BACKGROUND:

During the Board of Trustees’ 2023 Water Dedication Policy Work Sessions, the Board directed Town Staff to periodically update the Town’s water supply and demand outlook so the Board can continue to evaluate the Town’s water dedication policy. As requested, the Town’s water resources engineers have updated their prior water supply and demand outlook, with updated data regarding both supply and demand.

With respect to water supply, the updated outlook also incorporates the water supply associated Town’s recent acquisitions of 50 additional Colorado-Big Thompson (C-BT) Units and 2 additional Windy Gap Units. The updated outlook continues to evaluate three supply scenarios: 1) no yield from the Town’s Windy Gap Units, 2) average yield from the Town’s Windy Gap Units and 3) firm yield from the Town’s Windy Gap Units.

With respect to water demand, the outlook incorporates updated water demand data and utilizes a water bank accounting tool developed in 2023 to more closely analyze the difference between the Town’s “Actual Demand” (which is based on treated water production at the Town’s water treatment plant) and “Committed Demand” (which includes both Actual Demand and water service commitments the Town has made but that are not yet included in the Actual Demand). The difference between Actual Demand and Committed Demand is classified as Unrealized Water Demand. These demand concepts are depicted in the graphic below, along with three water supply scenarios described above.

The updated outlook conservatively assumes that the Town’s Unrealized Water Demand will grow proportionally with the Town’s Actual Demand, meaning the Town will continue to issue water credits at a rate proportionate to the growth in Actual Demand. These demand assumptions are very conservative and could be further refined through an evaluation of the projected water demands associated with the Town’s undeveloped area and expected annexation areas.

As shown in the graphic below, the updated outlook projects that under the most conservative assumptions (zero yield from the Town’s interest in the Windy Gap Project, a.k.a. Scenario 1, and continued growth of both Actual Water Demand and Committed Water Demand as described
above), the Town’s current water supply will support Actual Demand through approximately 2027. Under the slightly less conservative Scenario 2, the Town’s current water supply will support the projected Actual Demand through approximately 2031. It is important to understand that the Town’s Unrealized Water Demand will not become Actual Water Demand overnight; rather, the Unrealized Demand will become Actual Water Demand as the Town continues to approve building permits associated with new development. The Town has already made water service commitments for much of the currently planned growth within Town boundaries, so these conservative demand projections may over-estimate the demand for new water taps in the coming years.

The different water supply scenarios show that the Town’s firm water supply increases significantly once it firms the yield of its Windy Gap Units (Scenario 3), which underscores the importance of the Town’s ongoing projects to firm its Windy Gap Units. These projects will provide an additional firm water supply that can reliably serve the Town’s water demand, and the projects could yield even more water with reuse. Town Staff will continue efforts to firm the supply from its Windy Gap Units. Town Staff will also continue with additional water rights acquisitions if terms are favorable.

The updated outlook demonstrates that the Town has sufficient water for multiple years of continuing demand growth under the most conservative conditions. Therefore, Town Staff does not recommend changes to the Town’s water dedication policy at this time.

**Berthoud Projected Raw Water Demands 2024-2033**