

Comments – Natural Resource Services Request for Modifications to Bernalillo Comprehensive Plan

Report created from email received on March 25, 2024, from Dan McGregor, Natural Resource Services Section Manager requesting changes to the Blue Sky Edition Published March 8, 2024. Requested changes are to address public comments submitted to Planning staff prior to, during and after the March 19, 2024, BCC hearing.

A. Environmental Protection and Infrastructure - Water Management

1. Pg. 244: Add 2 paragraphs to beginning of section: “**New Mexico is the driest it has been in over 1,000 years. Warming and related aridification from climate change are exacerbating water shortages. Consequently, many of New Mexico’s reservoirs are nearly empty, many of our aquifers are declining, rivers are drying, irrigation ditches are running dry when crops most need water, and our forests spent the summer of 2022 burning. Driven by drought and climate change, New Mexico’s water crisis has laid bare water policies and processes that users, practitioners and lawmakers agree are not meeting the 21st century need of New Mexican under the stress of drought, aging infrastructure, and climate change.**”^X

All water that we use in New Mexico originates as rain or snow falling onto the landscape, which either goes to groundwater or surface water or returns to the atmosphere. Of the precipitation that falls on the state, 1.6% runs off into streams and rivers, and 1.8% infiltrates into the ground, recharging subsurface aquifers. Much larger portions are transpired by plants (78.9%) or evaporated (17.7%) ... the climate will continue to warm over the next 50 years, likely without an increase in precipitation, leading to greater statewide aridity. ... Combining the historical trends with modeling of future changes, significant decreases in runoff and recharge seem very likely.”^Y

2. Pg. 244: Add footnote X: “**New Mexico Water Policy and Infrastructure Task Force, December 2022, *Facing New Mexico’s 21st Century Water Challenges*, <https://uttoncenter.unm.edu/resources/state-water-task-force/new-mexicowater-policy-and-infrastructure-task-force-final-report-2022.pdf>, Last accessed 3/25/2044.**”
3. Pg. 244: Insert Footnote Y: “**Dunbar et al., 2022, *Climate Change in New Mexico Over the Next 50 Years: Impacts on Water Resources*. New Mexico Bureau of Geology and Mineral Resources Bulletin 164. <https://geoinfo.nmt.edu/publications/monographs/bulletins/164/> Last accessed 3/25/2024.**”

4. Pg. 245: Insert the following: "... and acknowledge that there is considerable uncertainty regarding specific spatial and temporal impacts that can be expected.

Using the analysis provided in the *Leap Ahead Report*, the State Engineer formed the Water Policy and Infrastructure Task Force comprised of 29 Water Task Force members representing diverse expertise, geographies, and community interests to examine New Mexico water management and governance challenges. The findings of the Task Force were presented in December 2022 in *Facing New Mexico's 21st Century Water Challenges*. Under its Water Resources Management and Planning purview, the Task Force identified that "New Mexico's reservoirs, rivers, and aquifers are at or near record lows, and that scientists project an additional 25% decrease in streamflow and aquifer recharge of the next half century, even as New Mexico's population and economy change and grow. This threatens human and environmental uses of water."^z

The Task Force identified that "on paper and in practice, demands placed on rivers and aquifers by human extraction of water outpace supply, draining aquifers and drying up rivers. In some areas of the state, surface water and groundwater are over-appropriated and/or underregulated" which results in seven problems regarding water demand and supplies, all of which are present in the Middle Rio Grande and Bernalillo County. These include:

- New Mexico's ability to comply with interstate compacts given increasing scarcity and competing demands between New Mexico and neighboring states as well as the subsequent need for significant funding for legal defense and/or settlement negotiations.
- The lack of clarity on Tribal and non-Tribal water rights due to many unadjudicated stream systems and unresolved Tribal and Pueblo water right settlements.
- Threats to all forms of agriculture – commercial and cultural, large and small, rural and urban, irrigated and dryland.
- Threats to the water supplies that sustain municipalities and industry.
- The disproportionate impact to communities both in the amount of water available during drought and times of shortage, and the socioeconomic

impact of water right transfers from agriculture to other uses, particularly in rural and acequia communities. In consideration of equity and private property rights, these must be balanced with the need to move water around via water banking, transfers, and markets to adapt.

-The need to augment supply regionally, though such tools as brackish groundwater desalination, wastewater reuse, and treated or recycled produced water.

-The need to conserve water across sectors with investment in innovative conservation technology.

While there will be regional variability, all water users in the state should expect decreased water availability as a warming climate turns what were once drought – due to end with the next wet years- into something more permanent, which scientists have begun calling “aridification”, This reflects not merely the need to adjust to a “new normal”, but rather a need to adapt to an inexorable downward trend in New Mexico’s water supplies.^{A”}

5. Pg. 245: Add footnote Z: “New Mexico Water Policy and Infrastructure Task Force, December 2022, *Facing New Mexico’s 21st Century Water Challenges*, <https://uttoncenter.unm.edu/resources/state-water-task-force/new-mexicowater-policy-and-infrastructure-task-force-final-report-2022.pdf>, Last accessed 3/25/2044.”
6. Pg. 245: Add footnote A: “New Mexico Water Policy and Infrastructure Task Force, December 2022, *Facing New Mexico’s 21st Century Water Challenges*, <https://uttoncenter.unm.edu/resources/state-water-task-force/new-mexicowater-policy-and-infrastructure-task-force-final-report-2022.pdf>, Last accessed 3/25/2044.”
7. Pg. 245: Modify sentence: “The 2018 state water plan, the 50 Year Water Plan, ~~and~~ Leap Ahead Report, and Task Force Report have not been adopted by the County as planning documents.”
8. Pg. 246: Add sentences: “Water supply in the County is subject to state, federal, and international law, and the inter-state Rio Grande Compact. Middle Rio Grande Compact compliance is a critical issue as the community-at-large is annually consuming water that is legally apportioned for use in the Lower Rio Grande. “Over the next 50 years, flow volume in the major rivers (San Juan, Chama, Rio Grande, Pecos, and Gila) is projected to decline by 16% to 18%. Rio Grande flows have been below average for all but four years in the last two decades, with the river through central new Mexico at its lowest flows in recorded history. To put an exclamation point on the crisis, the river dried in the summer of 2022

through Albuquerque, the state's largest city, for the first time in four decades. New Mexico is getting dangerously close to a Rio Grande Compact debit violation affecting water users in both the middle and lower Rio Grande valleys.^Y Total water storage in the Rio Grande's major reservoirs entered the third decade of the 21st century at its lowest levels since the drought of the 1950s.^B Regardless of any remedies, whether internal or external, the remedies will most likely destabilize the existing status quo and create significant uncertainties in future water supply conditions and availability.”

9. Pg. 246: Add Footnote B: U.S. Bureau of Reclamation Basin Status Maps https://www.usbr.gov/uc/water/hydrodata/status_maps/, Last Accessed 3/25/2024.
10. Pg. 246: Insert new paragraph: “... from that agency but does coordinate planning and development review with that entity.

The Water Authority operates under its own legislative and ordinance authorities, separate from Bernalillo County. These include establishing sewer and water rates, budget policies and procedures, sewer use and water control, water waste reduction, participation in the Water Protection Advisory Board, water and wastewater system expansion, and other governing rules. Within the ABCWUA's Water and Wastewater System Expansion Ordinance, the ordinance addresses, through Policy No.20 – Service Consistency with Approved Land Use plan, the Water Authorities' internal existing policy regarding the land use / service provision juncture. The ordinance states:

“(1) The availability of water service shall not be used to approve, disapprove, or delay development. Water and sewer service shall be extended as approved by the Utility consistent with adopted policies that contain decisions which explicitly consider both the availability of water and the prospects for water service, and which address the need for synchronizing the timing of land use and water decisions. The land-use approval processes include, but are not limited to, consideration by planning commissions, development review agencies, and various governing bodies. Comprehensive plan policies for land use, supplemented by other adopted major planning documents, determine the appropriate locations and densities of development.”^C As further stated in the ordinance, those seeking service “must comply with the policies regarding land use, water supply sustainability, and other policies as adopted in other documents”. To those ends, the Water Authority holds a seat on the county's County Development Review Authority and is given the

opportunity to participate in County Planning Commission case review and hearings as the Water Authority deems appropriate.”

11. Pg. 246: Add Footnote C: **Albuquerque Bernalillo County Water Utility Authority *Water and Wastewater System Expansion Ordinance*. https://www.abcwua.org/wpcontent/uploads/Ordinances_PDFs/Section_7_Water_Wastewater_System_Expansion.pdf. Last accessed 3/25/2024.**
12. Pg. 246: Add sentences: “ABCWUA manages the combined resource as directed by the water management strategy laid out in the Water Authority’s Water 2120: Securing our Water Future. **The Water 2120 Plan is currently scheduled for an update revision. The original Water 2120 Plan evaluated Low Demand, Medium Demand, and High Demand scenarios, based on population growth, as inputs to its long-term water demand models. The results of those projections are an estimated population of between 943,000 and 1.15 million in 2060 an, and between 1.3 million and 1.8 million in 2120. The population projections were based on linear interpolation of historical water system growth through 1995, projected through 2060. The projection roughly corresponded to the University of New Mexico’s Bureau of Business and Economic Research (BBER) medium growth projections for Bernalillo County (2012), adjusted to reflect the portion of Bernalillo County serviced by the Water Authority.^D**”
13. Pg. 246: Add footnote D: “Water 2120 Securing our Water Future, Section 2.3, Table 2.2 and Figure 2.4”