

# Political Environment of Water Conservation

Presentation  
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Prepared in June 2006



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# Political Environment of Water Conservation

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## Topics

- Key events in Colorado water policy and politics
- Historic drought
- Growth issue
- Public opinion
- The ins and outs: post-Two-Forks/post drought of 2002
- Statewide water conservation
- Denver metro water conservation

# Key Events in Colorado Water Policy and Politics

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|------|--|
| 1977 | Budget "hit list." Newly elected President Carter issues budget with no funding for several western water projects. End of significant federal financing of reclamation. |
| 1990 | EPA veto of Two-Forks. Long-planned Denver metro area dam and reservoir of 1.1 million ac-ft is stopped. End of big reservoir development.                               |
| 2002 | Drought of 2002. Record-breaking drought after decade of rapid growth. End of municipalities and water policy-makers' confidence continuing supply.                      |
| 2003 | Referendum A on water bonds defeated. Water policy is polarized and politicized.   |
| 2004 | Statewide Water Supply Initiative study completed. Identifies 630,000 ac-ft gap.   |
| 2005 | HB 05-1177 begins water roundtables and technical committees.  |
| 2006 | HB 06-1124 Rotational Crop Management legislation approved   |

# Historic Drought

The current drought, which began in 2000 and has continued to the present, has been the most severe on record by several measures. Streamflows in Colorado in 2002 have generally been the lowest in over 100 years and the tree ring data suggest that flows are probably the lowest in 300 to 500 years.

*What the Current Drought Means for the Future of Water Management in Colorado, 2003*

The South Platte basin—particularly the upper basin—has been notably immune from sustained drought in recent decades, as have the Upper Colorado watersheds that serve major population centers along the Front Range through trans-basin diversions. Consequently, most of Colorado's Front Range residents have little or no familiarity with drought. *Water and Growth in Colorado, 2001*

# Population Projections by Basin and Increase in Water Demand

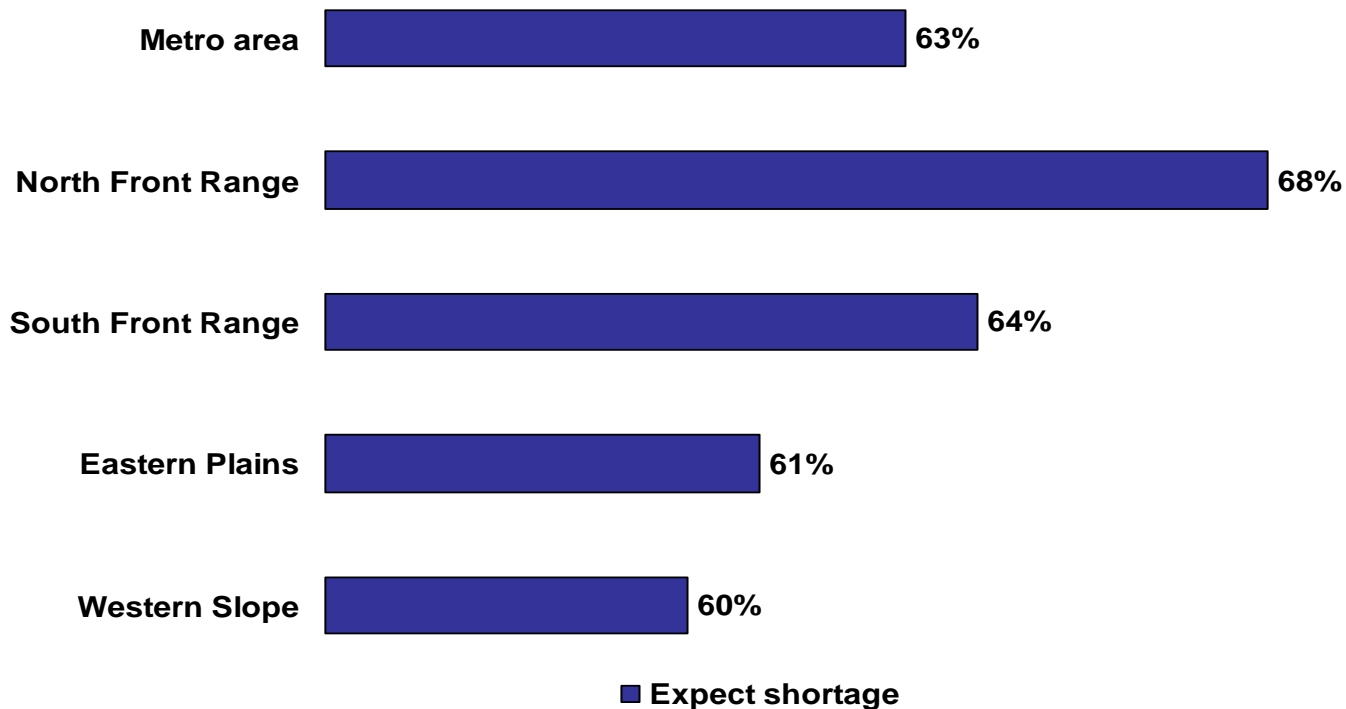
## Population and Water Demand 2000-2030

<u>Basin</u>	<u>2000</u>	<u>2030</u>	<u>Increase in Population</u>	<u>Percent Change 2000 to 2030</u>	<u>Increase in Water Demand AF</u>	<u>Increase in Water Demand AF</u>
Arkansas	835,100	1,293,000	457,900	55%	98,000	38%
Colorado	248,000	492,600	244,600	99	61,900	84
Dolores/San Juan/ San Miguel	90,900	171,600	80,700	89	18,800	80
Gunnison	88,600	161,500	72,900	82	14,900	72
North Platte	1,600	2,000	400	25	100	20
Rio Grande	46,400	62,700	16,300	35	100	20
South Platte	2,985,600	4,911,600	1,926,000	65	409,700	53
Yampa/White/Green	<u>39,300</u>	<u>61,400</u>	<u>22,100</u>	<u>56</u>	<u>22,300</u>	<u>76</u>
Total	4,335,500	7,156,400	2,820,900	65	630,000	53

Source: SWSI and Colorado Department of Local Affairs Demography Section  
AF is acre-feet

Population will increase 65% and water demand 53% — need 630,000 more acre-feet by 2030.

# Coloradans Expect Water Shortages



*Ciruli Associates, N601, Jul. 2002*

*Question: Do you believe the supply of water in your county will be adequate for the next five years or will there be a shortage of water?*

# New Political Environment of Water

## Post-Two Forks Era

- Drought of 1950s is record
- Slow growth in late 1980s and early 90s
- Public disengaged/politics of inaction
- Low level of state responsibility
- No new significant storage or supply
- Metro cooperation declines/most providers fend for themselves
- Low level urban/rural/suburban tension
- Incremental increases in conservation/water re-use
- Modest price increases—tap fee \$1,000
- Groundwater—described as Lake Erie
- Some agricultural water purchases
- Colorado River compact low priority

## Post-2002 Drought Era

- Drought of 1650s is record
- Fifth-fastest growing state in 90s
- Water top public priority/politicians motivated
- State responsibly increases
- Scramble to rehab/expand current storage/new storage
- New organizations/cooperative ventures (statewide and metro)
- Significant urban/rural/suburban tension
- Rush to conservation/rationing/re-use
- Dramatic price increases—tap fee \$20,000
- Groundwater—artesian pressure at risk within 12-15 years
- Major agricultural initiatives (lease and/or purchase with mitigation)
- Claim Colorado River compact entitlement

# Statewide Conservation

“A key feature of Facing Our Future is its recognition that some new storage facilities will be necessary to increase and improve management of water supplies. However, this report asserts that improving conservation and efficiency, and investing more in reuse and water ‘sharing’ between cities and farmers, are even higher priorities. These strategies increase supply faster, with less harm to Colorado’s famous environmental values, and with much less controversy.” (p. 3)

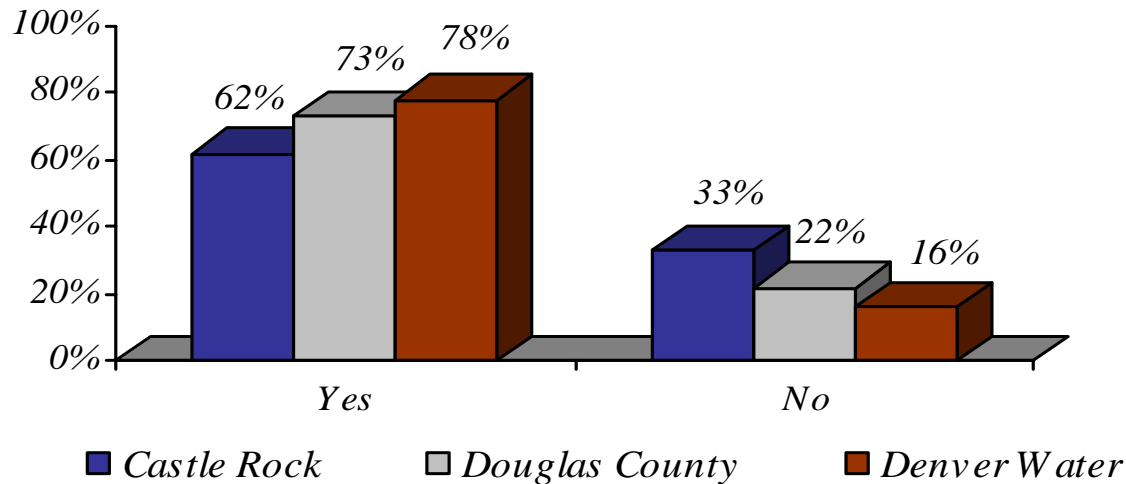
*Facing Our Future, A Balanced Water Solution for Colorado*

# Denver Metro Conservation

## We Are Still in a Drought

### Comparison of Castle Rock, Douglas County and Denver Water

*Are we in a drought...?*



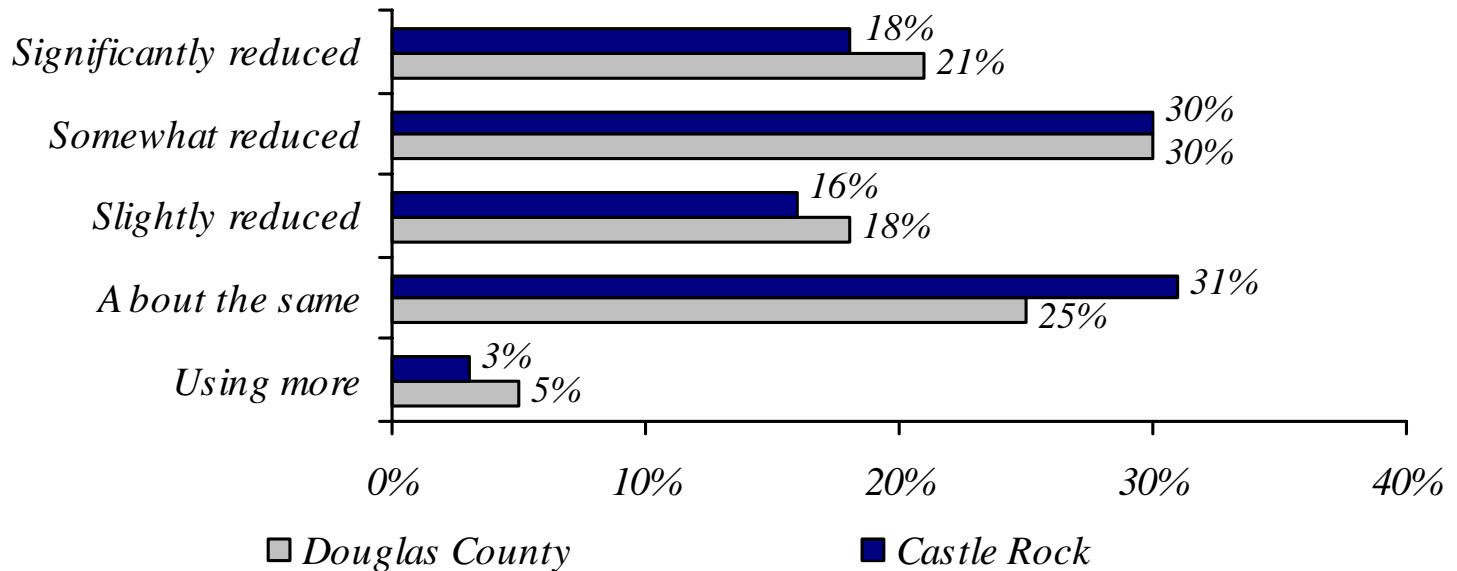
*Ciruli Associates, Town, N500, 2005*  
*Ciruli Associates, County, N700, 2005*  
*Denver Water, N801, 2005*

*Question: Thinking about the drought, do you believe we are still in a drought or do you believe the drought has ended? Castle Rock/Douglas County*  
*My next set of questions are about drought. Are we still in a drought? Denver Water*

# South Metro Residents Save Water

## Castle Rock and Douglas County

*Have you reduced water use...?*



*Ciruli Associates, Town, N500, 2005*  
*Ciruli Associates, County, N700, 2005*

*Question: In the last two years would you say you have significantly reduced your water usage, somewhat reduced your water usage, slightly reduced water usage, are you using about the same amount of water or using more water? Castle Rock/Douglas County*

# Why Metro Residents are Conserving

<u>Motive</u>	<u>Denver Water*</u>	<u>Douglas County</u>	<u>Castle Rock</u>
Right thing to do	33%	6%	15%
Perception of drought	31	38	27
Wanted lower bill	22	23	37
So area doesn't run out	21	28	27
Water rules	12	6	6

*Ciruli Associates, Town, N500, 2005  
Ciruli Associates, County, N700, 2005  
Denver Water, N801, 2005*

*\*Denver Water allowed multiple answers*

*Question: What motivated you to reduce the use of water? Castle Rock/Douglas County  
What motivated you to conserve water in the past few years? Denver Water*

# Support More Water Conservation Actions

*Do you agree with water conservation actions...?*

<u>Type of Action</u>	<u>Strongly/Somewhat Agree</u>		
	<u>Castle Rock</u>	<u>Douglas County</u>	<u>Denver Water</u>
Limit lawns for new homes	77%	77%	71%
All new developments must have adequate water	96	97	--
Increase rates to conserve	27	42	--
Reuse for drinking water	46	51	33

*Ciruli Associates, Town, N500, 2005  
Ciruli Associates, County, N700, 2005  
Denver Water, N801, 2005*

*Question: Text of questions available upon request.*

# Metro Area Conservation - 2005

## Conclusions

- More than 60% of metro residents believe the area is still in a drought.
- Two-thirds of residents attempted some water conservation during the last two years. A fifth claim significant reductions in usage.
- Perception of drought, a desire to not run out of water and the high cost of water are the main motivators for saving water.
- Social responsibility or a conservation ethic is an important motivation for conserving water.
- Residents support additional water-saving actions, including conservation education, ensuring all new development has adequate water and limits on new lawns. Residents resist higher prices just to encourage conservation and reusing wastewater for drinking water.
- Residents will invest in water conservation and supply programs and projects.