CLOVERDALE'S 2025 URBAN WATER MANAGEMENT PLAN

Esmeralda's WSA/WSV Implications (Approved December 2025)

28 July 2026

Background

The City of Cloverdale adopted its updated 2025 Urban Water Management Plan (UWMP) in June 2026. The Water Supply Assessment and Water Supply Verification (WSA/WSV) for the Esmeralda project was approved in December 2025 based on the previous 2020 UWMP. However, the WSA/WSV also incorporated the most recent available water supply information, demand projections, and lessons learned from recent drought conditions.

To confirm that the WSA/WSV remains consistent with the newly adopted 2025 UWMP, EKI Environment & Water, Inc. (EKI) compared the two documents. **EKI's review found no material difference in the 2025 UWMP that would change the WSA/WSV's conclusions.** The 2025 UWMP further supports the WSA/WSV's finding that **Esmeralda would not reduce water available for anticipated future growth or cause the City to exceed its long-term water supply and water rights availability.**

Water Use & Population Projections

Key Takeaways

- **The Esmeralda WSA/WSV was approved using the more conservative 2020 UWMP assumptions**, which anticipated higher future population and water demand.
- **The 2025 UWMP projects substantially lower & slower population growth** than the 2020 UWMP; reflecting Cloverdale's actual recent growth trends.
- **Lower existing & projected population means lower water demand**, increasing long-term water supply reliability.
- **The City has access to far more legal water rights** than is projected to be used.
- The updated 2025 UWMP therefore provides additional support for the WSA/WSV conclusion that **adequate water supplies are available to serve Esmeralda and Cloverdale**, *even when assuming a reduced and drought-impacted water right.*

Projected demand is still significantly less than the worst water supply situation in Cloverdale history, even when including the proposed project.

City's full water right is 910 MGY.

Year	City's Demand *with Project* (MGY)		Reduced City's Water Rights[1] (MGY)
	WSA/WSV & 2020 UWMP	2025 UWMP	
2030	611	456	740
2035	639	478	740
2040	659	505	740
2045	676	519	740

MGY = million gallons per year (total demand or supply).
[1] Reduced from City's 910 MGY full entitlement consistent with 2021 drought curtailment impacts.

Year	Population Estimates *with Project*	
	WSA/WSV & 2020 UWMP	2025 UWMP
2030	13,395	9,078
2035	14,420	10,490
2040	15,160	10,850
2045	15,586	11,210

Forecasted population of Cloverdale from City-led UWMP analyses.

Potter Valley Project (PVP) Decommissioning Impacts

The 2025 UWMP's assessment of PVP decommissioning is consistent with the analyses provided in WSA/WSV Section 7, as the City's access to senior water rights is expected to limit the severity of such impacts.

The 2025 UWMP (Section 7.1) states:

> *"the extent of impacts to the City's water availability is not yet known… [but] the City and other Russian River water users are collaborating to explore strategies to manage the regional water supply."*

No quantification of anticipated PVP decommissioning impacts to Cloverdale's supplies is provided in either UWMP. **However, the Esmeralda WSA/WSV did evaluate potential effects of PVP decommissioning and found it is expected to result in little to no impact on Cloverdale's long-term water supply.** This analysis was above and beyond state requirements for a WSA/WSV; Esmeralda did this analysis because it is a topic of interest to the public.

The Esmeralda WSA/WSV went beyond state requirements by evaluating potential effects of PVP decommissioning.

The study found that the City's senior water rights, together with broader watershed inflows, are expected to result in little to no impact on Cloverdale's long-term water supply.

The City's water resilience investments provide an additional layer of protection, helping minimize any potential impacts from PVP decommissioning.

City's Water Supply Resilience Projects

The 2025 UWMP lists several planning-stage supplemental water supply projects being pursued by Cloverdale, which were not included in the WSA/WSV projections. If implemented, these projects could **further improve** the City's water supply reliability beyond what was anticipated at Proposed Project buildout by 2040.

Physical Water Availability

- The 2025 UWMP confirms the City has sufficient physical water supplies to meet existing and projected demands under normal conditions.
- During severe droughts, the City would implement its Water Shortage Contingency Plan (WSCP) to maintain reliable water service.
- **The UWMP provided no evidence that physical groundwater availability has historically constrained the City's water supply operations.**

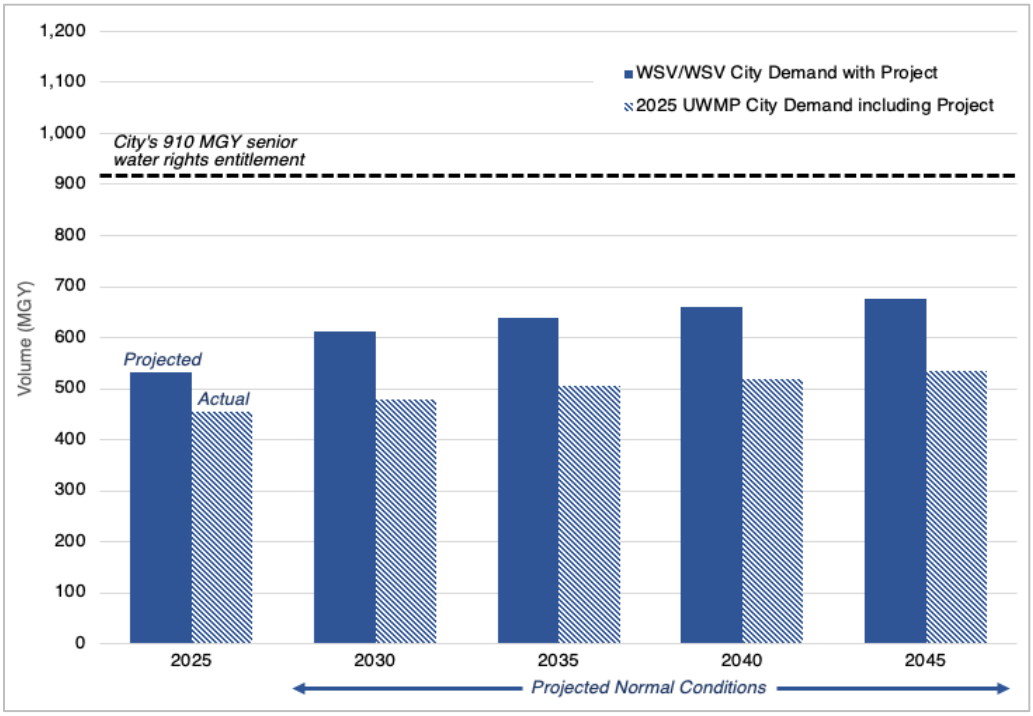
The City's wells draw from the naturally replenished Russian River underflow aquifer. The WSA/WSV evaluated both these physical conditions and the City's legal water rights.

- The WSA/WSV evaluated both the City's **legal water rights** and the **physical availability** of water. Consistent with the UWMP, it concluded that sufficient supplies are available to meet the City's existing and projected demands.
- As a City customer, any WSCP actions would apply equally to the project.
- *The WSA/WSV supplemented the UWMP by evaluating the City's water rights together with additional hydrologic analyses.*

Detailed WSA/WSV Analysis

Normal Conditions

The 2025 UWMP indicates that the City's senior water rights remain sufficient to meet **all projected City demands**, including the Proposed Project's, under normal conditions.



Single and Multiple Dry Years, and Drought Conditions

- The WSA/WSV relied on the City's 2020 UWMP given the preceding 2012-2016 drought, the most severe drought at that time. The 2025 UWMP was informed by the later 2021-2023 drought impacts, specifically the water supply curtailments imposed by the State Water Board.
- **The 2025 UWMP evaluates water shortages against this more stringent allocation but still concludes that the City can address shortfalls by actions defined in its WSCP.**
- While this suggests the Project may be subject to additional water use restrictions imposed during the most difficult droughts, **it <u>does not</u> conclude that the Project either exacerbates those supply issues or impacts existing City customers by forcing stronger restrictions.**
- Drought allocations are defined on **per capita** basis, so adding more people does not harm existing residents' legal allocation.

The City's Water Supply Resilience Projects aim to further improve its long-term water supply reliability for dry years and drought conditions.

This includes a 1M gallon water tank storage system that the Esmeralda project proposes to build, pay for, and transfer to the City.