Town of Carbondale analytical sampling results - Carbondale and Weaver Ditch June 2021

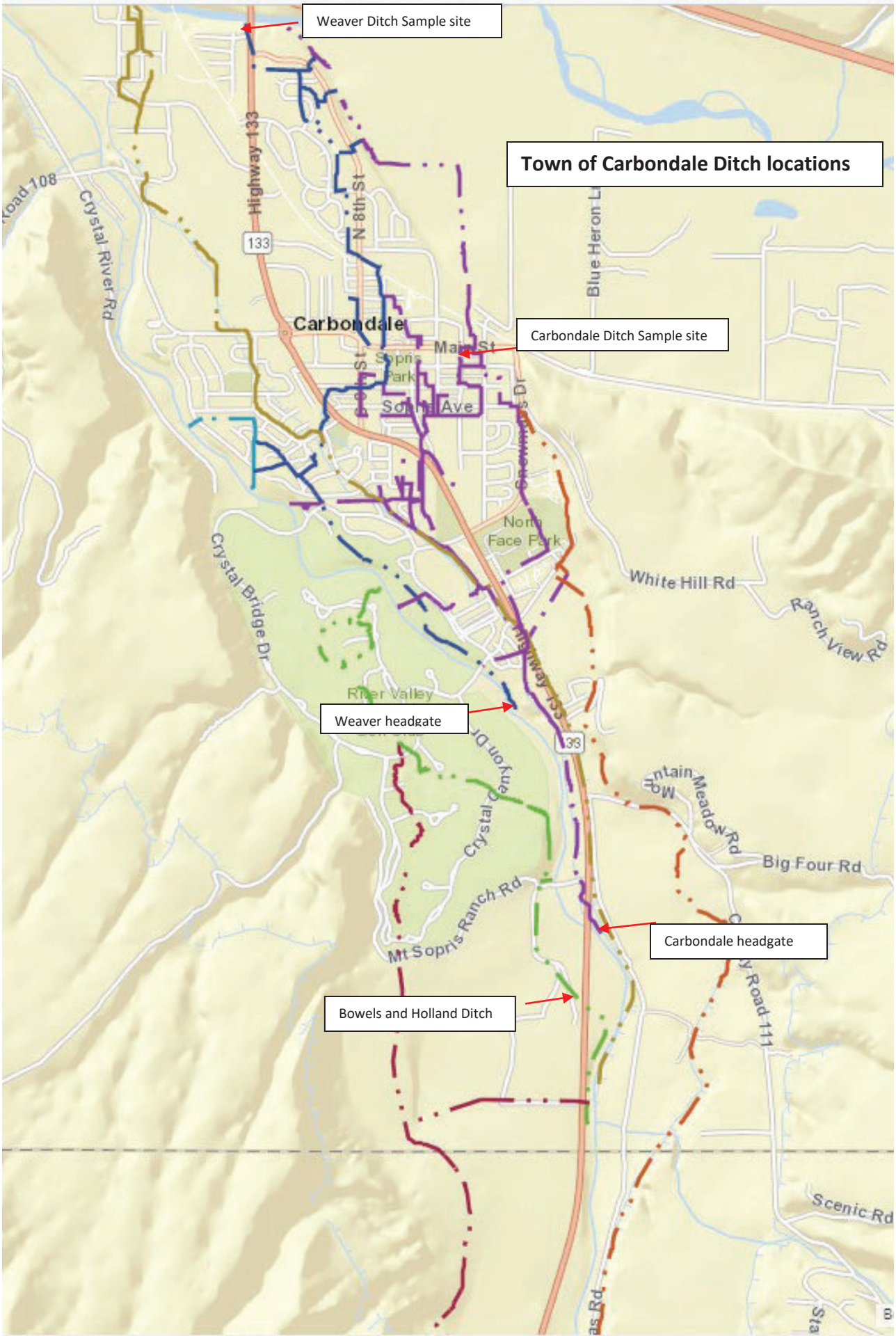
A request was made to the Town of Carbondale Utility Department to perform sample analysis on the water in the town's ditch system. The purpose of the sampling was to determine the presence of any synthetic compounds which might be carried over from upstream land use practices. The primary intent of the sampling was to screen for any residual background or presence of herbicides or pesticides.

The two primary ditches that serve the community receive water from the Crystal River south of town. They are the Weaver and the Carbondale ditches, the Bowels and Holland ditch primarily serves the RVR community and golf course and was not included in this analysis (Illustration below).

It was determined that a protocol of sampling at the beginning of the irrigation season and at the end of the irrigation season would be representative of any carry over of these compounds into the ditch system through town. Initial sampling was performed on June 6-3-2021 at the return flows of the Weaver ditch by the Highway 133 Bridge and the Carbondale ditch at the alley behind 26 South 3rd Street. The samples were analyzed for 49 constituents of which all were reported as Non Detected. A second sampling will occur prior to the end on the irrigation season in September.

The constituents selected for analysis were based on the drinking water standards for the primary drinking water regulation compliance with methodologies meeting the EPA 548.1, EPA 525.2, EPA 505, EPA 531.1, EPA 547, EPA 549.2, 515.4-Herbicides, and Chlorinated SDWA Herbicide Liquid-Liquid Microextraction E515.4.

The results from the first set of samples are attached.


Weaver Ditch Sample site
Town of Carbondale Ditch locations
Carbondale Ditch Sample site
Weaver headgate
Carbondale headgate
Bowels and Holland Ditch
Carbondale
Highway 133
N 8th St
Crystal River Rd
Blue Heron Ln
Main St
Sopris Park
Sopris Ave
Crystal Bridge Dr
North Face Park
River Valley
White Hill Rd
Ranch View Rd
Mountain Meadow Rd
Big Four Rd
Mt Sopris Ranch Rd
Scenic Rd
133

Town of Carbondale
Ditch sampling results 6-3-2021

Weaver Ditch DA34932-1

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
145-73-3	Endothall	ND	100	5	3.6	ug/l	
15972-60-8	Alachlor	ND	2.0	0.19	0.19	ug/l	
1912-24-9	Atrazine	ND	3.0	0.095	0.095	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.019	0.019	ug/l	
23184-66-9	Butachlor	ND		0.24	0.24	ug/l	
103-23-1	bis(2-Ethylhexyl)adipate	ND	400	0.57	0.57	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	6.0	0.57	0.57	ug/l	
51218-45-2	Metolachlor	ND		0.24	0.24	ug/l	
21087-64-9	Metribuzin	ND		0.24	0.24	ug/l	
1918-16-7	Propachlor	ND		0.24	0.24	ug/l	
122-34-9	Simazine	ND	4.0	0.067	0.067	ug/l	
309-00-2	Aldrin	ND		0.010	0.010	ug/l	
5103-71-9	alpha-Chlordane	ND		0.020	0.020	ug/l	
5103-74-2	gamma-Chlordane	ND		0.020	0.020	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.20	0.010	0.010	ug/l	
12789-03-6	Chlordane	ND	2.0	0.20	0.20	ug/l	
60-57-1	Dieldrin	ND		0.010	0.010	ug/l	
72-20-8	Endrin	ND	2.0	0.010	0.010	ug/l	
76-44-8	Heptachlor	ND	0.40	0.020	0.020	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.20	0.020	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.020	0.020	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	50	0.040	0.040	ug/l	
72-43-5	Methoxychlor	ND	40	0.020	0.020	ug/l	
8001-35-2	Toxaphene	ND a	3.0	1.0	1.0	ug/l	
12674-11-2	Aroclor 1016	ND a	0.50	0.080	0.080	ug/l	
11104-28-2	Aroclor 1221	ND a	0.50	0.10	0.10	ug/l	
11141-16-5	Aroclor 1232	ND a	0.50	0.10	0.10	ug/l	
53469-21-9	Aroclor 1242	ND a	0.50	0.10	0.10	ug/l	
12672-29-6	Aroclor 1248	ND a	0.50	0.10	0.10	ug/l	
11097-69-1	Aroclor 1254	ND a	0.50	0.10	0.10	ug/l	
11096-82-5	Aroclor 1260	ND a	0.50	0.10	0.10	ug/l	
1336-36-3	Total PCBs	ND a	0.50	0.10	0.10	ug/l	
116-06-3	Aldicarb	ND		0.50	0.25	ug/l	
1646-88-4	Aldicarb Sulfone	ND		0.50	0.25	ug/l	
1646-87-3	Aldicarb Sulfoxide	ND		0.50	0.25	ug/l	
63-25-2	Carbaryl	ND		0.50	0.25	ug/l	
1563-66-2	Carbofuran	ND	40	0.50	0.25	ug/l	
16655-82-6	3-Hydroxycarbofuran	ND		0.50	0.25	ug/l	
2032-65-7	Methiocarb	ND		1.0	0.50	ug/l	
16752-77-5	Methomyl	ND		0.50	0.25	ug/l	
23135-22-0	Oxamyl	ND	200	0.50	0.25	ug/l	
114-26-1	Propoxur	ND		0.50	0.25	ug/l	

Town of Carbondale
Ditch sampling results 6-3-2021

Weaver Ditch continued						
1071-83-6	Glyphosate	ND	700	5.00	2.50	ug/l
85-00-7	Diquat	ND	20	0.40	0.25	ug/l

Method	Compound	Result	MCL/QCL	RL		Units Q
E515.4	2,4,5-TP (Silvex)	ND	50	0.25		ug/L
E515.4	2,4-D	ND	70	1.0		ug/L
E515.4	Dalapon	ND	200	2.5		ug/L
E515.4	Dinoseb	ND	7	1.0		ug/L
E515.4	Pentachlorophenol	ND	1	0.10		ug/L
E515.4	Picloram	ND	500	0.50		ug/L

Carbondale Ditch DA34931-1

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Town of Carbondale
Ditch sampling results 6-3-2021

Carbondale Ditch DA34931-1 continued

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12672-29-6	Aroclor 1248	ND a	0.50	0.10	0.10	ug/l	
11097-69-1	Aroclor 1254	ND a	0.50	0.10	0.10	ug/l	
11096-82-5	Aroclor 1260	ND a	0.50	0.10	0.10	ug/l	
1336-36-3	Total PCBs	ND a	0.50	0.10	0.10	ug/l	
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1646-88-4	Aldicarb Sulfone	ND		0.50	0.25	ug/l	
1646-87-3	Aldicarb Sulfoxide	ND		0.50	0.25	ug/l	
63-25-2	Carbaryl	ND		0.50	0.25	ug/l	
1563-66-2	Carbofuran	ND	40	0.50	0.25	ug/l	
16655-82-6	3-Hydroxycarbofuran	ND		0.50	0.25	ug/l	
2032-65-7	Methiocarb	ND		1.0	0.50	ug/l	
16752-77-5	Methomyl	ND		0.50	0.25	ug/l	
23135-22-0	Oxamyl	ND	200	0.50	0.25	ug/l	
114-26-1	Propoxur	ND		0.50	0.25	ug/l	
1071-83-6	Glyphosate	ND	700	5	2.5	ug/l	
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E515.4	2,4-D	ND	70	1	ug/L	
E515.4	Dalapon	ND	200	2.5	ug/L	
E515.4	Dinoseb	ND	7	1	ug/L	
E515.4	Pentachlorophenol	ND	1	0.1	ug/L	
E515.4	Picloram	ND	500	0.5	ug/L	

Report Definitions:

ND - Not detected at the Reporting Limit (RL)
MDL = Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
a = 2 runs were made due to an inconsistency, result is from Run# 2
B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range
J = Indicates an estimated value
N = Indicates presumptive evidence of a compound
RL - Analyte Reporting Limit
QCL - Quality Control Limit

Environmental pollutant
Pesticide
Fungicide
Herbicide