

From Principles to Practice: Putting Equity at the Forefront in Climate Change Adaptation, Land Use, and Water Planning

American Planning Association, CO Chapter

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Introduction

- ***What is Equity?***

“just and fair inclusion into a society in which all can participate, prosper, and reach their full potential. Unlocking the promise of the nation by unleashing the promise in us all.” (PolicyLink 2018)

- ***Why does Planning for Equity Matter?***

- Disparities exist today and are growing in health, income, opportunity, mobility, and choice.
- Access to opportunity is needed bridge the gap.
- All community members are needed for equitable communities.

Planning for Equity Policy Guide



#NPC19



Planning for Equity Policy Guide

- ***Historical Context***

- *Recognition of role planning and planners have played in creating and perpetuating discriminatory practices (for example, red-lining)*

- ***Role and Responsibility of Planners***

- *Ensure that underserved populations do not unfairly shoulder impacts of development and instead benefit from community improvements*

Planning for Equity Policy Guide

- ***Equity-in-all-Policies***
 - *Planners must ensure that policies benefit all residents of a community*
 - *To make advancements in equity, planners need a holistic approach and specific guidance (Use an “equity lens”).*

Equity in All Policies in Practice



Climate Change and Resilience

- Education

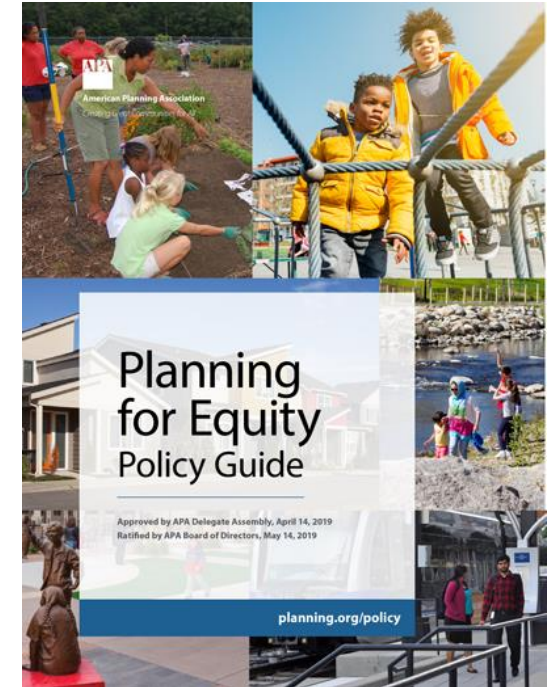


Energy and Resource Consumption



Health

- Heritage Preservation
- Housing
- Mobility and Transportation
- Public Spaces



<https://www.planning.org/policy/issues/>

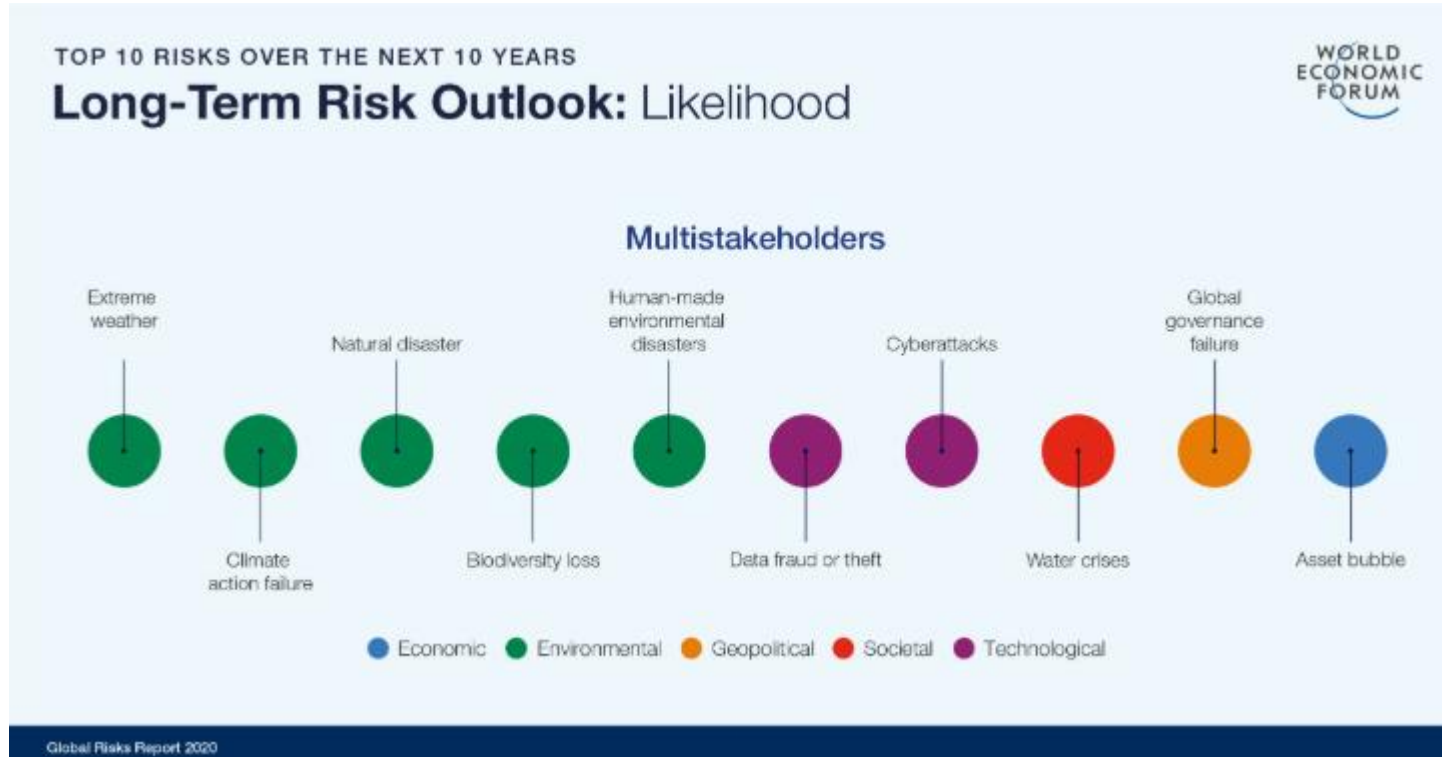
Water Equity

- ***What is Water Equity? What are the Issues?***
 - *Place-Based*
 - *Health-Based*
 - *Affordability*

Plan for Today

- ***Panel Presentation***
 - *Jorge Figueroa, J.D., M.F.*
 - *John Berggren, PhD*
- ***Brainstorming Session***
 - *Consider Questions*
 - *Individual and Group Discussion*
 - *Consider Issues and Approaches*
 - *Summarize Takeaways*

The Big Picture: Framing the Challenge



Climate-related issues dominated all of the top-five long-term risks in terms of likelihood

The Big Picture: Framing the Challenge



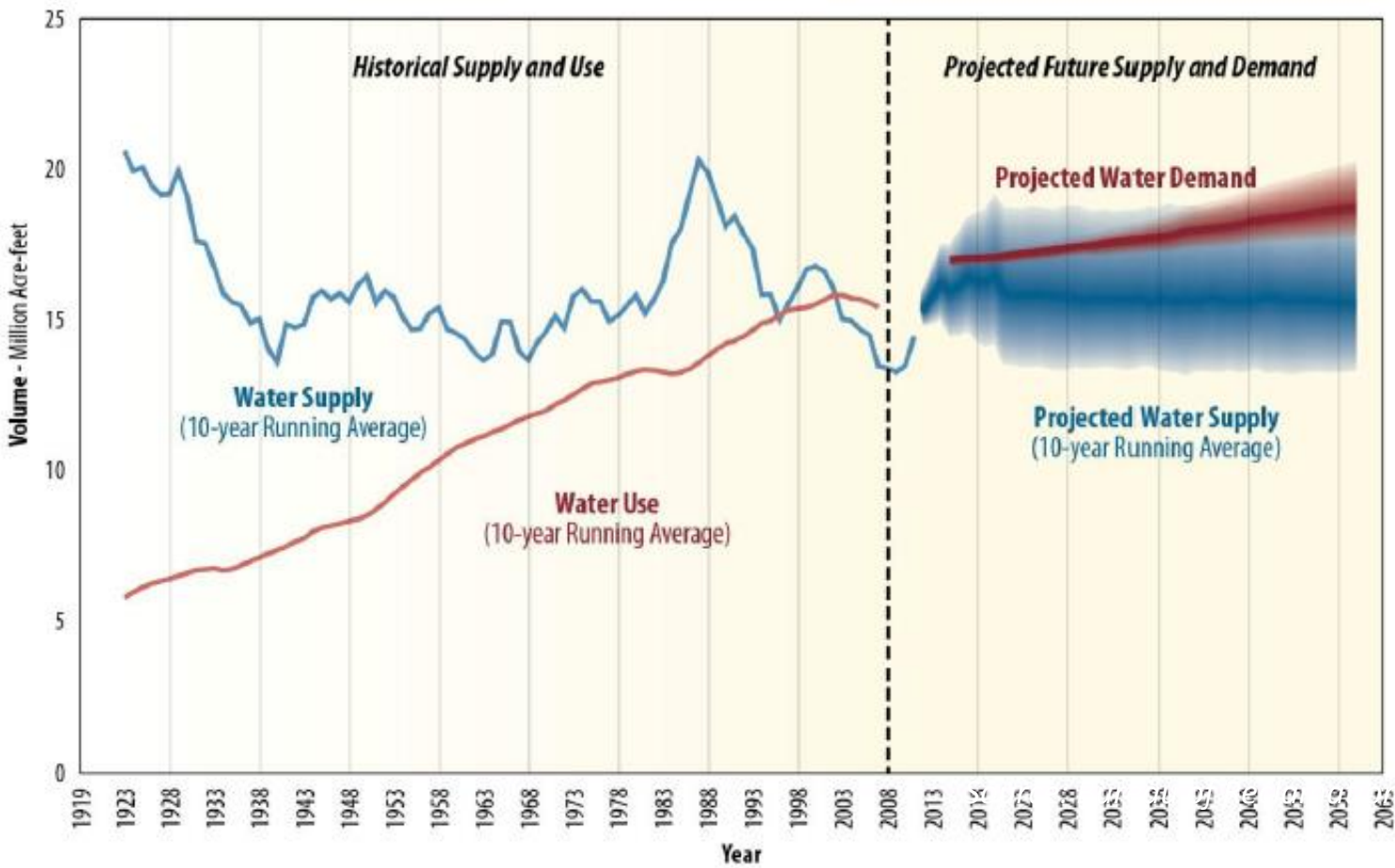
What were once givens regarding alliance structures and multilateral systems no longer hold



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The Perfect Storm: Water Scarcity and the Great and Growing Cities of the West

Projected Colorado River Supply-Demand Imbalance:
greater than 3.2 million acre-feet by 2060



The Perfect Storm: Colorado River Water Supply and Demand Imbalance

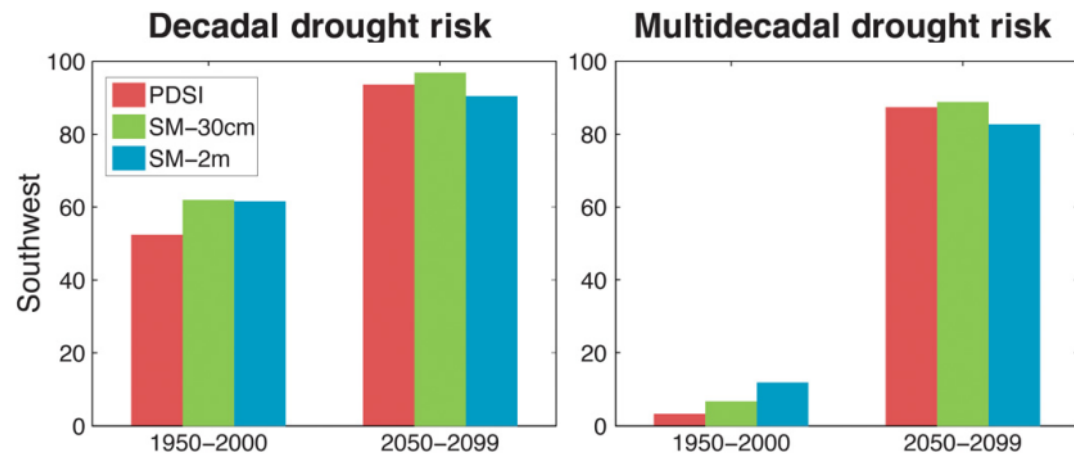
STATE	POPULATION (JULY 2008)	POPULATION GROWTH (2000-2008)	RANK	PRECIPITATION (INCHES)	RANK
Nevada	2,600,167	30%	1	9.5	50
Arizona	6,500,180	27%	2	13.1	48
Utah	2,736,424	23%	3	11.9	49
Colorado	4,939,456	15%	7	15.5	45
New Mexico	1,984,356	9%	17	13.9	46
U.S. Average		8%		34.3	

Source: Western Resource Advocates, 2009

Water Security

“The availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies.”

Source: Grey and Sadoff, 2007



2050 and beyond

NASA: “Unprecedented Drought Risk in the American Southwest”

Source: Cook et al., 2015



Historical Trends

Long-term data reveals:

- Prices for water and sewer maintenance continue to rise at rate much higher than overall rate of inflation (CPI)
- Recent price trends for electricity generally tracking overall rate of inflation
- Recent price trends for natural gas fallen below the overall rate of inflation

Source:

Janice Beecher, Michigan State University,
Trends in Consumer Prices (CPI) for Utilities

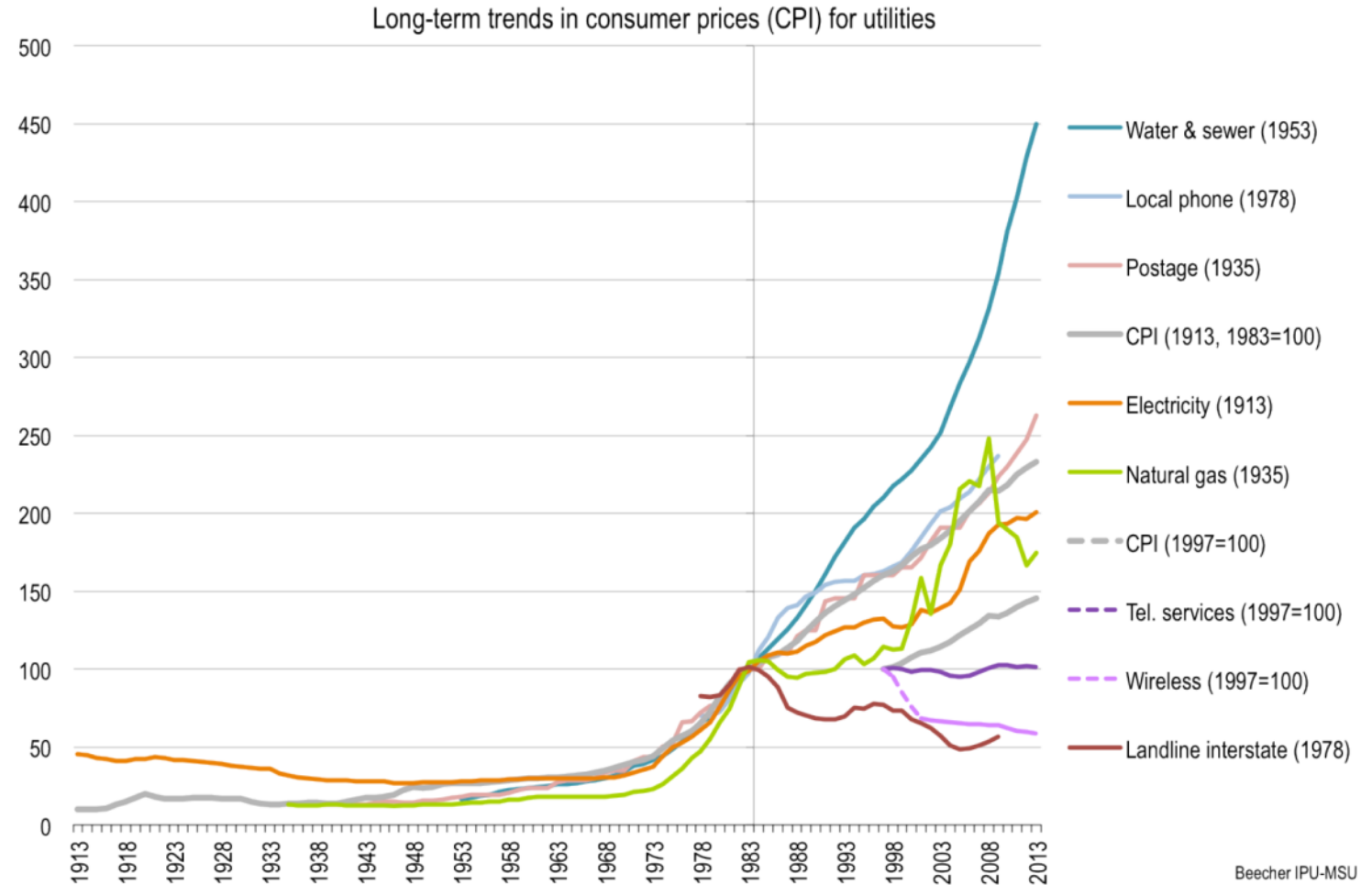


Exhibit 1. Long-term trends in the Consumer Price Index (CPI) for utilities (1913-2013). The index is set to 100 for 1982-1984 except for telephone and wireless services, where the index is set to 100 for 1997. Year (*) indicates start of series.



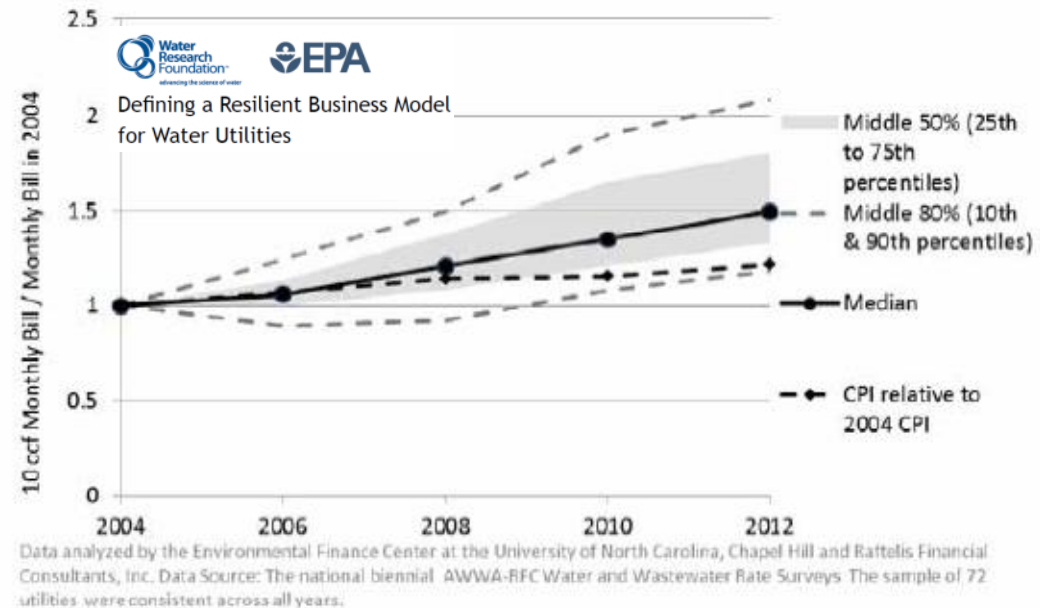
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Current and Future Municipal Water Market Trends

Recent Trends

Water Research Foundation, 2014

Median increase in nominal monthly bills 2004-2012 was 50%, compared to cumulative increase in CPI of 22% in same period



Monthly charge for 10 ccf relative to 2004 charge for 72 nationwide utilities

Next 25 Years

American Water Works Association, 2012

Buried No Longer Report's Key Findings,

1. Nationally, investment needs for water infrastructure **more than \$1 trillion** over next 25 years.
2. Water bills will go up

BURIED NO LONGER:
Confronting America's Water Infrastructure Challenge



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*Solving problems by building community.
Building community by solving problems.*



EQUITY AND PROCESS:

**How can we think about equity, water, and
the land use planning process?**

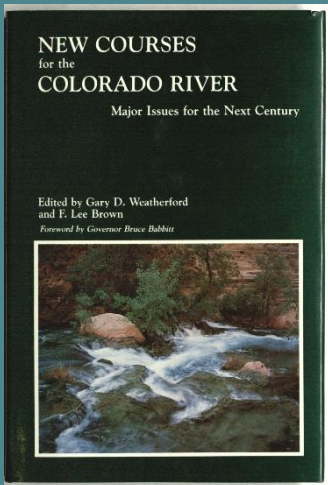
March 5, 2020 | John Berggren

Equity and Process

“Equity requires fair, open, and transparent decision-making processes in which all individuals and groups affected by water decisions have an opportunity to participate.”

Whiteley, Ingram, and Perry. 2008. “Water, Place, & Equity.”
MIT Press, Cambridge, MA. p. 21.

“Five Principles of Equity”

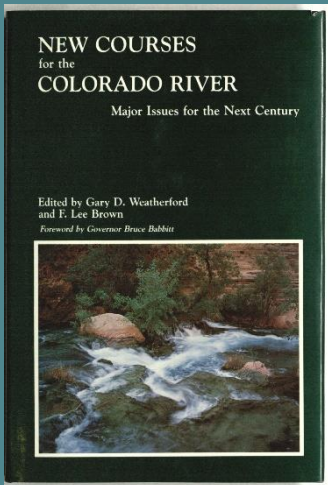


Ingram, H. M., Scaff, L. A., & Silko, L. (1986). Replacing Confusion with Equity: Alternatives for Water Policy in the Colorado River Basin. In G. Weatherford & F. L. Brown (Eds.), *New Course for the Colorado River: Major Issues for the Next Century*. University of New Mexico Press.

Reciprocity

- Reciprocity refers to the idea that all users within a water system should share both the burdens and benefits of access to that system.

“Five Principles of Equity”

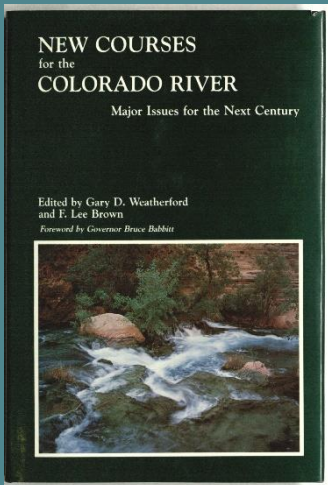


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Value-pluralism

- Value-pluralism suggests that users have the right to use water in way that aligns with their values, as long as that use does not negatively impact other users.

“Five Principles of Equity”

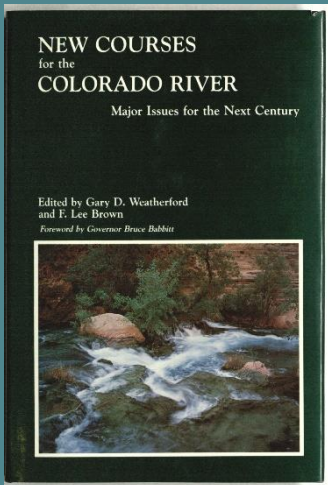


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Participation

- Participation means members of society have the right to be included in the decision-making process. Further, “[i]t does not seem equitable, then, to attempt either to limit community membership by restricting access to water or to decrease the probability of technically ‘inefficient’ decisions by restricting the circle of participants” (p. 188).

“Five Principles of Equity”

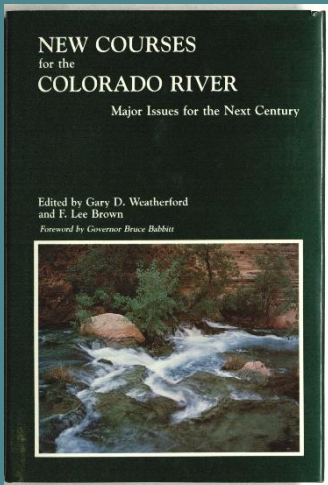


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Promises

- Promises made during the process of decision-making and negotiation, promises made to users or groups—particularly with compromises—must be met in good faith. If multiple promises come into conflict, then efforts to focus on flexible and adaptive decisions must be employed.

“Five Principles of Equity”



Ingram, H. M., Scaff, L. A., & Silko, L. (1986). Replacing Confusion with Equity: Alternatives for Water Policy in the Colorado River Basin. In G. Weatherford & F. L. Brown (Eds.), *New Course for the Colorado River: Major Issues for the Next Century*. University of New Mexico Press.

Responsibility

- Responsibility suggests that all decisions and uses should consider the impact to future generations. Further, “[e]quity is also an ethical idea which restrains the undertaking of large risks bearing on the fate, social good, and well-being of future humans” (p. 189).

Cross-cutting principles

1. Learning

- Can we identify and understand new information as it emerges?
 - Climate change, socio-economics, values, water supply availability, etc.

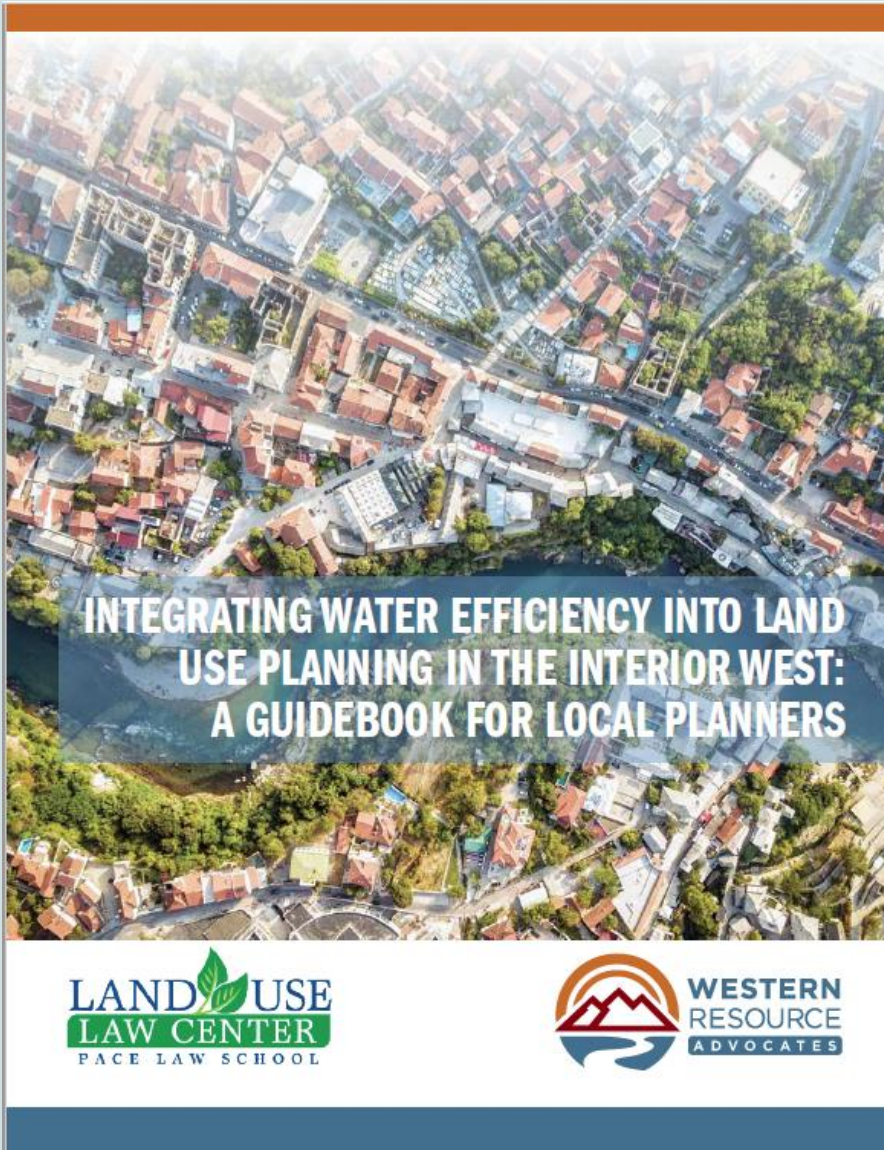
2. Flexibility

- If so, can we modify our actions to reflect that new information?

What does this mean for land use planning?

Guidebook chapters:

- Comprehensive Master Plans
 - Sustainability Plan
 - Zoning Code
 - Subdivision Regulations
 - Site-Plan Regulations
 - Building and Plumbing Codes
 - Supplemental Regulations
 - Development Moratoria
 - Development Agreements
 - Non-Zoning Incentives
 - Post-Occupancy Enforcement
- www.westernresources.org



Subdivision regulations

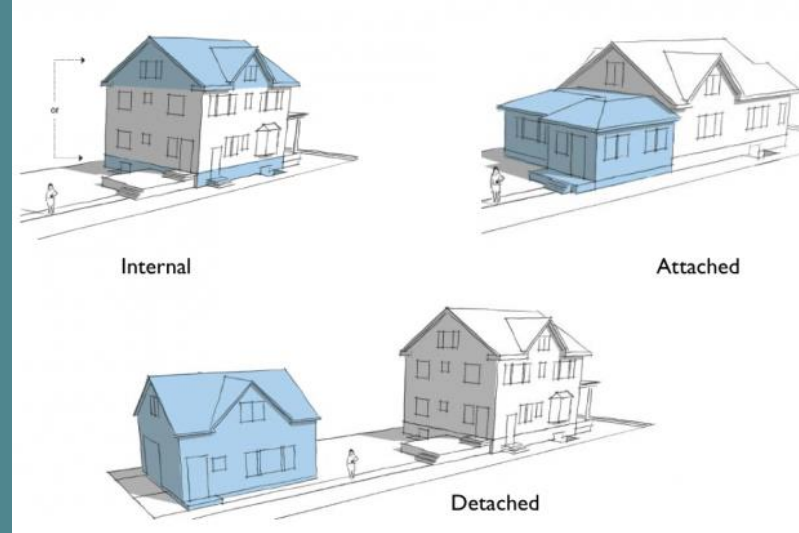


<https://www.ebwalshinc.com/services/subdivision-land-development/>

- Can dictate individual parcel size, which impacts density and therefore per capita water usage
- Can include water supply adequacy requirements
- Can require pre-application conference to discuss water

Water efficiency zoning

- Zoning ordinances can set the minimum lot size, density, & landscape requirements
- Water-Efficiency Overlay zone
- Permitting Accessory Dwelling Units (ADUs)



<https://www.co.washington.or.us/LUT/Divisions/LongRangePlanning/PlanningPrograms/CommunityPlanning/Housing/accessory-dwelling-units-adu-s.cfm>

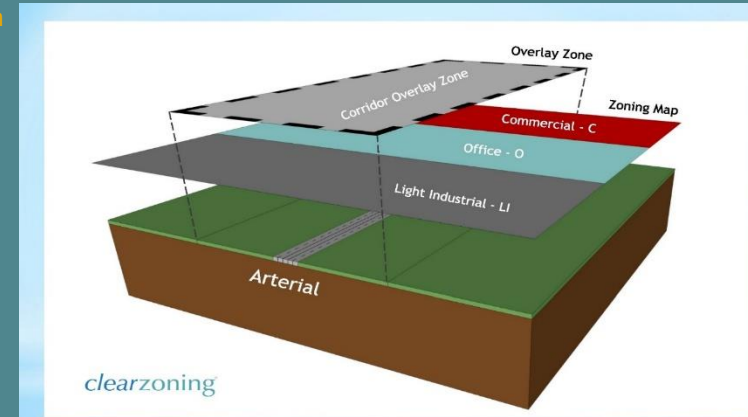
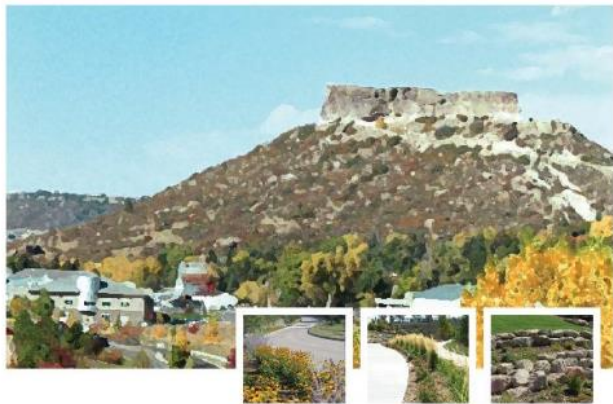


Image: <https://i1.wp.com/www.clearzoning.com/wp-content/uploads/2014/02/Overlay-Zoning.jpg?ssl=1>

Landscaping ordinances

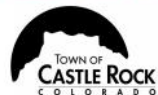


TOWN OF CASTLE ROCK

Landscape and Irrigation Performance Standards

AND CRITERIA MANUAL

April 3, 2018



100 N. Wilcox St., Castle Rock, CO 80104

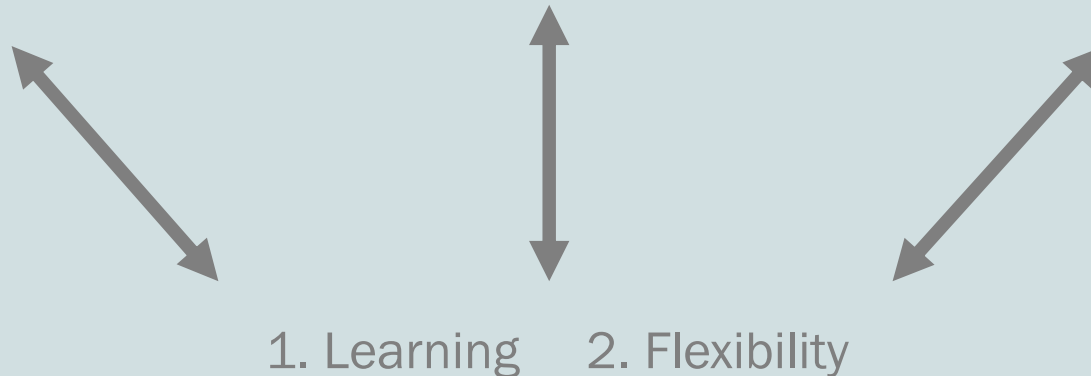
- Can require or incentivize plant types, turf limits, soil amendments, certification of landscapers, and more
- Can be adopted through zoning ordinance, subdivision regulation, site plan regulations or a stand alone landscaping ordinance

What does this mean for land use planning?

Integrating water and land use planning is challenging in and of itself....

...But that does not mean we cannot think about equity when making planning decisions. In fact, given that planning decisions often have implications for years, decades, and generations, it becomes imperative that we think about equity.

1. Reciprocity 2. Value-pluralism 3. Participation 4. Promises 5. Responsibility



Thank you!

john.berggren@westernresources.org

Brainstorming Session

- ***Instructions:***

- *Two Lightning Rounds*
- *Question 1*
 - *Pick a partner and discuss for approx. 5 minutes*
 - *Discuss as a group – Brainstorm issues/actions*
- *Question 2*
 - *Discuss with your approx. 5 minutes*
 - *Report out; discuss as a group – Brainstorm issues/actions*

Brainstorming Session

- ***Questions:***
 - *Question 1*
 - *TBD*
 - *Question 2*
 - *TBD*

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Thank You

Susan Wood

Jorge Figueroa

John Berggren, PhD



American Planning Association

Creating Great Communities for All



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