

Fact Sheet: Future Water Demand

Future water demand by category of use must be projected as part of an overall regional water plan as prescribed by the New Mexico Interstate Stream Commission (NMISC) in the Regional Water Planning Handbook (NMISC, 1994).

Water use categories we employ in this study were adopted from those defined by the New Mexico Office of the State Engineer (OSE), and are comprised of:

- Public Water Supply (PS),
- Self-Supplied Domestic (DO),
- Irrigated Agriculture (IR),
- Livestock (LS),
- Commercial (CO),
- Industrial (IN),
- Mining (MI),
- Power Generation (PO),
- Riparian Evapotranspiration (RPET), and Reservoir Evaporation (RE).

Future water demands were projected for PS, DO, and CO categories based on current demand (HRC, 2000) and projected population growth through the year 2040 (SSW, 2000). At present, the majority of the water demand in the CO category can be attributed to New Mexico Tech, which is seeking to expand in the future based on a recently completed strategic planning process (NM Tech, 1999; see web site <http://www.nmt.edu/~pio/strategy/final/>).

The other categories have shown no predictable trends in the past, and for this study they are assumed to continue at their current rates into the future. Changes in the IR, LS, MI, and IN categories within the planning region may occur as the regional economy evolves in the future, but predicting those changes is impossible at this time.

The results of our future demand projections are summarized in Figures 1 through 3, which show water demands in domestic (both DO and PS) and commercial categories to nearly double over the next 40

years. Given that the water budget for the region (HRC, 2001) suggests that essentially all existing supplies are already being used, future growth in demand must be carefully planned for to ensure required supplies are available.

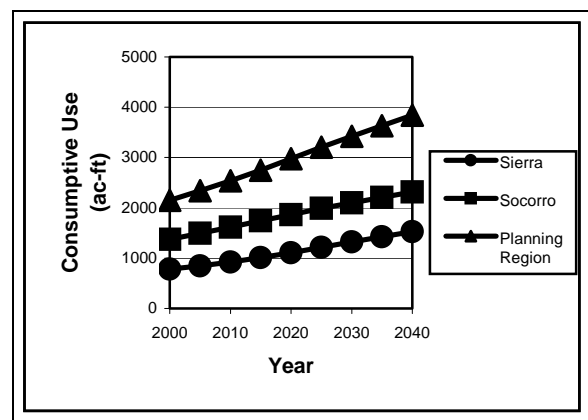


Figure 1 Future demand projection for the PS water use category.

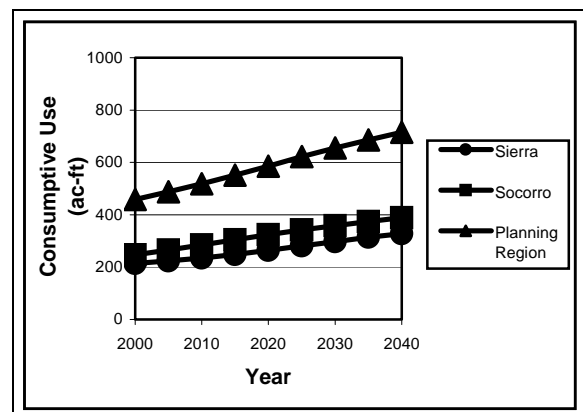


Figure 2. Future demand projection for the DO water use category.

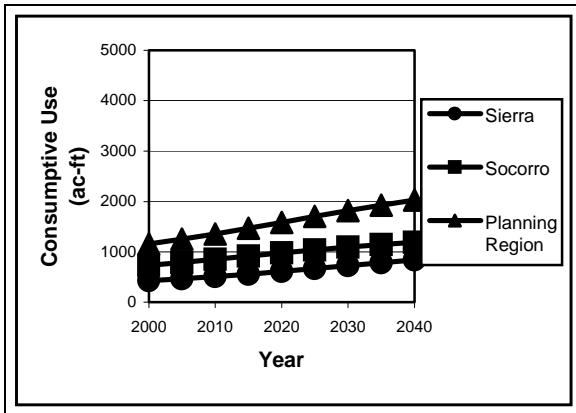


Figure 3. Future demand projection for the CO water use category.

References

HRC (Hydrosphere Resource Cons.), 2000. *Historic and Current Water Demand in the Socorro-Sierra Water Planning Region.*
 HRC (Hydrosphere Resource Cons.), 2001. *Water Budget for the Socorro-Sierra Water Planning Region.*
 NMISC, 1994, *Regional Water Planning Handbook.*
 SSW (Sites-Southwest), 2000. *Population Projections for Sierra and Socorro Counties 1990 to 2040.*



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