

Natural Resources Conservation Service (NRCS) Monitoring & Evaluation (M&E) Data for All Agricultural Sites

- Notes:
 1) These data were transcribed from printed unpublished annual reports for the NRCS M&E (on file NRCS-ARS, Fort Collins, Colorado, cited as U.S. Department of Agriculture, 1986-2003)
 2) This table excludes several sites from the original printed NRCS M&E annual reports that were identified in 2007 by Frank Riggle, Fort Collins NRCS-ARS as having invalid or missing data.
 3) The Urban Deep Percolation Study used only 1985 - 1995 alfalfa-crop sites from this data set.
 4) NRCS soil types are mapped and explained at URL: <http://weboisurvey.nrcs.usda.gov/app/>
 5) NRCS - Natural Resources Conservation Service, ARS - Agricultural Research Service.
 6) Eta - alfalfa-crop referenced evapotranspiration.
 7) Physical site locations were not identified in the NRCS M&E data set for privacy reasons. All Sites listed below were located in the Grand Valley, western Colorado.
 8) n/a - data is not available - no explanation was given in the NRCS M&E reports for these missing values.
 9) Volume of inflow and outflow was calculated in inches from 1985 until 1995, then in acre-feet for 1999 until 2002.

Year monitored	Site ID number (U.S. Department of Agriculture, 1986-2003)	Number of irrigations during season	Irrigation system type	Irrigation system description	Crop	Field size (acres)	Volume of in-flow (inches)	Volume of out-flow (inches)	Total input (inches)	Infiltrated depth (inches)	Seasonal efficiency (percent)	Precipitation (inches)	Evapotranspiration (Eta) (inches)	Deep percolation (inches)	Soil type	Volume of In-flow (acre-feet/acre)	Volume of out-flow (acre-feet/acre)	Total input (acre-feet/acre)	Infiltrated depth (acre-feet/acre)	Deep percolation (acre-feet/acre)	Deep percolation (acre-feet)	
1985	10	8	CDP	Ported Concrete Ditch	Alfalfa	14.0	79.6	33.0	46.6	46.6	23	6.1	22.8	0.8	Fruita Clay Loam			28.3		2.4	33.0	
1985	11	5	PGP	Pipeline to Gated-Pipe	Orchard	13.0	64.5	9.1	55.4	55.4	33	9.4	27.3	34.2	Genola Clay Loam			4.0		2.9	37.1	
1985	12	6	CDP	Concrete Ditch to Siphon Tubes	Corn	15.0	41.4	24.1	27.0	27.0	30	6.7	16.6	14.6	Ravola Fine Sandy Loam			1.6		1.2	18.3	
1985	13	8	CDG	Concrete Ditch to Siphon Tubes	Corn	8.0	82.0	26.4	55.6	55.6	29	6.9	19.7	39.5	6.6	Fruita Clay Loam			3.9		2.3	26.3
1985	14	7	PGP	Pipeline to Gated-Pipe	Orchard	4.0	79.9	39.9	40.0	40.0	29	9.8	29.8	16.5	Youngston Fine Sandy Loam			9.8		1.4	5.5	
1985	15	7	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	39.0	54.4	19.9	34.5	34.5	49	7.8	33.3	7.6	Ravola Clay Loam			3.3		0.6	24.7	
1985	16	5	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	26.0	34.2	14.7	19.5	19.5	56	9.4	30.4	0.2	Billings Sity Clay Loam			0.4		0.0	3.4	
1985	17	11	MIS	Microspray	Grapes	4.0	27.8	0.0	27.8	27.8	61	9.8	32.8	10.8	Genola Clay Loam			0.0		0.0	0.6	
1985	18	11	PGP	Pipeline to Gated-Pipe	Orchard	37.0	46.7	15.1	31.6	31.6	39	9.4	10.8	5.1	Mesa Clay Loam			1.7		0.9	5.9	
1985	19	6	SRS	Sideroll Sprinkler	Small grain (spring)	37.0	26.6	0.0	26.6	26.6	42	5.9	14.1	15.5	Hanksville Sity Clay Loam			1.5		1.3	47.8	
1985	20	10	CDP	Ported Concrete Ditch	Pasture	22.0	61.0	13.5	47.5	47.5	40	9.9	31.7	22.8	Ravola Loam			9.9		1.9	41.8	
1985	21	7	CDP	Concrete Ditch to Siphon Tubes	Corn	45.0	46.8	16.2	30.6	30.6	29	4.8	17.5	17.0	Ravola Fine Sandy Loam			4.8		1.4	63.8	
1985	22	6	EDF	Earth Ditch to Feeder Ditch	Corn	11.0	80.3	17.8	62.5	62.5	18	4.0	15.0	47.8	Fruita Clay Loam			4.0		4.0	43.8	
1985	23	7	CDP	Concrete Ditch to Siphon Tubes	Corn	37.0	46.7	15.1	31.6	31.6	39	9.4	10.8	5.1	Avallon Fine Sity Loam			1.7		1.4	50.3	
1985	24	7	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	28.0	89.0	28.9	60.1	60.1	28	8.1	30.9	34.8	Billings Sity Clay Loam			8.1		2.9	81.2	
1985	25	10	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	16.0	170.0	14.0	156.0	156.0	17	11.5	35.3	127.2	Fruita Clay Loam			11.5		10.6	169.6	
1986	10	7	CDP	Ported Concrete Ditch	Alfalfa	8.0	65.0	33.8	31.2	31.2	40	8.6	38.2	5.4	Fruita Clay Loam			8.6		0.5	2.6	
1986	11	5	PGP	Pipeline to Gated-Pipe	Orchard	13.0	30.1	3.1	27.0	27.0	81	11.4	38.8	2.7	Genola Clay Loam			11.4		0.2	3.9	
1986	12	5	CDP	Concrete Ditch to Siphon Tubes	Corn	73.6	38.7	34.9	33.9	33.9	27	7.4	23.4	14.7	Ravola Fine Sandy Loam			27.4		1.2	18.4	
1986	13	8	CDG	Cablegation	Corn	9.0	61.4	27.4	64.0	64.0	21	5.3	24.4	42.7	Fruita Clay Loam			5.3		3.6	32.0	
1986	14	7	PGP	Pipeline to Gated-Pipe	Orchard	4.0	65.4	27.3	38.1	38.1	43	11.3	38.9	9.7	Youngston Fine Sandy Loam			11.3		0.8	3.2	
1986	15	8	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	36.0	71.2	27.6	43.6	43.6	41	8.7	38.1	12.3	Ravola Clay Loam			8.7		1.0	36.9	
1986	16	5	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	26.0	38.4	19.5	18.9	18.9	48	11.8	40.2	0.5	Billings Sity Clay Loam			11.8		1.0	1.1	
1986	17	14	MIS	Microspray	Grapes	3.0	17	0.0	36.5	36.5	7	10.5	40.7	10.7	Genola Clay Loam			10.5		0.9	2.7	
1986	18	9	PGP	Pipeline to Gated-Pipe	Vegetables	3.0	50.2	15.3	34.9	34.9	35	3.0	14.9	17.3	Mesa Clay Loam			3.0		1.4	4.3	
1986	19	6	SRS	Sideroll Sprinkler	Fall Grain	37.0	20.8	0.0	20.8	20.8	79	9.8	20.9	4.4	Hanksville Sity Clay Loam			9.8		0.4	13.6	
1986	20	12	CDP	Ported Concrete Ditch	Pasture	20.0	79.9	14.1	65.8	65.8	45	8.7	41.3	28.7	Ravola Loam			41.3		2.4	47.8	
1986	21	5	CDP	Concrete Ditch to Siphon Tubes	Fall Grain	54.0	52.9	18.2	34.7	34.7	33	9.8	18.3	17.0	Ravola Fine Sandy Loam			9.8		1.4	76.5	
1986	22	7	CDP	Concrete Ditch to Siphon Tubes	Corn	37.0	51.4	24.1	27.3	27.3	39	5.5	23.9	5.3	Avallon Sity Clay Loam			5.5		0.4	16.3	
1986	24	4	CDP	Concrete Ditch to Siphon Tubes	Beans	27.0	54.4	15.9	38.5	38.5	34	2.8	13.6	8.7	Billings Sity Clay Loam			2.8		1.6	42.3	
1986	26	6	CDP	Concrete Ditch to Siphon Tubes	Corn	26.0	27.3	13.0	14.3	14.3	50	5.4	24.0	0.0	Ravola Fine Sandy Loam			5.4		0.0	0.0	
1986	27	7	PGP	Pipeline to Gated-Pipe	Alfalfa	10.0	77.0	19.0	58.0	58.0	41	8.7	38.2	24.9	Fruita Clay Loam			8.7		2.1	20.8	
1987	10	7	CDP	Ported Concrete Ditch	Alfalfa	8.0	53.7	17.3	36.4	36.4	55	4.4	36.3	7.1	Fruita Clay Loam			4.4		0.6	4.7	
1987	11	5	PGP	Pipeline to Gated-Pipe	Orchard	13.0	39.6	3.7	35.9	35.9	67	4.7	35.9	9.5	Genola Clay Loam			4.7		0.8	10.3	
1987	12	5	CDP	Concrete Ditch to Siphon Tubes	Corn	53.0	18.6	35.2	35.2	35.2	36	4.4	23.3	16.1	Ravola Fine Sandy Loam			16.1		1.3	20.1	
1987	14	6	PGP	Pipeline to Gated-Pipe	Orchard	4.0	69.6	26.0	43.6	43.6	44	4.7	39.8	12.8	Youngston Fine Sandy Loam			4.7		1.1	4.3	
1987	15	8	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	36.0	67.0	18.2	48.8	48.8	49	4.6	36.2	15.9	Ravola Clay Loam			4.6		1.3	47.7	
1987	16	6	CDP	Concrete Ditch to Siphon Tubes	Corn	26.0	51.1	16.3	34.8	34.8	50	5.2	26.4	9.4	Billings Sity Clay Loam			5.2		0.8	20.4	
1987	17	10	MIS	Microspray	Grapes	3.0	26.5	0.0	26.5	26.5	91	4.7	33.0	2.3	Genola Clay Loam			4.7		0.2	0.6	
1987	18	7	PGP	Pipeline to Gated-Pipe	Orchard	4.0	45.2	17.9	27.3	27.3	42	7.7	21.8	2.8	Avallon Fine Sandy Loam			7.7		0.2	0.2	
1987	19	6	SRS	Sideroll Sprinkler	Fall Grain	37.0	18.0	0.0	18.0	18.0	98	3.0	19.8	0.4	Hanksville Sity Clay Loam			3.0		0.0	1.6	
1987	21	5	CDP	Concrete Ditch to Siphon Tubes	Fall Grain	46.0	86.4	36.1	50.3	50.3	22	2.3	21.3	31.1	Ravola Fine Sandy Loam			2.3		2.6	119.2	
1987	24	7	CDP	Concrete Ditch to Siphon Tubes	Corn	27.0	102.7	42.6	60.1	60.1	22	4.0	24.0	37.5	Billings Sity Clay Loam			4.0		3.1	84.4	
1987	26	6	CDP	Concrete Ditch to Siphon Tubes	Corn	21.0	26.3	8.6	17.7	17.7	60	4.3	23.8	1.9	Ravola Fine Sandy Loam			4.3		0.2	3.3	
1987	27	6	PGP	Pipeline to Gated-Pipe	Alfalfa	10.0	64.7	19.3	45.4	45.4	40	6.6	34.6	21.6	Fruita Clay Loam			6.6		1.7	17.4	
1987	29	5	MIS	Microspray	Grapes	7.0	30.8	0.0	30.8	30.8	70	4.7	33.0	9.3	Mesa Clay Loam			4.7		0.8	5.4	
1987	29	5	CDP	Concrete Ditch to Siphon Tubes	Corn	20.0	53.5	28.2	25.3	25.3	35	4.4	23.9	6.5	Billings Sity Clay Loam			4.4		0.5	10.8	
1987	30	8	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	36.0	69.3	17.0	52.3	52.3	49	4.4	36.3	18.3	Hanksville Sity Clay Loam			4.4		1.5	54.9	
1988	11	6	PGP	Pipeline to Gated-Pipe	Orchard	13.0	47.5	3.0	44.5	44.5	56	4.9	31.4	18.1	Genola Clay Loam			4.9		1.5	19.6	
1988	12	7	CDP	Concrete Ditch to Siphon Tubes	Beans	15.0	87.5	27.3	60.3	60.3	32	3.5	27.4	32.3	Hanksville Sity Clay Loam			3.5		2.7	42.0	
1988	14	7	PGP	Pipeline to Gated-Pipe	Orchard	4.0	67.8	20.3	47.6	47.6	44	4.9	35.2	18.0	Youngston Fine Sandy Loam			4.9		1.5	6.0	
1988	15	9	CDP	Concrete Ditch to Siphon Tubes	Alfalfa	36.0	73.2	18.7	54.5	54.5	54	3.5	38.5	15.0	Ravola Clay Loam			3.5		1.3	45.0	
1988	16	7	CDP	Concrete Ditch to Siphon Tubes	Corn	26.0	43.4	17.1	26.3	26.3	50	3.5	25.7	4.5	Billings Sity Clay Loam			3.5		0.4	9.8	
1988	17	16	MIS	Microspray	Grapes	3.0	40.2	8.0	32.2	32.2	69	4.8	37.7	4.3	Genola Clay Loam			4.8		0.4	1.1	
1988	18	7	PGP	Pipeline to Gated-Pipe	Orchard	2.0	34.9	7.3	27.6	27.6	79	4.8	33.7	0.1	Mesa Clay Loam			4.8		0.0	0.0	
1988	21	5	PGP	Pipeline to Gated-Pipe	Fall Grain	54.0	24.0	29.7	45.0	45.0	29	3.9	24.1	2.4	Ravola Fine Sandy Loam			3.9		0.0	108.9	
1988	26	6	PGP	Pipeline to Gated-Pipe	Fall Grain	26.0	60.4	19.1	41.3	41.3	35	4.0	21.5	20.2	Ravola Fine Sandy Loam			4.0		1.7	48.0	
1988	27	6	PGP	Pipeline to Gated-Pipe	Alfalfa	10.0	62.3	7.8	54.5	54.5	53	3.5	37.0	21.6	Fruita Clay Loam			3.5		1.8	13.8	
1988	28	13	MIS	Microspray	Grapes	7.0	17.3	3.4	13.9	13.9	80	4.7	21.1	0.0	Mesa Clay Loam			4.7		0.0	0.0	
1988	29	5	CDP	Concrete Ditch to Siphon Tubes	Fall Grain	20.0	50.2	22.6	27.6	27.6	42	4.0	21.7	6.6	Billings Sity Clay Loam			4.0		0.6	11.0	
1988	30	8	CDP	Concrete Ditch to Siphon Tubes	Beans	72.0	78.3	23.3	48.8	48.8	39	3.5	38.5	9.2	Hanksville Sity Clay Loam			3.5		0.6	27.6	
1988	32	22	CDP	Concrete Ditch to Siphon Tubes	Onions	18.0	88.0	21.0	67.0	67.0	25	3.2	26.8	45.2	Hanksville Sity Clay Loam			3.2		3.8	67.8	
1988	33	9	SRS	Sideroll Sprinkler	Fall Grain	14.0	21.8	2.3	19.5	19.5	84	4.0	19.6	1.1	Hanksville Sity Clay Loam			4.0		0.1	1.3	
1988	35	12	SRS	Sideroll Sprinkler	Alfalfa	36.0	36.9	3.8	33.1	33.1	90	3.5	35.6	0.0	Hanksville Sity Clay Loam			3.5		0.0	1.6	
1988	36	13	SRS	Sideroll Sprinkler	Alfalfa	18.0	46.8	4.7	42.1	42.1	54	3.5	27.6	17.0	Hanksville Sity Clay Loam			3.5		1.4	25.5	
1988	37	12	CDP	Concrete Ditch to Siphon Tubes	Beans	37																