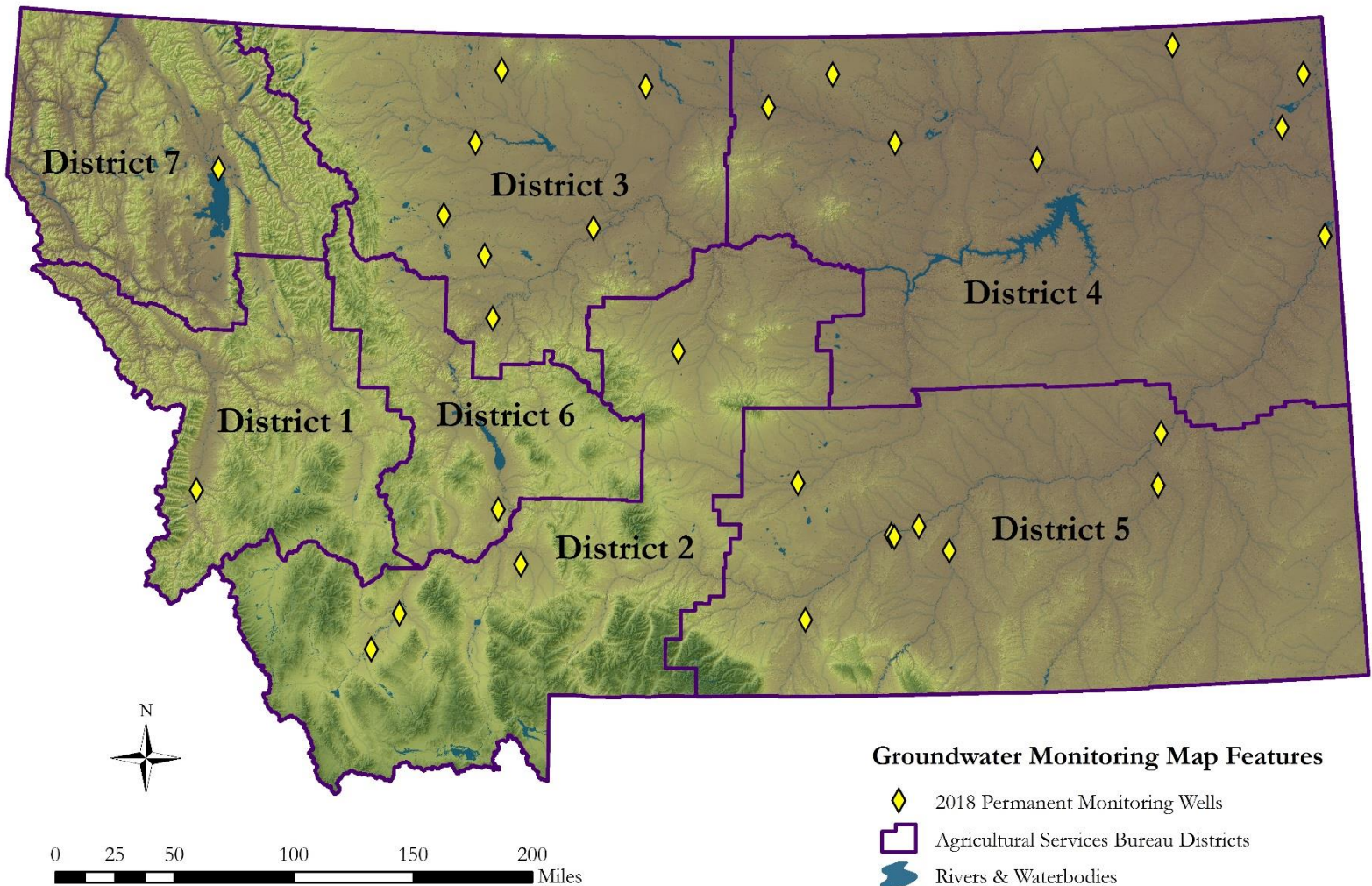


Groundwater Protection Program



Brett Heitshusen
Environmental Science Specialist
(406) 444-3271
BHeitshusen@mt.gov

Montana Department of Agriculture, Groundwater Protection Program 2018 Monitoring Locations



The Montana Department of Agriculture provides no warranty expressed or implied as to the accuracy, reliability, or completeness of furnished data. Some of the datasets in this map document may contain References (or pointers) to information created and maintained by outside organizations. Please note, the Montana Department of Agriculture does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials.

During the 2018 sampling season, the Groundwater Protection Program (GWPP) collected water samples from 23 permanent groundwater monitoring wells and 5 Montana Salinity Control Association groundwater monitoring wells. All wells in Regions 4 and 5 and the eastern half of Regions 2 and 3 were sampled in May and September. Wells in the western half of Regions 2 and 3 along with all wells in Regions 1, 6, and 7 were sampled in May and August. In total, 55 samples were collected and analyzed for up to 108 pesticides and pesticide metabolites. Results are summarized in the following tables by region. No detections exceeded the respective drinking water standard, or the action threshold of 50% of the respective drinking water standard. In general, most samples were < 1 % of the respective drinking water standard.

District 1

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Imazapic	1	0.0039	3,000

District 2

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
2,4-D	1	0.0055	70
Flucarbazone	2	0.451	3,000
Fluroxypyr	1	0.26	7,000
Imazamethabenz	3	0.008766667	1,700 (sum parent + metabolite)
Prometon	2	0.0078	100
Sulfosulfuron	2	0.00735	1,600

District 3

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Imazamethabenz	4	0.00715	1,700 (sum parent + metabolite)
Imidacloprid	2	0.0038	380
Pinoxaden	3	0.1467	2,000 (sum parent + metabolite)
Prometon	1	0.0017	100
Pyrasulfotole	2	0.385	70
Pyroxsulam	1	0.088	7,000

District 4

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Flucarbazone	1	0.0081	3,000
Sulfentrazone	1	0.034	700

District 5

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Alachlor	4	0.09275	2
Atrazine	2	0.03435	3 (sum parent + metabolites)
Bentazon	3	0.019166667	210
Clothianidin	5	0.232	650
Imazethapyr	2	0.0045	17,000
Metolachlor	9	0.029877778	1,000
Pinoxaden	4	0.014675	2,000 (sum parent + metabolite)
Pyrasulfotole	1	0.028	70
Simazine	1	0.0062	4

District 6

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Atrazine	1	0.0224	3 (sum parent + metabolites)
Imazamethabenz	1	0.0079	1,700 (sum parent + metabolite)
Imazamox	1	0.0065	20,000

District 7

Analyte	Number of Detections	Average Detected Concentration (ppb)	Drinking Water Standard (ppb)
Aminopyralid	1	6	3,000