

CHAPTER 3

WATER RESOURCE ISSUES, GOALS AND OBJECTIVES, AND POLICIES

ISSUES:

Issues impacting how White Pine County manages its water resources include the physical environment, the legal and regulatory framework, the planning context, the need to integrate water resource planning with the County's other planning efforts, economic development trends and strategies within White Pine County, and trends outside White Pine County on the regional, national, and global level.

Physical Environment/Geological Setting:

White Pine County's geology determines how water resources are stored and transmitted. The regional hydrologic conditions are poorly understood because of the area's geological history. The distribution of geologic units and the relationships between aquifers is varied and because aquifers are not continuous and are broken horizontally and vertically into hundreds of discrete compartments that are bounded by fault zones or rocks with contrasting hydraulic properties. For purposes of permitting water use, the Division of Water Resources considers the basins to be closed so that water will not transfer from one to the other. However the question of the relationship between the basins remains a concern in White Pine County. This is especially critical if large amounts of water are transferred out of one basin and transported out of the area. The Basin and Range Carbonate Aquifer System Study to be released in 2007 will help to answer basic questions about the geologic nature of White Pine County's water resources.

Climate:

White Pine County has a high desert, semi-arid climate and Basin and Range topography. The County's average annual precipitation is nine inches, which is average for the state of Nevada. Precipitation is normally light at lower elevations during all months of the year. At higher elevations, precipitation is much greater with snow accumulations to considerable depths. Much of the snowmelt irrigates crops in nearby valleys. Drought is common and expected. The Ely City Engineer reports that historically, Murry Springs, responds to drought conditions and climate changes with approximately four years' lag time. White Pine County's average potential evaporation rate exceeds the overall annual precipitation rate with actual average evaporation ranging from 45 to 51 inches. On an annual basis as much as 90 to 95 percent of the total annual precipitation is lost through evaporation and transpiration and only an estimated 5 to 10 percent recharges the ground water regime. The length of the growing season ranges from 100 to 120 days impacting the type of agricultural production that can be developed.

Legal and Regulatory Framework:

White Pine County's latitude in managing its water resources is constrained by the provisions of Nevada state water law, federal and state environmental regulations, and the fact that over 90 percent of the land in the County is administered by federal agencies. (See Attachment 1)

Available Data:

White Pine County's ability to understand and manage its water resources is further complicated by the lack of adequate data available regarding environmental factors, water commitments, and water use. Further study is needed to fully understand and define evapotranspiration rates in White Pine County's basins. In addition, the process to determine supplemental surface rights is tedious and requires substantial staff time available to review and adjust surface water rights to account for supplemental water commitments. Without that determination, water commitments remain overstated in most of White Pine County's basins. Finally, White River, Spring, Snake, Steptoe, and Newark Valleys list substantial vested water rights. Very few of the vested rights have been adjudicated and certificated. Before the County and state can accurately determine the level of water commitments in a basin, the vested rights need to be addressed. Completing the three areas of data is costly. Neither the County nor the State Engineer's office has had the staff available to complete the steps needed to provide accurate information on supplemental commitments, evapotranspiration rates, and vested rights.

Planning Context:

The Water Resource Plan is based on a fifty-year time frame, making it the longest term planning process in the County. Predicting growth and development over a fifty-year period is especially difficult in a County where the primary economic mainstay has been mining. Throughout White Pine County's history, community and economic development planning has been subject to the boom and bust cycles of the mining industry, making it very difficult for the County to project long term strategies for development, maintenance, and improvement of its facilities.

Planning activity within the County has been grant dependent for the past two decades. The Water Resources Plan, the County's Land Use Plan, and Public Land Use Policy were all completed in 1998-99 and are all in critical need of revision. The County is working to update all of its planning documents. The County is working to integrate all of its planning efforts so that its natural resources, land use, economic development and community development planning are consistent their goals, objectives, and strategies.

Federal land management agencies have begun to renew their planning efforts. The Ely District Bureau of Land Management Ely Resource Management Plan is in draft form and the Humboldt Toiyabe National Forest is beginning its Forest Plan process. The County is working with the agencies on both planning processes. In addition, the County is participating in several Environmental Impact Statement processes for projects

that will have economic and environmental impacts and it is working with the Congressional Delegation on the potential of a Public Lands Bill that will include designation of wilderness areas as well as disposal of public land for development purposes. Federal planning and environmental review activity on projects that may impact the County require substantial time to review documents and participate in the process.

Most of the County's basins are shared with other counties in the state of Nevada. Only four basins, Tippett, Pleasant, Newark, and Jake's Valleys are located entirely within White Pine County. In addition, Snake, Deep Creek, and Hamlin (east of Lincoln County) are shared with Utah. White Pine County's planning for water resource protection and use are further complicated by differing perspectives, needs, and issues in neighboring counties as well as differing state law in the basins shared with Utah.

Economic Development Trends and Strategies Within White Pine County:

Historically, White Pine County's economy has been natural resource based and the economic mainstay was mining supplemented by agriculture and in more recent years, tourism. With the closure of the copper mine in 1978, the County was forced to look for ways to diversify and strengthen its economy. In the past twenty-five years, the County has worked diligently to develop and stabilize its economic base and reduce its dependence on mining. By 1990, the location of Ely State Prison and growth of the tourism industry made noticeable inroads in the dominance of mining in the area's economy. In 1999, the County and City began working to acquire the Nevada Northern Railroad tracks to support existing and new industrial activity. The tracks and the land under them were acquired in 2006. In addition, grant funds have been secured to renovate the tracks and allow the reinstatement of rail freight service. The potential of rail freight service and the availability of permitted water rights for power generation put the County in an excellent position to attract interest from potential coal fired electrical power plants. It is currently working with two potential plants, both of which have identified preferred and alternate sites in Steptoe Valley. With potential for transmission capacity to serve the coal-fired plants, the County is also working closely with wind energy projects to develop renewable energy resources in conjunction with the coal plants. The potential of an energy development industrial cluster opens the door for other renewable energy projects including biomass, solar ponds, and pumped storage; agricultural production for biodiesel, and continued exploration and development by the petroleum industry. By 2006, the County is again in a growth pattern with the full operation of the copper mine, increasing tourist trade, the development of new housing for retirees moving to the area to enjoy the outdoor recreation, and new small industrial firms moving to the area for quality of life. In 2006, the County faces critical issues of workforce availability and lack of affordable housing.

Economic Development trends and strategies within White Pine County point out two underlying issues: 1) Continued growth of industrial sectors, primarily in the areas of natural resources (mining and agriculture), energy development, and metal fabrication and increasing tourism activity now converting to a recreational sector investing in property and homes in the area highlight the need to achieve a balance between industrial growth and quality of life issues and 2) The variety of economic development potential in Steptoe Valley, which may all begin to compete for water resources in that basin may require the County to explore inter-basin, intra-county transfers of water to support the growth.

Factors Outside White Pine County:

On a regional level, the continued population growth of the southwestern United States and the desire to maintain lifestyles emphasizing outdoor activity including swimming pools and golf courses in the arid southwest, are placing a significant strain on traditional sources of water to support urban and suburban areas. The pressure to support growth with water resources from rural areas, inter-basin transfers, and the increased activity of private water purveyors viewing water as a commodity to be transferred to the customer are all issues that White Pine County is facing and will continue to have to address.

National factors include policy changes that could impact the economic viability of agriculture, mining, and industrial activity in the County. A focus on energy independence might encourage more oil exploration in the area. Efforts to encourage development of renewable energy source might place the County in the center of a renewable energy development cluster.

Over the next fifty years, global issues of market and technology will have significant impact on the County's ability to develop new products and strengthen its economic base. The County is well aware of the impacts created by the mining industry's responsiveness to changes in market conditions. Technology may enable area mines to reduce costs and withstand price fluctuations. It may allow the mining industry to expand into resources that have not been economically feasible to extract. Changes in market and technology can influence agricultural activity, transportation, communication, and development of new products all of which will not only impact White Pine County's economic development efforts but the manner in which it uses its water resources as well.

GOALS AND OBJECTIVES:

The County has identified two primary goals for management of its water resources:

- 1) Maintaining the quality of its environment
- 2) Maintaining the quality of life for its citizens

Objectives and Strategies:

The County has identified primary objectives and a short-term action plan for each of its goals.

Goal 1. Maintain White Pine County's environmental quality:

1. Establish a County Natural Resource Department to provide staff and expertise required to carry out the water resources program.
2. Develop the water resources inventory and baseline, identify areas of critical environmental concern, areas demonstrating loss of environmental quality, and standards of environmental quality
3. Improve available data to understand nature of White Pine County's water resources, commitments, demand, and availability for development by working with the State Engineer to define supplemental water commitments in each of the County's basins, working with the State Engineer to conduct evaporation studies and to continually refine the evapotranspiration rates identified for each of the basins in White Pine County, and by working with water rights holders and the State Engineer to address vested water rights in the County's primary basins to develop an accurate accounting of committed water rights.
4. Initiate a monitoring program
5. Establish procedures for annual review and implementation of strategies to maintain and improve environmental quality
6. Complete the Update of the County Land Use Plan and Public Land Use Policy and integrate recommendations with the recommendations of the Water Resource Plan. Coordinate all natural resource, land use, economic development, and community development planning.

Goal 2. Meet the needs of the Citizens of White Pine County

1. Identify economic development potential by industrial sector for each hydrographic basin in White Pine County
2. Identify Steptoe Valley as an area of special concern because of the range of potential economic activity requiring water.
3. Coordinate recommendations of White Pine County's Land Use Plan, Open Space Plan, and Comprehensive Economic Development Strategy with the Water Resources Plan

POLICIES:

Water Quality, Public Health and Safety:

White Pine County has identified the protection of its water quality and drinking water supplies as a high priority. In the past two decades, the County, the City of Ely, McGill Ruth General Improvement District, and the Baker General Improvement District have compiled millions of dollars in grant and loan funds and local matching funds to carry out development of new wells, water, and waste water projects. Water health protection issues that have been identified include sources of potential contamination, water quality of domestic wells, and wellhead protection.

The City of Ely has adopted a wellhead protection plan and is making progress is accomplishing the objectives it outlines. The McGill/Ruth GID is in the process of developing its Wellhead Protection Plan, Baker is working toward funding for a Wellhead Protection Plan, and the County Commission has approved development of a countywide Wellhead Protection Ordinance.

The City has identified the protection of Murry Springs as its most critical water quality issue. The springs are the City's primary water source and sit on the southwestern corner of the community where US Highway 6 makes a steep decline from Murry Summit on the southwest and the US 6/50/93 bypass approaches downhill from the east. As truck traffic south on US 6 and State Route 318 has increased significantly over the past five years, the Municipal Utilities Board has become increasingly concerned about the potential of a hazardous materials spill in the vicinity of the springs. It has completed a study to determine how best to protect the springs and the City is in the process of developing funding to implement the recommendations. In addition, the City of Ely has identified the need for an additional well to provide a sufficient back up water source if the springs are contaminated

The City of Ely closely monitors any potential impact of its wastewater treatment plant and sanitary landfill on groundwater in the vicinity. The City has recently invested \$3 million in improvements to its wastewater treatment facility to allow it to operate at capacity without violating the standards set by the Division of Environmental Protection. It has established operations and monitoring standards for the landfill to protect groundwater resources and it is working toward the long-term solution of relocating the landfill.

As growth continues in the urban interface area in Steptoe Valley, there are an increasing number of homes being constructed on 2.5 to 5 acre lots in the area surrounding Ely. The County has identified the need to monitor any potential impact on groundwater quality as the concentration of septic systems continues to increase.

The collection systems in McGill and Ruth were undersized, poorly mapped, ran through private property (often through basements of homes), and were subject to frequent breaks. The General Improvement District has recently completed a \$7 million project

to replace the aging and inadequate sewer collection lines in the two communities. It is currently upgrading the sewer ponds in Ruth and completing a back up water source in McGill. The most critical need remains an adequate water source for Ruth including improvements to the collection system at the Ward Mountain springs, improving the pipeline to the community, and a new well as a back up water source for the community.

The Baker General Improvement District has adequate water and sewer capacity to allow growth in that community, but needs to secure water rights for expansion of its water supply. Its applications are junior to the Las Vegas Valley Water District applications. The communities of Lund and Preston are zoned for one-acre parcels and residents rely on wells and septic systems. The County secured funding to test the wells and explore the potential of a water system. Although no contamination was identified and the communities chose not to pursue a water system at that time, the County continues to monitor the water quality issues in that area. The community of Cherry Creek is served by a privately owned water system and septic systems. Two years ago, the residents recently approached the County Commission with concerns about quality and cost of their water service. The Commission worked with the State Bureau of Consumer Health and Division of Environmental Protection to address the issues.

Countywide concerns about Pinyon-Juniper encroachment and the fire hazard it presents are of critical concern, especially in the urban interface areas surrounding the County's communities. Fire risk assessments show that there is the potential for large, devastating fires that could threaten population centers. The County has completed an urban interface study and established development policies regarding defensible space, available water supplies, and construction standards. Water supplies must be adequate to meet the needs for fire protection.

Conservation and Reuse:

White Pine County has historically identified water conservation as an important element in its management of water resources. For example, during Kennecott's operation of the smelter in McGill, it used 15,000 acre feet per year, 9,000 acre feet of new water and 6,000 acre feet per year in recirculated water. Kennecott continues to use its water resources to irrigate the tailings that were generated through decades of operation. Much of the tailings have been reclaimed as productive agricultural land for livestock. In addition, Kennecott is working with the County, the Division of State Lands, and Rocky Mountain Elk Foundation to sell 6,000 acres of land and 53 c.f.s. of water rights for development of a Wildlife Management Area encompassing Bassett Lake so that it can be restored as a prime fishery and to restore wetlands used by migratory waterfowl, deer, elk, and other wildlife. The Bassett Lake project will provide and recreational opportunities for residents and visitors, increase tourism opportunities, especially for the town of McGill, and improve wildlife habitat.

Agriculture is often cited as a source of inefficient uses of water. However, area ranchers installed 125 miles of pipeline that has increased water conservation over earthen ditches by 80 percent. Ranchers and farmers have completed 25,000 acres of land leveling or land smoothing and sprinkler irrigation; and all of the irrigated farm ground in the county has approved 1985 Food Security Act Conservation Plans for each farm or ranch over forty acres. The total agricultural land covered by conservation plans is 231,000 acres.

Both Ely Municipal Water System and the McGill Ruth GID have metering policies in place and are gradually converting new water connections to meters. All three communities have stringent policies in place to limit outside watering schedules during the summer months. The City of Ely maintains a lease for the use of overflow from Murry Springs for a bottled water plant. It treats the effluent from its wastewater treatment plant so that it can be used for irrigation on the city-owned George Ranch property. April through November, the treated water irrigates 90 acres of farmland and during the winter months, December through March, the treated water is piped to two rapid infiltration ponds on the Georgetown Ranch.

Drought Conditions:

White Pine County experiences periods of drought conditions much the same as southern Nevada and Utah. Surface water is almost fully appropriated in White Pine County, the primary water source for the City of Ely is Murry Springs, the town of Ruth relies on the Ward Mountain springs, and surface water is responsible for the majority of all water commitments. White Pine County supports storage of surplus surface water in aquifers underground or in above ground reservoirs to enhance surface and ground water supplies in years when drought conditions results in inadequate supplies of surface water. Aquifer recharge and recovery and aboveground storage can also support multiple purposes of recreation and improved wildlife habitat.

Water Supply and Allocation:

White Pine County supports utilizing water resources within the boundaries of White Pine County to achieve its goals of environmental quality and quality of life for its residents, including economic development and diversification to supply jobs, business activity, and public tax revenue. White Pine County views managed growth needed to enhance the local economy and ensure the economic welfare of area residents as beneficial. White Pine supports a balance of allocation of water among environmental needs, agriculture, industrial and energy development, residential development, wildlife, and outdoor recreation. Although not viewed by the State Engineer as a consumptive use, the County believes that it must account for evapotranspiration as a valid use of its water resources. White Pine County's environmental quality and diversity is a function of the delicate balance of surface water characteristics and vegetation that feeds not only livestock and people, but also wildlife and wild horses.

Designated Basins:

North Steptoe Valley: In 1980, the State Engineer restricted access to water for irrigation as a non-preferred use and in 1983 designated industry as the preferred use for water.

Inter-basin Transfers:

White Pine County has identified the potential need for intra-county, inter-basin transfers to import water from adjoining basins in the County to Steptoe Valley to encourage the development of its municipal, commercial, and industrial opportunities that are beneficial to the entire county. The adjoining basins are Spring, Butte, and Cave Valleys. If the County determined the need to import water to Steptoe Basin from neighboring basins, its policy is to first ensure the environmental quality, protect the rights of senior water rights holders, and retain sufficient water resources to allow the basins of origin to develop to their full economic potential.

The County has expressed strong concern over the potential negative impacts to the environment and citizens of White Pine County due to proposed large scale, long-term inter-basin, inter-county transfers of water through the Southern Nevada Water Authority (SNWA) Clark, Lincoln, and White Pine County Groundwater Development Project. The SNWA proposal to export all unappropriated water from Spring Valley and much of the unappropriated water from Snake Valley is compounded by the purchase of property and water rights from private ranches by SNWA, and water rights secured by private water purveyors with the intention of exporting water for sale. The pipeline project promises minimal economic benefit to White Pine County. Economic benefits of operation will be limited and the benefits during construction will be short lived compared to the long-term impact of the project. Critical issues identified by the County include: 1) potential loss of vegetation due to the impact on of water resources; 2) potential loss of wildlife habitat; 3) potential negative environmental impacts including the project's visual impacts as well as air quality issues due to increasing dust; 4) potential negative impacts on senior water rights holders that cannot be adequately predicted because of the stated plans to file changes in the points of diversion once the water rights are permitted; 5) potential negative impacts on current economic activity including agriculture, outdoor recreation related tourism, and residential development; 6) potential negative impacts on future economic activity that could occur if water resources were available in White Pine County; and 7) potential negative cultural impacts including the loss of historic ranching activity.

The Las Vegas Valley Water District filed its applications for water from White Pine County in 1989. The hearings on the Spring Valley applications are scheduled for September 2006 and the Southern Nevada Water Authority representatives estimate that pumping will begin eight years following the award of permits for the water. Financing for the pipeline dictates a seventy-five year term before SNWA would re-evaluate the project. The total project from the date the applications were filed to the first time it would be re-evaluated is one hundred years. The County's primary goals in working with the issue since 1989 are to seek the strongest possible protections for White Pine County's environmental quality; senior water rights holders in the affected basins, and the County's long term economic potential as well as just compensation for the costs imposed by the project. The County protested the applications when they were filed. The County continues to maintain its protests as its only avenue to have a voice in the proceedings. It has entered into discussions with Southern Nevada Water Authority to determine if an agreement might provide stronger protections than could be available through the decision of the State Engineer. The County has determined that its strongest courses of action to protect its environment, citizens, and economic potential are a sound understanding of its water resources, an active and independent program to monitor changes in its water resources, and implementation of a well thought-out strategy that would prevent the need for mitigation.

Monitoring and Mitigation:

White Pine County has initiated a volunteer groundwater-monitoring program to collect groundwater levels from wells located in approximately ten hydrographic basins in the County. This is a vital first step for any comprehensive monitoring program that will support sustainable groundwater management. The only true way to ensure that a basin is not over drafted, while utilizing the groundwater resources, is to closely monitor hydrologic conditions, specific to that basin. This is best achieved through a comprehensive monitoring program that includes collecting groundwater levels that can be reviewed and analyzed regularly. Another important component of a successful groundwater-monitoring program is the assessment of water quality trends. Specific constituents should be monitored annually to track potential changes in water quality and ensure water degradation does not occur. A comprehensive program of monitoring

will then empower the County to implement the most appropriate actions, if necessary, in the future.

Short-Term Goals (2 – 5 years)

- Identify sensitive locations; characterized by springs, wells and/or riparian areas in select basins coupled with appropriate monitoring frequency. Early prioritizing of sensitive areas for data collection may become necessary to ensure consistent data is collected from the most critical areas.
- Document baseline data for use in comparing future data as pumping increases in the targeted hydrographic basins.
- Establish a quality control and quality assurance plan that will be reviewed annually to ensure the most accurate methods for data collection.
- Coordinate with neighboring counties and State, and Government agencies on data sets and basin studies to ensure that the most efficient and accurate data are collected and analyzed without duplication.
- Develop a public relations outreach program to help collect historical data from the more development (stressed) hydrographic basins.
- Incorporate a water quality sampling and analysis protocol into the monitoring and mitigation program that follows the same quality control and quality assurance methodology as the groundwater level measuring protocol.

Long-Term Goals (5 + years)

- Established baseline of data for every sensitive area identified by the County for use in generating data set trends.
- Identify, evaluate and procure additional wells and springs that should be targeted and incorporate them into the monitoring program.
- Analyze the data and determine if adverse impacts warrant changes in extraction rates from a basin or portion of a basin.
- Establish a system of written procedures on the protocol for making recommendations to refine the monitoring and mitigation program to the Board of County Commissioners.
- Improve understanding of the safe yield (perennial yield) of the basins targeted for monitoring.
- Protect the basins in White Pine County from over appropriation (over pumping) to ensure that a sustainable water resource is available for future generations and economic development in White Pine County.

Monitoring Protocol

The Monitoring system will be based on written records of exactly how data are collected to ensure consistency, comparability, repeatability, and traceability of scientific data; documented methods used to collect a specific data set; training programs for staff and volunteers; and standardized equipment. Monitoring activity will include both ground water levels and springs and riparian areas. See Attachment 4.

Mitigation Procedures:

The County has also developed a mitigation protocol to be used in response to changes clearly identified from the monitoring program. This mitigation protocol is the first step in determining trigger mechanisms for clearly creating actions designed to reduce adverse impacts, observed from the monitoring data collected from the hydrographic basins. Nevada water law requires that any person/entity, who significantly effects a groundwater well of a senior water right holder

provide mitigation for that impact. The determination of “*significant effect*” is made by the State Engineer and the burden of proof falls on the well owner who is being negatively impacted. White Pine County has established a series of mitigation measures to be initiated in the event that a basin appears to be undergoing over-drafting, due to groundwater pumping. The mitigation procedure is based on three levels of increasing indication of negative impacts and identifies actions to be taken at each level.

Triggering Mechanisms and Actions:

Level-1:

Two consecutive years (or eight consecutive quarters) of groundwater level data and/or spring and riparian areas in a basin or portion of a basin indicating a negative impact.

Level-2:

Implementation of the mitigation measures outlined in the level-1 triggering mechanism and at least one to two more additional years (three to four years total of aquifer over-drafting) of well monitoring and/or spring and riparian area data validating the negative impacts to the basin, watershed, and/or aquifer(s).

Level-3:

The conclusions from the hydrogeologist’s groundwater report along with at least one more year of depleting groundwater levels in the basin, watershed, and/or aquifer(s) suggests that excessive pumping is creating the negative impact.

See Attachment 4 for specific Mitigation Procedures for each Trigger Level.

ADMINISTRATIVE STRUCTURES:

The County has identified the need to take an active role in water resource issues. It has identified the need to monitor impacts, establish standards of environmental quality, and implement mitigation strategies to protect the environment, senior water rights holders, and potential for economic development.

The current Water Advisory Committee was established to provide the County Commission with review and advice on water resource issues and to assist in the revision of the Water Resources Plan. The Committee membership is representative of the County’s population by geographic location; economic and recreational interests; local government, the Ely Municipal Utilities Board, General Improvement Districts; and water users. In addition to its review of the 1999 Water Resources Plan, the Committee reviews applications for water rights in the County, makes recommendations to the County Commission on potential protests, and recommends scoping comments on water resource issues in NEPA actions by federal agencies. It has no authority to implement the recommendations in the Water Resources Plan.

The County will explore the benefits of establishing an administrative structure within the avenues outlined in the Nevada Revised Statutes to assist with the implementation of natural resource and water resource recommendations. The Nevada Revised Statutes allow for creation of General Improvement Districts under Chapter 318, a Water Planning Commission under Chapter 540A, a Water Conservancy District under Chapter 541, or a Regional Water Authority through specific legislative action.

There are currently two General Improvement Districts (GID's) for water and sewer services in the County, the McGill Ruth Consolidated Water and Sewer General Improvement District and the Baker General Improvement District. A GID must, "serve a public use and promote health, safety, prosperity, security, and general welfare of the inhabitants thereof and the State of Nevada." The County Commission has jurisdiction and authority to create General Improvement Districts by adopting a resolution; holding a public hearing; as a result of the public hearing, determining that the creation of the district is economically sound and feasible and it is required by public necessity and convenience; and adopting an ordinance to create the district. A GID can furnish facilities for water; sanitary facilities for sewage, and facilities for storm drainage or flood control and can qualify for federal grants.

The Water Planning Commission authority outlined in Chapter 540A applies only to Counties between 100,000 and 400,000 population and legislative action would be required to provide authority for White Pine County to establish a Commission under this Chapter. The primary benefit of establishing a Water Planning Commission is to provide formal delegation of the authority for water resource issues and planning and the adoption of a formal Water Resources Plan that must be taken into consideration by federal agencies in the development of their resource management plans, environmental impact statements, and environmental assessments. The N.R.S. details the membership of the Commission and the representation on the County's current Water Advisory Committee is patterned after the voting and non-voting membership outlined in Chapter 540A. The N.R.S. requires a comprehensive regional plan that meets specific requirements, a public hearing must be held and the Water Planning Commission must recommend the plan to the Board of County Commissioners by a two-thirds vote, the plan must be reviewed and approved by the Regional Planning Commission for conformance with the Comprehensive Master Plan, and then it must be approved by the County Commission. Once an approved plan is in place, the Water Planning Commission has the authority to acquire and use water rights and other sources of water within or outside the region for current and future use. N.R.S. 540A.250 allows the creation of Remediation Districts by the County Commission if conditions such as concentrations of septic systems or potential for contamination of ground water exist that affect or will affect the quality of water available for municipal, industrial, or domestic use in the region. To form a Remediation District, the County Commission must develop a Remediation Plan. The plan must be approved by the Division of Environmental Protection. The boundaries and costs of remediation must be identified, and a public hearing must be held prior to the establishment of the District. Once in place, the County can levy fees or taxes to recover the costs of remediation.

A Water Conservancy District has the authority to construct and maintain works including power, access roads, pipelines, canals, and other facilities; fix water rates; enter into contracts; acquire water and water rights, develop those rights, and transport water for sale or lease. Any municipality, irrigation district, or person or private corporation can petition the Water Conservancy District Board of Directors to purchase, lease, or otherwise obtain the beneficial use of the waters of the District. The Water Conservancy District is a legal alternative that can be established through the Court system. To establish the District, a petition is filed in the office of the Clerk of the Court and it must be approved and filed by the Board of County Commissioners with a bond of \$1,000. A hearing time and place is set by the District Court to hear protesting petitions and if approved the Court declares the district a corporation and notifies the Secretary of State, County Clerk, and County Recorder. The Governor appoints the Board of Directors in accordance with the petition.

Formation of a Regional Water Authority would require enabling legislation and could be based on the Southern Nevada Water Authority model. The advantage of the Authority is it would

provide more local authority over water management decisions, qualification for grant monies, and increased cooperation between utilities. The additional layer of management could increase operating costs for all of the member utilities.

In formation of a Regional Water Authority, the legislation would establish a charter to specify that it would ensure water supplies are available to support growth, a healthy economy, and the protection of public water supplies and the environment. The Authority could provide liaison with state and federal agencies, other counties, and other water authorities on water related issues. It could provide assistance to the General Improvement Districts, Ely Municipal Water System, and public water systems in the County.

The County Commission will consider the legal and structural benefits of establishment of a General Improvement District, Water Planning Commission, Water Authority, or a Water Conservancy District as means to more effectively manage its water resources and natural resources programs.

RECOMMENDATIONS:

See Attachment 5 for 2006 Recommendations and Action Plan.

EVALUATION AND IMPLEMENTATION:

The White Pine County Water Resources Plan is not a static document. It will be reviewed annually by the Water Advisory Committee or administrative structure that may replace it, and a report of progress in meeting overall goals and objectives as well as specific annual recommendations will be provided to the Regional Planning Commission and County Commission. Each year's annual report and recommendations will be added to the Plan as part of Attachment 5. The Plan will be completely reviewed and revised at least once every five years.

2006 WHITE PINE COUNTY WATER RESOURCE PLAN
CHAPTER 3, RESOURCES

1. Lumos Engineering, Draft Monitoring Protocol and Mitigation Strategies, June, 2006.
2. Nevada Revised Statutes, Chapters 533 and 534.
3. Nye County, Nye County 1999 Water Resource Plan.
4. Nevada Division of Water Resources, Water Rights Data Base, Designated Basins, (<http://water.nv.gov/water%20Rights>)
5. Tim Stack, US Department of Agriculture, Natural Resource Conservation Service, RE: White Pine County Agriculture, Conservation Measures, July, 2006.
6. Kurt Suchsland, Nevada Division of Water Resources, Water Planning Section, RE: Supplemental Basins, November, 2005
7. Water Advisory Committee, Minutes, 2005-2006
8. White Pine County, 1999 White Pine County Water Resources Plan, July, 1999.
9. White Pine County, 2005, Comprehensive Economic Development Strategy, August 2005.
10. White Pine County, 2006 Comprehensive Economic Development Strategy, Priorities, June 28, 2006; Minutes, C.E.D.S. Committee meetings
11. White Pine County Commission Minutes, RE: Bassett Lake Project, September, 2005.
12. White Pine County/Southern Nevada Water Authority Meeting Minutes, March 3 through August 4, 2006.