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Even though the Southern Nevada Water Authority (SNWA) has done a remarkable job of reducing per capita water use through conservation initiatives and has instituted water banking programs, population growth has increased the overall need for water nearly to the maximum allotted to its customers from the Colorado River. The need for additional sources of water has resulted in the proposal of the Groundwater Development Project (GDP). This proposal has been presented as one which will obtain an impossibly sustainable 78,755 to 176,655 acre feet per year (af/y), depending on which Alternative the Nevada State Engineer might approve (if any).

Originally presented as an alternative source of water supply, projected population growth will soon make this potential source a necessary component of the base supply. Based on information available on the SNWA web site, Nevada can draw 300,000 af/y from the Colorado, and gets a share of excess flows in high water years. The SNWA draws 50,000 af/y from groundwater, and gets credit for approximately 100,000 af/y of treated waste water returned to the Colorado – thus we are limited to about 450,000 acre feet per year from present sources. The SNWA goal for water use in 2035 drops from the current 250 gallons/capita/day to 199 gallons/capita/day. This laudable goal when converted to af/y and divided into the 450,000 af/y available yields a water supply for about 2,019,000 people. The 2010 census estimate for the Las Vegas metropolitan area is over 1,900,000. That's six more years before maxing out water supply at a mere 1% growth rate (and meeting the per capita use goal 15 years early). We clearly need more water if there is to be much growth. And that water needs to be there consistently unless the upper Colorado basin consistently gets higher than average precipitation. However, the warmer climate forecast is also predicted to bring lower average precipitation to the region.


Years when the northern basins of the GDP can be allowed to recharge will be scarce. The BLM Clark, Lincoln, and White Pine Counties Groundwater Development Project Draft Environmental Impact Study (DEIS) supplies information about the quantity of water that is available from the northern basins of the GDP area. The DEIS states that the groundwater outflow from the total project area is 56,193 af/y, and the reasonably foreseeable future actions will take 47,465 af/y. Thus there is only about 9,000 af/y that could be considered surplus from the study area, which of course ignores the downstream effects of such withdrawal. These flows eventually enter the Colorado via the Muddy River, but are not currently counted as Colorado River supply – an arbitrary ruling that we can expect to be revisited. Since the GDP is designed to take more than that (78,755 to 176,655 af/y), it can be seen that the majority of the water for the project will be pumped from old water naturally stored in underground basins. In other words the water will be mined, the groundwater levels will inevitably drop affecting the natural ecosystem of the area, and eventually the agricultural enterprises as well. The natural plants in these basins will be lost, the basins turned into dust bowls.

The SNWA manager has stated that the ranchers and farmers of the area with prior water rights do not need to worry about the effects of the project, because the State Engineer will shut down SNWA withdrawals if they begin to impact those prior water rights. When that happens, SNWA will not be able to reliably supply more than the 2,019,000 people. And that reliability depends mostly on the Colorado. In other words, in years of lower flows there will not even be that much available. It is clear that further population growth in the area will require new water sources, but relying on the northern Nevada GDP is only a stop-gap measure which will sacrifice those valleys and allow population growth beyond sustainable limits. If we do not limit growth here, water must be obtained from elsewhere,

doing so from the northern basins will permanently ruin them for a temporary stop-gap benefit, one that will still require the major water source development that would surplus the GDP and make its expense a waste.

#### Scenario of the future

The Groundwater Development Project pipeline to northern valleys is built, population in the valley increases, the Colorado river will not provide enough water for the new total population, groundwater removal from the northern basins is forced to continue on a regular basis— there are too few years of recharge, ground water levels drop, the State Engineer is forced to protect prior water rights in the basins by cutting off SNWA withdrawals. The result: all SNWA subscribers will have paid for or must continue to pay off the pipeline project costs, they no longer get any water from the project, the increased needs for water are beyond the legal maximum that can be taken from the Colorado River, so either water rationing is imposed on all, or — perhaps by prior use doctrine - the newer neighborhoods and communities are greatly rationed or cut off entirely if necessary. And the sacrifice of natural ecosystems in the northern valleys will have been for nought but temporarily supported population growth in a desert, an area that by definition does not have the resources to sustain the population. This project is not in the interests of the people of Nevada and should be denied.

  
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