



Source Water Protection Guidance

LOCAL AUTHORITY FOR GROUND WATER AND WELLHEAD PROTECTION

Introduction

Most communities in Nevada receive their drinking water from underground sources through private wells or public water supply systems. Many businesses and various land use activities use, store, or dispose of chemicals. Seepage of chemicals from businesses, industrial manufacturing, septic tanks or farming could contaminate ground water. Therefore, protecting ground water from these chemicals is extremely important. The State of Nevada has adopted water quality legislation and pursuant regulations to protect ground water from potential contaminant sources. These regulations are included in various Chapters of the Nevada Administrative Code (NAC).

While there are regulatory controls at the State level, it is important for local governments to use their authority. Nevada has land use statutes that enable local authorities to manage potential sources of contamination as part of Wellhead Protection Programs. This fact sheet summarizes the authorities local governments can use to protect their communities' underground drinking water resources.

The Nevada Wellhead Protection Program is a voluntary program that encourages local governments, communities, and utility companies to take preventive measures to protect their underground drinking water resources. The basic idea of wellhead protection is to reduce the risk of ground water contamination by managing potential sources of contamination. A community must determine the land surface area around a water supply well, called the wellhead protection area (WHPA) that should be protected. Before a plan or program can be developed, it is important to identify the existing and potential threats to the ground water. Then the WHPA should be managed to protect the ground water. Local communities need to conduct an extensive inventory within their communities and near their

wells to identify the location of facilities using, manufacturing, or storing materials that might contaminate ground water.

Local Authority

The management of land use in the WHPA is usually the responsibility of local governments. The Nevada Revised Statutes (NRS) include legislation empowering local governments with certain authority to enact and enforce local police and sanitary ordinances to promote public health, safety and general welfare. The NRS also allow local governments to participate in site plan review processes as part of the State permitting procedures. The NAC and NRS are available on the www.leg.state.nv.us.

Local governments can use these powers as management tools to protect their underground drinking water resources. These tools will be most effective if they become part of a local community Wellhead Protection Program. These regulatory management tools include:

1. Sanitary Ordinances

NRS 244.357 states that "Each board of county commissioners may enact and enforce such local police and sanitary ordinances and regulations as are not in conflict with the general laws and regulations of the State of Nevada...". Local governments may use this statute to adopt ordinances to regulate placement and testing of domestic wells and cleaning of septic systems.

2. Zoning Ordinances and Source Prohibitions/Restrictions

NRS 278.020 authorizes and empowers the governing bodies of cities and counties to regulate and restrict development. Further, NRS 278.020 states any regulations "must take into account: (a) The potential impairment of natural resources...". Additionally, NRS 278.250 states that zoning regulations "must be designed: (a) To preserve the quality of air and water

resources.” Local governments may use these statutes to exclude certain land uses and activities that store or use hazardous chemicals from a wellhead protection area.

3. **Land Use and Master Planning**

NRS 278.160 authorizes local governments to include both a land use plan and a conservation plan in their Master Plan. The conservation plan is “For the conservation, development and utilization of natural resources, including water and its hydraulic force, underground water, water supply,...”. Local governments may use this statute to incorporate wellhead protection areas into their Master Plan.

4. **Special Use Permits**

NRS 278.315 states that “The governing body may provide by ordinance for the granting of variances, special use permits or other special exceptions...”. Local governments may use this statute to grant special use permits containing specific provisions to protect their underground drinking water resources. For example, through a special use permit, a local government might limit the quantity of fertilizers or pesticides that can be used on a golf course.

5. **Subdivision of Land**

NRS 278.326 states that “Local subdivision ordinances shall be enacted by the governing body...”. Local governments may use this statute to protect wellhead areas in which ongoing development could cause contamination or where there is inadequate ground water recharge.

6. **Parceling of Land**

According to NRS 278.462, when approving

parcel maps, the governing body “may require...water quality, water supply and sewerage provisions as are reasonably necessary...”. Local governments may use this authority to prevent ground water quality degradation due to an excessive number of septic systems within a certain area.

An Ounce of Prevention

Clean water is a necessity of life. We need it for drinking and for many businesses. It is important that every community identifies existing and potential contaminant sources and works with the appropriate federal, state and local agencies to protect its ground water.

- A commitment to ground water protection by elected officials, public water suppliers, local health officials, fire marshals, building inspectors, agricultural officers, zoning administrators and other local regulators is needed for the successful implementation of a local Wellhead Protection Program.

It is less expensive to take appropriate preventive measures to protect ground water from possible contaminant sources than clean up contaminated ground water. Cleaning up contaminated ground water and developing new water sources are very expensive. Moreover, it is not possible to clean up contaminated ground water completely.

The old saying “An ounce of prevention is worth a pound of cure” is certainly true for ground water protection. Managing potential sources of contamination, in part through local regulations and authority, will potentially save millions of dollars in the long term and protect public health.

For more information about Ground Water and Wellhead Protection:

Contact the Nevada Division of Environmental Protection at (775) 687-9492 Funded by the Drinking Water State Revolving Fund Wellhead Protection Program Set-Aside through NDEP, or the Nevada Rural Water Association 775-841-4222.

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