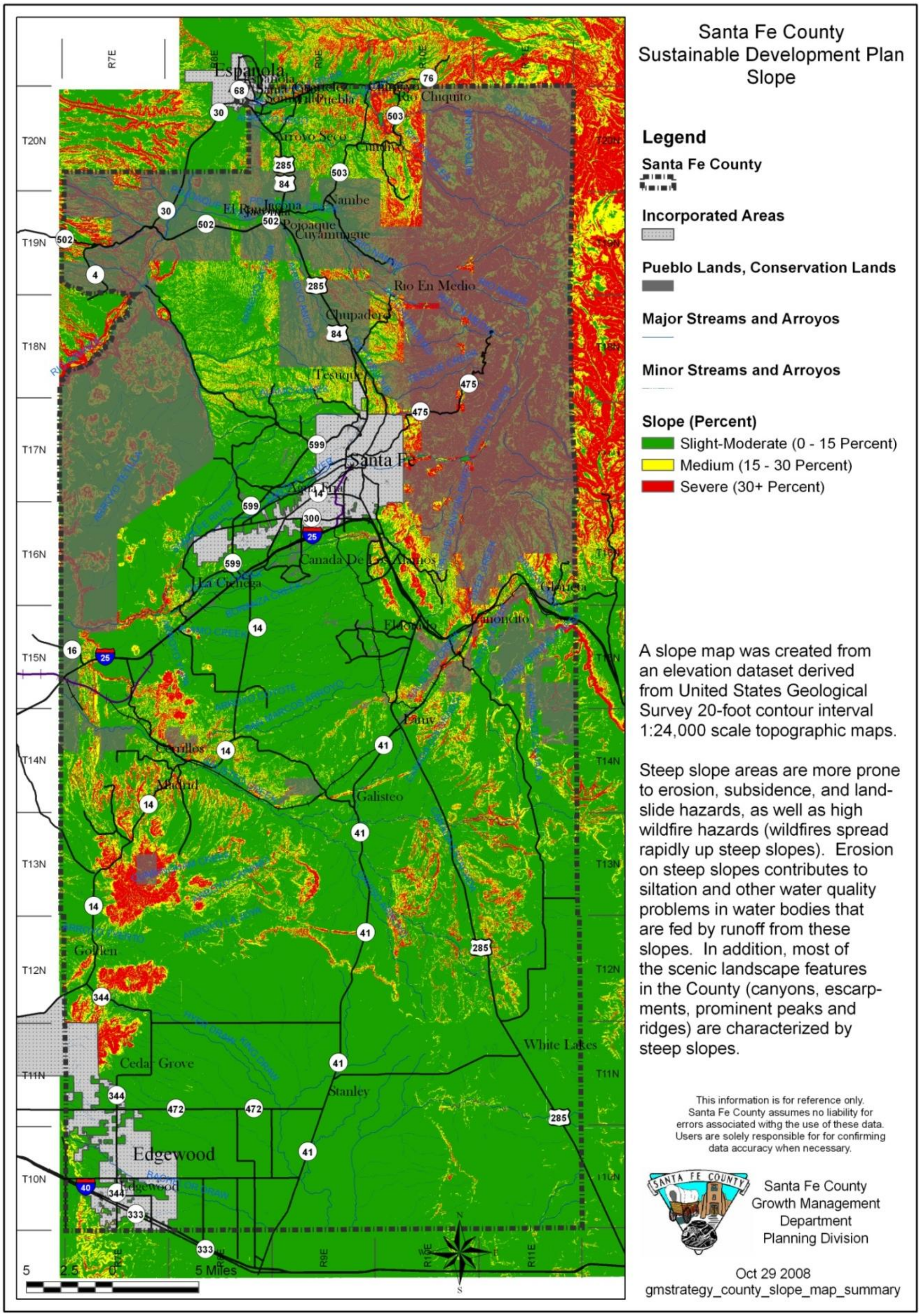
Map 21: Geology



Map 22: Elevation



Map 23: Slope


Santa Fe County
Sustainable Development Plan
Slope
Legend
Santa Fe County
Incorporated Areas
Pueblo Lands, Conservation Lands
Major Streams and Arroyos
Minor Streams and Arroyos
Slope (Percent)
Slight-Moderate (0 - 15 Percent)
Medium (15 - 30 Percent)
Severe (30+ Percent)
A slope map was created from an elevation dataset derived from United States Geological Survey 20-foot contour interval 1:24,000 scale topographic maps.
Steep slope areas are more prone to erosion, subsidence, and land-slide hazards, as well as high wildfire hazards (wildfires spread rapidly up steep slopes). Erosion on steep slopes contributes to siltation and other water quality problems in water bodies that are fed by runoff from these slopes. In addition, most of the scenic landscape features in the County (canyons, escarp-ments, prominent peaks and ridges) are characterized by steep slopes.
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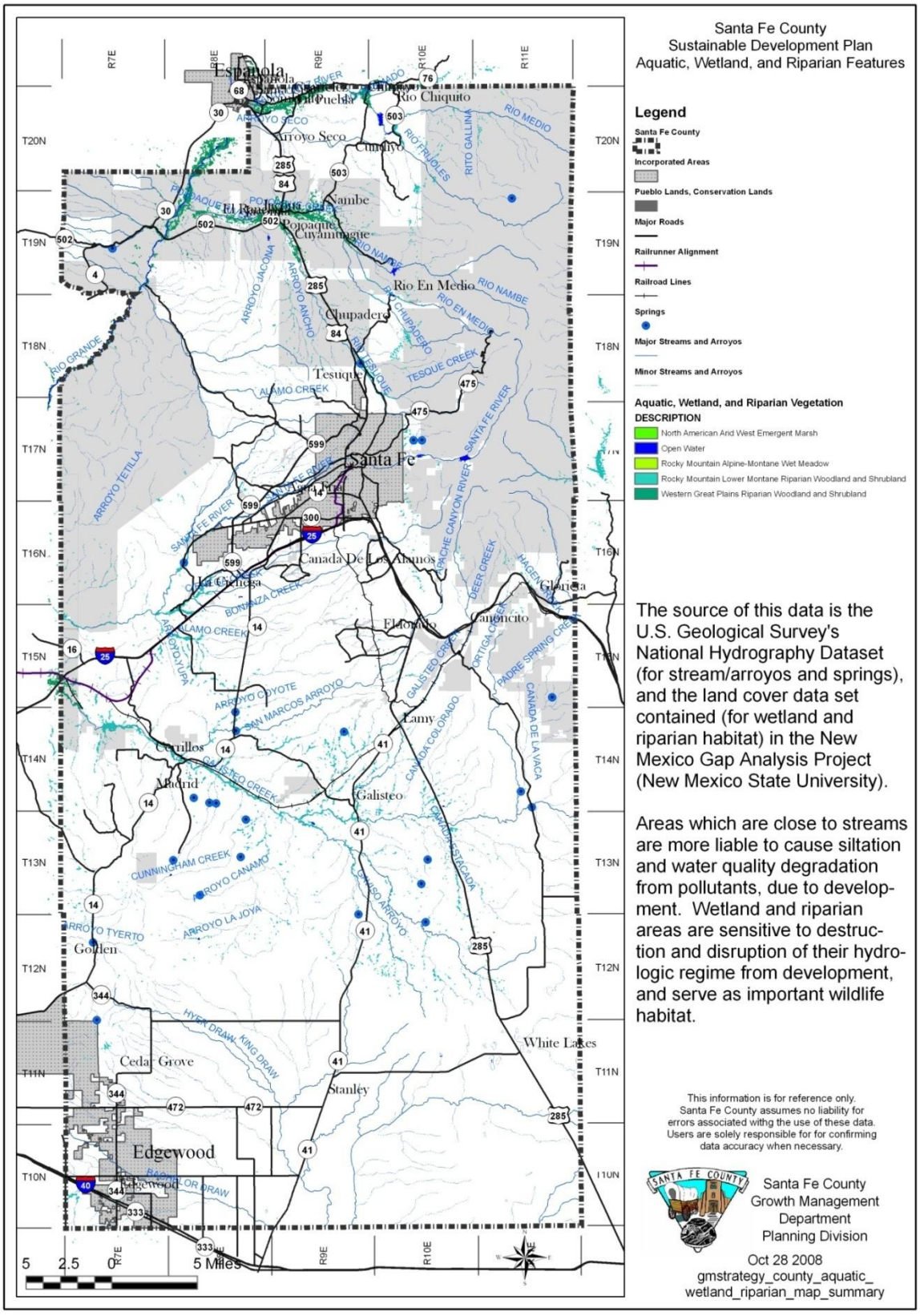
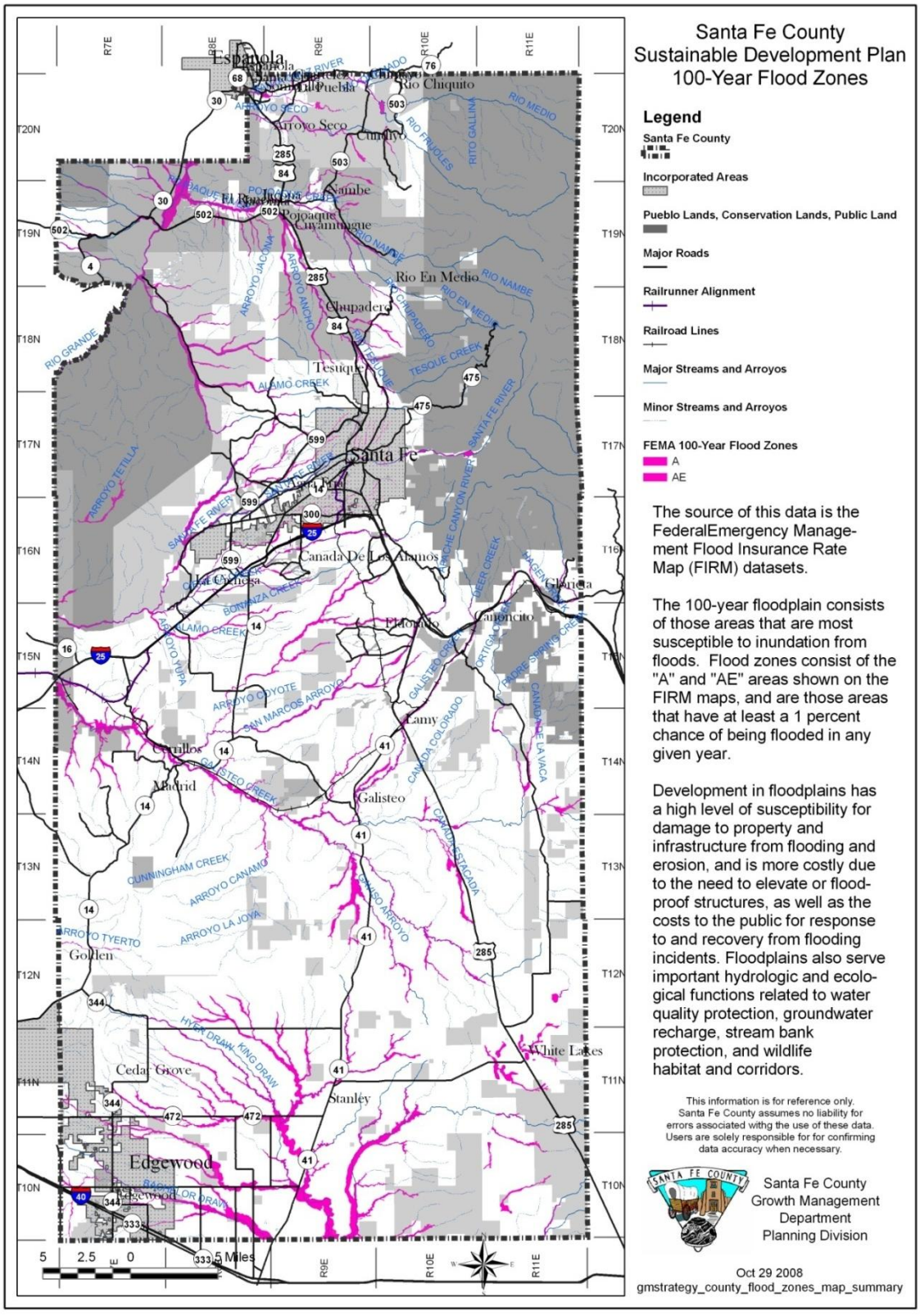
Santa Fe County
Growth Management
Department
Planning Division
Oct 29 2008
gmstrategy_county_slope_map_summary
Espanola
Santa Fe
Edgewood
5 2.5 0 5 Miles

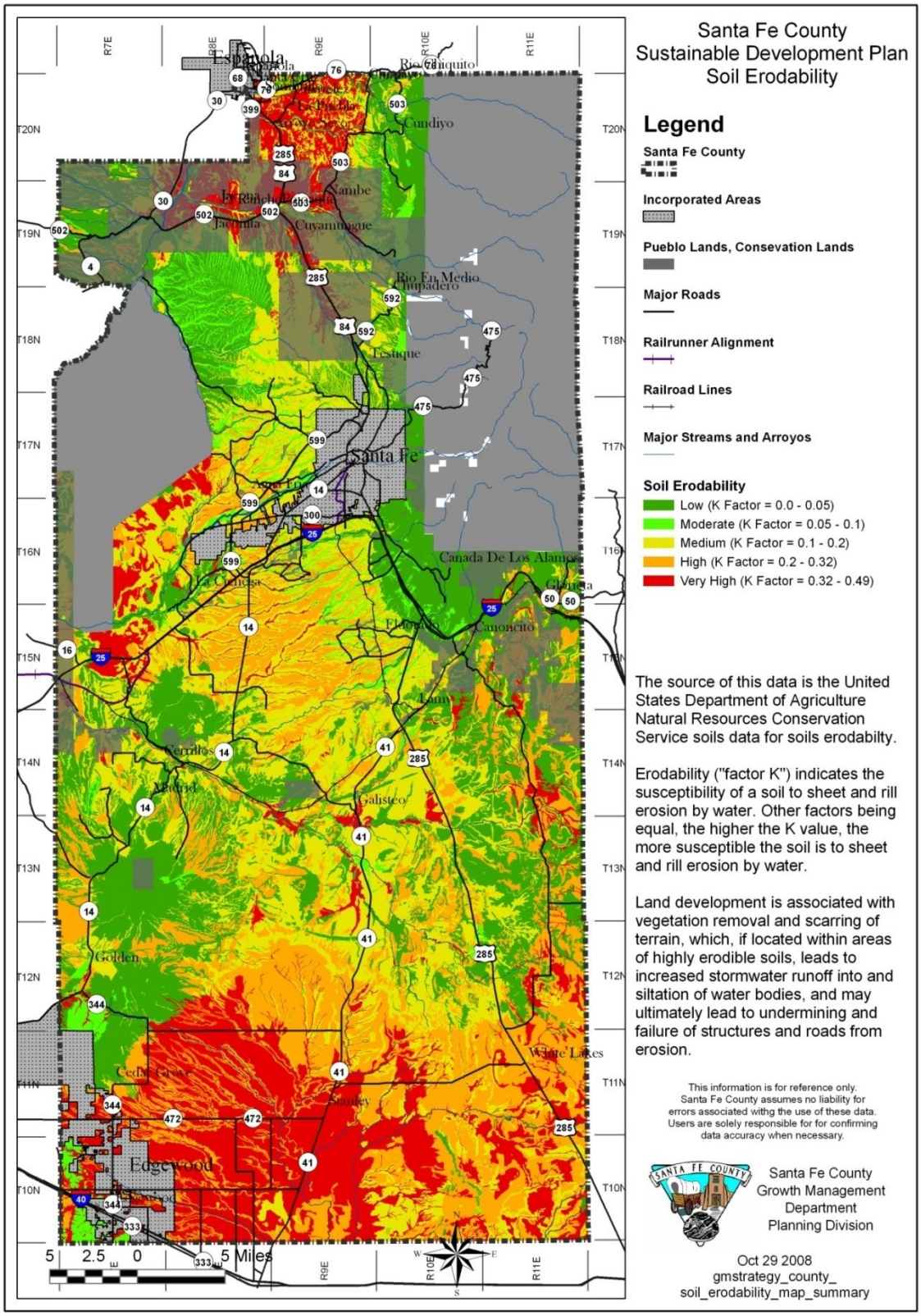
Map 24: Aquatic, Wetland and Riparian Features



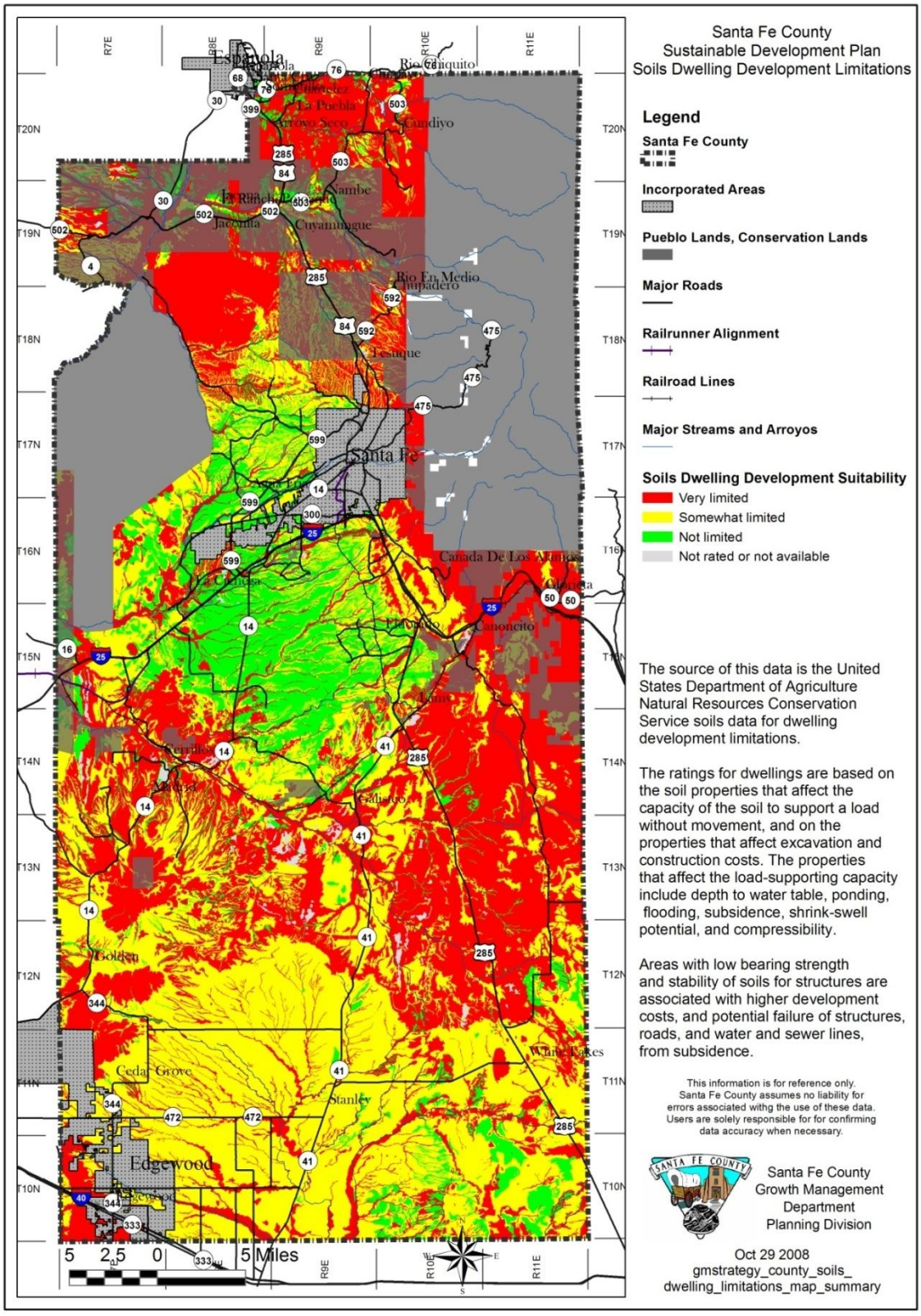
Map 25: 100-Year Flood Zones



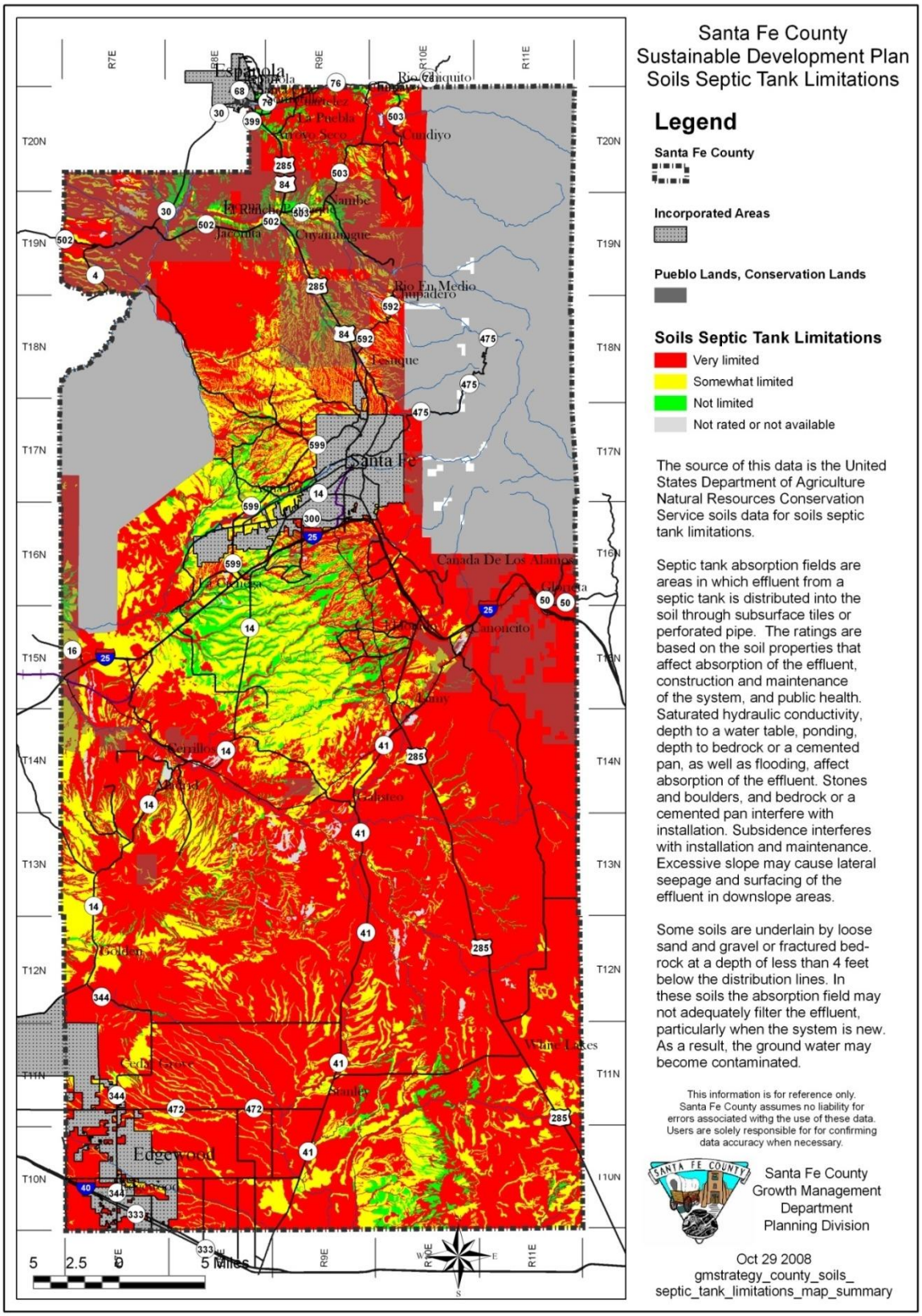
Map 26: Soil Erodibility



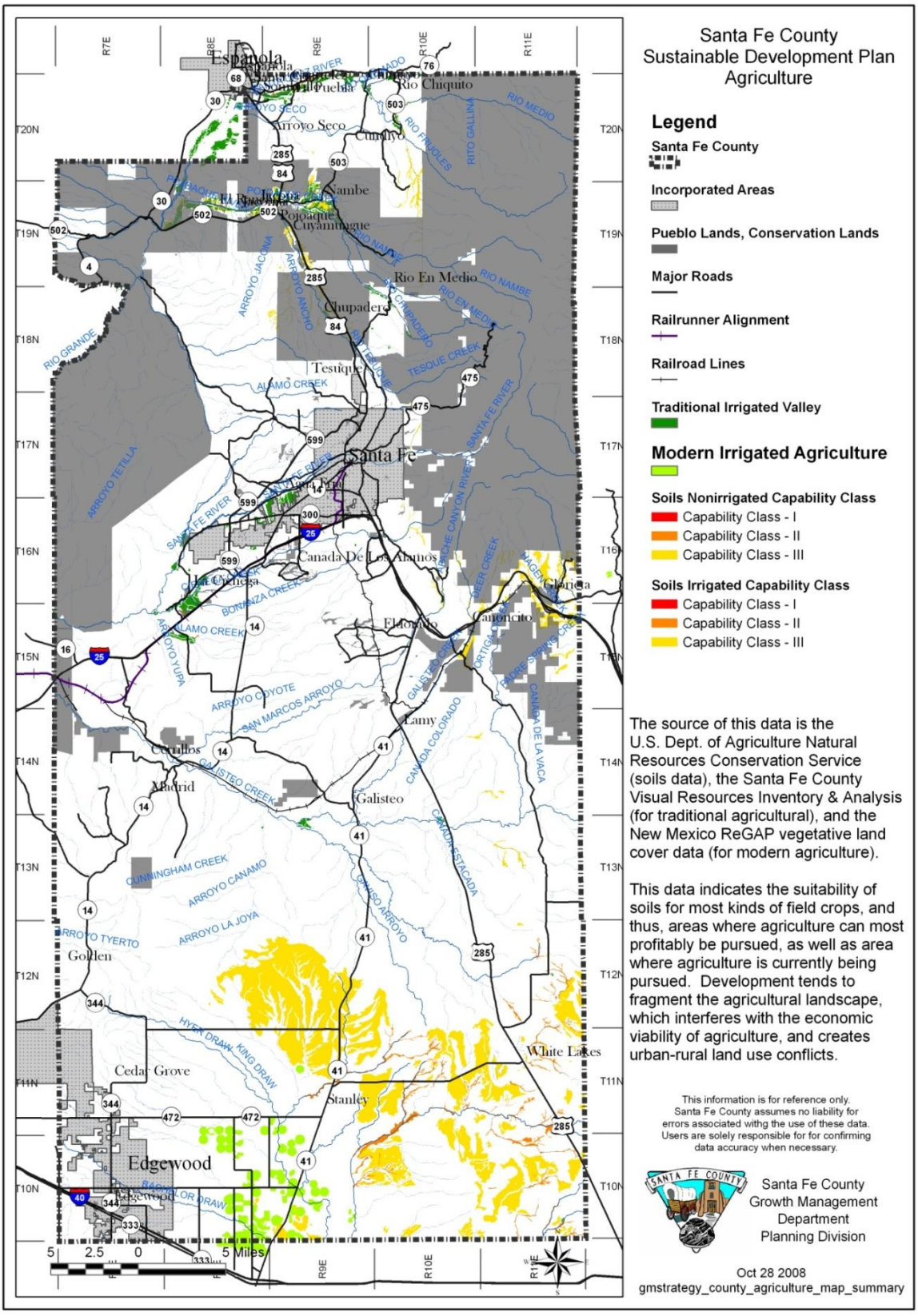
Map 27: Soils; Dwelling Development Limitations



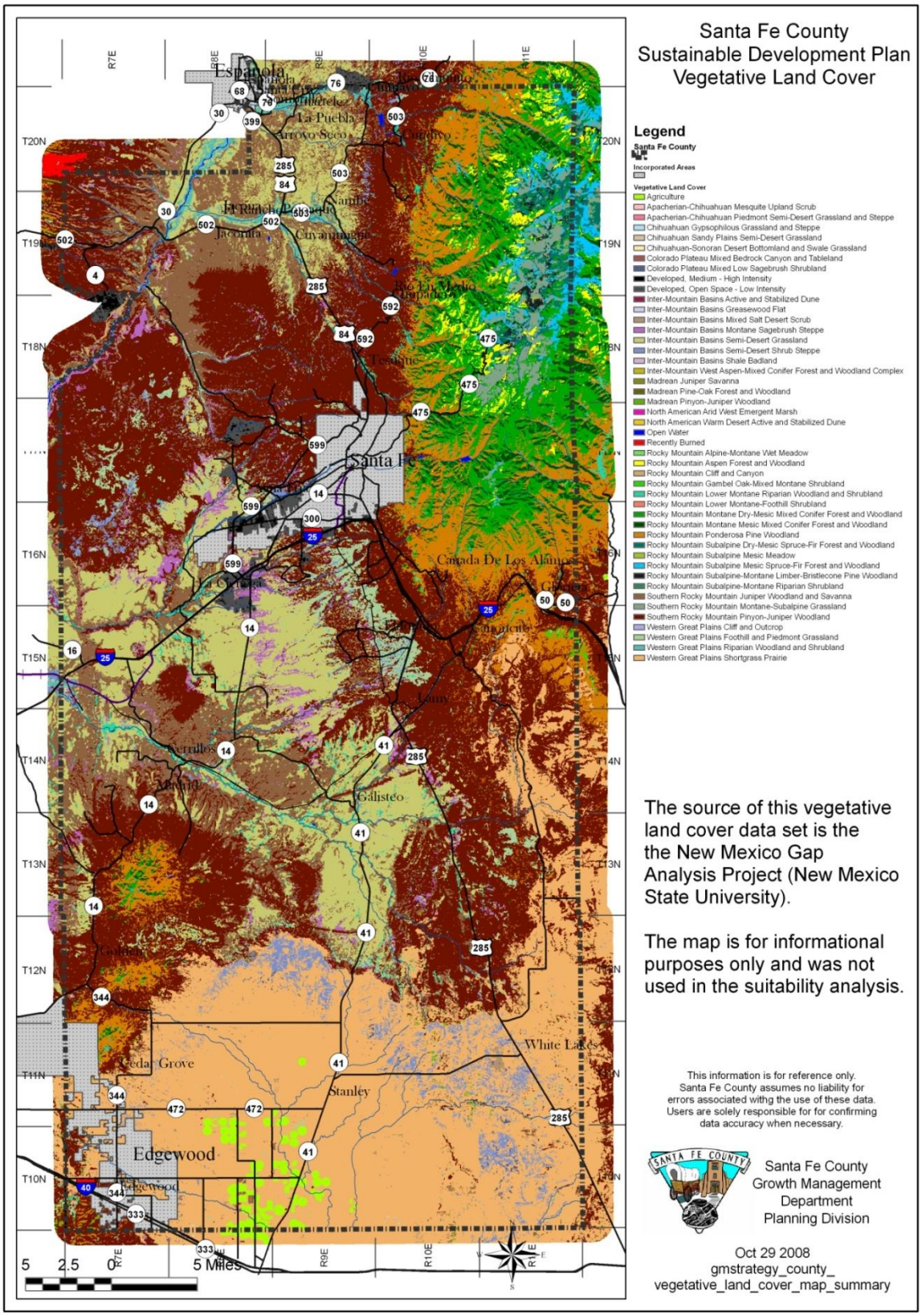
Map 28: Soils; Septic Tank Limitations



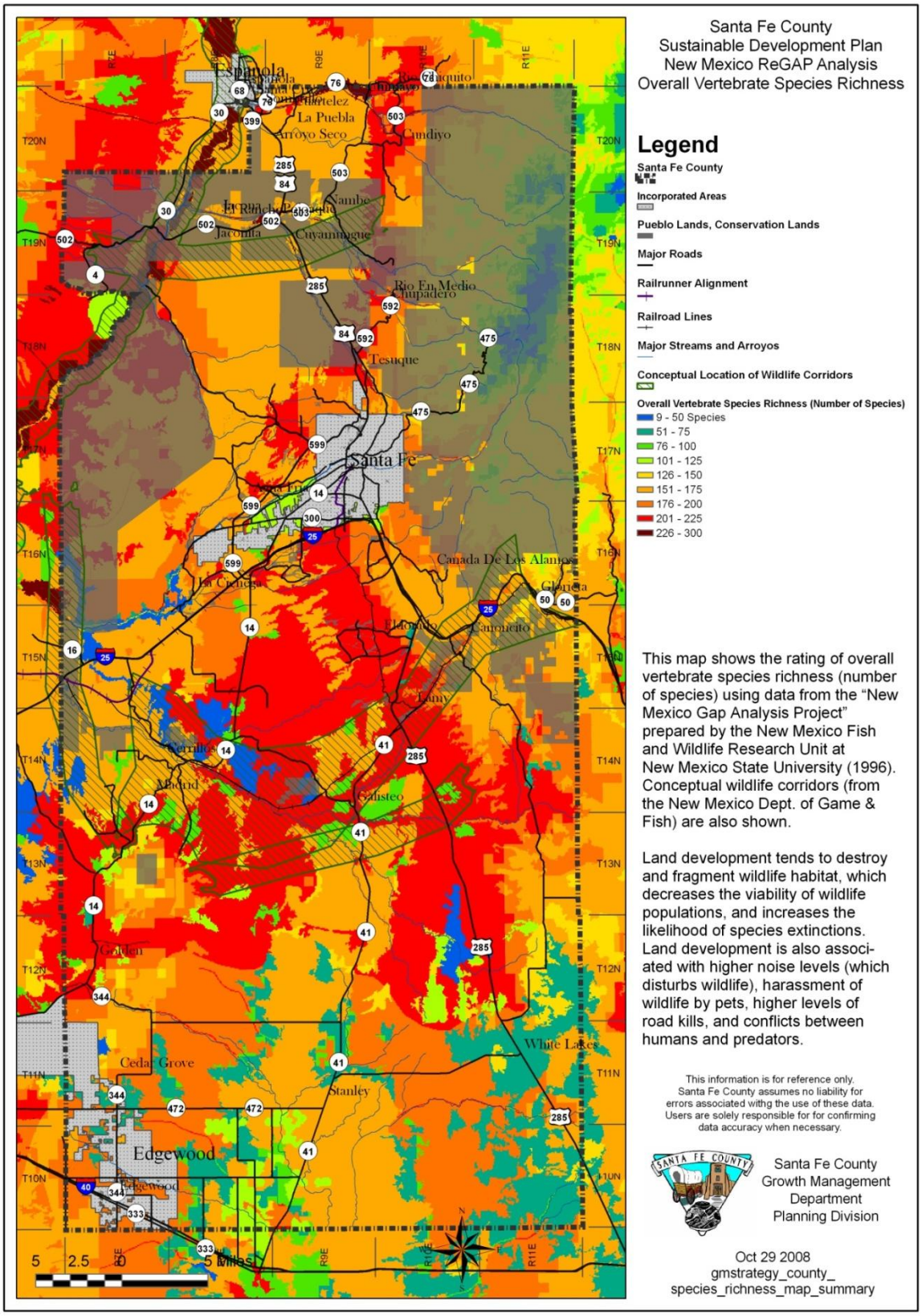
Map 29: Agriculture



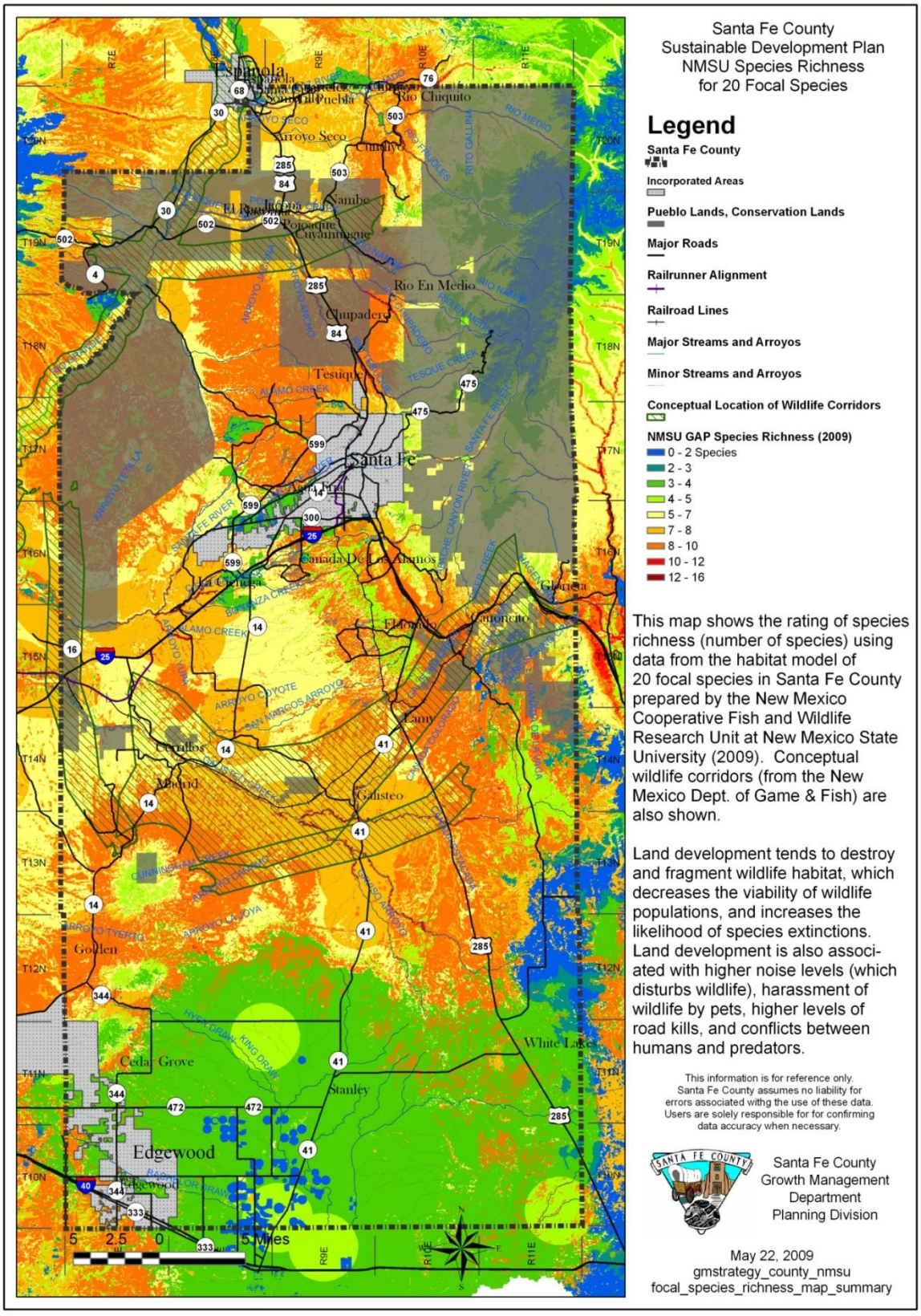
Map 30: Vegetative Land Cover



Map 31: Overall Vertebrate Species Richness



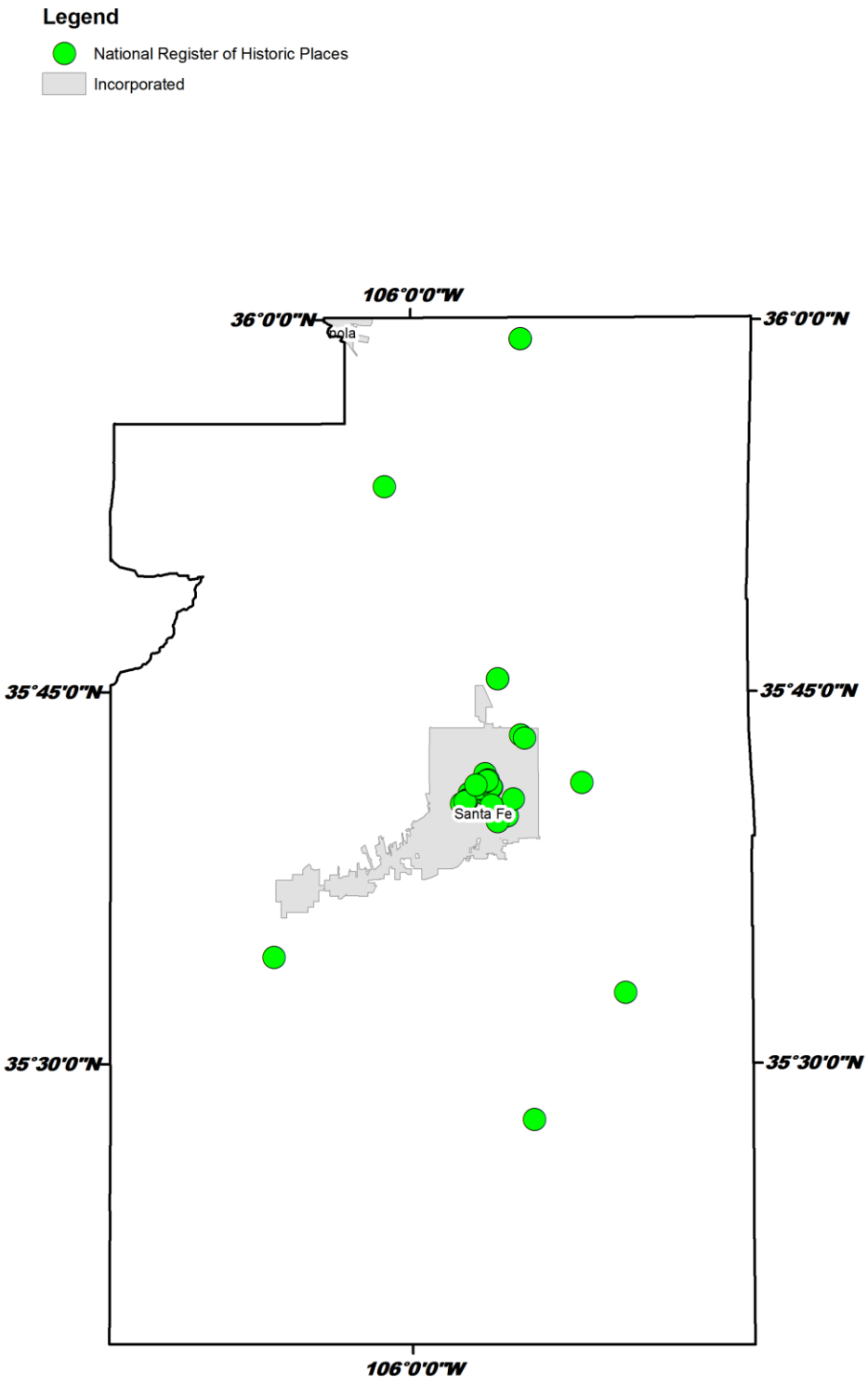
Map 32: Species Richness for 20 Focal Species



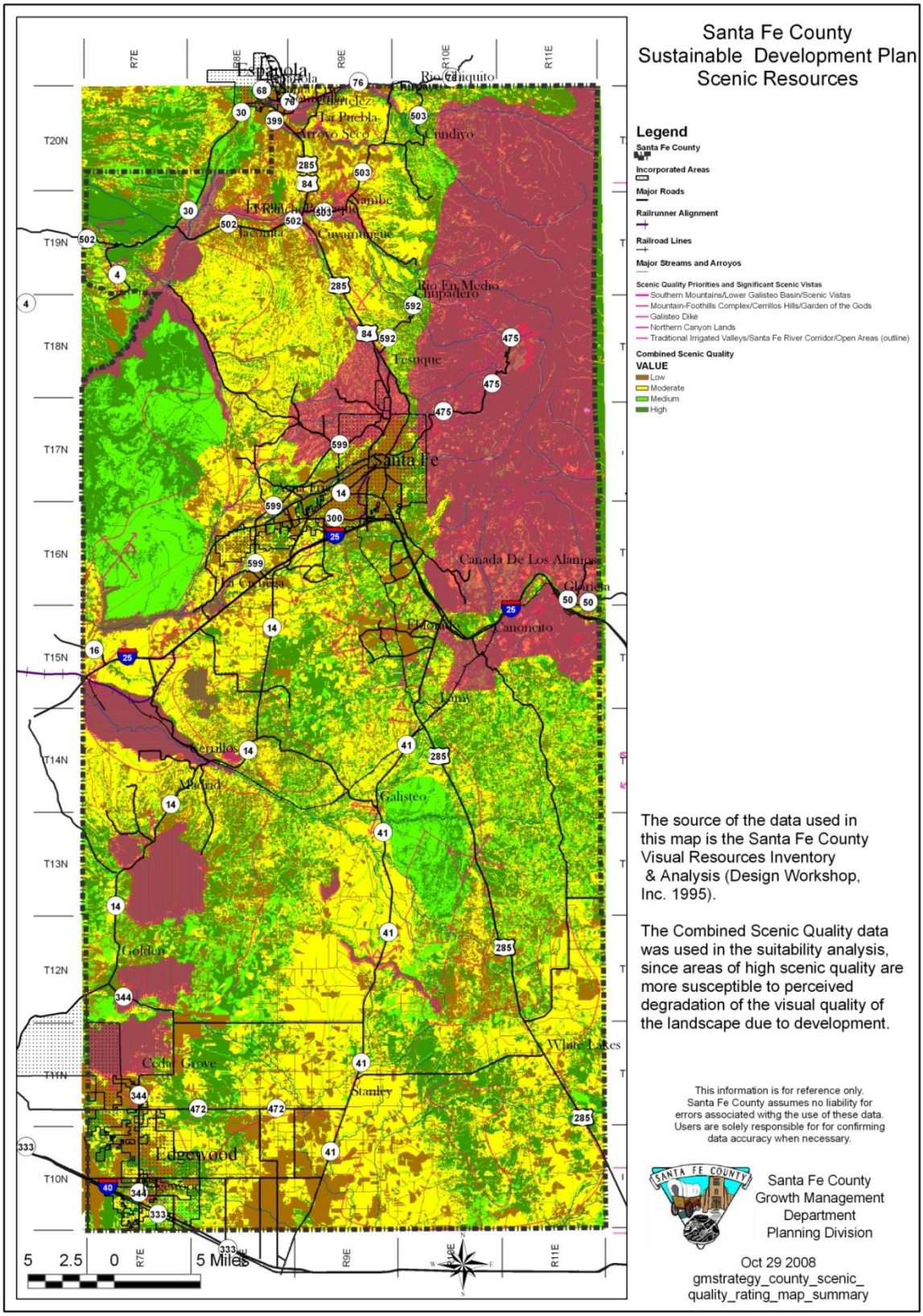
Map 33: Archaeological Resources

Map not shown for protective purposes.

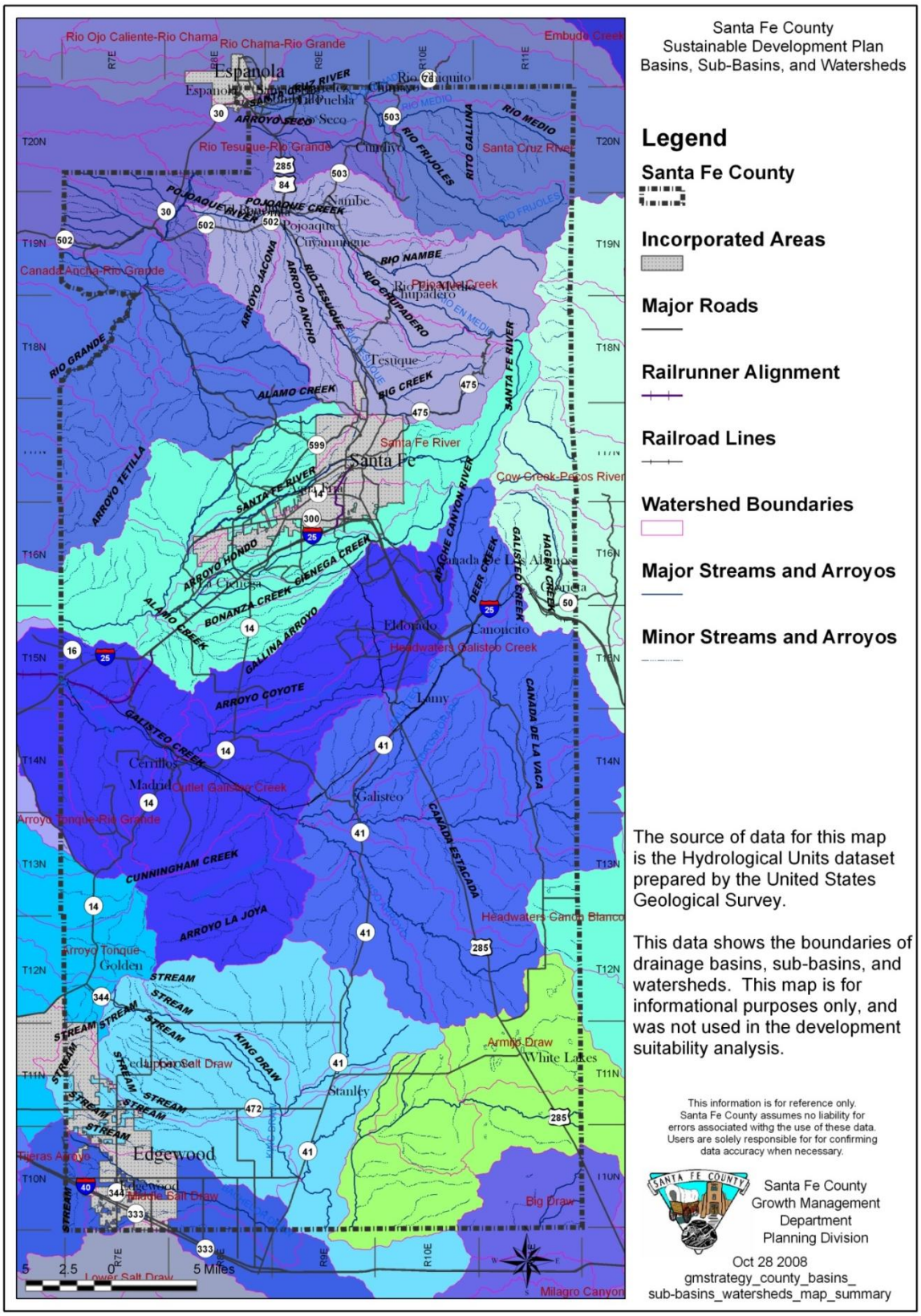
Map 34: Historic Places



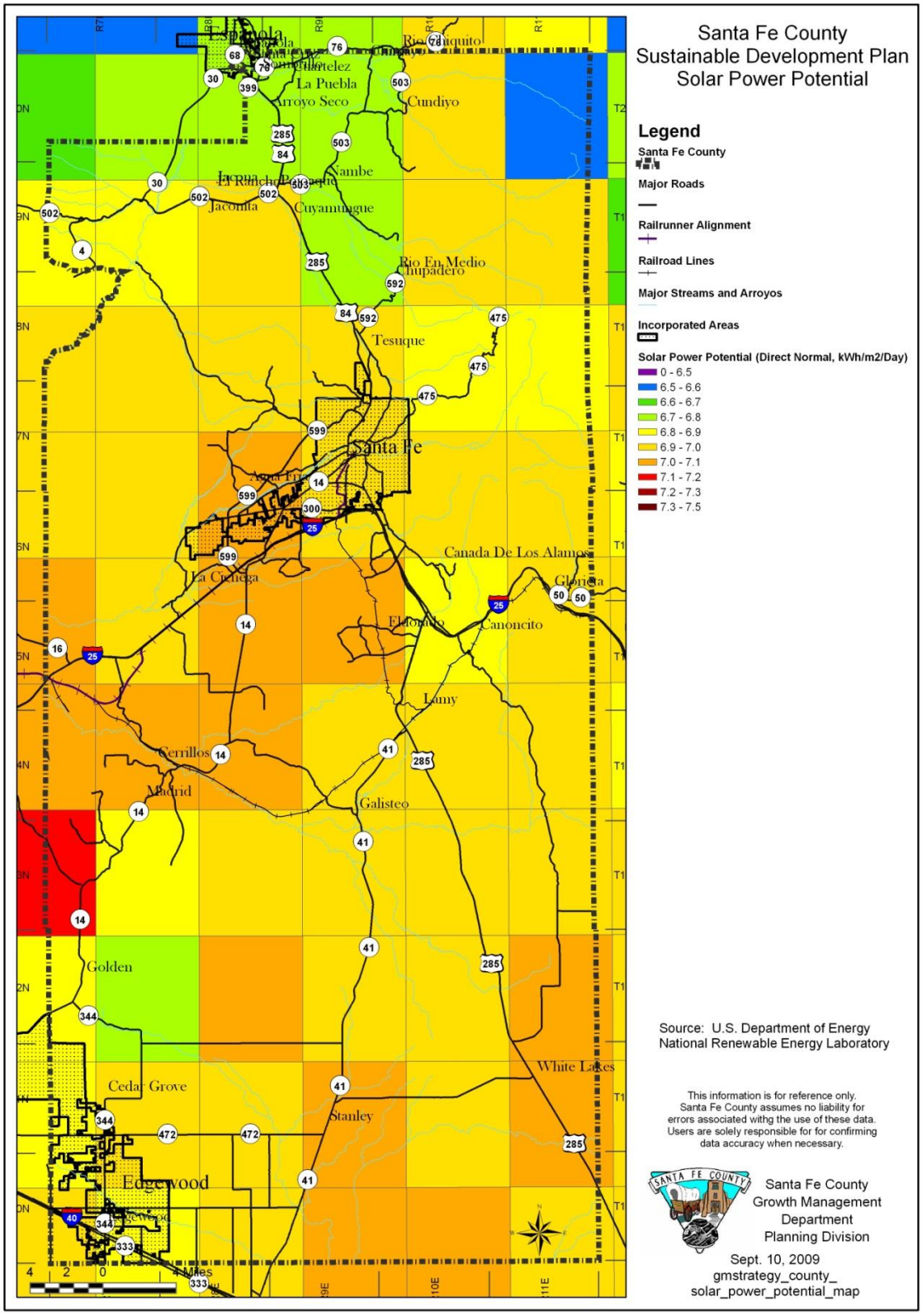
Map 35: Scenic Resources



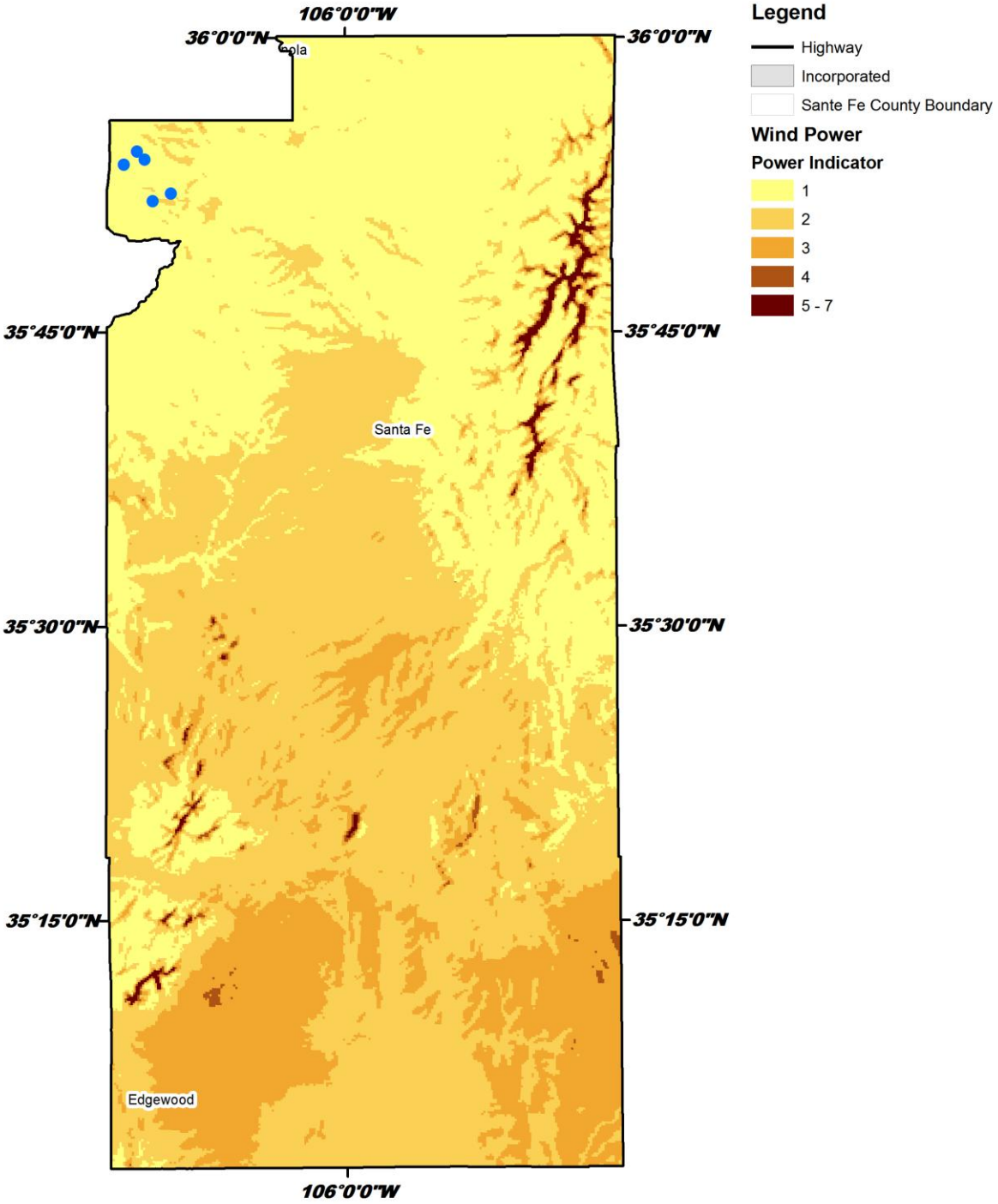
Map 36: Basins, Sub-Basins and Watersheds



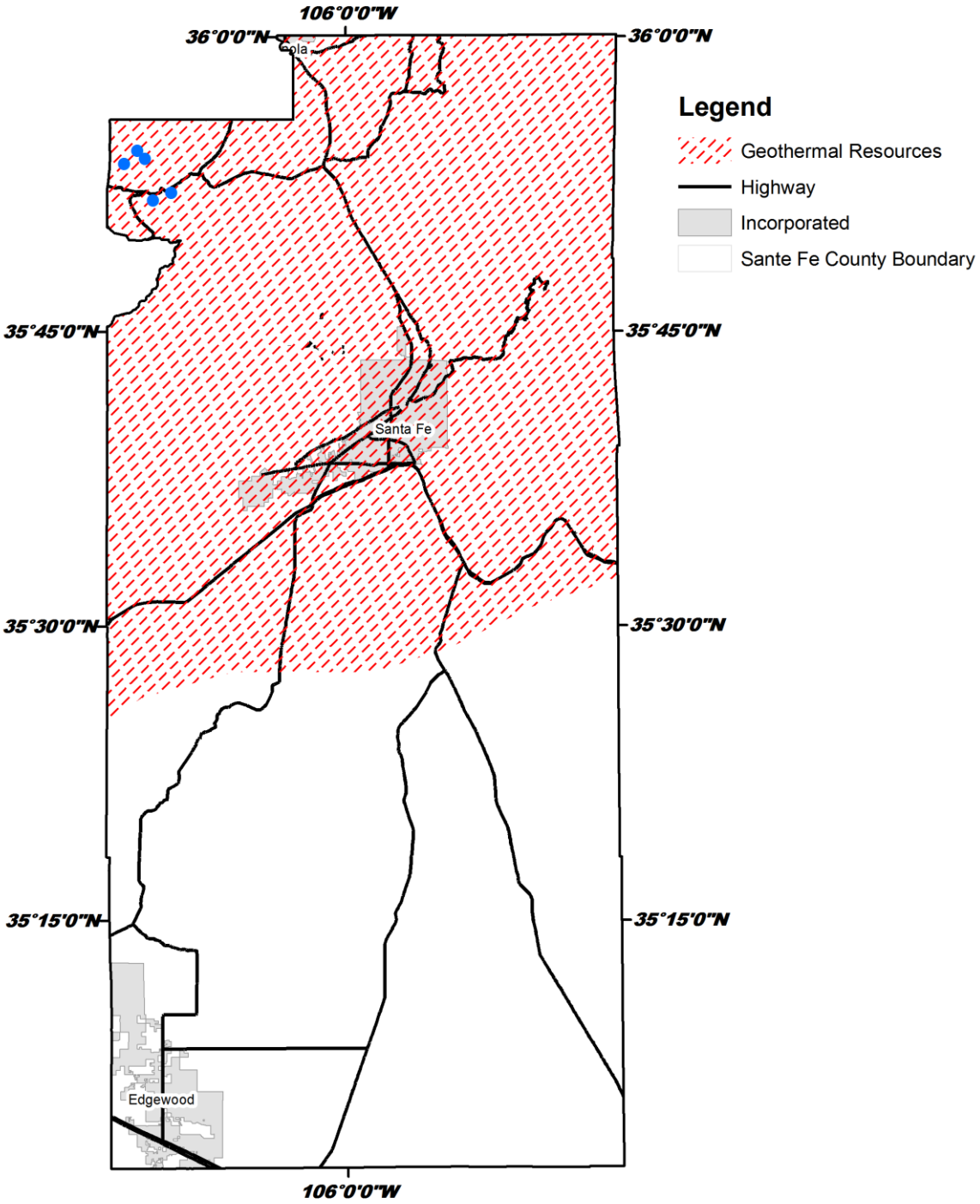
Map 37: Solar Power Potential



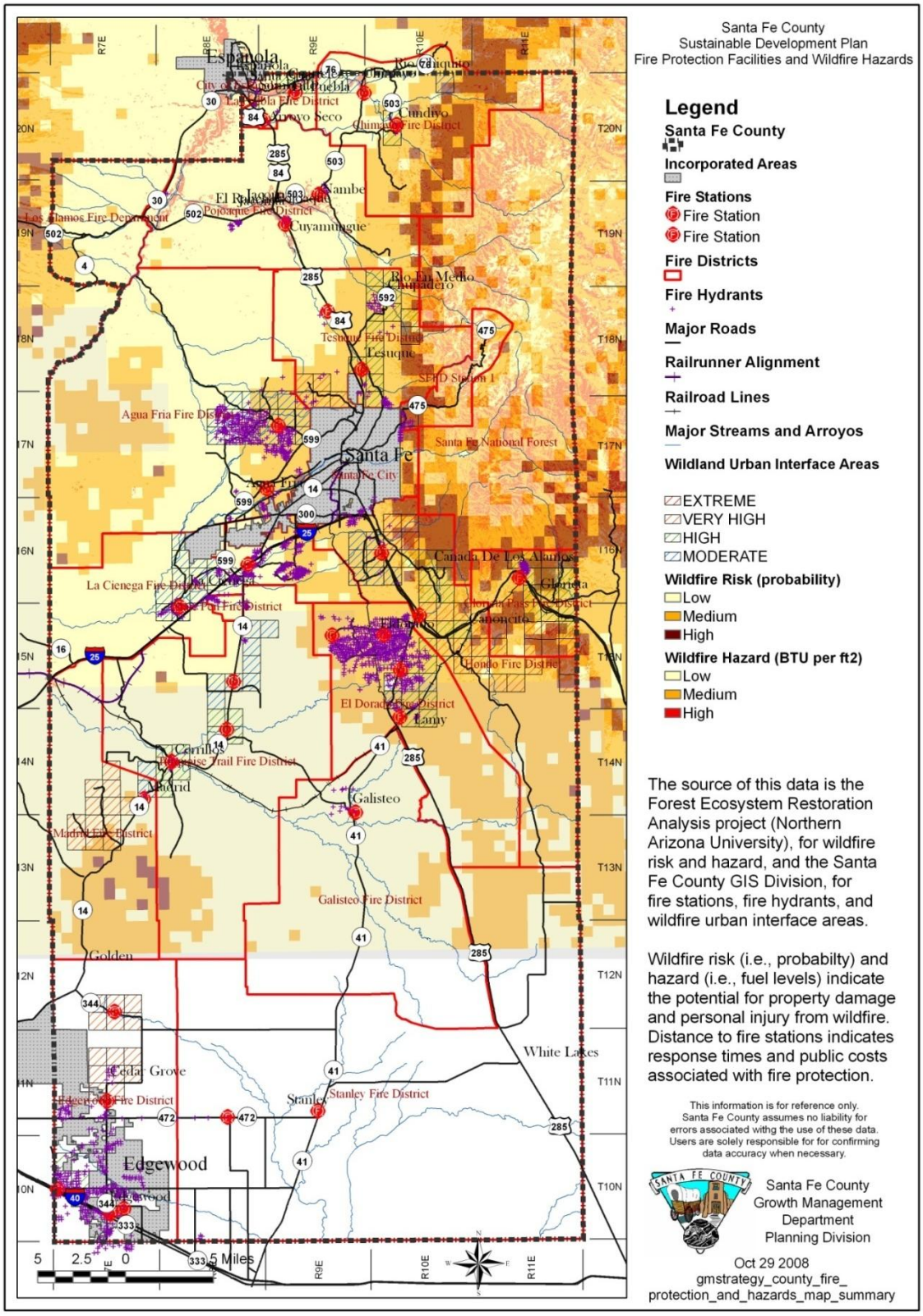
Map 38: Wind Power Potential



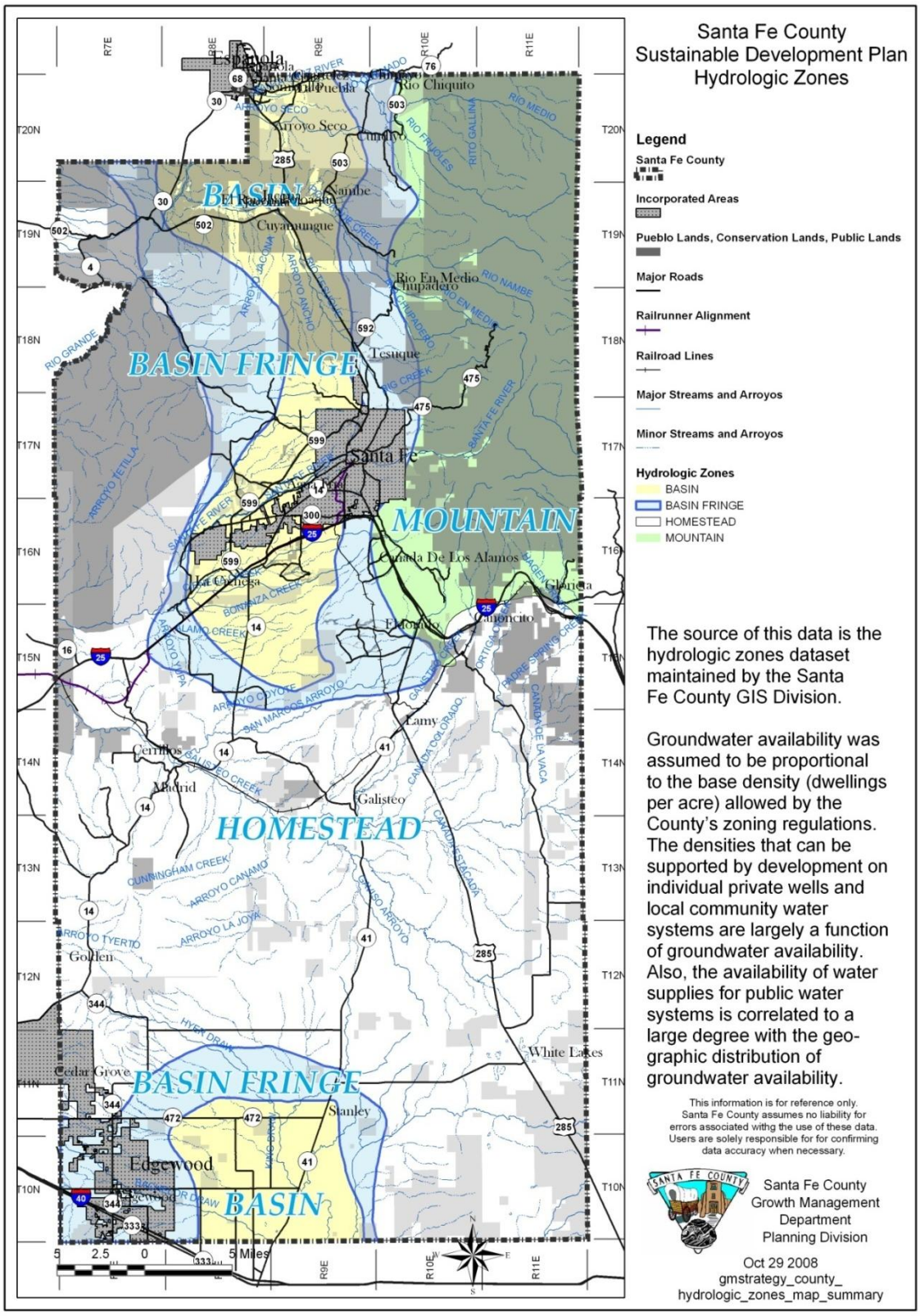
Map 39: Geothermal



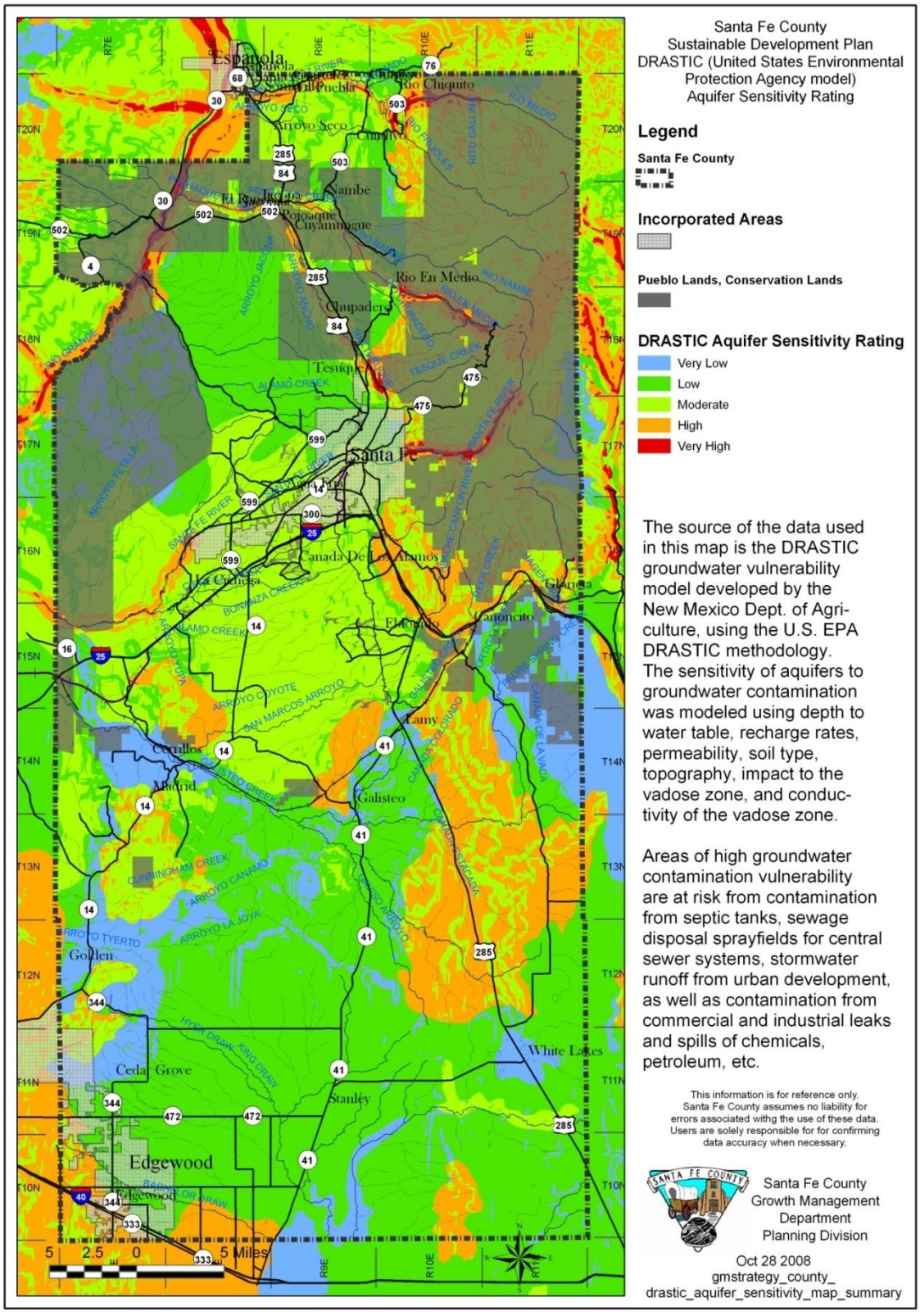
Map 40: Fire Protection Facilities and Wildfire Hazards



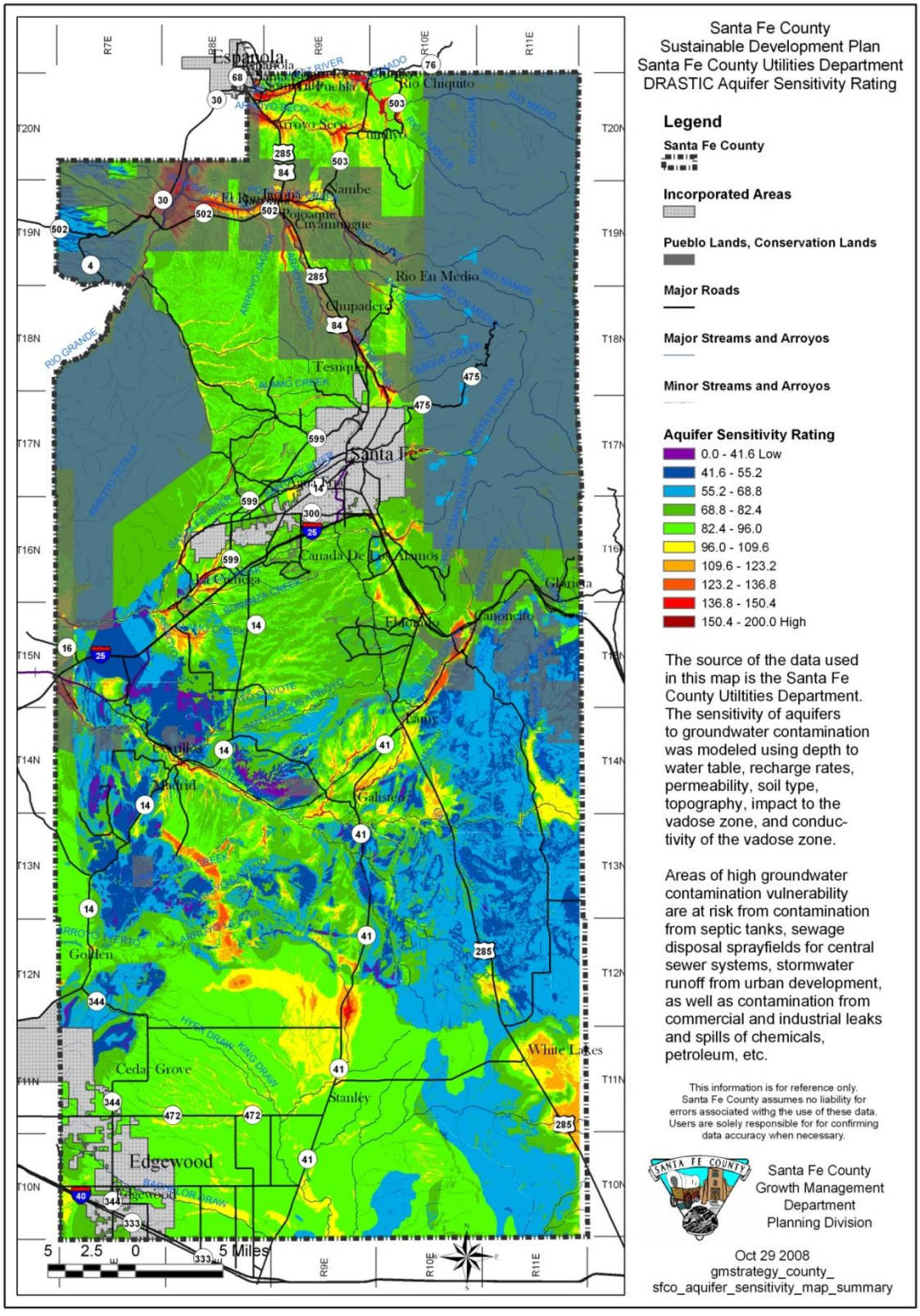
Map 41: Hydrologic Zones



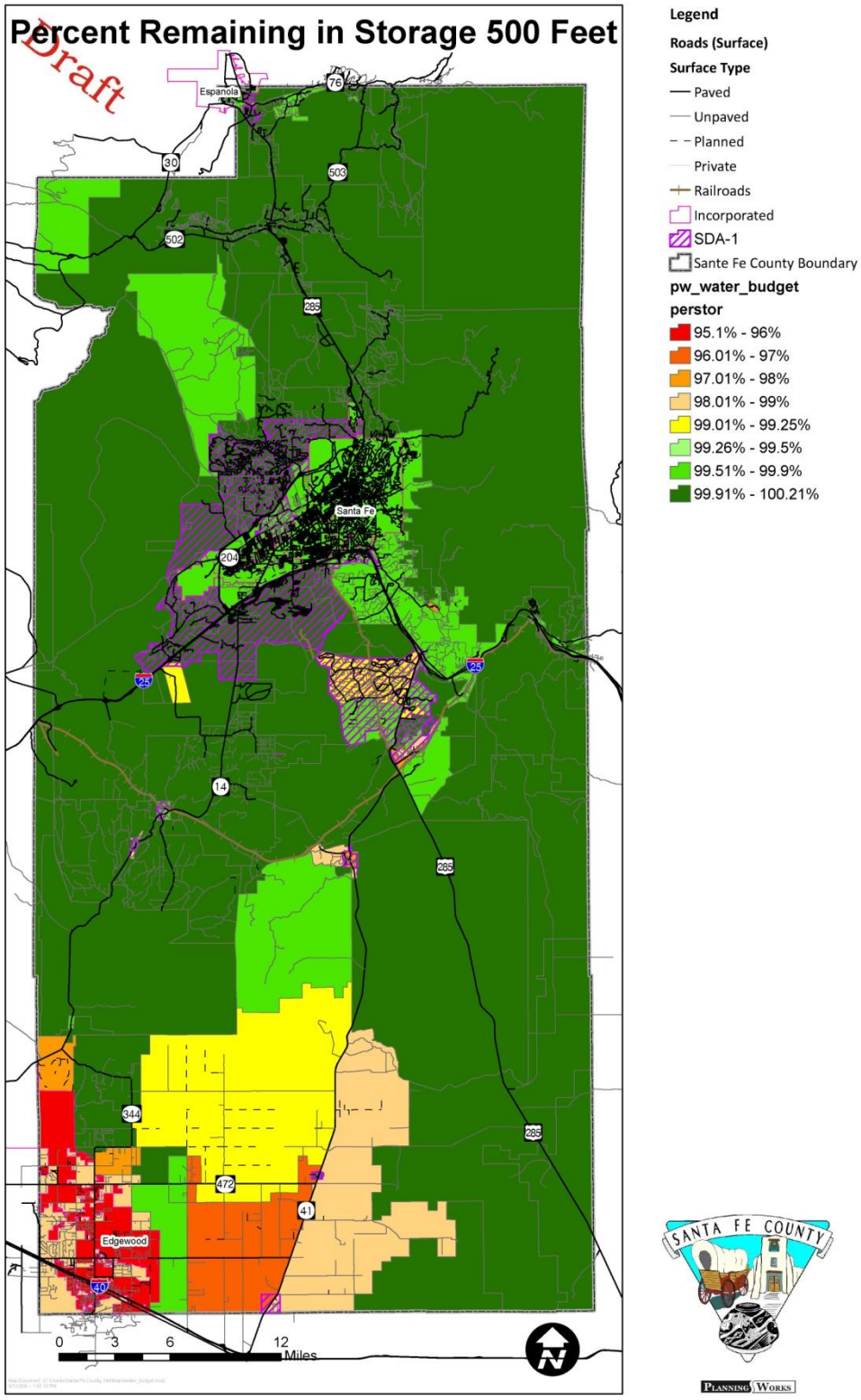
Map 42: DRASTIC (EPA Model) Aquifer Sensitivity Rating



Map 43: DRASTIC (County Utilities Model) Aquifer Sensitivity Rating

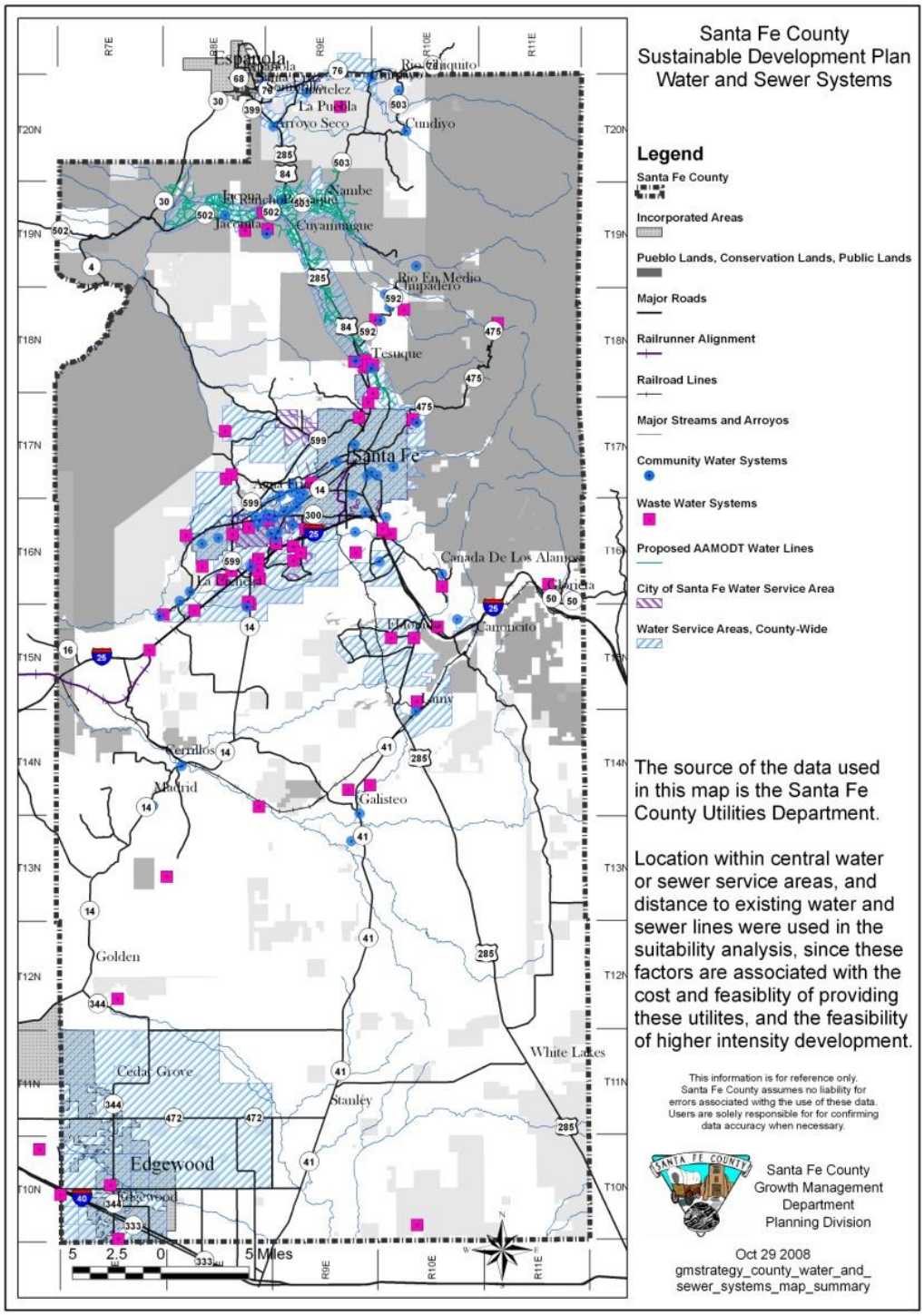


Map 44: Water Budget

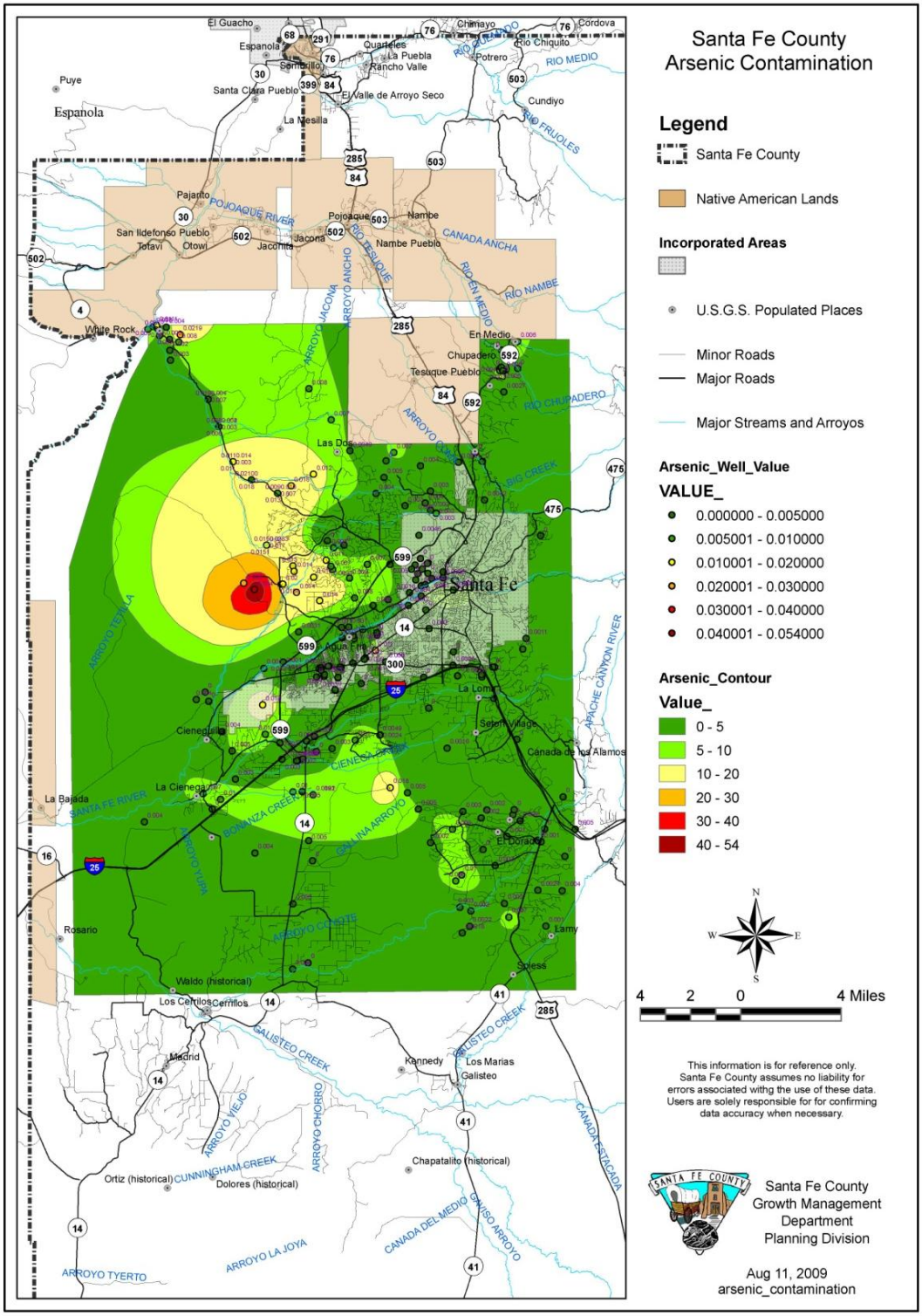


Map 45: Water and Sewer Systems

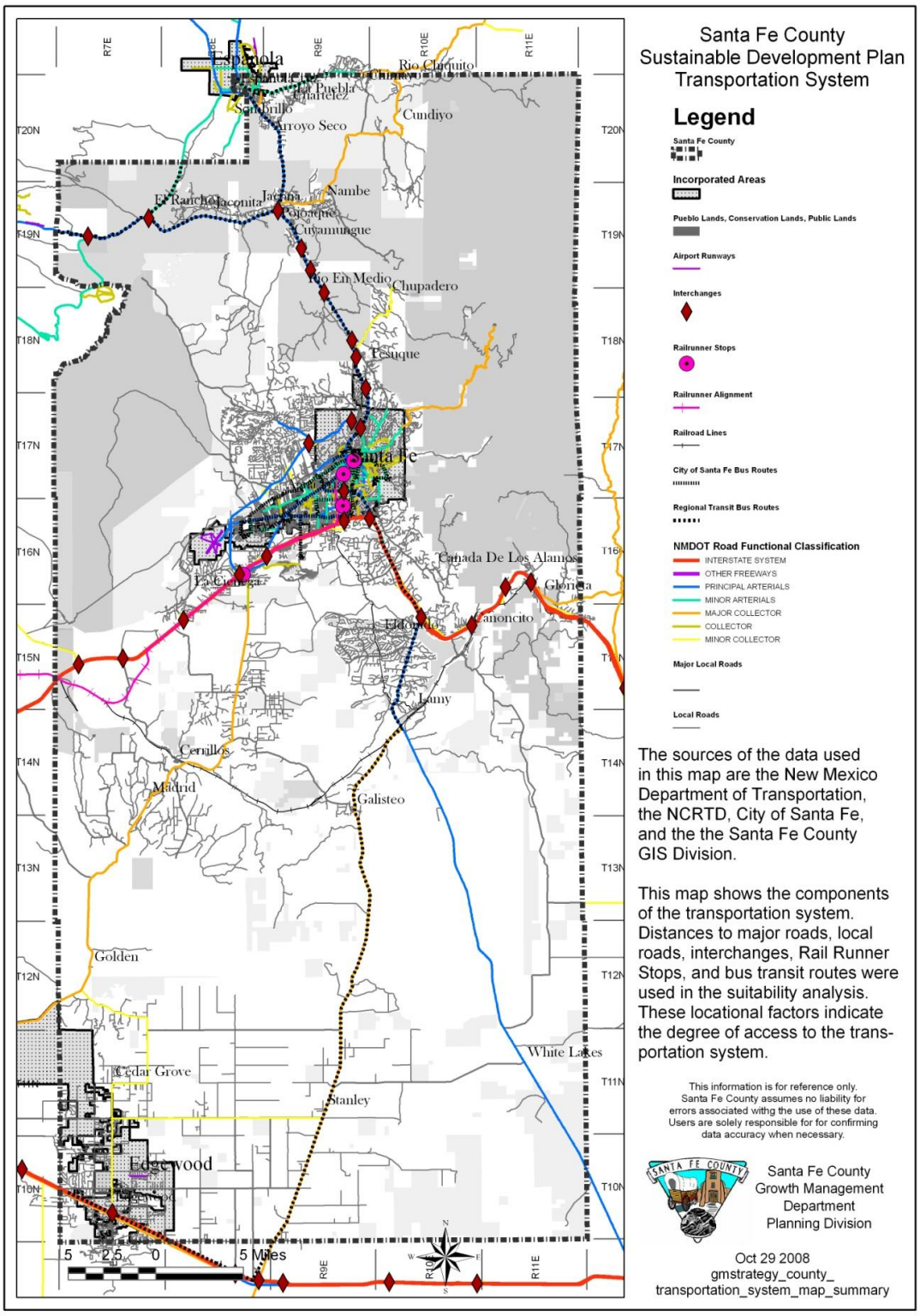
Map 27



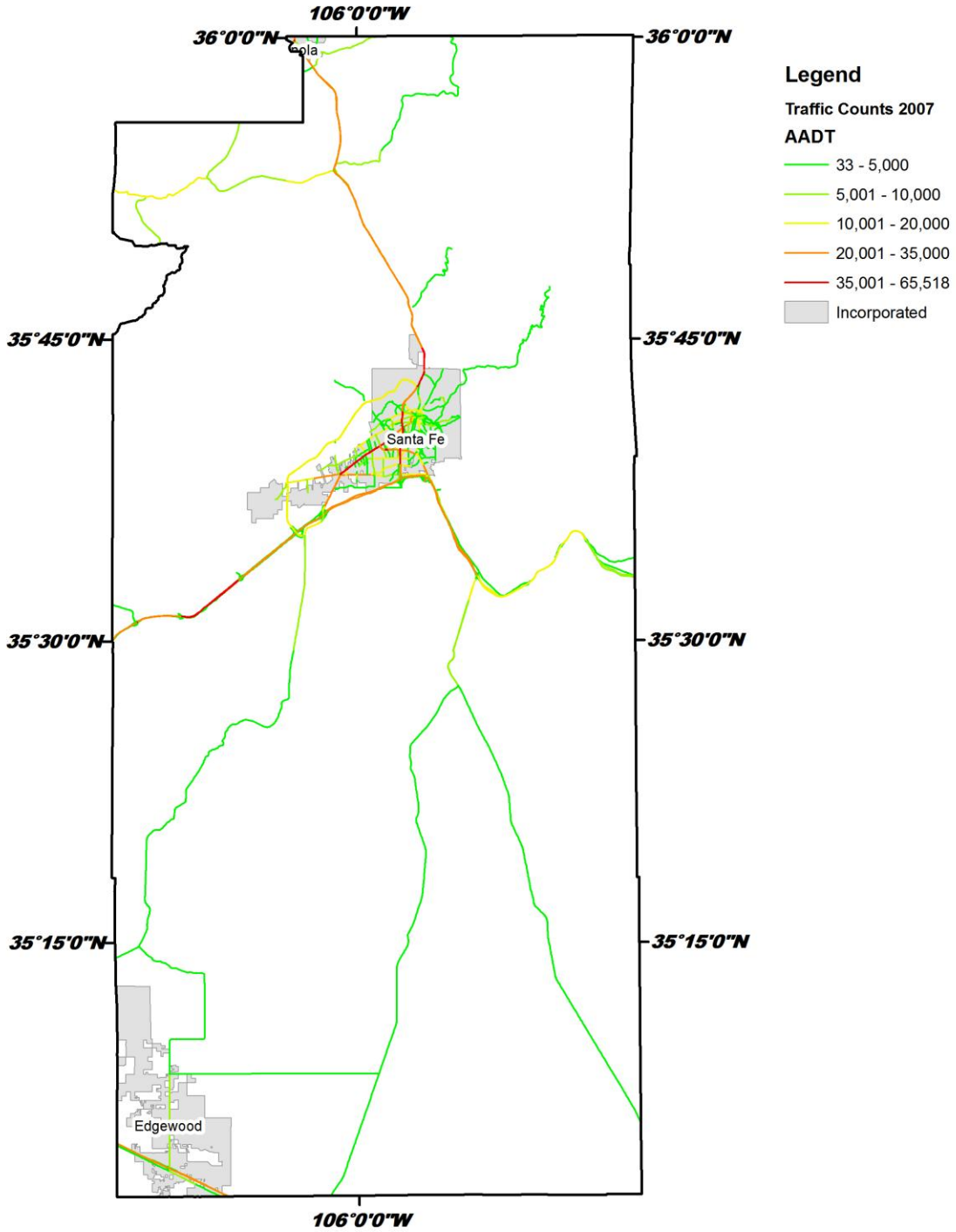
Map 46: Groundwater Contamination



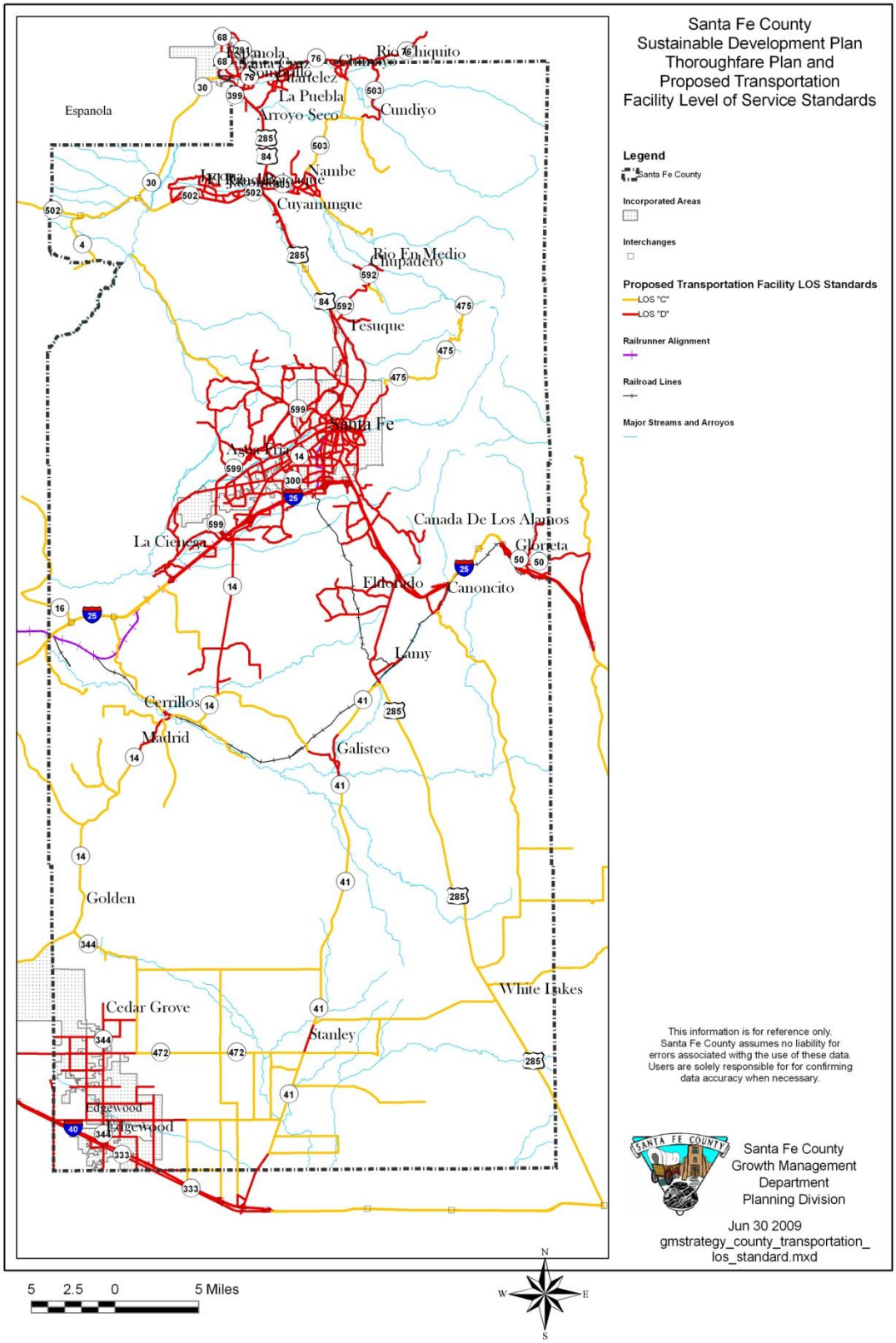
Map 47: Transportation System



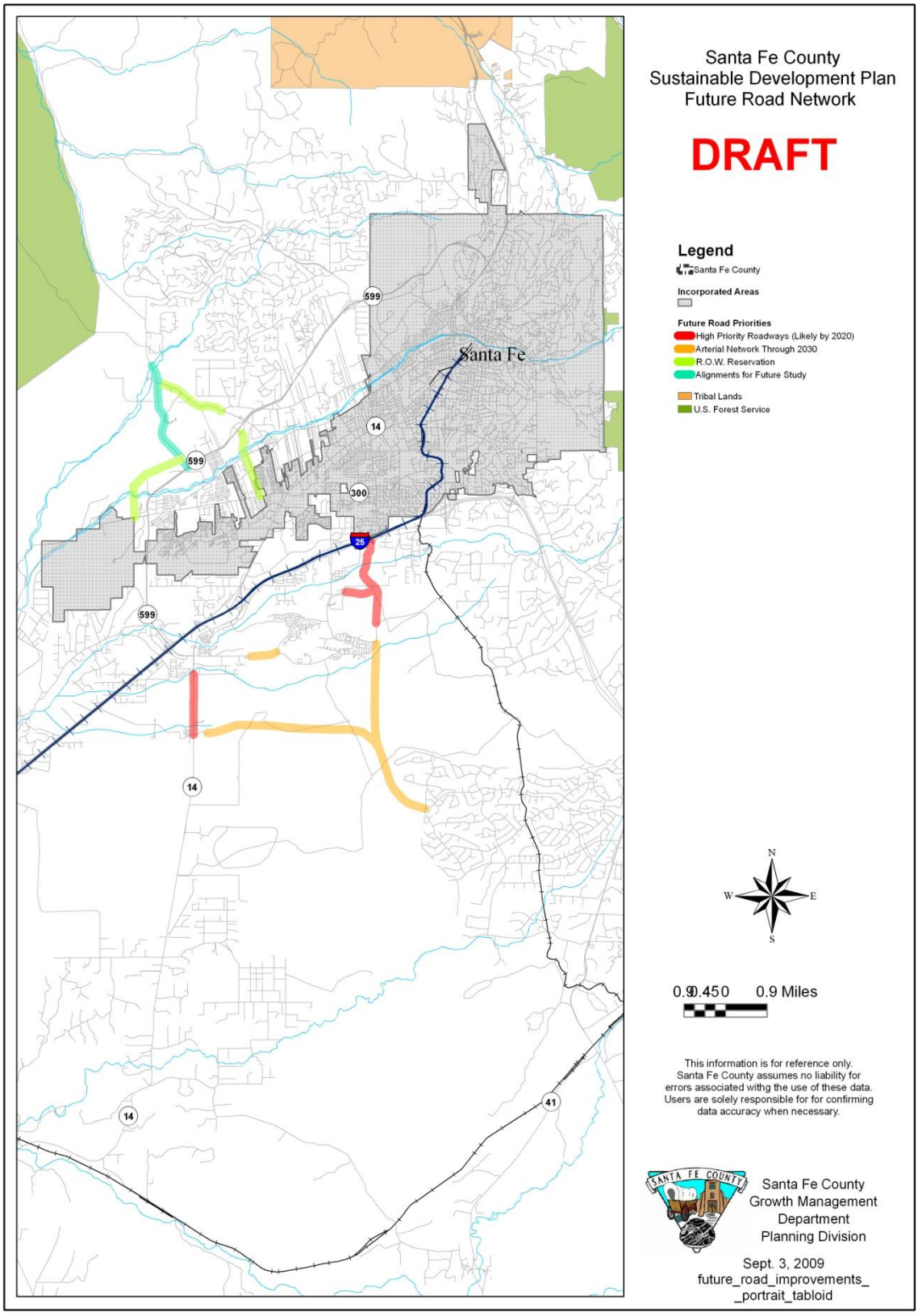
Map 48: Traffic Counts



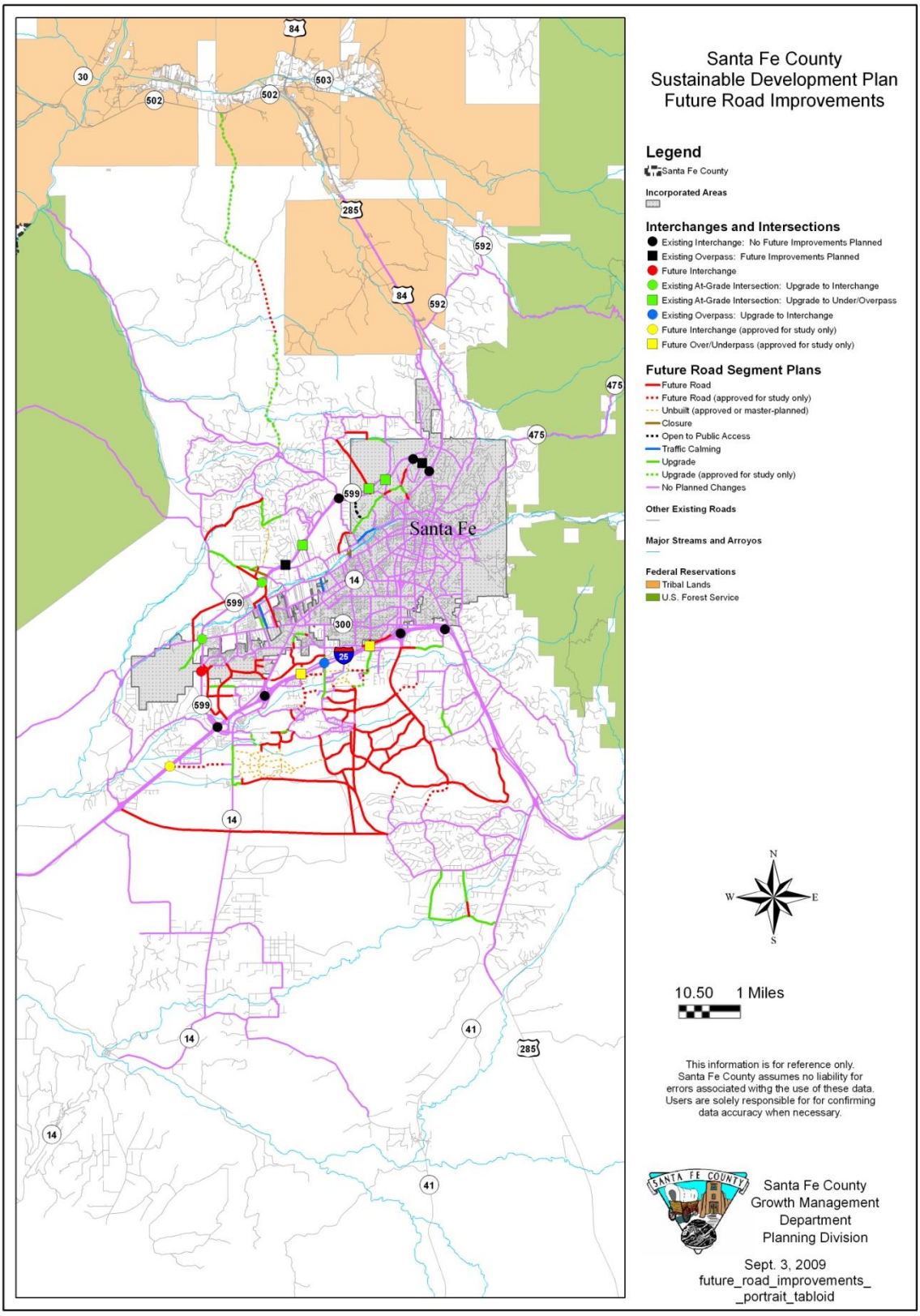
Map 49: Thoroughfare Plan and Transportation Levels of Service



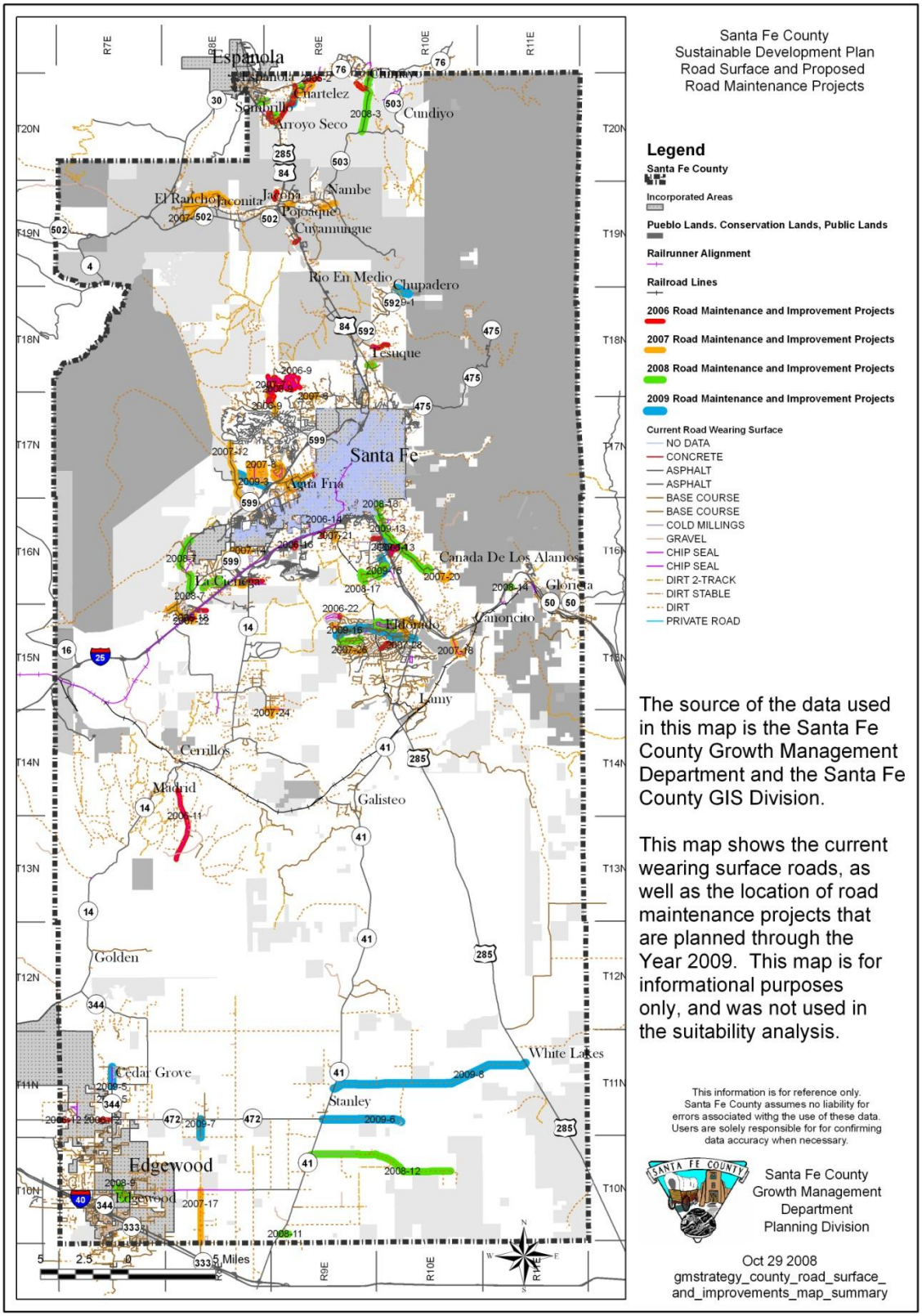
Map 50: Future Road Network



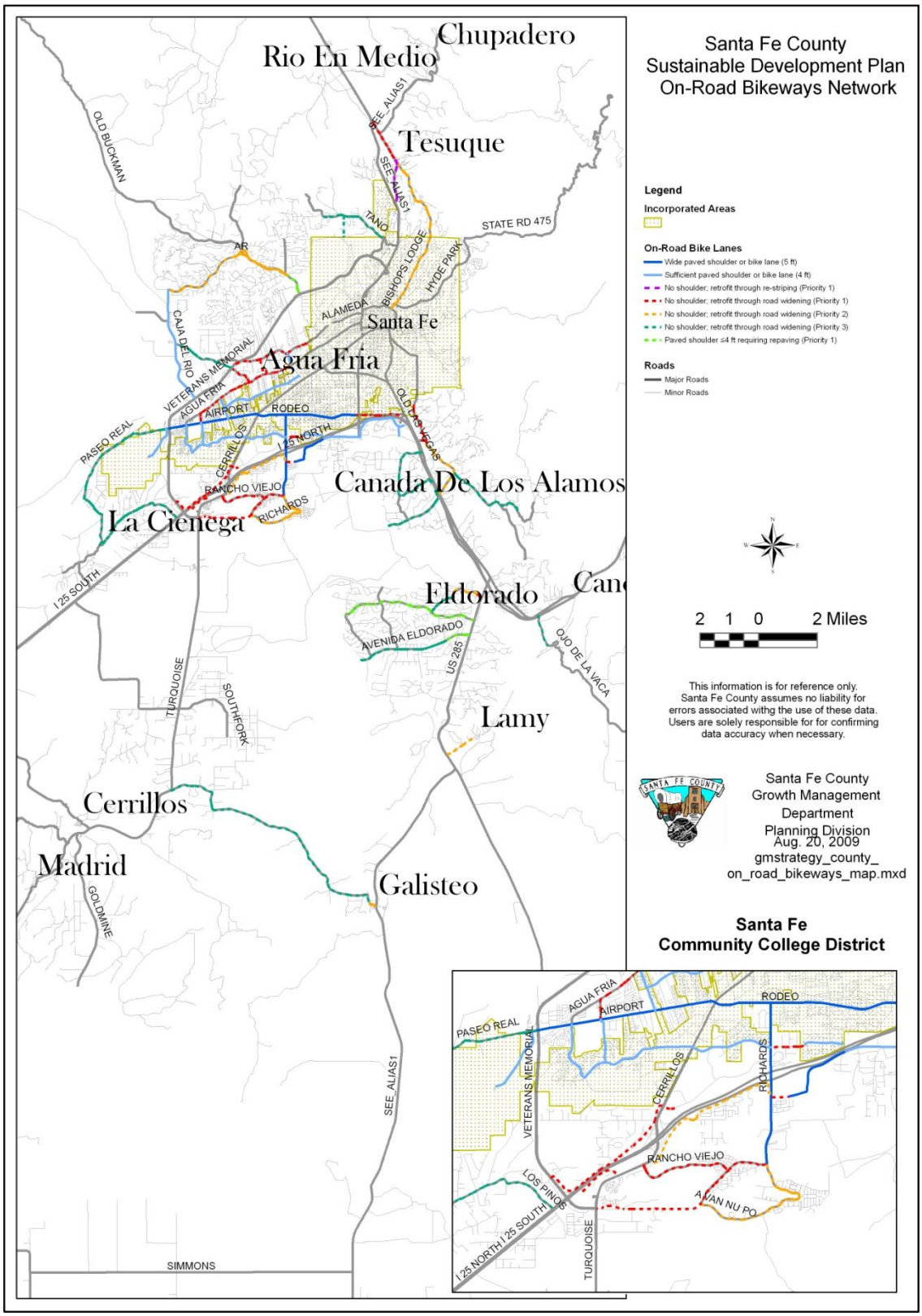
Map 51: Future Road Improvements



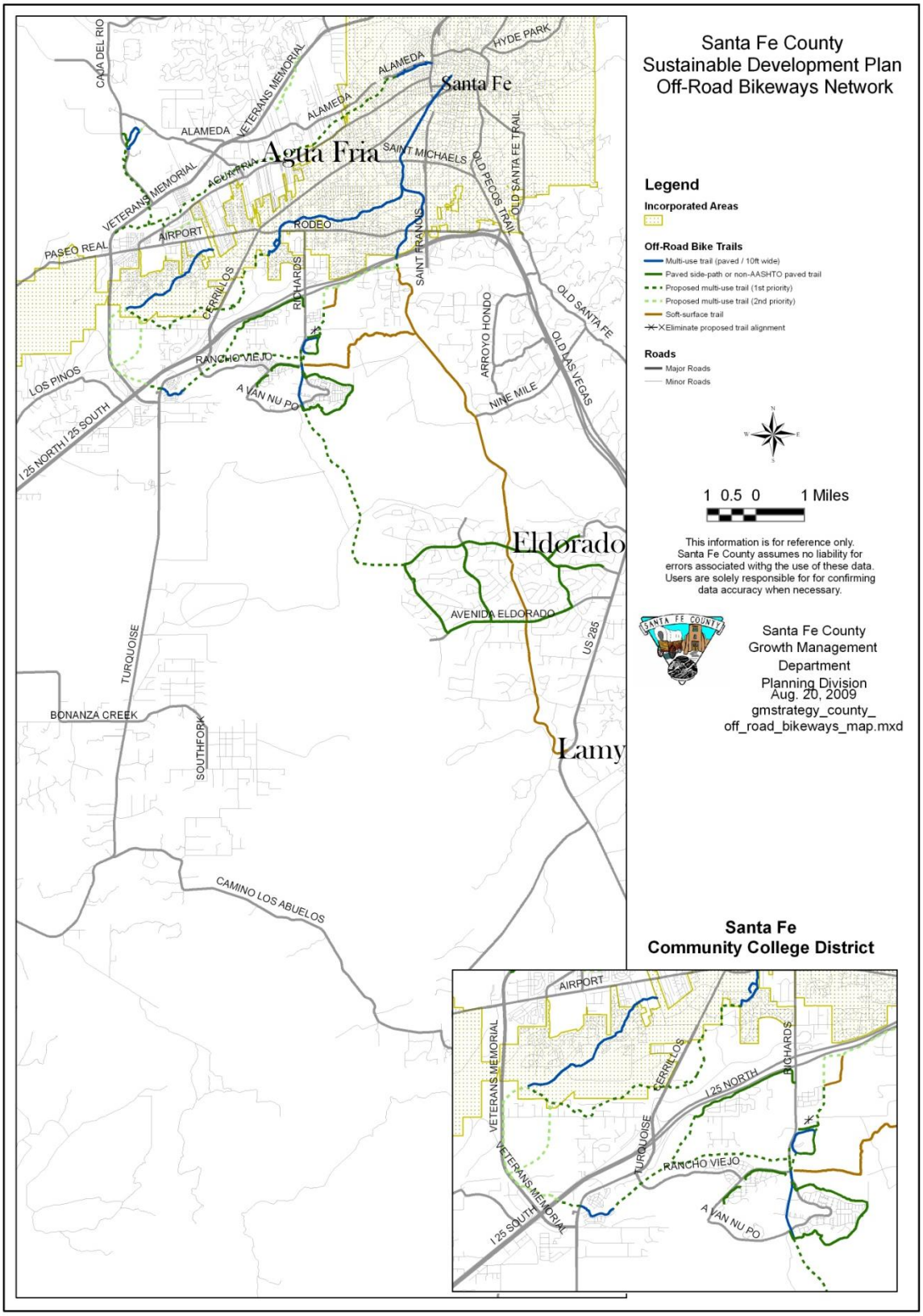
Map 52: Road Surface and Road Maintenance Projects



Map 53: On-Road Bikeways



Map 54: Off-Road Bikeways Network



Santa Fe County, New Mexico

Sustainable Land Development Plan

Map Atlas
Supplement

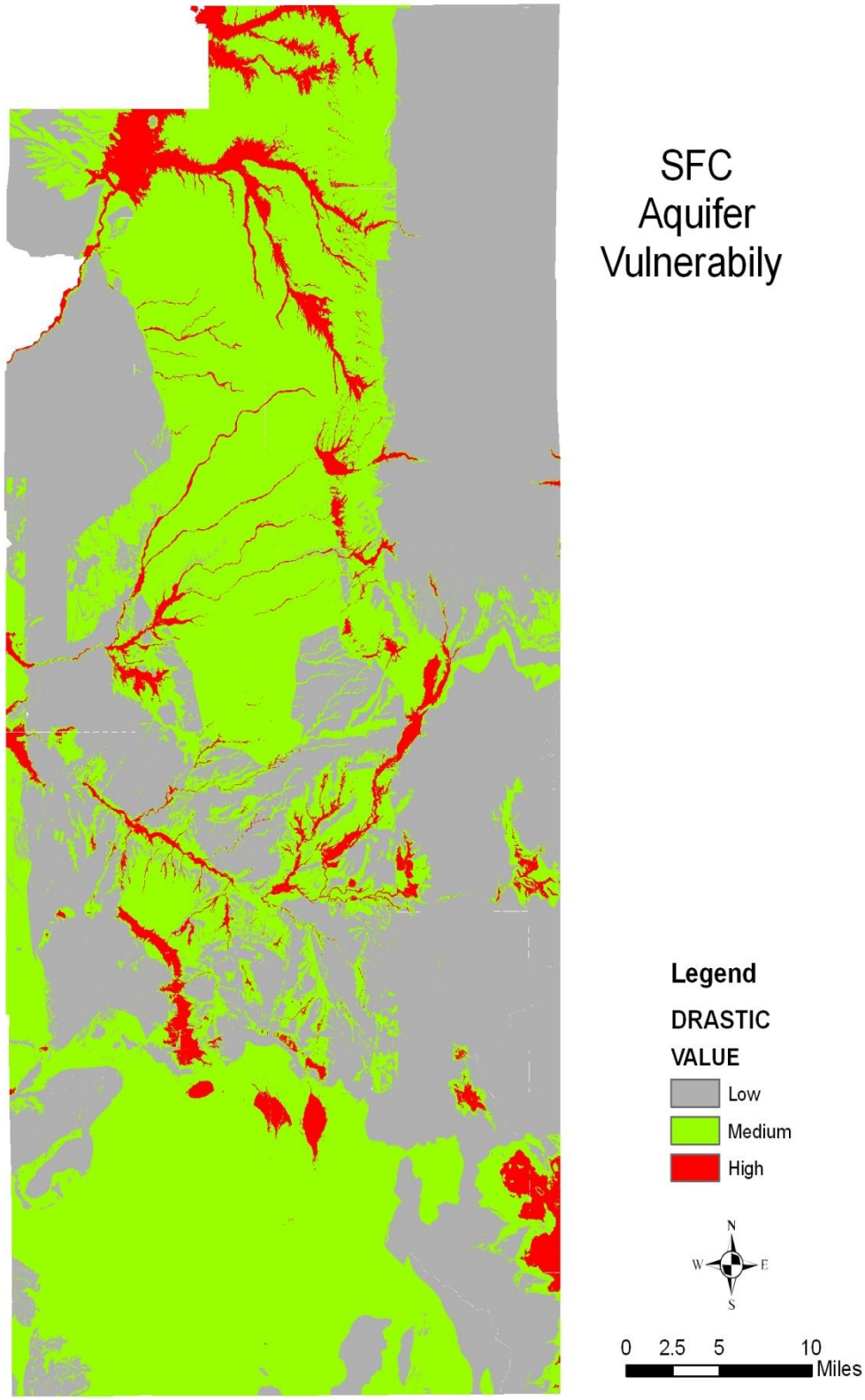
Public Review Draft
October 1, 2009

Planning Team:
Santa Fe County, New Mexico
Freilich & Popowitz, LLP
Planning Works, LLC
Rutgers University Center for Urban Policy and Research

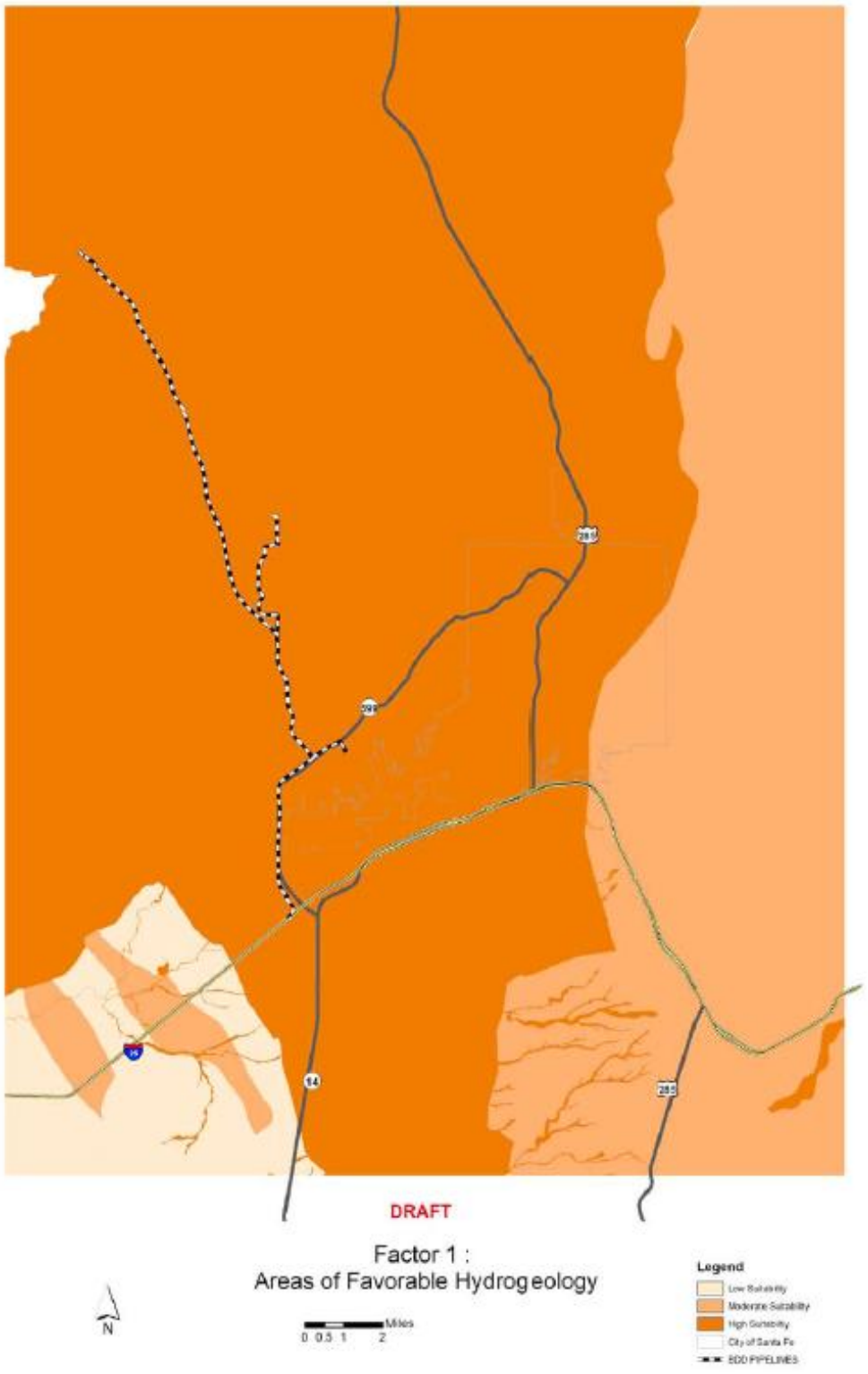
Maps

Figures

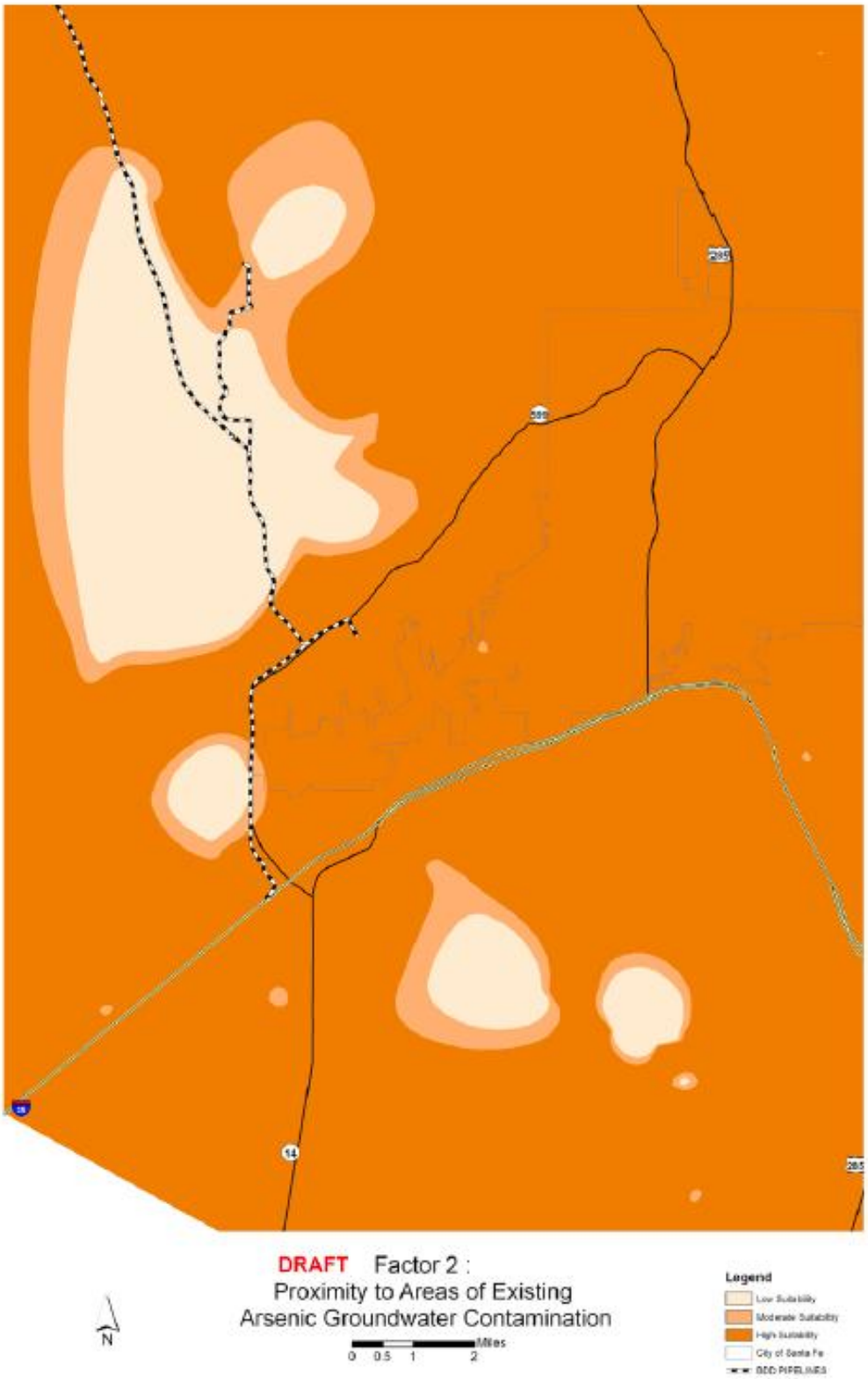
Map S-1: Santa Fe County Aquifer Vulnerability



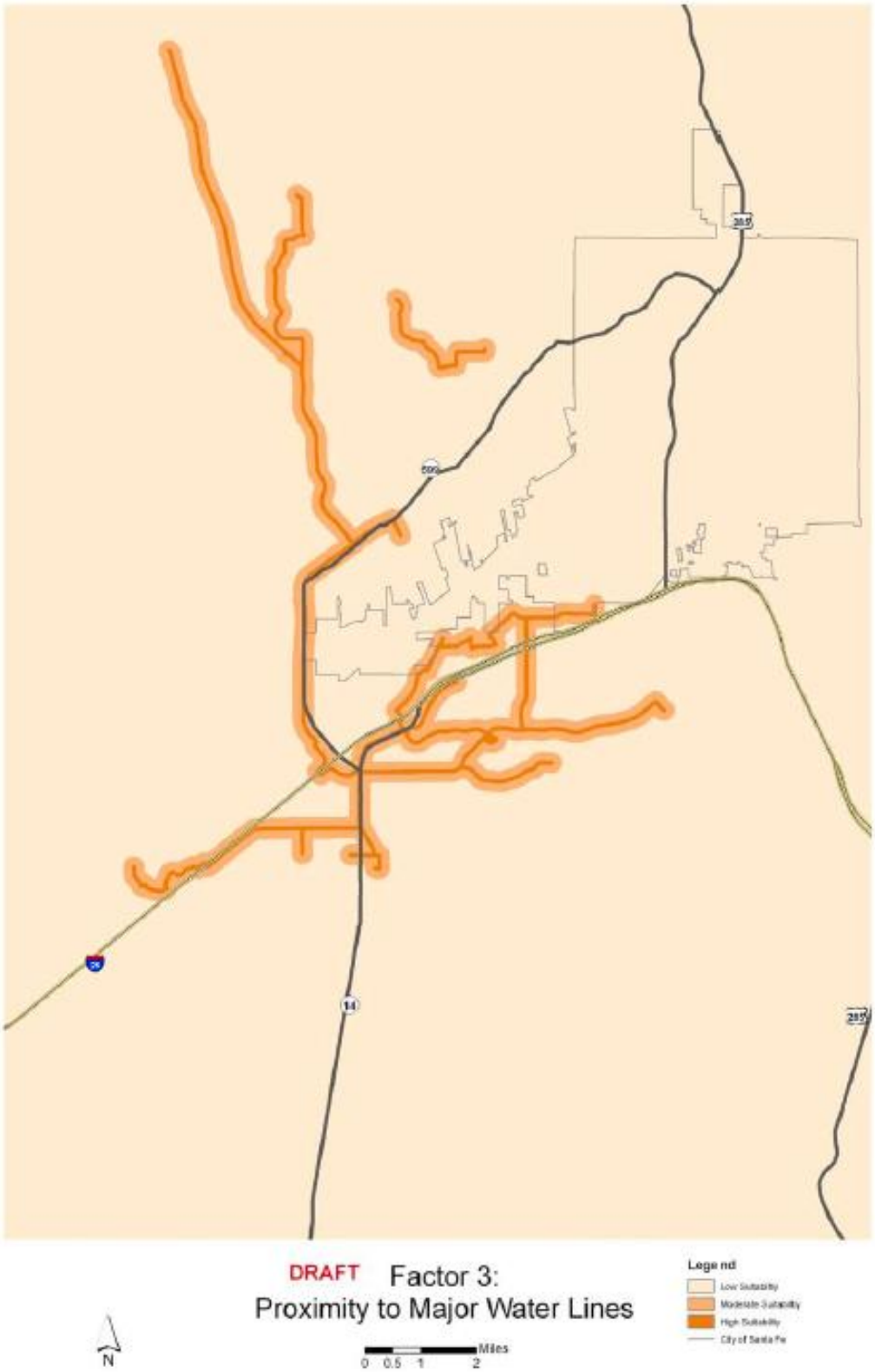
Map S-2: Supplemental Wells Analysis; Areas of Favorable Hydrogeology



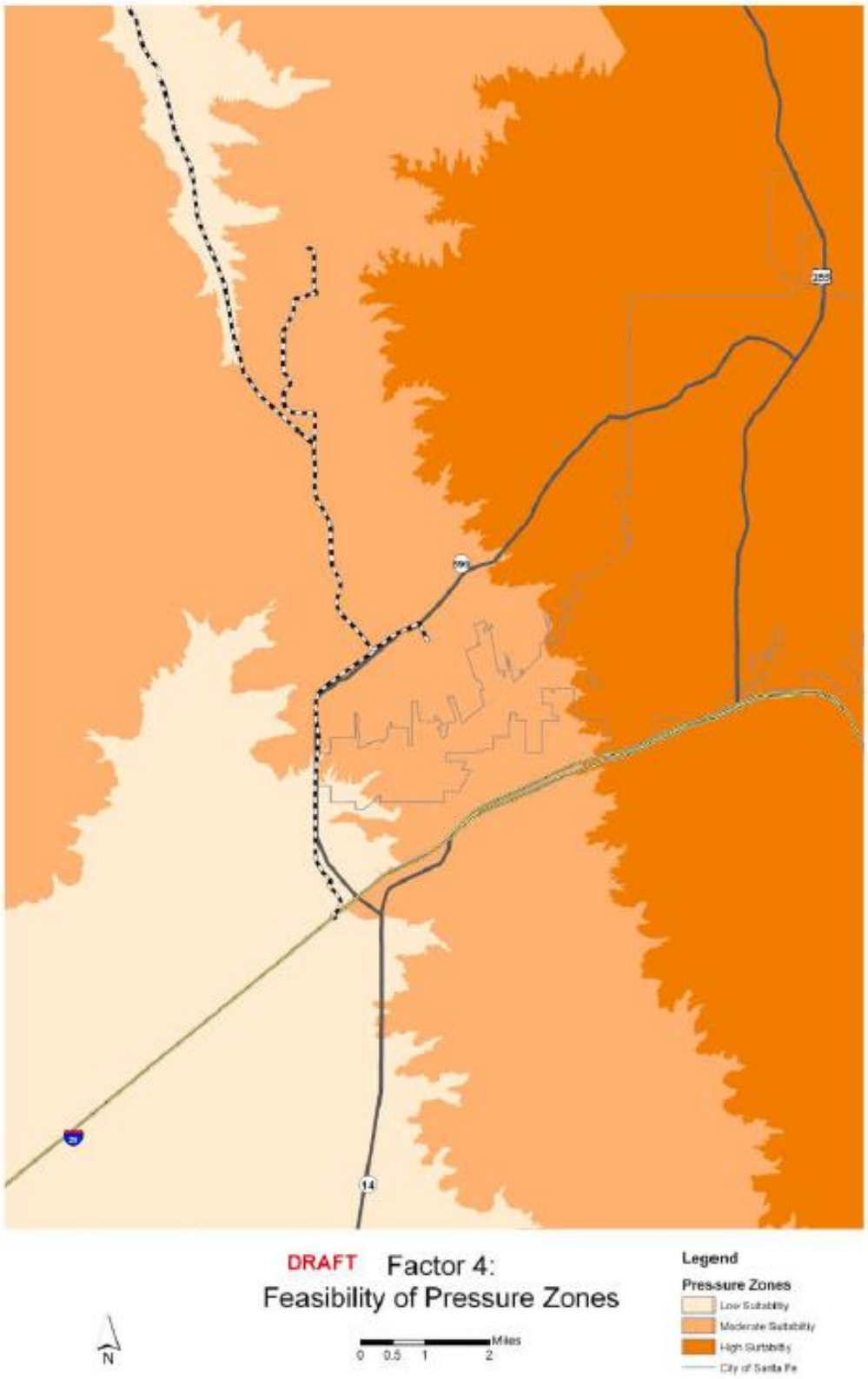
Map S-3: Supplemental Wells Analysis; Proximity to Areas of Existing Arsenic Groundwater Contamination



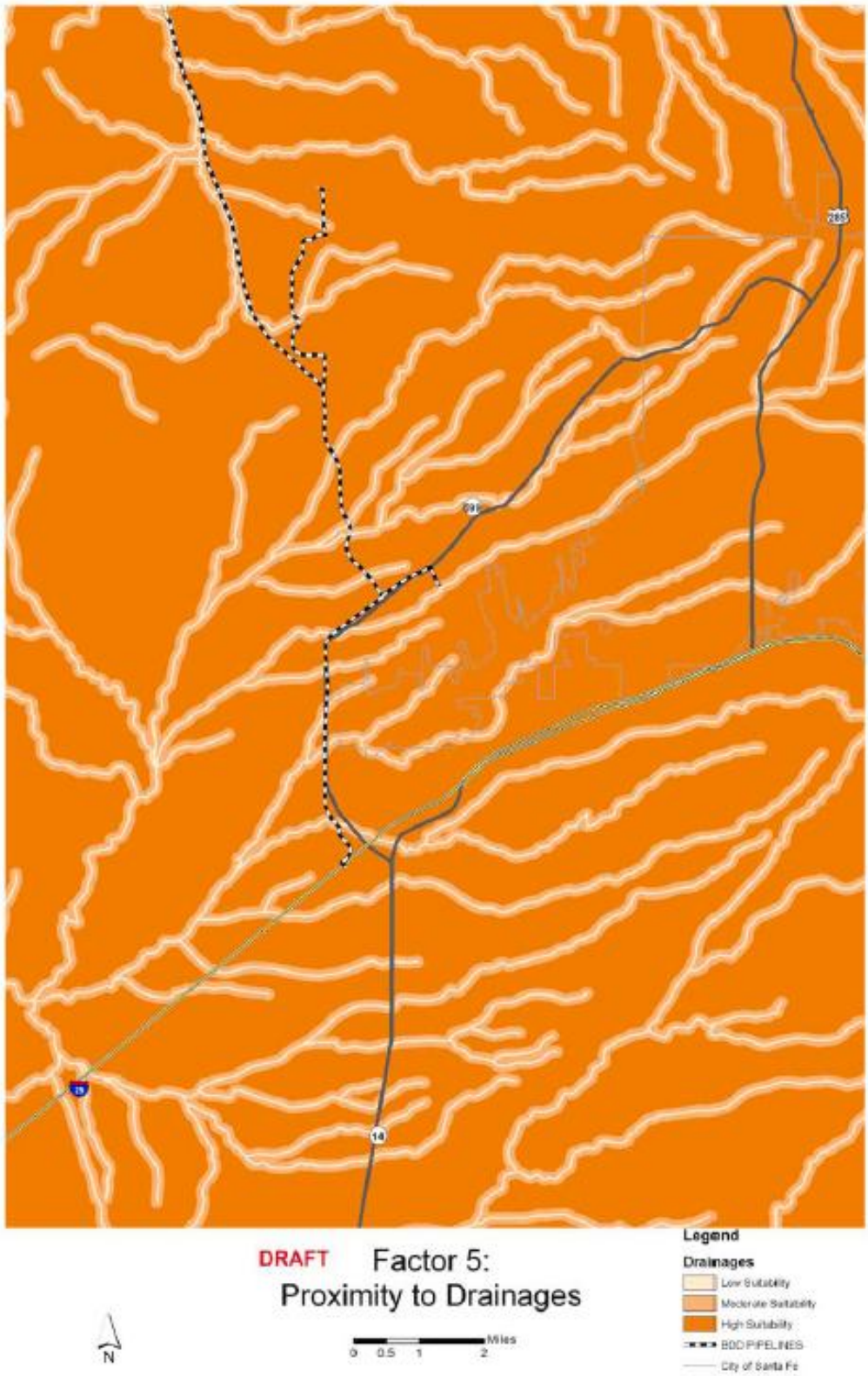
Map S-4: Supplemental Wells Analysis; Proximity to Major Water Lines



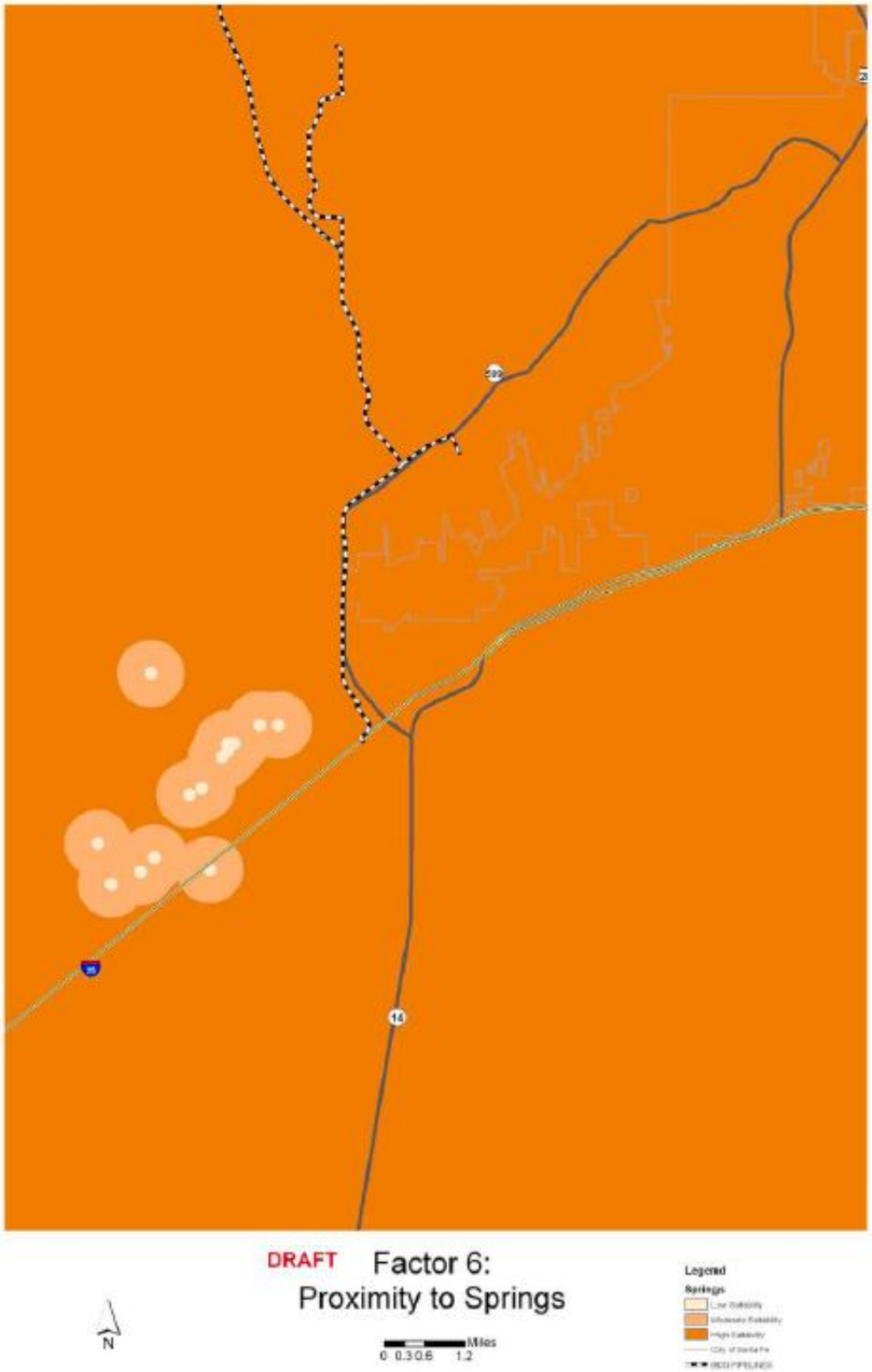
Map S-5: Supplemental Wells Analysis; Feasibility of Pressure Zones



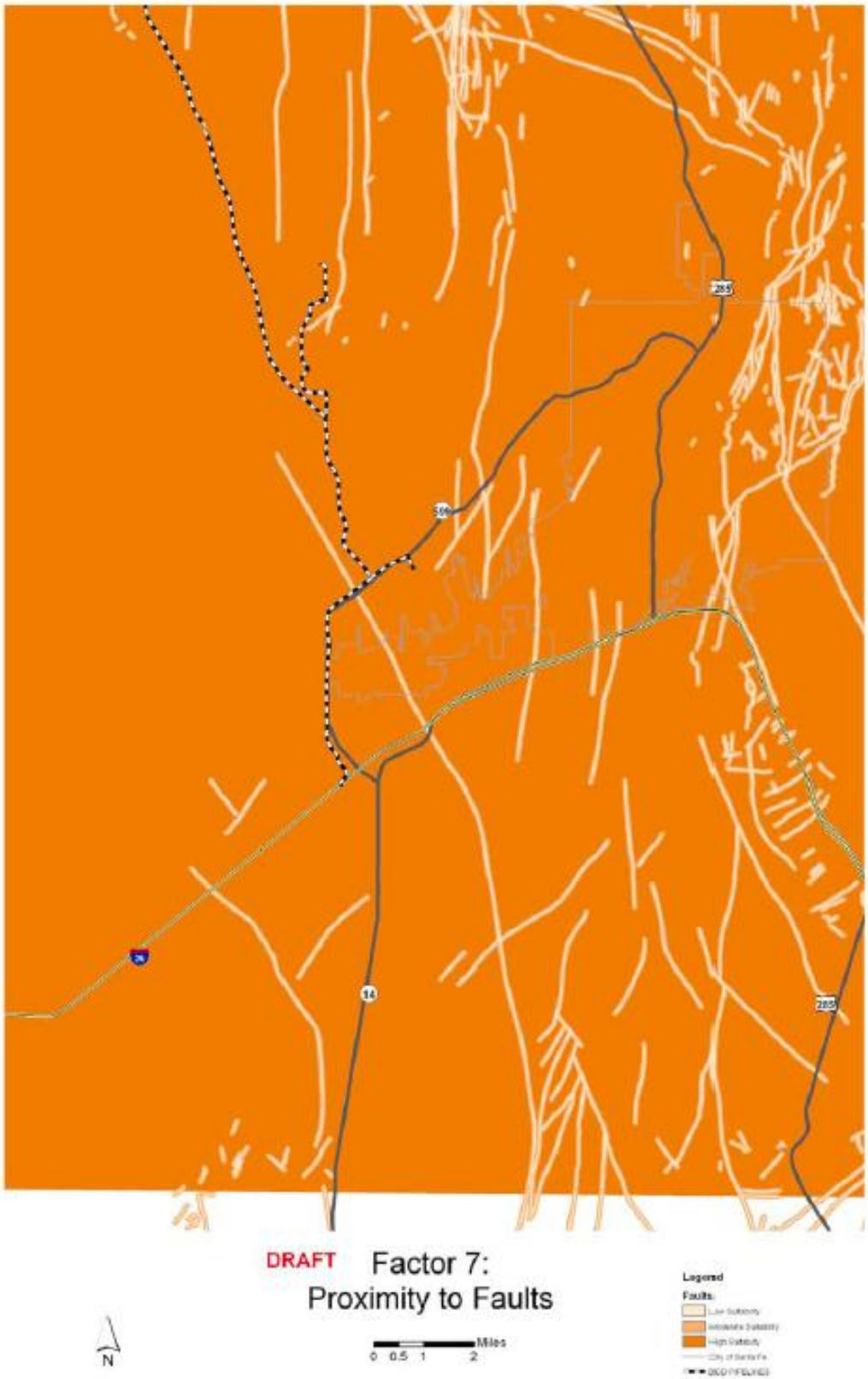
Map S-6: Supplemental Wells Analysis; Proximity to Drainages



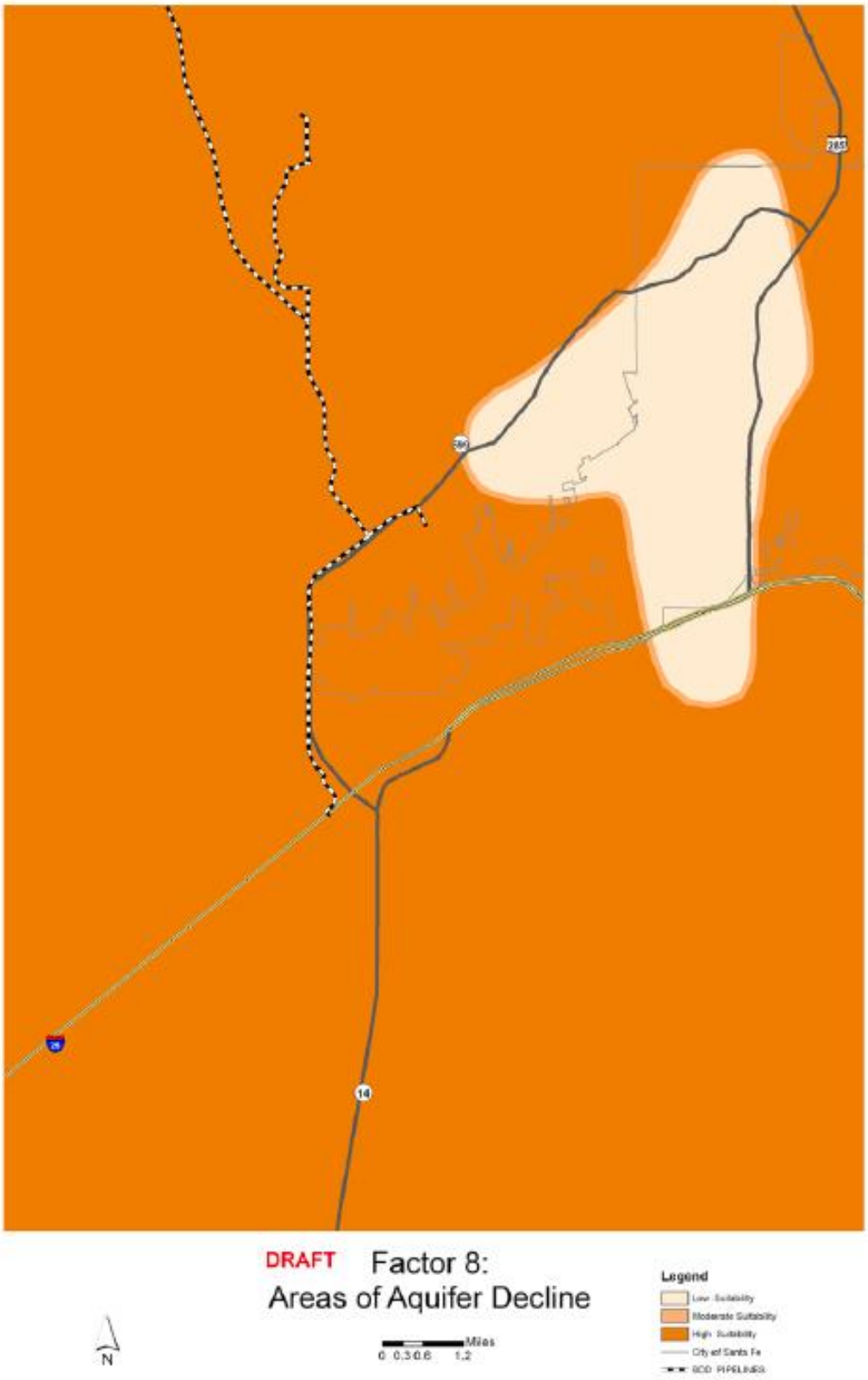
Map S-7: Supplemental Wells Analysis; Proximity to Streams



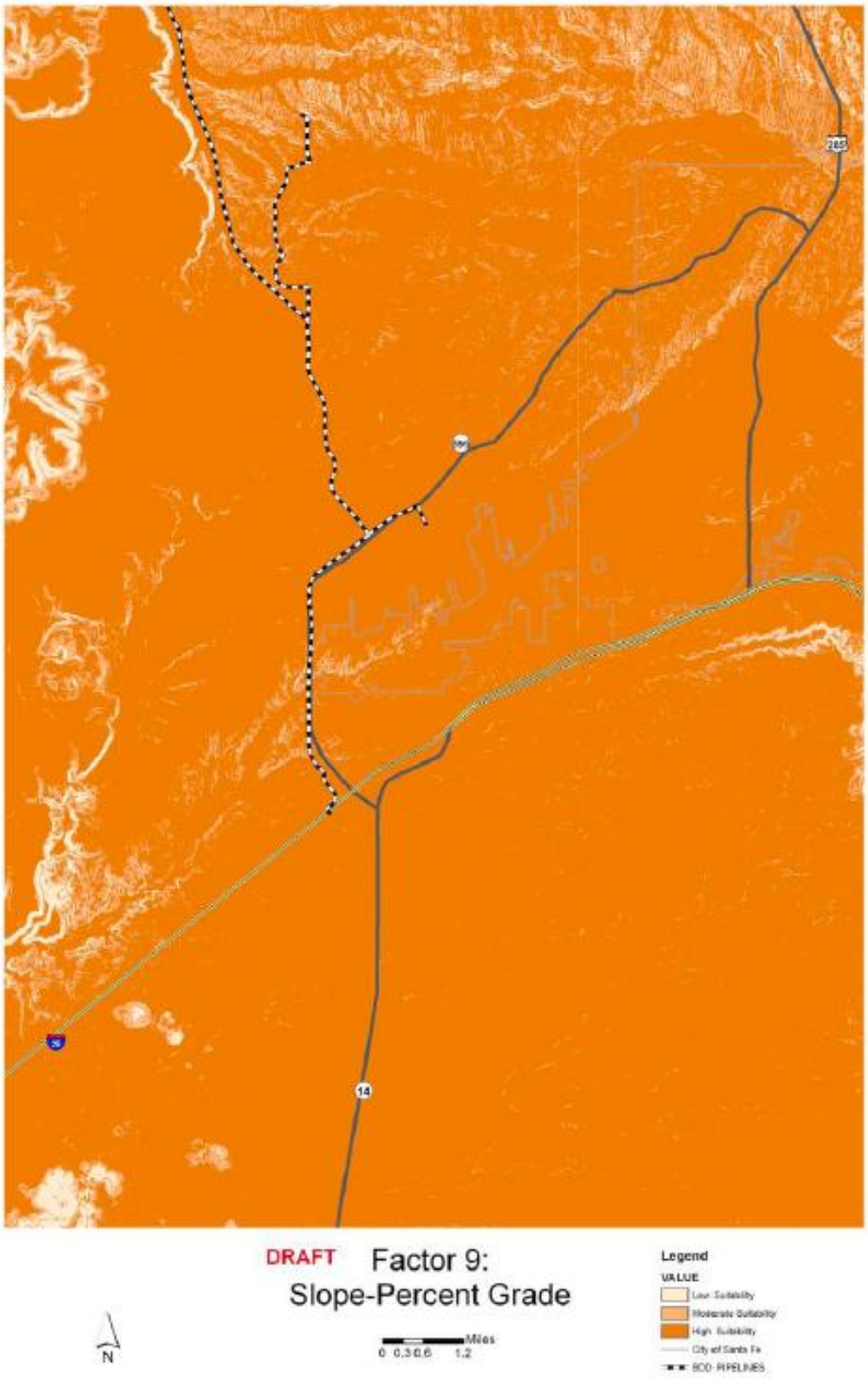
Map S-8: Supplemental Wells Analysis; Proximity to Faults



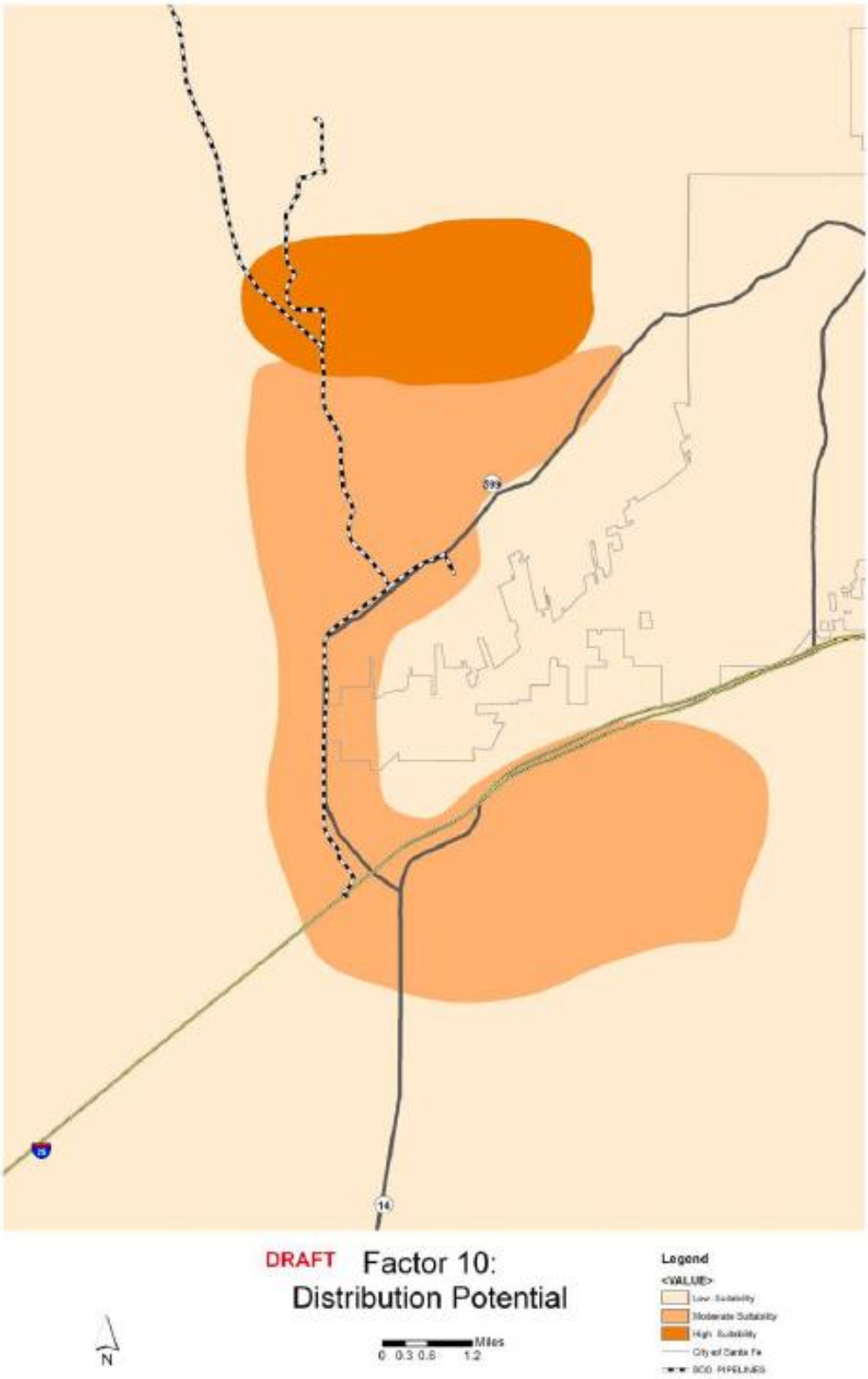
Map S-9: Supplemental Wells Analysis; Areas of Aquifer Decline



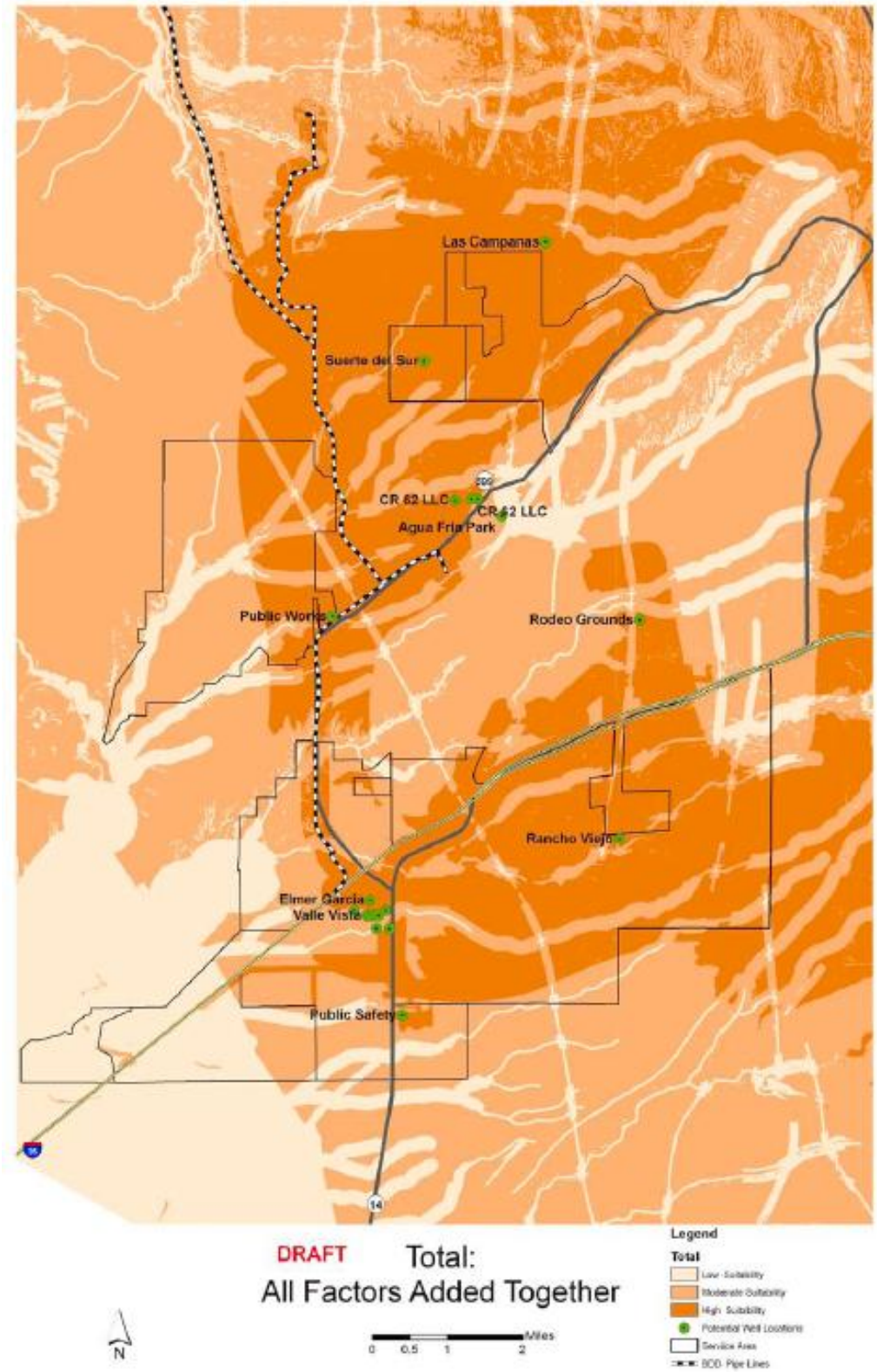
Map S-10: Supplemental Wells Analysis; Slope-Percent Grade



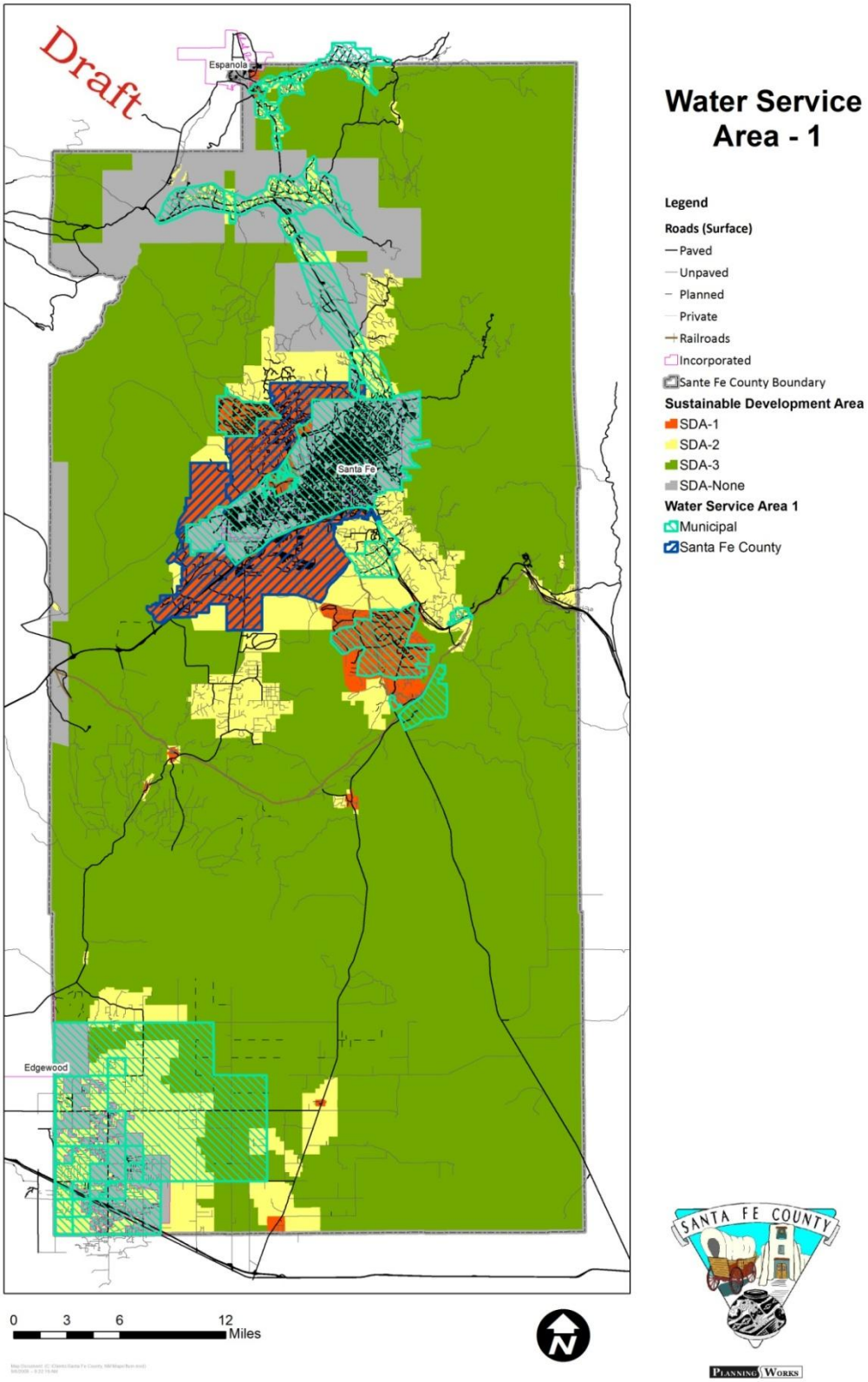
Map S-11: Supplemental Wells Analysis; Distribution Potential



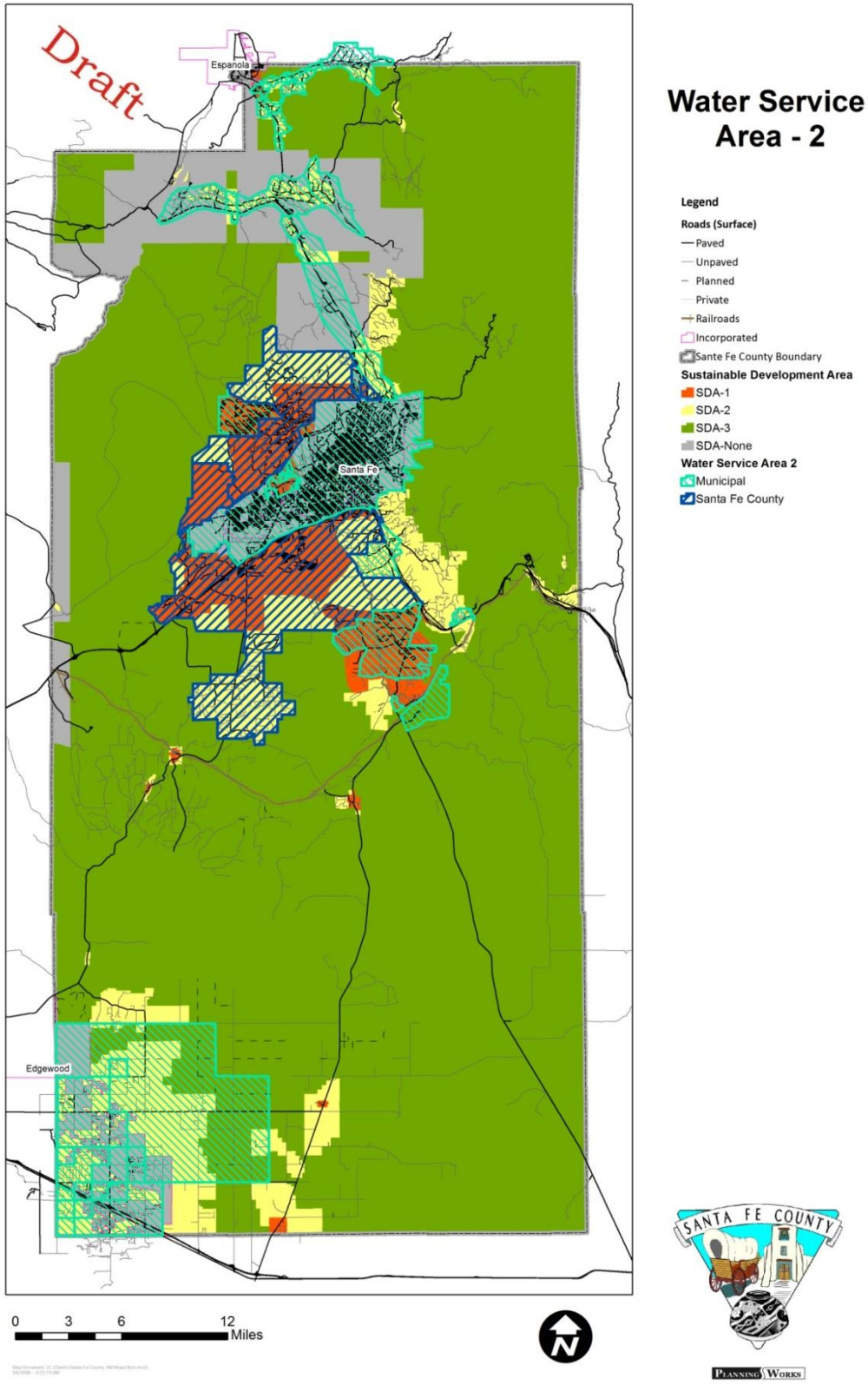
Map S-12: Supplemental Wells Analysis; All Factors



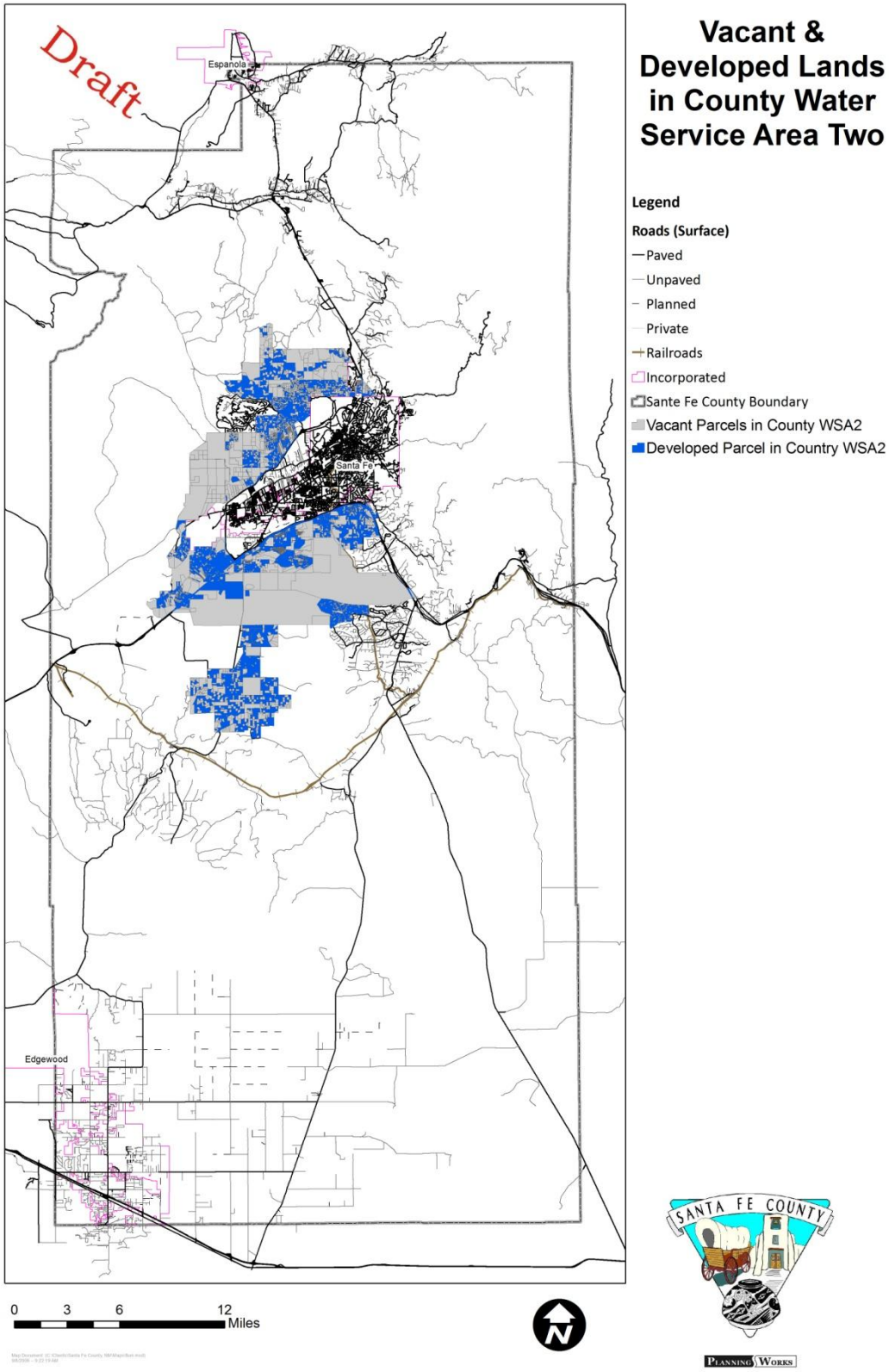
Map S-13: County & Municipal Water Service Area 1



Map S-14: County & Municipal Water Service Area 2



Map S-15: Vacant Lands inside Water Service Area 2



Map S-16: Well Locations inside Water Service Area 2

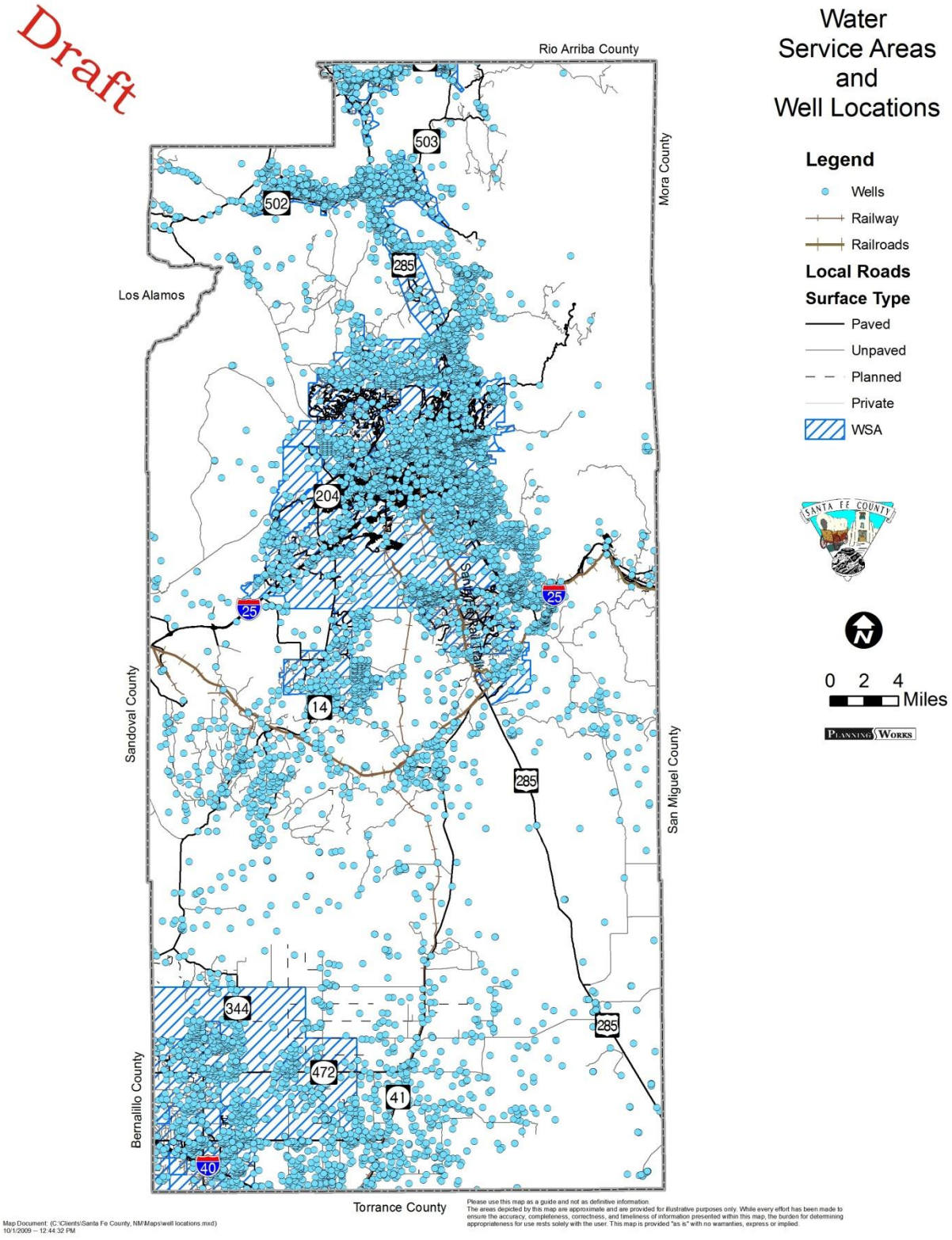


Figure 2- 76: Shared Wells vs. Individual Wells

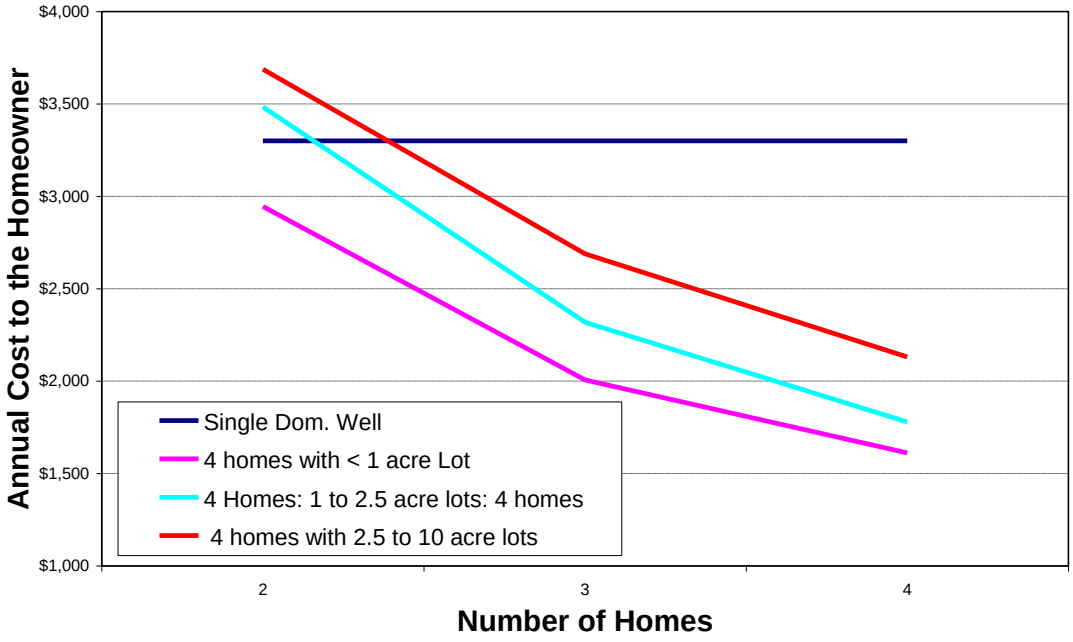


Figure 2- 77: Shared Wells vs. Community Water System (2.5- to 10-acre lots)

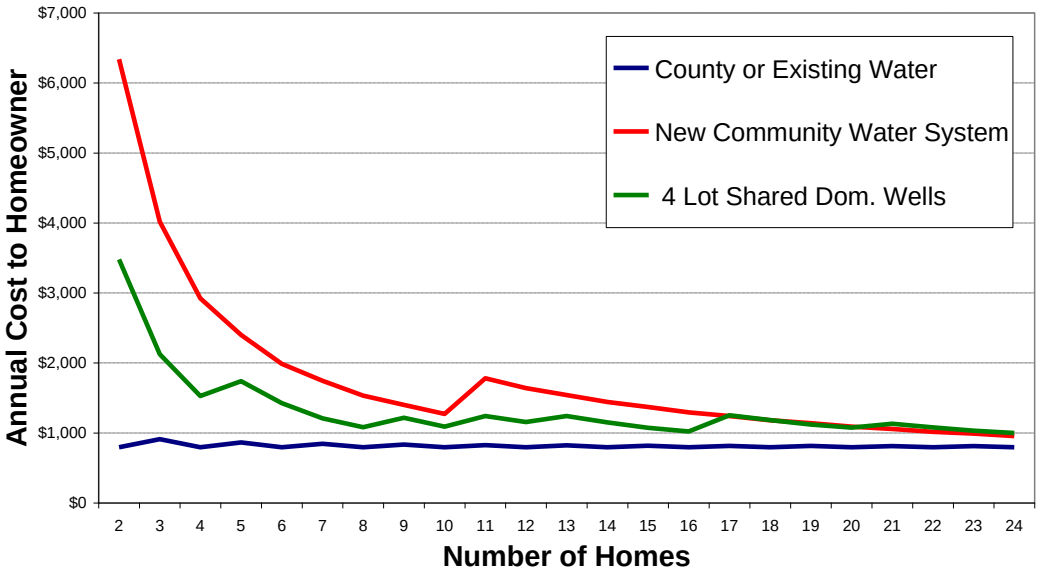
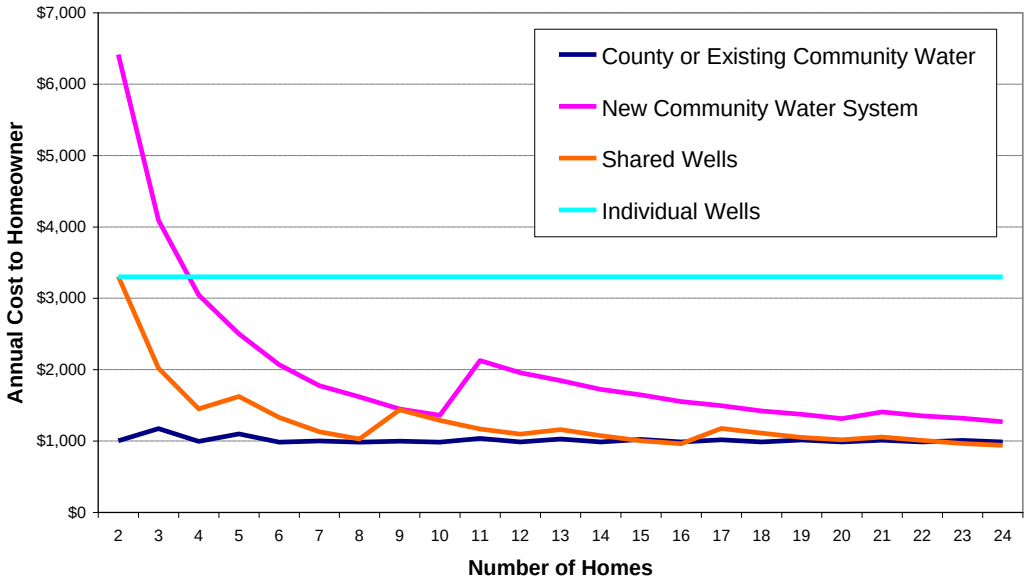


Figure 2- 78: Domestic Wells vs. Community Water Systems (10- to 40-acre lots)



Santa Fe County, New Mexico

Sustainable Land Development Plan

Appendix

Public Review Draft
October 1, 2009

Planning Team:
Santa Fe County, New Mexico
Freilich & Popowitz, LLP
Planning Works, LLC
Rutgers University Center for Urban Policy and Research

Contents

2-1. Renewable Energy Financing & Policy Guide

Source: The following information is re-printed from DSIRE Database of State Incentives for Renewables and Efficiency. It is included here for reference purposes only. For the latest updates and revisions, please visit the website at http://www.dsireusa.org.

2-1.1. Financial Incentives for Renewable Energy

2-1.1.1. Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation (2008-2009

Last DSIRE Review: 02/19/2009

Incentive Type:	Corporate Depreciation
State:	Federal
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Renewable Transportation Fuels, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Solar Hybrid Lighting, Direct Use Geothermal, Anaerobic Digestion, Microturbines
Applicable Sectors:	Commercial, Industrial
Authority 1:	26 USC § 168
Date Effective:	1986
Authority 2:	26 USC § 48

Summary:
Under the federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions. The MACRS establishes a set of class lives for various types of property, ranging from three to 50 years, over which the property may be depreciated. A number of renewable energy technologies are classified as five-year property (26 USC § 168(e)(3)(B)(vi)) under the MACRS, which refers to 26 USC § 48(a)(3)(A), often known as the energy investment tax credit or ITC to define eligible property. Such property currently includes:

a variety of solar electric and solar thermal technologies

fuel cells and microturbines

geothermal electric

direct-use geothermal and geothermal heat pumps

small wind (100 kW or less)

combined heat and power (CHP).

The provision which defines ITC technologies as eligible also adds the general term "wind" as an eligible technology, extending the five-year schedule to large wind facilities as well.

In addition, for certain other biomass property, the MACRS property class life is seven years. Eligible biomass property generally includes assets used in the conversion of biomass to heat or to a solid, liquid or gaseous fuel, and to equipment and structures used to receive, handle, collect and process biomass in a waterwall, combustion system, or refuse-derived fuel system to create hot water, gas, steam and electricity.

The 5-year schedule for most types of solar, geothermal, and wind property has been in place since 1986. The federal Energy Policy Act of 2005 (EPAct 2005) classified fuel cells, microturbines and solar hybrid lighting technologies as five-year property as well by adding them to § 48(a)(3)(A). This section was further expanded in October 2008 by the addition of geothermal heat pumps, combined heat and power, and small wind under the The Energy Improvement and Extension Act of 2008.

The federal Economic Stimulus Act of 2008, enacted in February 2008, included a 50% bonus depreciation (26 USC § 168(k)) provision for eligible renewable-energy systems acquired and placed in service in 2008. This provision was extended (retroactively to the entire 2009 tax year) under the same terms by The American Recovery and Reinvestment Act of 2009, enacted in February 2009. To qualify for bonus depreciation, a project must satisfy these criteria:

the property must have a recovery period of 20 years or less under normal federal tax depreciation rules;

the original use of the property must commence with the taxpayer claiming the deduction;

the property generally must have been acquired during 2008 or 2009; and

the property must have been placed in service during 2008 or 2009

If property meets these requirements, the owner is entitled to deduct 50% of the adjusted basis of the property in 2008 and 2009. The remaining 50% of the adjusted basis of the property is depreciated over the ordinary depreciation schedule. The bonus depreciation rules do not override the depreciation limit applicable to projects qualifying for the federal business energy tax credit. Before calculating depreciation for such a project, including any bonus depreciation, the adjusted basis of the project must be reduced by one-half of the amount of the energy credit for which the project qualifies.

For more information on the federal MACRS, see IRS Publication 946, IRS Form 4562: Depreciation and Amortization, and Instructions for Form 4562. The IRS web site provides a search mechanism for forms and publications. Enter the relevant form, publication name or number, and click "GO" to receive the requested form or publication.

* Note that the definitions of eligible technologies included in this entry are somewhat simplified versions of those contained in tax code, which often contain additional caveats, restrictions, and modifications. Those interested in this incentive should review the relevant sections of the code in detail prior to making business decisions.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224

Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.2. Residential Energy Conservation Subsidy Exclusion (Corporate)

Last DSIRE Review: 07/27/2009

Incentive Type:	Corporate Exemption
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Photovoltaics
Applicable Sectors:	Residential, Multi-Family Residential
Amount:	100% of the subsidy
Terms:	Applies to energy conservation measures on dwelling units only
Web Site:	http://www.irs.gov/publications/p525/index.html
Authority 1:	26 USC § 136
Date Enacted:	1992

Summary:
According to Section 136 of the U.S. Code, energy conservation subsidies provided by public utilities,* either directly or indirectly, are nontaxable: "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure." (This exclusion does not apply to electricity-generating systems registered as "qualifying facilities" under the Public Utility Regulatory Policy Act of 1978.)

The term "energy conservation measure" includes installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats and similar properties. If a building or structure contains both dwelling and other units, any subsidy must be properly allocated.

Given the definition of "energy conservation measure," there is strong evidence that utility rebates for residential solar-thermal projects and solar-electric systems may be nontaxable. However, the IRS has not ruled definitively on this issue. For taxpayers considering using this provision for renewable energy systems, consultation with a tax professional is advised.

Other types of utility subsidies that may come in the form of credits or reduced rates may also be nontaxable, according to IRS Publication 525:

"Utility rebates. If you are a customer of an electric utility company and you participate in the utility's energy conservation program, you may receive on your monthly electric bill either: a reduction in the purchase price of electricity furnished to you (rate reduction), or a nonrefundable credit against the purchase price of the electricity. The amount of the rate reduction or nonrefundable credit is not included in your income."

* The term "public utility" is defined as an entity "engaged in the sale of electricity or natural gas to residential, commercial, or industrial customers for use by such customers." The term includes federal, state and local government entities.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.3. Advanced Energy Tax Credit (Corporate)

Last DSIRE Review: 04/17/2009

Incentive Type:	Corporate Tax Credit
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Geothermal Electric
Applicable Sectors:	Commercial
Amount:	6% credit against personal, corporate, gross receipts, compensating, or withholding taxes
Maximum Incentive:	$60 million
Carryover Provisions:	10 years
Eligible System Size:	1 Megawatt or greater
Project	Projects must obtain a certificate of eligibility from the Environment

Review/Certification:	Department
Authority 1:	N.M. Stat. § 7-9G-2
Date Enacted:	4/3/2007
Date Effective:	7/1/2007
Authority 2:	N.M. Stat. § 62-6-28
Date Enacted:	4/3/2007
Date Effective:	7/1/2007
Authority 3:	SB 237
Date Enacted:	3/9/2009
Date Effective:	7/1/2009

Summary:
As of July 2007, the development and construction costs of solar thermal electric plants and associated energy storage devices are eligible for a 6% tax credit against gross receipts, compensating, or withholding taxes. Photovoltaics and geothermal electric generating facilities installed after July 1, 2009 with a nameplate capacity of at least 1 megawatt were added as eligible technologies by SB 237 of 2009. SB 237 also allowed the credit to offset personal and corporate income taxes in addition to gross receipts, compensating, and withholding taxes. Any unused credit may be carried forward for up to five years. The tax credit amount is capped at $60 million.

In order to claim the tax credit, developers must obtain a certificate of eligibility from the New Mexico Environment Department and submit the certificate to the New Mexico Taxation and Revenue Department.

Contact:

Craig O'Hare
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3207
Fax: (505) 476-3322
E-Mail: craig.ohare@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd

2-1.1.4. Business Energy Investment Tax Credit (ITC)

Last DSIRE Review: 06/10/2009

Incentive Type:	Corporate Tax Credit
State:	Federal
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Biomass, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, CHP/Cogeneration, Solar Hybrid Lighting, Direct-Use Geothermal, Microturbines
Applicable Sectors:	Commercial, Industrial, Utility
Amount:	30% for solar, fuel cells and small wind; 10% for geothermal, microturbines and CHP
Maximum Incentive:	Fuel cells: $1,500 per 0.5 kW Microturbines: $200 per kW Small wind turbines placed in service 10/4/08 - 12/31/08: $4,000 Small wind turbines placed in service after 12/31/08: no limit All other eligible technologies: no limit
Eligible System Size:	Small wind turbines: 100 kW or less Fuel cells: 0.5 kW or greater Microturbines: 2 MW or less CHP: 50 MW or less
Equipment/Installation Requirements:	Fuel cells, microturbines and CHP systems must meet specific energy-efficiency criteria
Authority 1:	26 USC § 48

Summary:
Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal renewable electricity production tax credit (PTC) to take the federal business energy investment tax credit (ITC) or to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations. The new law also allows taxpayers eligible for the business ITC to receive a grant from the U.S. Treasury Department instead of taking the business ITC for new installations. The Treasury Department issued Notice 2009-52 in June 2009, giving limited guidance on how to take the federal business energy investment tax credit instead of the federal renewable electricity production tax credit. The Treasury Department will issue more extensive guidance at a later time.

The federal business energy investment tax credit available under 26 USC § 48 was expanded significantly by the Energy Improvement and Extension Act of 2008 (H.R. 1424), enacted in October 2008. This law extended the duration -- by eight years -- of the existing credits for solar energy, fuel cells and microturbines; increased the credit amount for fuel cells; established new credits for small wind-energy systems, geothermal heat pumps, and combined heat and power (CHP) systems; extended eligibility for the credits to utilities; and allowed taxpayers to take the credit against the alternative minimum tax (AMT), subject to certain limitations. The credit was further expanded by The American Recovery and Reinvestment Act of 2009, enacted in February 2009.

In general, credits are available for eligible systems placed in service on or before December 31, 2016:*

Solar. The credit is equal to 30% of expenditures, with no maximum credit. Eligible solar energy property includes

equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. Passive solar systems and solar pool-heating systems are not eligible. (Note that the Solar Energy Industries Association has published a three-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.)

Fuel Cells. The credit is equal to 30% of expenditures, with no maximum credit. However, the credit for fuel cells is capped at $1,500 per 0.5 kilowatt (kW) of capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher. (Note that the credit for property placed in service before October 4, 2008, is capped at $500 per 0.5 kW.)

Small Wind Turbines. The credit is equal to 30% of expenditures, with no maximum credit for small wind turbines placed in service after December 31, 2008. Eligible small wind property includes wind turbines up to 100 kW in capacity. (In general, the maximum credit is $4,000 for eligible property placed in service after October 3, 2008, and before January 1, 2009. The American Recovery and Reinvestment Act of 2009 removed the $4,000 maximum credit limit for small wind turbines.)

Geothermal Systems. The credit is equal to 10% of expenditures, with no maximum credit limit stated. Eligible geothermal energy property includes geothermal heat pumps and equipment used to produce, distribute or use energy derived from a geothermal deposit. For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electric transmission stage. For geothermal heat pumps, this credit applies to eligible property placed in service after October 3, 2008.

Microturbines. The credit is equal to 10% of expenditures, with no maximum credit limit stated (explicitly). The credit for microturbines is capped at $200 per kW of capacity. Eligible property includes microturbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.

Combined Heat and Power (CHP). The credit is equal to 10% of expenditures, with no maximum limit stated. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems. This credit applies to eligible property placed in service after October 3, 2008.

In general, the original use of the equipment must begin with the taxpayer, or the system must be constructed by the taxpayer. The equipment must also meet any performance and quality standards in effect at the time the equipment is acquired. The energy property must be operational in the year in which the credit is first taken.

Significantly, The American Recovery and Reinvestment Act of 2009 repealed a previous limitation on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies. Businesses that receive other incentives are advised to consult with a tax professional regarding how to calculate this federal tax credit.

History

The federal Energy Policy Act of 2005 (EPAct 2005) expanded the existing federal business energy tax credit for solar and geothermal energy property to include fuel cells, microturbines and hybrid solar lighting systems installed on or after January 1, 2006, and raised the credit for solar to 30%. Prior to the provisions of EPAct 2005, a 10% credit was available to businesses that invested in or purchased solar or geothermal energy property.

* Note that the credit for geothermal property, with the exception of geothermal heat pumps, has no stated expiration date. The credit for solar energy property reverts to 10% after December 31, 2016.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.5. Renewable Electricity Production Tax Credit (PTC)

Last DSIRE Review: 07/20/2009

Incentive Type:	Corporate Tax Credit
State:	Federal
Eligible Renewable/Other Technologies:	Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power (i.e., Flowing Water), Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Commercial, Industrial
Amount:	2.1¢/kWh for wind, geothermal, closed-loop biomass; 1.1¢/kWh for other eligible technologies. Generally applies to first 10 years of operation.
Eligible System Size:	Marine and Hydrokinetic: Minimum capacity of 150 kW Agricultural Livestock Waste: Minimum capacity of 150 kW
Web Site:	http://www.irs.gov/pub/irs-pdf/f8835.pdf
Authority 1:	26 USC § 45
Date Enacted:	1992 (subsequently amended)

Summary:
Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal renewable electricity production tax credit (PTC) to take the federal business energy investment tax credit (ITC) or to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations. The new law also allows taxpayers eligible for the business ITC to receive a grant from the U.S. Treasury Department instead of taking the business ITC for new installations. The Treasury Department issued Notice 2009-52 in June 2009, giving limited guidance on how to take

the federal business energy investment tax credit instead of the federal renewable electricity production tax credit. The Treasury Department will issue more extensive guidance at a later time.

The federal renewable electricity production tax credit (PTC) is a per-kilowatt-hour tax credit for electricity generated by qualified energy resources and sold by the taxpayer to an unrelated person during the taxable year. Originally enacted in 1992, the PTC has been renewed and expanded numerous times, most recently by H.R. 1424 (Div. B, Sec. 101 & 102) in October 2008 and again by H.R. 1 (Div. B, Section 1101 & 1102) in February 2009.

The October 2008 legislation extended the in-service deadlines for all qualifying renewable technologies; expanded the list of qualifying resources to include marine and hydrokinetic resources, such as wave, tidal, current and ocean thermal; and made changes to the definitions of several qualifying resources and facilities. The effective dates of these changes vary. Marine and hydrokinetic energy production is eligible as of the date the legislation was enacted (October 3, 2008), as is the incremental energy production associated with expansions of biomass facilities. A change in the definition of "trash facility" no longer requires that such facilities burn trash, and is also effective immediately. One further provision redefining the term "non-hydroelectric dam," took effect December 31, 2008.

The February 2009 legislation revised the credit by: (1) extending the in-service deadline for most eligible technologies by three years (two years for marine and hydrokinetic resources); and (2) allowing facilities that qualify for the PTC to opt instead to take the federal business energy investment credit (ITC) or an equivalent cash grant from the U.S. Department of Treasury. The ITC or grant for PTC-eligible technologies is generally equal to 30% of eligible costs.*

The tax credit amount is 1.5¢/kWh in 1993 dollars (indexed for inflation) for some technologies, and half of that amount for others. The rules governing the PTC vary by resource and facility type. The table below outlines two of the most important characteristics of the tax credit -- in-service deadline and credit amount -- as they apply to different facilities. The table includes changes made by H.R. 1, in February 2009, and the inflation-adjusted credit amounts are current for the 2009 calendar year. (See the history section below for information on prior rules.)

Resource Type	In-Service Deadline	Credit Amount
Wind	December 31, 2012	2.1¢/kWh
Closed-Loop Biomass	December 31, 2013	2.1¢/kWh
Open-Loop Biomass	December 31, 2013	1.1¢/kWh
Geothermal Energy	December 31, 2013	2.1¢/kWh
Landfill Gas	December 31, 2013	1.1¢/kWh
Municipal Solid Waste	December 31, 2013	1.1¢/kWh
Qualified Hydroelectric	December 31, 2013	1.1¢/kWh
Marine and Hydrokinetic (150 kW or larger)**	December 31, 2013	1.1¢/kWh

The duration of the credit is generally 10 years after the date the facility is placed in service, but there are two exceptions:

Open-loop biomass, geothermal, small irrigation hydro, landfill gas and municipal solid waste combustion facilities placed into service after October 22, 2004, and before enactment of the Energy Policy Act of 2005, on August 8, 2005, are only

eligible for the credit for a five-year period.

Open-loop biomass facilities placed in service before October 22, 2004, are eligible for a five-year period beginning January 1, 2005.

In addition, the tax credit is reduced for projects that receive other federal tax credits, grants, tax-exempt financing, or subsidized energy financing. The credit is claimed by completing Form 8835, "Renewable Electricity Production Credit," and Form 3800, "General Business Credit." For more information, contact IRS Telephone Assistance for Businesses at 1-800-829-4933.

History
As originally enacted by the Energy Policy Act of 1992, the PTC expired at the end of 2001, and was subsequently extended in March 2002 as part of the Job Creation and Worker Assistance Act of 2002 (H.R. 3090). The PTC then expired at the end of 2003 and was not renewed until October 2004, as part of H.R. 1308, the Working Families Tax Relief Act of 2004, which extended the credit through December 31, 2005. The Energy Policy Act of 2005 (H.R. 6) modified the credit and extended it through December 31, 2007. In December 2006, the PTC was extended for yet another year -- through December 31, 2008 -- by the Tax Relief and Health Care Act of 2006 (H.R. 6111).

The American Jobs Creation Act of 2004 (H.R. 4520), expanded the PTC to include additional eligible resources -- geothermal energy, open-loop biomass, solar energy, small irrigation power, landfill gas and municipal solid waste combustion -- in addition to the formerly eligible wind energy, closed-loop biomass, and poultry-waste energy resources. The Energy Policy Act of 2005 (EPAct 2005) further expanded the credit to certain hydropower facilities. As a result of EPAct 2005, solar facilities placed into service after December 31, 2005, are no longer eligible for this incentive. Solar facilities placed in-service during the roughly one-year window in which solar was eligible are permitted to take the full credit (i.e., 2.1¢/kWh) for five years.

* Prior to H.R. 1, geothermal facilities were already eligible for a 10% tax credit under the energy ITC (26 USC § 48). However, the new legislation permits all PTC-eligible technologies, including geothermal electric facilities, to take a 30% tax credit (or grant) in lieu of the PTC. Recent guidance from the IRS regarding the Treasury grants in lieu of tax credits indicates that geothermal facilities that qualify for the PTC are eligible for either the 30% investment tax credit or the 10% tax credit, but not both. The window for the 30% tax credit runs through 2013, the in-service deadline for the PTC, while the 10% tax credit under the section 48 ITC runs through 2016.

** H.R. 1424 added marine and hydrokinetic energy as eligible resources and removed "small irrigation power" as an eligible resource effective October 3, 2008. However, the definition of marine and hydrokinetic energy encompasses the resources that would have formerly been defined as small irrigation power facilities. Thus H.R. 1424 effectively extended the in-service deadline for small irrigation power facilities by 3 years, from the end of 2008 until the end of 2011 (since extended again through 2013).

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.6. Renewable Energy Production Tax Credit (Corporate)

Last DSIRE Review: 05/14/2009

Incentive Type:	Corporate Tax Credit
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Municipal Solid Waste, Anaerobic Digestion
Applicable Sectors:	Commercial, Industrial
Amount:	$0.01/kWh for wind and biomass $0.027/kWh (average) for solar (see below)
Maximum Incentive:	Wind and biomass: First 400,000 MWh annually for 10 years (i.e. $4,000,000/year) Solar electric: First 200,000 MWh annually for 10 years (annual amount varies) Statewide cap: 2,000,000 MWh plus an additional 500,000 MWh for solar electric
Carryover Provisions:	Prior to 10/1/2007: Excess credit may be carried forward five years After 10/1/2007: Excess credit is refunded to the taxpayer
Eligible System Size:	Minimum of 1 MW capacity per facility
Equipment/Installation Requirements:	System must be in compliance with all applicable performance and safety standards; generators must be certified by the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD).
Web Site:	http://www.cleanenergynm.org
Authority 1:	N.M. Stat. § 7-2A-19
Date Enacted:	3/4/2002, amended 2003, 2007
Date Effective:	7/1/2002
Expiration Date:	1/1/2018

Summary:
Enacted in 2002, the New Mexico Renewable Energy Production Tax Credit provides a tax credit against the corporate income tax of one cent per kilowatt-hour for companies that generate electricity from wind or biomass. Companies that generate electricity from solar energy receive a tax incentive that varies annually according to the following scale:

Year 1: 1.5¢/kWh

Year 2: 2¢/kWh

Year 3: 2.5¢/kWh

Year 4: 3¢/kWh

Year 5: 3.5¢/kWh

Year 6: 4¢/kWh

Year 7: 3.5¢/kWh

Year 8: 3¢/kWh

Year 9: 2.5¢/kWh

Year 10: 2¢/kWh

According to the EMNRD, this incentive averages 2.7¢/kWh annually.

For wind and biomass generators, the credit is applicable only to the first 400,000 megawatt-hours (MWh) of electricity in each of 10 consecutive taxable years. For solar, the credit is applicable only to the first 200,000 MWh of electricity in each taxable year. To qualify, an energy generator must have a capacity of at least 1 megawatt and be installed before January 2018.

Total generation from both the corporate and personal tax credit programs combined must not exceed two million megawatt-hours of production annually, plus an additional 500,000 MWh produced by solar energy. Taxpayers cannot claim both the corporate and the personal tax credit for the same renewable energy system.

For electricity generated prior to October 1, 2007, excess credit may be carried forward for up to five consecutive taxable years. For electricity generated on or after October 1, 2007, excess credit shall be refunded to the taxpayer in order to allow project owners with limited tax liability to fully utilize the credit.

The renewable energy production tax credit claim form and instructions provide additional information.

Contact:

Michael McDiarmid, P.E.
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 South Saint Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3319
Fax: (505) 476-3322
E-Mail: mmcdiarmid@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.7. Sustainable Building Tax Credit (Corporate)

Last DSIRE Review: 04/28/2009

Incentive Type:	Corporate Tax Credit
State:	New Mexico
Eligible Efficiency Technologies:	Comprehensive Measures/Whole Building
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Daylighting
Applicable Sectors:	Commercial, Residential, Multi-Family Residential
Amount:	Varies based on the square footage of the building and the certification level
Carryover Provisions:	Excess credits may be carried forward for up to 7 years
Web Site:	http://www.cleanenergynm.org
Authority 1:	N.M. Stat. § 7-2A-21
Date Enacted:	4/2/2007
Date Effective:	1/1/2007
Authority 2:	SB 291
Date Enacted:	4/1/2009
Date Effective:	6/30/2009

Summary:
SB 463, enacted in April 2007, established a personal tax credit and a corporate tax credit for sustainable buildings in New Mexico. The tax credits apply to both commercial and residential buildings. Commercial buildings which have been registered and certified by the US Green Building Council at LEED* Silver or higher for new construction (NC), existing buildings (EB), core and shell (CS), or commercial interiors (CI) are eligible for a tax credit. The amount of the credit varies according to the square footage of the building and the level of certification achieved, as indicated on the following chart:

Commercial Buildings:

LEED Rating Level	Occupied Sq. Footage	Tax Credit/Sq. Ft.
LEED-NC Silver	First 10,000	$3.50
	Next 40,000	$1.75

	Over 50,000 and up to 500,000	$0.70
LEED-NC Gold	First 10,000	$4.75
	Next 40,000	$2.00
	Over 50,000 and up to 500,000	$1.00
LEED-NC Platinum	First 10,000	$.6.25
	Next 40,000	$3.25
	Over 50,000 and up to 500,000	$2.00
LEED-EB/CS Silver	First 10,000	$2.50
	Next 40,000	$1.25
	Over 50,000 and up to 500,000	$0.50
LEED-EB/CS Gold	First 10,000	$3.35
	Next 40,000	$1.40
	Over 50,000 and up to 500,000	$0.70
LEED-EB/CS Platinum	First 10,000	$4.40
	Next 40,000	$2.30
	Over 50,000 and up to 500,000	$1.40
LEED-CI Silver	First 10,000	$.1.40
	Next 40,000	$0.70
	Over 50,000 and up to 500,000	$0.30
LEED-CI Gold	First 10,000	$1.90
	Next 40,000	$0.80
	Over 50,000 and up to 500,000	$0.40
LEED-CI Platinum	First 10,000	$2.50
	Next 40,000	$1.30

	Over 50,000 and up to 500,000	$0.80

Residential buildings certified as sustainable homes can also qualify for a tax credit. Eligible residential buildings include single-family homes and multi-family homes which are certified as either Build Green NM** Silver or higher, or LEED-H Silver or higher, and Energy Star certified manufactured homes. The amount of the credit varies according to the square footage of the building and the level of certification achieved, as indicated on the following chart:

Residential Buildings:

Rating Level	**Occupied Sq. Footage**	**Tax Credit/Sq. Ft.**
LEED-H Silver or Build Green NM Silver	First 2,000	$5.00
	Next 1,000	$2.50
LEED-H Gold or Build Green NM Gold	First 2,000	$6.85
	Next 1,000	$3.40
LEED-H Platinum or Build Green NM Emerald	First 2,000	$9.00
	Next 1,000	$4.45
Energy Star Manufactured Home	Up to 3,000	$3.00

To receive the tax credit, the building owner must obtain a certificate of eligibility from the Energy, Minerals and Natural Resources Department after the building project has been completed. The Department will only grant certificates in any given calendar year until the equivalent of $5,000,000 worth of certificates for commercial buildings and $5,000,000 worth of certificates for residential buildings have been awarded in that calendar year. Further, no more than $1,250,000 of the annual amount for residential buildings can be applied to manufactured housing. Multi-family residential buildings are classified as residential buildings for the purpose of this tax credit. However, if the aggregate limit for residential tax credits has been reached for the year, the Department may issue certificates of eligibility under the annual aggregate limit for commercial buildings to owners of multi-family dwelling units provided that aggregate limit has not been reached as well.

The taxpayer must then present their certificate of eligibility to the Taxation and Revenue Department to receive a document granting the Sustainable Building Tax Credit. If the total amount of a Sustainable Building Tax Credit is less than $25,000, the entire amount of the credit can be applied to the taxpayer's income tax in that year. If the credit is more than $25,000 the credit will be applied in increments of 25% over the next 4 years. If a taxpayer's tax liability is less than the amount of credit due, the excess credit may be carried forward for up to seven years.

SB 291 of 2009 made the tax credit transferable for nonprofits. Although nonprofits are not taxed by the state, they can apply for the certificate of eligibility and sell the credit to an entity that does pay taxes. Additionally, people and entities who do not owe enough taxes to take full advantage of the tax credit also have the option of selling the tax credit.

A solar thermal system or a photovoltaic system may not be used as a component of qualification for this tax credit if a tax

credit has already been claimed for it under the Solar Market Development Tax Credit.

*The USGBC LEED Rating System is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Click here for more information on the national LEED program.

**Click here for more information on Build Green NM.

Contact:

Tax Information Office
New Mexico Taxation & Revenue Department
P.O. Box 630
Santa Fe, NM 87504
Phone: (505) 827-0700
E-Mail: poffice@state.nm.us
Web Site: http://www.state.nm.us/tax/home.htm

Susie Marbury
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3254
Fax: (505) 476-3322
E-Mail: susie.marbury@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.8. Tribal Energy Program Grant

Last DSIRE Review: 08/19/2009

Incentive Type:	Federal Grant Program
State:	Federal
Eligible Efficiency Technologies:	Clothes Washers, Refrigerators/Freezers, Water Heaters, Lighting, Lighting Controls/Sensors, Chillers, Furnaces, Boilers, Air conditioners, Programmable Thermostats, Energy Mgmt. Systems/Building Controls, Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows, Doors, Siding, Roofs, Comprehensive Measures/Whole Building, other energy efficiency improvements may be eligible
Eligible Renewable/Other	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind,

Technologies:	Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps
Applicable Sectors:	Tribal Government
Amount:	Varies by solicitation
Max. Limit:	Varies by solicitation
Web Site:	http://www.eere.energy.gov/tribalenergy

Summary:
The U.S. Department of Energy's (DOE) Tribal Energy Program promotes tribal energy sufficiency, economic growth and employment on tribal lands through the development of renewable energy and energy efficiency technologies. The program provides financial assistance, technical assistance, education and training to tribes for the evaluation and development of renewable energy resources and energy efficiency measures.

DOE's Tribal Energy Program consists of program management through DOE headquarters, program implementation and project management through DOE's field offices, and technical support through DOE laboratories. Program management for the Tribal Energy Program is carried out by DOE's Weatherization and Intergovernmental Program, which provides programmatic direction and funding to DOE field offices for program implementation. DOE's field offices, specifically the Golden Field Office, issue solicitations and manage resulting projects.

Program funding is awarded through a competitive process. Click here to view current program funding opportunities.

Contact:

Lizana Pierce
U.S. Department of Energy
Golden Field Office
1617 Cole Boulevard, MS 1501
Golden, CO 80401
Phone: (303) 275-4727
Fax: (303) 275-4753
E-Mail: lizana.pierce@go.doe.gov
Web Site: http://www.eere.energy.gov/tribalenergy

2-1.1.9. U.S. Department of Treasury - Renewable Energy Grants

Last DSIRE Review: 07/31/2009

Incentive Type:	Federal Grant Program
State:	Federal

Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Solar Hybrid Lighting, Hydrokinetic, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal, Microturbines
Applicable Sectors:	Commercial, Industrial, Agricultural
Amount:	30% of property that is part of a qualified facility, qualified fuel cell property, solar property, or qualified small wind property 10% of all other property
Max. Limit:	$1,500 per 0.5 kW for qualified fuel cell property $200 per kW for qualified microturbine property 50 MW for CHP property, with limitations for large systems
Terms:	Grant applications must be submitted by 10/1/2011. Payment of grant will be made within 60 days of the grant application date or the date property is placed in service, whichever is later.
Web Site:	http://www.treas.gov/recovery/1603.shtml
Authority 1:	H.R. 1: Div. B, Sec. 1104 & 1603 (The American Recovery and Reinvestment Act of 2009)
Date Enacted:	2/17/2009
Date Effective:	1/1/2009
Authority 2:	U.S. Department of Treasury: Grant Program Guidance
Date Enacted:	07/09/2009

Summary:

Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal business energy investment tax credit (ITC) to take this credit or to receive a grant from the U.S. Treasury Department instead of taking the business ITC for new installations. The new law also allows taxpayers eligible for the renewable electricity production tax credit (PTC) to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations. (It does not allow taxpayers eligible for the residential renewable energy tax credit to receive a grant instead of taking this credit.) Taxpayers may not use more than one of these incentives. Tax credits allowed under the ITC with respect to progress expenditures on eligible energy property will be recaptured if the project receives a grant. The grant is not included in the gross income of the taxpayer.

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, created a renewable energy grant program that will be administered by the U.S. Department of Treasury. This cash grant may be taken in lieu of the federal business energy investment tax credit (ITC). In July 2009 the Department of Treasury issued documents detailing guidelines for the grants, terms and conditions and a sample application. There is an online application process, and applications are currently being accepted. See the program web site for more information.

Grants are available to eligible property* placed in service in 2009 or 2010, or placed in service by the specified credit

termination date,** if construction began in 2009 or 2010. The guidelines include a "safe harbor" provision that sets the beginning of construction at the point where the the applicant has incurred or paid at least 5% of the total cost of the property, excluding land and certain preliminary planning activities. Below is a list of important program details as they apply to each different eligible technology.

Solar. The grant is equal to 30% of the basis of the property for solar energy. Eligible solar-energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Passive solar systems and solar pool-heating systems are not eligible. Hybrid solar-lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible.

Fuel Cells. The grant is equal to 30% of the basis of the property for fuel cells. The grant for fuel cells is capped at $1,500 per 0.5 kilowatt (kW) in capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher.

Small Wind Turbines. The grant is equal to 30% of the basis of the property for small wind turbines. Eligible small wind property includes wind turbines up to 100 kW in capacity.

Qualified Facilities. The grant is equal to 30% of the basis of the property for qualified facilities that produce electricity. Qualified facilities include wind energy facilities, closed-loop biomass facilities, open-loop biomass facilities, geothermal energy facilities, landfill gas facilities, trash facilities, qualified hydropower facilities, and marine and hydrokinetic renewable energy facilities.

Geothermal Heat Pumps. The grant is equal to 10% of the basis of the property for geothermal heat pumps.

Microturbines. The grant is equal to 10% of the basis of the property for microturbines. The grant for microturbines is capped at $200 per kW of capacity. Eligible property includes microturbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.

Combined Heat and Power (CHP). The grant is equal to 10% of the basis of the property for CHP. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the grant may be reduced for less-efficient systems.

It is important to note that only tax-paying entities are eligible for this grant. Federal, state and local government bodies, non-profits, qualified energy tax credit bond lenders, and cooperative electric companies are not eligible to receive this grant. Partnerships or pass-thru entities for the organizations described above are also not eligible to receive this grant, except in cases where the ineligible party only owns an indirect interest in the applicant through a taxable C corporation. Grant applications must be submitted by October 1, 2011. The U.S. Treasury Department will make payment of the grant within 60 days of the grant application date or the date the property is placed in service, whichever is later.

* Definitions of eligible property types and renewable technologies can be found in the U.S. Code, Title 26, § 45 and § 48.

** Credit termination date of January 1, 2013, for wind; January 1, 2014, for closed-loop biomass, open-loop biomass, landfill gas, trash, qualified hydropower, marine and hydrokinetic; January 1, 2017, for fuel cells, small wind, solar, geothermal, microturbines, CHP and geothermal heat pumps.

Contact:

Grant Information
U.S. Department of Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220
Phone: (202) 622-2000
Fax: (202) 622-6415
E-Mail: 1603Questions@do.treas.gov
Web Site: http://ww.treasury.gov

2-1.1.10. USDA - Rural Energy for America Program (REAP) Grants

Last DSIRE Review: 05/27/2009

Incentive Type:	Federal Grant Program
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP/Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Microturbines
Applicable Sectors:	Commercial, Schools, Local Government, State Government, Tribal Government, Rural Electric Cooperative, Agricultural, Public Power Entities
Amount:	Varies
Max. Limit:	25% of project cost
Web Site:	http://www.rurdev.usda.gov/rbs/busp/bprogs.htm
Authority 1:	7 USC § 8106
Date Enacted:	5/13/2002
Date Effective:	FY 2003

Summary:
NOTE: The U.S. Department of Agriculture's Rural Development has issued a Notice of Solicitation of Applications for the Rural Energy for America Program (REAP). The deadline to apply for grants and loan guarantees under this solicitation is July 31, 2009. Grants and loan guarantees will be awarded for investments in renewable energy systems, energy efficiency improvements and renewable energy feasibility studies.

The Food, Conservation, and Energy Act of 2008 (H.R. 2419), enacted by Congress in May 2008, converted the federal Renewable Energy Systems and Energy Efficiency Improvements Program,* into the Rural Energy for America Program (REAP). Similar to its predecessor, the REAP promotes energy efficiency and renewable energy for agricultural producers and rural small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance. Congress has allocated funding for the new program in the following amounts: $55 million for FY 2009, $60 million for FY 2010, $70 million for FY 2011, and $70 million for FY 2012. REAP is administered by the U.S. Department of Agriculture (USDA).

Of the total REAP funding available, 96% is dedicated to grants and loan guarantees for energy efficiency improvements and renewable energy systems. These incentives are available to agricultural producers and rural small businesses to purchase renewable energy systems (including systems that may be used to produce and sell electricity), to make energy efficiency improvements, and to conduct relevant feasibility studies. Eligible renewable energy projects include wind, solar, biomass and geothermal; and hydrogen derived from biomass or water using wind, solar or geothermal energy sources. These grants are limited to 25% of a proposed project's cost, and a loan guarantee may not exceed $25 million. The combined amount of a grant and loan guarantee may not exceed 75% of the project's cost. In general, a minimum of 20% of the funds available for these incentives will be dedicated to grants of $20,000 or less. The USDA likely will announce the availability of funding for this component of REAP through a Notice of Funds Availability (NOFA).

The USDA will also make competitive grants to eligible entities to provide assistance to agricultural producers and rural small businesses "to become more energy efficient" and "to use renewable energy technologies and resources." These grants are generally available to state government entities, local governments, tribal governments, land-grant colleges and universities, rural electric cooperatives and public power entities, and other entities, as determined by the USDA. These grants may be used for conducting and promoting energy audits; and for providing recommendations and information related to energy efficiency and renewable energy. Of the total REAP funding available, 4% is dedicated to competitive grants to provide assistance to agricultural producers and rural small businesses.

* The Renewable Energy Systems and Energy Efficiency Improvements Program was created by the USDA pursuant to Section 9006 of the 2002 federal Farm Security and Rural Investment Act of 2002. Funding in the amount of $23 million per year was appropriated for each fiscal year from FY 2003-2007. In March 2008, the USDA announced that it would accept $220.9 million in applications for grants, loan guarantees, and loan/grant combination packages under the Renewable Energy Systems and Energy Efficiency Improvements Program. The application deadline was June 16, 2008.

2-1.1.11. Clean Renewable Energy Bonds (CREBs)

Last DSIRE Review: 04/14/2009

Incentive Type:	Federal Loan Program
State:	Federal
Eligible Renewable/Other	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric,

Technologies:	Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative
Amount:	Varies
Terms:	Certain terms for "new" CREBs differ from those for prior allocations. See IRS Notice 2009-33 for details.
Web Site:	http://www.irs.gov/irb/2007-14_IRB/ar17.html
Authority 1:	26 USC § 54 (Old CREBs)
Date Effective:	08/08/2005
Expiration Date:	12/31/2009
Authority 2:	26 USC § 54A (New CREBs)
Date Enacted:	10/03/2008
Date Effective:	10/03/2008
Authority 3:	26 USC § 54C (New CREBs)
Date Enacted:	10/03/2008 (subsequently amended)
Date Effective:	10/03/2008
Authority 4:	IRS Notice 2009-33
Date Effective:	04/07/2009
Expiration Date:	08/04/2009

Summary:

Note: The terms "new" and "old" CREBs are used in the following summary to distinguish between prior CREB allocations and the new CREB authorizations made by the U.S. Congress in 2008 and 2009. The use of the term "new CREBs" has legal significance in that new CREBs authorized under 26 USC § 54A and 54C have substantially different rules than prior CREB allocations authorized under 26 USC § 54.

Clean renewable energy bonds (CREBs) may be used by certain entities -- primarily in the public sector -- to finance renewable energy projects. The list of qualifying technologies is generally the same as that used for the federal renewable energy production tax credit (PTC). CREBs may be issued by electric cooperatives, government entities (states, cities, counties, territories, Indian tribal governments or any political subdivision thereof), and by certain lenders. CREBs are issued -- theoretically -- with a 0% interest rate.* The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest.

The Energy Improvement and Extension Act of 2008 (Div. A, Sec. 107) allocated $800 million for new Clean Renewable Energy Bonds (CREBs). In February 2009, the American Recovery and Reinvestment Act of 2009 (Div. B, Sec. 1111) allocated an additional $1.6 billion for new CREBs, for a total new CREB allocation of $2.4 billion. The Energy Improvement and Extension Act of 2008 also extended the deadline for previously reserved allocations ("old CREBs") until December 31, 2009, and addressed several provisions in the existing law that previously limited the usefulness of the program for some projects. A separate section of the law extended CREBs eligibility to marine energy and hydrokinetic power projects.

In April 2009, the IRS issued Notice 2009-33, which solicited applications for the new CREB allocation and provided interim guidance on certain program rules and changes from prior CREB allocations. The expiration date for new CREB applications under this solicitation was August 4, 2009. Further guidance on CREBs is available in IRS Notices 2006-7 and 2007-26 to the extent that the program rules were not modified by 2008 and 2009 legislation.

Participation in the program is limited by the volume of bonds allocated by Congress for the program. Participants must first apply to the Internal Revenue Service (IRS) for a CREBs allocation, and then issue the bonds within a specified time period. The new CREBs allocation totaling $2.4 billion does not have a defined expiration date under the law; however, the recent IRS solicitation for new applications requires the bonds to be issued within 3 years after the applicant receives notification of an approved allocation (see History section below for information on previous allocations). Public power providers, governmental bodies, and electric cooperatives are each reserved an equal share (33.3%) of the new CREBs allocation. The tax credit rate is set daily by the U.S. Treasury Department. Under past allocations, the credit could be taken quarterly on a dollar-for-dollar basis to offset the tax liability of the bondholder. However, under the new CREBs allocation, the credit has been reduced to 70% of what it would have been otherwise. Other important changes are described in IRS Notice 2009-33.

CREBs differ from traditional tax-exempt bonds in that the tax credits issued through CREBs are treated as taxable income for the bondholder. The tax credit may be taken each year the bondholder has a tax liability as long as the credit amount does not exceed the limits established by the federal Energy Policy Act of 2005. Treasury rates for prior CREB allocations, or "old" CREBs are available here, while rates for new CREBs and other qualified tax credit bonds are available here.

History
The federal Energy Policy Act of 2005 (EPAct 2005) established Clean Energy Renewable Bonds (CREBs) as a financing mechanism for public sector renewable energy projects. This legislation originally allocated $800 million of tax credit bonds to be issued between January 1, 2006, and December 31, 2007. Following the enactment of the federal Tax Relief and Health Care Act of 2006, the IRS made an additional $400 million in CREBs financing available for 2008 through Notice 2007-26.

In November 2006, the IRS announced that the original $800 million allocation had been reserved for a total of 610 projects. The additional $400 million (plus surrendered volume from the previous allocation) was allocated to 312 projects in February 2008. Of the $1.2 billion total of tax-credit bond volume cap allocated to fund renewable-energy projects, state and local government borrowers were limited to $750 million of the volume cap, with the rest reserved for qualified mutual or cooperative electric companies.

For further information on CREBs, contact Zoran Stojanovic or Timothy Jones of the IRS Office of Associate Chief Counsel at (202) 622-3980. Questions on recent IRS Notice 2009-33 can be directed to Janae Lemley at (636) 255-1202.

* In practice, for a variety of reasons, bond issuers have sometimes had to issue the bonds at a discount or make supplemental interest payments in order to find a buyer.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.12. Energy-Efficient Mortgages

Last DSIRE Review: 08/03/2009

Incentive Type:	Federal Loan Program
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Daylighting
Applicable Sectors:	Residential
Web Site:	http://www.resnet.us/ratings/mortgages

Summary:
Homeowners can take advantage of energy efficient mortgages (EEM) to finance a variety of energy efficiency measures, including renewable energy technologies, in a new or existing home. The U.S. federal government supports these loans by insuring them through Federal Housing Authority (FHA) or Veterans Affairs (VA) programs. This allows borrowers who might otherwise be denied loans to pursue energy efficiency improvements, and it secures lenders against loan default.

The federal Energy Star program has a partnership program for lenders whereby lenders who provide EEMs to borrowers may become Energy Star lender partners. These EEMs may or may not be used to purchase an Energy Star qualified home. Becoming a partner allows lenders to utilize the Energy Star brand to promote themselves as Energy Star partners offering EEMs. To become a lender partner lenders must first provide proof that they know how to write EEMs. To maintain their partnership benefits, lenders must write a certain number of EEMs per year. Energy Star does not have a lender certification program or process. Click here for more information about Energy Star's lender partnership program. As of August 2008, the federal Energy Star program lists 61 private lenders who offer homebuyer assistance, HERS assistance, special financing, and other assistance to applicants buying homes with the Energy Star rating. Energy Star requires that its lender partners provide EEMs to qualified borrowers regardless of whether it is an FHA EEM, Fannie Mae EEM, or VA EEM.

FHA Energy Efficient Mortgages

The FHA allows lenders to add up to 100% of energy efficiency improvements to an existing mortgage loan with certain restrictions. FHA mortgage limits vary by county, state and the number of units in a dwelling. See www.fha.com/lending_limits.cfm for more details. These mortgages were previously limited to $8,000. In June 2009, HUD issued Mortgagee Letter 2009-18 which announced the removal of the dollar cap. The maximum amount of the portion of an energy efficient mortgage allowed for energy improvements is now the lesser of 5% of:

The value of the property,

115% of the median area price of a single-family dwelling, or

150% of the Freddie Mac conforming loan limit

Loan amounts may not exceed the projected savings of the energy efficiency improvements. These loans may be combined with FHA 203 (h) mortgages available to victims of presidentially-declared disasters and with financing offered through the FHA 203 (k) rehabilitation program. FHA loan limits do not apply to the EEM. Homebuyers must submit a Home Energy Rating (HER), contractor bids, and a FHA B Worksheet. This process may become streamlined in 2009 as a result of the Housing and Economic Recovery Act of 2008, which requires HUD to report to congress with ways to remove the administrative barriers and increase consumer participation and awareness of these financing options.

Presently, up to $200 of the cost of the HER may be included in the mortgage, and borrowers may include closing costs and the up-front mortgage insurance premium in the total cost of the loan. The loan is available to anyone who meets the income requirements for FHA's Section 203 (b), provided the applicant can meet the monthly mortgage payments. New and existing owner-occupied homes of up to two units qualify for this loan. Cooperative units are not eligible. Homebuyers should submit applications to their local HUD Field Office through an FHA-approved lending institution, or they can apply directly online at www.fha.com/energy_efficient.cfm. See also www.hud.gov/offices/hsg/sfh/eem/energy-r.cfm.

Department of Veterans Affairs (VA) Energy Efficient Mortgages
The VA insures EEMs to be used in conjunction with VA loans either for the purchase of existing homes or for refinancing loans secured by the dwelling. Homebuyers may borrow up to $3,000 if only documentation of improvement costs or contractor bids is submitted, or up to $6,000 if the projected energy savings are greater than the increase in mortgage payments. Loans may exceed this amount at the discretion of the VA. Applicants may not include the cost of their own labor in the total amount. No additional home appraisal is needed, but applicants must submit a HER, contractor bids and certain other documentation. The VA insures 50% of the loan if taken by itself, but it may insure less if the total value of the mortgage exceeds a certain amount.

This mortgage is available to qualified military personnel, reservists and veterans. (See www.homeloans.va.gov/elig2.htm for more details). Applicants should secure a certificate of eligibility from their local lending office and submit it to a VA-approved private lender. If the loan is approved, the VA guarantees the loan when it is closed.

Conventional EEMs
Conventional mortgages are not backed by a federal agency. Private lenders sell loans to Fannie Mae and Freddie Mac, which in turn allow homebuyers to borrow up to 15% of an existing home's appraised value for improvements documented by a HER.

Fannie Mae also lends up to 5% for Energy Star new homes. Fannie Mae EEMs are available to single-family, owner-occupied units, and Fannie Mae provides EEMs to those whose income might otherwise disqualify them from receiving the loans by allowing approved lenders to adjust borrowers' debt-to-income ratio by 2%. The value of the improvements is immediately added to the total appraised value of the home.

Freddie Mac offers EEMs for one- to four-unit dwellings and also helps raise the effective income of the borrower to qualifying levels by allowing lenders to increase the borrower's income by a dollar amount equal to the estimated energy savings. Any energy efficiency improvements can qualify, and these mortgages can be combined with both fixed-rate and adjustable-rate mortgages. Borrowers should apply directly to the lender. See

www.natresnet.org/resources/lender/default.htm for more details.

2-1.1.13. Qualified Energy Conservation Bonds (QECBs)

Last DSIRE Review: 04/14/2009

Incentive Type:	Federal Loan Program
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Local Government, State Government, Tribal Government
Amount:	Varies
Authority 1:	26 USC § 54A
Date Enacted:	10/03/2008
Date Effective:	10/03/2008
Authority 2:	26 USC § 54D
Date Enacted:	10/03/2008 (subsequently amended)
Date Effective:	10/03/2008
Authority 3:	IRS Notice 2009-29
Date Effective:	04/07/2009

Summary:
The Energy Improvement and Extension Act of 2008, enacted in October 2008, authorized the issuance of Qualified Energy Conservation Bonds (QECBs) that may be used by state, local and tribal governments to finance certain types of energy projects. QECBs are qualified tax credit bonds, and in this respect are similar to new Clean Renewable Energy Bonds or CREBs.

The October 2008 enabling legislation set a limit of $800 million on the volume of energy conservation tax credit bonds that may be issued by state and local governments. However, The American Recovery and Reinvestment Act of 2009, enacted in February 2009, expanded the allowable bond volume to $3.2 billion. In April 2009 the IRS issued Notice 2009-29 providing

interim guidance on how the program will operate and how the bond volume will be allocated.

The advantage of these bonds is that they are issued -- theoretically -- with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest. The tax credit may be taken quarterly to offset the tax liability of the bondholder. The tax credit rate is set daily by the U.S. Treasury Department; however, energy conservation bondholders will receive only 70% of the full rate set by the Treasury Department under 26 26 USC § 54A. Credits exceeding a bondholder's tax liability may be carried forward to the succeeding tax year, but cannot be refunded. Energy conservation bonds differ from traditional tax-exempt bonds in that the tax credits issued through the program are treated as taxable income for the bondholder. QECB rates are available here.

In contrast to CREBs, QECBs are not subject to a U.S. Department of Treasury application and approval process. Bond volume is instead allocated to each state based on the state's percentage of the U.S. population as of July 1, 2008. Each state is then required to allocate a portion of its allocation to "large local governments" within the state based on the local government's percentage of the state's population. Large local governments are defined as municipalities and counties with populations of 100,000 or more. Large local governments may reallocate their designated portion back to the state if they choose to do so. IRS Notice 2009-29 contains a list of the QECB allocations for each state and U.S. territory.

The definition of "qualified energy conservation projects" is fairly broad and contains elements relating to energy efficiency capital expenditures in public buildings; renewable energy production; various research and development applications; mass commuting facilities that reduce energy consumption; several types of energy related demonstration projects; and public energy efficiency education campaigns (see H.R. 1424 for additional details). Renewable energy facilities that are eligible for CREBs are also eligible for QECBs.

For more information on QECBs, contact Timothy Jones or David White of the IRS Office of Associate Chief Counsel at (202) 622-3980.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.14. U.S. Department of Energy - Loan Guarantee Program

Last DSIRE Review: 07/30/2009

Incentive Type:	Federal Loan Program
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified

Eligible Renewable/Other Technologies:	Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Fuel Cells, Manufacturing Facilities, Daylighting, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel
Applicable Sectors:	Commercial, Industrial, Nonprofit, Schools, Local Government, State Government, Agricultural, Institutional, Any non-federal entity
Amount:	Varies. Program focuses on projects with total project costs over $25 million.
Max. Limit:	None stated
Terms:	Full repayment is required over a period not to exceed the lesser of 30 years or 90% of the projected useful life of the physical asset to be financed
Web Site:	http://www.lgprogram.energy.gov
Authority 1:	42 USC § 16511 et seq.
Authority 2:	10 CFR 609

Summary:

Innovative Technology Loan Guarantee Program:

Title XVII of the federal Energy Policy Act of 2005 (EPAct 2005) authorized the U.S. Department of Energy (DOE) to issue loan guarantees for projects that "avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued." The loan guarantee program has been authorized to offer more than $10 billion in loan guarantees for energy efficiency, renewable energy and advanced transmission and distribution projects.

DOE actively promotes projects in three categories: (1) manufacturing projects, (2) stand-alone projects, and (3) large-scale integration projects that may combine multiple eligible renewable energy, energy efficiency and transmission technologies in accordance with a staged development scheme. Under the original authorization, loan guarantees were intended to encourage early commercial use of new or significantly improved technologies in energy projects. The loan guarantee program generally does not support research and development projects.

In July 2009, the U.S. DOE issued a new solicitation for projects that employ innovative energy efficiency, renewable energy, and advanced transmission and distribution technologies. Proposed projects must fit within the criteria for "New or Significantly Improved Technologies" as defined in 10 CFR 609. The solicitation provides for a total of $8.5 billion in funding and is to remain open until that amount is fully obligated. The initial due date for applicants is September 16, 2009.

Temporary Loan Guarantee Program:

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, extended the authority of the DOE to issue loan guarantees and appropriated $6 billion for this program. Under this act, the DOE may enter into guarantees until September 30, 2011. The act amended EPAct 2005 by adding a new section defining eligible technologies for new loan guarantees. Eligible projects include renewable energy projects that generate electricity or thermal energy and facilities that manufacture related components, electric power transmission systems, and innovative biofuels projects. Funding for biofuels projects is limited to $500 million. Davis-Bacon wage requirements apply to any project receiving a loan guarantee.

In July 2009, the U.S. DOE issued a solicitation for transmission infrastructure investment projects. The solicitation is intended to provide loan guarantees for transmission infrastructure investment projects that are expected to commence

construction no later than September 30, 2011.

Contact:

Public Information - DOE
U.S. Department of Energy
1000 Independence Avenue, SW
Washington , DC 20585-0121
Phone: (202) 586-8336
E-Mail: LGProgram@hq.doe.gov
Web Site: http://www.lgprogram.energy.gov

2-1.1.15. USDA - Rural Energy for America Program (REAP) Loan Guarantees

Last DSIRE Review: 05/27/2009

Incentive Type:	Federal Loan Program
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP/Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Microturbines
Applicable Sectors:	Commercial, Agricultural
Amount:	Varies
Max. Limit:	$25 million per loan guarantee
Web Site:	http://www.rurdev.usda.gov/rbs/busp/bprogs.htm
Authority 1:	7 USC § 8106
Date Enacted:	5/13/2002
Date Effective:	FY 2003

Summary:

NOTE: The U.S. Department of Agriculture's Rural Development has issued a Notice of Solicitation of Applications for the Rural Energy for America Program (REAP). The deadline to apply for grants and loan guarantees under this solicitation is July 31, 2009. Grants and loan guarantees will be awarded for investments in renewable energy systems, energy efficiency improvements and renewable energy feasibility studies.

The Food, Conservation, and Energy Act of 2008 (H.R. 2419), enacted by Congress in May 2008, converted the federal Renewable Energy Systems and Energy Efficiency Improvements Program,* into the Rural Energy for America Program (REAP). Similar to its predecessor, the REAP promotes energy efficiency and renewable energy for agricultural producers and rural small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance. Congress has allocated funding for the new program in the following amounts: $55 million for FY 2009, $60 million for FY 2010, $70 million for FY 2011, and $70 million for FY 2012. REAP is administered by the U.S. Department of Agriculture (USDA).

Of the total REAP funding available, 96% is dedicated to grants and loan guarantees for energy efficiency improvements and renewable energy systems. These incentives are available to agricultural producers and rural small businesses to purchase renewable energy systems (including systems that may be used to produce and sell electricity), to make energy efficiency improvements, and to conduct relevant feasibility studies. Eligible renewable energy projects include wind, solar, biomass and geothermal; and hydrogen derived from biomass or water using wind, solar or geothermal energy sources. These grants are limited to 25% of a proposed project's cost, and a loan guarantee may not exceed $25 million. The combined amount of a grant and loan guarantee may not exceed 75% of the project's cost. In general, a minimum of 20% of the funds available for these incentives will be dedicated to grants of $20,000 or less. The USDA likely will announce the availability of funding for this component of REAP through a Notice of Funds Availability (NOFA).

The USDA will also make competitive grants to eligible entities to provide assistance to agricultural producers and rural small businesses "to become more energy efficient" and "to use renewable energy technologies and resources." These grants are generally available to state government entities, local governments, tribal governments, land-grant colleges and universities, rural electric cooperatives and public power entities, and other entities, as determined by the USDA. These grants may be used for conducting and promoting energy audits; and for providing recommendations and information related to energy efficiency and renewable energy. Of the total REAP funding available, 4% is dedicated to competitive grants to provide assistance to agricultural producers and rural small businesses.

* The Renewable Energy Systems and Energy Efficiency Improvements Program was created by the USDA pursuant to Section 9006 of the 2002 federal Farm Security and Rural Investment Act of 2002. Funding in the amount of $23 million per year was appropriated for each fiscal year from FY 2003-2007. In March 2008, the USDA announced that it would accept $220.9 million in applications for grants, loan guarantees, and loan/grant combination packages under the Renewable Energy Systems and Energy Efficiency Improvements Program. The application deadline was June 16, 2008.

Contact:

Public Information - RBS
U.S. Department of Agriculture
Rural Business - Cooperative Service
USDA/RBS, Room 5045-S, Mail Stop 3201
1400 Independence Avenue SW
Washington, DC 20250-3201
Phone: (202) 690-4730
Fax: (202) 690-4737
E-Mail: webmaster@rurdev.usda.gov
Web Site: http://www.rurdev.usda.gov/rbs

2-1.1.16. Alternative Energy Product Manufacturers Tax Credit

Last DSIRE Review: 06/15/2009

Incentive Type:	Industry Recruitment/Support
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Renewable Fuel Vehicles, Geothermal Electric, Fuel Cells, Municipal Solid Waste, Batteries, Hybrid Electric Vehicles, Electric Vehicles, Anaerobic Digestion, Fuel Cells using Renewable Fuels
Applicable Sectors:	Commercial, Industrial
Amount:	Determined by New Mexico Department of Taxation and Revenue
Max. Limit:	5% of taxpayer's qualified expenditures
Terms:	5-year tax credit carryforward
Authority 1:	N.M. Stat. § 7-9J-1 et seq.
Date Enacted:	4/3/2007
Date Effective:	7/1/2006

Summary:
The Alternative Energy Product Manufacturers tax credit may be claimed for manufacturing alternative energy products and components, including renewable energy systems, fuel cell systems, and electric and hybrid-electric vehicles. Alternative energy components include parts, assembly of parts, materials, ingredients or supplies that are incorporated directly into end-use products.

The total amount of the credit is approved by the Taxation and Revenue Department and is not to exceed five percent of the taxpayer's qualified expenditures. A qualified expenditure is the purchase of manufacturing equipment made after July 1, 2006.

The alternative energy product manufacturers tax credit may only be deducted from the taxpayer's modified combined tax liability which is the total liability for the reporting period for the gross receipts, compensating tax, and withholding tax. Any portion of the alternative energy product manufacturers tax credit that remains unused at the end of the taxpayer's reporting period may be carried forward for five years. Click here for the forms required to claim the tax credit.

Contact:

Craig O'Hare
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3207
Fax: (505) 476-3322
E-Mail: craig.ohare@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd

2-1.1.17. Qualifying Advanced Energy Manufacturing Investment Tax Credit

Last DSIRE Review: 08/13/2009

Incentive Type:	Industry Recruitment/Support
State:	Federal
Eligible Efficiency Technologies:	Lighting, Lighting Controls/Sensors, Energy Conservation Technologies; Smart Grid
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Thermal Electric, Photovoltaics, Wind, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Batteries and Energy Storage; Advanced Transmission Technologies that Support Renewable Energy Generation; , Renewable Fuels, Fuel Cells using Renewable Fuels, Microturbines
Applicable Sectors:	Commercial, Industrial, Manufacturing
Amount:	30% of qualified investment
Max. Limit:	Total amount of credits to be allocated shall not exceed $2.3 billion
Terms:	Apply first to the Department of Energy (DOE); must receive recommendation and ranking from DOE in order to apply to the Internal Revenue Service for certification of credits
Web Site:	http://www.energy.gov/recovery/48C.htm
Authority 1:	26 USCS § 48C
Date Enacted:	02/17/2009
Date Effective:	02/17/2009

Summary:

The U.S. Treasury Department, in consultation with the U.S. Department of Energy (DOE), has posted guidelines and the application for these tax credits on the website listed above. The applications may be submitted starting August 14, 2009 and preliminary applications are due to the DOE by September 16, 2009 with final applications due to DOE October 16, 2009. The DOE will provide its project review and ranking. In order to apply to the Internal Revenue Service (IRS), the applicant must receive its recommendation and ranking from the DOE. The applications to the Internal Revenue Service (IRS) are due on December 16, 2009 and must include the DOE recommendation and project ranking. IRS will certify or reject applications by January 10, 2010 and notify the certified projects of the approved amount of their tax credit.

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, established a new investment tax credit to encourage the development of a U.S.-based renewable energy manufacturing sector. In any taxable year, the investment tax credit is equal to 30% of the qualified investment required for an advanced energy project that establishes, re-equips or expands a manufacturing facility that produces any of the following:

Equipment and/or technologies used to produced energy from the sun, wind, geothermal or "other" renewable resources

Fuel cells, microturbines or energy-storage systems for use with electric or hybrid-electric motor vehicles

Equipment used to refine or blend renewable fuels

Equipment and/or technologies to produce energy-conservation technologies (including energy-conserving lighting technologies and smart grid technologies)*

Qualified investments generally include personal tangible property that is depreciable and required for the production process. Other tangible property may be considered a qualified investment only if it is an essential part of the facility, excluding buildings and structural components.

The U.S. Treasury Department will issue certifications for qualified investments eligible for credits to qualifying advanced energy project sponsors. In total, $2.3 billion worth of credits may be allocated under the program. After certification is granted, the taxpayer has one year to provide additional evidence that the requirements of the certification have been met and three years to put the project in service. There are provisions for credit recapture for non-compliance.

In determining which projects to certify, the U.S. Treasury Department must consider those which most likely will be commercially viable, provide the greatest domestic job creation, provide the greatest net reduction of air pollution and/or greenhouse gases, have great potential for technological innovation and commercial deployment, have the lowest levelized cost of generated (or stored) energy or the lowest levelized cost of reduction in energy consumption or greenhouse gas emissions, and have the shortest project time.

Any taxpayer receiving this credit may not also receive business energy investment tax credit.

See U.S. DOE Advanced Energy Manufacturing Tax Credit (48C) Website for the DOE application and guidance, the IRS application, as well as the email for submitting the application.

*Note: This credit may be expanded in the future to include other energy technologies that reduce greenhouse gas emissions, as determined by the U.S. Treasury Department.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224

Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.18. Residential Energy Conservation Subsidy Exclusion (Personal)

Last DSIRE Review: 07/27/2009

Incentive Type:	Personal Exemption
State:	Federal
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Photovoltaics
Applicable Sectors:	Residential, Multi-Family Residential
Amount:	100% of subsidy
Terms:	Applies to energy conservation measures on dwelling units only
Web Site:	http://www.irs.gov/publications/p525/index.html
Authority 1:	26 USC § 136
Date Enacted:	1992

Summary:
According to Section 136 of the U.S. Code, energy conservation subsidies provided by public utilities,* either directly or indirectly, are nontaxable: "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure." (This exclusion does not apply to electricity-generating systems registered as "qualifying facilities" under the Public Utility Regulatory Policy Act of 1978.)

The term "energy conservation measure" includes installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats and similar properties. If a building or structure contains both dwelling and other units, any subsidy must be properly allocated.

Given the definition of "energy conservation measure," there is strong evidence that utility rebates for residential solar-thermal projects and solar-electric systems may be nontaxable. However, the IRS has not ruled definitively on this issue. For taxpayers considering using this provision for renewable energy systems, consultation with a tax professional is advised.

Other types of utility subsidies that may come in the form of credits or reduced rates may also be nontaxable, according to IRS Publication 525:

"Utility rebates. If you are a customer of an electric utility company and you participate in the utility's energy conservation program, you may receive on your monthly electric bill either: a reduction in the purchase price of electricity furnished to you (rate reduction), or a nonrefundable credit against the purchase price of the electricity. The amount of the rate reduction or nonrefundable credit is not included in your income."

* The term "public utility" is defined as an entity "engaged in the sale of electricity or natural gas to residential, commercial, or industrial customers for use by such customers." The term includes federal, state and local government entities.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.19. Advanced Energy Tax Credit (Personal)

Last DSIRE Review: 04/17/2009

Incentive Type:	Personal Tax Credit
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Geothermal Electric
Applicable Sectors:	Commercial
Amount:	6%
Maximum Incentive:	$60 million
Carryover Provisions:	10 years
Eligible System Size:	1 Megawatt or greater
Project Review/Certification:	Projects must obtain a certificate of eligibility from the Environment Department

Authority 1:	SB 237
Date Enacted:	3/9/2009
Date Effective:	7/1/2009

Summary:
As of July 2007, the development and construction costs of solar thermal electric plants and associated energy storage devices are eligible for a 6% tax credit against gross receipts, compensating, or withholding taxes. Photovoltaics and geothermal electric generating facilities installed after July 1, 2009 with a nameplate capacity of at least 1 megawatt were added as eligible technologies by SB 237 of 2009. SB 237 also allowed the credit to offset personal and corporate income taxes in addition to gross receipts, compensating, and withholding taxes. Any unused credit may be carried forward for up to ten years. The tax credit amount is capped at $60 million.

In order to claim the tax credit, developers must obtain a certificate of eligibility from the New Mexico Environment Department and submit the certificate to the New Mexico Taxation and Revenue Department.

Contact:

Craig O'Hare
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3207
Fax: (505) 476-3322
E-Mail: craig.ohare@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd

2-1.1.20. Renewable Energy Production Tax Credit (Personal)

Last DSIRE Review: 05/14/2009

Incentive Type:	Personal Tax Credit
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Municipal Solid Waste, Anaerobic Digestion
Applicable Sectors:	Commercial, Industrial, Residential, Agricultural

Amount:	$0.01/kWh for wind and biomass $0.027/kWh (average) for solar (see below)
Maximum Incentive:	Wind and biomass: First 400,000 MWh annually for 10 years (i.e. $4,000,000/year) Solar electric: First 200,000 MWh annually for 10 years (annual amount varies) Statewide cap: 2,000,000 MWh plus an additional 500,000 MWh for solar electric
Carryover Provisions:	Prior to 10/1/2007: Excess credit may be carried forward five years After 10/1/2007: Excess credit is refunded to the taxpayer
Eligible System Size:	Minimum of 1 MW capacity per facility
Equipment/Installation Requirements:	System must be in compliance with all applicable performance and safety standards; generators must be certified by the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD).
Web Site:	http://www.cleanenergynm.org
Authority 1:	N.M. Stat. § 7-2-18.18
Date Enacted:	4/3/2007
Date Effective:	1/1/2008
Expiration Date:	1/1/2018

Summary:
Enacted in 2002, the New Mexico Renewable Energy Production Tax Credit provides a tax credit against the personal income tax of one cent per kilowatt-hour for companies that generate electricity from wind or biomass. Companies that generate electricity from solar energy receive a tax incentive that varies annually according to the following scale:

Year 1: 1.5¢/kWh

Year 2: 2¢/kWh

Year 3: 2.5¢/kWh

Year 4: 3¢/kWh

Year 5: 3.5¢/kWh

Year 6: 4¢/kWh

Year 7: 3.5¢/kWh

Year 8: 3¢/kWh

Year 9: 2.5¢/kWh

Year 10: 2¢/kWh

According to the EMNRD, this incentive averages 2.7¢/kWh annually.

For wind and biomass generators, the credit is applicable only to the first 400,000 megawatt-hours (MWh) of electricity in each of 10 consecutive taxable years. For solar, the credit is applicalbe only to the first 200,000 MWh of electricity in each taxable year. To qualify, an energy generator must have a capacity of at least 1 megawatt and be installed before January 2018.

Total generation from both the corporate and personal tax credit programs combined must not exceed two million megawatt-hours of production annually, plus an additional 500,000 MWh produced by solar energy. Taxpayers cannot claim both the corporate and the personal tax credit for the same renewable energy system.

For electricity generated prior to October 1, 2007, excess credit may be carried forward for up to five consecutive taxable years. For electricity generated on or after October 1, 2007, excess credit shall be refunded to the taxpayer in order to allow project owners with limited tax liability to fully utilize the credit.

The renewable energy production tax credit claim form and instructions provide additional information.

Contact:

Michael McDiarmid, P.E.
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 South Saint Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3319
Fax: (505) 476-3322
E-Mail: mmcdiarmid@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.21. Residential Energy Efficiency Tax Credit

Last DSIRE Review: 02/18/2009

Incentive Type:	Personal Tax Credit
State:	Federal
Eligible Efficiency Technologies:	Water Heaters, Furnaces, Boilers, Heat pumps, Air conditioners, Building Insulation, Windows, Doors, Roofs, Circulating fans used in a qualifying furnace
Eligible Renewable/Other Technologies:	Biomass, Stoves that use qualified biomass fuel
Applicable Sectors:	Residential

Amount:	30%
Maximum Incentive:	Aggregate amount of credit for all technologies placed in service in 2009 and 2010 combined is limited to $1,500
Equipment/Installation Requirements:	Equipment must be new and in compliance with all applicable performance and safety standards as described in tax code
Authority 1:	26 USC § 25C
Date Enacted:	8/8/2005 (subsequently amended)
Date Effective:	1/1/2006
Expiration Date:	12/31/2010

Summary:
The federal tax credit for energy-efficient home improvements was established by the Energy Policy Act of 2005. After expiring December 31, 2007, the credit was extended and expanded by The Energy Improvement and Extension Act of 2008 (H.R. 1424: Div. B, Sec. 302) and The American Recovery and Reinvestment Act of 2009 (H.R. 1: Div. B, Sec. 1121). The credit now applies to eligible equipment purchased between January 1, 2009, and December 31, 2010. In addition to extending the credit, H.R. 1424 and H.R. 1 strengthened the efficiency requirements for most equipment, extended the credit to stoves that use biomass fuel and asphalt roofs with appropriate cooling granules; raised the cap for the credit; and redesigned the way the credit is calculated.

The credit applies to energy efficiency improvements in the building envelope of existing homes and for the purchase of high-efficiency heating, cooling and water-heating equipment. Efficiency improvements or equipment must serve a dwelling in the United States that is owned and used by the taxpayer as a primary residence. The maximum amount of homeowner credit for all improvements combined is $1,500 for equipment purchased during the two-year period of 2009 and 2010.

Building Envelope Improvements
Owners of existing homes receive a tax credit worth 30% of the cost of upgrading the efficiency of the building's envelope. Installation (labor) costs are not included. The following improvements are eligible for the tax credit:

Insulation materials and systems designed to reduce a home's heat loss or gain

Exterior doors and windows (including skylights) and

Pigmented metal roofs designed to reduce heat gain, and asphalt roofs with appropriate cooling granules.

Heating, Cooling and Water-Heating Equipment
Taxpayers who purchase qualified residential energy-efficient property are eligible for a tax credit worth 30% of the system cost, including labor costs. The credit may also be applied to labor costs for assembly and original installation of eligible property. The following types of equipment are eligible:

Electric heat pump water heaters

Electric heat pumps

Central air conditioners

Natural gas, propane or oil water heaters

Natural gas, propane or oil furnace or hot water boilers

Advanced main air circulating fans

Biomass stoves that use "plant-derived fuel available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues (including wood pellets), plants (including aquatic plants), grasses, residues, and fibers"

Performance and quality standards for tax credit eligibility vary by technology. (See 26 USC § 25C, H.R. 1424 of 2008 and H.R. 1 of 2009) for details. Additionally, the Energy Star web site offers detailed information on qualifying products.

Significantly, The American Recovery and Reinvestment Act of 2009 repealed a previous limitation on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies. Businesses that receive other incentives are advised to consult with a tax professional regarding how to calculate this federal tax credit.

Background
The Energy Policy Act of 2005 established the tax credit for energy improvements to existing homes. The credit was originally limited to purchases made in 2006 and 2007, with an aggregate cap of $500 for all qualifying purchases made in these two years combined. There were also separate individual caps for the different equipment types. H.R. 1424 of 2008 reinstated the credit for 2009 purchases and made other minor adjustments. H.R. 1 further extended the credit to include purchases made in 2010 and replaced the $500 aggregate cap with a $1,500 aggregate cap for installations made in 2009 and 2010. Tax credits for installations made in 2006 and 2007 are still limited to $500. Any purchase made in 2008 is not eligible for this tax credit.

Geothermal heat pumps were originally eligible for this credit, with a $300 cap. However, geothermal heat pumps are now eligible for the residential renewable energy tax credit, with no cap.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.22. Residential Renewable Energy Tax Credit

Last DSIRE Review: 02/19/2009

Incentive Type: Personal Tax Credit

State:	Federal
Eligible Renewable/Other Technologies:	Solar Water Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Other Solar Electric Technologies
Applicable Sectors:	Residential
Amount:	30%
Maximum Incentive:	Solar-electric systems placed in service before 1/1/2009: $2,000 Solar-electric systems placed in service after 12/31/2008: no maximum Solar water heaters placed in service before 1/1/2009: $2,000 Solar water heaters placed in service after 12/31/2008: no maximum Wind turbines placed in service in 2008: $4,000 Wind turbines placed in service after 12/31/2008: no maximum Geothermal heat pumps placed in service in 2008: $2,000 Geothermal heat pumps placed in service after 12/31/2008: no maximum Fuel cells: $500 per 0.5 kW
Carryover Provisions:	Excess credit may be carried forward to succeeding tax year
Eligible System Size:	Fuel cells: 0.5 kW minimum
Equipment/Installation Requirements:	Solar water heating property must be certified by SRCC or by comparable entity endorsed by the state in which the system is installed. At least half the energy used to heat the dwelling's water must be from solar. Geothermal heat pumps must meet federal Energy Star requirements. Fuel cells must have electricity-only generation efficiency greater than 30%.
Authority 1:	26 USC § 25D
Date Enacted:	8/8/2005 (subsequently amended)
Date Effective:	1/1/2006
Expiration Date:	12/31/2016
Authority 2:	IRS Form 5695 & Instructions: Residential Energy Credits

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Summary:

Note: The American Recovery and Reinvestment Act of 2009 does not allow taxpayers eligible for the residential renewable energy tax credit to receive a U.S. Treasury Department grant instead of taking this credit.

Established by the federal Energy Policy Act of 2005, the federal tax credit for residential energy property initially applied to solar-electric systems, solar water heating systems and fuel cells. The Energy Improvement and Extension Act of 2008 (H.R. 1424) extended the tax credit to small wind-energy systems and geothermal heat pumps, effective January 1, 2008. Other key revisions included an eight-year extension of the credit to December 31, 2016, the ability to take the credit against the

alternative minimum tax, and the removal of the $2,000 credit limit for solar-electric systems beginning in 2009. The credit was further enhanced in February 2009 by The American Recovery and Reinvestment Act of 2009 (H.R. 1: Div. B, Sec. 1122, p. 46), which removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008.

A taxpayer may claim a credit of 30% of qualified expenditures for a system that serves a dwelling unit located in the United States and used as a residence by the taxpayer. Expenditures with respect to the equipment are treated as made when the installation is completed. If the installation is on a new home, the "placed in service" date is the date of occupancy by the homeowner. Expenditures include labor costs for onsite preparation, assembly or original system installation, and for piping or wiring to interconnect a system to the home. If the federal tax credit exceeds tax liability, the excess amount may be carried forward to the succeeding taxable year. The excess credit can be carried forward until 2016, but it is unclear whether the unused tax credit can be carried forward after then. The maximum allowable credit, equipment requirements and other details vary by technology, as outlined below.

Solar-electric property

There is no maximum credit for systems placed in service after 2008. The maximum credit is $2,000 for systems placed in service before January 1, 2009.

Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016.

The home served by the system does not have to be the taxpayer's principal residence.

Note that the Solar Energy Industries Association (SEIA) has published a three-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.

Solar water-heating property

There is no maximum credit for systems placed in service after 2008. The maximum credit is $2,000 for systems placed in service before January 1, 2009.

Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016.

Equipment must be certified for performance by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the government of the state in which the property is installed.

At least half the energy used to heat the dwelling's water must be from solar in order for the solar water-heating property expenditures to be eligible.

The tax credit does not apply to solar water-heating property for swimming pools or hot tubs.

The home served by the system does not have to be the taxpayer's principal residence.

Note that the Solar Energy Industries Association (SEIA) has published a three-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.

Fuel cell property

The maximum credit is $500 per half kilowatt (kW).

Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016.

The fuel cell must have a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%.

In case of joint occupancy, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is $1,667 per half kilowatt. This does not apply to married individuals filing a joint return. The credit that may be claimed by each individual is proportional to the costs he or she paid.

The home served by the system must be the taxpayer's principal residence.

Small wind-energy property

There is no maximum credit for systems placed in service after 2008. The maximum credit is $500 per half kilowatt, not to exceed $4,000, for systems placed in service in 2008.

Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2016.

The home served by the system does not have to be the taxpayer's principal residence.

Geothermal heat pumps

There is no maximum credit for systems placed in service after 2008. The maximum credit is $2,000 for systems placed in service in 2008.

Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2016.

The geothermal heat pump must meet federal Energy Star program requirements in effect at the time the installation is completed.

The home served by the system does not have to be the taxpayer's principal residence.

Significantly, The American Recovery and Reinvestment Act of 2009 repealed a previous limitation on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies.

History
The federal Energy Policy Act of 2005 established a 30% tax credit (up to $2,000) for the purchase and installation of residential solar electric and solar water heating property and a 30% tax credit (up to $500 per 0.5 kilowatt) for fuel cells. Initially scheduled to expire at the end of 2007, the tax credits were extended through December 31, 2008, by the Tax Relief and Health Care Act of 2006.

In October 2008, the Energy Improvement and Extension Act of 2008 extended the tax credits once again (until December 31, 2016), and a new tax credit for small wind-energy systems and geothermal heat pump systems was created. In February 2009, The American Recovery and Reinvestment Act of 2009 removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008.

Contact:

Public Information - IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web Site: http://www.irs.gov

2-1.1.23. Solar Market Development Tax Credit

Last DSIRE Review: 04/10/2009

Incentive Type:	Personal Tax Credit
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Process Heat, Photovoltaics, Solar Space Cooling
Applicable Sectors:	Commercial, Residential, Agricultural
Amount:	10% of purchase and installation costs
Maximum Incentive:	$9,000
Carryover Provisions:	Maximum 10-year carryover
Eligible System Size:	No limit.
Equipment/Installation Requirements:	Must comply with requirements established in 3.3.28 NMAC (see below); includes requirement for solar water heaters to be SRCC-certified or in the certification process.
Project Review/Certification:	System must be certified by the New Mexico Energy, Minerals and Natural Resources Department
Web Site:	http://www.emnrd.state.nm.us/ECMD/CleanEnergyTaxIncentives/solartaxcredit.htm
Authority 1:	NM Stat. § 7-2-18.14
Date Enacted:	3/6/2006
Date Effective:	1/1/2006
Expiration Date:	12/31/2015

Authority 2:	3.3.28 NMAC (Solar System Certification Requirements)
Date Effective:	7/1/2006
Authority 3:	SB 257
Date Enacted:	4/9/2009
Date Effective:	1/1/2009
Expiration Date:	12/31/2016

Summary:
New Mexico provides a 10% personal income tax credit (up to $9,000) for residents and businesses (non-corporate), including agricultural enterprises, who purchase and install certified photovoltaic (PV) and solar thermal systems. Eligible systems include grid-tied commercial PV systems, off-grid and grid-tied residential PV systems, and (active) solar hot water or hot air systems. To be eligible, systems must first be certified by the New Mexico Energy, Minerals, and Natural Resources Department. Note that solar pool or hot tub heaters are not eligible for this tax credit.

Credits may be carried forward for a maximum of ten taxable years until fully expended. Aggregate credit levels are capped annually at $2 million for solar thermal and $3 million for photovoltaic systems.

These tax credits are set to expire December 31, 2016.

Solar System Certification Application
Solar System Installation Form

Background
In 2006 New Mexico established a 30% tax credit for solar technologies. The credit was originally designed to leverage and extend, not amplify, the federal solar income tax credits. Prior to the signing of the Energy Improvement and Extension Act of 2008 and the American Recover and Reinvestment Act of 2009, the federal investment tax credit (ITC) for residential solar systems was capped at $2,000 and set to expire at the end of 2008. New Mexico's Solar Market Development Tax Credit was written so the federal and state tax credits could not exceed 30% combined. Effectively, the state credit was designed to extend the federal individual tax credit past its $2,000 cap and 2008 deadline. When the caps on the federal ITC were lifted, the Solar Market Development Tax Credit could no longer be used. SB 257 of 2008 removed the language about the interaction with the ITC and changed it to a 10% tax credit.

Contact:

Ryan Helton
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3318
Fax: (505) 476-3322
E-Mail: ryan.helton@state.nm.us

Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.24. Sustainable Building Tax Credit (Personal)

Last DSIRE Review: 04/28/2009

Incentive Type:	Personal Tax Credit
State:	New Mexico
Eligible Efficiency Technologies:	Comprehensive Measures/Whole Building
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Daylighting
Applicable Sectors:	Commercial, Residential, Nonprofit, Multi-Family Residential
Amount:	Varies based on the square footage of the building and the certification level
Carryover Provisions:	Excess credits may be carried forward for up to 7 years
Web Site:	http://www.cleanenergynm.org
Authority 1:	N.M. Stat. § 7-2-18.19
Date Enacted:	4/2/2007
Date Effective:	1/1/2007
Authority 2:	SB 291
Date Enacted:	4/1/2009
Date Effective:	6/30/2009

Summary:
SB 463, enacted in April 2007, established a personal tax credit and a corporate tax credit for sustainable buildings in New Mexico. The tax credits apply to both commercial and residential buildings. Commercial buildings which have been registered and certified by the US Green Building Council at LEED* Silver or higher for new construction (NC), existing buildings (EB), core and shell (CS), or commercial interiors (CI) are eligible for a tax credit. The amount of the credit varies according to the square footage of the building and the level of certification achieved, as indicated on the following chart:

Commercial Buildings:

LEED Rating Level	Occupied Sq. Footage	Tax Credit/Sq. Ft.
LEED-NC Silver	First 10,000	$3.50
	Next 40,000	$1.75
	Over 50,000 and up to 500,000	$0.70
LEED-NC Gold	First 10,000	$4.75
	Next 40,000	$2.00
	Over 50,000 and up to 500,000	$1.00
LEED-NC Platinum	First 10,000	$.6.25
	Next 40,000	$3.25
	Over 50,000 and up to 500,000	$2.00
LEED-EB/CS Silver	First 10,000	$2.50
	Next 40,000	$1.25
	Over 50,000 and up to 500,000	$0.50
LEED-EB/CS Gold	First 10,000	$3.35
	Next 40,000	$1.40
	Over 50,000 and up to 500,000	$0.70
LEED-EB/CS Platinum	First 10,000	$4.40
	Next 40,000	$2.30
	Over 50,000 and up to 500,000	$1.40
LEED-CI Silver	First 10,000	$.1.40
	Next 40,000	$0.70
	Over 50,000 and up to 500,000	$0.30
LEED-CI Gold	First 10,000	$1.90
	Next 40,000	$0.80

	Over 50,000 and up to 500,000	$0.40
LEED-CI Platinum	First 10,000	$2.50
	Next 40,000	$1.30
	Over 50,000 and up to 500,000	$0.80

Residential buildings certified as sustainable homes can also qualify for a tax credit. Eligible residential buildings include single-family homes and multi-family homes which are certified as either Build Green NM** Silver or higher, or LEED-H Silver or higher, and Energy Star certified manufactured homes. The amount of the credit varies according to the square footage of the building and the level of certification achieved, as indicated on the following chart:

Residential Buildings:

Rating Level	**Occupied Sq. Footage**	**Tax Credit/Sq. Ft.**
LEED-H Silver or Build Green NM Silver	First 2,000	$5.00
	Next 1,000	$2.50
LEED-H Gold or Build Green NM Gold	First 2,000	$6.85
	Next 1,000	$3.40
LEED-H Platinum or Build Green NM Emerald	First 2,000	$9.00
	Next 1,000	$4.45
Energy Star Manufactured Home	Up to 3,000	$3.00

To receive the tax credit, the building owner must obtain a certificate of eligibility from the Energy, Minerals and Natural Resources Department after the building project has been completed. The Department will only grant certificates in any given calendar year until the equivalent of $5,000,000 worth of certificates for commercial buildings and $5,000,000 worth of certificates for residential buildings have been awarded in that calendar year. Further, no more than $1,250,000 of the annual amount for residential buildings can be applied to manufactured housing. Multi-family residential buildings are classified as residential buildings for the purpose of this tax credit. However, if the aggregate limit for residential tax credits has been reached for the year, the Department may issue certificates of eligibility under the annual aggregate limit for commercial buildings to owners of multi-family dwelling units provided that aggregate limit has not been reached as well.

The taxpayer must then present their certificate of eligibility to the Taxation and Revenue Department to receive a document granting the Sustainable Building Tax Credit. If the total amount of a Sustainable Building Tax Credit is less than $25,000, the entire amount of the credit can be applied to the taxpayer's income tax in that year. If the credit is more than $25,000 the credit will be applied in increments of 25% over the next 4 years. If a taxpayer's tax liability is less than the amount of credit due, the excess credit may be carried forward for up to seven years.

SB 291 of 2009 made the tax credit transferable for nonprofits. Although nonprofits are not taxed by the state, they can apply for the certificate of eligibility and sell the credit to an entity that does pay taxes. Additionally, people and entities who do not owe enough taxes to take full advantage of the tax credit also have the option of selling the tax credit.

A solar thermal system or a photovoltaic system may not be used as a component of qualification for this tax credit if a tax credit has already been claimed for it under the Solar Market Development Tax Credit.

*The USGBC LEED Rating System is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Click here for more information on the national LEED program.

**Click here for more information on Build Green NM.

Contact:

Tax Information Office
New Mexico Taxation & Revenue Department
P.O. Box 630
Santa Fe, NM 87504
Phone: (505) 827-0700
E-Mail: poffice@state.nm.us
Web Site: http://www.state.nm.us/tax/home.htm

Susie Marbury
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3254
Fax: (505) 476-3322
E-Mail: susie.marbury@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.25. El Paso Electric Company - Small System Renewable Energy Certificate Purchase Program

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Last DSIRE Review: 04/07/2009

Incentive Type:	Production Incentive
State:	New Mexico

Eligible Renewable/Other Technologies:	Photovoltaics, Other Distributed Generation Technologies
Applicable Sectors:	Residential
Amount:	$0.13/kWh for RECs produced for a period of 12 years
Terms:	Maximum system capacity is 10 kW AC; must have a REC meter installed
Web Site:	http://www.epelectric.com/ site/renewable.nsf/bf25ab0f47ba5dd785256499006b15a4/526189e823f8502887257558007a7f90?OpenDocu
Date Effective:	3/1/2009

Summary:
El Paso Electric Company originally intended to purchase RECs from small wind systems, but it was not approved by the Public Regulation Commission. As of April 2009, El Paso Electric is only purchasing RECs from photovoltaic systems

As of March 1, 2009, El Paso Electric is purchasing renewable energy certificates (RECs) from its New Mexico customers who insta small photovoltaic (PV) systems up to 10 kilowatts (kW) in capacity. The RECs that El Paso Electric purchases will help the utility comply with New Mexico's renewable portfolio standard (RPS), and provide a financial incentive for homeowners and businesses install PV and wind-energy systems.

Only systems connected to the utility's grid and net-metered are eligible. REC's produced by small systems will be measured by a separate REC meter and purchased by El Paso Electric on a monthly basis. The utility will purchase the REC's at a rate of $0.13 pe kilowatt-hour (kWh) for a period of 12 years. REC purchase payments will be appear as a credit on the customer's monthly bill. A credit balance up to $30.00 will be applied to the following month's bill. Once the rolling credit exceeds $30.00 a direct payment will be made to the customer.

See application for further details.

Contact:

Manager - Rates
El Paso Electric Company
PO Box 982
El Paso, TX 79960
E-Mail: renewableenergy@epelectric.com
Web Site: http://www.epelectric.com

2-1.1.26. PNM - Performance-Based Customer Solar PV Program

Last DSIRE Review: 04/01/2009

Incentive Type:	Production Incentive
State:	New Mexico
Eligible Renewable/Other Technologies:	Photovoltaics
Applicable Sectors:	Commercial, Residential
Amount:	Systems up to 10 kW: $0.13/kWh for RECs Systems greater than 10 kW up to 1 MW: $0.15/kWh for RECs
Maximum Incentive:	None specified
Terms:	Systems up to 10 kW: 12-year contract Systems greater than 10 kW up to 1 MW: 20-year contract (System must be net-metered to be eligible.)
Web Site:	http://www.pnm.com/customers/pv/program.htm
Date Effective:	3/1/2006

Summary:
In March 2006, PNM initiated a renewable energy credit (REC) purchase program as part of its plan to comply with New Mexico's renewable portfolio standard (RPS). PNM will purchase RECs from customers who install photovoltaic (PV) systems up to one megawatt (MW). PNM will then be able to apply these RECs towards their obligations under the state's RPS, which requires 4% of the total generation capacity to come from solar electricity by 2020, and 0.6% from distributed generation in 2020.

REC payments are based on the system's total output. PNM will purchase RECs from each participant as part of the regular monthly billing process. Participants will receive a monthly bill documenting the number of kilowatt-hours (kWh) produced by the PV system, the number of RECs purchased by PNM, the purchase price per REC and the total price of RECs purchased that billing period. REC purchase payments will be applied as a credit to the participant's electric bill on a monthly basis.

Systems up to 10 kW
PNM will purchase RECs generated by small PV systems at a rate of $0.13/kWh for 12 years of the system's operation. If the amount paid for the RECs is greater than the total of the customer's monthly electric service plus kWh charges, the balance of the REC payment will be carried forward as a credit for the following month's bill if $20 or less. If the REC payment balance is greater than $20 after credits to the customer's electric bill have been made, the entire REC payment balance will be paid directly to the customer. Program participants must pay an application fee of $100 for residential customers, which includes the cost of installing a second meter to monitor system output. Customers also must pay a net-metering application fee of $50 to establish an approved interconnection with PNM.

Systems greater than 10 kW up to 1 MW
PNM will purchase RECs associated with the electricity generated by large PV systems and used on-site at a rate of $0.15/kWh for 20 years of the system's operation. If the amount paid for the RECs is greater than the total of the customer's monthly electric service plus kWh charges, the balance of the REC payment will be carried forward as a credit for the following month's bill if $200 or less. If the REC payment balance is greater than $200 after credits to the customer's

electric bill have been made, the entire REC payment balance will be paid directly to the customer. PNM does not pay for RECs associated with net excess generation. Program participants must pay an application fee of $350 for commercial customers, which includes the cost of installing a second meter to monitor system output. Customers also must pay an interconnection application fee of $100.00 up to 100 kW for interconnection + $1.00 for every kW above 100 kW up to 1 MW to establish an approved interconnection with PNM.

Contact:

Customer Service
PNM
Customer Generation Programs
Alvarado Square
MS 0510
Albuquerque, NM 87158-0001
Phone: (505) 241-2491
Web Site: http://www.pnm.com

2-1.1.27. Renewable Energy Production Incentive (REPI)

Last DSIRE Review: 03/18/2009

Incentive Type:	Production Incentive
State:	Federal
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative, Native Corporations
Amount:	2.1¢/kWh (subject to availability of annual appropriations in each federal fiscal year of operation)
Terms:	10 years
Web Site:	http://apps1.eere.energy.gov/repi
Authority 1:	42 USC § 13317
Date Enacted:	10/24/1992 (subsequently amended)
Authority 2:	10 CFR 451

Summary:
Note: Contact the program administrator to find out the current funding status of this program.

Established by the federal Energy Policy Act of 1992, the federal Renewable Energy Production Incentive (REPI) provides incentive payments for electricity generated and sold by new qualifying renewable energy facilities. Qualifying systems are eligible for annual incentive payments of 1.5¢ per kilowatt-hour in 1993 dollars (indexed for inflation) for the first 10-year period of their operation, subject to the availability of annual appropriations in each federal fiscal year of operation. REPI was designed to complement the federal renewable energy production tax credit (PTC), which is available only to businesses that pay federal corporate taxes.

Qualifying systems must generate electricity using solar, wind, geothermal (with certain restrictions), biomass (excluding municipal solid waste), landfill gas, livestock methane, or ocean resources (including tidal, wave, current and thermal). The production payment applies only to the electricity sold to another entity. Eligible electric production facilities include not-for-profit electrical cooperatives, public utilities, state governments and political subdivisions thereof, commonwealths, territories and possessions of the United States, the District of Columbia, Indian tribal governments or political subdivisions thereof, and Native Corporations.

Payments may be made only for electricity generated from an eligible facility first used before October 1, 2016. Appropriations have been authorized for fiscal years 2006 through fiscal year 2026. If there are insufficient appropriations to make full payments for electricity production from all qualified systems for a federal fiscal year, 60% of the appropriated funds for the fiscal year will be assigned to facilities that use solar, wind, ocean, geothermal or closed-loop biomass technologies; and 40% of the appropriated funds for the fiscal year will be assigned to other eligible projects. Funds will be awarded on a pro rata basis, if necessary.

Contact:

Christine Carter
U.S. Department of Energy
1617 Cole Blvd.
Golden, CO 80401-3393
E-Mail: christine.carter@go.doe.gov
Web Site: http://www.energy.gov

Information Specialist - REPI
U.S. Department of Energy
Washington, DC
E-Mail: repi@ee.doe.gov
Web Site: http://www.energy.gov

2-1.1.28. Xcel Energy - Solar*Rewards Program

Last DSIRE Review: 03/19/2009

Incentive Type:	Production Incentive
State:	New Mexico
Eligible Renewable/Other Technologies:	Photovoltaics
Applicable Sectors:	Commercial, Industrial, Residential
Amount:	Systems between 0.5 kW and 100.0 kW DC: $0.20 per kWh AC production (new systems), $0.10 per kWh AC production (existing systems) Systems between 100.1 kW and 2 MW DC: determined through RFP process
Terms:	Systems between 0.5 kW and 10.0 kW DC: 14-year contract Systems between 10.1 kW and 100.0 kW DC: 10-year contract Systems between 100.1 kW and 2 MW DC: competitive
Web Site:	http://www.xcelenergy.com/solar

Summary:
Through the Solar*Rewards program, Xcel Energy is purchasing renewable energy credits (RECs) from customers in New Mexico who install photovoltaic (PV) systems. The RECs that Xcel purchases will help the utility comply with New Mexico's renewable portfolio standard (RPS), and provide a financial incentive for homeowners and businesses to install PV systems.

Xcel has a standard offer for new PV systems between 0.5 kW and 100 kW AC; the utility will pay $0.20 per kilowatt-hour (kWh) for RECs. Small systems between 0.5 kW and 10 kW will receive this payment for the first 14 years of the system's life, and medium systems between 10.1 kW and 100 kW will receive the payment for 10 years. Larger systems between 100.1 kW and two megawatts can participate through a request for proposals (RFP) and will receive a per-kWh payment for their RECs at a rate to be determined through the RFP process.

For a limited time, Xcel will also purchase RECs from small and medium (0.5 kW - 100 kW) systems installed prior to February 9, 2009. The payment periods will be the same as stated above, but the payment amount will be smaller than for new systems, $0.10/kWh.

Participating systems will be net-metered, and a separate production meter will be installed to measure the system's output. The electricity output of participating systems will be measured each month and will be paid in the form of a bill credit. If the total amount of the credit reaches $50, a check will be issued to the customer. To be eligible for the program, PV equipment must appear on the California Energy Commission's lists of eligible modules and inverters. All systems must also carry a five-year warranty from both the manufacturer and the installer, including parts and labor.

Contact:

Solar*Rewards Program Manager
Xcel Energy
1225 17th St., Suite 1200
Denver, CO 80202
E-Mail: solarprogram@xcelenergy.com

Web Site: http://www.xcelenergy.com

2-1.1.29. Local Option - Renewable Energy Improvement Special Assessments

Last DSIRE Review: 07/16/2009

Incentive Type:	Property Tax Financing Authorization
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Wind, Geothermal Electric, Geothermal Heat Pumps, Others locally determined
Applicable Sectors:	Commercial, Residential
Financing Terms:	Financing may not exceed 40% of assessed property value; administrative fees may not exceed 10% of total financing
Eligible Local Governments:	Counties (including "H class" counties), municipalities in unincorporated areas
Possible Revenue Sources:	Certified "Renewable Energy Improvement Financing Institutions"
Authority 1:	S.B. 647
Date Enacted:	04/10/2009
Date Effective:	7/1/2009

Summary:
"Property tax financing" allows property owners to borrow money to pay for energy improvements. The amount borrowed is repaid through an increased property tax assessment over a period of years. New Mexico has enacted legislation (Senate Bill 647 and House Bill 572) that authorizes local governments to offer property tax financing. Contact your local government to find out if financing is available for renewable energy and/or energy efficiency through special property tax assessments.

Renewable-energy technologies eligible for financing include photovoltaics (PV), solar-thermal, geothermal and wind. Systems must comply with guidelines established by the New Mexico Energy, Minerals and Natural Resources Department. A county may not require any energy efficiency standards, such as energy audits, as a condition for receiving financing.

Participating local governments establish a Renewable Energy Improvement Special Assessment District Board to administer the program. To qualify for financing, a residential or commercial property owner must submit an application that has been approved by the county treasurer. Financing (including principal, interest and administrative fees) may not exceed 40% of the assessed value of the property. The special assessment on the property equals the amount necessary to finance approved renewable energy improvements (including principal, interest and administrative fees). The maximum

annual loan, loan terms and pre-payment options must be specified.

A financing provider must be certified as a "renewable energy improvement financing institution" by the Financial Institutions Division of the New Mexico Regulation and Licensing Department. The county treasurer must enter into an agreement with the financing institution specifying the procedures with which the treasurer transfers money from the assessment to the institution. Funds received from the collection of this special assessment are kept separate from other county funds and will be disbursed by the county treasurer only for the purpose of financing energy improvements and paying applicable administrative fees to the county. The county is not liable in any way for the debt of the property owner.

Contact:

Craig O'Hare
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
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Fax: (505) 476-3322
E-Mail: craig.ohare@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd

2-1.1.30. Biomass Equipment & Materials Compensating Tax Deduction

Last DSIRE Review: 07/28/2009

Incentive Type:	Sales Tax Exemption
State:	New Mexico
Eligible Renewable/Other Technologies:	Landfill Gas, Biomass, Municipal Solid Waste, CHP/Cogeneration, Hydrogen, Anaerobic Digestion, Ethanol, Methanol, Biodiesel, Microturbines
Applicable Sectors:	Commercial, Industrial
Amount:	100% of value may be deducted for purposes of calculating Compensating Tax due
Maximum Incentive:	None
Authority 1:	NM Stat. § 7-9-98
Date Enacted:	04/05/2005
Date Effective:	6/17/2005

Expiration Date:	None specified

Summary:
In 2005 New Mexico adopted a policy to allow businesses to deduct the value of biomass equipment and biomass materials used for the processing of biopower, biofuels or biobased products in determining the amount of Compensating Tax due.

New Mexico's Compensating Tax is an excise, or "use" tax, which is typically levied on the purchaser of the product or service for using tangible property in the state. The tax applies to imports of factory and office equipment, and other items. The rate is 5% of the value of the property or service. Compensating Tax is designed to protect New Mexico businesses from unfair competition from out-of-state business not subject to a sales or gross receipts tax. This biomass Compensating Tax deduction is analogous to a sales tax exemption for renewable energy equipment available in some other states.

Deductions from compensating tax do not have to be reported to the NM Taxation and Revenue Department but records substantiating the deduction should be kept in the taxpayer's records.

Contact:

Tax Information Office
New Mexico Taxation & Revenue Department
P.O. Box 630
Santa Fe, NM 87504
Phone: (505) 827-0700
E-Mail: poffice@state.nm.us
Web Site: http://www.state.nm.us/tax/home.htm

2-1.1.31. Solar Energy Gross Receipts Tax Deduction

Last DSIRE Review: 08/19/2009

Incentive Type:	Sales Tax Exemption
State:	New Mexico
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaics
Applicable Sectors:	Installer/Contractor, Systems Integrator, Solar Distributors
Amount:	100% of gross receipts from sale and installation of solar energy systems
Web Site:	http://www.emnrd.state.nm.us/ECMD/CleanEnergyTaxIncentives/grossreceiptstaxexemption.htm

Authority 1:	N.M. Stat. § 7-9-112
Date Enacted:	4/3/2007
Date Effective:	7/1/2007

Summary:
New Mexico has a gross receipts tax structure for businesses instead of a sales tax. Businesses are taxed on the gross amount of their business receipts each year before expenses are deducted. Revenue generated by the sale and installation of solar systems used to provide space heat, hot water or electricity may be deducted from gross receipts before the gross receipts tax is calculated. Also covered are dark colored water tanks exposed to sunlight, including all equipment necessary for the installation and operation of the water tank as a part of the overall water system of the property; and a non-vented trombe wall, and all equipment necessary for the installation and operation of the trombe wall.

To claim the deduction, the seller must have a signed copy of Form RPD-41341, Solar Energy Systems Gross Receipts Tax Deduction Purchase and Use Statement, or other evidence acceptable to EMNRD that the service or equipment was purchased for the sole use of the sale and installation of a qualified energy system.

Contact:

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Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.1.32. Energy Efficiency & Renewable Energy Bond Program

Last DSIRE Review: 08/18/2009

Incentive Type:	State Bond Program
State:	New Mexico
Eligible Efficiency Technologies:	Lighting, CHP/Cogeneration, Energy Mgmt. Systems/Building Controls, Caulking/Weather-stripping, Building Insulation, Windows, Doors, Custom/Others pending approval, Energy Recovery Systems
Eligible Renewable/Other	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Biomass,

Technologies:	Fuel Cells, CHP/Cogeneration, Daylighting
Applicable Sectors:	Schools, State Government
Amount:	Varies
Maximum Amount:	$20 million in bonds outstanding at any one time
Web Site:	http://www.nmfa.net/loan/?t=State%20Building%20Automation%20Project%20Financing
Authority 1:	N.M. Stat. 6-21D-1 et seq. (Amended 2007)
Date Enacted:	7/1/2005

Summary:
New Mexico's Energy Efficiency and Renewable Energy Bonding Act, which became law in April 2005, authorizes up to $20 million in bonds to finance energy efficiency and renewable energy improvements in state government and school district buildings. At the request of a state agency or school district, the New Mexico Energy, Minerals and Natural Resources Department will conduct an energy assessment of a building to determine specific efficiency measures which will result in energy and cost savings. A state agency or school district may install or enter into contracts for the installation of energy efficiency measures on the building identified in the assessment. An installation contract may be entered into for a term of up to 10 years.

The bonds are exempt from taxation by the state, and any type of renewable energy system and most energy efficiency measures, including energy recovery and combined heat and power (CHP) systems, are eligible for funding. Projects financed with the bonds will be paid back to the bonding authority using the savings on energy bills.

Contact:

Marquita Russel
New Mexico Finance Authority
409 St. Michael's Drive
Santa Fe, NM 87505
Phone: (505) 984-1454
Fax: (505) 984-0002
Web Site: http://www.nmfa.net

2-1.2. Rules, Regulations & Policies

2-1.2.1. Energy Efficiency Standards for State Buildings

Last DSIRE Review: 12/22/2008

Incentive Type:	Energy Standards for Public Buildings
State:	New Mexico
Eligible Efficiency Technologies:	Comprehensive Measures/Whole Building, Specific technologies not identified
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Biomass, Geothermal Heat Pumps, CHP/Cogeneration, Bio-gas, Daylighting, Small Hydroelectric
Applicable Sectors:	State Government
Goal:	20% reduction in energy usage by Executive Branch agencies by 2015
Requirement:	Adopt LEED standards for state buildings
Web Site:	http://www.emnrd.state.nm.us/ECMD/index.htm
Authority 1:	Executive Order 2006-001
Authority 2:	Executive Order 2007-053
Date Enacted:	11/16/2007
Date Effective:	11/16/2007

Summary:
On January 16th, 2006, the governor of New Mexico signed Executive Order 2006-001, calling for all Executive Branch state agencies, including the Higher Education Department, to adopt the US Green Buildings Council's LEED* rating system. New construction of public buildings over 15,000 square feet or using over 50 kW peak electrical demand and renovations involving the replacement of more than 3 major systems (HVAC, lighting, etc.) must achieve a minimum rating of LEED "Silver". Projects between 5,000 and 15,000 square feet must achieve a minimum delivered energy performance standard of one half of the US energy consumption for that building type as defined by the US Department of Energy. All other new construction, renovations, repairs, and replacements of state buildings must employ cost-effective, energy efficient, green building practices to the maximum extent possible.

Furthermore, the act orders that the Energy, Minerals, and Natural Resource Department (EMNRD) convene a "Public Schools Clean Energy Task Force" to make recommendations to "implement aggressive energy efficiency measures" in all existing and newly constructed school buildings.

Executive Order 2007-053, established further energy saving goals for Executive Branch agencies in New Mexico, as well as the state as a whole. The Order set a goal of a 20% reduction below 2005 energy consumption levels for all Executive Branch agencies by 2015. The reduction will be based on the average energy usage per square foot of building space. Similarly, all Executive Branch agencies must reduce the energy usage of their fleets by 20% by 2015 relative to 2005 levels, and based on the average energy usage per state employee. The state-wide target is for a 20% reduction in per capita

energy use across all sectors from 2005 levels by 2020, with an interim goal of 10% by 2012. Other provisions in the Executive Order deal with tracking, reporting and other administrative responsibilities related to these goals.

*Click here for more information on the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

Contact:

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New Mexico Energy, Minerals and Natural Resources Department
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Web Site: http://www.emnrd.state.nm.us/ecmd/

2-1.2.2. Energy Goals and Standards for Federal Buildings

Last DSIRE Review: 04/30/2009

Incentive Type:	Energy Standards for Public Buildings
State:	Federal
Eligible Efficiency Technologies:	Comprehensive Measures/Whole Building, Custom/Others pending approval
Eligible Renewable/Other Technologies:	Solar Water Heat
Applicable Sectors:	Fed. Government
Goal:	Total energy reduction goal of 30% by FY 2015, using FY 2003 as baseline
Requirement:	Energy efficiency specs required in procurement bids and evaluations. Requires premium efficient products for electric motors, air conditioning and refrigeration equipment procurements. New federal buildings designed 30% below ASHRAE standards or IECC, and obtain 30% of their hot water demand from solar water heating, if life-cycle cost-effective.
Authority 1:	Energy Policy Act 2005 §§ 102, 104, 109

Date Enacted:	8/8/2005
Authority 2:	Energy Independence and Security Act 2007 §§ 431, 523
Date Enacted:	12/19/2007
Date Effective:	12/19/2007

Summary:
The federal Energy Policy Act of 2005 (EPAct 2005) and the federal Energy Independence and Security Act of 2007 (EISA 2007) reaffirmed and expanded several previous goals and standards to reduce energy use in existing and new federal buildings. The 2007 energy bill extended the federal energy reduction goal to 30% by fiscal year 2015; directed federal agencies to purchase Energy Star and Federal Energy Management Program (FEMP)-designated products; and requires new federal buildings to be built 30% below ASHRAE* standards or the International Energy Conservation Code (IECC).

Section 431 of EISA 2007 increased the federal energy reduction goal from 2% per year (as established by EPAct 2005) to 3% per year, resulting in 30% greater efficiency by 2015. The reporting baseline for energy savings is 2003, so that energy consumption per gross square foot (of federal buildings) is reduced, compared to energy consumption in 2003. The specified percentage reductions for each fiscal year are:

FY 2006 .....2%

FY 2007 .....4%

FY 2008 .....9%

FY 2009 .....12%

FY 2010 .....15%

FY 2011 .....18%

FY 2012 .....21%

FY 2013 .....24%

FY 2014 .....27%

FY 2015 .....30%

Under EPAct 2005, federal agencies are permitted to retain savings achieved through energy and water reductions. The U.S. Department of Energy (DOE) is charged with recommending new requirements for federal energy performance for FY 2016 - FY 2025 by December 13, 2014.

Section 104 of EPAct 2005 directed federal agencies to purchase Energy Star and FEMP-designated products when procuring energy-consuming items covered by the Energy Star program, except when purchasing such items is not cost-effective or does not meet functional requirements of the agency. Agencies must also incorporate energy-efficient specifications in procurement bids and evaluations, and must only purchase premium efficient electric motors, air conditioning and refrigeration equipment. EPAct 2005 also instructed the General Services Administration (GSA) and the U.S. Department of Defense to clearly identify and display Energy Star and FEMP-designated products in any inventory, catalog or product listing.

Section 109 of EPAct 2005 required new federal buildings to be designed 30% below ASHRAE standards or IECC, to the

extent that technologies employed are life-cycle cost-effective. In addition, sustainable design principles must be applied to new and replacement buildings. All agencies must identify new building projects in their budget requests and identify those that meet or exceed the standard.

Section 523 of the EISA 2007 requires that at least 30% of the hot water demand for each new federal building or existing federal buildings undergoing a major renovation be met through the use of solar hot water heating, if it is determined to be life-cycle cost-effective.

In December 2007, DOE adopted a final rule to implement certain efficiency provisions of EPAct 2005. This final rule applies to efficiency standards for federally-funded commercial and multi-family high-rise residential buildings and low-rise residential buildings.

* ASHRAE is the acronym for the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

Contact:

Public Information - FEMP
U.S. Department of Energy
Federal Energy Management Program
EE-2L
1000 Independence Ave., SW
Washington, DC 20585-0121
Phone: (202) 586-5772
Fax: (202) 586-3000
Web Site: http://www1.eere.energy.gov/femp

2-1.2.3. Energy Reduction Goals for Federal Agencies

Last DSIRE Review: 04/30/2009

Incentive Type:	Energy Standards for Public Buildings
State:	Federal
Eligible Efficiency Technologies:	Comprehensive Measures/Whole Building
Eligible Renewable/Other Technologies:	Renewable Fuel Vehicles, Other Alternative Fuel Vehicles
Applicable Sectors:	Fed. Government
Goal:	Total energy reduction goal for every federal agency is 30% by 2015, relative

	to the baseline of the agency's energy use in FY03
Requirement:	At least half of the required renewable energy consumed by the agency in a fiscal year must come from new renewable sources. New construction and major renovation of agency buildings must comply with the "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings" set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006). Electronic equipment purchased by agencies must be Electronic Product Environmental Assessment Tool (EPEAT)-registered products, unless there is no EPEAT standard for such product.
Web Site:	http://www1.eere.energy.gov/femp/news/news_detail.html?news_id=10538
Authority 1:	Executive Order 13423
Date Enacted:	1/24/2007
Date Effective:	1/24/2007

Summary:
Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management was signed by President George W. Bush on January 24, 2007. It establishes total energy reduction goals for every federal agency. These goals apply to the electricity consumed by federal buildings as well as the fuel consumed by federal fleets, provided a fleet consists of at least 20 vehicles. The executive order also establishes water-reduction goals, mandates recycling programs within facilities, and requires agencies to purchase electronic equipment registered with the Electronic Product Environmental Assessment Tool (EPEAT).

Executive Order 13423 established a schedule by which all federal agencies should reduce their total energy intensity by 30% by the end of 2015, relative to the baseline of the agency’s energy use in fiscal year 2003. The table below shows the annual energy reductions required to meet this goal:

FY 2006: 3%

FY 2007: 6%

FY 2008: 9%

FY 2009: 12%

FY 2010: 15%

FY 2011: 18%

FY 2012: 21%

FY 2013: 24%

FY 2014: 27%

FY 2015: 30%

To help achieve these energy reductions, new construction and major renovation of agency buildings must comply with the "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings" set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006), in addition to the energy goals and standards established by the federal Energy Policy Act of 2005. These building standards include a target energy use of 30% below the average building performance for new buildings, and a target that is 20% below the average for renovations. The building standards also take into consideration indoor environmental quality, and a reduction in the environmental impact of the materials within the building in favor of bio-based and post-consumer products.

The executive order also calls for agencies to begin in fiscal year 2008 to reduce water consumption intensity when cost-effective, relative to the baseline of the agency's water consumption in fiscal year 2007. The target reduction is 2% annually through the end of fiscal year 2015 (or 16% by the end of fiscal year 2015). To help agencies conserve water, DOE's Federal Energy Management Program (FEMP) has developed a guidance document entitled Establishing Baseline and Meeting Water Conservation Goals of Executive Order 13423.

Agencies that operate fleets of at least 20 vehicles are also required to reduce their fleet's total consumption of petroleum products by 2% annually through 2015, while increasing their consumption of non-petroleum-based fuel by 10% per year. Agencies are also required to purchase plug-in hybrid vehicles when life-cycle cost analysis demonstrates their cost to be reasonably similar to other vehicles.

The Energy Policy Act of 2005 established green power purchasing goals for the federal government, whereby the 7.5% of electricity used by federal agencies must be obtained from renewable sources by 2013. Executive Order 13423 now requires at least half of the required renewable energy consumed by an agency in a fiscal year to come from sources placed in service in 1999 or later.

Contact:

Public Information - FEMP
U.S. Department of Energy
Federal Energy Management Program
EE-2L
1000 Independence Ave., SW
Washington, DC 20585-0121
Phone: (202) 586-5772
Fax: (202) 586-3000
Web Site: http://www1.eere.energy.gov/femp

2-1.2.4. U.S. Federal Government - Green Power Purchasing Goal

Last DSIRE Review: 07/27/2009

Incentive Type:	Green Power Purchasing/Aggregation
State:	Federal

Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Fed. Government
% Renewables:	3% in fiscal years 2007-2009; 5% in fiscal years 2010-2012; 7.5% in fiscal year 2013 and thereafter
Source:	At least half of the required renewable energy must come from new renewable sources
Appropriation:	Commercialization Program - $50 million for each FY 2006-2010 Evaluation Program - $10 million for each FY 2006-2010
Web Site:	http://www1.eere.energy.gov/femp/renewable_energy/renewable_fedrequire.html
Authority 1:	42 USC § 15852
Date Enacted:	8/8/2005
Authority 2:	Executive Order 13423
Date Enacted:	1/24/2007
Date Effective:	1/24/2007

Summary:
The federal Energy Policy Act of 2005 (EPAct 2005) extended and expanded several previous goals and standards to reduce energy use in existing and new federal buildings. Section 203 of EPAct 2005 requires that, to the extent it is economically feasible and technically practicable, the total amount of renewable electric energy consumed by the federal government during any fiscal year shall not be less than the following:

3% in fiscal years 2007-2009

5% in fiscal years 2010-2012

7.5% in fiscal year 2013 thereafter

The amount of renewable-energy credit is doubled for electricity produced and used on-site at a federal facility, produced on federal lands and used at a federal facility, or if it is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 and used at a federal facility.

Renewable electrical energy technologies defined in this section include solar, wind, biomass, landfill gas, ocean (including tidal, wave, current and thermal), geothermal, municipal solid waste, and new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project. Executive Order 13423, issued in January 2007, requires at least half of the mandated renewable energy consumed by an agency in a fiscal year to be generated by systems sources placed into service after January 1, 1999.

Section 204 of EPAct 2005 establishes a photovoltaic (PV) energy commercialization program for the procurement and

installation of PV systems in public and federal buildings. It requires the installation of 20,000 solar-energy systems on federal buildings by 2010, as contained in the federal Million Solar Roof Initiative (MSRI) of 1997. The commercialization program has been appropriated $50 million annually for fiscal years 2006–2010, until funds are expended. An evaluation program has been appropriated $10 million annually for fiscal years 2006-2010, until funds are expended.

The Federal Energy Management Program (FEMP) has issued guidelines to help federal agencies meet energy management and renewable energy requirements for complying with EPAct 2005 and Executive Order 13423. For an overview of these requirements and for updates on progress in meeting the federal renewable-energy goals, see the FEMP web site.

Contact:

Public Information - FEMP
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2-1.2.5. Interconnection Standards

Last DSIRE Review: 08/19/2009

Incentive Type:	Interconnection
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, CHP/Cogeneration, Small Hydroelectric, Microturbines, Other Distributed Generation Technologies
Applicable Sectors:	Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Fed. Government
Applicable Utilities:	Investor-owned utilities, electric cooperatives
System Capacity Limit:	80 MW
Standard Agreement:	Yes
Insurance Requirements:	Generally not required for systems up to 250 kW. Utilities may require insurance for systems > 250 kW, with limits set by commission.

External Disconnect Switch:	Not required for inverter-based systems up to 10 kW; utility's discretion for all other systems
Net Metering Required:	No
Authority 1:	NMAC 17.9.568
Date Enacted:	7/29/2008
Date Effective:	7/29/2008
Authority 2:	NMAC 17.9.569
Date Enacted:	7/29/2008
Date Effective:	7/29/2008
Authority 3:	The New Mexico Interconnection Manual
Date Enacted:	7/29/2008

Summary:
Interconnection in New Mexico is governed by New Mexico Public Regulation Commission (PRC) Rule 568 and Rule 569. These rules, adopted in July 2008, revised and clarified the state's existing rules. Rule 569 applies to all qualifying facilities (QFs) under PURPA, which generally includes all renewable-energy systems and combined-heat-and-power (CHP) systems up to 80 megawatts (MW) in capacity.

Rule 568 applies to renewable-energy systems and CHP systems up to 10 MW in capacity. The purpose of Rule 568 is to simplify the interconnection requirements for QFs up to 10 MW and to encourage the use of small-scale, customer-owned renewables or alternative energy resources. All utilities subject to PRC jurisdiction must offer net metering and must comply with these standards. (Municipal utilities, which are not regulated by the commission, are exempt.)

Interconnection applications will generally follow this review path:

Systems up to 10 kilowatts (kW) in capacity are eligible for the "Simplified Interconnection Process," which includes simplified applications.

Systems greater than 10 kW and up to 2 MW are eligible for the "Fast Track Process," which might include supplemental review.

Systems greater than 2 MW and up to 10 MW must follow the "Full Interconnection Study Process."

Systems greater than 10 MW must follow the "Case Specific Study Process."

All systems must comply with all relevant local and national standards (including the NEC, IEEE and UL standards), and must meet any additional requirements approved by the PRC. A redundant external disconnect device is required for all interconnected systems. For systems greater than 10 kW, the disconnect switch must be visibly marked and accessible to and lockable by the utility.

The PRC may require the owner of a generating facility with a rated capacity of up to 250 kW to obtain general liability insurance prior to connecting with a utility if the utility provides a sufficient reason for doing so. A utility may directly and

independently require owners of systems greater than 250 kW to provide proof of insurance, with reasonable limits not to exceed $1 million, or other reasonable evidence of financial responsibility. A mutual indemnification agreement between the customer and the utility is required.

Interconnected customers must pay an application fee that varies according to the size of the system. Systems up to 10 kW must pay $50; systems greater than 10 kW and up to 100 kW must pay $100; and systems greater 100 kW must pay $100 plus $1 per kW. In addition to these fees, a small utility with fewer than 50,000 customers may charge reasonable consulting fees for systems greater than 10 kW.

Contact:

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New Mexico Public Regulation Commission
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Marian Hall
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E-Mail: jim.brack@state.nm.us
Web Site: http://www.nmprc.state.nm.us/

2-1.2.6. Interconnection Standards for Small Generators

Last DSIRE Review: 11/10/2008

Incentive Type:	Interconnection
State:	Federal
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, CHP/Cogeneration, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Microturbines, Other Distributed Generation Technologies
Applicable Sectors:	Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Tribal Government, Fed. Government, Agricultural, Institutional
Applicable Utilities:	FERC standards generally apply to all transmission-level interconnection; state standards generally apply to distribution-level interconnection
System Capacity Limit:	20 MW
Standard Agreement:	Yes

Insurance Requirements:	"Additional liability insurance" required only "if necessary as a function of owning and operating a generating facility"
External Disconnect Switch:	Not addressed
Net Metering Required:	No
Authority 1:	FERC Order No. 2006
Date Enacted:	5/12/2005
Authority 2:	FERC Order No. 2006-A
Date Enacted:	11/22/2005
Authority 3:	FERC Order No. 2006-B
Date Enacted:	7/20/2006

Summary:
The Federal Energy Regulatory Commission (FERC) adopted "small generator" interconnection standards for distributed energy resources up to 20 megawatts (MW) in capacity in May 2005.* The FERC's standards apply only to facilities subject to the jurisdiction of the commission; mostly, these are systems that interconnect at the transmission level. The standards generally do not apply to distribution-level interconnection, which is regulated by state public utilities commissions. However, the FERC has noted that its interconnection standards for small generators should serve as a useful model for state-level standards.

The FERC's standards include a Small Generator Interconnection Procedures (SGIP) document and a Small Generator Interconnection Agreement (SGIA). The SGIP contains the technical procedures that the small generator and utility must follow in the course of connecting the generator with the utility's lines. The SGIA contains the contractual provisions for the interconnection and spells out who pays for improvements to the utility's electric system, if needed to complete the interconnection. The standards include provisions for three levels of interconnection:

The "10-kilowatt (kW) Inverter Process," for certified, inverter-based systems no larger than 10 kW;

The "Fast Track Process," for certified systems no larger than 2 MW; and

The default "Study Process," for all other systems no larger than 20 MW.

The standards include technical screens for each level of interconnection. Notably, the FERC standards do not require systems to have an external disconnect switch. Utilities and customers must follow specific timelines, and guidelines for interconnection and study fees are established. Customers must obtain liability insurance "sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made." Additional liability insurance must be obtained "only if necessary as a function of owning and operating a generating facility."

* The FERC adopted interconnection standards for facilities larger than 20 MW in July 2003. (See FERC Order Nos. 2003, 2003-A, 2003-B and 2003-C.) FERC's standards for larger generators include a standard Large Generator Interconnection

Procedures (LGIP) document and a standard Large Generator Interconnection Agreement (LGIA).

Contact:

Public Information - FERC
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426
Web Site: http://www.ferc.gov

2-1.2.7. Mandatory Utility Green Power Option

Last DSIRE Review: 12/23/2008

Incentive Type:	Mandatory Utility Green Power Option
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Hydrogen, Anaerobic Digestion
Applicable Sectors:	Utility
Web Site:	http://www.nmprc.state.nm.us/renewable.htm
Authority 1:	NMAC 17.9.572

Summary:
In addition to meeting the requirements of the state renewables portfolio standard, New Mexico investor-owned utilities (IOUs) are required to offer a voluntary program for purchasing renewable energy to customers. IOUs are also required to develop an educational program communicating the benefits and availability of the green power option.

The state's rural electric distribution cooperatives are also required to offer a voluntary green power program to the extent that their suppliers make such renewable resources available under their supply contracts.

Program information about the three investor-owned utility voluntary green power programs and the green power program managed by Tri-State Generation & Transmission (which supplies energy to most of the state's rural electric cooperatives) can be found on the New Mexico Public Regulation Commission's renewable energy website located here.

Contact:

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Santa Fe, NM 87501
Phone: (505) 827-6982
E-Mail: jim.brack@state.nm.us
Web Site: http://www.nmprc.state.nm.us/

2-1.2.8. Farmington Electric Utility System - Net Metering

Last DSIRE Review: 08/26/2009

Incentive Type:	Net Metering
State:	New Mexico
Eligible Renewable/Other Technologies:	Photovoltaics, Wind, Small Hydroelectric, Other Distributed Generation Technologies
Applicable Sectors:	Residential
Applicable Utilities:	Farmington Electric
System Capacity Limit:	10 kW
Aggregate Capacity Limit:	No limit specified
Net Excess Generation:	Credited to customer's next bill at retail rate; carries over indefinitely or paid for at end of 12-month period
REC Ownership:	Not addressed
Meter Aggregation:	Not addressed
Web Site:	http://www.fmtn.org/city_government/electric_utility
Authority 1:	Net Metering Tariff and Interconnection Agreement

Summary:
Net metering rules developed by the New Mexico Public Regulation Commission (PRC) apply to the state's investor-owned utilities and electric cooperatives. Municipal utilities, which are not regulated by the commission, are exempt from the PRC rules but authorized to develop their own net metering programs.

Farmington Electric, a municipal utility, offers net metering to residential customers with systems up to 10 kilowatts (kW) in capacity. This option is available for photovoltaic (PV), wind, hydro and other (unspecified) non-carbon-based fuels. Any customer net excess generation (NEG) is credited to the customer's next monthly bill at the utility's retail rate. Accounts are trued-up at the end of twelve calendar months. At this point, the customer has the option of either receiving a payment for any remaining NEG or carrying the credits forward.

Contact:

Net Metering Interconnection/New Service
Farmington Electric Utility System
101 N. Browning Parkway
Farmington, NM 87401
Phone: (505) 599-8301
Fax: (505) 599-8421
Web Site: http://www.fmtn.org/city_government/electric_utility/

2-1.2.9. New Mexico - Net Metering

Last DSIRE Review: 08/19/2009

Incentive Type:	Net Metering
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, CHP/Cogeneration, Small Hydroelectric, Microturbines
Applicable Sectors:	Commercial, Industrial, Residential
Applicable Utilities:	Investor-owned utilities, electric cooperatives
System Capacity Limit:	80 MW
Aggregate Capacity Limit:	No limit specified
Net Excess Generation:	Credited to customer's next bill at avoided-cost rate or reconciled monthly at avoided-cost rate
REC Ownership:	Utility owns RECs
Meter Aggregation:	Not addressed
Authority 1:	NMAC 17.9.570

Date Enacted: 7/29/2008

Date Effective: 7/29/2008

Summary:
In January 2007, the New Mexico Public Regulation Commission (PRC) extended the availability of net metering to systems up to 80 megawatts (MW) in capacity. Net metering is available to all "qualifying facilities" (QFs), as defined by the federal Public Utility Regulatory Policies Act of 1978 (PURPA).* Previously, net metering in New Mexico was limited to systems up to 10 kilowatts (kW) in capacity.

Net-metered customers are credited or paid for any monthly net excess generation (NEG) at the utility's avoided-cost rate. If a customer has net excess generation (NEG) less than $50 during a monthly billing period, the excess is carried over to the customer's next monthly bill. If NEG exceeds $50 during a monthly billing period, the utility will pay the customer the following month for the excess. Customers do not own the renewable-energy credits (RECs) associated with the generation of electricity by net-metered systems.

All utilities subject to PRC jurisdiction must offer net metering. (Municipal utilities, which are not regulated by the commission, are exempt.) Customers on a time-of-use tariff are permitted to net meter. There is no statewide cap on the aggregate capacity of net-metered systems.

The PRC adopted revised interconnection standards for customer-sited generators in July 2008; separate rules are in effect for systems less than or equal to 10 MW and systems larger than 10 MW. The PRC's interconnection rules also include a simplified interconnection process and application for systems less than or equal to 10 kW, and a fast-track process for systems less than or equal to 2 MW.

* In general, QFs under PURPA include renewable-energy systems and combined heat and power (CHP) systems.

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Web Site: http://www.nmprc.state.nm.us/

2-1.2.10. Renewables Portfolio Standard

Last DSIRE Review: 12/09/2008

Incentive Type:	Renewables Portfolio Standard
State:	New Mexico
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Zero emission technology with substantial long-term production potential, Anaerobic Digestion, Fuel Cells using Renewable Fuels
Applicable Sectors:	Investor-Owned Utility, Rural Electric Cooperative
Standard:	Investor-owned utilities: 20% by 2020; Rural electric cooperatives: 10% by 2020
Technology Minimum:	For IOUs only in 2020 Solar: 20% of RPS requirement (4% of sales) Wind: 20% of RPS requirement (4% of sales) Geothermal or Biomass: 10% of RPS requirement (2% of sales) Distributed Renewables: 3% of RPS requirement (0.6% of sales)
Credit Trading:	Yes
Web Site:	http://www.nmprc.state.nm.us/renewable.htm
Authority 1:	NMAC 17.9.572
Date Enacted:	8/7/2007
Date Effective:	9/1/2007
Authority 2:	N.M. Stat. § 62-15-34 et seq.
Date Enacted:	3/5/2007
Date Effective:	7/1/2007
Authority 3:	N.M. Stat. § 62-16-1 et seq.
Date Enacted:	3/2004

Summary:
In March 2007, New Mexico passed SB 418, which directs investor-owned utilities to generate 20% of total retail sales to New Mexico customers from renewable energy resources by 2020, with interim standards of 10% by 2011 and 15% by 2015. The bill also establishes a standard for rural electric cooperatives of 10% by 2020 (see below). Furthermore, utilities are to set a goal of at least 5% reduction in total retail sales to New Mexico customers, adjusted for load growth, by January 1, 2020.

Renewable energy is defined as electric energy generated by low- or zero-emissions generation technology with substantial long-term production potential; solar; wind; geothermal; hydropower facilities brought in service after July 1, 2007; fuel cells that are not fossil fueled; and biomass resources, such as agriculture or animal waste, small diameter timber, salt cedar and other phreatophyte or woody vegetation removed from river basins or watersheds in New Mexico, landfill gas

and anaerobically digested waste biomass. Renewable energy does not include electric energy generated from fossil fuel or nuclear facilities.

Utilities document compliance with the RPS through the use of renewable-energy certificates (RECs). A REC represents one kilowatt-hour (kWh) of renewable electricity. RECs used for RPS compliance on or after January 1, 2008 must be registered with the Western Renewable Energy Generation Information System (WREGIS). RECs not used for compliance, sold, or otherwise transferred may be carried forward for up to four years.

RPS for Investor-Owned Utilities

In August 2007, the PRC issued an order and rules requiring that investor owned utilities meet the 20% by 2020 target through a "fully diversified renewable energy portfolio" which is defined as a minimum of 20% solar power, 20% wind power, and 10% from either biomass or geothermal energy starting in 2011. Additionally 1.5% must come from distributed renewables by 2011, rising to 3% in 2015. Distributed resources counted toward the other portfolio requirements cannot also be counted for the distributed requirement. Utilities will be excused from the diversification targets should costs of achieving them raise the cost of electricity by more than 2 percent or if the targets cannot be accomplished without impairing system reliability.

PRC Case No. 04-00253-UT established a two-prong "Reasonable Cost Threshold" (RCT). One component is a cap on the price of resources by technology type, while the second is an overall retail customer rate impact threshold. The technology cost caps were set at $0.049 per kilowatt-hour (kWh) for wind and hydroelectric resources; $0.06254 per kWh for biomass and geothermal resources; $0.15 per kWh for solar projects up to 10 kilowatts (kW) in capacity, and $0.10 per kWh for solar projects greater than 10 kW. The overall retail customer rate impact is capped at one percent (1%) of all customers' aggregated overall annual electric charges for 2006, increasing by one-fifth percent (0.2%) per year until January 1, 2011, at which time it will be two percent (2%). New Mexico investor-owned utilities must file by September 1, 2007, reports that reflect their positions regarding the RCT and whether the utilities believe the threshold should be changed. The NMPRC then will initiate a proceeding to review the RCT.

The additional cost of the RPS to non-governmental customers who consume more than 10 million kWh per year is also limited so as not to exceed the lower of 1% of that customer's annual electric charges or $49,000. This procurement limit increases by 0.2% or $10,000 per year until January 1, 2011, when it remains fixed at the lower of 2% of the customer's annual electric charges or $99,000. After January 1, 2012, the $99,000 limit is adjusted for inflation by the amount of the cumulative change in the Consumer Price Index, Urban (CPI-U) between January 1, 2011 and January 1 of the procurement plan year.

On July 1 of every year, investor-owned utilities must file a report to the PRC on its procurement and generation of renewable energy during the prior calendar year and submit a procurement plan.

RPS for Rural Electric Cooperatives
In March 2007, SB 418 created a separate renewables portfolio standard for rural electric distribution cooperatives: 5% of retail sales by 2015, increasing 1% per year to reach 10% renewables by 2020. Cooperatives are not required to incur RPS compliance costs that exceed the "reasonable cost threshold", which is set at 1% of the distribution cooperative's gross receipts from business transacted in New Mexico for the preceding calendar year.

In addition to the RPS, SB 418 established a "renewable energy and conservation fee" to support programs or projects to promote the use of renewable energy, load management or energy efficiency. Distribution cooperatives may collect from its customers a fee of no more than 1% of the customer's bill, not to exceed $75,000 annually from any single customer.

Distribution cooperatives must report to the PRC by March 1 of each year on its purchases and generation of renewable energy during the preceding calendar year.

Background
In December 2002, the PRC unanimously approved a renewables portfolio standard (RPS) requiring investor-owned utilities

to derive 5% of annual retail sales to New Mexico customers from renewable energy sources by 2006, rising to 10% by 2011. In March of 2004, Senate Bill 43 codified the PRC rules and established additional requirements. New Mexico subsequently doubled its RPS for investor-owned utilities and created a separate standard for rural electric cooperatives in March 2007 (Senate Bill 418).

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2-1.2.11. Solar Access Laws

Last DSIRE Review: 03/13/2009

Incentive Type:	Solar Access Law/Guideline
State:	New Mexico
Eligible Renewable/Other Technologies:	Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Solar Pool Heating
Applicable Sectors:	Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Fed. Government
Web Site:	http://www.cleanenergynm.org
Authority 1:	NMSA § 47-3-1 et seq.
Date Enacted:	1977 (subsequently amended)
Date Effective:	1/1/1978
Expiration Date:	None
Authority 2:	NMSA § 3-18-32
Date Enacted:	4/3/2007

Summary:
New Mexico's Solar Rights and Solar Recordation Acts (both contained in NMSA § 47-3) allow property owners to create solar easements for the purpose of protecting and maintaining proper access to sunlight. The Solar Rights Act established the right to use solar energy as a property right. The solar right prevents neighboring property owners from constructing new buildings or planting new trees which would block their access to the sun.

The Solar Recordation Act explains the procedures for filing a solar right through the County Clerk's Office. The property owner seeking the solar right must give advanced notice to the adjacent property owners, who are entitled to contest the claim. Once awarded, the solar right is attached to the property and will remain in effect even if the property is sold. The solar right, however, can be bought and sold separately from the property. This allows a neighboring property owner to purchase the solar right and then cancel it. The Solar Rights Act and the Solar Recordation Act also include provisions allowing local governments to create their own ordinances or zoning rules pertaining to the protection of solar rights.

In May 2007, SB 1031 strengthened solar access rights in New Mexico by limiting the ability of a county or municipality to restrict the placement of solar collectors unless the location is within a historic district. SB 1031 also voided all covenants and restrictions (from July 1, 1978 forward) that effectively prohibit the installation of solar collectors.

Contact:

Ryan Helton
New Mexico Energy, Minerals and Natural Resources Department
Energy Conservation and Management Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Phone: (505) 476-3318
Fax: (505) 476-3322
E-Mail: ryan.helton@state.nm.us
Web Site: http://www.emnrd.state.nm.us/ecmd/

Please note: The information on the DSIRE web site provides an overview of incentives and other policies, but it should not be used as the only source of information when making purchasing decisions, investment decisions, tax decisions or other binding agreements. Please refer to the individual contact provided in each record to verify that a specific incentive or other policy is applicable to your specific project.

2-2. Glossary

Adequate Public Facilities – The requirement that public facilities and services be available to serve a proposed development at adopted level of service standards concurrent with development timing. Such facilities may include law enforcement, fire and emergency services, transportation, schools or other necessary facilities.

Assessment District - A geographic area designated to pay for infrastructure costs for a specific project. Properties within the district each pay a portion of the total project cost premised on the concept that those properties benefit from the improvement project.

Board of County Commissioners (BCC) – The elected officials charged with administering the government of Santa Fe County. There are five County Commissioners, one representing each of the County's five districts.

Capital Improvement – An acquisition by the County of real property, such as a major construction project or the acquisition of major equipment.

Capital Improvements Plan ("CIP") – A timetable or schedule of all future capital improvements to be carried out during a specific period and listed in order of priority, together with cost estimates and the anticipated means and sources of financing each project.

Conservation Easement – The grant of a property right or interest which is designed to protect an area of land in its natural, scenic, open or wooded condition. Typically a conservation easement is used to protect a specific area of land from further development while maintaining its present use, such as agriculture or open space.

County Development Review Committee (CDRC) – The seven member committee appointed on rotating terms by the Board of County Commissioners that act as the County's planning and zoning commission. One member represents the City of Santa Fe while the other six members represent different areas of the County. The CDRC makes recommendations and decisions related to land use, subdivision and zoning.

General Plan – The master, long-range plan intended to guide the growth and development of the County for a set period of time. The General Plan includes inventory and analytic sections leading to recommendations for the community's land use, future economic development, housing, recreation and open space, transportation, community facilities and community design. Goals, objectives, policies and strategies for each of these elements are contained with the General Plan.

Growth Management – A wide range of techniques used in combination to determine the amount, type and/or rate of growth and to direct it to designated areas. Techniques used to execute growth management policies may include, but are not limited to: transfer of development rights (TDR), tiers, open space and farmland preservation, adequate public facilities ordinances, and flexible zoning and subdivision regulations.

Growth Management Area - The boundaries of each Growth Management Area (GMA) were delineated for growth management planning purposes according to the following criteria:

- Geographic Boundaries with topographic features and hydrologic basins;
- Continuity with existing Community Planning areas and boundaries to avoid fragmentation;

- Observation of political boundaries (*i.e.* Tribal lands, Federal lands, State lands);
- Consideration of major transportation networks as corridors connecting all GMA's;
- Existing parcel boundaries;
- Sensitivity to the Landscape and Historical context (i.e. Land Grants, Archaeological Sites, Historic communities, settlement patterns and transportation routes); and
- Consideration of open space buffers.

Impact Fees – A charge or assessment imposed by the local jurisdiction against new development in order to generate revenue for funding the costs of capital improvements or facility expansions necessitated by and attributable to the new development.

Infill Development – Development designed to occupy scattered or vacant parcels of land that remain after the majority of development has occurred in an area**.**

Impact Analysis – An assessment as to the positive or negative impact that a development proposal will have on County resources, such as financial or environmental health. A Fiscal Impact Analysis measures the anticipated impact on the County's fiscal health (the County's revenues and expenditures for public improvements, delivery of services and net cash flow). An Environmental Impact Analysis measures the anticipated impact on the County's environmental health (the on-and off-site environmental impacts to the ecosystem likely to be produced by a development project).

Intergovernmental Agreement (IGA) – An agreement between two or more governmental units, such as a county or city. Also known as a Memorandum of Understanding (MOU).

Joint Powers Agreement – An agreement between two or more entities, such as a county, a city and/or a special district whereby the entities agree to jointly perform services, cooperate with, review development, enforce regulations or undertake other similar actions.

Sustainable Land Development Code ("SLDC") – The Sustainable Land Development Code is the collection of the County's land development regulations, including zoning, subdivision and design regulations.

LEED (Leadership in Energy and Environmental Design) – A programmed set of standards for environmentally sustainable construction. LEED-certified structures use key resources more efficiently than conventional building standards to create less of an impact upon the environment.

Level of Service ("LOS") – An existing or determined level of manpower expenditure or capital commitment by the County per unit of user demand, typically expressed per capita, per dwelling unit or per square foot of gross floor area (for non-residential uses). Examples include the number of police officers per 1,000 population, or the square feet of public park per 1,000 population.

Mixed Use – Areas in which various uses, such as office, commercial, institutional and residential, are combined in a single building or on a single site in an integrated development project. A single site may include contiguous properties. Traditional development patterns were generally mixed use prior to the advent of single-use zoning districts.

Smart Growth – Policies, legislation, regulations, procedures and strategies meant to achieve more compact, efficient development patterns served by adequate infrastructure and facilities. Smart Growth minimizes environmental and fiscal impacts of new development.

Sustainability – "[To meet] the needs of the present without compromising the ability of future generations to meet their own needs." *Source:* World Commission on Environment and Development (Brundtland Commission).

Sustainable Development – Development based on the tenets of Smart Growth that is designed to balance fiscal, social and environmental considerations and minimize negative impacts to existing communities and the environment. Sustainable development typically includes the following development characteristics: compact form, adjacent to existing development, energy efficient, socio-economically diverse and balanced, low environmental impact and in line with adopted growth management plans and policies.

Tiers – A growth management system used to direct the location, timing and phasing of growth in order to achieve rational growth patterns, efficiently provide facilities and services and protect rural, agricultural, environmentally sensitive or other important open spaces from inappropriate development.

Transferable Development Rights ("TDR") – A technique to direct growth which involves the transfer of zoning density or development rights from one building site to another. TDR requires the creation of a sending district (where lower densities and less development is desired) and receiving zones (where higher densities and more development is desired).

2-3. Green Development

2-3.1. Leadership in Energy and Environmental Design

The *Leadership in Energy and Environmental Design (LEED) Green Building Rating System* is one of many nationally accepted benchmarks for the design, construction and operation of high performance green buildings[i]. According to the U.S. Green Building Council, "LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality." Currently there are adopted LEED standards for new construction, existing buildings, commercial interiors, core and shell, schools, retail, healthcare, homes and neighborhood development. According to the LEED standards, "green design not only makes a positive impact on public health and the environment, it also reduces operating costs, enhances building and organizational marketability, potentially increases occupant productivity, and helps create a sustainable community."

The LEED for Neighborhood Development pilot program, during which nearly 240 pilot projects tested a pilot version of the rating system, began in the summer of 2007 and final standards are nearing adoption in fall 2009. The program seeks to create a "national set of standards for neighborhood location and design based on the combined principles of smart growth, new urbanism and green building." There is no minimum or maximum size requirement for a neighborhood to become LEED certified, instead a neighborhood development must earn at least 40 points out of 106 and include all nine criteria required for certification. Although the pilot program is currently closed, the post-pilot program is scheduled to launch in early 2009.

LEED New Construction Project Checklist

Sustainable Sites		14 Possible Points
Prereq 1	Construction Activity Pollution Prevention	Required
Credit 1	Site Selection	1
Credit 2	Development Density & Community Connectivity	1
Credit 3	Brownfield Redevelopment	1
Credit 4.1	Alternative Transportation, Public Transportation Access	1
Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
Credit 4.3	Alternative Transportation, Low Emitting & Fuel Efficient Vehicles	1
Credit 4.4	Alternative Transportation, Parking Capacity	1
Credit 5.1	Site Development, Protect or Restore Habitat	1
Credit 5.2	Site Development, Maximize Open Space	1
Credit 6.1	Stormwater Design, Quantity Control	1
Credit 6.2	Stormwater Design, Quality Control	1
Credit 7.1	Heat Island Effect, Non-Roof	1
Credit 7.2	Heat Island Effect, Roof	1
Credit 8	Light Pollution Reduction	1
Water Efficiency		5 Possible Points
Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1

Credit 2	Innovative Wastewater Technologies	1
Credit 3.1	Water Use Reduction, 20% Reduction	1
Credit 3.2	Water Use Reduction, 30% Reduction	1
Energy & Atmosphere		17 Possible Points
Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
Prereq 2	Minimum Energy Performance	Required
Prereq 3	Fundamental Refrigerant Management	Required
Credit 1	Optimize Energy Performance (2 points mandatory)	1–10
Credit 2	On-Site Renewable Energy	1–3
Credit 3	Enhanced Commissioning	1
Credit 4	Enhanced Refrigerant Management	1
Credit 5	Measurement & Verification	1
Credit 6	Green Power	1
Materials & Resources		13 Possible Points
Prereq 1	Storage & Collection of Recyclables	Required
Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1
Credit 1.2	Building Reuse, Maintain 95% of Existing Walls, Floors & Roof	1
Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1
Credit 2.1	Construction Waste Management, Divert 50% from Disposal	1
Credit 2.2	Construction Waste Management, Divert 75% from Disposal	1
Credit 3.1	Materials Reuse, 5%	1
Credit 3.2	Materials Reuse, 10%	1
Credit 4.1	Recycled Content, 10% (post-consumer + 1/2 pre-consumer)	1
Credit 4.2	Recycled Content, 20% (post-consumer + 1/2 pre-consumer)	1
Credit 5.1	Regional Materials, 10% Extracted, Processed & Manufactured Regionally	1
Credit 5.2	Regional Materials, 20% Extracted, Processed & Manufactured Regionally	1
Credit 6	Rapidly Renewable Materials	1
Credit 7	Certified Wood	1
Indoor Environmental Quality		15 Possible Points
Prereq 1	Minimum IAQ Performance	Required
Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required

Credit 1	Outdoor Air Delivery Monitoring	1
Credit 2	Increased Ventilation	1
Credit 3.1	Construction IAQ Management Plan, During Construction	1
Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1
Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1
Credit 4.2	Low-Emitting Materials, Paints & Coatings	1
Credit 4.3	Low-Emitting Materials, Carpet Systems	1
Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	1
Credit 5	Indoor Chemical & Pollutant Source Control	1
Credit 6.1	Controllability of Systems, Lighting	1
Credit 6.2	Controllability of Systems, Thermal Comfort	1
Credit 7.1	Thermal Comfort, Design	1
Credit 7.2	Thermal Comfort, Verification	1
Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
Credit 8.2	Daylight & Views, Views for 90% of Spaces	1
Innovation & Design Process		5 Possible Points
Credit 1.1	Innovation in Design	1
Credit 1.2	Innovation in Design	1
Credit 1.3	Innovation in Design	1
Credit 1.4	Innovation in Design	1
Credit 2	LEED Accredited Professional	1
Project Totals		**69 Possible Points**
		Certified 26–32 points
		Silver 33–38 points
		Gold 39–51 points
		Platinum 52–69 points

LEED Neighborhood Design Project Checklist

Smart Location & Linkage		**27 Possible Points**
Prereq 1	Smart Location	Required
Prereq 2	Imperiled Species and Ecological Communities	Required
Prereq 3	Wetland and Water Body Conservation	Required

Prereq 4	Agricultural Land Conservation	Required
Prereq 5	Floodplain Avoidance	Required
Credit 1	Preferred Locations	10
Credit 2	Brownfield Redevelopment	2
Credit 3	Locations with Reduced Automobile Dependence	7
Credit 4	Bicycle Network and Storage	1
Credit 5	Housing and Jobs Proximity	3
Credit 6	Steep Slope Protection	1
Credit 7	Site Design for Habitat or Wetland/Water Body Conservation	1
Credit 8	Restoration of Habitat or Wetlands/Water Bodies	1
Credit 9	Long-Term Conservation Management of Habitat or Wetlands/Water Bodies	1
Neighborhood Pattern & Design		**44 Possible Points**
Prereq 1	Walkable Streets	Required
Prereq 2	Compact Development	Required
Prereq 3	Connected and Open Community	Required
Credit 1	Walkable Streets	12
Credit 2	Compact Development	6
Credit 3	Mixed-Use Neighborhood Centers	4
Credit 4	Mixed-Income Diverse Communities	7
Credit 5	Reduced Parking Footprint	1
Credit 6	Street Network	2
Credit 7	Transit Facilities	1
Credit 8	Transportation Demand Management	2
Credit 9	Access to Civic & Public Spaces	1
Credit 10	Access to Recreation Facilities	1
Credit 11	Visitability and Universal Design	1
Credit 12	Community Outreach and Involvement	2
Credit 13	Local Food Production	1
Credit 14	Tree-Lined and Shaded Streets	2
Credit 15	Neighborhood Schools	1
Green Infrastructure & Buildings		**29 Possible Points**
Prereq 1	Certified Green Building	Required
Prereq 2	Minimum Building Energy Efficiency	Required
Prereq 3	Minimum Building Water Efficiency	Required
Prereq 4	Construction Activity Pollution Prevention	Required

Credit 1	Certified Green Buildings	5
Credit 2	Building Energy Efficiency	2
Credit 3	Building Water Efficiency	1
Credit 4	Water Efficient Landscaping	1
Credit 5	Existing Building Use	1
Credit 6	Historic Resource Preservation and Adaptive Reuse	1
Credit 7	Minimize Site Disturbance in Design and Construction	1
Credit 8	Stormwater Management	4
Credit 9	Heat Island Reduction	1
Credit 10	Solar Orientation	1
Credit 11	On-Site Renewable Energy Sources	3
Credit 12	District Heating and Cooling	2
Credit 13	Infrastructure Energy Efficiency	1
Credit 14	Wastewater Management	2
Credit 15	Recycled Content in Infrastructure	1
Credit 16	Solid Waste Management Infrastructure	1
Credit 17	Light Pollution Reduction	1
Innovation & Design Process		**6 Possible Points**
Credit 1.1	Innovation in Design: Provide Specific Title	1
Credit 1.2	Innovation in Design: Provide Specific Title	1
Credit 1.3	Innovation in Design: Provide Specific Title	1
Credit 1.4	Innovation in Design: Provide Specific Title	1
Credit 1.5	Innovation in Design: Provide Specific Title	1
Credit 2	LEED® Accredited Professional	1
Regional Priority Credits		**4 Possible Points**
Credit 1.1	Regional Priority Credit: Region Defined	1
Credit 1.2	Regional Priority Credit: Region Defined	1
Credit 1.3	Regional Priority Credit: Region Defined	1
Credit 1.4	Regional Priority Credit: Region Defined	1
Project Total		**110 Possible Points**
		Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80+ points

2-4. Invasive & Native Species

2-4.1. US 285 South Highway Landscaping Plant List

Trees

Common Name	Botanical Name
One Seed Juniper	Juniperus Monosperma
Pinion Pine	Pinus Edulis
Ponderosa Pine	Pinus Ponderosa
Wavyleaf Oak	Quercus Undulata
Narrowleaf Cottonwood	Populus Angustifolia
Bristlecone Pine	Pinus Aristata
New Mexico Privet/Olive	Foerstiera Neomexicana
New Mexico Locust	Robinia Neomexicana
Silver Buffaloberry	Shepherdia Argentia
Chokecherry	Prunus Virginiana
Utah Serviceberry	Amelanchier Utahensis
Black Willow	Goodingii
Western Hackberry	Celtis Reticulata

Bushes

Common Name	Botanical Name
Woods Rose	Rosa Woodsii
Apache Plume	Fallugia Paradoxa
Littleleaf Mockorange	Philadelphus Microphyllus
Big Leaf Sage	Artemisia Tridentata
Silver Sage	Artemisia Cana
Sand Sage/Threadleaf Sage	Artemisia Filifolia
Curl Leaf Mahogany	Cercocarpus Ledifolius
Mountain Mahogany	Cercocarpus Montanus
Smooth Mahogany	Cercocarpus Intricatus
Snowberry	Symphoricarpos Oreophilus

Winter Fat	Ceratoides Lanata
Golden Current	Ribes Cereum
Wild Plum	Prunus Americana
Three Leaf/Skunkbush Sumac	Rhus Trilobata
Smooth Sumac	Rhus Glabra
Fernbush	Chamaebatiaria Millefolium
Beargrass	Nolina Microcarpa
Broadleaf Yucca	Yucca Baccata
Soap Tree Yucca	Yucca Elata
Narrowleaf Yucca	Yucca Glauca
Fremont Barberry	Berberis Fermontii
Western Sand Cherry	Prunus Besseyi
Four Wing Saltbrush	Atriplex Canescens
Agave	Agave Utahensis
Mormon Tea	Ephedra Nevadensis
Wolfberry	Lycium Sp.
Indian Apple	Periphyllum Ramosissimus

Grasses

Common Name	**Botanical Name**
Blue Grama	Bouteloua Gracilis
Sideoats Grama	Bouteloua Curtipendula
Western Wheatgrass	Agropyron Smithii
Little Bluegrass	Andropogon Scoparium
Alkali Sacaton	Sporobolus Airoides
Galleta	Hilaria Jamesii
Indian Ricegrass	Oryzopsis Hymenoides

Flowers

Common Name	**Botanical Name**
Purple Aster	Machaeranthera Bigelovii

Wild Four O'clock	Mirabilis Multiflora
Blue Flax	Linum Lewisii
New Mexican Region Poppy	Eschscholzia
Firewheel	Gaillardia Aristata
Rocky Mountain Penstemon	Penstemon Strictus
Creeping Globemallow	Sphaeralcea Coccinea

2-4.2. Tesuque Native Plants

Native flora typical of high desert species includes, but is not limited to the following:

Trees

Rocky Mountain Juniper

One-seed or Cherry Stone Juniper - Grows lower than and with pinon.

Fremont Cottonwood - Rapid growing, short lived, grows around streams and moist areas to a height of 50-100'.

Gambel or Rocky Mountain White Oak - Grows 6-50[1] high in thickets in pinon belt up to ponderosa pine belt.

Shrub Live Oak grows as chaparral in pinon belt to heights of 13 feet.

Box Elder or Ash-leafed Maple - provides bright red fall foliage.

Bushes

Squaw or Wild Crab Apple - grows up to 8000', is rare, but grows in the dry hills of the pinon juniper belt.

Pointleaf Manzanita - grows in thickets up to 8000'.

Goldenrod Chamisa - Grows to 8,000 feet above sea level.

Rubber Rabbit Brush Chamisa -

Grasses

Buffalo Grass - A warm season grass. Needs very little water and thrives in hot sunny locations, grows low and spreads by surface runners and seed.

Blue Grama -

Crested Wheat -

Wild Buckwheat

Right Buckwheat

Flowers

Scarlet Bugler or Red Penstemon - grows up to 7000'.

Scarlet gilia

Indian Paintbrush - grows up to 7500'.

Yellow Sweet Clover -

Wild or Crane's Bill Geranium - grows between 5000 and 8000 feet.

Small-leaf Globemallow - Grows up to 7000'.

Red Columbine - Grows between 6000 and 10,000 feet.

Spring Beauty or Mayflower - Grows up to 7000'.

Wild Onion or Ullium - A member of the lily family that grows between 4,000 and 7,500 feet above sea level

Segolily or Mariposa –

Larkspur –

Lupine –

New Mexico Thistle –

Clematis –

Thistle Poppy -

Rock Spirea - grows between 5,000 and 8,000 feet above sea level.

Service Berry or Shad Bush - Grows between 2,000 and 7,000 feet.

Apache Plume - Grows between 3,700 and 8,000 feet.

Locoweed or Milk Vetch - is common along road cuts and similar ground scars.

Creeping Primrose and Evening Primrose - both grow between 4,500 and 7,500 feet.

Tassel-flowered Brickellia or sunflower - Is common between 5,000 and 9,000 feet above sea level.

Heath-leafed Aster or Baby White Aster -

Spreading Daisy or Branching Fleabone grows between 1,000 and 9,000 feet. Sprawling Daisy grows between 4,000 and 7,000 feet.

Cacti & Succulents

White Spiral Claret Cup or Heart Twister - grows between the 4000 and 9000 foot levels and is common in the pinon/juniper belt.

Beehive Cactus - grows to 8000'.

Utah Agave - A member of the cactus family that grows up to 7,500 feet above sea level.

Red Flowered Prickly Pear - Grows up to 7,500 feet.

Green Flowered Torch Cactus - Also grows up to 7,500 feet in the pinon/juniper belt.

Cane Cactus or Cholla - Prevalent in the pinon/juniper belt up to 7,500 feet.

Yucca or Spanish Bayonet - Also known as the soap weed yucca.

2-4.3. Invasive Species in New Mexico

Popular Name	Latin Name	Place of Origin
Alfombrilla	*Drymaria arenarioides*	Mexico
Black Henbane	*Hyoscyamus niger*	Europe
Camelthorn	*Alhagi pseudalhagi*	Asia
Canada Thistle	*Cirsium arvense*	Eurasia
Dalmatian Toadflax	*Linaria genisitifolia* ssp. *dalmatica*	Europe
Diffuse Knapweed	*Centaurea diffusa*	Mediterranean
Dyer's Woad	*Isatis tinctoria*	Europe
Eurasian Watermilfoil	*Myriophyllum spicatum*	Eurasia
Hoary Cress	*Cardaria draba*	Europe
Hydrilla	*Hydrilla verticillata*	South Africa
Leafy Spurge	*Euphorbia esula*	Eurasia
Onionweed	*Asphodelus fistulosus*	Mediterranean
Perennial Pepperweed	*Lepidium latifolium*	South Europe
Purple Loosestrife	*Lythrum salicaria*	Europe
Purple Starthistle	*Centaurea calcitrapa*	Europe
Scotch Thistle	*Onopordum acanthium*	Europe
Spotted Knapweed	*Centaurea maculosa*	Eurasia

Yellow Starthistle	*Centaurea solstitialis*	Europe
Yellow Toadflax	*Linaria vulgaris*	Eurasia
Class Bb Weeds		
African Rue	*Peganum harmala*	North Africa
Bull Thistle	*Cirsium vulgare*	Eurasia
Halogeton	*Halogeton glomeratus*	Asia
Malta Starthistle	*Centaurea melitensis*	Europe
Musk Thistle	*Carduus nutans*	South Europe
Russian Knapweed	*Acroptilon repens*	Eurasia
Poison Hemlock	*Conium maculatum* L.	Europe
Teasel	*Dipsacus fullonum*	Europe
Class Cc Weeds		
Field Bindweed	*Convolvulus arvensis* L.	Europe
Jointed Goatgrass	*Aegilops cylindrical*	South Europe
Russian Olive	*Elaeagnus angustifolia* L.	Europe
Saltcedar	*Tamarix* sp.	Europe
Siberian Elm	*Ulmus pumila*	Europe