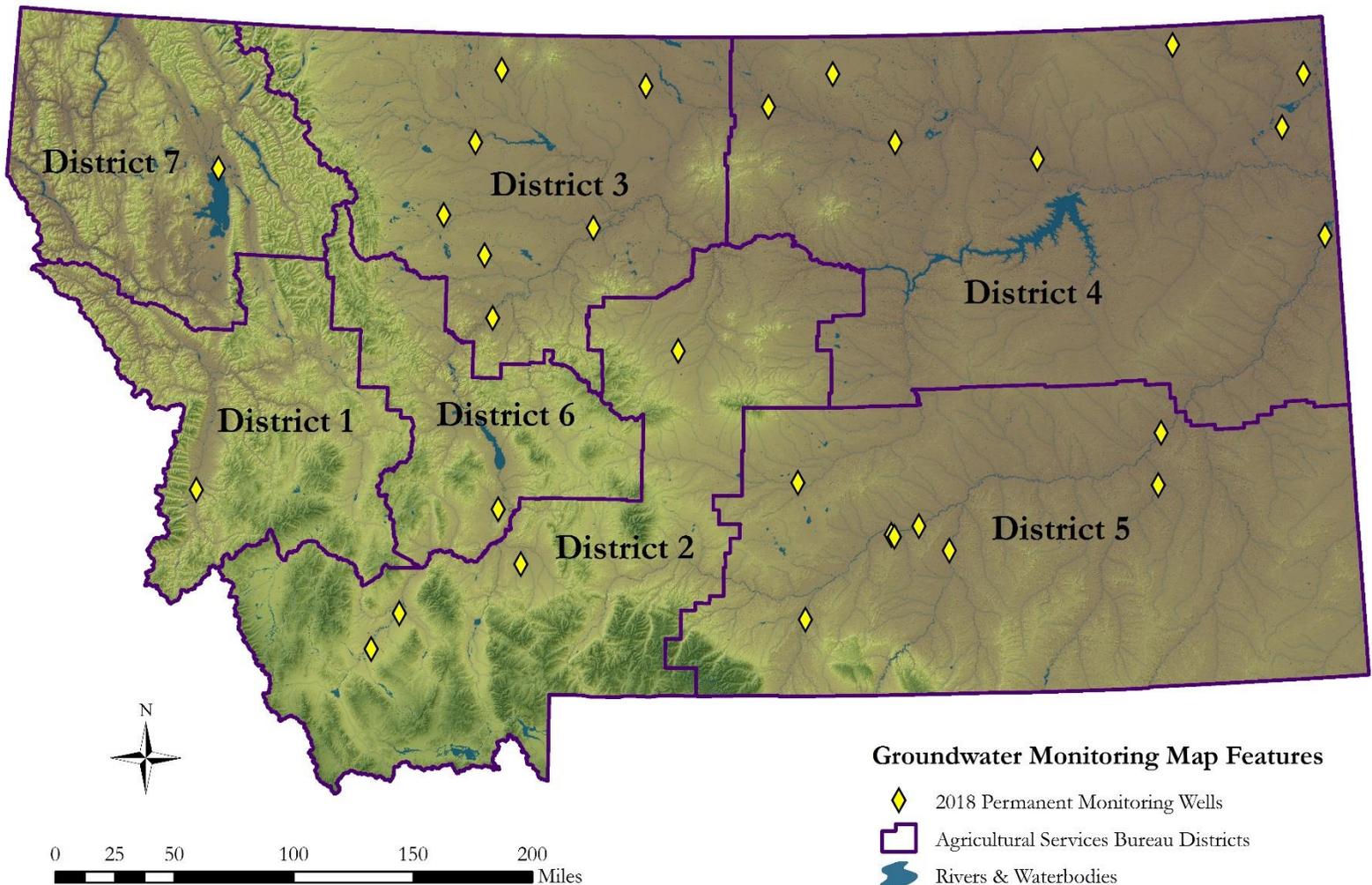


# Groundwater Protection Program



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## Montana Department of Agriculture, Groundwater Protection Program 2018 Monitoring Locations



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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