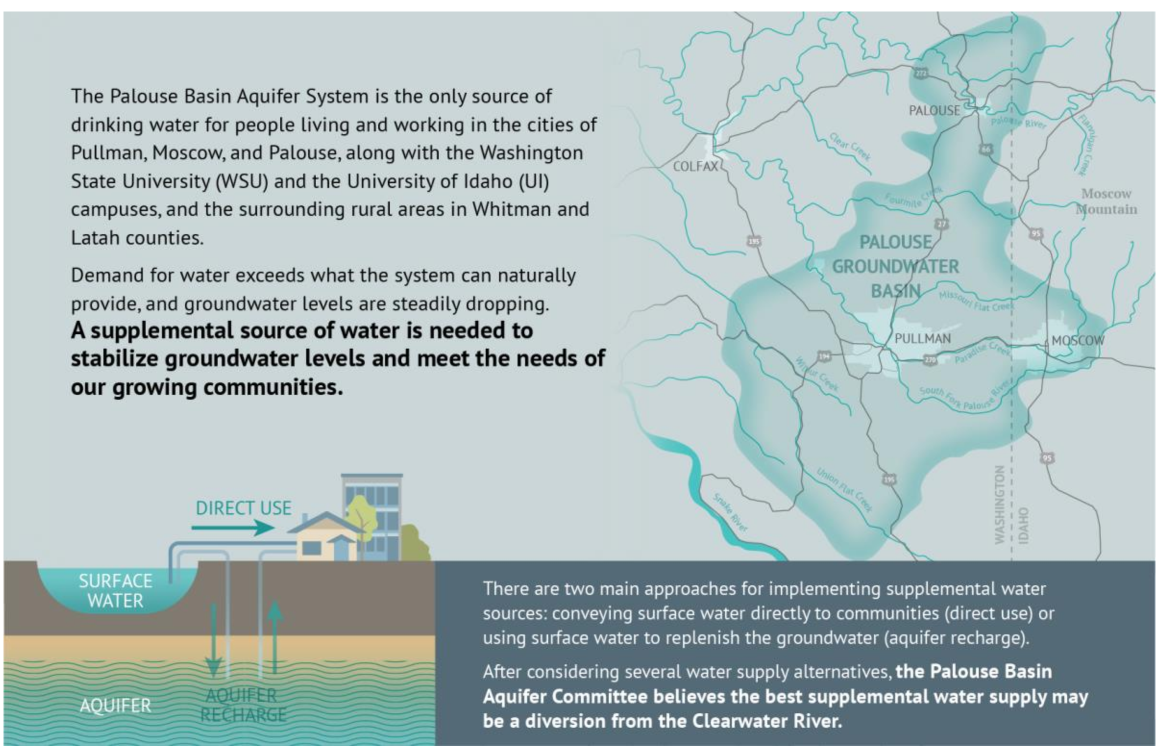
White Paper:

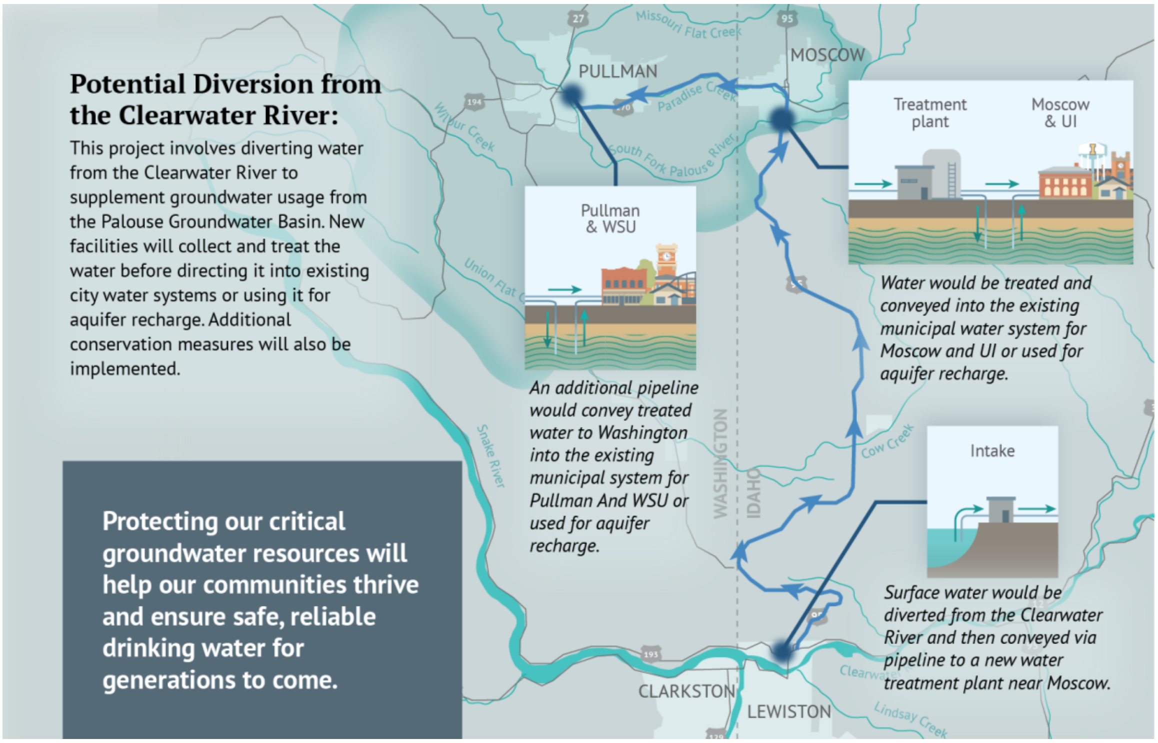
Ensuring Long-Term Water Sustainability for the Palouse Basin

Overview

The Palouse Basin—home to the communities of Moscow, Idaho and Pullman, Washington—relies on a shared aquifer system that is in long-term decline. Despite decades of highly successful water conservation efforts, the aquifers are being depleted at rates that exceed natural recharge. Without a supplemental water source, the region's long-term water security, economic vitality, and environmental health are at risk.

This paper outlines the current status of regional efforts, led by the Palouse Basin Aquifer Committee (PBAC), to secure a sustainable future water supply. It also highlights the progress of the Palouse Basin Regional Water Sustainability Project and emphasizes the importance of continued support and partnership at the federal level.





A History of Conservation Leadership

The Palouse region has long been recognized for its proactive approach to water conservation. Local water providers have implemented a wide range of demand-reduction strategies, including:

- Tiered water rates to incentivize efficient use
- Leak detection and system upgrades
- Extensive public education campaigns
- Installation of water-efficient fixtures and appliances

These efforts have successfully reduced per capita water usage even as the population has grown. However, conservation alone cannot restore aquifer levels, and a supplemental water supply is now essential to secure the region's long-term water future.

Declining Aquifers: The Need for Action

The Palouse Basin aquifer system, which includes the Wanapum and Grande Ronde aquifers, has experienced a steady decline in water levels for decades. Monitoring conducted by PBAC and the pumping entities confirms that:

- Groundwater withdrawals continue to outpace natural recharge
- Annual declines in aquifer levels are averaging 0.7 feet per year
- The total usable volume of water is finite and diminishing

PBAC has concluded that without the introduction of a supplemental source, the region faces increasing risks to water reliability, economic development, and quality of life.

Evaluating Supply Alternatives

PBAC has overseen comprehensive studies to evaluate the feasibility of various supplemental water supply options. Among the findings:

- Local surface water sources within the basin are insufficient
- Seasonal and annual flows were lower than originally modeled
- Treatment costs were higher than anticipated
- A Clearwater River diversion is emerging as the most viable option
- Offers reliability, volume, and relative proximity
- Supported in concept by the Idaho Department of Water Resources and Washington Department of Ecology

This recommendation of a Clearwater River Diversion follows extensive collaboration with state agencies, technical experts, and stakeholders across Idaho and Washington.

Current Progress: Clearwater River Diversion Study

In Spring 2025, the City of Moscow—in partnership with PBAC—initiated a major study of a potential Clearwater River diversion. Following a competitive RFQ process, HDR Engineering, Inc. was selected to lead the study. The contract includes:

- Water rights application strategy
- Preliminary project design and technical feasibility
- Regulatory and environmental permitting assessment
- Stakeholder, tribal, and intergovernmental engagement

The study is expected to take approximately 12 months and is funded by the Idaho Water Resource Board, with supplemental support from PBAC.

HDR brings extensive experience in regional water infrastructure and basin-specific knowledge, with several team members having previously worked in the Palouse Basin.

Community Partnership Needed

As the Palouse Basin works toward a sustainable water future, continued community engagement is vital. The success of the Palouse Basin Regional Water Sustainability Project depends not only on technical expertise and intergovernmental coordination, but also on the shared commitment and active participation of the people who call the Palouse home.

Residents, businesses, and institutions can contribute in several ways:

1. **Stay Informed and Engaged**
   Follow updates from PBAC to stay informed about project milestones, public meetings, and opportunities for feedback. The project's transparency and accountability depend on broad community understanding and involvement.
2. **Support Conservation and Education**
   Even as a supplemental water source is developed, conservation remains essential. Community members can continue to model water-wise behaviors, participate in rebate and efficiency programs, and help educate others about the importance of sustainable water use.
3. **Participate in Planning and Dialogue**
   Community voices are critical in shaping the long-term vision for water use and sustainability. Public meetings, surveys, and workshops provide avenues for residents to share their perspectives, ask questions, and contribute ideas that reflect local values.
4. **Champion Collaboration**
   The Palouse Basin's strength lies in collaboration. Continued partnership among residents, businesses, educational institutions, and local governments will help ensure that solutions are practical, equitable, and aligned with community priorities.
   Through ongoing engagement and stewardship, the people of the Palouse can help secure a resilient water future—one that sustains both the natural environment and the quality of life that defines this unique region.

Conclusion

The cities of Moscow, Idaho, and Pullman, Washington, along with regional partners, including the University of Idaho and Washington State University, have demonstrated extraordinary foresight and leadership in managing a limited water resource. However, even the strongest conservation efforts cannot solve the underlying problem of an overdrawn aquifer. A sustainable, supplemental water supply is essential.

The Palouse Basin Regional Water Sustainability Project represents a responsible, science-based approach to securing the future. Continued federal engagement will be vital to helping this effort succeed for the health of the aquifer, the resilience of the community, and the strength of our regional economy.

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