

Colorado Water Conservation Board (CWCB)

CO Drought and Water Supply Survey 2007

Summary Data

Prepared by



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Demographic Section

Q2A Do you manage multiple water systems?	Number	Percent
Yes	23	12%
No	177	89%
DK/REF	0	0%
Total	200	100%

Q3A How many customers does your organization serve?	Number	Percent
1 to 1,000	72	36%
1,001 to 5,000	48	24%
5,001 to 10,000	23	12%
10,001 to 30,000	21	11%
30,001 to 50,000	10	5%
50,001 to 100,000	8	4%
100,001 to 1,100,000	9	5%
DK/REF	9	5%
Total	200	100%

Q3A How many customers does your organization serve?	Number reporting	Minimum	Maximum	Mean	Median	Sum
	191	35	1,100,000	22,096	2,000	4,220,320

Q3B How many connections does your organization serve?	Number	Percent
1 to 250	33	17%
251 to 500	37	19%
501 to 1000	29	15%
1001 to 3000	31	16%
3001 to 5000	22	11%
5001 to 10,000	20	10%
10,001 to 225,000	20	10%
DK/REF	8	4%
Total	200	100%

Q3B How many connections does your organization serve?	Number reporting	Minimum	Maximum	Mean	Median	Sum
	192	34	225000	6745	930	1295052

Q4 to Q8 Water deliveries (millions of gallons)	Number reporting	Minimum	Maximum	Mean	Median	Sum
Total water deliveries in 2006	118	0.000025	146,000.00	1,523.28	2.93	179,747.45
Total billed water deliveries in 2006	61	1.000	10,311.00	172.04	2.07	10,494.61
Total billed water deliveries in 2002	35	0.011	9.45	1.34	3.95	46.90
Total projected billed water deliveries in 2012	46	1.000	550,000.00	11,957.79	3.06	550,058.28
Total projected billed water deliveries in 2017	37	1.000	600,000.00	19,677.09	3.26	728,052.14

Q9 Is there someone in your organization who does water conservation planning or programming?	Number	Percent
Yes	105	53%
No	93	47%
DK/REF	2	1%
Total	200	100%

Q11 Is this a full time position, part time position or just part of someone's job description?*	Number	Percent
Full time	23	22%
Part time	3	3%
Just part of someone's job description	79	75%
Total	105	100%

*asked if Q9=yes

Q12 Does your organization have any water conservation programs?	Number	Percent
Yes	56	28%
No	141	71%
DK/REF	3	2%
Total	200	100%

Q13*	Number	Percent	
How many full time staff are assigned to water conservation programming?	0	37	66%
	1	12	21%
	3	4	7%
	5	1	2%
	7	1	2%
	10	1	2%
	Total	56	100%
How many part time staff are assigned to water conservation programming?	0	42	75%
	1	9	16%
	2	2	4%
	3	1	2%
	6	1	2%
	10	1	2%
	Total	56	100%
How many Full Time Equivalents (FTE's) are assigned to water conservation programming?	0	40	71%
	1	12	21%
	2	1	2%
	3	2	4%
	8	1	2%
	Total	56	100%

**asked if Q12=yes*

Q14 Is there someone in charge of drought planning for your organization?	Number	Percent
Yes	74	37%
No	125	63%
DK/REF	1	1%
Total	200	100%

Q16 Do you have a water supply master plan for raw and/or treated water?	Number	Percent
Yes, raw only	5	3%
Yes, treated only	9	5%
Yes, raw and treated	106	53%
No	70	35%
DK/REF	10	5%
Total	200	100%

Q17 What year was your most recent RAW water supply master plan written (or updated)?*	Number	Percent
1988	2	2%
1995	1	1%
1996	2	2%
1997	1	1%
1998	1	1%
1999	1	1%
2000	4	4%
2001	1	1%
2002	10	10%
2003	9	9%
2004	10	10%
2005	14	14%
2006	15	15%
2007	31	30%
Total	102	100%

*asked if Q16=yes

Q17 What year was your most recent TREATED water supply master plan written (or updated)?*	Number	Percent
1988	1	1%
1995	1	1%
1996	2	2%
1997	1	1%
1998	1	1%
1999	1	1%
2000	5	5%
2001	1	1%
2002	9	8%
2003	10	9%
2004	10	9%
2005	13	12%
2006	19	18%
2007	32	30%
Total	106	100%

**asked if Q16=yes*

Q18 Has this master plan been published and/or been made publicly available? [Choose all that apply]*	Number of respondents	Percent of respondents
Published	37	30.8%
Publicly available	80	66.7%
Neither	29	24.2%
DK/REF	8	6.7%
Total	120	100.0%

**asked if Q16=yes, percents do not sum to 100% as respondents could choose more than one category.*

Drought Status

Q19 To what extent, if at all, have your water supplies recovered from the recent drought (from about 1999 to 2003)?	Number	Percent
Still in severe drought	7	4%
About half way to recovery	47	24%
Fully recovered, reservoirs are full	127	64%
DK/REF	19	10%
Total	200	100%

Q20 Is your organization currently implementing any drought response measures that are distinct from any regular water conservation programs, or does it plan to at any time in 2007?	Number	Percent
Yes	10	5%
No	188	94%
Not sure/depends	2	1%
Total	200	100%

Q21 I am going to read a list of drought response measures. For each one, please tell me whether or not you are currently implementing this measure or plan to sometime in 2007.*		Yes	No	DK/REF	Total
Declaring a drought emergency	Number	3	9	0	12
	Percent	25%	75%	0%	100%
Putting controls on new construction or restricting or prohibiting new taps	Number	3	9	0	12
	Percent	25%	75%	0%	100%
Implementing Landscape watering restrictions	Number	8	4	0	12
	Percent	67%	33%	0%	100%
Landscape restrictions	Number	5	7	0	12
	Percent	42%	58%	0%	100%
Voluntary indoor water use reductions	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Enacting ordinances or fines for wasting water	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Public education or involvement programs	Number	8	4	0	12
	Percent	67%	33%	0%	100%
Cloud seeding	Number	1	11	0	12
	Percent	8%	92%	0%	100%
Drought pricing	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Other drought ordinances	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Temporary increase in water conservation program intensity	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Dry year leasing of water rights	Number	5	7	0	12
	Percent	42%	58%	0%	100%
Emergency water supply agreements	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Aquifer storage and recovery or conjunctive use	Number	3	8	1	12
	Percent	25%	67%	8%	100%
Interruptible water supply agreements	Number	3	8	1	12
	Percent	25%	67%	8%	100%
Entering into or continuing cooperative agreements	Number	7	5	0	12
	Percent	58%	42%	0%	100%
Substitute supply plans	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Pump ground water	Number	6	6	0	12
	Percent	50%	50%	0%	100%
Stop deliveries	Number	2	9	1	12
	Percent	17%	75%	8%	100%
Shut down wells	Number	4	8	0	12
	Percent	33%	67%	0%	100%

**asked if Q20=yes or not sure/depends*

Q21a. You mentioned other drought ordinances, can you specify what those are? . .

- Wasting water ordinance. Adding organic material to soil. Increasing block rate structure.
- Working with developers on low use appliances. Xeriscaping. Non-potable water use projects.
- Our biggest focus is on new development- we will triple in size in the next 10 years. We will see they get breaks for responsible development. We shut off one of our wells. We have a new water storage system with a million gallon tank.
- Irrigation curtailment
- Allow for use of ground water resources when we're in any level of restrictions. Voluntary irrigation restrictions.
- We have proposed a soils remediation ordinance for new construction.

Q21b. Any other drought measures that I've missed? . .

- Irrigation water only, not drinking water for washing cars.

Q22 Has your organization set aside any money for drought response measures in 2007?	Number	Percent
Yes	19	10%
No	176	88%
DK/REF	5	3%
Total	200	100%

Q23 How much money have you set aside?*	Number	Percent
\$5,000	2	11%
\$10,000	2	11%
\$15,000	1	6%
\$18,000	1	6%
\$25,000	1	6%
\$30,000	1	6%
\$40,000	1	6%
\$50,000	1	6%
\$100,000	1	6%
\$350,000	1	6%
\$500,000	2	11%
\$750,000	1	6%
\$1,000,000	1	6%
\$2,000,000	1	6%
\$3,000,000	1	6%
Total	18	100%

**asked if Q22=yes*

Q23 How much money have you set aside?*	Number reporting	Minimum	Maximum	Mean	Median	Sum
	18	\$5,000	\$3,000,000	\$467,111	\$45,000	\$8,408,000

**asked if Q22=yes*

Q24 Have you quantified the impacts of the recent drought (from about 1999-2003) on your utility?	Number	Percent
Yes	45	23%
No	143	72%
DK/REF	12	6%
Total	200	100%

Q25 Do you have an economic or monetary estimate of the drought impact on your utility?*	Number	Percent
Yes	16	36%
No	23	51%
DK/REF	6	13%
Total	45	100%

**asked if Q24=yes*

Q26. What was the impact on your utility? . [RECORD WHATEVER IMPACTS THEY MENTION, MONETARY OR OTHERWISE]

- \$25000 in pump repairs
- \$40,000
- \$60000 per year
- \$4,000,000
- 4000000
- 2 million dollars per year in aftermath - not selling as much water for the drought- \$200000 for water police and info and monitoring. Ongoing revenue downtrend from decreased water use - to meet that we have put off or delayed capital improvements.
- About 2 million dollars
- It cost us about 1 million dollars in sales over the 4 years. It forced us to defer capital improvements.
- 20% impact
- 43% lost in water sales
- Raised water fees by 35%
- Sales went down about 50%
- 10-15% reduction
- It was difficult to meet budgetary numbers as the use was down. We rented a lot of water to make sure would could serve people. We got through alright but it was at a monetary cost.

Q27 Have you quantified the impacts of the 1999-2003 drought on your customers?	Number	Percent
Yes	11	6%
No	177	89%
DK/REF	12	6%
Total	200	100%

Q28 Do you have an economic or monetary estimate of the impact on your customers?*	Number	Percent
Yes	1	9%
No	10	91%
Total	11	100%

**asked if Q27=yes*

Q29. What was the impact on your customers? [RECORD WHATEVER IMPACTS THEY MENTION, MONETARY OR OTHERWISE]

- Average bills have doubled

Q30 I am going to read a list of drought response measures. For each one, please tell me whether or not you implemented this measure during the 1999-2003 drought.		Yes	No	DK/REF	Total
Declaring a drought emergency	Number	57	122	21	200
	Percent	29%	61%	11%	100%
Putting controls on new construction or restricting or prohibiting new taps	Number	29	152	19	200
	Percent	15%	76%	10%	100%
Implementing Landscape watering restrictions	Number	113	69	18	200
	Percent	57%	35%	9%	100%
Landscape restrictions	Number	50	132	18	200
	Percent	25%	66%	9%	100%
Voluntary indoor water use reductions	Number	97	85	18	200
	Percent	49%	43%	9%	100%
Enacting ordinances or fines for wasting water	Number	92	88	20	200
	Percent	46%	44%	10%	100%
Public education or involvement programs	Number	126	56	18	200
	Percent	63%	28%	9%	100%
Cloud seeding	Number	17	164	19	200
	Percent	9%	82%	10%	100%
Drought pricing	Number	47	131	22	200
	Percent	24%	66%	11%	100%
Other drought ordinances	Number	26	156	18	200
	Percent	13%	78%	9%	100%
Temporary increase in water conservation program intensity	Number	78	104	18	200
	Percent	39%	52%	9%	100%
Dry year leasing of water rights	Number	34	146	20	200
	Percent	17%	73%	10%	100%
Emergency water supply agreements	Number	38	142	20	200
	Percent	19%	71%	10%	100%
Aquifer storage and recovery or conjunctive use	Number	14	164	22	200
	Percent	7%	82%	11%	100%
Interruptible water supply agreements	Number	22	156	22	200
	Percent	11%	78%	11%	100%
Entering into or continuing cooperative agreements	Number	61	118	21	200
	Percent	31%	59%	11%	100%
Substitute supply plans	Number	50	131	19	200
	Percent	25%	66%	10%	100%
Pump ground water	Number	53	129	18	200
	Percent	27%	65%	9%	100%
Stop deliveries	Number	8	174	18	200
	Percent	4%	87%	9%	100%
Shut down wells	Number	12	170	18	200
	Percent	6%	85%	9%	100%

Q30a You mentioned other drought ordinances, can you specify what those are?

- Landscaping restrictions, non potable raw water uses
- During 2002, we implemented a mandatory outdoor watering restriction
- No outdoor watering except livestock for about 13 months
- Landscape ordinances
- Irrigation restrictions
- Voluntary irrigation restrictions
- Voluntary outdoor water use reductions
- How many times a week you can water outdoors
- Related to implementing a surcharge or drought structure for landscape and was to occur when the city declared a drought emergency
- Mandatory restrictions on irrigation
- Changed our rate structure to reflect the drought
- Increasing block rates. Restrict new lawns to 125 square feet. Institutes water conservation chapter.
- The rate structure on tiers, no new lawns
- We implemented surge in the rate structure
- Some commercial indoor water use restrictions
- Temporary surcharge on excess usage. Rebate program if customers complied.
- Surcharge
- Restricting use of treated water for dust control
- No car washing, no refilling of swimming pools or hot tubs
- Water wasting fines in newspaper announcement
- Times to water, before 9am and after 6pm, alternate days
- Severely limited in house use. Read meters once a week. Shut off after 600 gallons a month for 1/2 people.

Q30b. Any other drought measures that I've missed? . .

- Properties that were not in the district have not have been able to come into the district
- Institute irrigation restrictions
- Voluntary outdoor irrigation restrictions
- Acquisition of additional water supply by exchange
- Educational and voluntary programs
- Media effort
- Send out info packet
- Reading meters every five days, mandatory indoor water use reductions
- Began metering
- Mandatory indoor water use reductions
- Parks water reductions. Action on intensive water users-nurseries and car washes. To reduce swimming pool, reductions of fillings, not filling one. Public pools / private pool restrictions. General water use restrictions-no home car washing or patio washing for restaurants or sidewalk washing. In-stream flow program interruption. Delay of landscape install for parks and medians and new construction.
- Enlarged water storage pond
- Redrilled wells
- Purchase of three new wells
- Purchased raw water storage
- Pre plans
- 2 other wells we shut down for high nitrate- we could use in an extreme emergency- we tell consumers of a nitrate problem.
- No hauling for irrigation
- Replacing water resources/purchase replacement water
- Reallocating water resources

Q31 Does your organization have a drought response plan?	Number	Percent
Yes	54	27%
No	138	69%
DK/REF	8	4%
Total	200	100%

Q32 Has this drought response plan been published and/or been made publicly available? [Choose all that apply]?*	Number of respondents	Percent of respondents
Published	24	44.4%
Publicly available	42	77.8%
Neither	8	14.8%
DK/REF	2	3.7%
Total	54	100.0%

**asked if Q31=yes, percents do not sum to 100% as respondents could choose more than one category.*

Q33 What is the date of the most recent update?*	Number	Percent
2001	3	6%
2002	8	16%
2003	5	10%
2004	7	14%
2005	6	12%
2006	9	18%
2007	13	25%
Total	51	100%

**asked if Q31=yes*

Q34 How does your organization determine if you are in a drought?*		Yes	No	DK/REF	Total
Reservoir levels	Number	27	24	3	54
	Percent	50%	44%	6%	100%
Snow pack	Number	30	22	2	54
	Percent	56%	41%	4%	100%
Other climate conditions	Number	30	20	4	54
	Percent	56%	37%	7%	100%

**asked if Q31=yes*

Q34d. Are there any other methods you utilize when determining if you are in a drought?

- 4 districts meet and compare, drought can be declared by one district, puts all districts into drought. River supply. Availability.
- A drought response index based on storage levels. Evaluation by professional water mgrs- not a number- it is not easily captured in just one index. Example - knowing how boulder creek flows and seeing the snow pack go down but the creek not coming up. With numbers it could be quantified, but it can be just observed. While it could be quantified, we just have a lot of inherent knowledge and info to help assess the situation from years of experience and huge familiarity of a huge amount of data, bringing it into the assessment. Stream flows not coming up as the should, from previous years data we compared the snow pack level decrease to stream flow response.
- A survey of our 2 wells to monitor usage- see what is left, if a spike in use we find out why
- Amount of water in storage
- Aquifer levels
- Call on native water rights
- Central well
- Demand
- Division of water resources
- Expected demand. Expected growth. Stream flow. Potential water supply options.
- If our wells have trouble - did they dry up or not produce as much
- Long term weather forecast
- Newspapers/common knowledge
- Precipitation yield on shares
- Production
- Projected runoff protected demand projected carry over
- Projected water supply
- Proposed development
- Rainfall
- Renewable source
- Runoff
- Spring water
- Direct flow in the river
- Stream (river) flow
- Stream flow
- Stream flow
- Water level in creek
- Streams water. Water rights overage
- Terms of our water lease agreement
- The local Rio Grande basin engineer
- Time of year
- Trying to access static water/draw down of the well. If surface water deliveries are less than normal.
- Water supply levels

- We go off of Denver water board

Q34e. You mentioned Reservoir levels as a determining factor for a drought. What level including unit of measure do you use? (i.e. Percentage of Fullness or Emptiness)

- % acre feet of water stored
- % fullness below 30%
- % of fullness, 50%= drought
- 60% acre feet
- 65% acre feet
- 70% fullness acre feet
- 75-90% level 1 drought, 60-75% level 2, less than 60% level 3
- 85% acre feet
- Percentage
- Percentage of capacity of the level
- Percentage of fullness- don't know what number
- Percentage of fullness- drought at 70 percent
- Predicted level percent 50%= drought
- Production capability, reservoir levels, percentage, 60% down
- Acre feet available on may 1st plus projected inflow until peak runoff compared to prior year use, as a ratio. The simple water supply compared to expected demand. We look at the ratio- it turns into a decimal or percentage-relating to drought stage. We are in not just percentage of reservoir storage it is percent of years our system equaled that yield or less- it is tied to our water system model, looks at water system currently and compares to model performance of historic hydrology and compares it to current demand-which is increasing this is then compared the current conditions in the stored water plus the current water demand to historic modeled system performance to assure we are prepared for an extended drought.
- If it doesn't fill
- Look at total water available, measure in acre feet
- Supply vs. Demand
- Water from Denver water dept percentage of reservoir fullness

Q34f. You mentioned Snow Pack as a determining factor for a drought. What level including unit of measure do you use? (ie. Percentage or average)

- % of average (60% or lower)
- 25% of the total
- 65% or less is considered a dry year
- 70% of normal
- 80% snowpack percentile
- Percent of average
- Percentage of average
- Below 60%
- Below 70% of normal=drought
- Bureau of reclamation informs us on yield
- Check level online
- Comparison from year to year. Percentage year from the previous year, no set percentage indicating drought.
- Inches of water coming in from the snow course reading or pillows we look at what range we are in and what actions we should take we think our reservoirs will fill with up to 85 percent of normal snow pack-in that range we look at runoff coming off and turning into stream flow we need water rights when the stream flow comes we need decent water pack from snow-not evaporate or go to ground.
- We don't have a specific number we use of percentage of snow pack
- When snow pack is gone

Q35 In developing the drought response plan which of the following planning steps were parts of the process? Did the organization...*		Yes	No	DK/REF	Total
Appoint a drought task force	Number	17	33	4	54
	Percent	31%	61%	7%	100%
State the purpose and objectives of drought plan	Number	43	9	2	54
	Percent	80%	17%	4%	100%
Seek stakeholder participation	Number	30	19	5	54
	Percent	56%	35%	9%	100%
Inventory resources and identify groups at risk	Number	41	10	3	54
	Percent	76%	19%	6%	100%
Establish and write drought plan	Number	43	9	2	54
	Percent	80%	17%	4%	100%
Identify research needs and fill institutional gaps	Number	20	29	5	54
	Percent	37%	54%	9%	100%
Integrate science and policy	Number	33	15	6	54
	Percent	61%	28%	11%	100%
Publicize drought plan, build public awareness	Number	41	11	2	54
	Percent	76%	20%	4%	100%
Develop education programs	Number	38	13	3	54
	Percent	70%	24%	6%	100%
Evaluate and revise drought plan	Number	38	13	3	54
	Percent	70%	24%	6%	100%

*asked if Q31=yes

Q35k. Are there any other steps used in the planning process that I did not mention?

- Tiered rate structure to promote conservation
- Researched what other agencies have done
- Evaluate the drought response methods that are effective for our particular community- some methods may not fit a community- such as reuse of our effluent- we don't have a lot of reusable effluent- some cities can perhaps recycle water for soccer field watering. Our community gets stronger response for voluntary response than other communities. Might get too strong a response - it can drop like a rock, such as announcing a broken water line.
- Updated plan is not a document, it's an internal process
- Hired engineering company to inventory our water rights portfolio and assess yields

Q36 Which of the following drought response measures are in the plan?*		Yes	No	DK/REF	Total
Declaring a drought emergency	Number	45	7	2	54
	Percent	83%	13%	4%	100%
Controls on new construction/ restrict or prohibit new taps	Number	21	29	4	54
	Percent	39%	54%	7%	100%
Landscape water restrictions	Number	51	1	2	54
	Percent	94%	2%	4%	100%
Public education/ involvement programs	Number	46	6	2	54
	Percent	85%	11%	4%	100%
Cloud seeding	Number	3	49	2	54
	Percent	6%	91%	4%	100%
Landscape restrictions	Number	38	14	2	54
	Percent	70%	26%	4%	100%
Voluntary indoor water use reductions	Number	46	7	1	54
	Percent	85%	13%	2%	100%
Fines/ordinances for wasting water	Number	44	8	2	54
	Percent	81%	15%	4%	100%
Drought pricing	Number	32	20	2	54
	Percent	59%	37%	4%	100%
Other drought ordinances	Number	9	42	3	54
	Percent	17%	78%	6%	100%
Water conservation programs	Number	41	11	2	54
	Percent	76%	20%	4%	100%
Dry year leasing of water rights	Number	16	33	5	54
	Percent	30%	61%	9%	100%
Emergency water supply agreements	Number	17	34	3	54
	Percent	31%	63%	6%	100%
Aquifer storage and recovery/ conjunctive use	Number	11	40	3	54
	Percent	20%	74%	6%	100%
Interruptible water supply agreements	Number	23	29	2	54
	Percent	43%	54%	4%	100%
Operations/cooperative agreements	Number	31	21	2	54
	Percent	57%	39%	4%	100%
Substitute supply plans	Number	22	29	3	54
	Percent	41%	54%	6%	100%
Pump ground water	Number	15	36	3	54
	Percent	28%	67%	6%	100%

*asked if Q31=yes

Q36-1. You mentioned other drought ordinances; can you specify what those are?

- Depending on the level of drought, we set increasing restrictions on outdoor watering. Reduce or eliminate the use of water we have for non potable
- Surcharge
- Construction practices, landscaping
- Prohibit certain uses of water (i.e. fountains, drinking water in restaurants)
- Implementing no outdoor water use
- No car washing, no filling swim pools
- Voluntary irrigation restrictions
- The ordinance for soil remediation for new development-not passed yet

Q36s. Are there any other drought response measures in the plan that I haven't mentioned?

- Restrictions on wholesale customers. Reduction of water in all city facilities. Additional staffing.
- Setting usage limits
- Fourth stage drought- the most severe- having flow restrictors at meters and water shutoff for flagrant violators
- Tiered water rates
- Irrigation restrictions/or banned irrigation

Water Conservation Planning and Programs

Q37 Does your organization have a water conservation plan?	Number	Percent
Yes	87	44%
In progress	8	4%
No	96	48%
DK/REF	9	5%
Total	200	100%

Q38 What is (what will be) the date of the most recent update?*	Number	Percent
1985	1	1%
1996	1	1%
1997	2	2%
1998	1	1%
1999	3	4%
2000	3	4%
2001	2	2%
2002	6	7%
2003	1	1%
2004	4	5%
2005	4	5%
2006	8	10%
2007	39	48%
2008	7	9%
Total	82	100%

**asked if Q37=yes*

Q39 Does your organization have a budget for water conservation programs?	Number	Percent
Yes	59	30%
No	137	69%
DK/REF	4	2%
Total	200	100%

Q40 What is the approximate budget for 2007?*	Number	Percent
\$500	2	5%
\$1,000	3	7%
\$2,500	1	2%
\$5,000	2	5%
\$7,000	1	2%
\$10,000	4	10%
\$12,000	1	2%
\$15,000	4	10%
\$22,000	1	2%
\$25,000	4	10%
\$30,000	3	7%
\$40,000	2	5%
\$60,000	1	2%
\$67,000	1	2%
\$100,000	2	5%
\$150,000	2	5%
\$200,000	1	2%
\$275,000	1	2%
\$300,000	1	2%
\$400,000	1	2%
\$495,000	1	2%
\$500,000	1	2%
\$8,000,000	1	2%
Total	41	100%

**asked if Q39=yes*

Q40 What is the	Number reporting	Minimum	Maximum	Mean	Median	Sum
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approximate budget for 2007?*	41	\$500	\$8,000,000	\$273,768	\$25,000	\$11,224,500
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**asked if Q39=yes*

Q41 Why does your organization have a water conservation plan or program? Is it to... *		Yes	No	DK/REF	Total
Offset increased demand of future growth	Number	63	33	5	101
	Percent	62%	33%	5%	100%
Reduce peak expansion cost	Number	66	31	4	101
	Percent	65%	31%	4%	100%
For drought preparedness	Number	82	15	4	101
	Percent	81%	15%	4%	100%
Because citizens demand it	Number	32	63	6	101
	Percent	32%	62%	6%	100%
Because it is the right thing to do	Number	92	5	4	101
	Percent	91%	5%	4%	100%
Environmental benefits (i.e. increased stream flow, habitat preservation)	Number	73	23	5	101
	Percent	72%	23%	5%	100%
Because it is required as a condition for a loan or permit	Number	38	58	5	101
	Percent	38%	57%	5%	100%

**asked if Q37=yes or Q39=yes*

Q41h. Are there any other reasons that I didn't mention?

- It's a proactive approach
- Mandated by the city of Westminster we purchase water from them
- There is a state statute that has an effect on it
- Safeguard our supplies/good stewardship
- State requirement
- Protection of the watershed
- For demand preparedness
- Cost of water
- To entice industry to come to Flagler
- Delayed infrastructure
- Contract with the Denver water board
- To keep people from wasting water we have a limited supply

Q42 In the long term, how would you rate your ability to offset increased demand of future growth through water conservation programs?*	Number	Percent
1 Poor	12	6%
2	34	17%
3	64	32%
4	47	24%
5 Excellent	27	14%
DK/REF	16	8%
Total	200	100%

**asked if Q39=yes*

Q42 In the long term, how would you rate your ability to offset increased demand of future growth through water conservation programs?*	Number reporting	Mean	Standard Error
	184	3.2	.08

**where 1=poor and 5=excellent*

Q43 How important is it to offset increased demand of future growth through water conservation programs?*	Number	Percent
1 Not at all important	19	10%
2	22	11%
3	55	28%
4	52	26%
5 Extremely important	47	24%
DK/REF	5	3%
Total	200	100%

**asked if Q39=yes*

Q43 How important is it to offset increased demand of future growth through water conservation programs?*	Number reporting	Mean	Standard Error
	195	3.4	.09

**where 1=not at all important and 5=extremely important*

Q44. I am going to read a list of tools and programs that can be used to conserve water. Please tell me if your organization uses each tool or program.

Q44 a-c Does your organization use any of the following educational tools and programs for water conservation?		Yes	No	DK/REF	Total
Conservation public information campaigns	Number	123	76	1	200
	Percent	62%	38%	1%	100%
School education programs	Number	76	120	4	200
	Percent	38%	60%	2%	100%
Water conservation awards programs	Number	14	184	2	200
	Percent	7%	92%	1%	100%

Q44d. Any other educational tools or programs that I didn't mention?

- Bill stuffers, newspapers
- Quarterly newsletter
- Monthly newsletter
- Town bulletins/newsletters
- Newsletter-for the town- it has info on water conservation and drought to keep it on citizens minds
- Utility days with handouts, free barbecue rain gauges
- Children's water festival
- Children's water festival. Annually put on xeriscape seminars. Conservation outreach through citizen's festival. Disperse conservation literature. Free irrigation audit program/teach how to best operate home sprinkler systems.
- We have done educational programs for large users park/commercial customers
- Gardening classes demo garden
- Public classes
- Master gardener program
- Inform customers of drought cycle/voluntary conservation
- Outdoor water audits
- Talks to HOA's
- Toilet leak detection, free of charge
- Tours for students and adults
- We are the test developer of new conservation material the educational programs- the H2O Joe figure on signs
- Website
- Xeriscape contest
- Xeriscape demo garden, xeriscape classes
- Xeriscape program

- Education for xeriscaping

Q44_2 e-k					
Does your organization offer rate and informational tools and programs?		Yes	No	DK/REF	Total
Increasing block rate structure	Number	112	83	5	200
	Percent	56%	42%	3%	100%
Online access to water history	Number	32	162	6	200
	Percent	16%	81%	3%	100%
On-line water use calculator	Number	24	171	5	200
	Percent	12%	86%	3%	100%
Informational water budgets	Number	58	132	10	200
	Percent	29%	66%	5%	100%
Water budget rate structure	Number	91	96	13	200
	Percent	46%	48%	7%	100%
Seasonal rates for commercial customers	Number	26	171	3	200
	Percent	13%	86%	2%	100%
In-home water use tracking device (i.e. meter inside home)	Number	62	136	2	200
	Percent	31%	68%	1%	100%

Q44I. Any other informational tools or programs that I didn't mention?

- Incentive billing
- Decreasing block rate structure
- Rates
- Currently installing meters
- Meters on wells
- Devices - like show timers and faucet restrictors. A landscape consulting program. Best way to irrigate lawn. Sprinkler system evaluation program. A water audit for commercial businesses. The water seminar for fifth graders- water expo or something, a speakers bureau for schools.
- Website
- Website community newsletter
- Watering guidelines; brochures, pamphlets
- We distribute free water saver kits

Q44_3 m-t					
Does your organization use indoor residential use tools and programs?		Yes	No	DK/REF	Total
Efficient toilet incentives	Number	43	154	3	200
	Percent	22%	77%	2%	100%
Residential clothes washer incentives	Number	30	168	2	200
	Percent	15%	84%	1%	100%
Dishwasher incentives	Number	13	183	4	200
	Percent	7%	92%	2%	100%
Hot water recirculation system incentives	Number	5	192	3	200
	Percent	3%	96%	2%	100%
Showerhead incentive/distribution	Number	33	164	3	200
	Percent	17%	82%	2%	100%
Faucet aerator (<1.5 gpm) distribution	Number	30	166	4	200
	Percent	15%	83%	2%	100%
Residential indoor audit and leak detection	Number	70	128	2	200
	Percent	35%	64%	1%	100%
Low income retrofit program (toilets, faucets, showerheads)	Number	7	190	3	200
	Percent	4%	95%	2%	100%

Q44u. Any other indoor residential tools or programs that I didn't mention?

- A conservation kit during the drought-with showerheads and aerators
- Limited to 6000 gallons
- ET controller rebate

Q44_4 v-y					
Does your organization use outdoor use tools and programs?		Yes	No	DK/REF	Total
Water-wise landscape incentives	Number	37	160	3	200
	Percent	19%	80%	2%	100%
Water-wise landscape design assistance	Number	39	157	4	200
	Percent	20%	79%	2%	100%
Irrigation system audits	Number	60	138	2	200
	Percent	30%	69%	1%	100%
Irrigation technology incentives (smart controllers, soil sensors, etc.)	Number	24	175	1	200
	Percent	12%	88%	1%	100%

Q44z. Any other outdoor use tools or programs that I didn't mention?

- No outdoor watering
- Restriction on livestock watering landscape irrigation
- Want to promote maximum irrigated turf
- Ordinance requires soil amendment. Pre-planned xeriscape, all plantings.
- Incentives for new construction.
- Some incentive based contracts
- Separate raw water irrigation pipeline system
- Raw water irrigation
- Leak detection on our distribution system. Lawn watering restrictions.
- Tap fee
- Voluntary watering restrictions
- Encourage rain shut-off devices
- We run an open irrigation system. Provide free irrigation to residents from river
- Planning review
- Rate structure
- Free landscape seminars

Q44_5 aa-ee					
Does your organization use commercial tools and programs?		Yes	No	DK/REF	Total
Commercial clothes washer incentives	Number	3	196	1	200
	Percent	2%	98%	1%	100%
Distribute pre-rinse spray heads to restaurants	Number	4	195	1	200
	Percent	2%	98%	1%	100%
Financial incentives for commercial water-saving upgrades	Number	7	189	4	200
	Percent	4%	95%	2%	100%
Commercial Industrial Institutional audits and efficiency planning	Number	9	188	3	200
	Percent	5%	94%	2%	100%
Commercial toilet and urinal incentives	Number	6	192	2	200
	Percent	3%	96%	1%	100%

Q44ff. Any other commercial tools or programs that I didn't mention?

- Commercial audits
- Commercial workshops
- New construction tap fees
- Expanded list of rebates
- The pace program- partners for clean environment- conserve water and other things- recognition for participation
- Distribute pamphlets in hotels about water conservation

Q44_6 gg-ss					
Does your organization use regulatory tools and programs.		Yes	No	DK/REF	Total
Limit turf areas & or narrow strips	Number	42	154	4	200
	Percent	21%	77%	2%	100%
Require rain shut-off devices	Number	9	189	2	200
	Percent	5%	95%	1%	100%
Require dedicated tap for irrigation for large properties	Number	62	133	5	200
	Percent	31%	67%	3%	100%
Establish landscaping guidelines for public facilities	Number	58	137	5	200
	Percent	29%	69%	3%	100%
Require new car washes to recycle	Number	33	154	13	200
	Percent	17%	77%	7%	100%
Retrofit on resale ordinance	Number	6	182	12	200
	Percent	3%	91%	6%	100%
Prohibit new single-pass cooling systems	Number	7	183	10	200
	Percent	4%	92%	5%	100%
Time-of-day irrigation restrictions	Number	98	101	1	200
	Percent	49%	51%	1%	100%
Water efficiency plumbing codes for new buildings	Number	72	118	10	200
	Percent	36%	59%	5%	100%
Ordinance against water waste	Number	109	89	2	200
	Percent	55%	45%	1%	100%
Landscape & irrigation standards for new development	Number	75	124	1	200
	Percent	38%	62%	1%	100%
Restrictive covenants ordinance - no prohibition of xeriscape or mandate for turf	Number	29	165	6	200
	Percent	15%	83%	3%	100%
Soil amendment ordinance (new construction)	Number	23	173	4	200
	Percent	12%	87%	2%	100%

Q44tt. Any other regulatory or programs that I didn't mention?

- Water rates
- Have started to look at requiring not treated water for irrigation
- Treated waste water for irrigation
- Restriction on outdoor irrigation
- No outdoor water use
- No outdoor irrigation
- Limited taps. Limited lawn space. Max outdoor water use restrictions.
- No irrigation

Q45 To what extent, if at all, would your organization be interested in participating in a statewide water efficiency public information and education campaign?	Number	Percent
Not at all interested	15	8%
Slightly interested	33	17%
Somewhat interested	106	53%
Very interested	44	22%
DK/depends	2	1%
Total	200	100%

Q45 To what extent, if at all, would your organization be interested in participating in a statewide water efficiency public information and education campaign?*	Number reporting	Mean	Standard Error
	198	2.9	.06

**where 1=not at all interested, 2=slightly interested, 3=somewhat interested and 4=very interested*

Q46. Why wouldn't your organization be interested?

- We mainly just work with distribution
- It's not an issue now or in the foreseeable future
- We're such a limited organization
- Conservation isn't our goal at this time. Small community.
- We're too small as an origination to participate at any funding level
- We're very small district and we don't have the irrigation that you find in other districts because we're in the forest.
- We are not a municipality
- Management
- Too small, no time or funding
- We would not have control over what was done
- We got lots of water rights lot of capacity
- We follow Denver's lead so we don't need it
- State already has too much power
- We are just not that big of a water system here. Our customers are well educated and conservative water users. Only 3 customers use any considerable water to speak of.
- I think the district manager is high on only divulging info that is required
- Not a priority

Q46a. What is your interest dependent upon?

- Amount of time someone would have to spend working with this
- Community participation
- Board of directors; need to review, cost and benefit
- Budget and staffing
- Cost
- Cost and time
- Labor, cost, what exactly would be included in the info or value of info
- The program, what it did/who it reached, and the cost
- Depends on what they do
- Different incentives
- Educational
- Future droughts
- How applicable it is to our system
- Information
- Just to learn what others are doing to keep ahead of things
- Manpower
- My time schedule
- Need
- Our current water usage and the well status
- Population changes
- Small community
- The campaign
- The results
- Time
- Understaffed
- We have no impending need. It hurts us to conserve in regards to the utility.
- We're a distributor of Denver water, so if they're involved we would be
- We're busy
- What is available from the state at no cost
- When this will be/financial

Climate Change and Long Term Planning

Q47 Which of the following are considerations in your organization's long term water supply and conservation planning? Has your organization considered...?		Yes	No	DK/REF	Total
Climate variability	Number	75	122	3	200
	Percent	38%	61%	2%	100%
Snow pack	Number	126	72	2	200
	Percent	63%	36%	1%	100%
El Niño/La Nina conditions	Number	59	139	2	200
	Percent	30%	70%	1%	100%
Ground water levels	Number	116	84	0	200
	Percent	58%	42%	0%	100%
Drought recurrence	Number	140	60	0	200
	Percent	70%	30%	0%	100%
Population change	Number	153	47	0	200
	Percent	77%	24%	0%	100%
Availability of new water supply	Number	157	43	0	200
	Percent	79%	22%	0%	100%
Changes in water use/demand patterns	Number	145	55	0	200
	Percent	73%	28%	0%	100%
Peak demand	Number	156	44	0	200
	Percent	78%	22%	0%	100%

Q47j. Are there any other considerations that I haven't mentioned?

- Trying to track the regulatory climate, also tracking endangered species climate. Monitoring demographics.
- Cost of treatment
- Surface water sources
- Acquisition of new water supplies. Aquifer storage and recovery program
- Water quality
- Availability of additional water shares
- Availability of water rights
- Well regulations
- Permitting requirements. Availability of reservoir sites. Constructions of facilities. Cost of water service vs. Water rates.
- In stream flow needs, agricultural leasing program
- Front range diversions from the western slope to front range
- Water rights purchase
- Minimum stream flow
- Developing new water storage
- Built a reservoir
- Leasing water
- We are doing a water project cross connection and new meters and pits and the like. We have a grant and are borrowing money to help. We have just quarter inch lines to fight fires- a real problem. We have problems getting water here and distributing it around town.
- Water quality issues

Q48 Has your organization considered the impact of climate change on long term planning?	Number	Percent
Yes	54	27%
No	144	72%
DK/REF	2	1%
Total	200	100%

Q49 How has your organization integrated potential impacts into long term planning? Have you...?*		Yes	No	DK/REF	Total
started informal discussions	Number	51	2	1	54
	Percent	94%	4%	2%	100%
Started formal discussions	Number	23	30	1	54
	Percent	43%	56%	2%	100%
implemented formal research/study	Number	15	37	2	54
	Percent	28%	69%	4%	100%
actively started seeking new supplies	Number	36	18	0	54
	Percent	67%	33%	0%	100%
increased the expected drought severity scenarios	Number	27	25	2	54
	Percent	50%	46%	4%	100%
full integrated them into your long term plan	Number	20	32	2	54
	Percent	37%	59%	4%	100%
increased water conservation program efforts	Number	27	26	1	54
	Percent	50%	48%	2%	100%

*asked if Q48=yes

Q49h. Are there any other potential impacts to long term planning that I haven't mentioned?

- Reserve pool policy
- Climbing of runoff
- Ongoing monitoring of the science of climate change and what it means for us at some point it might affect what we put in our capital program- additional pipelines and possible dam enlargements. With runoff coming earlier we are more conservative in how we implement our river exchange monitoring the river call more closely- the call for water rights on the river.
- Diversion of water to the front range
- Physical quantity of water in streams
- Potentially modification of landscaping for future drought response

Needs Assessment

Q50 I am going to read a list of areas for assistance; for each, please tell me how much your organization needs assistance.		1 No need at all	2	3	4	5 Extreme need	DK/ REF	Total
Improve public education and awareness	N	33	39	79	36	12	1	200
	%	17%	20%	40%	18%	6%	1%	100%
Improve or enhanced water conservation methods	N	28	34	81	42	14	1	200
	%	14%	17%	41%	21%	7%	1%	100%
Improve or enhance water conservation measurement methods	N	35	36	81	31	16	1	200
	%	18%	18%	41%	16%	8%	1%	100%
Create or improve master plans for future water supply and demand	N	44	31	54	44	26	1	200
	%	22%	16%	27%	22%	13%	1%	100%
Create or improve drought planning	N	31	45	64	42	17	1	200
	%	16%	23%	32%	21%	9%	1%	100%
Create or improve conservation planning	N	24	35	79	42	19	1	200
	%	12%	18%	40%	21%	10%	1%	100%
Conduct hydrologic studies	N	66	34	49	27	20	4	200
	%	33%	17%	25%	14%	10%	2%	100%
Conduct water rights studies	N	69	38	33	33	25	2	200
	%	35%	19%	17%	17%	13%	1%	100%
Pre-fabricated conservation programs and materials	N	40	43	72	31	13	1	200
	%	20%	22%	36%	16%	7%	1%	100%
Technical information on climate and forecasting	N	43	47	57	36	16	1	200
	%	22%	24%	29%	18%	8%	1%	100%
Create cooperative agreements	N	56	52	54	20	16	2	200
	%	28%	26%	27%	10%	8%	1%	100%
Communicating the value of water	N	28	25	59	51	36	1	200
	%	14%	13%	30%	26%	18%	1%	100%
Loans for project evaluations/feasibility studies	N	43	29	39	51	35	3	200
	%	22%	15%	20%	26%	18%	2%	100%
Loans for planning activities	N	45	31	43	46	33	2	200
	%	23%	16%	22%	23%	17%	1%	100%
Loans for capital projects	N	33	16	35	49	65	2	200
	%	17%	8%	18%	25%	33%	1%	100%
Grant funding for project evaluations/feasibility studies	N	27	15	34	48	74	2	200
	%	14%	8%	17%	24%	37%	1%	100%
Grant funding for planning activities	N	29	20	42	44	63	2	200
	%	15%	10%	21%	22%	32%	1%	100%
Grant funding to implement planning	N	31	18	38	44	67	2	200
	%	16%	9%	19%	22%	34%	1%	100%
Grant funding for infrastructure	N	29	19	47	38	65	2	200

management	%	15%	10%	24%	19%	33%	1%	100%
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Q50 I am going to read a list of areas for assistance; for each, please tell me how much your organization needs assistance.*	Number reporting	Mean	Standard Error
Improve public education and awareness	199	2.8	.08
Improve or enhanced water conservation methods	199	2.9	.08
Improve or enhance water conservation measurement methods	199	2.8	.08
Create or improve master plans for future water supply and demand	199	2.9	.09
Create or improve drought planning	199	2.8	.08
Create or improve conservation planning	199	3.0	.08
Conduct hydrologic studies	196	2.5	.10
Conduct water rights studies	198	2.5	.10
Pre-fabricated conservation programs and materials (e.g., "fixture rebate program in a box", educational materials, bill stuffers)	199	2.7	.08
Technical information on climate and forecasting	199	2.7	.09
Create cooperative agreements	198	2.4	.09
Communicating the value of water	199	3.2	.09
Loans for project evaluations/feasibility studies	197	3.0	.10
Loans for planning activities	198	3.0	.10
Loans for capital projects	198	3.5	.10
Grant funding for project evaluations/feasibility studies	198	3.6	.10
Grant funding for planning activities	198	3.5	.10
Grant funding to implement planning	198	3.5	.10
Grant funding for infrastructure management	198	3.5	.10

**where 1=no need at all and 5=extreme need*

Q51 Now I am going to read a list of specific types of cooperative agreements, please indicate much your organization needs assistance for each type.		1 No need at all	2	3	4	5 Extreme need	DK/REF	Total
Exchanges	Number	78	34	37	16	19	16	200
	Percent	39%	17%	19%	8%	10%	8%	100%
Transfers	Number	79	36	40	17	16	12	200
	Percent	40%	18%	20%	9%	8%	6%	100%
Substitute water supply plans	Number	62	32	51	22	19	14	200
	Percent	31%	16%	26%	11%	10%	7%	100%
Interruptible supplies	Number	67	36	47	16	18	16	200
	Percent	34%	18%	24%	8%	9%	8%	100%
Dry year leases	Number	74	41	47	12	13	13	200
	Percent	37%	21%	24%	6%	7%	7%	100%
Operating agreements	Number	69	37	42	25	15	12	200
	Percent	35%	19%	21%	13%	8%	6%	100%
Water banking	Number	72	34	37	25	18	14	200
	Percent	36%	17%	19%	13%	9%	7%	100%
Water conservation easements	Number	66	37	41	24	14	18	200
	Percent	33%	19%	21%	12%	7%	9%	100%

Q51 Now I am going to read a list of specific types of cooperative agreements, please indicate much your organization needs assistance for each type.*	Number reporting	Mean	Standard Error
Exchanges	184	2.3	.10
Transfers	188	2.2	.10
Substitute water supply plans	186	2.5	.10
Interruptible supplies	184	2.4	.10
Dry year leases	187	2.2	.09
Operating agreements	188	2.4	.10
Water banking	186	2.4	.10
Water conservation easements	182	2.4	.10

*where 1=no need at all and 5=extreme need

Q52 For these same areas for assistance; for each, please tell me how strongly you agree or disagree that the state should provide the service.		1 Strongly disagree	2	3	4	5 Strongly agree	DK/ REF	Total
Improve public education and awareness	N	9	16	67	50	57	1	200
	%	5%	8%	34%	25%	29%	1%	100%
Improve or enhanced water conservation methods	N	12	22	76	51	38	1	200
	%	6%	11%	38%	26%	19%	1%	100%
Improve or enhance water conservation measurement methods	N	13	22	74	53	37	1	200
	%	7%	11%	37%	27%	19%	1%	100%
Create or improve master plans for future water supply and demand	N	25	36	51	47	41	0	200
	%	13%	18%	26%	24%	21%	0%	100%
Create or improve drought planning	N	14	26	61	52	47	0	200
	%	7%	13%	31%	26%	24%	0%	100%
Create or improve conservation planning	N	15	23	69	53	40	0	200
	%	8%	12%	35%	27%	20%	0%	100%
Conduct hydrologic studies	N	19	23	54	53	49	2	200
	%	10%	12%	27%	27%	25%	1%	100%
Conduct water rights studies	N	24	32	58	40	45	1	200
	%	12%	16%	29%	20%	23%	1%	100%
Pre-fabricated conservation programs and materials	N	16	28	76	55	24	1	200
	%	8%	14%	38%	28%	12%	1%	100%
Technical information on climate and forecasting	N	15	24	59	61	39	2	200
	%	8%	12%	30%	31%	20%	1%	100%
Create cooperative agreements	N	30	34	80	31	22	3	200
	%	15%	17%	40%	16%	11%	2%	100%
Communicating the value of water	N	9	11	54	52	74	0	200
	%	5%	6%	27%	26%	37%	0%	100%
Loans for project evaluations/feasibility studies	N	12	15	56	61	56	0	200
	%	6%	8%	28%	31%	28%	0%	100%
Loans for planning activities	N	13	16	53	67	51	0	200
	%	7%	8%	27%	34%	26%	0%	100%
Loans for capital projects	N	8	12	43	64	73	0	200
	%	4%	6%	22%	32%	37%	0%	100%
Grant funding for project evaluations/feasibility studies	N	10	19	41	59	71	0	200
	%	5%	10%	21%	30%	36%	0%	100%
Grant funding for planning activities	N	10	17	43	64	66	0	200
	%	5%	9%	22%	32%	33%	0%	100%
Grant funding to implement planning	N	10	15	43	63	69	0	200
	%	5%	8%	22%	32%	35%	0%	100%

Grant funding for infrastructure management	N	13	20	49	53	65	0	200
	%	7%	10%	25%	27%	33%	0%	100%

Q52 For these same areas for assistance; for each, please tell me how strongly you agree or disagree that the state should provide the service.*	Number reporting	Mean	Standard Error
Improve public education and awareness	199	3.7	.08
Improve or enhanced water conservation methods	199	3.4	.08
Improve or enhance water conservation measurement methods	199	3.4	.08
Create or improve master plans for future water supply and demand	200	3.2	.09
Create or improve drought planning	200	3.5	.08
Create or improve conservation planning	200	3.4	.08
Conduct hydrologic studies	198	3.5	.09
Conduct water rights studies	199	3.3	.09
Pre-fabricated conservation programs and materials (e.g., "fixture rebate program in a box", educational materials, bill stuffers)	199	3.2	.08
Technical information on climate and forecasting	198	3.4	.08
Create cooperative agreements	197	2.9	.08
Communicating the value of water	200	3.9	.08
Loans for project evaluations/feasibility studies	200	3.7	.08
Loans for planning activities	200	3.6	.08
Loans for capital projects	200	3.9	.08
Grant funding for project evaluations/feasibility studies	200	3.8	.08
Grant funding for planning activities	200	3.8	.08
Grant funding to implement planning	200	3.8	.08
Grant funding for infrastructure management	200	3.7	.09

**where 1=strongly disagree and 5=strongly agree*

Q53 Do you think the state should implement drought assessment surveys, such as this, in the future?	Number	Percent
Yes	169	85%
No	19	10%
DK/REF	12	6%
Total	200	100%

Data Collection and Reporting

Q54 Does your organization currently collect any data to support water conservation planning?	Number	Percent
Yes	85	43%
No	110	55%
DK/REF	5	3%
Total	200	100%

Q55 For which of the following metrics does your organization collect data? [Read list, Check all that apply]*	Number of respondents	Percent of respondents
Total consumption/demand	84	98.8%
Gallons per capita per day (GPCD)	75	88.2%
Water loss (unaccounted for water)	73	85.9%
Water saved by conservation	36	42.4%
Other	0	.0%
DK/REF	0	.0%
Total	85	100.0%

**asked if Q54=yes, percents do not sum to 100% as respondents could choose more than one category.*

Q56 To whom, if anyone, does your organization report the data? [Read list, Check all that apply]*	Number of respondents	Percent of respondents
County	2	2.4%
State	16	18.8%
Federal government	0	.0%
EPA	1	1.2%
Other	27	31.8%
DK/REF	3	3.5%
None	39	45.9%
Total	85	100.0%

**asked if Q54=yes, percents do not sum to 100% as respondents could choose more than one category.*

Q56. To whom, if anyone, does your organization report the data?

- Board of directors
- Board of directors
- Board of directors
- Board of trustees for the town for citizens
- Board/council
- Our governing board
- Town board
- Upper management and the water board
- Utility board, city council
- City council and citizens
- City council/city management
- City
- City of Broomfield
- City of Longmont
- CWCB, for a loan
- District 23 division 1
- Division of water resources
- Division of Water Resources. To the customers.
- Health Dept. Water Commissioner.
- Our consultant maybe water quality authorities
- Reports for grants and things like that
- The public
- Within the organization, sometimes to the public

Q57 To what extent would your organization currently be able to provide the following types of data.*		No data	Partial data	Complete data	DK/REF	Total
Total consumption/demand	Number	0	3	81	1	85
	Percent	0%	4%	95%	1%	100%
Gallons per capita per day (GPCD)	Number	6	16	61	2	85
	Percent	7%	19%	72%	2%	100%
Water loss (unaccounted for water)	Number	6	28	50	1	85
	Percent	7%	33%	59%	1%	100%
Water saved by conservation	Number	36	37	9	3	85
	Percent	42%	44%	11%	4%	100%

**asked if Q54=yes*

Q58. Now I am going to read a list of specific types of data that could be made available statewide. For each, please indicate how useful such information would be to your organization.		1 Not at all useful	2	3	4	5 Very useful	DK/REF	Total
Per capita use at other COLORADO agencies	Number	22	27	61	41	48	1	200
	Percent	11%	14%	31%	21%	24%	1%	100%
Water rates at other COLORADO agencies	Number	5	13	43	65	73	1	200
	Percent	3%	7%	22%	33%	37%	1%	100%
Water rate structures at other CO agencies	Number	4	12	45	64	74	1	200
	Percent	2%	6%	23%	32%	37%	1%	100%
Tap/connection fees at other CO agencies	Number	5	12	44	63	75	1	200
	Percent	3%	6%	22%	32%	38%	1%	100%
Water quality and treatment data	Number	14	12	57	70	44	3	200
	Percent	7%	6%	29%	35%	22%	2%	100%
Total billed water	Number	18	25	71	43	37	6	200
	Percent	9%	13%	36%	22%	19%	3%	100%
Percentage of raw water from different sources (ground, surface, etc.)	Number	29	31	78	35	26	1	200
	Percent	15%	16%	39%	18%	13%	1%	100%
Drought planning at other CO agencies	Number	16	18	66	48	51	1	200
	Percent	8%	9%	33%	24%	26%	1%	100%

Q58. Now I am going to read a list of specific types of data that could be made available statewide. For each, please indicate how useful such information would be to your organization.*	Number reporting	Mean	Standard Error
Per capita use at other Colorado agencies	199	3.3	.09
Water rates at other Colorado agencies	199	3.9	.07
Water rate structures at other Colorado agencies	199	4.0	.07
Tap/connection fees at other Colorado agencies	199	4.0	.07
Water quality and treatment data	197	3.6	.08
Total billed water	194	3.3	.09
Percentage of raw water from different sources (ground, surface, etc.)	199	3.0	.09
Drought planning at other Colorado agencies	199	3.5	.08

**where 1=the worst and 5=the best*

Q58j. Any other types of data that I haven't mentioned?

- Water reuse
- Percentage of ground water to surface water
- Raw water acquisition plans
- Long term water supply planning
- Revenue per tap collected by an entity
- Comparing different agencies with similar populations
- Percent of indoor vs. Outdoor use of water percent of residential vs commercial use of water. Largest water users in the community. Seasonal pattern of use monthly pattern of use.
- Capital cost info for mountain communities
- Drought shadow data
- Measurements on backwash

Q59 To what extent, if at all, would your organization be interested in contributing to a statewide water data repository project?	Number	Percent
Not at all interested	19	10%
Slightly interested	52	26%
Somewhat interested	95	48%
Very interested	29	15%
DK/depends	5	3%
Total	200	100%

Q59 To what extent, if at all, would your organization be interested in contributing to a statewide water data repository project?*	Number reporting	Mean	Standard Error
	195	2.7	.06

**where 1=not at all interested, 2=slightly interested, 3=somewhat interested and 4=very interested*

Q60. What are some of your concerns about the State collecting this data?

- Control, knowing where all of our water is going water rights thing
- Depends on info
- Depends on what data is going to be stored, and what public access will be allowed
- Don't want the state to be involved
- How much effort would be required of us to provide the data
- How that data would be used/applied and to whom it would be distributed
- How the data would be used and distributed
- It is all well and good. Bigger water systems would be quite interested in the data collected. We like to do our own thing and don't get crossword with the state.
- Just depends on how much info they're looking for. When you have a smaller district it's harder with lack of manpower
- Lack of manpower
- Lack of staff
- We're understaffed
- More workload
- One concern is that using the data to mandate certain practices-each system is different and it might not show up in the database- such as some systems -types of water-some have more storage - whereas ours is direct flow- for us it is best to use it when available- for some others they can store water and mandate certain use -they have controls as they can keep water in storage- same for wells- they can control it- affecting us more is climate variability- we depend on snow levels.
- Personally none/management would say privacy issues
- The data can get used in inappropriate ways
- The data we receive is already useful/costs money
- The state should collect all the data that they can. We are running out of water, too many people have water rights
- They need to stay out of the water rights area
- Time
- Time involved for a small staff
- Time money
- Typically the state collects data and uses it for their own agenda
- We would need to know what specifically they're looking for
- You cannot compare entities

Q61 Would this data be useful to you for your planning and/or comparison with other entities?	Number	Percent
Yes	179	90%
No	11	6%
DK/REF	10	5%
Total	200	100%

Q62 Do you think the state should conduct statewide water availability studies?	Number	Percent
Yes	163	82%
No	20	10%
DK/REF	17	9%
Total	200	100%

Q63 Do you think the state should conduct statewide basin water availability studies?	Number	Percent
Yes	173	87%
No	15	8%
DK/REF	12	6%
Total	200	100%

Q64 Do you think the state should conduct statewide waste water availability studies?	Number	Percent
Yes	140	70%
No	38	19%
DK/REF	22	11%
Total	200	100%

Q65 Do you think the state should conduct statewide drinking water availability studies?	Number	Percent
Yes	173	87%
No	15	8%
DK/REF	12	6%
Total	200	100%

Q66. Finally I would like to ask you which methods of communication you prefer for getting information from the state about water and drought issues. For each method, please indicate whether this is one of the worst methods of communication for you, or one of the best.		1 The worst	2	3	4	5 The best	DK/REF	Total
		E-mail	Number	20	10	20	44	105
	Percent	10%	5%	10%	22%	53%	1%	100%
Internet	Number	20	9	33	49	88	1	200
	Percent	10%	5%	17%	25%	44%	1%	100%
Mail	Number	12	34	68	44	41	1	200
	Percent	6%	17%	34%	22%	21%	1%	100%
Regional Workshops/seminars	Number	12	29	72	51	34	2	200
	Percent	6%	15%	36%	26%	17%	1%	100%
Attending CWCB Board Meetings	Number	73	54	51	17	2	3	200
	Percent	37%	27%	26%	9%	1%	2%	100%
Phone consultations	Number	58	63	46	18	14	1	200
	Percent	29%	32%	23%	9%	7%	1%	100%
Face-to-face	Number	24	28	49	44	54	1	200
	Percent	12%	14%	25%	22%	27%	1%	100%
Through the media	Number	65	66	38	20	10	1	200
	Percent	33%	33%	19%	10%	5%	1%	100%
Organizational meetings	Number	12	44	89	36	17	2	200
	Percent	6%	22%	45%	18%	9%	1%	100%

Q66. Finally I would like to ask you which methods of communication you prefer for getting information from the state about water and drought issues. For each method, please indicate whether this is one of the worst methods of communication for you, or one of the best.*	Number reporting	Mean	Standard Error
E-mail	199	4.0	.09
Internet	199	3.9	.09
Mail	199	3.3	.08
Regional Workshops/seminars	198	3.3	.08
Attending CWCB Board Meetings	197	2.1	.07
Phone consultations	199	2.3	.08
Face-to-face	199	3.4	.09
Through the media	199	2.2	.08

Organizational meetings	198	3.0	.07
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**where 1=the worst and 5=the best*

Q67. Please tell me any other methods of communication that you would prefer for getting information from the state about water and drought issues.

- Conferences
- Publications/pamphlets
- Lunch-in/brown bag type seminars
- Fax
- Annual reports or subject report
- Newsletter
- DRCOG people present info, and that info is useful especially their drought projections.
- Internet database