## **BACKGROUND PAPER 03-2**

# HISTORY OF WATER LAW IN NEVADA AND THE WESTERN STATES

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# HISTORY OF WATER LAW IN NEVADA AND THE WESTERN STATES

#### I. INTRODUCTION

Traditionally when people have referenced the "water law," they have addressed the state statutes and judicial decisions dealing with water quantity — the allocation and management of water rights. The subject of water quality has usually been discussed in the context of environmental law. Thus, the materials in this background paper are limited to the concepts and laws associated with water quantity.

It should also be noted that Nevada's water law is founded upon principles and doctrines that developed in a relatively uniform pattern within the Western United States. Thus, a discussion of Nevada's water law begins with an overview of the history of water law generally in the Western States.

It should also be recognized that water has always been the "life blood" of the arid West; Western water law was born in controversy; and the allocation of precious water rights will continue to be of critical importance as laws and procedures are modified to meet modern needs.

# "CONTROVERSY" Three Principles of Western Water Law

- 1. Whisky is for drinkin' water is for fightin';
- 2. Water flows uphill towards money and power; and
- 3. People were created by water to help move it uphill!

#### II. HISTORY OF WESTERN WATER LAW

Through history, two distinct philosophies for the management of surface water resources have been developed. Both of these approaches have influenced the water laws in the Western United States.

## The Riparian Water Rights Doctrine

The riparian water rights doctrine was developed in England and the Eastern United States where the climate is humid and water is relatively abundant. The basic principle of the riparian doctrine is that each person owning land along a surface water body (a riparian owner) is entitled to a "reasonable use" of water from that source. Each riparian owner has an equal right to use water, and no priority system exists to allocate water during times of decreased flow. The riparian right exists perpetually, even without use, while the land remains adjacent to the water source. Riparian rights are not limited to a fixed quantity of flow or volume; and, therefore, no administrative system was incorporated into the doctrine.

## The Doctrine of Prior Appropriation

The appropriation doctrine, or the doctrine of prior appropriation, was developed in the semi-arid Western States which were unsuited to the riparian doctrine. Early large-scale uses of water in the West were mining and irrigation. Minerals and irrigable land were not necessarily located near surface water bodies. Thus, water had to be diverted and used away from the source. In addition, much of the activity took place on public lands, and therefore modified the land ownership concept associated with the riparian doctrine. The prior appropriation doctrine was developed over the years to address these special water problems in the arid West.

The most significant principles of the appropriation doctrine are:

- 1. Beneficial use is the basis, the measure, and the limit of the right;
- 2. Generally, the right to use water is lost if the water is not actually used for a period of time the "use it or lose it" principle; and
- 3. The rule of priority controls in times of shortage.

In all Western States, the waters are declared to be the property of the public or state. Under the appropriation doctrine, most states employ a permit system through which water may be appropriated for beneficial use based upon availability of unappropriated water and nonimpairment of existing rights. Once a permit is issued and the water has been put to beneficial use, a water right is granted to the user. This right to the use of the appropriated water is a real property right which can be defined, sold, transferred, mortgaged, or bequeathed (even though it does not imply ownership of the water itself).

The cornerstone of water allocation under the appropriation doctrine is that "beneficial use is the basis, the measure, and the limit of the right to use water." In order to use water, it must be taken for a beneficial purpose, and the amount of water actually used for this beneficial purpose defines the limit and extent of the right. Under this concept, nonuse of the water leads to loss of the right – the "use it or lose it" principle.

In disputes over water, the early westerners applied the rule of "first in time, first in right." The courts later adopted the rule, and it also was adopted as a primary principle of the appropriation doctrine. Under this concept, the holders of earlier rights have a senior priority for use of water in times of shortage, and their rights may be filled in total before junior appropriators get any water.

## **Application of Water Rights Doctrines in Western States**

Each of the 17 Western States has adopted the doctrine of prior appropriation. The following less arid Western States also apply the riparian doctrine to lands adjacent to surface water bodies: California, Kansas, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Washington.

Groundwater legislation occurred much later than surface water doctrines. This was due in part to adequacy of surface water supplies, lack of economically efficient technology to produce groundwater, and lack of knowledge about groundwater supplies. Most of the Western States adopted groundwater laws which incorporated the basic provisions of the appropriation doctrine. However, the specifics of management of the supplies continue to vary considerably among the states, and some states (most notably California) have never adopted a groundwater law.

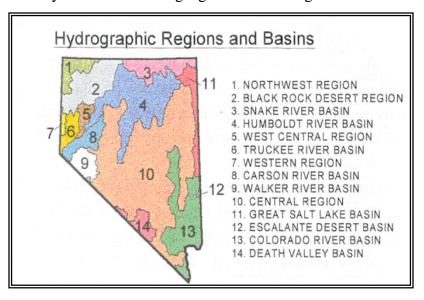
#### III. HISTORY OF THE NEVADA WATER LAW

Except for a very short period between 1872 and 1885, Nevada water law has always been based upon the appropriation doctrine. Statutes relating to water were enacted by the Nevada Legislature as early as 1866. The act of 1866 allowed any person or persons to divert the waters of a river or stream and run the water through any ditch or flume, and it also provided for the right-of-way through the lands of others. Court decisions provided the guidelines, which were used to attempt to bring some order out of the chaos created by early mining booms and irrigation development in the semi-arid State. A law designed to adjudicate water rights through the courts was tried in Nevada in the early 1890s. The law proved a failure. The determination of water rights through the courts was unsatisfactory, as well as being a long, expensive, and tedious process. Thus the fundamental idea in creating the office of State Engineer was to avoid this delay and expense.

#### Background Concept and Creation of the State Engineer's Office - 1903

The background concept of the present Nevada water law was developed from the Irrigation Act of 1903. The primary purpose of the act of 1903 creating the Office of State Engineer was to provide a method by which the existing rights to water might be defined.

The act declared that all natural water courses and natural lakes. and the waters thereof which private were not held in ownership, belong to the public and are subject to appropriation for a beneficial use. It also stated that the right to the use of appropriated SO water irrigation would be appurtenant to the land to be irrigated, and beneficial use would be the basis, the measure, and the limit of the right.



Map 1 (Source: Nevada State Water Plan)

#### **Basic Statutory Principles - 1913**

In 1913, the water law was rewritten, and this 1913 statute provided the basic principles that have remained in the State's water law through the succeeding years. By this act, underground water was fully recognized, "The waters of all sources of water supply within the boundaries of the State, whether above or beneath the surface of the ground, belong to the public." A declaration was made that beneficial use of water is a public use; and therefore, the right of eminent domain may be exercised. Statutory provisions were established for the abandonment of rights, and provision was made for rotation in the use of water. A more substantial code for the determination of vested water rights was established, and provisions were set forth concerning reservoir permits. The 1913 act also included an early reference to the conservation of underground water in the State of Nevada.

#### Significant Amendments and Addition of Groundwater Law - 1939

The 1939 Legislature provided a great many additions to meet the rapidly growing demands for water. For the first time, the Legislature declared that all underground waters were subject to appropriation under the State laws relating to appropriation. Thus, percolating water was included under the water laws. This provision expanded the statute of 1913 which required that water from an artesian or definable aquifer be subject to the State law regarding appropriation. Domestic wells not exceeding two gallons per minute (later changed to 1,800 gallons per day) were declared exempt from the water code.

It is to be noted that the State of Nevada was one of the early states to develop a groundwater law.

#### IV. SUMMARY OF CURRENT NEVADA WATER LAWS AND PROCEDURES

There are two ways to acquire a water right in the State of Nevada. One is by the adjudication of a right beneficially used prior to the enactment of the water law. The other is by filing an application to appropriate the public water in accordance with statutory procedures. Administration of these procedures may be described within the following three categories:

ADJUDICATION	DISTRIBUTION	APPROPRIATION

## Adjudication

Surface water rights initiated by applying water to beneficial use prior to March 1, 1905, and which have been perpetuated or continuously used through the years are known as vested water rights. *Nevada Revised Statutes* (NRS) 533.090 though 533.320 provide the procedure by which the limit and extent of vested water rights are determined by the district court.

In addition to defining the nature and extent of vested rights, the water law provides for systematic State control over the distribution of water under these rights.

The 1939 Groundwater Act (*Statutes of Nevada 1939*, Chapter 178) defined vested rights as applied to water from wells. Such a vested right is a right to the use of underground water acquired from an artesian well or from a definable aquifer prior to March 22, 1913, and an underground water right on percolating water, the course and boundaries of which are incapable of determination, acquired prior to March 25, 1939.

The law provides that any water user on a stream system or any claimant of a vested underground water right may petition the State Engineer to begin an adjudication of the water rights, or without such petition, the State Engineer may initiate such proceedings on any stream. The basic steps followed in the adjudication procedure are summarized in Table 1.

	Table 1		
	SUMMARY OF		
	THE ADJUDICATION PROCESS		
1	After a field investigation, the State Engineer enters an order granting the petition for adjudication, if he deems an adjudication to be appropriate.		
2	The State Engineer gives notice of the pending proceedings.		
3	A notice and order for taking proofs of appropriation (claims of vested rights) is published in a local newspaper in the county where the water body is located, and a period of not less than 60 days for taking proofs is established.		
4	Following the period for taking proofs, the State Engineer prepares an abstract of all claims filed and a preliminary order of determination.		
5	A period for inspection of proofs is set for at least 20 days.		
6	The State Engineer next sets a time and place for the hearing of objections to his preliminary order of determination.		
7	Following the hearing, the State Engineer prepares the final order of determination and files this with the district court, together with all other evidence in connection with the adjudication proceedings.		
8	When the court sets the time and place for hearing of exceptions to the order of determination, the State Engineer gives notice of the pending court hearing.		
9	The court then hears the exceptions to the order of determination.		
10	The findings of fact, conclusions of law, and decree are entered by the district judge.		

As noted, the adjudication procedure applies both to surface water and to groundwater. A large number of surface water systems have been adjudicated by this procedure in Nevada. Currently, adjudications are being conducted on a basinwide basis, including surface and groundwaters.

#### Distribution

The State Engineer, pursuant to NRS 533.270 through 533.320, has primary responsibility for distribution of all adjudicated waters in Nevada except federally decreed stream systems. Stream systems which have been adjudicated are distributed by water commissioners in accordance with the decree. These water commissioners are appointed by the State Engineer, subject to confirmation by the court, and are supervised by the State Engineer through the supervising water commissioner.

Nevada Revised Statutes 533.300 provides authority for the creation of water districts. In areas where an irrigation district has been formed, the water is distributed within the district by their personnel. However, in accordance with NRS 533.305, the State Engineer retains the responsibility for proper distribution. On interstate streams, a federal Water Master is designated by the court having jurisdiction, and he distributes the water under the federal decree.

In the case of intrastate streams where distribution is required, the State Engineer is directed to set up a distribution budget as provided under NRS 533.280. In most cases, the court decree specifies the quantity of water that is allocated to various parcels of land included in the decree. All costs of distribution (water commissioners' wages, transportation, stream measurement and related items) are included in the budget. The particular stream budgets are based on the total acre-feet owned by each user so that each will be assessed a just and proportionate share of costs.

Chapter 534 of NRS provides that in the event investigations by the office of the State Engineer show the need for the supervision of the groundwater within any basin, the State Engineer is responsible for employing well supervisors and other necessary assistants required for the proper administration of that basin. If a groundwater basin has been adjudicated and vested groundwater rights determined, those adjudicated rights are included within the distribution of the waters of the basin. Authority exists under NRS 534.040 for the county commission to levy a special tax to provide finances to administer the groundwater basin.

#### **Appropriation**

*Nevada Revised Statutes* 533.325 through 533.435 provides the complete procedure for appropriation of the public waters of the State, whether above or beneath the surface of the ground. An outline of the statutory procedures is provided in Table 2.

Table 2			
	OUTLINE OF STATUTORY PROCEDURES FOR		
	APPROPRIATION OF WATER		
1	The person who desires to use water files an application, accompanied by a map prepared by a licensed water rights surveyor, with the Division of Water Resources.		
2	A summary of the application is noticed in the newspaper.		
3	A 30-day period beginning after the last date of publication exists for interested parties to file protests.		
4	The State Engineer may hold field investigations and hearings relative to the application, if he deems these necessary.		
5	The State Engineer grants or denies the application based primarily upon availability of supply, relationship to existing rights, and the public interest. Any aggrieved party may appeal the decision to the district court.		
6	The State Engineer issues a permit to appropriate a specific amount of water at a specified point of diversion for use at a specified location. The permit also contains additional conditions and information, including the date of priority.		
7	The permittee must file within specified time limits:  a. Proof of completion of the works of diversion; and b. Proof of placement of the water to beneficial use.		
8	Upon request, the State Engineer may grant extensions of time.		
9	After all proofs have been filed and compliance with the other terms of the permit has been shown, the State Engineer records a certificate of the water right in his office and sends a copy to the permit holder.		

In Nevada, although other statutory considerations must also be applied, three statutory criteria form the foundation for review of applications to appropriate water (as well as applications to change existing permits). The State Engineer (pursuant to subsection 3 of NRS 533.370) is directed to reject an application where:

- 1. No unappropriated water is available in the proposed source of supply;
- 2. Conflicts with existing rights or with protectible interests in existing domestic wells are present; or
- 3. Approval of the application "threatens to prove detrimental to the public interest."

Similarly, subsection 4 of NRS 533.470 specifies that the State Engineer must consider the following factors when reviewing applications for interbasin transfers of water:

- Whether the applicant has justified the need to import the water from another basin;
- If the State Engineer determines that a plan for conservation of water is advisable for the basin into which the water is to be imported, whether the applicant has demonstrated that such a plan has been adopted and is being effectively carried out;
- Whether the proposed action is environmentally sound as it relates to the basin from which the water is exported;
- Whether the proposed action is an appropriate long-term use which will not unduly limit the future growth and development in the basin from which the water is exported; and
- Any other factor the State Engineer determines to be relevant.

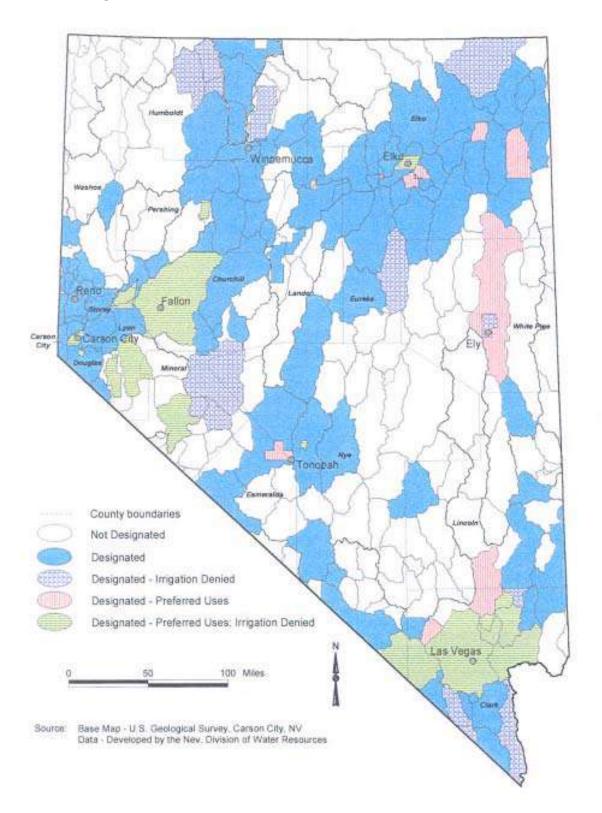
The general policy of the State Engineer is to limit groundwater withdrawals from a basin to the average annual recharge to the groundwater basin or its "perennial yield." "Perennial yield" of a groundwater basin may be defined as the maximum amount of water that can be salvaged each year over the long-term without depleting the groundwater reservoir. Thus, perennial yield is ultimately limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If perennial yield is continually exceeded, groundwater levels will decline.

Under NRS 534.030, the State Engineer is given the authority to "designate" a groundwater basin if he determines that the basin is in need of further administration. (See Map 2.) The criterion which he typically employs as a guide for determining when to designate a basin is the time that the use of water approaches the annual recharge. As provided in NRS 534.120, in designated basins where the groundwater is being depleted, the State Engineer is authorized to make such rules, regulations or orders as are deemed essential for the welfare of the area involved, and he is directed to designate preferred uses of water. In such designated basins, he may also:

- 1. Issue temporary well permits which are revocable when water can be furnished by a municipality or water district;
- 2. Prohibit the drilling of domestic wells where water can be provided by such an entity engaged in furnishing water;
- 3. Limit the depth of domestic wells; and
- 4. Deny application to appropriate groundwater for any purpose in an area served by such an entity that furnishes water.

The Las Vegas Artesian Basin is the only designated groundwater basin in which temporary permits have been issued.

## **Designated Groundwater Basins of Nevada**



Map 2

Source: Nevada State Water Plan

Several additional Nevada statutes deal with specific elements within the water appropriation procedures. Some of the most significant are as follows:

- Nevada Revised Statutes 533.440 provides for primary and secondary permits to store water in a reservoir.
- Nevada Revised Statutes 534.180 states that Chapter 534 does not apply to wells for domestic purposes where the water use does not exceed 1,800 gallons per day. (The definition of "domestic purposes" specifies that this exemption applies only to uses directly related to a single-family dwelling.)
- Nevada Revised Statutes 534.090 provides that if a holder of a right fails for five successive years after April 15, 1967, to use beneficially all or part of his permitted undergroundwater, he forfeits the right to use that water to the extent of the nonuse.
- Chapter 534A of NRS makes geothermal water and steam subject to appropriation under NRS Chapters 533 and 534, and provides for confidentiality of information associated with geothermal drilling.

### **Additional Duties of the State Engineer**

The law prescribes several additional duties for the State Engineer and the Division of Water Resources which he administers.

Chapter 535 of NRS makes the State Engineer responsible for the safety of dams within the State. It provides that any person or entity wishing to build or reconstruct a dam which will impound more than 20 acre-feet of water or which will rise more than 20 feet from the channel bottom must obtain a permit. Inspection and final approval of the dam are required before water may be impounded in the reservoir.

The National Dam Safety Program (Public Law 92-367) calls for inspection of dams where the potential for a high loss of life or property exists if the dam were to fail. In Nevada, the Division of Water Resources is responsible for inspecting 80 such dams. In addition, the division is required to visit and gather information on all other privately owned, permitted dams. There are approximately 600 dams in Nevada which fall within these parameters.

Under provisions of Chapter 278 of NRS, the State Engineer is required to approve water availability for new subdivisions. Within 15 days of receipt of a tentative map, the State Engineer must recommend approval, conditional approval or disapproval of the tentative map. His signature is also required on the final subdivision map.

*Nevada Revised Statutes* 534.140 provides for licensing of well drillers through the Division of Water Resources, and NRS 533.080 provides for licensing of water right surveyors.

A water right is a property right, and transfer of ownership of a water right is binding only between the parties until a copy of the instrument of transfer is filed with the county recorder; however, no "assignment" of a water right is made in the records of the State Engineer until properly filed paperwork is processed in his office. Upon checking for proper chain of title, the State Engineer makes the "assignment" of the water right a matter of record.

Also among his duties, the State Engineer sits on the Nevada Commission of the California-Nevada Interstate Compact Commission, the Nevada Commission of the Columbia Basin Interstate Compact Commission, the State Environmental Commission, and the Review Board for Public Lands, as well as functioning as a technical advisor to the Board for Financing Water Projects.

## V. MAJOR TYPES OF WATER LAW ISSUES FACING NEVADA AND THE OTHER WESTERN STATES

Nevada could be considered a microcosm of the West in reference to some of the major water issues facing the region. The West as a region is changing and being affected by high rates of population growth, increased urbanization, and the finite nature of its water supplies.

Nevada is the driest and fastest growing state in the nation. Although Nevada is often thought of as a rural state, a little over 90 percent of its population lives in urban centers. (See Map 3.) However, according to the *Nevada State Water Plan*, in 1995, agricultural uses were estimated to account for 77 percent of all the water used in the State. Public supply water for municipal and industrial uses accounted for 13 percent. These general types of conditions are similar in other Western States, so many of the key Western water issues are reflected in Nevada.

The following list provides a brief explanation of some of the major water issues in the Western States, and furnishes examples of how or where they apply in Nevada.



#### **Reallocation of Water Supplies**

Perhaps the most dominant trend in recent years is the reallocation of water supplies from rural, usually agricultural uses to rapidly growing urban, municipal uses. One way for an expanding urban center to obtain additional water resources is to acquire agricultural water rights. Another is to apply for unappropriated water in rural areas and seek interbasin transfers into the urban areas.

Both major urban areas in Nevada have initiated and seriously examined proposals to transfer water from the rural areas of the State — the Cooperative Water Project for the Las Vegas area and the Truckee Meadows Project for the Reno area. The Reno project effectively was stopped by action of the Federal Government, and the Las Vegas project essentially is not being pursued as other, less costly options are being explored.

In recent years, however, several entities have pursued large appropriations for water from the carbonate aquifer that lies under the eastern one-third of Nevada. The State Engineer has allowed some gradual, staged development, but uncertainty exists as to whether significant withdrawals from this resource would result in negative impacts upon the environment and existing water rights. Therefore, the State Engineer has required additional study and test pumping before making any additional determinations concerning appropriations from the carbonate aquifer. The special considerations associated with interbasin transfers will also have to be addressed before final actions are taken on these applications.

The Las Vegas area is also different from many other Western urban centers in that a major percentage of its water supply is derived from the Colorado River. Allocations of water from the Colorado River are governed by the Colorado River Compact and the subsequent laws, regulations, and agreements known collectively as the "Law of the River." While always attracting controversy, the Colorado River allocations have generated special disputes in recent years as efforts have been made to negotiate long-term plans to cut back uses in the State of California to be within that state's formal allocation after a considerable time in which "surplus water" was directed to these uses. Because uses are approaching their allocated limits throughout the Colorado River Basin, including Southern Nevada, the success of these negotiations is critical to the stability of the long-term water supply provided through the river system.

## **Overallocation of Water Supplies**

Additional pressures result, particularly in drought years, from the overallocation of water supplies. Many Western surface water sources are overappropriated; downstream users depend on return flows to satisfy their water rights; and many Western groundwater basins are severely overdrafted.

The most critical overdraft situation in Nevada is in the Las Vegas Valley groundwater basin, but additional instances are also apparent in other portions of the State. All surface water

systems in the State have been fully appropriated for most of this century, and junior appropriators rely heavily on return flows to meet their rights. For example, approximately 700,000 acre-feet of water rights exist on the Humboldt River in Northern Nevada, but the river directly supplies only about 265,000 acre-feet of water annually. Further, domestic well owners in several areas of the State are seeking protection from or mitigation for the pumping of groundwater to supply municipal systems.

#### **Environmental Concerns**

Environmental concerns have gained prominence through enforcement of the federal Endangered Species Act (ESA) and increased emphasis on maintaining and protecting in-stream flows for wildlife and recreational purposes.

The ESA has had a major impact in Nevada, particularly in the negotiations involving the Truckee River and Pyramid Lake in Northern Nevada, as well as other areas of the State. Protection for in-stream rights was established in 1988 in the case of *Nevada v. Morros* when the State Supreme Court upheld the State Engineer's issuance of appropriative water rights to two federal agencies for recreation, fishery, and stock and wildlife watering purposes, including in-stream rights.

In addition to actions directly related to the ESA, complicated activities in areas like the Walker River Basin include assertions of additional water rights for federal entities and tribes, proposals for transfer of existing rights that could be accompanied by environmental impacts, and various other proposals for obtaining water to protect the environmental and recreational characteristics of basic resources like the Lake.

#### **Tribal Claims**

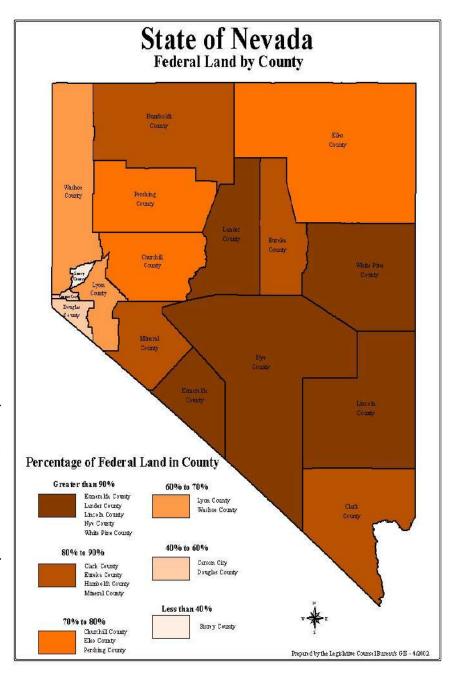
Indian tribal claims for federal reserved water rights under the *Winters* doctrine are ripening in many areas of the West through the quantification of water rights in adjudication proceedings. Indian tribes in Nevada have been active in asserting their claims and rights to water throughout the State, including the Pyramid Lake area, Walker River Basin and the Las Vegas Valley.

#### **Federal Role**

With 87 percent of Nevada's land being managed by Federal agencies, the role of the Federal Government and the activities of these agencies are extremely significant factors in natural resource management within the State. (See Map 4.)

The federal role in state water issues is uncertain because it appears vacillate between facilitator approaches and unilateral The role of the actions. Bureau of Reclamation has been changing from agency that builds water control structures to one that manages water resources; and the Western States are becoming increasingly wary about retention of their traditional control over water issues as federal and congressional actions and proposals appear to impinge on state control.

Officials of the Bureau of Reclamation have been working with water users on the Lower Colorado River in an effort to ensure longterm allocations under the Colorado River Compact, but proposals like the water rights provision Rangeland Reform '94 have generated skepticism Nevada about Federal agencies' respect for the primacy of state water law.



Map 4

#### V. CONCLUSION

This background paper is designed to provide an overview of the history of water law in Nevada and the Western States, to summarize its major provisions, and to highlight some of the most significant types of issues traditionally associated with the water law.

Of necessity, discussion of a topic as broad and complex as state water law will not address specific subjects that are of significance and interest to some readers. Additionally, this

background paper does reference laws relating to water quality, nor does it provide discussions of specialized issues like domestic wells and temporary water permits in Southern Nevada, stockwatering rights, or the development of the public interest doctrine.

If you would like further information in any of these areas, please contact the Legislative Counsel Bureau's Research Division at 775/684-6825. The State Engineer has also offered to provide any additional assistance that is needed; his office may be contacted at 775/687-4037.