



BABBITT CENTER FOR LAND AND WATER POLICY

A Center of the Lincoln Institute of Land Policy

State Water Management Frameworks

**American Planning
Association**

Water & Planning Connect

Kansas City, Sept 2018



State Water Management Frameworks

- **Jim Holway**, Director, Babbitt Center for Land and Water Policy
- **Daniel DeLisi**, President at DeLisi, Inc.
- **Lori J. Mathieu**, Public Health Section Chief, Drinking Water Section at Connecticut Department of Public Health
- **Anne Miller**, Senior Planner at the Colorado Community Development Office
- **Kevin Reidy**, State Water Conservation Technical Specialist, Colorado Water Conservation Board
- **Andrew Fahlund**, Senior Program Officer, Water Foundation

WATER & LAND USE - THE MISSING LINK

WHY HISTORICALLY A DISCONNECT

Water Use – regulated at state & federal levels

- Quality – Federal ... vs... Quantity - State
- Reacting to crisis, facilitating econ development
- Water & Land – separate commodities, separate property rights
 - Surface Water – Riparian vs. Prior Appropriation
 - Groundwater a public (not private) resource

WATER & LAND USE - THE MISSING LINK

WHY HISTORICALLY A DISCONNECT

Land Use – regulated by local government

- Avoid nuisance, grow & increase tax base
- Water historically not examined in comp. plans
 - Planners & water managers don't interact
- Comprehensive plans previously were often not followed
 - Too general, different elements conflict
 - Investment decisions – incremental & disconnected
- State & Local interests may be inconsistent

WATER & LAND USE - THE MISSING LINK

WHY HISTORICALLY A DISCONNECT

- Significant growth on urban fringe and rural areas
 - with little planning capacity and limited water data
- The regional and local water related impacts of development do not line up
 - Local areas receive benefit of development, but may not bear impact on water resources
- Inadequate willingness/ability to invest in water resources planning or management – at state & local level
- Assumption water will move uphill towards development
 - Just buy the rights and build infrastructure
- Leave it to the experts – water is complicated ...trust us!

WATER MANAGEMENT - Framework & Tools

- **Local – Regional – Statewide – Larger Institutions**
- **Planning - Econ Incentives - Regulatory**
- **Management Focus**
 - Quality vs. Quantity
 - Withdrawal & Use Rights and Reporting
 - Demand Management: Conservation Requirements & Use Restrictions
 - Supply Management: GW vs SW, Sustainable use, Reuse

Water in Comprehensive Plans

- Babbitt Center Comprehensive Plan Review
 - Every AZ jurisdiction; 50 CO jurisdictions; 3+ jurisdictions in other basin states
- Essential Elements:

Current Water Resources Overview	Future Resiliency Considerations	Land Use/Water Planning Tools
Description of Water System & Supplies	Population Growth	Low Water Use Development Strategies & Green Infrastructure
Water Conservation Efforts	Development Expectations	Preserve Natural Areas
Water Demand Management	Water Demand Scenarios	Innovative Zoning Techniques
Water Quality	Water Supply Sustainability	Outdoor Water Use Regulations
Stormwater Management	Climate Change Impacts & Drought Planning	Regional Watershed Planning Coordination

Colorado

Structure	Arapahoe County		Archuleta County		Aspen	Aurora		Basalt	Berthoud	Boulder	Boulder County		Brush	Carbondale		Castle Rock		City and County of Broomfield		City and County of Denver		Colorado Springs		Cortez	Douglas County		Durango	Eagle County	El Paso County		Englewood	Evans	Firestone	Ft. Collins	Fountain	Garfield County		Glenwood Springs	Grand Junction	Greeley	Gypsum	Jackson County		La Junta	Lamar	Louisville	Mesa County	New Castle	Pagosa Springs	Park County	Pueblo County	Rico	Rio Grande County		Routt County	Silt	Silverthorne	Superior	Thornton	Trinidad	Weld County	Westminster	Woodland Park																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Aggregate Determination	20	7	4	10	18	7	12	7	11	3	20	18	3	11	13	15	14	17	8	2	7	6	10	8	4	13	12	11	7	1	15	4	11	2	12	12	10	4	12	5	4	9	6	11	3	4		15	21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Components Filled	2018	2017	2012	2009	2007	2014	2015	2017	2007	2013	2017	2016	2000	2001	2008	2014	2017	2006	1997	2016	2010	2013	2010	2015	2010	2011	2010	2018	2017	1998	2017	2004	2013	2013	2009	2018	2016	2002	2004	2004	2003	2017	2014	2012	2012	2017	2008	2013	2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Plan Year	2018	2017	2012	2009	2007	2014	2015	2017	2007	2013	2017	2016	2000	2001	2008	2014	2017	2006	1997	2016	2010	2013	2010	2015	2010	2011	2010	2018	2017	1998	2017	2004	2013	2013	2009	2018	2016	2002	2004	2004	2003	2017	2014	2012	2012	2017	2008	2013	2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Water Element in General/Comprehensive Plan				2009		2014					2014				2008	2014	2017	2006	1997		2010	2013	2010	2015	2010									2009								2012			2017	2013	2010																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Dedicated Water Planning Document				2017	2015		2011				2017			2017				2013	2018				2015	2010											2008								2010			2014																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Ownership of Water System (City, Private, Utility/District)	P/R	P/R	C	C	C	C	C		C		C	C	P	U	C	P	C	C, P				C	C	C	C	C	C/P	C	C		C	C	C		C	P	D		C	R		C		C	C	C		C	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Water/Land Use Planning Best Practices																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Comprehensive																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Description of Water Supplies																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

Less: 30

Integrated: 14

More: 5

Land Use in Water Efficiency Plans

Interviews with 10 Colorado water providers revealed:

1. Land use planning and development approval influence water use initially
2. All providers can collaborate with land use authorities
3. Long-range planning and development approval processes are two important points of collaboration
4. Value of technical assistance

Essential Elements:

- 70+ land use efforts identified as appropriate for Water Efficiency Plans
- *Foundational Activities:*
 - Establish Regular Contact and Information Sharing
 - Align Data and Establish Coordinated Procedures
 - Water Provider Participates in Development Approval
 - Integrate Long Term Land Use and Water Planning



Implementing the Plan