
J. ENVIRONMENT

1. Environmental Issues

Finding a reasonable balance between jobs and environment is always difficult, but when the project depends on any degree of taxpayer funding and services, government environmental safeguards usually apply. This section outlines the different types of reviews and levels of clearance required to release Federal funds (and often apply to State funds as well).

Projects located near protected lands or wildlife are generally subject to some level of review, regardless of the funding source. Because the environmental laws pass liability for former violations on to current property owners, lenders will require Environmental Protection Agency reviews if the site is suspected of having underground gasoline storage tanks or asbestos.

The rules apply regardless of the size or type of project, and the focus is on the type of activity being carried out. For a typical retail business, the main concerns are floodplain location, buried fuel tanks, old buildings, and hazardous siting. For projects involving construction or renovation, a lengthy review and additional subreviews could also be required when Federal funds are involved.

In addition to the Valley's fierce defense of its water resources, the awareness and sensitivity on environmental issues has been greatly intensified by evidence of climate change and global warming, and increased news media coverage. This generally leads to a more critical and cautious approach to development, or as we stated in the previous CEDS: development prospects often start with "... enthusiasm created by the number of jobs promised, but sour when the impacts on the environment ... are better understood."

Since the environmental laws and guidelines have remained essentially the same, a majority of the material prepared for the previous CEDS is still relevant and is being retained in the current document. Updates are being provided for the Historic Properties listing in Table J-5, and for Table J-6 on Threatened or Endangered Species. We would note that cleanup activities are still continuing on the Summitville Mine site listed in Table J-7, to prevent or mitigate drainage from the site's water treatment plant.

We would also recognize the efforts being made to protect and conserve the river corridor and surrounding lands of the Rio Grande as an essential safeguard to the region's water resources and other sustainable uses. The Rio Grande Headwaters Restoration Project covers 91 miles of the waterway, with a mission to "... restore and conserve the historical functions and vitality of the Rio Grande in Colorado for improved water quality, agricultural

water use, riparian health, wildlife and aquatic species habitat, recreation, and community safety while meeting the requirements of the Rio Grande Compact.” A Rio Grande Initiative request by the Rio Grande Headwaters Land Trust (RiGHT), and SLV Wetlands Focus Area Committee, was recently awarded a \$7 million grant to preserve 25,000 acres of land along the Rio Grande through voluntary conservation easements.

Some of the projects and activities anticipated to receive the greatest environmental concern in the coming implementation period include: leasing of BLM, Sand Dunes Preserve, and other Federal lands for oil and gas exploration and drilling; pesticide and herbicide use for crops and mosquito control; Federal land sales; timber sales; large scale developments such as the Village at Wolf Creek; protection of habitat for the Southwestern Willow Flycatcher; and development plans for the Alamosa Ranch north of Alamosa.

2. Environmental Laws Pertaining to Economic Development (Table J-1, J-5, J-6, J-7)

Laws listed in Table J-1 are mandatory for reviews of RLF projects using a Federal source, and Table J-4 describes the review procedures needed to comply with these laws. Additional water quality regulations and EPA reviews which may also be applicable are discussed in subsection 4. of this chapter.

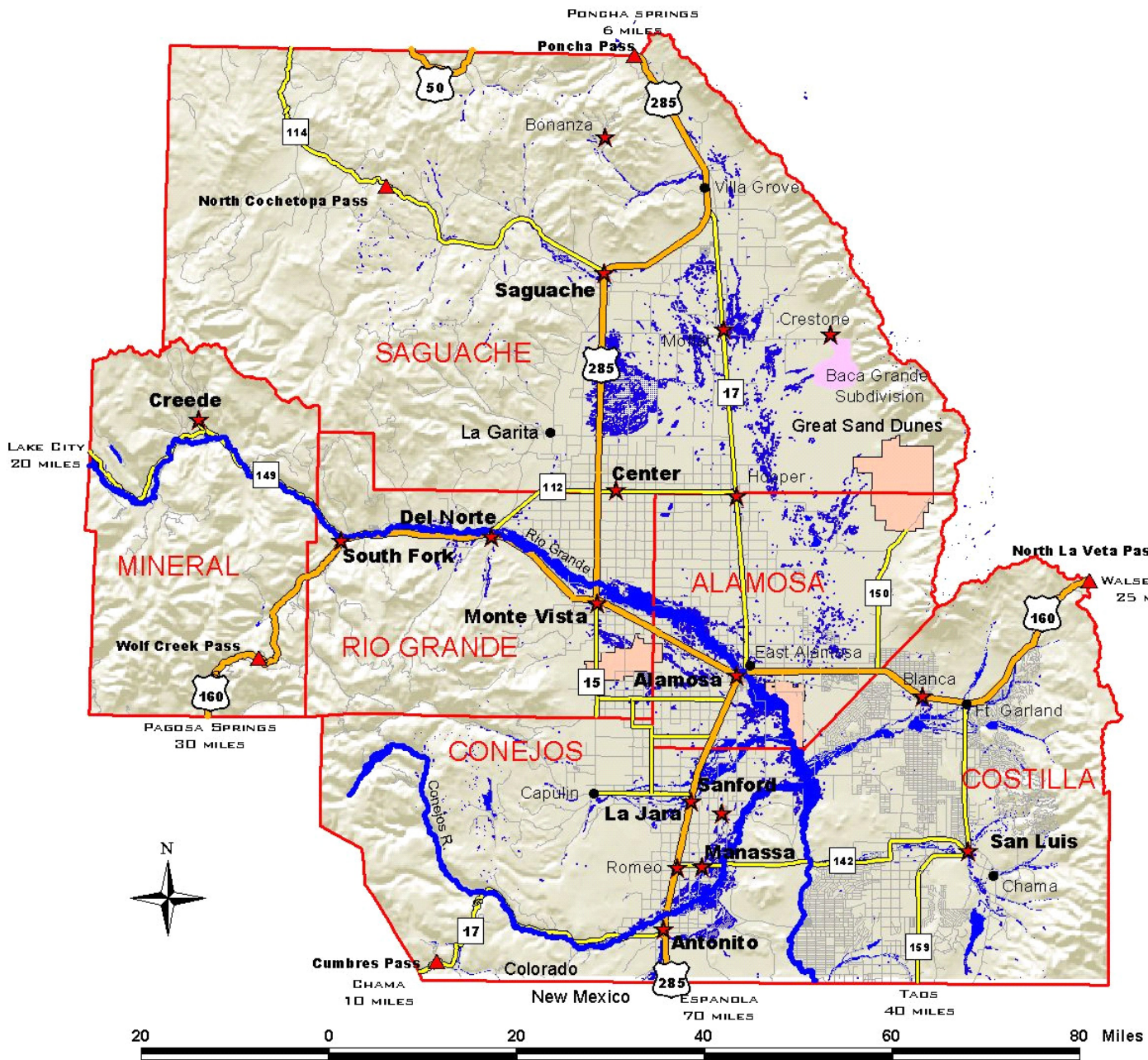
For historical properties, we would also mention the State Antiquities Act (24-80-401) which protects fossils on State-owned lands and land controlled by any subdivision of State government. A list of State and/or National Register historic properties are included in Table J-5.

Use of wetlands is also governed by the Clean Water Act. Wetlands are subject to a range of definitions, one of which would include marshes, wet meadows, bogs, river banks, and other acreage covered with water a minimum of 21 consecutive days a year. A distinction is made between man-made wetlands created by the outflow of fish farming operations or other after-use releases, and those which occur naturally. Man-made wetlands may sometimes be used to offset or mitigate other impacts, depending on water quality.

Endangered, threatened, and species of special concern are listed in Table J-6, but we have not included plant species which would also require consideration in any proposed development.

Map 13

San Luis Valley Region – Floodplains and Wetlands



Source: San Luis Valley GIS/GPS Authority.

Table J-7 provides a history of Superfund or candidate projects in the Valley, most of them tied to heap-leach mining operations. The most famous of these was the Summitville Mine spill which required years of EPA cleanup and reclamation (and is still not totally closed out). Second in terms of impact was the Battle Mountain Gold operation north of San Luis which is shown on the list as one of the archived cleanup projects.

Needless to say, proposed operations of this type are not likely to be welcomed again in the Valley --- regardless of their economic benefits.

3. Extent, Types, and Content of Reviews Required (Table J-2, J-3, J-4).

Guidelines used in clearing loan requests for the Valley's Revolving Loan Fund were used in the tables. These apply mainly to Community Development Block Grants funds used to capitalize the RLF (which originate from HUD), but the same general principles apply to all Federal sources. Detailed procedures and points of emphasis in the reviews, however, vary greatly from one agency to the next.

Table J-2 shows that construction, extensive renovation, and change of site use are actions triggering a lengthier review under the National Environmental Policy Act. Activities marked in the second column are "categorically excluded" from NEPA, but still require further review to determine if the site location has triggered any other Federal or State environmental laws.

Projects which involve some level of renovation (but are not changing site use or zoning) may not require the full NEPA review if the Environmental Review Official determines that building size and cost criteria have not been exceeded.

Economic development activities limited to RLF working capital financing after construction or renovation have already taken place are considered exempt, provided that bank commitments for construction or other financing were not contingent on the RLF working capital. In this case, only the "clearance form" is required.

Table J-3 lists 36 items on which the review could be based, and the extent of coverage required by NEPA, categorical review, and clearance form. All 36 are covered on NEPA's Environmental Assessment, a total of 12 are covered on the categorical review Statutory Checklist, and only 2 on the clearance form.

Table J-4 outlines the review steps involved for NEPA and categorical exclusions, and the main points of emphasis and procedures to be followed in the 12 major components common to both. Because construction and site changes have more impact, publication of notices allowing time for public comments on the project are also required. After all items in the review have been completed, a determination by the Certifying Official is made as

to whether or not activities in the project are considered to present a "significant impact," and subject to an even more detailed and technical analysis under an Environmental Impact Statement (EIS).

One example of a project with impact levels significant enough to warrant an EIS would be the highway construction work on Wolf Creek Pass. As noted in the table, any subreviews which are triggered (such as project location in the 100-year floodplain) have to be done prior to or concurrent with the EA, and the same is true for categorical reviews.

For example, a machine shop is requesting an RLF loan using Federal funds as the source and plans to locate on a site once occupied by a lumberyard. Only a few minor inside repairs are needed on the building and the project is judged not to require a NEPA Environmental Assessment. In starting the Statutory Checklist, however, the site is found to be in the 100-year floodplain and the building is determined to be more than 50 years old.

In this case, both subreviews as described in the table would need to be completed to show how the potential impacts were being mitigated. The floodplain would require notices before and after the 8-step mitigation process, and the historic would require clearance from SHPO before any project activities proposed for RLF financing took place. In addition, a public notice stating that impacts were mitigated and funds are being requested would also be required.

4. Water Quality

Potential water quality impacts of a proposed project generally do not fall under scrutiny unless a NEPA review has been triggered by construction activities or change in site use. In this case, guidelines for review under the Federal Clean Water Act may apply, depending on the extent and type of water use.

Water quality management is under the jurisdiction of the Colorado Department of Public Health and Environment (CDPHE), which also does water testing and issues National Pollution Discharge Elimination System (NPDES) permits for municipal and private business water and sewer systems. Water basins are tested for pollutants such as metals, bacteria, sediments, nutrients, and salinity. Point source testing is focused on discharge to streams at specific sites. Non-point sources include agriculture, timber operations, construction runoff, urban runoff, resource extraction, land disposal, and hydrologic changes.

Any project that uses a dewatering element during construction, or which will disturb 5 acres or more during construction, will need a 402 permit. If the project involves the discharge of dredged or fill material, an evaluation by the Army Corps of Engineers is required. The discharge of pollutants into navigable waters and adjacent wetlands requires Section 401 clearance.

5. EPA Reviews and Other Notable Concerns

Liability for environmental compliance of properties held or mortgaged to banks is a concern to lenders, and borrowers or property owners are required to complete examinations of property conditions and full mitigation of any problems identified as a contingency of loan closing. Review procedures to test this liability are under the jurisdiction of the Environmental Protection Agency (EPA).

EPA Level I reviews provide an overview of the site and outline the type of examinations needed. EPA Level II reviews provide in-depth analysis and specify the mitigating actions required. This work is usually contracted out to an environmental specialist or consultant, and the costs passed on to borrower or property owner.

Sites known or suspected to contain underground fuel storage tanks which may be contaminating water supplies is a major concern. This is in contrast to the emphasis placed on the potential hazards imposed by above-ground fuel storage tanks in the Table J-4 review examples. Asbestos is also a major concern, particularly when older buildings are involved. In either case, the expense of removing buried tanks and specialized asbestos removal is borne by the property buyer or seller, and not the lender.

Environmental controls on noise levels are particularly lacking in most of the Valley's cities and towns. Table J-4 notes a generally accepted outside noise threshold of 65 decibels, as advised by CDOT. Truck and auto traffic on US 160 through downtown Alamosa is on a much higher order, which is part of a larger traffic routing problem being dealt with under the Alamosa Corridor study (see Section O. Transportation).

Apart from the understandably louder portions of the cities affected by traffic corridors or industrial zones, and the unavoidable occurrence of police, fire, and ambulance sirens, the frequency of offending vehicles well in excess of 65 db are on the rise and are affecting residential areas as well.

South Fork designed and is enforcing a noise ordinance which declares as a public nuisance any vehicle with inadequate muffling; use of jake brakes in the city limits; operation of equipment exceeding defined decibel levels; and vehicle audio systems exceeding decibel levels and/or producing objectionable disturbance due to intermittence, beat frequency, or shrillness. From 7am-7pm decibel levels are set at 55 db for residential zones; 60 db for commercial; 70 db light industrial; and 80 db industrial. From 7pm-7am the levels are set at 5 db lower.

Other concerns noted in our 1992 OEDP which are still relevant include:

- Groundwater contamination by "chemigation," or adding herbicides to water distributed by pivot sprinkler systems, and unauthorized or incorrectly advised agricultural use of chemicals.

- Mining operation ore treatment overloads and spills of cyanide or other chemicals into streams and reservoirs.
- Overloads on existing landfills, and illegal dumping.
- Improper disposal of motor oil and pesticides.
- Deteriorating or poorly repaired dam structures.
- Military flyovers were a hot issue 10 years ago, but are less frequent today.
- Poaching of wildlife, large areas to cover, and limited budgets for regulatory staff.
- Mercury readings slightly above advised levels in some reservoirs.

6. Zoning and Land Use Planning (Table J-8)

Table J-8 shows which communities have their own zoning regulations or use the county's, and also describes the categories used in a typical set of zoning regulations. With the exception of a few places, most local governments are becoming more familiar with land use requirements and have passed, or are considering, zoning regulations.

Colorado does not have a statewide land use plan, and regulations like zoning, sign codes, and building codes are for the most part, locally designed. Enabling legislation for land use planning and regulations by counties and municipalities has provided for planning commissions, master plans, subdivision regulations, annexation, impact fees, and related concerns.

Subdivisions are defined as any parcel of land which is to be used for condominiums, apartments and multiple dwelling units, or divided into two or more parcels. Specifically excluded from the definition of subdivision within counties is any division of land resulting in parcels of 35 acres or more. Up to 3 divisions or less on parcels under 35 acres are treated as minor subdivisions, and dividing up the land more than 3 times falls under the major subdivision codes. Minimum lot size in Alamosa County is one acre or more, based on the separation needed for septic purposes.

The so-called "1041 powers" allow local governments to identify, designate, and regulate areas and activities of state interest including: mineral resources; geological, wildfire, and flood hazard areas; historical and archaeological resources; significant wildlife habitats; shorelands of reservoirs; areas around airports; major facilities of a public utility; interchanges on arterial highways; and mass transit.

7. Brownfields Potential

EPA funding for cleanup and conversion of contaminated sites for new business use and jobs is available under various Brownfields legislation and programs. A Brownfields site is defined as: "Real property, the expansion,

redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”

Of an estimated 450,000 Brownfields sites in the U.S., about a third or more have underground storage tanks --- which is something the Valley can relate to. Other estimates on the benefits of Brownfields note that for every acre of Brownfields redeveloped, 4.5 acres of undeveloped land is saved; and the effort is credited with creating over 22,000 permanent jobs.

Once mainly an urban program, new legislation is helping Brownfields to receive greater rural use, and this could be true of the Valley as well. Provisions of the Small Business Liability Relief and Brownfields Act of 2001 are as follows:

- The Act authorizes \$200 million for Brownfields assessment and cleanup to states and local governments starting in FY 2003.
- It protects developers of Brownfields in the case that additional contamination is found after redevelopment.
- The site definition includes land contaminated by petroleum or petroleum products, a controlled substance as defined by the Controlled Substance Act or mine-scarred land.

Since the Valley has many former gas station sites and plenty of mine-scarred land, we believe the Brownfields assistance holds potential for Valley involvement and will be exploring the options available to us as part of the regional development priorities.

8. EPA San Luis Basin Sustainability Project

The San Luis Valley area was selected by the EPA Research offices in Cincinnati (over Yellowstone National Park) as the ideal spot in the nation to test the validity of applying metric measurements and theories to identify a direction of the region towards increasing (or decreasing) sustainability, based on its current and historic land use and economic practices and patterns. A model developed from the study could then be used by local governments for consideration in planning and policy decisions, and also applied as a planning and policy tool in other regions of the State and Nation.

SLVDRG staff participated with the Project Data Team in providing a range of economic and other information on the region, and anticipates further input and need for assistance. More than 50 data elements and a 20-year data series (where available) are required for the study. Metrics include: dynamic order of the regional system as estimated by Fisher Information; environmental burden characterized by the Ecological Footprint; flow and conservation of energy resources through the system as computed from an Energy Budget; and Net Regional

Product defined as the sum of all monetary incomes with the regional system minus the depreciation of man-made and natural capital.

Table J-1

Environmental Reviews – Laws Applicable to Economic Development Projects (Partial Listing)

Laws/Executive Orders

Historic Properties

- * National Historic Preservation Act of 1966 – P.L. 89-665, 16 U.S.C. 470.
- * The Archeological and Historic Data Preservation Act of 1974 – P.L. 93-291, 16 U.S.C. 469.
- * Executive Order #11593, Protection and Enhancement of the Cultural Environment.
- * 36 CFR, Part 800, Procedure for the Protection of Historic and Cultural Properties.
- * 24 CFR, Part 59, Protection of Historic and Cultural Properties under HUD programs.

Floodplains and Wetlands

- * Protection of Wetlands, 44 FR 47006, August 9, 1973.
- * Flood Disaster Protection Act of 1973, 42 U.S.C. 4001, et seq.
- * Executive Order #11988, Floodplain Management, May 24, 1977, 42 FR 26952, May 25, 1977.
- * Executive Order #11990, Protection of Wetlands, May 24, 1977, 42 FR 26951, May 25, 1977.
- * Colorado Executive Order #8491, Evaluation of Flood Hazards in Locating State Buildings, Road and other Facilities, and in Reviewing and Approving Sewage and Water Facilities, and Subdivisions.
- * Colorado Executive Order #8504, Requirements and Criteria for State Participation in the National Flood Insurance Program.

Endangered Species

- * Endangered Species Act of 1973, P.L. 93-205, as amended by the Endangered Species Act of 1978, P.L. 95-632, 16 U.S.C. 1536.

Wild and Scenic Rivers

- * Wild and Scenic Rivers Act of 1968, P.L. 90-542, 16 U.S.C., 1274, et seq., as amended.

Air Quality

- * Clean Air Act Amendment of 1970, 42 U.S.C. 740 1 et seq., as amended, particularly Section 176 (c) and (d).

Noise, Hazardous Siting, Airport Runway Clear Zones, EPA Superfund Sites

- * 24 CFR, Part 51, Environmental Criteria and Standards, 44 FR 40860-40866, July 12, 1979 (Revised 1984).

Farmland Protection

- * Farmland Protection Policy Act of 1981, 7 U.S.C. 42 01 et seq., particularly sections 1540(b) and 1541.

Environmental Justice

- * 3 CFR, 1994 Comp. P. 859; 59 FR 7629, Executive Order 12898, February 11, 1994.

Source: Colorado Office of Economic Development, *2001 Guidebook for Direct Economic Development Projects and Revolving Loan Funds*, April 2001.

Table J-2

Environmental Reviews - Type of Review Required Based on Level of Activities

Project and Activity Examples	Subject to NEPA - Environmental Assessment	Categorically excluded from NEPA but subject to other Fed/State regs - Statutory Checklist	Exempt from NEPA and statutory review - requires Clearance form
* Construction of new facilities or extensive renovation which will substantially change the use, size, capacity, or character of the facility or its site.	X		
* Rehabilitation which does not increase unit density by more than 20 percent and which does not require a change in land use, residential class, or zoning; and for which the estimated cost is less than 75% of the total estimated cost of replacement after rehabilitation.		X	
* Acquisition of facilities that are in place and will be retained for the same use.		X	
* Replacement or upgrading of facilities with only a minimal change in use, size, capacity or location.		X	
* Projects which will not change the use, size, capacity, or character of the site.		X	
* Projects involving fire protection equipment.		X	
* Projects which reduce or eliminate material and architectural barriers.		X	
* Engineering and design costs, environmental studies, and project planning.			
* Interim assistance to arrest the effects of an imminent threat or physical deterioration in which the assistance does not alter environmental conditions.			
* Provision of working capital for operating expenses and inventory purchases.			
* Supportive services including, but not limited to, health care, housing services, permanent housing replacement, day care, nutritional services, short-term payments for rent/mortgage/utility costs, and assistance in gaining access to local, State, and federal government benefits and services.			
* Economic development activities, including but not limited to equipment purchase, inventory financing, interest subsidy, operating expenses and similar costs not associated with construction or expansion of existing operations.			X

Source: Colorado Office of Economic Development, *2001 Guidebook for Direct Economic Development Projects and Revolving Loan Funds*, April 2001. No X indicates exempt and no clearance form required.

Table J-3

Environmental Reviews - Review Types and Coverage

	Environmental Assessment (Activities subject to NEPA)	Statutory Checklist (Categorically excluded activities)	Clearance form (Exempt activities)
Historic Properties	X	X	
Floodplain management	X	X	X ¹⁾
Wetlands	X	X	
Vegetation & wildlife - Endangered species	X	X	
- Vegetation impact	X		
Unique natural features - Farmland protection	X	X	
- Wild & scenic rivers	X	X	
Environmental justice	X	X	
Air quality	X	X	
Noise	X	X	
Hazardous siting - Thermal & explosive	X	X	
- Traffic, natural hazards & nuisance	X		
- Airport runway clear zones	X	X	X ¹⁾
- EPA Superfund Program	X	X	
Conformity with comp plans & zoning	X		
Slope	X		
Compatibility & urban impact	X		
Erosion	X		
Soil suitability	X		
Energy consumption	X		
Visual quality & compatibility	X		
Demographic/community character changes	X		
Displacement - persons, jobs, housing	X		
Employment & income patterns	X		
Educational facilities	X		
Commercial facilities	X		
Health care	X		
Social services	X		
Wastewater systems	X		
Solid waste	X		
Storm water	X		
Water supply	X		
Water resources - type, consistency	X		
Public safety - police, fire & emergency	X		
Open spaces, recreation & cultural	X		
Transportation	X		

Source: Colorado Office of Economic Development, *2001 Guidebook for Direct Economic Development Projects and Revolving Loan Funds*, April 2001.

1) Comments and supporting material regarding any possible floodplain impacts or siting near airport runway clear zones are now required as a minimum review regardless of exempt status.

Table J-4

Environmental Reviews - Detailed Components

Type of Review/ Agency Oversight	Requirements/Process
Environmental Assessment - National Environmental Policy Act (NEPA)	<ul style="list-style-type: none"> * Certifying Official completes EA Checklist covering the 30 potential impact factors in Table K-2 indicating specific reviews completed, mitigation taken, and a level of clearance funding as to whether or not the project requires an Environmental Statement (EIS) ¹⁾. * Any floodplain, historic properties, hazardous siting, or other review and mitigation work is completed prior to or concurrent with the EA. * A Combined Notice of intent to request and release funding for projects receiving a finding of no significant impact is published which provides at least 30 days for public comment (15 days local/15 days state).
Categorical Exclusion - Various agencies & statutes	<ul style="list-style-type: none"> * Certifying Official completes Statutory Checklist covering the 12 potential impact factors in Table K-2 indicating specific reviews completed and mitigation taken. * For projects requiring floodplain, historic properties, or other extensive review, a Notice of Intent to Request a Release of Funds (NOIRROF) is published providing at least 15 days for public comment (7 days local/7 days state). * For projects having no specific review and mitigation triggered by the Checklist, no publication is required and a Finding of Exemption is filed.
Historic properties - State Historic Preservation Office (SHPO)	<ul style="list-style-type: none"> * Further review and potential mitigation is required for ground disturbing activities, rehab or additions to properties 50 years old or more, and any property located within a National Register Listing (see Table K-4). * Completion of an inventory record is required for any properties 50+ which have not been previously evaluated. SHPO has up to 30 days to review and determine eligibility for National Listing. * New construction adjacent to historic structures, or previously undisturbed ground, requires SHPO evaluation of site potential for subsurface archeological resources.
Floodplain management - Colorado Water Conservation Board (CWCB)	<ul style="list-style-type: none"> * Further review is required for projects located in the 100-year floodplain as determined by FEMA Flood Insurance Rating Maps, other maps in lieu of FIRM maps, and/or surveyed elevations of site. * A Floodplain Eight-Step process required by Executive Order 11988 is completed to determine appropriate mitigation for projects having no potential alternatives to floodplain location. Examples include compacted fill to elevate new structures above the flood level, and flood insurance for pre-existing structures. * Publication of an Early Public Notice providing at least 15 days for public comment, and a Notice of Explanation on the actions being taken after the comment period is also required.
Wetlands - Colorado Division of Wildlife (CDOW)	<ul style="list-style-type: none"> * Further review is required for projects with potential wetlands impact as identified by various maps and observation. * Consultation would then be made with CDOW officials and Army Corps of Engineers concerning any mitigation required.
Endangered species - US Fish & Wildlife Service (USFWS) and CDOW	<ul style="list-style-type: none"> * Lists of Threatened, Endangered, and Species of Special Concern provided by responsible agencies are being maintained and updated (see Table K-5). * Consultation with USFWS and CDOW is required where there is a likelihood of the listed species within the project area and any mitigation required.
Farmland Protection - Department of Agriculture, US Soil Conservation	<ul style="list-style-type: none"> * Applies to projects which will result in taking current agricultural lands out of production. * In this case, the Soil Conservation Service is contacted and a Farmland Conversion Impact Rating is completed to determine if the proposed land meets the federal definition of "prime" or "unique."

Table J-4 (Continued)

Wild & Scenic Rivers - National Park Service	<ul style="list-style-type: none"> * Designated area covers 8 miles in southeast Conejos and southwest Costilla counties from the Lobatos bridge to the New Mexico state line. * In the unlikely event of business location near this area, consultation with the Park Service will be made.
Environmental justice - US Department of Housing and Urban Development (HUD)	<ul style="list-style-type: none"> * A determination is made concerning whether or not the project will provide detrimental or adverse exposure from environmental hazards that would adversely affect the health of high-risk populations such as minority, low-income, and worker populations. * Applicable to new construction and expansion.
Air quality - Colorado Department of Public Health & Environment, Air Pollution Control Division	<ul style="list-style-type: none"> * The six-county Valley region is classified as an attainment area for pollutants regulated by the Clean Air Act Amendments of 1990 (carbon monoxide, sulfur oxide, lead, particulate matter of a ten micron diameter or smaller, ozone, and nitrogen oxide). * Ground disturbances lasting longer than 6 months or involving more than 25 acres may require an air quality permit. * Asbestos requirements as prescribed in Colorado Regulation No. 8, Part B apply to projects involving demolition or renovation where asbestos is present. * Other concerns include project exposure to or generation of excessive dust, odors, smoke, or vehicle exhaust.
Noise - HUD Environmental Standards	<ul style="list-style-type: none"> * Applies mainly to projects in which people will be spending a lot of time (e.g., day care centers, nursing homes, hospitals, etc). * Review factors include site location within 1,000 ft of a major highway or roadway; 3,000 ft of a railroad; and/or 15 miles of a commercial airport. * The standard for outside noise is 65 decibels.
Hazardous siting, thermal & explosive - HUD Environmental Standards	<ul style="list-style-type: none"> * Applies to project siting within one mile of above-ground storage tanks (excluding residential fuel tanks), transmission pipelines, or loading facilities for hazardous liquids or gases. * Clearance for the project is determined by site location falling within an Acceptable Separation Distance (ASD) from potential hazards which account for differences in types of liquid or gasses, volume, and shielding by dikes or buildings. ASDs are calculated for thermal radiation (including tolerance differentials for people and buildings), and for blast radius when gasoline, propane, or other explosive substances are involved.
Airport runway clear zones - HUD Environmental Standards	<ul style="list-style-type: none"> * Proposed projects located within one mile of a designated commercial airport (San Luis Valley Regional Airport - Alamosa) are subject to further review in order to ensure that projects will not be built near runway clear zones.
EPA Superfund Program - HUD Environmental Standards	<ul style="list-style-type: none"> * A CERLCIS site listing is maintained and a review made to determine that proposed projects are not located in Superfund sites. * Proximity of proposed projects to Superfund sites and any potential impacts are also addressed.

Source: Colorado Office of Economic Development, *2001 Guidance for Direct Economic Projects and Revolving Loan Funds*, April 2001. Presentation and enhancements provided by DRG staff.

1) Preparation of an EIS is considerably more technical and requires the involvement of environmental consultants.

Table J-5

Colorado State and National Register Historic Properties

Property	Designation	Location and Notes
Alamosa County		
Superintendents Residence, Great Sand Dunes National Monument	National Register, 1989	Mosca. WPA project using native materials and vernacular building traditions.
Denver and Rio Grande Railroad Depot	National Register, 1993	Alamosa. Built in 1908 with Spanish tile roof.
Zapata Ranch Headquarters	National Register, 1993	Mosca. Some of these log buildings date back to the 1870s.
Alamosa County Courthouse	National Register, 1995	Alamosa. Example of Mission style built in the 1930's. Still in use for county business.
Bain's Department Store	State Register, 1995, increased 1998	Alamosa. Depression Era commercial building.
Sacred Heart Catholic Church	State Register, 1996 and National Register, 1998	1922-1928 interpretation of Mission style with outstanding murals painted by local artists.
Alamosa Masonic Hall	State Register, 1997	Alamosa. Stamped iron façade associated with the arrival of the railroad.
American National Bank Building	National Register, 1999	Alamosa. 1909 brick commercial building using the Arcaded Block style, popular in the early 20 th Century.
Husung Hardware	National Register, 2000	Alamosa. One of the best small town expressions of Art Deco in the state. Built in 1936.
Denver and Rio Grande Railroad Locomotive No. 169	State Register, 2000 and National Register, 2001	Alamosa. Built in 1883, this narrow gauge, coal-fired, ten-wheeler steam engine remained in service for over 50 years. One of the fastest narrow gauge engines
Mt. Pleasant School	National Register 5/3/2006	Junction of County Rd 3S and Rd 103S, Alamosa vicinity. Built in 1911, the last one-room school in the Alamosa vicinity.
First Baptist Church	National Register 5/22/2005	408 State Ave, Alamosa. Oldest standing church in Alamosa. Construction began in 1907, church epitomizes the Queen Anne style.
St. Thomas Episcopal Church	National Register 3/4/2003	607 Fourth St., Alamosa. 1926 Parrish House and 1930 Sanctuary, Mission Revival style.
Howard Store (Hooper Town Hall)	National Register 2/1/2006	8681 Main St. Hooper. 1891 storefront, with sheet metal siding stamped to resemble rock-faced stone masonry.
Medano Ranch Headquarters	National Register 2/4/2004	Approximately 9 miles northeast of Mosca. Important part of the development of cattle ranching in the San Luis Valley since the open range days of the 1870s.
Trujillo Homestead	National Register 2/4/2004	Approximately 4 miles north of 6N Lane, Mosca vicinity. 1879 Hispanic settlement.

Conejos County		
Pike's Stockade Site	National Historic Landmark, 1961 and National Register, 1966	4 miles east of Sanford. The site marks the spot where, in 1907, Zebulon Pike raised the American flag over what was then Spanish Territory. Now owned by
Denver & Rio Grande Railroad Depot Antonito Depot	State Register 8/31/2006	Antonito. 1880 Denver & Rio Grande Railroad (DR&G) masonry served for over sixty years.
Cumbres-Toltec Scenic Railroad	National Register, 1973	Antonito to Chama, NM. Segment of the narrow gauge railroad built and operated by the D&RG RR. The 1880 railroad formed a link for the transportation of precious metals from the San Juan mining camps to Denver.
Warshauer Mansion	National Register, 1974	Antonito. This 1912 brick and stucco home has a central vacuum cleaning system and a fire control
Engine 463	National Register, 1975	Antonito. Narrow gauge engine built in 1903.

Table J-5 (Continued)

Property	Designation	Location and Notes
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Conejos County Continued		
Florence & Cripple Creek Railroad Combination Car No. 60	State Register 6/9/1999, Boundary Change 8/14/2002	Cumbres & Toltec Scenic Railroad, Antonito to Cumbres. Built in 1897, the first railroad to reach the Victor and Cripple mining districts.
Costilla Crossing Bridge	National Register, 1985	Antonito. Significant for its unusual construction style. The oldest vehicular truss in southern Colorado.
Palace Hotel	National Register, 1994	Antonito. Built in 1890 to service the needs of the railroad.
La Capilla de San Antonio de Padua	State Register, 1997	Los Sauces. Reflects the importance of churches as center of southern Colorado Hispanic communities and the only remaining public/community building of the village of Los Sauces.
San Rafael Presbyterian Church	State Register, 1999	Mogote. 1895 church with an asymmetrical composition is quite different from the typical Territorial
SPMDTU Concilio Superior	National Register, 2001	Antonito. Fraternal organization to combat racism against Hispanos. Construction style popularized the use of steel trusses.

Costilla County		
Fort Garland	National Register, 1970 and State Register, 1996	Fort Garland. Important for its association with the settlement of the San Luis Valley and Southern Colorado.
Plaza de San Luis de la Culebra Historic District	National Register, 1978	San Luis. Established in 1851, this district includes a courthouse, church, cemetery, residences, commercial buildings, the Vega, and the San Luis People's Ditch.
San Luis Bridge	National Register, 1985	San Luis. Built over the Culebra Creek in 1911, it is one of the earliest unaltered bridges of this type in Colorado.
Barlow and Sanderson Stagecoach	State Register, 1995	Fort Garland. A rare example of an Abbot-Downing mud wagon built around 1971.
Salazar House	State Register, 1997 and National Register 1998	San Luis. A 1906 example of ornamental concrete residential construction with Queen Anne detailing.
San Luis Valley Southern Railway Trestle	National Register 1/6/2004	County Road 12, Blanca vicinity. Built in 1910, in service for passengers and freight until 1939.
Rito Seco Creek Culvert	National Register 10/15/2002	Colorado Hwy 142. Two 18-foot spans, constructed in 1936 by Works Progress Administration.
San Acacio San Luis Southern Railway Depot	State Register, 1998	San Acacio. Built in 1910, it is all that is left of the railroad and company the town created.
Sociedad de Nuestro Padre Jesus Nazareno	State Register, 2000	San Pablo vicinity. This circa 1908 elongated adobe building follows the traditional linear plan of northern

Mineral County		
Wagon Wheel Gap Railroad Station	National Register, 1976	Southeast of Creede at Wagon Wheel Gap. Built in 1883, the station is typical of the time period.
Sevenmile Bridge	National Register, 1985	6 miles southwest of Creede. The bridge is structurally significant for its cantilevered ends.
Rio Grande Depot (Creede Museum)	State Register, 1994	Creede. This depot served as the hub of mining import and export activities.
Rio Grande Hotel	State Register, 1995	Creede. Constructed circa 1892 during the silver mining boom, the hotel is one of the few wood structures to survive the town's 1892 fire.
Creede Federal Fish Hatchery	State Register, 1996	Creede. Aided in the preservation of important native and sport fish populations.

Table J-5 (Continued)

Property	Designation	Location and Notes
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Rio Grande County		
Sutherland Bridge	National Register, 1985	Del Norte off US hwy. 160. The use of timber represents an unusual 1924 adaptation of the Warren truss.
Wheeler Bridge	National Register, 1985	Del Norte off US hwy. 160. This 1924 bridge is one of the longest and oldest examples of the Howe configuration.
Monte Vista Library	National Register, 1986	Monte Vista. Small stone building constructed in 1895.
Monte Vista Post Office and Federal Building	National Register, 1986	Monte Vista. 1933 example of Beaux-Arts influenced architecture.
El Monte Hotel (Monte Villa Inn)	National Register, 1990	Monte Vista. Built in 1930, incorporating Mission, and Pueblo Revival styles.
Monte Vista Downtown Historic District	National Register, 1991	Monte Vista. Built between 1889 and 1921, mostly of volcanic rock.
Fassett Department Store	State Register, 1993	Monte Vista. 1881. The first, largest, and longest surviving retail establishment in Monte Vista.
Windsor Hotel	State Register, 1994	Del Norte. Originally built in 1874, with add-ons in 1882 and 1888, this two-story red brick and stucco building is an important example of early community planning and development.
Carnegie Library	State Register, 1995, National Register, 1995	Monte Vista. Built in 1919, in the Colonial Revival style. Funded by Andrew Carnegie.
State Soldiers' and Sailor's Home	State Register, 1995	Monte Vista. The oldest veteran's home in Colorado. Established in 1891. A collection of buildings encompassing the 100-year evolution of the facility as well as a cemetery.
Central School Auditorium and Gymnasium	National Register, 1996	Monte Vista. This 1938 building is the largest auditorium in the San Luis Valley that continues to serve in the same capacity for which it was built.
Keck Homestead	National Register, 1998	Del Norte. An intact collection of log buildings dating from the mid-1870s. Contains a rare 2-story log house and well-crafted barn.
Monte Vista Cemetery Chapel	State Register, 1999	Monte Vista. Built in 1912 in the Craftsmen Style.
Sargent Consolidated School District	State Register, 2000	Monte Vista. 14 buildings, 7 of which were built between 1917 and 1921.
Creede Branch, Denver & Rio Grande Western Railroad	National Register 11/27/2002	South Fork to Creede. 22.8-mile track dating back to 1891.
Denver & Rio Grande Western Railroad Engine No. 40	State Register 8/14/2002	Creede Branch. 1942 railroad locomotive, oldest surviving diesel-electric locomotive, D&RG system.
Aldrich House	State Register 6/11/2003	901 Acequia Drive, Monte Vista. 1885
St. Francis of Assisi Mission Church	State Register, 2002	Del Norte vicinity. Built in 1881. An unusual example of an Hispanic adobe church with a cruciform plan and an apse.
Denver & Rio Grande Railroad South Fork Water Tank	State Register, 2002	Erected in 1881. Only surviving example like it on the 66 mile Creede Branch.

Saguache County		
Carnero Creek Pictographs	National Register, 1975	La Garita vicinity Rio Grande National Forest. Rock art including spirals, crescents, bird tracks, ladders, and
Saguache School and Jail Buildings	National Register, 1975	Saguache. Adobe school built in 1874, the jail in 1908.
Saguache Flour Mill	National Register, 1978	Saguache. 1873. One of the few remaining water powered grist mills in Colorado.
Capilla de San Juan Bautista	National Register, 1980	La Garita vicinity. Completed in 1923. Territorial Adobe style with Gothic Revival influences.

Table J-5 (Continued)

Property	Designation	Location and Notes
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Saguache County Continued		
Crestone School	National Register, 1986	Crestone. Built during the 1880s, this rural schoolhouse continued to serve the area's children until 1949.
Saguache County Courthouse	State Register, 1993	Saguache. Brick Classical Revival style built in 1910.
Saguache Elementary School	State Register, 1993	Saguache. Brick Mediterranean style built in 1915.
Sargent Schoolhouse	State Register, 1995	Sargent. The 1924 building was important in the education and social activities of the community and
Dunn's Block/Means & Ashley Mercantile Company	State Register 8/13/2006	Saguache, 1874 building.
Indian Grove	National Register, 2000	Mosca vicinity. Located within the Great Sand Dunes National Park, this is believed to be a Ute site.

Source: Office of Archaeology and Historic Preservation, Colorado Historical Society, *Directory of Colorado State Register Properties*, updated through 1/15/08.

Table J-6

Threatened or Endangered Species

Common Name	Scientific Name	Status	Counties
Fish			
Rio Grande Sucker	<i>Catostomus plebius</i>	State Endangered	Alamosa, Conejos, Costilla
Rio Grande Chub	<i>Gila pandora</i>	State Special Concern	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
Rio Grande Cutthroat	<i>Oncorhynchus clarki virginalis</i>	" "	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
Colorado River Cutthroat	<i>Oncorhynchus clarki pleuriticus</i>	" "	Conejos, Mineral
Amphibians			
Boreal Toad	<i>Bufo boreas boras (population 1)</i>	State Endangered	Conejos, Mineral
Northern Leopard Frog	<i>Rana pipiens</i>	State Special Concern	Mineral
Mammals			
Black-Footed Ferret	<i>Mustela nigripes</i>	Federal and State Endangered	Alamosa, Conejos, Costilla, Saguache
Grizzly Bear	<i>Ursus arctos</i>	" "	Conejos, Mineral, Rio Grande
Lynx	<i>Lynx canadensis</i>	Federal Threatened, State Endangered	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
Wolverine	<i>Gulo gulo luscus</i>	State Endangered	Mineral, Saguache
Black-tailed Prairie Dog	<i>Cynomys ludovicianus</i>	State Special Concern	
Birds			
Greater Sandhill Crane	<i>Grus canadensis</i>	" "	Alamosa
Ferruginous Hawk	<i>Buteo Regalis</i>	State Special Concern	Alamosa, Conejos
Bald Eagle	<i>Haliaeetus leucocephalus</i>	State Threatened	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	State Special Concern	Conejos, Mineral, Saguache
Gunnison Sage Grouse	<i>Centrocercus minimus</i>	" "	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
Western Snowy Plover	<i>Charadrius alexandrinus</i>	" "	Alamosa
Mountain Plover	<i>Charadrius montana</i>	" "	Conejos, Saguache
Long-billed Curlew	<i>Numenius americanus</i>	" "	Alamosa
Burrowing Owl	<i>Athene cucicularia</i>	State Threatened	
Southwestern Willow Flycatcher	<i>Empidonax trailii extimus</i>	Federal and State Endangered	Alamosa, Conejos, Costilla, Rio Grande, Mineral, Saguache
Mexican Spotted Owl	<i>Stric occidentalis lucinda</i>	Federal listed Threatened	Alamosa, Costilla, Conejos, Rio Grande Saguache

Source: Colorado Division of Wildlife, updated 10/15/07. US Fish & Wildlife Service, Colorado Office, 8/16/04.

Table J-7

CERCLIS Listing of Superfund, Candidate, and Archived Sites

County/site/location	NPL (Superfund)		Archived (completed)	Incident category	Comments
	Yes	No			
<u>Alamosa</u> Denver & Rio Grande Railroad City of Alamosa			9/17/98		No further remedial action planned.
<u>Conejos</u> Cedar Resources .5 miles E of Platoro Reservoir		X		Mines/tailings	Site inspection completed 5/7/96.
<u>Costilla</u> Battle Mountain Gold 3 miles N of San Luis Sanchez Reservoir 8.5 miles S of San Luis			1/6/97 9/27/94		No further remedial action planned. " "
<u>Mineral</u> Creede Mining District East & West Willow Creek		X		Mines/tailings	Site inspection completed 5/20/97.
<u>Rio Grande</u> Monte Vista Landfill Town of Monte Vista Monte Vista Power Plant Town of Monte Vista San Luis Valley Airport Pond Monte Vista Airport South Fork Landfill Town of Monte Vista US Forest Industries Town of South Fork Summitville Mine Summitville			12/8/98 11/4/96 10/10/96 4/3/95 12/23/94		No further remedial action planned. " " " " " " " "
	X			Mines/tailings	Consent decree 9/28/01. Fed Fac ESI start needed.
<u>Saguache</u> NL IND, Mine, Mill Bonanza City U.S. BLM Saguache Mill Site 2 miles NW of Saguache USDA - Bonanza Mining District		X X X		Mines/tailings " "	Removal completed 1/11/02. Cleaned up. Discovery 10/30/96. EPA final financed. Site inspection completed 9/20/94. Federal facility.

Source: U.S. Environmental Protection Agency website, last updated 5/15/02.

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act (superseded by the Superfund Amendments and Reauthorization Act (SARA).

CERCLIS = Comprehensive Environmental Response Compensation Information System.

NPL = National Priority List (designated Superfund site).

Table J-8
Zoning Coverage and Types

Applicable Zoning Regulations by Area ¹⁾

<u>County</u>	<u>Area governed by county</u>	<u>Areas governed by city/county/place</u>
Alamosa	Unincorporated area and places including East Alamosa, Mosca	Alamosa Hooper
Conejos	Unincorporated area and places including Capulin, Mogote, others Towns of Romeo, Manassa	Antonito La Jara Sanford
Costilla	Unincorporated area and places including Jaroso, Garcia, Mesita, San Acacio, others	Blanca Fort Garland San Luis
Mineral	Unincorporated area	Creede
Rio Grande	Unincorporated area and places including Sargent, Alpine Village, others	Del Norte Monte Vista South Fork
Saguache	Unincorporated area and places including Baca Subdivision, Villa Grove, Towns of Bonanza, Crestone, Moffat	Center Saguache

Typical Zoning Categories ²⁾

Rural: Lands existing in a natural state or utilized for growing crops, raising livestock, timber, and resource conservation activities. Approximately 90% of the land area in Alamosa County is designated Agricultural. Conditional use permitting may allow for single-wide mobile homes manufactured after 1976. Multi-section manufactured homes are allowed on permanent foundations.

Residential Estate: Large lot (5 acres minimum), single family, residential development which can accommodate stables. HUD approved multi-section manufactured homes are allowed on permanent foundations if manufactured after 1976.

Residential: Quiet, low-density, residential areas, except in approved Planning Unit Developments (PUDs) which can accommodate apartments. Residential differs from Residential Estate in lot size and frontage. HUD approved multi-section manufactured homes are allowed on permanent foundations if manufactured after 1976. Single-wide

Mobile Home Estate: Similar to residential estates but accommodating single-wide manufactured homes built after 1976 on permanent foundations. Minimum lot area 5 acres with lot width 200 ft.

Mobile Home: Differs from Mobile Home Estate in the size of the lot. Allows for Mobile Home Park under Conditional use. Minimum lot size for Mobile home parks is 2 acres.

Commercial: Covers a full range of retail sales and services, including opportunities for a complete variety of comparative shoppers' goods. The regulations are designed to permit development of commercial and business functions plus certain public facilities which are needed to serve the occupants of the district.

Industrial: Usually reserved for "non-offensive" types of processing and manufacturing which do not produce smoke, odors or noise, and which are compatible with adjacent zoning. Alamosa County considers this type of development as a "permitted use," and requires "conditional use" permits for others which meet Zoning Commission and County Commissioner approval.

Source: 1) SLV Development Resources Group, July 2002. Based on contacts with local government planning depts.

2) Examples based on information reported by Alamosa County Land Use office.