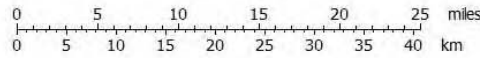
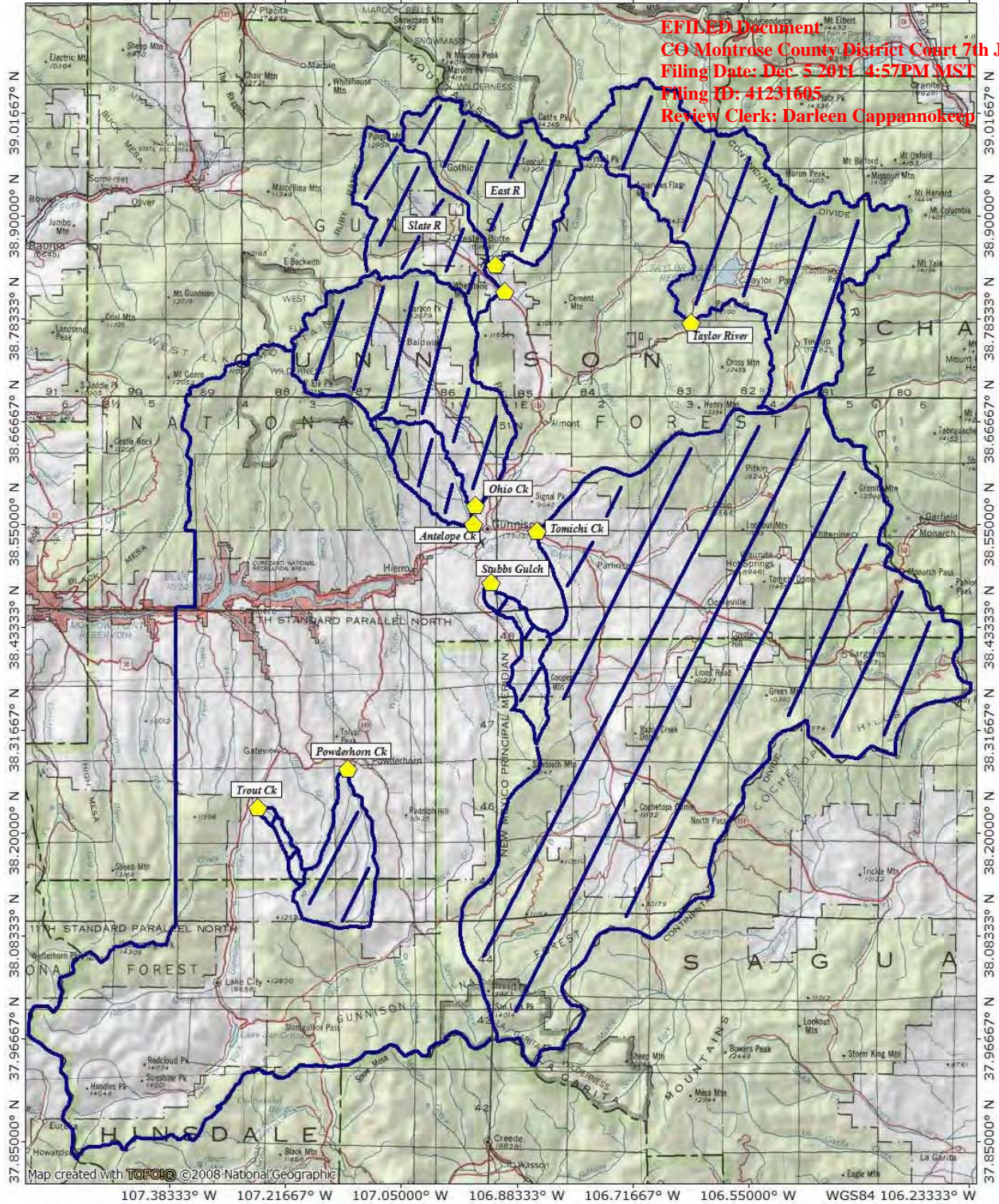


LSC Local Calls

107.38333° W 107.21667° W 107.05000° W 106.88333° W 106.71667° W 106.55000° W WGS84 106.23333° W

FILED Document  
CO Montrose County District Court 7th JD  
Filing Date: Dec 5 2011 4:57PM MST  
Filing ID: 41231605  
Review Clerk: Darleen Cappannoke



## LEGAL DESCRIPTIONS

### POINTS OF DIVERSION FOR LOCAL CALLING RIGHTS

Biebel Ditches Nos. 1 & 2: WD 28;

Biebel Ditches Nos. 1 & 2 is located within the NE/4 NW/4 SW/4 of Section 3, Township 49 North, Range 1 East, N.M.P.M., at a point 2122 feet north of the south section line and 1088 feet east of the west section line.

Graham Ditch: WD 28;

Graham Ditch is located within the SE/4 SW/4 NW/4 of Section 24, Township 49 North, Range 1 West, N.M.P.M., at a point 2317 feet south of the north section line and 935 feet east of the west section line.

Schecker Ditch: WD 62;

Schecker Ditch is located within the NE/4 SW/4 NW/4 of Section 5, Township 46 North, Range 2 West, N.M.P.M., at a point 1700 feet south of the north section line and 1150 feet east of the west section line.

Johnson Ditch: WD 62;

Johnson Ditch is located within the SE/4 NE/4NW/4 of Section 19, Township 46 North, Range 3 West, N.M.P.M., at a point 706 feet south of the north section line and 2905 feet west of the east section line.

East River No. 2 Ditch: WD 59;

East River No.2 Ditch is located within the SW/4 SW/4 NE/4 of Section 17, Township 14 South, Range 85 West, 6<sup>th</sup> P.M., at a point 2076 feet south of the north section line and 2020 feet west of the east section line.

Hamor Ditch: WD 59;

Hamor Ditch is located within the SW/4 SW/4 NE/4 of Section 27, Township 50 North, Range 1 West, N.M.P.M., at a point 1044 feet north of the south section line and 1981 feet west of the east section line.

Taylor River Instream Flow Right (W-1991): WD59

The downstream terminus of the Taylor River Instream Flow Right is located at the confluence of Lottis Creek within the NE/4 SW/4 NE/4 of Section 2, Township 15 South, Range 83 West, 6<sup>th</sup> P.M., at a point 1940 feet south of the north section line and 1920 feet west of the east section line.

## CONTRACT

*November 23*

This contract is entered into effective ~~October 31~~, 2011 between the Lake San Cristobal Water Activity Enterprise, an enterprise established pursuant to § 37-45.1-101, *et seq.*, Colorado Revised Statutes, by Hinsdale County (Enterprise) the Colorado Water Conservation Board (CWCB) and the Colorado Division of Water Resources..

## RECITALS

Pursuant to Rule 8 of the *Rules Concerning the Colorado Instream Flow and Natural Lake Level Program*, at a regular meeting of the CWCB on July 21, 2010, the Board gave final approval to the Enterprise's proposal, related to Case No. 03CW108 in Water Division 4 (03CW108), for injury with mitigation to the natural lake level water right decreed to Lake San Cristobal in Case No. W-3366, Water Division 4 (NLL Right). The mitigation contemplates a coordinated operation of the NLL Right and the storage rights decreed in 03CW108 (described below).

As a condition of the CWCB approval, the Enterprise agreed to dedicate 200 acre-feet of water stored in priority in Lake San Cristobal under the storage rights decreed in Case No. 03CW108 for use as directed by the CWCB, in its discretion, for any purpose that serves to preserve or improve the natural environment to a reasonable degree, including recreation, fishery and wildlife habitat uses, subject to certain conditions stated in the decree in said case.

In 03CW108, the Upper Gunnison River Water Conservancy District, on behalf of the Enterprise, obtained a decree for a conditional water storage right for 950 acre-feet with an appropriation date of April 28, 3, to store in priority flows of the Lake Fork of the Gunnison River in Lake San Cristobal after construction of an outlet structure by the Enterprise, a conditional water storage right for 950 acre-feet with an appropriation date of December 10, 8 to store in priority flows of the Lake Fork of the Gunnison River for a second filling of Lake San Cristobal, and for approval of a plan for augmentation utilizing releases of water stored in Lake San Cristobal.

The purpose of this contract is to provide an agreement enforceable by CWCB regarding dedication of 200 acre-feet stored in Lake San Cristobal and to provide the Division Engineer with a mutually agreeable method for administration of storage in Lake San Cristobal.

## AGREEMENT

1. The Enterprise hereby dedicates 200 acre-feet of water stored in priority in Lake San Cristobal under the storage rights decreed in Case No. 03CW108 for use as directed by the CWCB, in its discretion, to preserve the natural environment to a reasonable degree under its

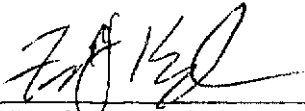
water rights decreed in Case Nos. 80CW097 and 80CW119. The provisions of this paragraph shall be enforceable by the CWCB as a water matter in the Water Court, Water Division 4.

2. Solely for the purpose of facilitating administration of water stored in Lake San Cristobal, and to allow coordinated operation of the NLL Right and the 03CW108 storage rights held by the Enterprise and the CWCB, respectively, the parties agree that water stored in priority in Lake San Cristobal by operation of the Enterprise's outlet structure from lake level elevation 8,992 to 8,995 feet above sea level, not to exceed 950 acre-feet stored in priority under the first fill right and 950 acre-feet stored in priority under the refill right decreed in 03CW108, shall be charged against those water storage rights. When storage commences under the 03CW108 priority, the NLL Right will be deemed for administration purposes to be fully satisfied for that water year for elevations exceeding 8,992 feet above sea level. The agreement set out in this paragraph is intended only as an accounting procedure for water stored in Lake San Cristobal, and because of the coordinated operation of the NLL Right and 03CW108 rights, it will not diminish the NLL Right or affect its priority.

3. This Contract shall not otherwise interfere with the regular administration of the NLL Right, or the water rights decreed in 03CW108, in priority consistent with Colorado water law. The water rights decreed in 03CW108 shall be administered in priority against all other water rights. The injury with mitigation settlement incorporated in the 03CW108 Decree shall not result in the CWCB subordinating the NLL right to any other water rights that are junior to that water right. The CWCB is allowing the District and the Enterprise to cause impact to the NLL Right as specified in the 03CW108 Decree only because the proposed mitigation will enable the CWCB to continue to preserve the natural environment to a reasonable degree.

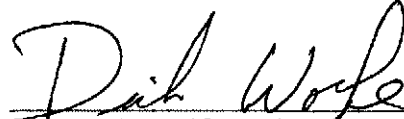
4. This contract was entered into by way of compromise and as part of the settlement of 03CW108 reached between the Enterprise and the CWCB shall not be construed as a precedent regarding administration of any other water storage right or natural lake level water right.

Lake San Cristobal Water Activity Enterprise



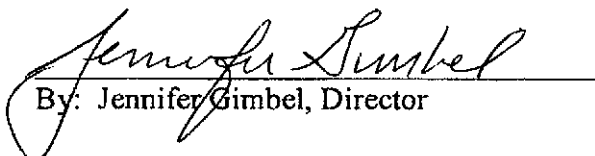
By: Frank J. Kugel, General Manager

Colorado Division of Water Resources



By: Dick Wolfe, Colorado State Engineer

Colorado Water Conservation Board



By: Jennifer Gimbel, Director

**Table 1**  
**Lake Evaporation Rates**

		<b>RATES FOR ON CHANNEL LAKES</b>												
Elevation Range		Net Lake Evaporation (feet) (calculated as lake evaporation minus effective precipitation using SEO SWSP Guidelines)												
Lower	Upper	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
6,600	6,799	0.00	0.00	0.00	0.28	0.40	0.50	0.48	0.37	0.33	0.21	0.10	0.00	2.65
6,800	6,999	0.00	0.00	0.00	0.28	0.39	0.49	0.48	0.37	0.33	0.21	0.10	0.00	2.65
7,000	7,199	0.00	0.00	0.00	0.27	0.39	0.49	0.47	0.36	0.32	0.21	0.10	0.00	2.61
7,200	7,399	0.00	0.00	0.00	0.27	0.39	0.49	0.47	0.36	0.32	0.21	0.10	0.00	2.61
7,400	7,599	0.00	0.00	0.00	0.27	0.38	0.48	0.47	0.36	0.32	0.21	0.10	0.00	2.58
7,600	7,799	0.00	0.00	0.00	0.24	0.37	0.47	0.45	0.35	0.31	0.20	0.09	0.00	2.48
7,800	7,999	0.00	0.00	0.00	0.21	0.36	0.46	0.44	0.34	0.30	0.19	0.09	0.00	2.39
8,000	8,199	0.00	0.00	0.00	0.18	0.35	0.45	0.43	0.33	0.29	0.19	0.09	0.00	2.31
8,200	8,399	0.00	0.00	0.00	0.15	0.34	0.44	0.42	0.32	0.28	0.18	0.09	0.00	2.22
8,400	8,599	0.00	0.00	0.00	0.12	0.33	0.43	0.41	0.31	0.27	0.17	0.09	0.00	2.13
8,600	8,799	0.00	0.00	0.00	0.09	0.32	0.43	0.40	0.30	0.27	0.17	0.09	0.00	2.07
8,800	8,999	0.00	0.00	0.00	0.06	0.31	0.42	0.39	0.29	0.26	0.16	0.09	0.00	1.98
Greater than 9,000		0.00	0.00	0.00	0.00	0.29	0.39	0.36	0.27	0.24	0.15	0.08	0.00	1.79

		<b>RATES FOR OFF-CHANNEL LAKES</b>												
Elevation Range		Lake Evaporation (feet) (lake evaporation with no effective precipitation offset)												
Lower	Upper	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
6,600	6,799	0.00	0.00	0.00	0.31	0.43	0.53	0.55	0.44	0.38	0.26	0.14	0.00	3.02
6,800	6,999	0.00	0.00	0.00	0.31	0.42	0.53	0.54	0.44	0.37	0.25	0.14	0.00	3.00
7,000	7,199	0.00	0.00	0.00	0.30	0.42	0.52	0.54	0.44	0.37	0.25	0.14	0.00	2.98
7,200	7,399	0.00	0.00	0.00	0.30	0.42	0.52	0.54	0.44	0.37	0.25	0.13	0.00	2.97
7,400	7,599	0.00	0.00	0.00	0.30	0.42	0.52	0.53	0.43	0.37	0.25	0.13	0.00	2.95
7,600	7,799	0.00	0.00	0.00	0.27	0.41	0.51	0.53	0.43	0.36	0.25	0.13	0.00	2.89
7,800	7,999	0.00	0.00	0.00	0.23	0.41	0.50	0.52	0.42	0.36	0.24	0.13	0.00	2.81
8,000	8,199	0.00	0.00	0.00	0.20	0.40	0.50	0.51	0.42	0.35	0.24	0.13	0.00	2.75
8,200	8,399	0.00	0.00	0.00	0.17	0.39	0.49	0.50	0.41	0.35	0.24	0.13	0.00	2.68
8,400	8,599	0.00	0.00	0.00	0.14	0.39	0.48	0.50	0.40	0.34	0.23	0.12	0.00	2.60
8,600	8,799	0.00	0.00	0.00	0.10	0.38	0.47	0.49	0.40	0.34	0.23	0.12	0.00	2.53
8,800	8,999	0.00	0.00	0.00	0.07	0.38	0.47	0.48	0.39	0.33	0.23	0.12	0.00	2.47
Greater than 9,000		0.00	0.00	0.00	0.00	0.36	0.45	0.47	0.38	0.32	0.22	0.12	0.00	2.32

Notes:

- 1) Values shown for the 6,600 to 6,799 elevation range are the rates from Table 2 for a small reservoir located near Crystal Reservoir which is located at an approximate elevation of 6,760 feet
- 2) Values shown for the 7,400 to 7,599 elevation range are the rates from Table 2 for a small reservoir located near Blue Mesa Reservoir which is located at an approximate elevation of 7,500 feet
- 3) Values shown for the greater than 9,000 feet elevation range are the rates from Table 2 for a small reservoir located near Taylor Park Reservoir which is located at an approximate elevation of 9,330 feet
- 4) Values for intermediate elevation ranges determined by linear interpolation.
- 5) The on-stream criteria for ponds can only be used for Mine Land Reclamation Division permitted gravel pits and ponds on a year-around live stream.

**Table 2****Lagged Streamflow Effects from Outdoor Water Use for Lawn Irrigation**(includes the alluvium of the mainstems of the Gunnison River & Tomichi Creek, and all area north of these)  
(original July 14, 2003 SEO table modified by the UGRWCD to correct minor rounding errors)

Elevation Range		Distance from the Stream	Lagged Stream Depletions from Irrigation of Blue Grass (ac-ft/ac)												Total
Lower	Upper		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
6,600	6,799	Less than 100	0.00	0.00	0.00	0.00	0.39	0.48	0.48	0.39	0.32	0.00	0.00	0.00	2.06
		100 to 499	0.00	0.00	0.00	0.00	0.39	0.48	0.47	0.39	0.33	0.00	0.00	0.00	2.06
		500 to 999	0.01	0.01	0.01	0.00	0.30	0.42	0.45	0.39	0.34	0.08	0.03	0.02	2.06
		Greater than 1,000	0.04	0.03	0.02	0.01	0.18	0.33	0.38	0.37	0.35	0.18	0.10	0.07	2.06
6,800	6,999	Less than 100	0.00	0.00	0.00	0.00	0.37	0.47	0.46	0.38	0.31	0.00	0.00	0.00	1.99
		100 to 499	0.00	0.00	0.00	0.00	0.38	0.46	0.45	0.38	0.32	0.00	0.00	0.00	1.99
		500 to 999	0.01	0.01	0.01	0.00	0.29	0.41	0.42	0.38	0.33	0.08	0.03	0.02	1.99
		Greater than 1,000	0.04	0.03	0.02	0.01	0.17	0.32	0.36	0.36	0.34	0.17	0.10	0.07	1.99
7,000	7,199	Less than 100	0.00	0.00	0.00	0.00	0.36	0.45	0.44	0.37	0.31	0.00	0.00	0.00	1.93
		100 to 499	0.00	0.00	0.00	0.00	0.37	0.45	0.43	0.37	0.31	0.00	0.00	0.00	1.93
		500 to 999	0.01	0.01	0.01	0.00	0.28	0.39	0.42	0.37	0.32	0.07	0.03	0.02	1.93
		Greater than 1,000	0.04	0.03	0.02	0.01	0.17	0.31	0.34	0.35	0.33	0.17	0.09	0.07	1.93
7,200	7,399	Less than 100	0.00	0.00	0.00	0.00	0.34	0.44	0.44	0.35	0.29	0.00	0.00	0.00	1.86
		100 to 499	0.00	0.00	0.00	0.00	0.35	0.43	0.43	0.35	0.30	0.00	0.00	0.00	1.86
		500 to 999	0.01	0.01	0.01	0.00	0.27	0.38	0.40	0.35	0.31	0.07	0.03	0.02	1.86
		Greater than 1,000	0.04	0.03	0.02	0.01	0.16	0.30	0.34	0.33	0.32	0.16	0.09	0.06	1.86
7,400	7,599	Less than 100	0.00	0.00	0.00	0.00	0.32	0.43	0.42	0.35	0.28	0.00	0.00	0.00	1.80
		100 to 499	0.00	0.00	0.00	0.00	0.34	0.42	0.41	0.34	0.29	0.00	0.00	0.00	1.80
		500 to 999	0.01	0.01	0.01	0.00	0.26	0.37	0.38	0.34	0.30	0.07	0.03	0.02	1.80
		Greater than 1,000	0.03	0.03	0.02	0.01	0.16	0.29	0.32	0.32	0.31	0.16	0.09	0.06	1.80
7,600	7,799	Less than 100	0.00	0.00	0.00	0.00	0.31	0.41	0.40	0.33	0.27	0.00	0.00	0.00	1.72
		100 to 499	0.00	0.00	0.00	0.00	0.33	0.40	0.38	0.33	0.28	0.00	0.00	0.00	1.72
		500 to 999	0.01	0.01	0.01	0.00	0.25	0.35	0.36	0.33	0.28	0.07	0.03	0.02	1.72
		Greater than 1,000	0.03	0.03	0.02	0.01	0.15	0.28	0.31	0.31	0.29	0.15	0.08	0.06	1.72
7,800	7,999	Less than 100	0.00	0.00	0.00	0.00	0.30	0.40	0.39	0.32	0.26	0.00	0.00	0.00	1.67
		100 to 499	0.00	0.00	0.00	0.00	0.32	0.39	0.37	0.32	0.27	0.00	0.00	0.00	1.67
		500 to 999	0.01	0.01	0.01	0.00	0.24	0.34	0.36	0.32	0.28	0.06	0.02	0.02	1.67
		Greater than 1,000	0.03	0.02	0.02	0.01	0.15	0.27	0.30	0.30	0.28	0.15	0.08	0.06	1.67
8,000	8,199	Less than 100	0.00	0.00	0.00	0.00	0.28	0.39	0.37	0.31	0.25	0.00	0.00	0.00	1.60
		100 to 499	0.00	0.00	0.00	0.00	0.30	0.37	0.37	0.30	0.26	0.00	0.00	0.00	1.60
		500 to 999	0.01	0.01	0.01	0.00	0.23	0.33	0.35	0.30	0.26	0.06	0.02	0.02	1.60
		Greater than 1,000	0.03	0.02	0.02	0.01	0.14	0.26	0.29	0.29	0.27	0.14	0.08	0.05	1.60
8,200	8,399	Less than 100	0.00	0.00	0.00	0.00	0.27	0.37	0.36	0.30	0.24	0.00	0.00	0.00	1.54
		100 to 499	0.00	0.00	0.00	0.00	0.29	0.36	0.35	0.29	0.25	0.00	0.00	0.00	1.54
		500 to 999	0.01	0.01	0.01	0.00	0.22	0.31	0.35	0.29	0.25	0.06	0.02	0.01	1.54
		Greater than 1,000	0.03	0.02	0.01	0.01	0.13	0.25	0.30	0.28	0.26	0.13	0.07	0.05	1.54
8,400	8,599	Less than 100	0.00	0.00	0.00	0.00	0.25	0.36	0.35	0.28	0.23	0.00	0.00	0.00	1.47
		100 to 499	0.00	0.00	0.00	0.00	0.28	0.34	0.33	0.28	0.24	0.00	0.00	0.00	1.47
		500 to 999	0.01	0.01	0.01	0.00	0.21	0.30	0.32	0.28	0.24	0.06	0.02	0.01	1.47
		Greater than 1,000	0.03	0.02	0.01	0.01	0.13	0.24	0.27	0.26	0.25	0.13	0.07	0.05	1.47
8,600	8,799	Less than 100	0.00	0.00	0.00	0.00	0.24	0.35	0.33	0.27	0.22	0.00	0.00	0.00	1.41
		100 to 499	0.00	0.00	0.00	0.00	0.27	0.33	0.31	0.27	0.23	0.00	0.00	0.00	1.41
		500 to 999	0.01	0.01	0.01	0.00	0.21	0.29	0.30	0.27	0.23	0.05	0.02	0.01	1.41
		Greater than 1,000	0.03	0.02	0.01	0.01	0.12	0.23	0.26	0.25	0.24	0.12	0.07	0.05	1.41
8,800	8,999	Less than 100	0.00	0.00	0.00	0.00	0.22	0.33	0.31	0.26	0.21	0.00	0.00	0.00	1.33
		100 to 499	0.00	0.00	0.00	0.00	0.25	0.31	0.31	0.25	0.21	0.00	0.00	0.00	1.33
		500 to 999	0.01	0.01	0.01	0.00	0.19	0.27	0.29	0.25	0.22	0.05	0.02	0.01	1.33
		Greater than 1,000	0.03	0.02	0.01	0.01	0.12	0.21	0.23	0.24	0.23	0.12	0.06	0.05	1.33
Greater than 9,000		Less than 100	0.00	0.00	0.00	0.00	0.21	0.32	0.30	0.25	0.20	0.00	0.00	0.00	1.28
		100 to 499	0.00	0.00	0.00	0.00	0.24	0.30	0.29	0.24	0.21	0.00	0.00	0.00	1.28
		500 to 999	0.01	0.01	0.01	0.00	0.19	0.26	0.27	0.24	0.21	0.05	0.02	0.01	1.28
		Greater than 1,000	0.02	0.02	0.01	0.01	0.11	0.21	0.24	0.23	0.22	0.11	0.06	0.04	1.28

**Table 3**

**Lagged Streamflow Effects from Outdoor Water Use for Lawn Irrigation**  
 (includes all areas south of the alluvium of the mainstem of the Gunnison River & Tomichi Creek)  
 (original July 14, 2003 SEO table modified by the UGRWCD to correct minor rounding errors)

Elevation Range		Distance from the Stream	Lagged Stream Depletions from Irrigation of Blue Grass (ac-ft/ac)												Total
Lower	Upper		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
6,600	6,799	Less than 100	0.00	0.00	0.00	0.00	0.43	0.52	0.52	0.43	0.36	0.00	0.00	0.00	2.26
		100 to 499	0.00	0.00	0.00	0.00	0.43	0.52	0.52	0.43	0.36	0.00	0.00	0.00	2.26
		500 to 999	0.01	0.01	0.01	0.00	0.33	0.46	0.50	0.43	0.37	0.08	0.04	0.02	2.26
		Greater than 1,000	0.05	0.04	0.02	0.01	0.20	0.36	0.42	0.40	0.38	0.20	0.11	0.07	2.26
6,800	6,999	Less than 100	0.00	0.00	0.00	0.00	0.41	0.52	0.51	0.42	0.34	0.00	0.00	0.00	2.20
		100 to 499	0.00	0.00	0.00	0.00	0.42	0.51	0.50	0.42	0.35	0.00	0.00	0.00	2.20
		500 to 999	0.01	0.01	0.01	0.00	0.32	0.45	0.48	0.42	0.36	0.08	0.04	0.02	2.20
		Greater than 1,000	0.05	0.04	0.02	0.01	0.19	0.35	0.41	0.39	0.37	0.19	0.11	0.07	2.20
7,000	7,199	Less than 100	0.00	0.00	0.00	0.00	0.40	0.50	0.49	0.41	0.34	0.00	0.00	0.00	2.14
		100 to 499	0.00	0.00	0.00	0.00	0.41	0.49	0.49	0.41	0.34	0.00	0.00	0.00	2.14
		500 to 999	0.01	0.01	0.01	0.00	0.31	0.44	0.46	0.41	0.35	0.08	0.04	0.02	2.14
		Greater than 1,000	0.05	0.04	0.02	0.01	0.19	0.34	0.39	0.38	0.36	0.19	0.10	0.07	2.14
7,200	7,399	Less than 100	0.00	0.00	0.00	0.00	0.38	0.49	0.49	0.39	0.33	0.00	0.00	0.00	2.08
		100 to 499	0.00	0.00	0.00	0.00	0.40	0.48	0.47	0.40	0.33	0.00	0.00	0.00	2.08
		500 to 999	0.01	0.01	0.01	0.00	0.30	0.42	0.46	0.40	0.34	0.07	0.04	0.02	2.08
		Greater than 1,000	0.05	0.04	0.02	0.01	0.18	0.33	0.39	0.37	0.35	0.18	0.10	0.06	2.08
7,400	7,599	Less than 100	0.00	0.00	0.00	0.00	0.36	0.48	0.47	0.39	0.32	0.00	0.00	0.00	2.02
		100 to 499	0.00	0.00	0.00	0.00	0.38	0.46	0.48	0.38	0.32	0.00	0.00	0.00	2.02
		500 to 999	0.01	0.01	0.01	0.00	0.29	0.41	0.45	0.38	0.33	0.07	0.04	0.02	2.02
		Greater than 1,000	0.04	0.04	0.02	0.01	0.18	0.32	0.37	0.36	0.34	0.18	0.10	0.06	2.02
7,600	7,799	Less than 100	0.00	0.00	0.00	0.00	0.35	0.47	0.46	0.38	0.31	0.00	0.00	0.00	1.97
		100 to 499	0.00	0.00	0.00	0.00	0.37	0.45	0.47	0.37	0.31	0.00	0.00	0.00	1.97
		500 to 999	0.01	0.01	0.01	0.00	0.29	0.40	0.44	0.37	0.32	0.07	0.03	0.02	1.97
		Greater than 1,000	0.04	0.03	0.02	0.01	0.17	0.31	0.38	0.35	0.33	0.17	0.10	0.06	1.97
7,800	7,999	Less than 100	0.00	0.00	0.00	0.00	0.34	0.45	0.44	0.36	0.30	0.00	0.00	0.00	1.89
		100 to 499	0.00	0.00	0.00	0.00	0.36	0.43	0.44	0.36	0.30	0.00	0.00	0.00	1.89
		500 to 999	0.01	0.01	0.01	0.00	0.28	0.38	0.41	0.36	0.31	0.07	0.03	0.02	1.89
		Greater than 1,000	0.04	0.03	0.02	0.01	0.17	0.30	0.35	0.33	0.32	0.17	0.09	0.06	1.89
8,000	8,199	Less than 100	0.00	0.00	0.00	0.00	0.32	0.45	0.42	0.36	0.29	0.00	0.00	0.00	1.84
		100 to 499	0.00	0.00	0.00	0.00	0.35	0.42	0.43	0.35	0.29	0.00	0.00	0.00	1.84
		500 to 999	0.01	0.01	0.01	0.00	0.27	0.37	0.40	0.35	0.30	0.07	0.03	0.02	1.84
		Greater than 1,000	0.04	0.03	0.02	0.01	0.16	0.29	0.34	0.33	0.31	0.16	0.09	0.06	1.84
8,200	8,399	Less than 100	0.00	0.00	0.00	0.00	0.31	0.43	0.42	0.34	0.28	0.00	0.00	0.00	1.78
		100 to 499	0.00	0.00	0.00	0.00	0.34	0.41	0.41	0.34	0.28	0.00	0.00	0.00	1.78
		500 to 999	0.01	0.01	0.01	0.00	0.26	0.36	0.39	0.34	0.29	0.06	0.03	0.02	1.78
		Greater than 1,000	0.04	0.03	0.02	0.01	0.16	0.28	0.31	0.32	0.30	0.16	0.09	0.06	1.78
8,400	8,599	Less than 100	0.00	0.00	0.00	0.00	0.30	0.42	0.40	0.33	0.27	0.00	0.00	0.00	1.72
		100 to 499	0.00	0.00	0.00	0.00	0.33	0.40	0.39	0.33	0.27	0.00	0.00	0.00	1.72
		500 to 999	0.01	0.01	0.01	0.00	0.25	0.35	0.37	0.33	0.28	0.06	0.03	0.02	1.72
		Greater than 1,000	0.04	0.03	0.02	0.01	0.15	0.27	0.33	0.30	0.29	0.15	0.08	0.05	1.72
8,600	8,799	Less than 100	0.00	0.00	0.00	0.00	0.28	0.41	0.39	0.32	0.26	0.00	0.00	0.00	1.66
		100 to 499	0.00	0.00	0.00	0.00	0.32	0.38	0.38	0.32	0.26	0.00	0.00	0.00	1.66
		500 to 999	0.01	0.01	0.01	0.00	0.24	0.34	0.36	0.32	0.27	0.06	0.03	0.01	1.66
		Greater than 1,000	0.04	0.03	0.01	0.01	0.15	0.26	0.31	0.29	0.28	0.15	0.08	0.05	1.66
8,800	8,999	Less than 100	0.00	0.00	0.00	0.00	0.27	0.39	0.37	0.31	0.26	0.00	0.00	0.00	1.60
		100 to 499	0.00	0.00	0.00	0.00	0.30	0.37	0.38	0.30	0.25	0.00	0.00	0.00	1.60
		500 to 999	0.01	0.01	0.01	0.00	0.23	0.33	0.35	0.30	0.26	0.06	0.03	0.01	1.60
		Greater than 1,000	0.04	0.03	0.01	0.01	0.14	0.25	0.30	0.28	0.27	0.14	0.08	0.05	1.60
Greater than 9,000		Less than 100	0.00	0.00	0.00	0.00	0.25	0.38	0.36	0.30	0.24	0.00	0.00	0.00	1.53
		100 to 499	0.00	0.00	0.00	0.00	0.29	0.35	0.36	0.29	0.24	0.00	0.00	0.00	1.53
		500 to 999	0.01	0.01	0.01	0.00	0.22	0.31	0.34	0.29	0.25	0.05	0.03	0.01	1.53
		Greater than 1,000	0.03	0.03	0.01	0.01	0.14	0.24	0.28	0.27	0.26	0.14	0.07	0.05	1.53

GUIDELINES ON  
INDIVIDUAL SEWAGE DISPOSAL SYSTEMS  
REVISED 2000

COLORADO STATE BOARD OF HEALTH  
AUTHORITY: CHAPTER 25, ARTICLE 10  
Colorado Revised Statutes, 1973,  
as Amended

COLORADO DEPARTMENT OF HEALTH  
WATER QUALITY CONTROL DIVISION  
4300 Cherry Creek Drive South  
DENVER, CO 80246-1530

For Biodegradable Wastes Only



**TABLE I**  
**QUANTITIES AND BOD STRENGTH OF SEWAGE**  
**FOR VARIOUS TYPES OF USES**

TYPE OF ESTABLISHMENT	GALLONS/PERSON/DAY (AVERAGE) (UNLESS OTHERWISE STATED)	LBS. BOD5/PERSON/DAY (UNLESS OTHERWISE STATED)
<b>Residential</b>		
Single-family dwellings (two people per bedroom)	75	.20
Separate Distribution of Flows - Individual Residential use		
Bath/Shower	14.7	.014
Dishwasher	1.8	.002
Kitchen sink	4.4	.045
Additional for garbage grinder	1.4	.052
Laundry washer	19.5	.037
Lavatory	8.4	.021
Water closet	24.8	.029
Hotels and Motels - per room (without private baths)	50	.15
Hotels and Motels - per room (with private baths)	75	.15
Multiple-family dwellings or apartments	75	.20
Boarding and Rooming houses	50	.15
Mobile Home Parks	75	.20
(per space)	300	.80
<b>Commercial</b>		
Airports (per passenger)	5	.02
(per employee)	10	.06
Barber and Beauty Shops (per chair)	100	.70*
Bowling Alleys (per lane - toilet wastes only)	5	.03*
Bus Service Areas (not including food)	5	.02

Country clubs		
(per member)	30	.02
(per employee)	20	.06
Dentist offices	50	.14*
(per non-wet chair)		
Doctors offices (per doctor)	250	.80*
Fairgrounds	5	.02
(per person attending)		
Factories and plants		
(exclusive of industrial wastes)		
(per employee per 8-hour shift-no showers)	20	.05
(per employee per 8-hour shift - showers provided)	35	.08
Food service establishments		
(per seat)		
Restaurant (Open 1 or 2 meals)	50	.06/meal served
24-hour Restaurant	75	.07/meal served
Restaurant with paper service only	25	.01/meal served
Additional for bars and cocktail lounges	30	.02
Drive-in Restaurant (per car space)	50	.02
Kennels (per dog)	30	.20
Laundries, self-service (per commercial washer)	400	.75
Office Buildings	15	.06
(per employee per 8-hour shift)		
Stores and Shopping Centers	.1	.01*
(per square foot of Retail space)		
Service Stations (per toilet fixture)	250	.50*
Stadiums, Race Tracks, Ball Parks (per seat)	5	.02
Theaters (Movie, Indoor, or Auditorium)	5	.17
Work or construction camps (semi-permanent - with flush toilets)	50	.02
Work or construction camps (semi-permanent - without flush toilets)	35	.02
Institutional (does not include kitchen wastewater flows)		
Churches (not including food)	5	.01

Hospitals (per bed space)	250	.20
Nursing Homes (per bed space)	100	.17
Schools, Boarding	100	.17
Schools, Day	15	.04
(without cafeteria, gym or showers)		
(with cafeterias, no gym or showers)	20	.08
(with cafeterias, gym and showers)	25	.10
(additional for school workers)	15	.06
<b>Recreational and Seasonal</b>		
Camps, day (no meal served)	15	.12
Luxury Resort	125	.17
Resort (night and day)	50	.12
Campground (seasonal occupancy - per unit)**	50	.12
<b>Public Park (during hours when park is open)</b>		
- Flush Toilet (per fixture per hour)	36	.04 lbs./ fixture
- Urinal (per fixture per hour)	10	.01 lbs./fixture
- Shower (per fixture per hour)	100	.10 lbs./ fixture
- Faucet (per fixture per hour)	15	.04 lbs./ fixture
Swimming pools and bathhouses	10	.06
Travel trailer parks (with individual water and sewage hookup - per unit) **	50	.12
(without individual water and sewage hookup - per unit) **	50	.12

\* = BOD Levels needing further verification

\*\* = Laundry facilities are to be calculated on a per commercial washer basis in accordance with other elements of this table.