

Public Attitudes and Values Regarding Water Conservation, Use and the Environment

Sustaining Colorado Watersheds Conference
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Jennifer Thorvaldson, Andrea Shortsleeve, James Pritchett,
Alan Bright, Troy Bauder and Reagan Waskom
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Realities for Water in Western US

- Increasing competition and scarcity as population increases ...
- Water development and a reallocation of use will continue ...
- Reallocation impacts communities and involves policy decisions and the allocation of public funds...
- Policy decisions are influenced by public knowledge and attitudes.

Objectives

To identify water programs that would receive the most public support and water topics that would benefit most from an educational program we wanted to:

- Gauge public knowledge and preferences regarding water use, reuse, and conservation...and
- Estimate households' willingness to pay for programs for water conservation and reallocation

What are Public Perceptions, Preferences and Values for Water?

Today's Focus:

How do households value protecting the economy vs. the health of the environment?

Views on personal conservation and government's role?

What are households' perceptions of scarcity and water use in the West?

What strategies do households rank as the "best" when setting priorities for meeting future needs?

Eliciting Public Preferences, Values and Perceptions

Survey Methodology

- Two focus groups (non-technical and technical) used to develop questionnaire.
- Email invitation (203,750 addresses) to an internet survey
 - May – June, 2008
 - 6,250 municipal household respondents in 17 Western states.
 - 535 municipal household respondents in Colorado
- Results weighted to reflect US Census demographics on gender, income and population (West).



PERCEPTIONS OF ENVIRONMENTAL PROTECTION

What are Public Perceptions, Preferences and Values for Water?

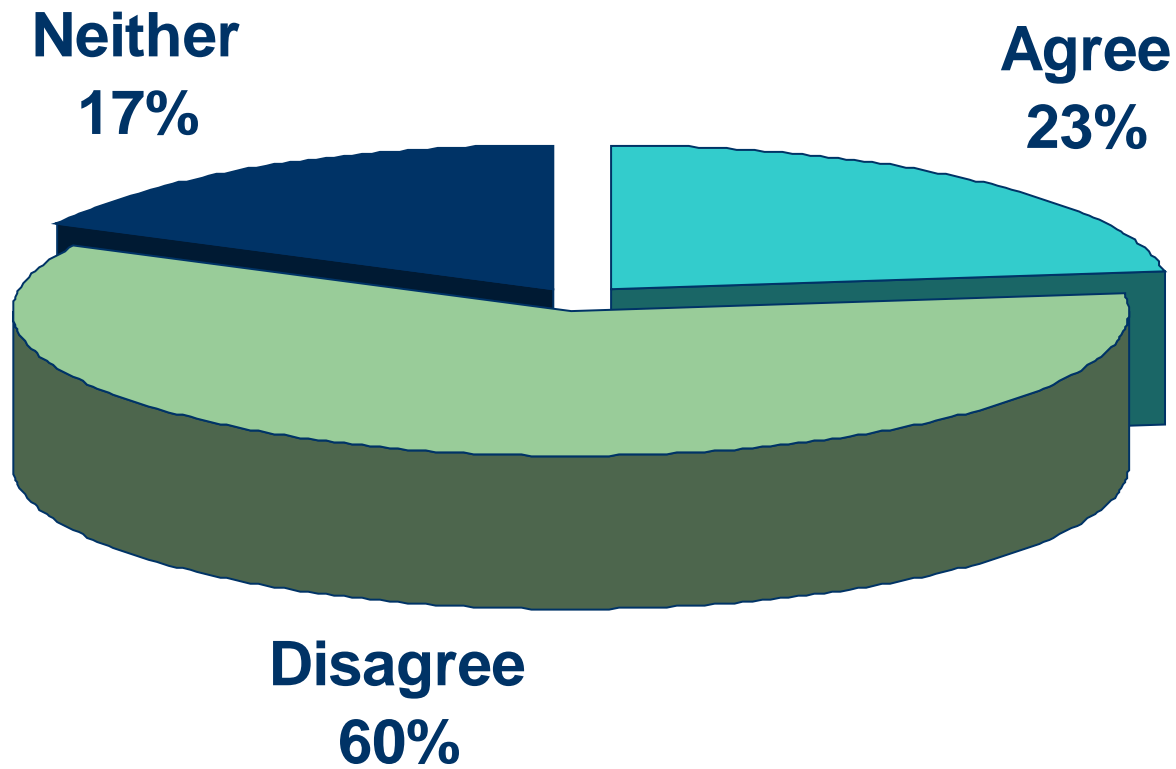
Attitudes Toward Water Conservation and the Environment...

Question: ...we would like to get your general perceptions about a variety of issues related to water conservation. Indicate the extent to which you agree or disagree with each of the following statements (5 – point scale: Strongly agree to Strongly Disagree).

- A. In water planning, the health of the economy is more important than protecting the environment.
- B. Reallocating water for the natural environment and for human use should have the same priority.
- C. Water conservation is an issue I am personally concerned about.
- D. I participate in water conservation strategies in my daily life.
- E. Government has a responsibility to develop policies and laws to make sure that water is conserved.
- F. The best way to ensure future water is through govt. regulation.

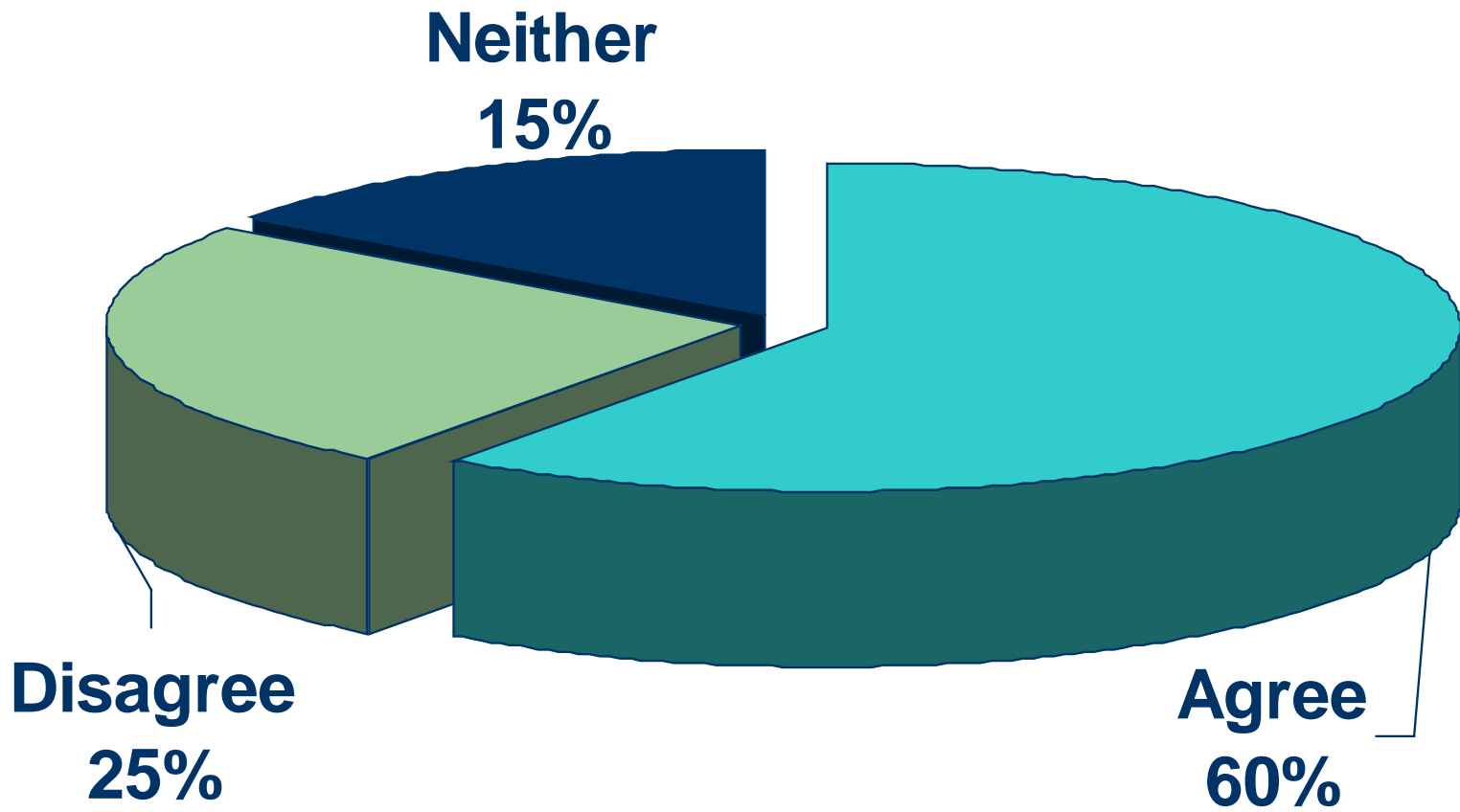
(6 of 17 questions in section)

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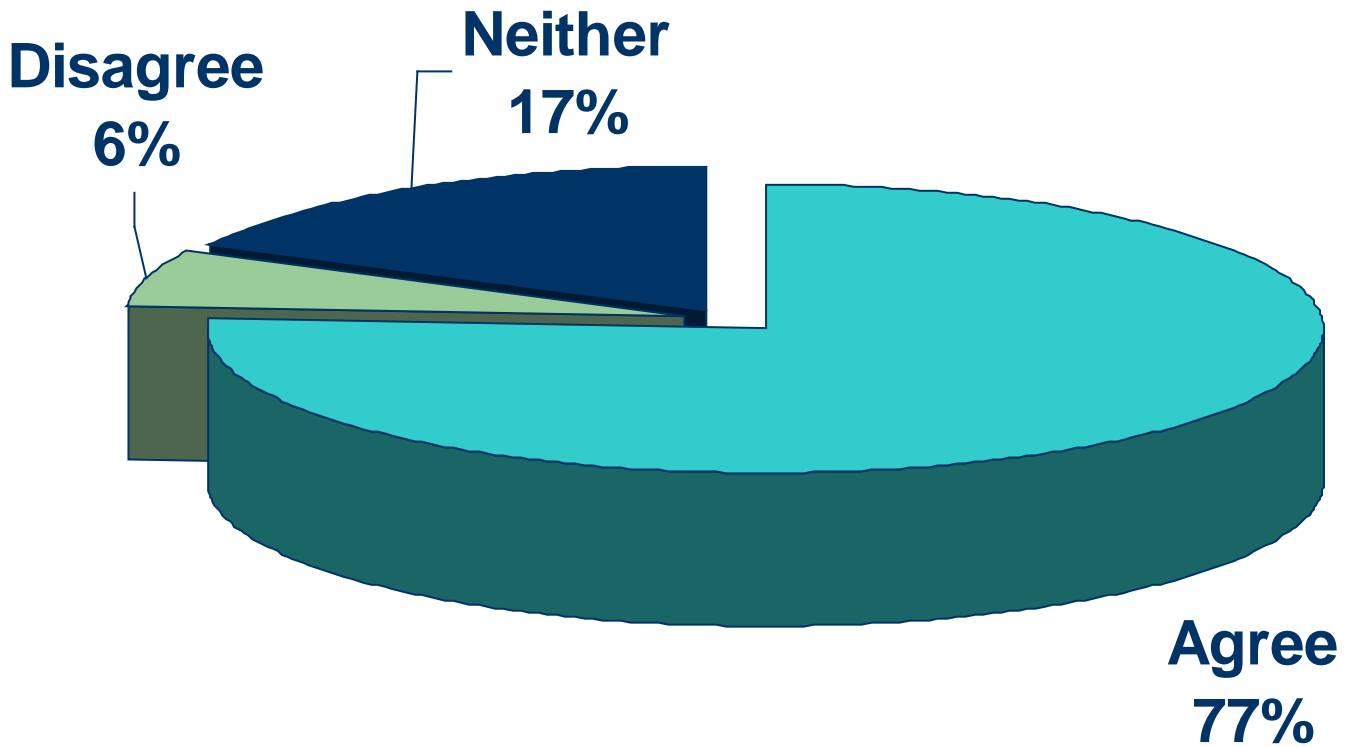
Colorado

Reallocating water for the natural environment and for human use should have the same priority.



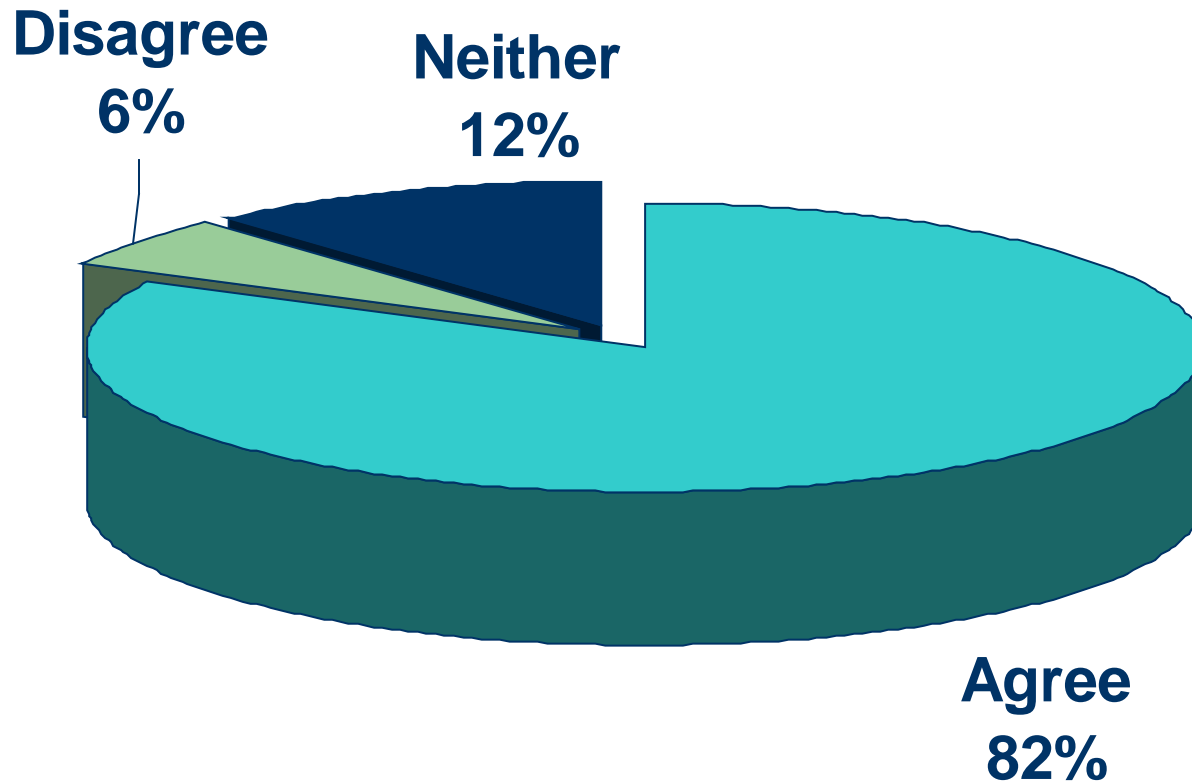
Colorado

Water conservation is an issue I am personally concerned about.



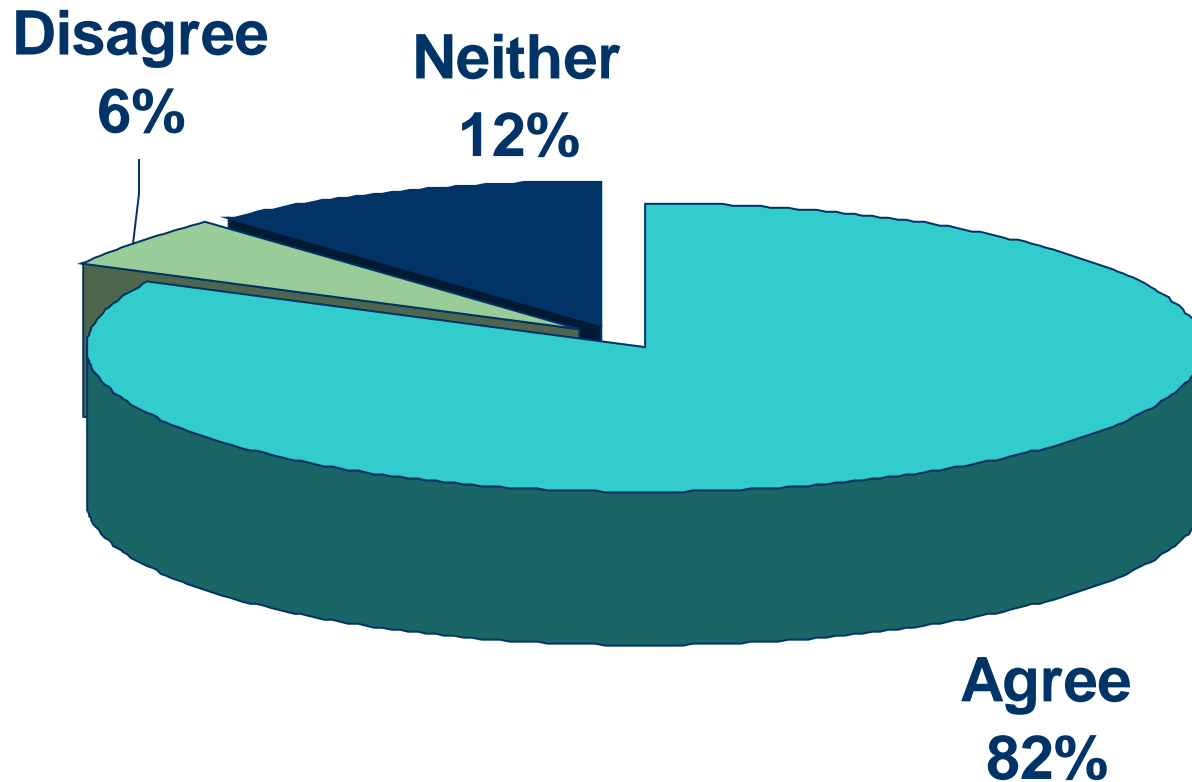
Colorado

I participate in water conservation strategies in my daily life.



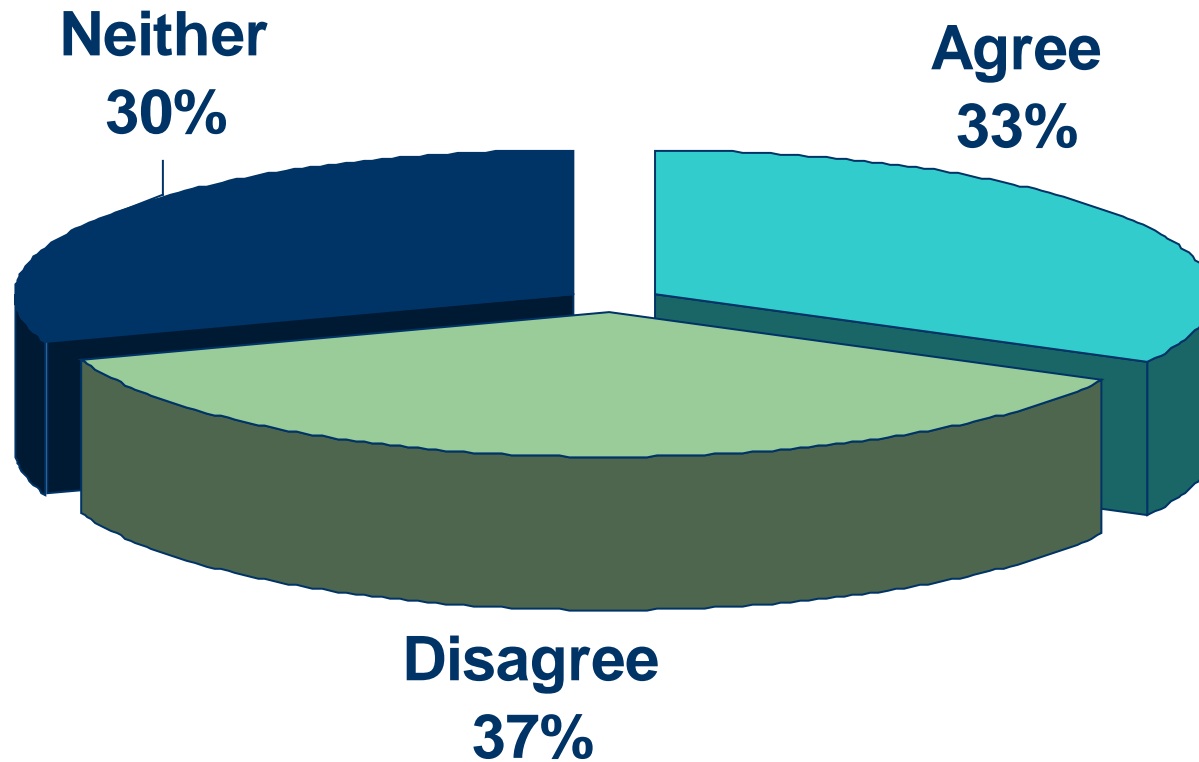
Colorado

Government has a responsibility to develop policies and laws to make sure that water is conserved.



Colorado

The best way to make sure there is enough water for the future is through government regulation.



Colorado



PERCEPTIONS OF WATER USE

What are Public Perceptions, Preferences and Values for Water?

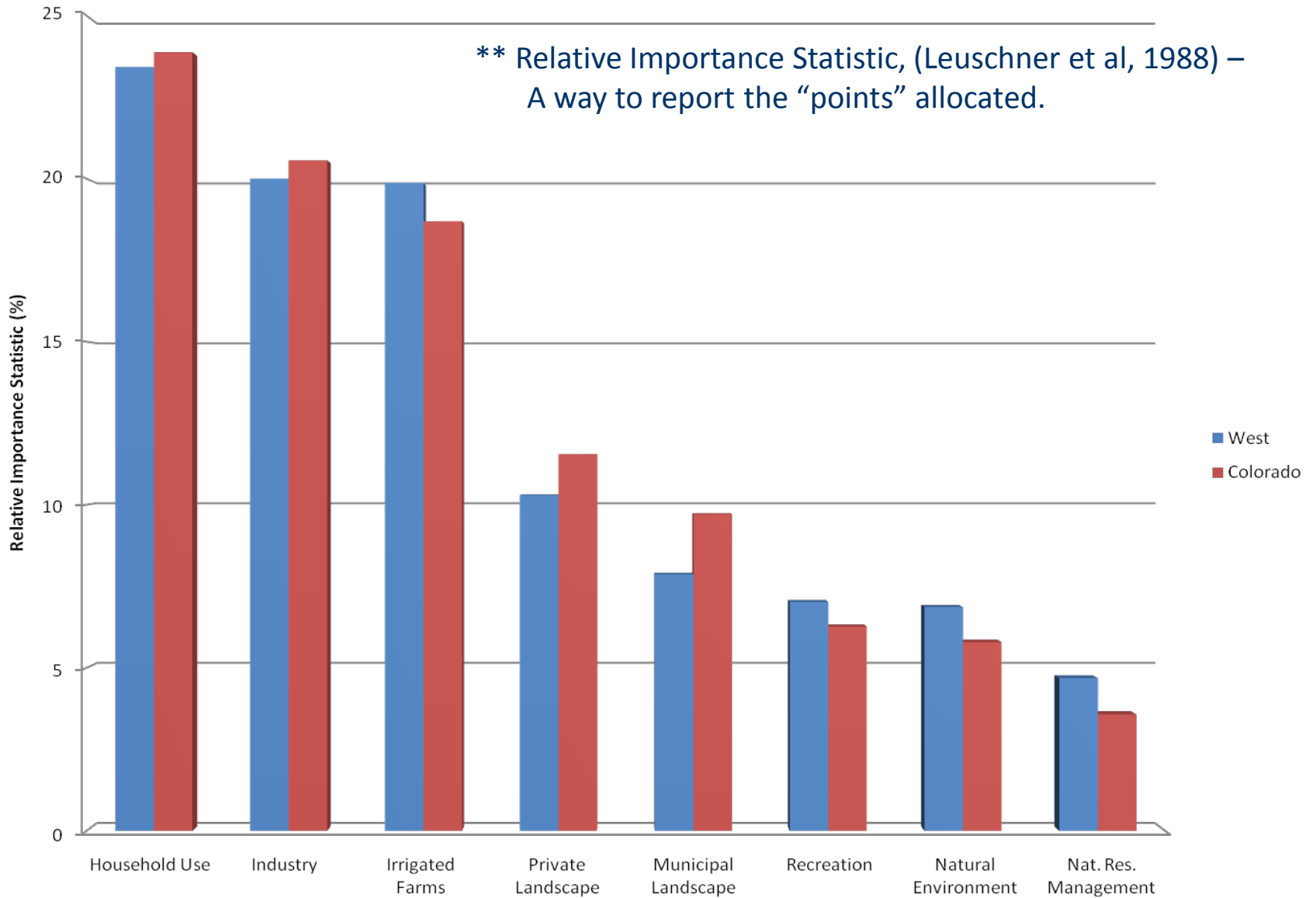
Perceptions of water use ...

Question: Water is used in a number of ways in the West. Listed below are common uses of water.

- A. *natural environment,*
- B. *natural resource management,*
- C. *household use,*
- D. *private landscapes,*
- E. *industry,*
- F. *irrigated farms,*
- G. *municipal landscapes,*
- H. *and recreation*

Consider the uses listed above. Which **three** uses require the most water available in your state?

Perceptions of water use ...





WATER SCARCITY PERCEPTIONS

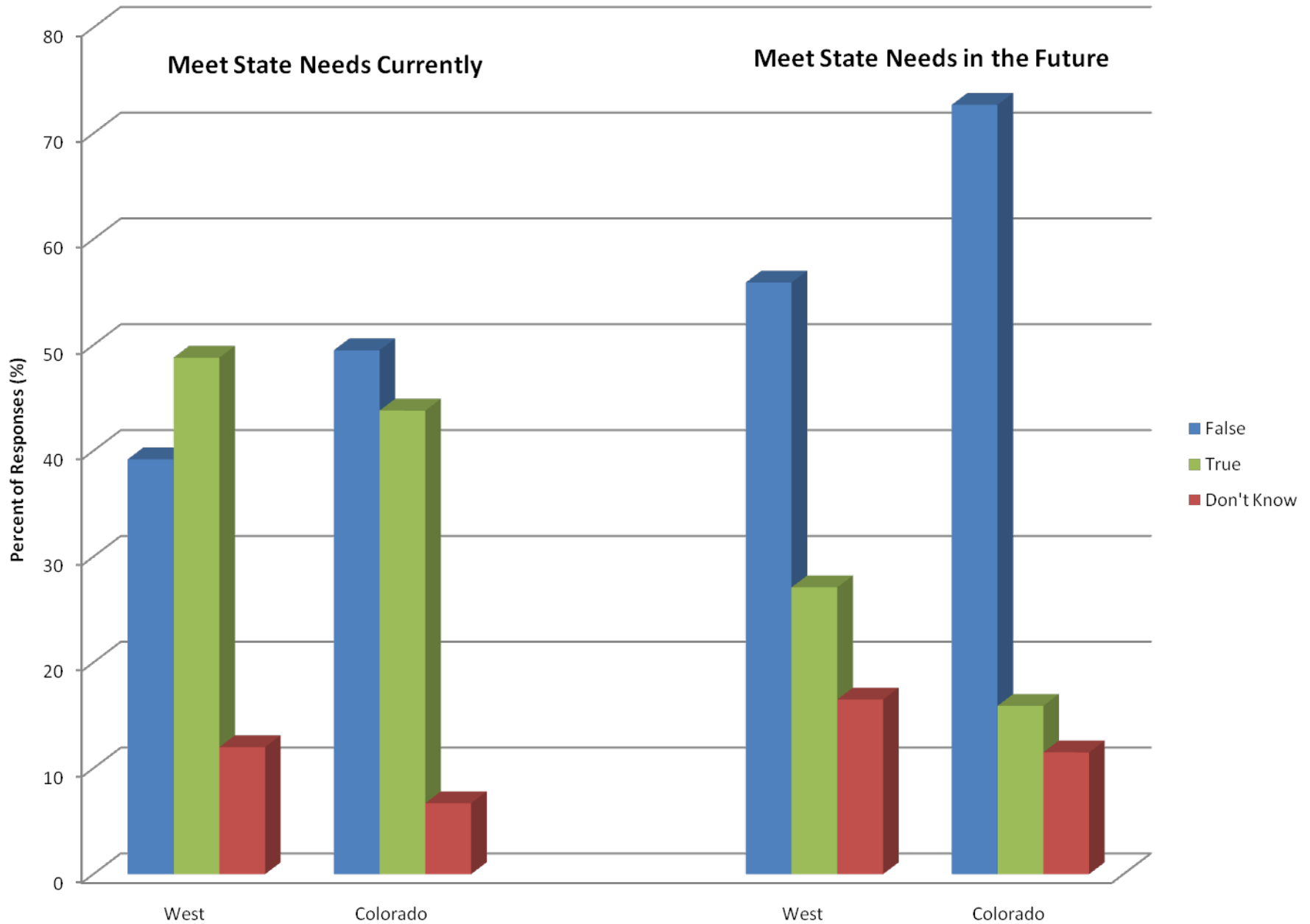
What are Public Perceptions, Preferences and Values for Water?

Perceptions of water scarcity ...

Question: Indicate the extent to which you believe each of the following statements is true or false regarding water supplies in your state and in the West. If you cannot say whether it is true or false, select I don't know.

- a. There is enough water in my state to meet current needs of all the people and businesses in my state.
- b. There is enough water in my state to meet future needs of all the people and businesses in my state for the next 25 years.

Perceptions of water scarcity ...





SHORT TERM DROUGHT PRIORITIES

What are Public Perceptions, Preferences and Values for Water?

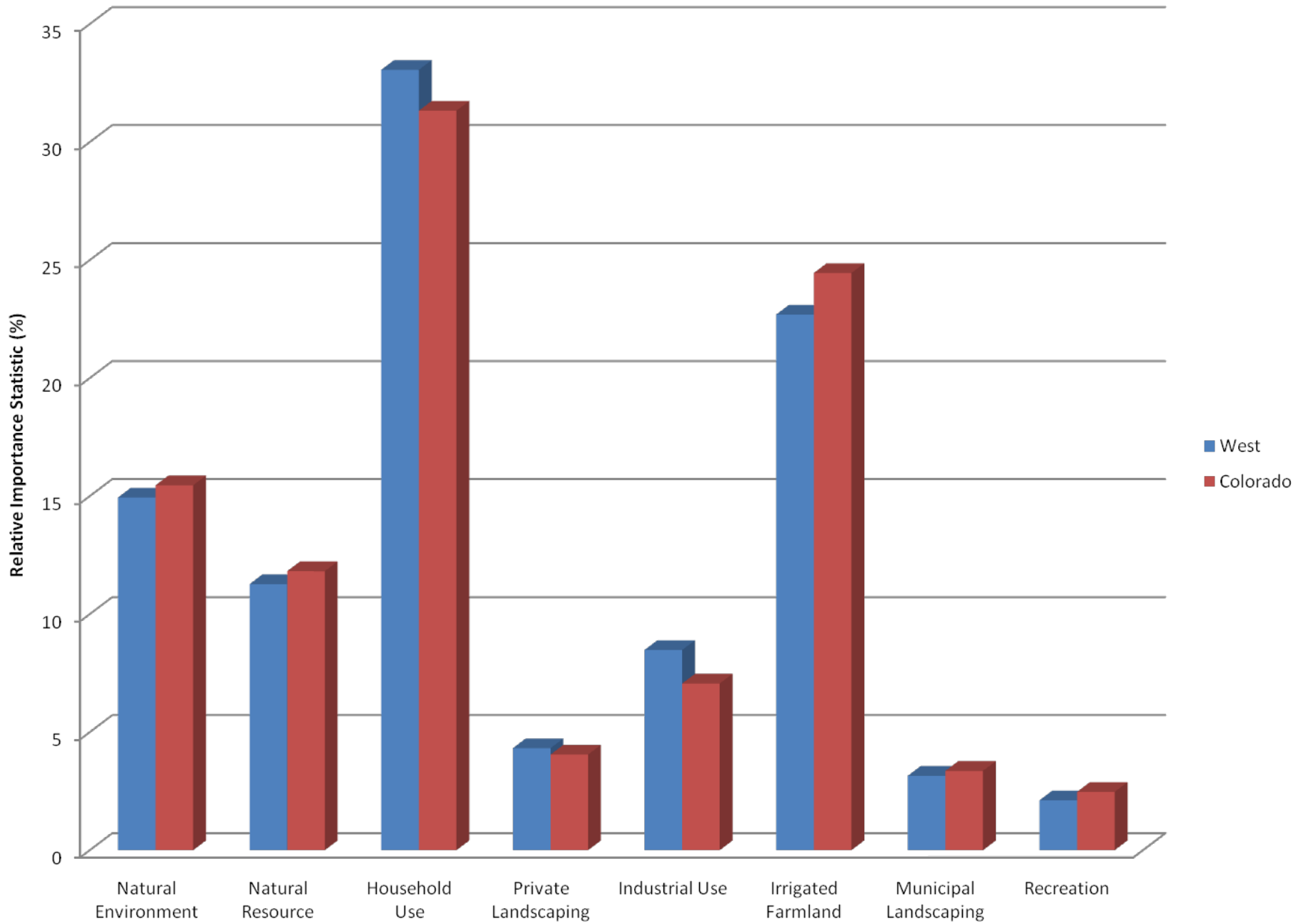
Water use priorities ...

Question: At times, your state has experienced temporary (less than 2 years) water shortages. During these times, there may not be enough water to adequately provide for all water uses. Listed below are 8 uses for which water might be allocated when water is limited.

- A. *natural environment,*
- B. *natural resource management,*
- C. *household use,*
- D. *private landscapes,*
- E. *industry,*
- F. *irrigated farms,*
- G. *municipal landscapes,*
- H. *and recreation*

Consider the 8 water uses. If you had to select 3 of the above uses to allocate water to when water is limited, which 3 uses do you think should receive 1st, 2nd and 3rd priority.

Water use priorities ...





MUNICIPAL RESPONSE TO DROUGHT

What are Public Perceptions, Preferences and Values for Water?

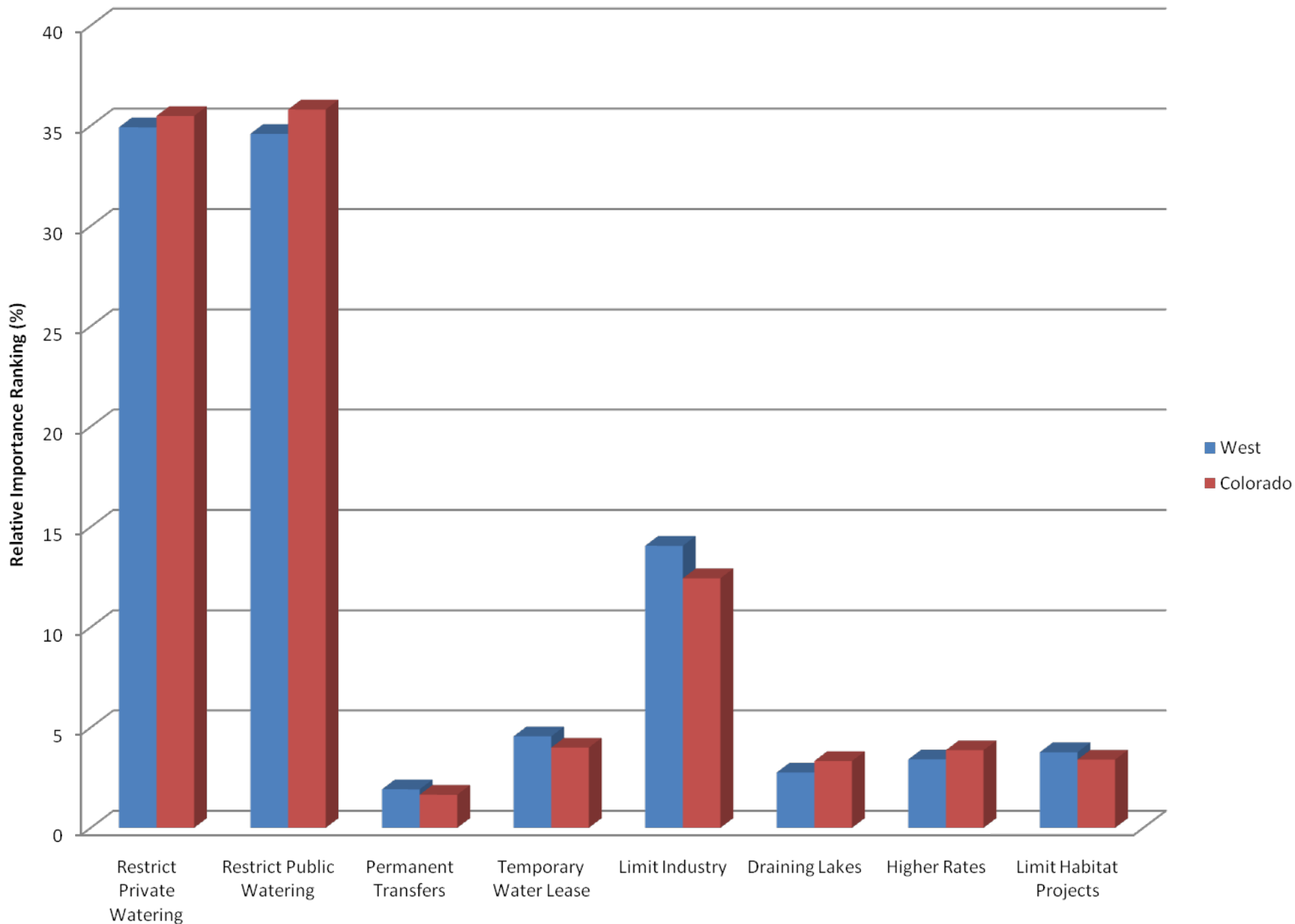
Water strategies in short-term scarcity...

Question: During times when water availability is limited (such as during a short-term drought lasting less than two years), a city may adopt several strategies to ensure it has enough water. Listed below are eight strategies a city might consider.

- A. Restricting the amount of water that can be used on private lawns and landscapes.
- B. Restricting the amount of water that can be used on public landscapes (e.g., parks and golf courses).
- C. Permanently transferring water from farms to the city.
- D. Temporarily renting water from farms to the city.
- E. Restricting the amount of water that can be used by industry (e.g., commercial manufacturing, mining, or power plants).
- F. Draining reservoirs and lakes.
- G. Increasing water rates (bills) paid by private households.
- H. Putting a limit on water projects that help protect wildlife and fish habitat.

Consider the 8 water strategies. If you had to adopt 3 of the above strategies, which do you think would be best?

Water strategies in short-term scarcity...





LONG TERM WATER NEEDS

What are Public Perceptions, Preferences and Values for Water?

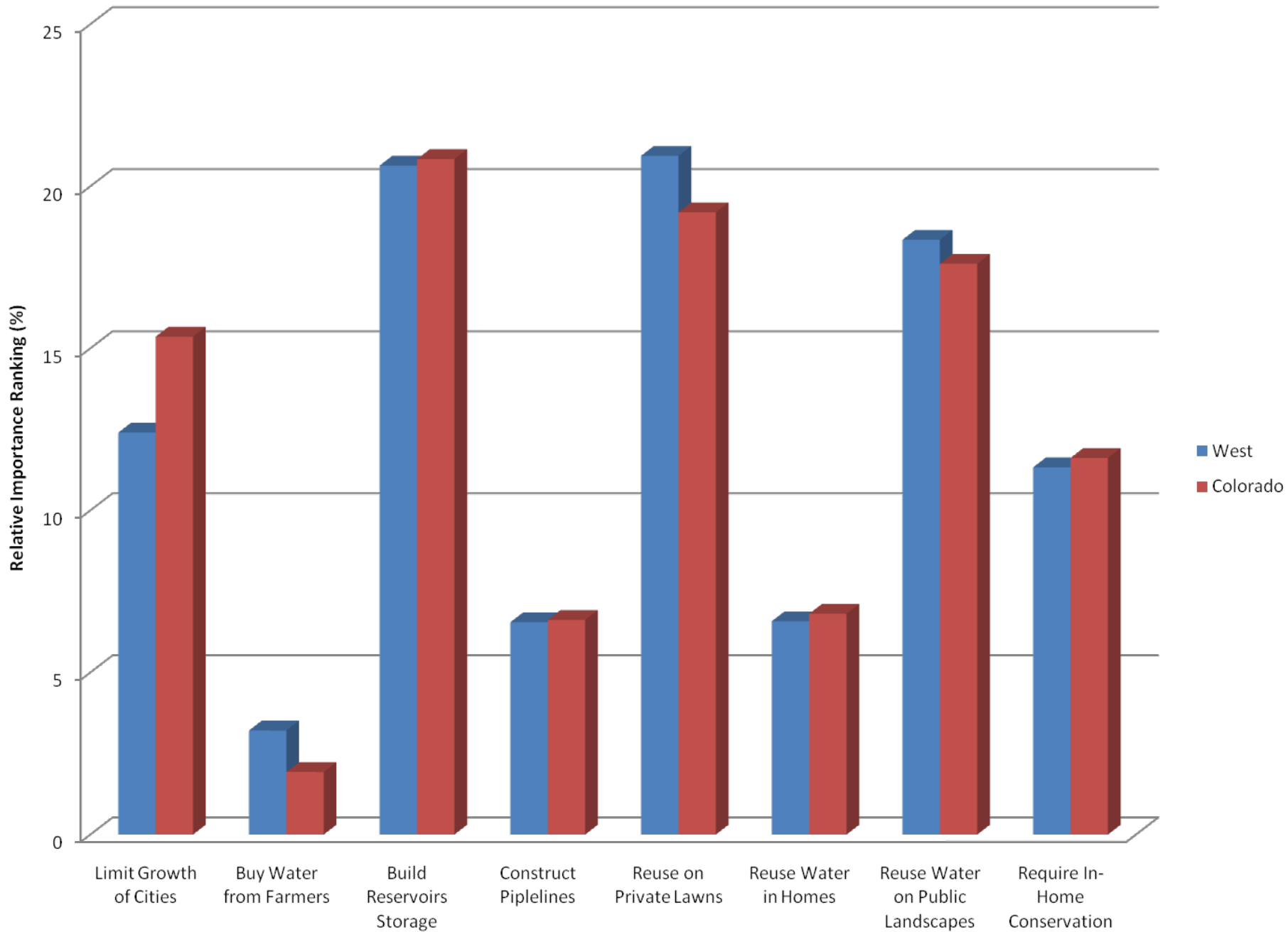
Water development in the long run ...

Question: Increasing population in the West means that cities will need more water in the long run (more than ten years in the future) Below are 8 strategies that cities might consider to ensure adequate water supplies for the future.

- A. Reusing waste water on private lawns and landscapes (e.g., homes and private businesses).
- B. Reusing waste water on public landscapes (e.g., parks and golf courses).
- C. Building reservoirs and other storage projects.
- D. Limiting the growth of cities to a level that is supported by a sustainable water supply.
- E. Requiring that households take steps to conserve water (e.g., use low flow toilets).
- F. Constructing pipelines.
- G. Reusing waste water, after it is treated, for use within the home.
- H. Buying water from farmers.

Consider the 8 water strategies. If you had to adopt 3 of the above strategies, which do you think would be best?

Water development in the long run ...



Summary

- Majority of households believe water conservation is important, claim participation in conservation, but have mixed opinion on government's role
- Households perceive scarcity but may not recognize current water allocation.
- Priorities are for household and agricultural use.
- General support for reservoirs (specific?), reuse, and keeping water in agriculture.

More information:

- http://wsprod.colostate.edu/cwis435/WQ/project_website/index.html
- Coming soon: westernwatersurvey.colostate.edu
- Publication: <http://www.cwi.colostate.edu/publications/sr/17.pdf>