

What is our strategy?

The Mosier Watershed Council would like to:

- increase stakeholder involvement;
- evaluate potentially commingling wells;
- help prevent the drilling of any new commingling wells;
- develop a restoration plan to address the groundwater problem and other identified priority issues; and
- seek funding to implement the restoration plan.

The Mosier Watershed Council provides a venue for community members to get together to discuss natural resource problems and opportunities; prioritize activities and decide upon a course of action.

Your voice can make a difference!

Contact the Watershed Council Coordinator to receive notices about upcoming meetings.

Mosier Watershed Council

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What has been done?

Wasco Co. Soil and Water Conservation District has continued to work on Mosier's groundwater problems by funding evaluations of wells found in the priority areas identified in the USGS study.

Spring and summer of 2015, members of the Mosier Watershed Council were not only successful in getting stricter well standards passed for new well construction in Mosier; they were also able to find funding for those wells already impacted.

Through meetings with Representative John Huffman and his staff, Watershed Council members were able to bring attention to the Mosier groundwater situation and the domestic and commercial repercussions of the water loss.

The voice of the community was heard and in July 2015, the legislature earmarked one million dollars for 2017 to repair commingling wells in Mosier.

In order to be ready when the funds become available, the Conservation District will continue to fund well evaluations to zero in on the actual commingling wells.

We need your help. Without participation of the landowners in the affected zones, it will be difficult to fully solve the commingling well issue.

For more information on the Mosier Groundwater Project, please visit:

http://www.wascoswd.org/wcswd_024.htm

Mosier's Groundwater

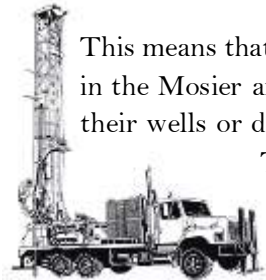
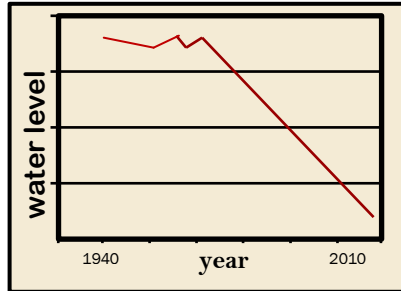


Problems, Consequences, & Strategies for the Future

The problem:

well water levels are dropping

In the Mosier area, water for city residents, rural homes, and farms comes from wells. Water levels in many Mosier-area wells have dropped 150—200 feet in the last 40 years!



This means that many rural and farmers in the Mosier area have had to deepen their wells or drill new wells.

This gets
VERY
EXPENSIVE!

Well problems impact property values and increase costs for agricultural operations.

Besides threatening Mosier's economic stability, water supply problems also create conflicts among neighbors and make it difficult for individuals to be self-sufficient on their land. The long-term sustainability of the community depends on a sustainable water supply.

What's causing the problem?

A review of recent studies and their conclusions...

The Mosier Watershed Council and Wasco County Soil & Water Conservation District teamed up with the US Geological Survey to study Mosier's groundwater. After years of reviewing existing data, collecting new data and building computer models, the USGS published a report in 2012.

The big conclusion regarding the cause of Mosier's groundwater declines? **Commingling wells.** According to computer models, leakage through commingling wells accounts for 80—90% of the groundwater level declines, with the remaining 10—20% of the declines attributable to pumping (groundwater use). However, flow measurements to quantify commingling have only been made in a couple Mosier-area wells; more measurements are needed to verify model results

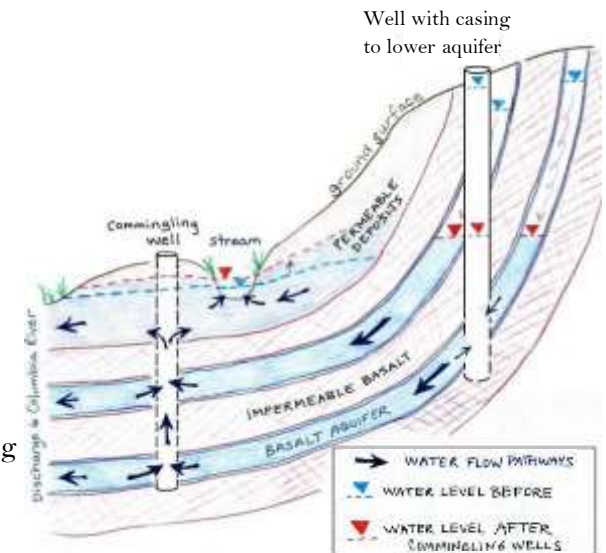
Another study, funded by a grant from the Oregon Water Resources Department, looked at the feasibility of different potential solutions to Mosier's groundwater problem. The conclusion? Techniques such as artificially recharging the aquifers with winter runoff from streams will not restore water levels unless commingling wells are repaired or decommissioned first.

What is a commingling well?

These are leaky wells that allow water to drain from one aquifer to another aquifer or a stream.

Commingling wells are common in the Mosier area because:

1. The geologic layers beneath Mosier contain multiple aquifers, stacked on top of one another but separated by impermeable layers. In some cases, water pressure is higher in deeper aquifers.
2. Many wells were constructed without proper casing & sealing, which leaves the walls of the well bore permeable to water.



Therefore, higher-pressure water from deeper aquifers flows up into the well but then leaks out through the unsealed walls. **The cumulative effect of multiple unsealed wells? The aquifer acts like a leaky bucket and water levels drop.**