

Virgin & Muddy Rivers Surface Water Development Project

As part of an ongoing initiative to protect Southern Nevada from drought and augment future water supplies, the Southern Nevada Water Authority (SNWA) is planning to develop surface flows from the Virgin and Muddy Rivers for which it holds water rights. The SNWA currently holds annual maximum diversion rights to the Virgin River of 190,000 acre-feet per year, with an average annual diversion not to exceed 113,000 acre-feet. The SNWA's Muddy River surface water rights, which currently represent approximately 7,000 acre-feet per year, are in the form of shares in the Muddy Valley Irrigation Company.

The SNWA proposes to deliver this water to Southern Nevada through one of three options:

- Diversion and Overland Conveyance
- River Conveyance
- Combination of Diversion and Overland Conveyance/River Conveyance

The SNWA in October 2004 applied for a permanent Right of Way from the Bureau of Land Management (BLM) to accommodate facilities associated with developing the water rights. This application requires the preparation of an Environmental Impact Statement (EIS) by the BLM. Specific facilities and alternatives associated with this project will be identified during the EIS process, and the application may be modified as project design details are developed.

The Diversion and Overland Conveyance alternative proposes to divert surface water rights from the Virgin River through an off-stream reservoir and from the Muddy River via the Bowman Reservoir. The River Conveyance alternative would change the SNWA's point of diversion for Virgin and Muddy River water rights to Lake Mead, allowing for water withdrawal through existing facilities. The Combination of Diversion and Overland Conveyance and River Conveyance would reduce the volume of Virgin River surface water diversion, conveying the remaining rights through existing facilities at Lake Mead and potentially eliminating the need for an off-stream reservoir.

Depending upon the alternative identified, necessary facilities may include: Diversion structure across the Virgin River and associated off-stream storage reservoir; pump stations; water transmission pipelines; water treatment facilities; brine evaporation ponds; overhead electrical distribution lines; and access roads.

Pending completion of the EIS, the SNWA anticipates that construction of facilities for this project is anticipated to begin in 2009 and may extend through 2012.