IN THE OFFICE OF THE STATE ENGINEER

OF THE STATE OF NEVADA

ORDER #1250

ORDER

CURTAILING THE USE OF GROUNDWATER RIGHTS THAT ARE SUPPLEMENTAL TO SURFACE WATER RIGHTS IN THE MASON VALLEY HYDROGRAPHIC BASIN (108) AND SMITH VALLEY HYDROGRAPHIC BASIN (107) NEVADA

WHEREAS, the Walker River system is entering its fourth year of drought and is currently under a state of extreme drought.

WHEREAS, irrigation, surface-water rights for the use of the waters of the Walker River in Mason Valley and Smith Valley have priority dates from as early as 1859 through the early 1900s.

WHEREAS, beginning in the late 1940s, water right applications began to be filed to use groundwater to augment/supplement the Walker River surface-water rights. The filing of applications for supplemental groundwater rights accelerated in the 1960s and 1970s.

WHEREAS, most groundwater basins in Nevada are managed on the basis of the perennial yield of the groundwater basin. The perennial yield of a groundwater reservoir is often defined as the maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater reservoir and is calculated using either a natural recharge or discharge analysis. State Engineers have generally limited groundwater appropriations in a particular basin to a calculated perennial yield, but have also recognized that in some basins this analysis does not adequately determine the amount of groundwater generally available for appropriation.

WHEREAS, in Mason Valley and Smith Valley, State Engineers recognized that substantial additional recharge to the groundwater basins occurred through the infiltration of the surface water from irrigation using water from the Walker River; this is actually the principal way that groundwater aquifers in Smith Valley and Mason Valley receive recharge. Based on this additional recharge, State Engineers permitted supplemental groundwater rights to be appropriated on a system yield analysis, rather than a perennial yield analysis. These supplemental groundwater rights were only to be used when necessary to make up the deficiency in supply from the surface-water source. If the groundwater rights were used in excess of the

available resource in one year, it was believed that the system would recover in other wetter years when supplemental water rights would not be used or minimally used.

WHEREAS, the recent prolonged drought has resulted in significantly reduced flows in the Walker River. Reduced flows in the irrigation delivery ditches and reduced irrigation using surface water has resulted in reduced seepage into the system aquifer and reduced groundwater recharge.

WHEREAS, primary, stand-alone, non-supplemental groundwater rights were permitted using the perennial yield analysis of the groundwater basins.

WHEREAS, supplemental groundwater rights were issued with the understanding that these water rights would be used differently than primary, stand-alone groundwater rights. These supplemental groundwater rights were issued in amounts far in excess of the estimated perennial yield of these groundwater basins. The purpose of issuing the supplemental groundwater rights was intended to allow farmers to continue to grow crops in dry years. These rights were also issued subject to existing rights. The amount of water used under any particular supplemental water right is constantly in flux relative to the available surface-water resources.

WHEREAS, supplemental groundwater rights are further distinguished from primary, stand-alone groundwater rights in that State Engineers have not permitted supplemental water rights to be transferred to other manners of use; have only allowed them to be transferred to supplement other decreed surface-water rights of the same or senior priority; and have not allowed them to be converted to primary, stand-alone groundwater rights. These limitations prevent them from consideration as having priority over junior, primary, stand-alone groundwater rights.

WHEREAS, as the surface-water resources have dwindled, supplemental water right holders have been using groundwater at alarmingly increasing rates.

WHEREAS, the perennial yield of Mason Valley is established as 25,000 acre-feet.

WHEREAS, existing groundwater rights in Mason Valley have been issued in excess of 149,000 acre-feet annually. Of that amount, 119,198 acre-feet have been issued for irrigation of which approximately 100,000 are supplemental water rights.

WHEREAS, the perennial yield of Smith Valley is established as 17,000 acre-feet.

WHEREAS, existing groundwater rights in Smith Valley have been issued in excess of 55,000 acre-feet annually. Of that amount, 52,879 acre-feet have been issued for irrigation of which approximately 43,000 are supplemental water rights.

WHEREAS, for the calendar years of 2012, 2013 and 2014, groundwater pumping in Mason Valley was estimated to be 110,958 acre-feet, 116,520 acre-feet and 143,600 acre-feet respectively.

WHEREAS, for the calendar years of 2012, 2013 and 2014, groundwater pumping in Smith Valley was estimated to be 36,838 acre-feet, 38,000 acre-feet and 41,200 acre-feet respectively.

WHEREAS, groundwater pumping is far in excess of the perennial yields for either of these basins.

WHEREAS, groundwater levels in much of Mason Valley have declined nearly 30 feet since 2011 and are continuing to decline at a rate of approximately 8 feet per year.

WHEREAS, groundwater levels in much of Smith Valley have declined nearly 40 feet since 2011 and are continuing to decline at a rate of approximately 12 feet per year.

WHEREAS, during this current prolonged drought, the record amounts of pumping of supplemental groundwater rights so much in excess of the perennial yields of these basins has resulted in the steepest rate of decline in groundwater levels on record.

WHEREAS, NRS § 534.120 provides that within an area that has been designated and where in the judgment of the State Engineer the groundwater basin is being depleted, the State Engineer may make such rules and regulations and orders as are deemed essential for the welfare of the area involved. Additionally, pursuant to NRS § 534.120(2), the State Engineer is authorized to designate preferred uses of water within designated basins from which water is being depleted.

WHEREAS, the extensive pumping of supplemental groundwater rights is in immediate danger of conflicting with existing primary, stand-alone groundwater rights. The groundwater resources of Mason Valley and Smith Valley are being depleted at an alarming rate and it is essential for the welfare of the areas involved that immediate action be initiated to protect the groundwater resources and water rights in these hydrographic basins. This requires the

curtailment of the use of supplemental groundwater rights in both Mason Valley and Smith Valley Hydrographic Basins

NOW THEREFORE, for the purpose of this order, the State Engineer declares that all manners of use of groundwater within the Smith and Mason Valleys, **except** irrigation from supplemental groundwater rights, to be preferred uses. It is further ordered that during the 2015 calendar year, all supplemental groundwater rights are curtailed by 50% of their annual duty.

Actual pumpage from the supplemental groundwater rights will be measured at the wellhead through the required totalizing meters by State Engineer staff. Each water right owner shall:

1. Be responsible for the installation, maintenance and repair of his meter;
2. Ensure that the meter is installed in accordance with the manufacturer's specifications;
3. Provide access to State Engineer staff without prior notice for reading and inspection;
4. Ensure that a working meter is installed at all times water is being pumped; and
5. Not tamper with any working meter, i.e. reprogramming, such that the meter provides a false measurement.

If upon inspection, State Engineer staff finds discrepancies between the totalizing meter reading and actual discharge, an independent certification of the flow measurement may be required at the expense of the water right holder.

Any violation of this order will be subject to fines and penalties pursuant to NRS § 534.193. The State Engineer will consider reasonable exceptions to the historical limitations on the movement of supplemental groundwater rights during the period this order is in effect.

J. K. P.E.

JASON KING, P.E.
State Engineer

Dated at Carson City, Nevada this

3RD day of FEBRUARY, 2015.