

SB 62 PROJECT REPORT
March 2009

Project	Grant Amount	Project Summary
Humboldt River Basin Water Authority	\$120,000.00 (Project Complete)	<p>Assemble existing information into a water resources database in support of threats to water rights. Develop recommendations for collection of additional necessary data. Develop a public information program. Deliver a summary report for each county describing available forecast of economic/demographic conditions and related water.</p> <p>Progress Report, December 2007: The Humboldt River Basin Water Authority project is complete and the documents produced as a part of that project are available electronically on NDEP's website at http://ndep.nv.gov/bffwp/ http://ndep.nv.gov/bffwp/hrbwa_sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
Esmeralda County	\$16,245.85 (Project Complete)	<p>The project plan was to conduct a physical reconnaissance of the County's present water uses and existing water rights and develop a strategy to enhance and protect the County's water rights to ensure present and future water demands can be met as well as preparing a Water Rights Management Plan. All water rights identified in four hydrographic basins were reviewed. A field reconnaissance trip was conducted with the State Engineers office to physically site the locations for the point of diversion for water rights and ascertain the manner by which the appropriated water is being exercised.</p> <p>Progress Report, June 2007: The Esmeralda County Water Rights Plan is complete and available electronically on NDEP's website at http://ndep.nv.gov/bffwp/esmeralda%20county_sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
Town of Tonopah	\$11,250.00 (Project Complete)	<p>Assemble all active surface and groundwater rights for Ralston Valley Hydrographic Basin No. 141, Big Smokey – Tonopah Flat Hydrographic Basin No. 137, and Alkali Spring Valley Hydrographic Basin No. 142.</p> <p>Progress Report, Dec 2007: The water rights inventory and map of those rights are complete and available electronically on NDEP's website at http://ndep.nv.gov/bffwp/tonopah_sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
Churchill County	\$36,500.00 (Project Complete)	<p>Update of the County's Water Resources Plan for surface and groundwater resources. Review of all county records relating to water resource requirements, both existing and projected. Update of the water resource ownership in the County.</p> <p>Progress Report, June 2007: The Churchill County Water Resources Plan update is complete and available on the County's website at http://www.churchillcounty.org/planning/waterplan.php and is linked to NDEP's website at http://ndep.nv.gov/bffwp/sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
LVVWD – Kyle Canyon	\$27,184.72 (Project Complete)	<p>Install 100 Permalog units for the detection of subsurface leaks and acquisition of a Patroller unit for data collection. This system will allow operators to find and repair leaks, protecting millions of gallons of water previously lost to the system.</p> <p>Progress Report, June 2008: The leak detection units have been installed and the project is complete. A final project report was received in June 2008 and is available electronically on NDEP's website at http://ndep.nv.gov/bffwp/docs/kc wd_sb62_final.pdf (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>

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City of Fernley	\$38,680.59 (Project Complete)	<p>Reconcile all past and future mapping difficulties by attempting to develop a new GIS map of all Truckee Diversion surface water rights within the City of Fernley.</p> <p>Progress Report, January 2009: The mapping project is complete. The final report is on file at NDEP (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov). The project is in the process of closing.</p>
Eureka County	\$120,000.00	<p>The project develops improved estimates of basin discharge and flow system interconnection.</p> <p>Progress Report, June 2008: The project objectives were modified. The objectives are to quantify basin discharge from phreatophyte vegetation, quantify basin discharge by crop use, refine estimates of basin thickness, and estimate subsurface flow between discharge basins.</p>
Gerlach	\$92,833.42	<p>A database of spring flow and water quality will be created and a groundwater model will be developed to determine any changes that might result from the proposed development in the basin that might adversely affects the two springs (Garden and Railroad Springs) that provide water to Gerlach.</p> <p>Progress Report, November 2008: Data loggers & flow meters were installed at both springs; Monitoring of water level and discharge rate from the springs is in progress and is being used in calibration of the groundwater model. Water rights were researched and compiled into tabular format. Other model parameter data (e.g., DEM, geology, structure, well logs, rainfall) were compiled and added to the model. Washoe County Water Resources has made an initial review of the steady state model and given a positive review. They have also reviewed the data logging methods for the long-term spring flow and planned to reinforce the importance of continuing to collect this data with the operator on a site visit in November 2008 when they observed the modeled area and springs. The County will review the transient model as soon as it is completed – estimated completion in December 08/January 09.</p>
Virgin Valley Water District	\$116,041.77	<p>Analyze water quality information from throughout the watershed region to develop a conceptual model of groundwater flow, mixing and hydrologic connection through naturally occurring chemical tracers, and develop a steady-state representation of the predevelopment conditions of the regional groundwater flow systems utilizing modifications of previous models to develop a comprehensive numerical model.</p> <p>Progress Report, December 2009: The District submitted a thesis on the <u>Interaction of Surface and Subsurface Hydrological Processes in the Lower Virgin Valley</u> and a progress report on the status of the Lower Virgin groundwater model. The ground water model is approximately 65% complete and is expected to be finished within the next year.</p>
White Pine County	\$116,041.77 (Project Complete)	<p>Update information (including: hydrogeologic framework, groundwater hydrology, and regional groundwater flow system) on County's water resources and update the Water Resources Plan to assist in identifying potential water use and needs based on scenarios for growth and development. The County also added GIS capability in order to maintain and update information as it becomes available.</p> <p>Progress Report, January 2008: White Pine County's Water Resources Plan is complete and available at the NDEP offices in Carson City as well as electronically on NDEP's website at http://ndep.nv.gov/bffwp/whitepineco_sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>

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LVVWD – Searchlight	\$150,000.00	<p>Drill and develop 4 new monitoring wells to better understand the groundwater resource and groundwater quality in Paiute Valley and the Eldorado Valley Basins. One of the 4 wells will be funded by this grant.</p> <p>Progress Report, September 2008: LVVWD evaluated monitoring well locations in Piute Valley and drilled 4 exploratory wells in 2007. An Environmental Assessment for the monitoring well was submitted to the BLM in February 2008. Approval of the EA and granting of ROW by the BLM was expected by in late 2008; however, issues with ACEC (Areas of Critical Environmental Concern) will preclude well construction of several of the originally planned monitoring wells. An alternate site for the monitoring well to be funded by this grant has been selected. Drilling of the monitoring wells and production wells will occur on the same bid. Expected completion of the monitoring well is June 2009.</p>
Topaz Ranch Estates	\$5221.88	<p>Identification and mapping of proposed point of use/place of diversion for the existing 9 water rights permits.</p> <p>Progress Report, February 2009: The GID was awaiting the construction and testing of the new well to begin this project. The points of use/place of diversion for existing water rights are to be moved to this new well pending approval by the State Engineer. Mapping is currently in progress.</p>
Central Nevada Regional Water Authority	\$150,000.00	<p>Compile and document the baseline information required to determine long-term changes in groundwater levels in the Central Hydrographic Region (including: Churchill, Elko, Esmeralda, Eureka, Lander, Nye, White Pine, and Pershing counties) in order to evaluate the sustainability of present groundwater supplies secured under existing water rights, analyze the impacts of future development, and support future actions by local governments.</p> <p>Progress Report, November 2008: A spreadsheet containing water-level data, supporting database attributes and data-quality information; maps showing spatial distribution of water-level data; and an analysis of data gaps are complete and the data is accessible through an electronic mapping system – Map Guide by Websoft – hosted on the NDWR website. A summary report that documents methods and findings and identifies areas needing additional new water-level measurements was generated. The website that hosts the information for the Central Nevada Regional Water Authority is located at http://www.cnrwa.com/home/index.asp and will soon link to the Map Guide system (http://webmap.water.nv.gov/) developed with NDWR. Some delays were experienced as NDWR awaited the arrival of a new server for the Map Guide software. The CNRWA has continued to plan for future project phases of data collection in concert with the USGS.</p>