

Making the Water-Energy Link

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A Changing Policy Climate in the West

Two key trends:

- Rapid growth
- Warming temperatures

Population Trends

Fastest-growing states in U.S., 2006-07 data:

- #1 Nevada
- #2 Arizona
- #3 Utah
- #4 Idaho

- #8 Colorado
- #9 Wyoming

Global Changes

QuickTime™ and a
decompressor
are needed to see this picture.

The Warming West

QuickTime™ and a
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Western Runoff

QuickTime™ and a
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Implications for Western Water

- Reduced snowpack
 - Earlier snowmelt
 - Less groundwater recharge
 - Greater variation in precipitation
 - Higher evaporation from reservoirs
- Less predictable, more competition

Implications for Western Energy

- Reduced hydropower potential
- Increased opposition to water-intensive energy strategies
- Incentives to practice and encourage conservation

How to Respond?

- Key: Think holistically
 - Separate water, energy “silos” don’t work
 - Need to integrate water/energy planning
- Example: Seven Colorado River Basin states’ shortage strategy

The Carbon Question

- Projected warming, drying could bring crises
 - 5-40% reduction in water supplies projected
 - Water-stressed SW especially vulnerable
- Need to reduce carbon emissions below 1990 levels just to keep options open

Integrating Water & Energy

- Analyze energy impacts of water supply, and water impacts of energy development; e.g.:
 - Energy used to transport water over long distances
 - Energy savings gained by using less water
- Minimize carbon footprint of new water and energy supplies
- Emphasize conservation, efficiency of both water and energy practices

Choosing our Future

- Crisis is not inevitable -- we have a choice
- Choosing to act now preserves options for the future
- Western Progress: Committed to sustainable energy, water use -- thriving West for the long term

Contact

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