## What Did the Lower Yakima Valley Groundwater Management Area Accomplish?

As of October 2022, the Lower Yakima Valley Groundwater Management Area (LYV GWMA) Implementation Team has held seven meetings, purchased a geoprobe for the South Yakima Conservation District, and arranged for bottled water delivery to 75 homes.

In June 2019, the LYV GWMA Advisory Committee (GWAC) completed seven years of work and published a plan to address groundwater pollution.<sup>1</sup> The plan was to be carried out by an Implementation Team with representatives from Yakima County, the WA State Dept. of Ecology, the WA State Dept. of Agriculture, the WA State Conservation Commission, the WA State Dept. of Health, South Yakima Conservation District, WA State University Extension Service, the Yakima Farm Bureau, the Yakima Dairy Federation, the Roza-Sunnyside Joint Board of Control. and the Yakima Health District.<sup>2</sup>

In July 2019, the WA State Dept. of Ecology certified the GWMA subject to three conditions:<sup>3</sup>

1) Identify and name a lead entity and describe specific duties (Scope of Work) to implement the goals and recommendations of the Lower Yakima Valley Groundwater Management Area Program.

2) Submit a prioritized implementation schedule to Ecology on or before May 31, 2020, including but not limited to deadlines for accomplishment of the Program's recommended actions, responsibilities to seek funding, and recommended implementation priorities.

3) Seek funding, identify and support opportunities via a study of water supply alternatives, consistent with recommendations 33 and 44, to provide immediate assistance to residents within the Groundwater Management Area boundary whose drinking water nitrate levels are consistently above the EPA safe drinking water standard of 10 mg/L in their private domestic wells.

As of this writing the GWMA Implementation Team has achieved one of these requirements: The GWMA named the South Yakima Conservation District as the lead entity. In October 2022, in response to a public records request Ecology stated:

For number one South Yakima Conservation district agreed to be the lead entity with help from the Implementation Committee. The group is currently working on the draft scope of work and the implementation plan. For number three they should be reaching out to Yakima County, Yakima Health District, Washington State Department of Health and EPA as well.

## **Timeline:**

## **Thirty Years Ago**

In the 1990's the State of Washington began addressing groundwater pollution in Eastern Washington. There were large meetings and grand plans.<sup>4</sup>

#### **Twenty Years Ago**

In 2002 the Valley Institute for Research and Education (VIRE) completed a study of groundwater pollution in the Lower Yakima Valley that showed significant nitrate pollution in parts of the LYV downstream from Zillah and Toppenish.<sup>5</sup>

In 2008 Yakima Herald Republic reporter Leah Beth Ward wrote a series of articles entitled "Hidden Wells, Dirty Water" that documented pollution of domestic wells in the LYV and led to studies by the Environmental Protection Agency under the Safe Drinking Water Act.<sup>6</sup>

#### **Ten Years Ago**

Ward's investigative reporting led to the formation of the Lower Yakima Valley Groundwater Management Area (LYV GWMA) in 2012. In the GWMA Request for Identification planners projected that the aquifer would be cleaned up in five years.<sup>7</sup> This did not happen.

#### **Most Recently**

In 2019, when the Friends of Toppenish Creek appealed the GWMA certification to the WA State Pollution Control Hearings Board (PCHB)<sup>8</sup>, Ecology told the PCHB that the agency could not determine whether LYV groundwater nitrate levels were getting better or worse because, after thirty years of discussions, there were still no baseline studies.

The GWMA had drilled 30 monitoring wells in the LYV in 2018/2019.<sup>9</sup> Ecology began a two year study with quarterly well testing in 2021. This sampling will supposedly establish a baseline. But the sampling excludes wells in the "dairy cluster", the most contaminated part of the LYV.

As of this writing there are three quarters of well sampling on Ecology's Environmental Information System Data Base website.<sup>10</sup> For these three quarters 45% to 48% of the monitoring wells have readings above the safe drinking water level of 10 mg/L Nitrate – N plus Nitrite-N.

FOTC has submitted public records requests for meeting summaries for the LYV GWMA Implementation Team. The responses indicate that the implementation team has met on:

- February 10, 2021
- September 16, 2021
- March 10, 2022
- April 14, 2022
- June 9, 2022
- July 14, 2022
- August 11, 2022

FOTC has requested copies of the team's Scope of Work, Implementation Schedule, and Study of Water Supply Alternatives to Provide Immediate Assistance to Residents. Ecology says that the Implementation Team is working on these items. South Yakima Conservation District says that the documents will eventually be posted on the LYV GWMA website.

# Lower Yakima Valley Monitoring Wells – 2021 to 2022

From

https://apps.ecology.wa.gov/eim/search/Groundwater/GWSearchResults.aspx?ResultType=GroundwaterWellTab&StudyUserIds=MRED0005&StudyUserIdSearchType=Contains&HasGroundwaterData=True

	Summer				Winter	
Location Name	2021	Unsafe	Fall 2021	Unsafe	2022	Unsafe
LYV-MW-014	11.2	*	11.1	*	11.5	*
LYV-MW-015	17.3	*	18.2	*	15.8	*
LYV-MW-025	5.1		5.45		4.8	
LYV-MW-002	3.83		3.77		3.81	
LYV-MW-027						
LYV-MW-021	29.1	*	25.9	*	24.5	*
LYV-MW-007	15.5	*	15	*	14.8	*
LYV-MW-008	7.42		8		7.25	
LYV-MW-011	18.9	*	18.5	*	18.5	*
LYV-MW-016	1.06		1.27		0.93	
LYV-MW-022	0.51		0.53		0.54	
LYV-MW-019	3.73		3.9		4.03	
LYV-MW-001	8.3		8.2		8.37	
LYV-MW-003	36.8	*	37.5	*	37.1	*
LYV-MW-004	7.5		4.3		5.2	
LYV-MW-010	33.5	*	29.6	*	26.4	*
LYV-MW-028	0.8		6		5.5	
LYV-MW-029	1.8		2.65		2.2	
LYV-MW-024	3.23		3.13		3.05	
LYV-MW-017	41.8	*	40	*	36	*
LYV-MW-018	23.6	*	23.2	*	26.7	*
LYV-MW-023	11.55	*	8.8		10.85	*
LYV-MW-006						
LYV-MW-026	24	*	33	*	24	*
LYV-MW-005	21.4	*	20.6	*	20.3	*
LYV-MW-009	4.56		4.59		4.64	
LYV-MW-020	29	*	25.8	*	27.7	*
LYV-MW-013	5.8		6.5		4.5	
LYV-MW-012	22.8	*	22.3	*	23	*
LYV-MW-030	6.5		3.6		6.8	
LYV-MW-034	0		0		0	
		14/29		13/29		14/29
		48%		45%		48%

References:

<sup>1</sup> Lower Yakima Valley Groundwater Management Area. <u>https://www.yakimacounty.us/541/Groundwater-Management</u>

<sup>2</sup> Lower Yakima Valley Groundwater Management, Volume I, page 99. <u>https://www.yakimacounty.us/DocumentCenter/View/22177/GWMA-VolumeI-July2019</u>

<sup>3</sup>LYV GWMA Certification Letter.

https://www.yakimacounty.us/DocumentCenter/View/22161/DOE-Certification-Letter

<sup>4</sup> LYV GWMA FOTC Minority Report, page 23.

https://www.yakimacounty.us/DocumentCenter/View/18990/FOTC-Minority-Report

<sup>5</sup> Quality of Ground Water in Private Wells in the Lower Yakima Valley 2001 – 2002. (VIRE Study) <u>https://apps.ecology.wa.gov/publications/documents/0210074.pdf</u>

<sup>6</sup>Hidden Wells, Dirty Water.

http://www.friendsoftoppenishcreek.org/cabinet/data/GWMA%20MR%20Attachment%2036%2 0Hidden%20Wells%20Dirty%20Water.pdf

<sup>7</sup>LYV GWMA Request for Identification. <u>https://www.yakimacounty.us/DocumentCenter/View/18712/GWMA-MR-Attachment-2-</u> Request-for-Identification

<sup>8</sup> FOTC Appeal of the LYV GWMA Certification. http://www.friendsoftoppenishcreek.org/cabinet/data/PCHB%20Opening%20Brief%20XXI.pdf

<sup>9</sup>LYV GWMA Ambient Monitoring Well Initial Report. <u>https://www.yakimacounty.us/DocumentCenter/View/21633/GWAC-Presentation---Monitoring-Well-Report-Overview---2019620-v20-1</u>

<sup>10</sup> Environmental Information System website – Groundwater Data. (Study ID is MRED0005). <u>https://apps.ecology.wa.gov/eim/search/Groundwater/GWSearch.aspx?SearchType=Groundwater r&State=newsearch&Section=all</u>