



# Oregon

Tina Kotek, Governor

Department of Land Conservation and Development  
Water Resources Department



February 26, 2026

To: Land Conservation and Development Commission and the Water Resources Commission

From: Brenda Ortigoza Bateman, Ph.D., Director, DLCD  
Ivan Gall, Director, OWRD  
Ethan Stuckmayer, Housing Services Division Manager, DLCD  
Justin Iverson, Groundwater Section Manager, OWRD  
Kerri Cope, Water Management and Conservation Analyst/Reuse Coordinator, OWRD  
Alyssa Mucken, Senior Water Advisor, OWRD

Subject: **Agenda Item 4D, February 26, 2026, LCDC and WRC Meeting**

## Housing Goals & Water Availability

### I. Agenda Item Summary

Ethan Stuckmayer, Housing Services Division Manager, Department of Land Conservation and Development, and Justin Iverson, Groundwater Section Manager, and Kerri Cope, Water Management and Conservation Analyst/Reuse Coordinator, Water Resources Department will present this agenda item. Staff will provide an overview of housing production goals and the associated rulemaking. This agenda item will also discuss water availability, both surface water and groundwater allocation, and various options or alternatives for meeting water supply needs that can support housing production needs and economic growth.

#### a. Purpose

The purpose of this agenda item is to provide helpful information to members of the Water Resources Commission and Land Conservation and Development Commission as they work with or engage with members of their communities about the state's housing goals and water scarcity in some parts of the state. The staff report and briefing is intended to provide key messages and a summary of tools that can be used to address water issues as communities plan for additional growth and development.

#### b. Objective

This is an informational report, and Commissioners will be given an opportunity to share thoughts and ask questions. The objective of this briefing is to inform Commissioners of recent agency-led efforts, some of which may be a refresher of past briefings, and to describe the connection between housing production goals, economic development, and the use and management of the state's water resources. Further, this briefing is intended to stimulate

conversation about how to improve the integration of water information and land-use planning, where possible, a recommended action of Oregon's 2025 Integrated Water Resources Strategy.

For further information about this report, please contact:

- Ethan Stuckmayer, Housing Services Division Manager, DLCD, at 503-302-0937 or [ethan.stuckmayer@dlcd.oregon.gov](mailto:ethan.stuckmayer@dlcd.oregon.gov)
- Justin Iverson, Groundwater Section Manager, OWRD, at 503-302-9728 or [justin.t.iverson@water.oregon.gov](mailto:justin.t.iverson@water.oregon.gov)
- Kerri Cope, Water Management and Conservation Analyst/Reuse Coordinator, OWRD, at 503-979-9544 or [kerri.h.cope@water.oregon.gov](mailto:kerri.h.cope@water.oregon.gov)
- Alyssa Mucken, Senior Water Advisor for NW Region, OWRD, at 503-871-6964 or [alyssa.m.mucken@water.oregon.gov](mailto:alyssa.m.mucken@water.oregon.gov)

## II. Background

Oregon continues to experience a housing shortage that has prompted the development of statewide housing production goals. Municipalities and other water providers are required to obtain water rights to supply water to residents, industries, businesses and provide public services, often using surface water, groundwater, or storage in reservoirs. Some communities in Oregon are confronting significant challenges related to water supply reliability, particularly as drought conditions become more frequent, some groundwater aquifers are experiencing declining water levels, and surface water supplies during the summer months limit access to new water rights. Nearly 90,000 water rights exist today, supporting both instream and out-of-stream uses.

### a. Housing Modernization

Governor Tina Kotek signed [Executive Order 23-04](#) which set an ambitious housing production goal of 36,000 homes per year, intended to increase supply at a large enough scale to improve housing affordability and reduce housing instability. This represents an 80 percent increase over previous trends. This additional housing will depend on an adequate supply of development ready land, water, water treatment capacity upgrades, and needed infrastructure.

In 2021, the Oregon Legislature directed the Department of Land Conservation and Development (DLCD), in partnership with Oregon Housing and Community Services (OHCS), to prepare a set of recommendations to modernize how local cities and counties plan for housing in a manner that results in more affordable, fair, and equitable housing outcomes. DLCD published a set of comprehensive and community-informed recommendations on how to implement the Oregon Housing Needs Analysis (OHNA) before the 2023 Legislative Session. The last three legislative sessions have led to new statutes and resulting rules that have modernized Oregon's approach to housing.

On December 4, 2025, the Land Conservation and Development Commission (LCDC) adopted a comprehensive set of rules to implement the Oregon Housing Needs Analysis, marking one of the most significant housing reforms in decades. These rules shift Oregon's housing planning

framework from a narrow focus on land capacity toward a comprehensive system that emphasizes local actions to promote housing production, affordability, and choice.

This work complements the first phase of housing rules adopted in December 2024 and marks the completion of DLCD's assignment by the legislature through House Bill 2001 (2023), House Bill 2889 (2023), and Senate Bill 1129 (2025).

One critical change in the newly adopted rule paradigm is recognition of the strong linkage between meeting our state's housing goals and the need to plan for and build the requisite urban services, including, but not limited to, the provision of water service.

## **b. Public Facilities Review**

The statewide planning goals necessitate consideration and balancing of all goals, otherwise known as Comprehensive Planning. When local governments conduct housing planning activities, they are also asked to take steps to ensure adequate planning for public facilities to accommodate new housing. Rules recently adopted by LCDC under the OHNA program attempt to further solidify this connection.

### **Development-Ready Lands Inventory**

Adopted under HB 2001 (2023), the Development-Ready Lands Inventory directs cities to assess which buildable lands are ready for development within their Urban Growth Boundary. This means that those lands are (1) annexed into the city limits, (2) do not include wetlands or other issues constraining development, and (3) have adequate public facilities nearby or plan to have public facilities in the near future via an adopted capital improvement plan.

This inventory is structured so that if a local government identifies a deficiency of Development-Ready Lands when compared to the near-term housing needs of its community, it is obligated to take actions to remedy this deficit. Actions that cities might take to remedy a deficit of Development-Ready Lands might include, but are not limited to, investing in public facilities improvements, reprioritizing projects on the capital improvement plan, annexing land for urban development, or rezoning lands to intensify development potential in areas that have more service capacity. This requires planning departments to work closely with public works departments in the city to coordinate these planning efforts.

### **Coordinated Public Facilities Planning**

When cities are amending their Urban Growth Boundaries, it is the most viable time in the planning process to consider public facility needs. However, lands brought into a city's Urban Growth Boundary can develop on wildly different timelines depending on many factors in the development landscape (including, but not limited to, proximity to city limits, rate of urbanization of a community, owner interest, and market conditions). What is true, though, is that the closer a recently included property nears service availability, the more likely development is to occur.

Recently adopted rules by LCDC direct cities to play a role in bringing recently included properties closer to service availability via public facilities planning or conceptual planning. The new rules direct cities to conduct concept planning of lands brought into the urban growth boundary within five years of its inclusion. This means that cities will play a much more active role in preparing lands for urban development and solidifies a deeper connection between

planning and public works activities of the city. This requires cities to be prepared to take action to service newly urbanized lands but also to think critically about which lands to bring into the urban growth boundary initially.

### **c. Water Availability**

A specific planning nexus exists between housing and water supply. Under Oregon law, all water belongs to the public. With some exceptions, cities, irrigators, businesses, and other water users must obtain a permit or license from the Water Resources Department (OWRD) to use water from any source - whether it is underground, or from lakes or streams. Oregon's water laws are based on the doctrine of prior appropriation. This means the first person to obtain a water right is the last to be shut off in times of low streamflow or declining groundwater levels. In water-short times, the water right holder with the oldest priority date can demand the water specified in a water right without regard for the needs of junior users.

Determining water availability is an important decision for evaluating new water right applications for the use of groundwater, surface water, and to store water. In September 2024, the Water Resources Commission adopted new rules that modernize the criteria for allocating new groundwater rights to better protect existing users and sustainably manage the resource.

Like groundwater, the Department has identified a need to modernize the tools used for evaluating new uses of surface water. Today, when the Department evaluates a new water right application, various factors are considered, such as water availability, the needs of existing water right holders, including instream water rights, and the potential impact to sensitive, threatened, or endangered fish species, as well as state and federal water quality standards.

### **Groundwater Supplies & Allocation**

Larger-scale groundwater development has occurred primarily in areas where the geological conditions are favorable and where additional surface water is no longer available for more water rights. The quality of groundwater can also limit the current and future use of water.

Oregon recognizes the connectivity between surface water and groundwater. Statewide monitoring indicates that groundwater levels are declining and surface water supplies are overallocated in many parts of the state. Signs of overallocation include groundwater level declines, dry water wells, and surface water flows that are insufficient to fulfill existing water rights especially during summer months when groundwater discharge is a significant component of the total flow of many streams in Oregon.

The new administrative rules for groundwater allocation are designed to better protect existing water users and to sustainably manage water resources. The rules require an affirmative finding that water is available to allocate when determining whether to issue a new water right, including a finding that water levels are reasonably stable and hydraulically connected surface waters are not already fully allocated. OWRD's Groundwater Section recently completed processing the backlog of applications filed before the new rules went into effect and is now conducting technical reviews of applications under the new administrative rules.

The rules do not make changes to uses of groundwater that are statutorily exempted from the requirement to obtain a permit or certificate (exempt uses). A few exemptions exist for

groundwater use, including domestic household use of up to 15,000 gallons per day (for single or a group of homes). Exempt groundwater uses still carry a priority date.

Where drinking water services are not available from a city or water district, households often rely on exempt use wells to provide for domestic water use. An estimated 280,000 exempt use wells exist today, with several thousand more drilled each year. The amount of water pumped by such wells represents a small portion of total groundwater use statewide, an estimated 5 percent, compared to larger permitted groundwater uses like irrigation at 82 percent and municipal supply at 10 percent. Expansion of rural residential water use can be problematic in areas of low-yielding aquifers or where water quality contaminants are present. In summary, for most of rural Oregon, exempt use wells support current and future housing development on rural lands.

### **Surface Water Supplies & Updating Allocation Tools**

Many of Oregon's streams and rivers are over-appropriated, meaning there is not enough water to meet the full water rights held by people, cities, and industries, while also maintaining protection for instream flows where these exist. In dry years, junior water rights are regulated off in favor of senior water rights. In Northwest Oregon, regulation can happen for water rights junior to the mid-1900s, to the late 1800s in Eastern Oregon, and to time immemorial in the Klamath Basin.

To prevent water use regulations from becoming worse, water availability must be considered for issuance of new water rights. OWRD calculates water availability by first estimating the natural (pre-development) streamflow conditions for a specific waterway and then subtracts water demands documented by existing water rights. These existing uses, or demands, may include water storage projects, water diverted for out-of-stream uses, such as irrigation or municipal use, and instream use protected by instream water rights and state-designated scenic waterway flows.

In early 2025, OWRD began developing the Surface Water Information Modeling System (SWIMS), a modern replacement for the current Water Availability Reporting System. The WARS tool was developed in the early 1990s using streamflow data from 1958 to 1987. SWIMS will be based on updated science and more recent data (1991-2020) and designed to more readily handle complexity and incorporate newer streamflow data in the future. SWIMS has an expected completion date of January 2030 and will replace the current decision-support tool used for evaluating applications for new surface water rights and hydraulically connected groundwater rights.

## **d. Planning for Water Supply and Infrastructure**

### **Municipal Water Management and Conservation Plans**

The Oregon Water Resources Department oversees the Municipal Water Management and Conservation Planning (WMCP) program, which provides a process for developing long-range plans that demonstrate how a drinking water provider will reliably meet existing and future water demands while using water efficiently.

Municipal water systems may be shared water systems operated by homeowner associations, larger systems managed by private water companies, or public systems operated by cities,

towns, or water districts. Most commercial, industrial, and high-tech facilities receive water through municipal water systems.

OWRD currently has approximately 200 approved municipal WMCPs. Because not every municipality or water supplier is required to submit a WMCP, coverage is not uniform statewide. The initial requirement is typically triggered through the following actions:

- A new municipal (or quasi-municipal) water right permit has been issued: A WMCP is typically due within three to five years of permit issuance.
- An extension application, allowing additional time to develop a water use permit, is approved for a municipal (or quasi-municipal) permit: A WMCP is due within 3 years of the extension of time approval.
- When a WMCP is approved: Future updates are due on the schedule set in the final order approving the WMCP – typically every five to ten years.

As a result, WMCPs are generally concentrated among water providers that have had recent permitting activity and are planning for projected growth, while gaps are more common among smaller water systems that have not triggered a permitting action (and therefore may not be on a WMCP schedule).

A WMCP documents a water provider's legal and physical water supplies (including associated water rights), describes current and projected water use, and identifies supply limitations and risks. Consistent with state requirements, it ties land use and growth assumptions to water demand projections over 10- and 20-year planning horizons (and, at the supplier's option, longer periods), and it establishes a water conservation program with an implementation schedule, five-year benchmarks, and required reporting to evaluate progress over time. In practice, a WMCP functions as a water resiliency blueprint, linking planned growth to available water resources and defining the operational, infrastructure, and conservation actions needed to maintain reliable water service under varying hydrologic conditions, seasonal demand patterns, and system operating constraints.

Many of the elements required in a WMCP are aligned with similar plans by the Drinking Water Section of the Oregon Health Authority (water system master plans) and Department of Land Conservation and Development (public facilities plans).

## **e. Water Supply Options to Support Growth & Development**

Increasingly, water users are relying on tools such as water conservation, reuse, water right transfers, and water storage to meet water needs during the summer months. Some of these tools are designed to benefit instream flow. Interest in alternative pathways or innovative approaches is driven by the fact that most of the surface water in the state has already been allocated and securing additional water rights through a new water use permit is difficult. This is especially true for obtaining new water rights when existing instream and out-of-stream water demands are high and supplies are scarce.

- **Water Right Transfers** – Having a water right certificate opens the door to other tools, such as transfers, that allow water users to change where water is diverted from, where

it is used, or change its purpose or type of water use. There is growing interest in the use of water right transfers to move water around to support out-of-stream uses, streamflow restoration, and economic growth. The filing of transfer applications, including permit amendments, has steadily increased over the past twenty years, a growing trend in most western states. The transfer program includes options for permanent transfers, temporary transfers, and instream leases.

- **Aquifer Storage and Recovery (ASR) and Aquifer Recharge (AR)** – The 2025 Integrated Water Resources Strategy calls for increasing the pace and scale of aquifer storage projects, noting this as a key priority task for implementation. The use of ASR/AR techniques is gaining interest, particularly in the northwest and north-central regions of Oregon, due to the smaller environmental footprint, moderate cost, and potential associated benefits for water quality, compared to above-ground storage. Areas of Oregon designated as “groundwater limited” or “critical groundwater areas” may have greater capacity to develop ASR and AR projects. The state has issued authorizations for approximately 20 ASR and 10 AR projects. Municipalities use aquifer storage to supplement water supplies for their communities, as in the case of Baker City and the City of Beaverton, for example. Farmers and ranchers use aquifer recharge to supplement irrigation water during the summer months.
- **Recycled Water / Reuse** – The 2025 Oregon Legislature passed House Bill 2169 requiring the Department of Environmental Quality to establish an Interagency Water Reuse Development Team to encourage and expand water reuse in Oregon.

Oregon has approximately 340 wastewater treatment facilities and there are more than 140 municipal facilities operating recycled water programs throughout Oregon.

States that commonly experience water supply shortages, such as Texas and California, have long been using direct-potable reuse and other states are positioned to follow. In 2013, Texas became the first state to operate a direct potable reuse facility in the country.

Key barriers to expanding water reuse include fragmented and sometimes unclear multi-agency roles and permitting processes, which can create coordination challenges and inconsistencies for project sponsors, as well as intra- and interagency barriers and conflicts that still need to be identified and resolved. There are also permitting challenges across different reuse pathways (including land application and aquifer storage/recharge), along with regulatory and guidance issues such as the need to evaluate and update policies, internal guidance, administrative rules, and long-standing internal directives to create a more transparent and predictable permitting pathway while continuing to protect public health and the environment.

- **Water Conservation Programs** – Other states and many Oregon communities have addressed water supply constraints using an assortment of tools including pairing conservation requirements with reuse, water right transfers/market mechanisms, and regional planning.

Las Vegas, for example, has implemented water conservation measures such as limits on pools/spas construction, restrictions on green ornamental lawns, and strict irrigation schedules coupled with enforcement, while also expanding reuse by reclaiming indoor water and supporting septic-to-sewer conversions to increase water available for reuse.

In California, San Diego has combined fixture standards and turf replacement incentives with an agricultural-to-urban water transfers model that funds irrigation efficiency improvement within an agricultural water district, and leases conserved water long-term for use by the city.

In addition, some communities have pursued advanced reuse options such as direct potable reuse (Big Spring, Texas), producing highly purified water for blending with other sources prior to treatment.

- **Other Water Supply Approaches** – Oregon and many neighboring states continue to promote non-traditional and innovative approaches for stretching limited water supplies. Other approaches include integrated place-based water planning and management (Washington, Oregon, and California), locally led groundwater sustainability planning and groundwater banking (California), alternative water right transfer methods (Colorado), and mitigation programs intended to address impacts of new water uses on water quality or listed fish species. Improved weather forecasting and modeling is also leading to more innovative water management approaches, especially in how water managers operate reservoirs and dams to achieve greater flood risk benefits and improve water supply reliability.

### **III. Conclusion**

Oregon's housing goals and economic development priorities further illustrate the importance of managing and adapting to less water supply to support all beneficial uses of water. Each year Oregon experiences less snowpack – our natural water storage system – and hotter, drier summers, which can increase consumptive uses. Oregon, like many states, needs to develop and upgrade our water and wastewater infrastructure systems, not only to address the aging nature and repair outdated equipment, but to also use water efficiently and prepare for hazards like earthquakes and more frequent drought conditions. Oregon has a real opportunity to be creative and modernize the way we approach development of new housing and water projects, one that promotes collaborative multi-benefit solutions for both land and water resources management.

### **IV. Recommended Action**

No action is required. Staff appreciate the Commission's input and discussion on this briefing.

### **V. Attachments**

None.