ATechnical and Physical Feasibility Fact Sheet
Alternative 30: Land Use

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1. Definition of Alternative

A-30: Adopt policies to integrate land use and transportation planning and water resource management in all government jurisdictions in the Middle Rio Grande planning region.

2. Summary of the Alternative Analysis

As described in the Water Assembly database, this alternative includes incentives and regulations related to water resource management as well as the land use policies described in Alternative 28, *Infill/Density.* Water resource management is part of a comprehensive, integrated approach to development and growth management. Water resource management strategies are also being evaluated in other alternatives being considered by the Water Assembly, such as those addressing water conservation, wastewater reuse, greywater use, or other similar strategies. Additionally, Alternative 52, *Growth Management,* focuses on combined strategies for growth management. Because there is overlap among the alternatives, this alternative has focused on land use and subdivision development.

Original suggested actions that are incorporated into this alternative are as follows:

- Integrate or create linkages between water management and land use plans.
- Review/approve land use plans for water resource impact at all levels of government.
- Develop land use policies that support water plan goals.
- Use transfer of development rights to protect sensitive areas.

Land use policy can also provide incentives for implementation of the water conserving or water management techniques identified and being evaluated in other alternatives.

3. Alternative Evaluation

3.1 Technical Feasibility

Enabling New Technologies and Status

Linking Development Projects to Water Supply

Under the New Mexico Subdivision Act, counties can require proof of a long-term water supply that is adequate to serve new subdivisions as part of the subdivision approval process. Limitations to this are that there is no consistency in how counties apply the statute in their ordinances, and the act does not apply to municipalities. For example, ordinances can require proof of water for 50 years or 70 years, and the time frames may not be sustainable over a longer term. The definition of "adequate" can vary, and counties have not necessarily technically defined what water availability means. Consistent technical definitions of water availability and adequacy for the counties in the region, as well as a means of evaluating the cumulative effect of multiple subdivisions over time, could be the responsibility of a Regional Water Authority (A-67, *Water Authority/Banking*). New subdivisions within municipalities are typically served by a municipal system, and a municipality could include consideration of system capacity in its land use regulations. The City of Albuquerque, for example, requires a written statement of water and sewer availability for any proposed development project for building permits, site plan or subdivision approval. Again, a jurisdiction that ties approvals to system capacity should have a sound technical basis for evaluating development and implementing such regulations.

Presently, the fact that municipalities do not consistently require proof of available water may move development from rural areas to municipalities. Municipalities in this region do not consistently evaluate the availability of water. Regional consistency between municipalities and counties and a method of evaluating cumulative impacts is needed to effectively tie water supply availability to land use planning. This would be a complex process due to the diverse jurisdictions in the region.

The State of California has used the technique of directly linking land use approvals to available water supply. Since 1995, land use agencies in California have been required to consider water supply when approving a development project. Historically, public water suppliers issued "will serve" letters to meet this requirement. In 2001, two bills (SB 211 and SB 610) were passed that require more specific evaluation and documentation of available water, with much of the burden of documentation on the utilities.

SB 211 applies to residential development of more than 500 dwelling units unless it is within an urbanized area or exclusively for very low and low-income households. The bill applies to a smaller subdivision if the water system serving it has less than 5,000 service connections. Local governments must include as a condition for subdivision approval the written verification from a public water supplier that a sufficient water supply is available to serve the subdivision.

SB 610 requires that public water suppliers prepare a water supply assessment for residential and commercial projects meeting certain size thresholds. The water utility must identify the anticipated water supply and its rights to that supply. Urban water suppliers are required to prepare, adopt, and update an urban water management plan that forecasts water demands and supplies within their service area. If groundwater is a source, the urban water management plan must consider the basin from which water is to be extracted. The plan must also include a description of all projects and programs that will be undertaken to meet projected water demand.

On the positive side, these bills could directly link project level requests for water service to long range plans and encourage suppliers to plan further ahead to develop adequate water supplies.

On the negative side, these requirements create new administrative responsibilities for water systems and potentially increase the cost of new housing. The California building and real estate industries project that new home prices will escalate as a result of the administrative and legal costs associated with compliance with these bills. The bills also place a burden on water utilities to respond to requests and provide detailed documentation of water availability in a timely manner.

Protection of Sensitive Areas

Local governments have several means of protecting sensitive areas from inappropriate development. Areas critical to water quality or aquifer recharge can be identified in a community's comprehensive plan, and the county or municipality can establish zoning for these areas that would restrict certain uses or establish appropriate densities. Local governments in New Mexico have purchased sensitive lands outright as open space, established wellhead protection ordinances to restrict threats to groundwater, established setbacks for new development, and regulated storm water discharge as ways to protect sensitive areas.

One technique included in the Water Assembly's description of this alternative is the transfer of development rights (TDR) is a method for protecting land by transferring the right to develop from one area to another area. The difference between the current and potential use of a parcel, as permitted by existing zoning, is the development right that can be transferred. An area that the community wants to preserve is identified as the "sending site". The owner can record a legal restriction on future development of the sending site, and sell the development rights to the owner of another property, which becomes the "receiving site." By purchasing development rights, the receiving site owners are allowed to build at a higher density than the zoning ordinance would allow if the project did not include the transferred development rights. A similar concept is cluster development within a single property, with land set aside as permanent open space.

TDR has not been used in the Middle Rio Grande planning region, primarily because most development is low density. Unless developers perceive a demand for higher density development than is currently allowed by zoning and this development is supported by nearby residents, few sites in the region are candidates for additional development rights. Cluster development has been used infrequently in the region. The La Luz townhouse project in Albuquerque is an example of a single site with development clustered on a portion of the site. In this case, development is away from the Rio Grande while the property closest to the river is set aside as permanent open space for the residents of the development.

Infrastructure Development Requirements

Infrastructure development requirements would tie development approvals to existing or planned system capacity. Local governments could better link capital improvements to the

timing of new development by identifying growth areas in advance and providing new publicly funded infrastructure to serve these areas in a timely manner. Conversely, local governments have established concurrency ordinances which require that new development is restricted to areas where infrastructure capacity exists or will be available within a specified period of time. This alternative may not alter the type or cost of improvements, but would affect the timing of construction.

If water suppliers do not have the capacity to serve new development, they may either increase capacity through system expansion or refuse to provide services. If a water supplier does not provide service, and local governments have no provision for private utilities, then development will go elsewhere. Planning in a rational way for system expansion, and an equitable sharing of cost between developers and existing ratepayers, may be the preferable method of directing growth in the region. Typically, a public water supplier provides a master plan for its system without any change to existing laws. However, cost sharing would be defined through the supplier's rate structure and modifications to local subdivision and/or other ordinances. To meet future capacity needs, the water supplier must also determine that funding will be available as needed through revenues, developer fees, and other sources as needed. Outside funding sources might include state and federal loans and grants.

Total Time to Implement

This alternative will be implemented over the long-term as new development occurs. However, local governments could begin the process immediately by designing and passing new ordinances and policies.

3.1.1 Physical and Hydrological Impacts

Effect on Water Demand

- A change in land use policy will not have an immediate impact on water demand. The effect will be realized as new development occurs that uses less water than existing development.

- A regulatory link between land use policy and water use can provide an incentive for reduced water demand through higher densities, xeriscaping, storm water management, and other conservation techniques. The effects of these techniques are discussed in the

fact sheets for other alternatives (A-18, *Urban Conservation,* A-22, *Conservation Incentives,* and A-28, *Infill/Density*).

Effect on Water Supply (surface and groundwater)

None.

Water Saved/Lost (consumption and depletions)

This alternative describes ways that local governments can reduce water demand through incentives in its land use policies. Water savings will result from water conservation and other techniques described in fact sheets for other alternatives, primarily A-18, *Urban Conservation,* and A-22, *Conservation Incentives*.

The potential for water savings is only marginally related to land use patterns, as the land use does not necessarily relate to water use unless there is a specific link. Outdoor water use is the major component of residential water use. Most savings from residential development will come from reducing landscaped areas or installing water conserving landscapes. Indoor water use is the more significant component of commercial, industrial and institutional uses. Water savings in non-residential uses may come from conserving water in industrial processes, heating and cooling systems, domestic plumbing fixtures, and water conserving landscapes

Impacts to Water Quality (and mitigations)

Protection of sensitive lands through land use measures could maintain and potentially improve water quality by protecting surface and groundwater at these locations. Integrating wellhead protection into land use policies could also protect water quality.

Watershed/Geologic Impacts

None.

3.1.2 Environmental Impacts

Impact to Ecosystems

Land use policies that protect sensitive areas would have a positive impact on ecosystem by protecting water quality and, potentially, critical habitats.

Implications to Endangered Species

Land use policies could set aside and protect sensitive areas, including habitat for endangered species.

3.2 Financial Feasibility

3.2.1 Initial Cost to Implement

Costs for developing, implementing and enforcing new regulations and programs depend upon the size and extent of the programs, the number of jurisdictions and agencies involved, and the staffing for the various programs. Because this alternative could be implemented in any number of ways, specific costs cannot be determined. However, the types of costs expected to be incurred from this alternative include:

- Administrative cost to local governments and water utilities.
- Increased housing costs that result from costs incurred by developers to verify water availability and development fees for water rights acquisition.
- Administrative costs for special studies and staff training.

See A-67, *Water Authority/Banking,* for costs associated with creation of a regional water management authority.

3.2.2 Potential Funding Source

Local governments will likely fund the cost of developing new regulations, special technical studies, staffing, and staff training. Some of the costs could be shifted to new development through impact fees, in which case costs would be borne by homebuyers and commercial building owners and reflected in higher home prices and rents.

Potential funding sources for any costs that are not a landowner responsibility under the normal development process include utility rates, general obligation bonds, and state and federal grants.

3.2.3 Ongoing Cost for Operation and Maintenance

The primary ongoing program administrative costs to local governments and water utilities would be additional staff to administer regulations and provide the technical expertise needed for assessments of water system capacity.

3.3 Other Considerations:

- Complexity of regulations and implementation process.

- Need for jurisdictions to amend existing regulations, preferably in a consistent way for the region.

- Need for ongoing staff training.

- Potential impact on local real estate markets, including increased cost of development and likelihood that developers will seek opportunities in jurisdictions with simpler regulations.

- Need to develop the technical knowledge required to draft and enforce regulations.

- Technical studies will be required to support scientifically based regulations. For example, if a jurisdiction adopts a policy to protect critical habitat, the jurisdiction must identify the locations of critical habitat and the criteria that will be used to evaluate development.

- Development constraints and opportunities should be identified in local land use plans.

- Need to understand who will bear the responsibility and costs of regulations. Costs borne by the developer of a new subdivision will be passed to the people who buy land and build homes in the subdivision. Costs borne by the local jurisdiction will be spread over the jurisdiction's residents and businesses or utility ratepayers. Local governments must act fairly and anticipate the consequences of either development costs or tax increases.

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