Proceedings of

Integrating Land Use and Water Planning in New Mexico

Thank you for attending the Utton Center's April 8 seminar "Integrating Land Use and Water Planning in New Mexico." The purpose of the event was to bring together a group of interested people to examine how to better coordinate local, state and regional water plans with local land use plans and development decisions. [Link to Program] The Utton Center has received lots of positive feedback on the event, with many people expressing the view that although this is a tough subject to tackle, it is of critical importance to the State.

One of our goals was to bring together two disparate groups: land use planners and water resource professionals who historically have rarely interacted. While the need for communication between water resource managers and land planners may seem to be obvious, it is evolving slowly, in large part both because these two groups have little understanding of what the other is facing and because of institutional constraints. We sought to bring new people into the discussion to broaden awareness of the issues, introduce people working on different parts of the big picture to each other, and help everyone understand more about the many processes that take place when land is developed.

The day-long event in Albuquerque brought about 120 people together from across New Mexico. Nearly all parts of the State were represented: Las Cruces, Farmington, Taos, Rio Arriba County, Las Vegas, Catron County, and Rio Rancho, to name a few. Click here to see who attended. And people came from different disciplines and backgrounds: land use planners, water resource professionals, elected officials, water and land use lawyers, UNM law and graduate students, the development community, as well as environmental and community groups. Through panel presentations and breakout sessions, participants learned about the issues and explored ideas to improve land planning and water resource integration.

INTRODUCTORY REMARKS

Moderator Tim Karpoff started the day off with his own observations about the disconnect between land use and water resource planning. In working with land use planners in the Albuquerque area, the topic of water rarely comes up. Planners just assume water will be provided by the utility. Conversely, in his work with water quality/water resource professionals on a watershed plan for stormwater and innovations in low impact development, we never discuss the interplay in how these innovations will work with changes in land use patterns. Everyone is working in their own disciplines – planners, hydrologists, engineers, lawyers, and lay citizens – and we all have our respective specialized ways of looking at things. In this complex area, the essential need to better integrate land use and water, there are lots of questions, but no easy answers. He asked the participants to step back today and think about how all the parts can fit together.

Susan Kelly discussed her perspective on the many disconnects facing people working in land use and water. Land planners are driven by many factors: schools, transportation,

neighborhood concerns and economic development. Water may not be high on the list. On the other side, water managers are focused on meeting demand. They are not always interested in the land use approval process. Oftentimes, the two groups are working in separate silos. With population growing, projected impacts on water supply due to climate change and long-term drought, it's time to get smart about how we grow so that we protect our water supply, streams, and rural areas, yet still support healthy economic growth. She is hopeful while the economic downturn has slowed development, it may be a good time to work on how to improve our processes.

There were important topics covered at an earlier Utton Center workshop on Land and Water Planning in the Middle Rio Grande Valley. Click here for 2008 Program. Those presentations produced a wealth of information that is useful to our understanding today, including: a detailed description of the OSE process for subdivision review, Link to John Longworth presentation, overviews of the State, regional, and 40-year water planning processes, discussions of various municipal water conservation strategies, Link to Dale Lyons presentation, agricultural preservation issues and strategies, Link to Cecilia McCord presentation, and descriptions of master planning and zoning processes in Bernalillo, Santa Fe and Valencia Counties. [Link to a summary of all presentations.]

Susan provided the group with an overview of a White Paper, "Land and Water: Making the Connection," Link to White Paper, included in the conference materials and she introduced the authors: Conci Bokum, Barbara Calef, Mary Helen Follingstad, Alan Hamilton, Joanne Hilton, Susan Kelly, Sigmund Silber, and Carol Romero Wirth. The paper describes the Land and Water Connection Problem and recommends strategies that could be considered. As the day went on, and particularly during the breakouts groups, it became apparent that there is broad agreement on the importance of the topic: how do we better connect land use and water planning?

Conci Bokum spoke to the big picture: where are we headed given what history tells us about the magnitude of drought in the past? Using a chart that gives an historical picture of drought in New Mexico over 2000 years, she noted that not only is 2011 a very dry year to date, but drought occurs frequently. Link to Drought Chart. The Gussino-Mayer tree ring chart shows that the drought in the 1950's – which caused great hardship even though there were many fewer people here – was actually average over the 2000 year period reflected in the chart. In addition, one of the consequences of not having enough surface water has been to increase our dependence on groundwater, leaving us now with less groundwater for dry years. She reflected that given the growing imbalance between demand and supply, this is a good time to improve the links between water and land use – which is how growth is manifested.

She noted that many communities in New Mexico have made great progress in linking land use and water, but also noted that we are likely to face severe water shortages in the future which we ignore at our peril. Unfortunately, there is no single, simple solution. There are many factors working against linking land and water – the most obvious being that primary responsibility for water resides with State Engineer and land use is managed by local governments. A long list of difficult actions developed to bring land use and water availability into balance – most of which appear in the materials that accompany this event – would work only if a fair number of them were to be implemented. She hoped that this conference would help build the resolve to improve our prospects for the future.

SPEAKERS AND PANELS Link to Bios

Science, Supply and Demand, and Land Use Tools

The first part of the day was geared towards *education* – what do we know about our water supply and what tools do we have to match water availability to land use? John Shomaker described the water availability side of the picture: what processes, policies and laws does the State Engineer follow? He noted that the State Engineer has jurisdiction over water transfers and appropriations and is required to consider, "the public welfare of the state." But there are no guidelines for deciding what is best for the public and he suggests that public welfare considerations would more properly belong with elected governing bodies, assisted by their planning staffs. John's paper is a clear, concise description of water policy, law and hydrology and is worthwhile reading for all New Mexicans who want to understand how water is managed in the State. Link to John Shomaker paper.

Rolf Schmidt-Peterson discussed the multi-faceted functions of the Interstate Stream Commission and the great challenges the agency faces. He described the quantity of groundwater pumping rights in the Middle Valley; and the implications if all of the pumping rights are exercised to meet future demand and agricultural water rights are retired in order to offset pumping effects to meet New Mexico's obligations under the Rio Grande Compact. Link to Rolf's presentation. Namely, that if there is sole reliance on Middle Valley agricultural water rights, there could be very little agriculture left.

Joe Quintana spoke regarding the many tools available to planners to coordinate land use decisions with water availability: zoning ordinances, subdivision regulations, building codes, water conservation ordinances and environmental regulations. He re-stated the basis of the apparent disconnect between water and land use planning: Planners assume water will somehow be available, they consider water as a component of infrastructure, and they emphasize economic development goals. Water Managers are focused on water supply and demand and figure they have no control over land uses; they just need to be prepared to meet demand.

Planning and zoning around the New Mexico – and the connection to water

Next, we discussed how the two issues are being treated around the State in several current planning initiatives. Santa Fe County, the City of Rio Rancho, Dona Ana County and Rio Arriba were all represented, sharing plans and experiences.

Santa Fe County, after following a general plan for many years that was intended to tie land development to hydrologic zones, has adopted a Sustainable Growth Management Plan. Link to Kathy Holian presentation. The previous plan had the unintended effect of promoting sprawl development. The new plan ambitiously integrates water elements into its goals and growth considerations, but the "rubber will meet the road" when the Sustainable Land Development Code is adopted. The County is starting that process now. Rio Rancho is anticipating growing from 81,000 people to 210,000 people by year 2035 and is struggling with antiquating platting – 75,000 platted lots! Link to John Korkosz presentation. They are also looking at the prospect of two huge developments in Sandoval County, adding another 54,000 acres of development, and are exploring all potential sources of water. Xeriscaping is required in the front yard of single family homes, and homeowners can have traditional turf landscaping in

the back. Dona Ana County is wisely working on a comprehensive plan that addresses both the City of Las Cruces and Dona Ana County together. Link to Roger Hedrick presentation. Water is being dealt with in a subcommittee that also addresses community facilities and utilities and there is some attempt to coordinate planning activities with the Lower Rio Grande Regional Water Plan.

Patricio Garcia described Rio Arriba County's forward-thinking zoning to encourage clustering of new development in a way that is intended to preserve agricultural lands. Patricio provided background. In 1987, Rio Arriba, with the help of expert Anita Miller, adopted its first subdivision regulations and in 1995, enacted the initial zoning ordinance. The zoning was very controversial with citizens and developers alike. Citizens thought the commission had gone overboard in "telling us what to do" and developers claimed their property values were negatively impacted. Leadership is hard he said. Now they are trying to preserve quality of life – preserve their irrigated land – and not impede economic growth. Phil Kilgour added more information about the County. Most of the development runs along the rivers and there are three major types of platted lands: small irrigated parcels (3 acres or so such as in Chimayo); parcels that are long and narrow – sometimes ½ mile long and only 60' wide - located along the Rio Grande and the Rio Chama; and, further north towards Chama, large parcels of hundreds of acres that are primarily pasture. It's hard to develop an ordinance that covers all types of land parcels. Under the new zoning ordinance, if an application for development comes in, the planning commission checks to see if there is irrigated acreage. If so, the property is limited to 30% maximum developed area; 70% must be irrigated agriculture (which includes certain park-type uses). There is also a provision that water rights, if no longer needed, are to be put into a water bank run by an acequia association or the County. This is a brand-new system, still being developed.

Keynote:

Sarah Bates, our keynote speaker from the University of Montana, Center for Natural Resources and Environmental Policy, Link to Center, offered a broad perspective on the issues from around the West. The problem we face is long-standing. Historically land use and water planning have been separate decision-making processes. In most states, land use planning is the responsibility of local officials, while water allocation is administered by State officials. Now, it's becoming clear that local land use decisions are running head-on into concerns about sustainability of water supplies and the impacts of water use on ecosystems and other important public values. Link to Sarah Bates' paper.

Sarah provided an overview of assured water supply statutes across the West and in Florida. There are several different types of statutes and they vary in their effectiveness. No state has achieved the perfect law, that is: a compulsory requirement that all development (of whatever size and location) comply with a defined hydrologic review to show that there is substantial proof of wet water and linkage of the analysis to existing water planning processes or documents.

> *[Note: In New Mexico, the hydrologic standards for subdivision review vary by county; there are numerous exceptions, such as the family transfer and small lot split exemptions; there is not a consistent evaluation of the cumulative effects of*

individual approvals on water supply; and the review is not interconnected with other plans.]

There are some good models in other states: California outlines a good process for the scope of hydrologic review. But there is no consensus on the ideal length for a planning period, i.e., how far into the future should water supply be proved? Plans vary from 20 to 100 years. Bates prefers 50 years or more, but hoarding of water rights is a concern. Link to Sarah Bates presentation.

Water planners tend to look only at population projections when thinking about long term water requirements – or they focus on current development approval as opposed to long-term planning. Planning laws fail to affect sprawl, and do not ensure meaningful consideration of the environment, equity, or economic considerations. A higher level analysis is needed early in the process. States could strengthen the requirements for a water resources element in comprehensive plans, for example requiring that these plans:

- Identify the known supplies of water for future development
- Quantify the demand that would result from projected population growth; and
- Analyze how demand will be met by available supplies (or what additional water will have to be obtained).

"This level of analysis at the broader planning stage may prove more useful than asking for assurances that water is immediately available once a particular development is under consideration. It would be particularly useful if land use planners worked in close cooperation with water planners in this exercise in long term thinking and if the public were involved in a broad dialogue about the choices inherent in such planning."

Development, Economic and Political Concerns

Katherine Martinez, representing the Homebuilders of Central New Mexico and Kathy McCoy, former NM State Representative, closed the presentation portion of the day. The Homebuilders of Central New Mexico are pursuing innovative standards for new home construction. They have initiated the Build Green New Mexico program which certifies homes based on the level of efficiencies built into the home. They are working in cooperation with the Albuquerque Bernalillo County Water Utility Authority to promote water conserving home construction through design guidelines and incentive programs. Link to Katherine Martinez presentation. The homebuilders are looking at individual design standards and not necessarily at cumulative impacts of development, although they do have certifications for larger scale developments. The business community wants processes standardized and streamlined.

Kathy McCoy spoke from her personal experience and her experience as a long-time legislator on the Interim Water and Natural Resource Committee. Before we can integrate land and water planning we need to know how much water we have and how it is allocated. The problem is there are people and entities that aren't interested in finding out how much water we have in the State, which may make sense if you're a land owner that hasn't yet developed your land, or a business that needs significant water to operate, or a municipality that wants to expand to increase its tax base.

It is going to take a defining moment for land and water to become integrated -- more than what we've been experiencing with long term drought and the water level in Elephant Butte dropping lower and lower. Quantifying water resources will almost certainly lead to restrictions and that means it will cost someone money. Given the complexity of water law, and how deeply emotional people are about water, these are tough issues for legislators to take on. So, no matter how logical it may seem to quantify the water supply and plan your land uses around that, it often leads to gridlock in Santa Fe.

Kathy described a vivid example of the disconnect between land and water:

A developer in the East Mountain area wanted to build 4,000 homes and two golf courses on 8,000 acres. Unhappy with Bernalillo County's findings on water supply, he approached the municipality of Edgewood, 15 miles away and in a different county (Santa Fe County). He struck an agreement with Edgewood for a shoestring annexation. So even though the property is located in Bernalillo County, it is now subject to Edgewood's less stringent zoning requirements, with no serious requirements to prove water availability. In theory, the development could have come in with individual domestic wells and 12,000 new residents in an area that is already water-challenged. The situation really shows what can happen when there is such marked inconsistency state-wide among municipalities and counties; illustrating the common sense in getting land and water planning integrated.

Kathy went on to discuss the legislative process and the multiple voices at the table in water issues such as regionalization. She believes that water is one of the top issues in the State and she would like to see it get the attention it deserves. Communities constantly have to spend time, energy and money pushing back. She would love to see some predictable laws that have teeth.

BREAKOUT GROUPS

In the last part of the day, participants had a chance to talk with each other in small groups and share ideas about approaches for better integration of land and water planning. Many people stayed and participated in the group discussions. Each group was tasked with developing its top achievable priorities and bringing them back to the full group. A summary of the groups' discussions and suggested actions – is available here: Link to Discussion Group report.

THANKS!

Thanks to all of the participants for coming and sharing your time, energy and ideas. Special thanks to all of the speakers and moderators and to the following people who helped with the event:

Tracey Kincaid – Institute of Public Law/Utton Center, UNM School of Law

Torild Kristiansen – Utton Center

Joanne Hilton – Hydrologist

Conci Bokum – 1000 Friends of NM

Louise Pocock – UNM School of Law, student

Tim Karpoff – Karpoff and Associates
Sig Silber – RG Chapter of the Sierra Club
Mary Helen Follingstad – AICP
Alan Hamilton – NM Wildlife Federation
Carol Romero Wirth – MPP, Esq.
Barbara Calef – League of Women Voters
Liz Zeiler – Interstate Stream Commission
Ashleigh Morris – UNM School of Law, student
Summer McKean – UNM School of Law, student
Also thanks to the Thaw Foundation

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May 16, 2011