Interbasin Transfers

Environmentally Sound?

Division of
WATER RESOURCES

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DEPARTMENT OF
CONSERVATION &
NATURAL RESOURCES

Criteria Used by the State Engineer When Deciding Whether or Not to Approve or Deny Any Application

Criteria

Approval or denial of water rights based on four (4) primary criteria (NRS 533.370):

- Is there unappropriated water?
- Does the use of the water conflict with existing rights?
- Does the use of the water threaten to prove detrimental to public interest?
- Does the use of the water conflict with existing domestic wells?

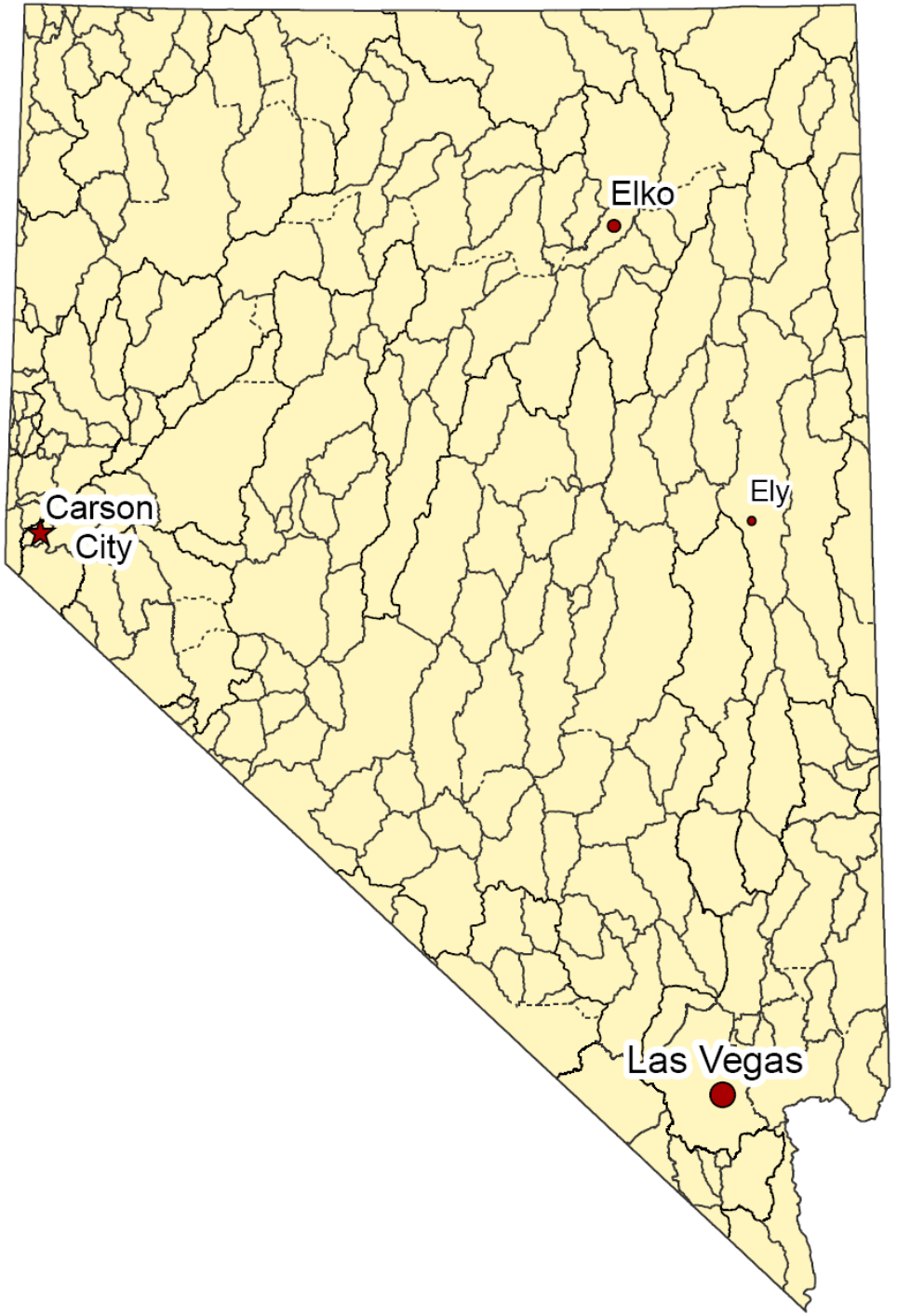
Criteria

Additional criteria for approving a water right was added in the 1993 and 1995 legislatures (NRS 533.370):

- Applicant must show good faith intention to construct the works necessary to put the water to the intended beneficial use with reasonable diligence.
- Applicant must have the financial ability and reasonable expectation to actually construct the project and apply the water to beneficial use with reasonable diligence.

Additional Criteria Used When Dealing with Interbasin Transfers of Groundwater

What constitutes an interbasin transfer?



Interbasin Transfers

- **Not a new idea!**
- 1st interbasin transfer was in 1873 from Marlette Lake to Virginia City (Lake Tahoe Basin to Dayton Valley)

Groundwater Source		
Basin-of-Origin	**Receiving Basin**	**Type of Use**
Washoe Valley	Eagle Valley	Carson City municipal supply
Goshute Valley	Great Salt Lake Desert	Wendover municipal supply
Pilot Creek Valley	Great Salt Lake Desert	Wendover municipal supply
Long Valley	Cold Springs Valley	municipal supply
Ralston Valley	Big Smokey Valley	Tonopah municipal Supply
Carson Valley	Eagle Valley	Carson City municipal supply
Dayton Valley	Eagle Valley	Carson City municipal supply
L. Meadow Valley Wash	Muddy River Springs Area	Reid Gardner Power Plant
Oreana Sub-area	Lovelock Valley	Lovelock Municipal Supply
Surface Water Source		
Source / Basin-of-Origin	**Receiving Basin**	**Type of Use**
Lake Tahoe Basin	Eagle Valley	Carson City municipal supply
Lake Tahoe Basin	Dayton Valley	Virginia City municipal supply
Truckee River (Tracy Segment)	Carson River (Churchill Valley via Truckee Canal)	Truckee-Carson Irrigation District irrigation
Newark Valley (spring)	Diamond Valley	Eureka municipal supply
Lake Tahoe Basin (treated effluent)	Carson Valley	irrigation
Truckee River (Truckee Meadows)	Lemmon Valley	SPPCo municipal supply
Carson River (Dayton Valley)	Eagle Valley	Carson City municipal supply
Colorado River (Black Mountain area)	Las Vegas Valley	Las Vegas area municipal supply
Truckee River (Truckee Meadows)	Spanish Springs Valley (via Orr Ditch)	irrigation
Truckee River (Truckee Meadows)	Sun Valley	SPPCo for municipal supply

Other Interbasin Transfers

Southern Nevada Water Authority

- In-State Groundwater Management Plan
  - Filed 146 applications in 1989 in 27 basins for the appropriation of 180,000 acre-feet of groundwater
  - Withdrew 32 applications from 10 of the basins
  - Permits have been granted for 74,057 to 94,057 afa
    - Garnet and Hidden Valleys – 2,200 afa
    - California Wash – 2,500 afa Moapa Tribe holds now
    - Tikapoo Valley North – 2,587 afa
    - Tikapoo Valley South – 1,700 afa
    - Three Lakes Valley North –3,700 afa
    - Three Lakes Valley South – 2,618 afa
    - Spring Valley – 40,000 to 60,000 afa
    - Cave Valley – 4,675 afa
    - Dry Lake Valley – 11,584 afa
    - Delamar Valley – 2,493 afa

Additional Criteria When Considering Interbasin Transfers

Adopted in the 1999 legislative session (NRS 533.370)

- Whether the applicant has justified the need to import the water from another basin;
- If the S.E. 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;

Interbasin Transfers

- 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;
- Any other factor the State Engineer determines to be relevant

Environmentally Sound

- The words *environmentally sound* have intuitive appeal, but what do they mean?
- The Legislature did not provide any specific objective criteria that the State Engineer should consider in statute; and
- A review of the public record and discussion leading up to the enactment of this language finds no specific operational or measurable criteria for use as the basis for a quantitative definition.

What Does Environmentally Sound Mean?

- It has been left to the State Engineer's discretion to interpret

- Testimony by the State Engineer in a hearing before the Subcommittee on Natural Resources shows that the State Engineer did not consider his office to be the guardian of the environment, but rather only the guardian of the groundwater and surface water in the state. It was noted that the State Engineer was not a range manager or environmental scientist.

What Does Environmentally Sound Mean?

- Senator James, a member of the subcommittee, pointed out that the language “environmentally sound” was not intended to create an environmental impact statement process for every interbasin water transfer application and agreed that the State Engineer’s responsibility should only be for the hydrologic environmental impact in the basin of export.

Environmentally Sound

State Engineer's Decisions

- It was found that the Legislature's intent was to protect the natural resources of the basin of origin and prevent a repeat of the Owens Valley while at the same time allowing for responsible use of the available water resources by the citizens of Nevada.
- It was found that while there are no definitions of what environmentally sound is, there are examples of what environmentally sound is not, such as the Owens Valley project in California.

Environmentally Sound

State Engineers' Decisions

- Protest claims have been filed that focus on the protection of threatened and endangered species and the maintenance of environmental, ecological, scenic and recreational values held in trust for Nevadans.

- Applicants argue that the State Engineer is not required to duplicate the environmental review that other state and federal agencies are obliged to complete under state and federal law. The State Engineer agreed.

Environmentally Sound

State Engineer looks to those types of interests and protections found in the water law

Environmentally Sound

Wildlife and Springs

- NRS § 533.367 - before a person may obtain a right to the use of water from a spring, he must ensure that the wildlife which customarily uses the water will continue to have access to it.

  - While this provision of the water law does not specifically apply to an appropriation of groundwater, it is a clear demonstration of the public interest in that the sources of water for wildlife remain accessible and viable.

Environmentally Sound

Pollution and Contamination of Groundwater

- NRS § 534.020 - provides that it is the intention of the Nevada Legislature to prevent the pollution and contamination of groundwater.

  - Pollution of the groundwater would be considered to be environmentally unsound; therefore, in allowing for appropriating water, the State Engineer must take into consideration whether the extent of the pumping could draw non-potable water into a drinkable water supply.

Environmentally Sound

Lowering of the Water Table

- NRS § 534.110(4) - provides that it is a condition of each appropriation of groundwater that the right must allow for a reasonable lowering of the static water level at the appropriator's point of diversion. A water-level decline in and of itself is not environmentally unsound, but rather it is the effects of water-level decline on the hydrologic-related natural resources that must be considered.

Environmentally Sound

Lowering of the Water Table

- The State Engineer has found that there can be reasonable impacts on the hydrologic related natural resources in the basin of origin. However, we have required the collection of biological and hydrological baseline data, monitoring and mitigation plans, staged development and other associated studies may be required in order to have significant safeguards in place to ensure that the transfer of water would be environmentally sound.
- If unreasonable impacts were being felt, regulation and/or mitigation of the impacts would be ordered.

Environmentally Sound

Cheat Grass Example

- A protest issue was raised that the clearing of ground for pipeline construction would introduce cheat grass into the area and therefore was not environmentally sound to issue the water rights.
- Made a finding that concerns about pipeline construction and the introduction of cheat grass into the area were not a matter of hydrology and that the State Engineer's jurisdiction should remain confined to issues found in hydrology and the water law and that other subjects outside the water law should be left to those entities or agencies which have the expertise.

Perennial Yield of Groundwater Basins

Nevada acknowledges that the perennial yield doctrine that governs groundwater appropriation in Nevada generally allows for the appropriation of groundwater that is discharged through natural evapotranspiration processes and/or some portion of the subsurface flow to adjacent basins. The majority of groundwater appropriation within Nevada throughout the state's history has been premised upon the capture of groundwater naturally discharged as phreatophytic evapotranspiration.


Thank You,
Questions?
http://water.nv.gov