WATER EFFICIENT CITIES
MANAGING WATER AND GROWTH TOGETHER

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WHY?

- Water suppliers are faced with the prospect of:
  - Reduced supplies
  - Increased demand
  - Uncertainty
  - Climate change exacerbating everything
- Without a significant emphasis on water efficiency, we have a water gap
TRADITIONAL WATER CONSERVATION

• Water supplier focused
  • Rate structure
  • Tap fees
  • Maybe irrigation restrictions
• But water supplier has to serve whatever development the land use authority approves
WATER EFFICIENT DESIGN

• Initial configuration of development influences future water demand
• Enhanced ability to absorb growth and increase resilience
• Water savings can be used to further unique community goals
  • Preserve stream flows
  • Preserve nearby agricultural land
Integration is Hard!

- Water Supplier
- Land Use Authority
- Public/Developers

Water Supplier: Just leave us alone so we can get some work done!

Land Use Authority: Not our fault.

Public/Developers: Just make it come out of the tap.
CHALLENGES OF LAND/WATER INTEGRATION

• Water supplier and land use authority may be separate entities
  • Water district may serve parts of city and/or unincorporated areas of county
  • City water utility may serve areas outside city boundaries
• Denver Water serves 27 different land use authorities
COLORADO SPECIFICS

• Water providers must evaluate best practices for implementing water conservation through land use planning.

• Colorado Water Plan - By 2025, 75% of Coloradans will live in communities that have incorporated water-saving actions into land use planning.
A local government can’t approve a development permit until the applicant demonstrates the water supply is adequate for development of $\geq 50$ units.

AUTHORITIES

- Colo. Rev. Stat. § 29-20-301, -303
WATER ADEQUACY

• “Adequate” includes quality, quantity, dependability, and availability for the particular development

• May include reasonable conservation measures to account for hydrologic variability

• Local governments have great discretion in determining what adequate means
WATER ADEQUACY

• Possible uses of authority
  • Require water conservation in all development proposals
  • Decrease minimum for water adequacy review from 50 units to something less
GENERAL AUTHORITIES

• Basic
  • Establish a land and water planning team
  • Make sure they’re using the same data
  • Make water part of the development approval process

• Other possibilities
  • Developer incentives
  • Water efficient landscape code
  • WaterSmart outdoor devices
TOOLS

Western Resource Advocates:
Guidebook for Land Use Planners

Chapters on:
- Comp plans
- Zoning
- Subdivision regs
TOOLS

WRA Tap Fee Guide:

Reduce demand using tap fees to incentivize water efficient homes and development
TOOLS

• Colo Water and Growth Dialogue
• Describes effects of higher densities and landscaping policies
• Tools for developing growth scenarios and projecting water demand
TOOLS

• New guidance for water suppliers
• Best practices for using land use authority to implement water conservation
GUIDANCE

• More than 100 land use practices described for consideration
  • No one-size-fits-all
• Hundreds of examples and case studies
  • All with direct weblinks to more detail
4. **Incorporate Water Efficiency into Zoning Codes and Zoning Procedures**

Extensive information on this subject is available in the CWCB and DOLA-sponsored training program on Integrating Water Efficiency into Zoning Code and associated watershed. See Integrating Water Efficiency into Land Use Planning in the Interior West: A Guidebook for Local Planners, Chapter 7, for a full overview of incorporating water into zoning codes and regulations.

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**Example: The City of Colorado Springs** coordinates its annexation policies with Colorado Springs Utilities to ensure there is no projected available water surplus both at the time of the annexation request and into the foreseeable future (Cond. for Annexation Code 7.6.200).

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**Case Study: PUDs in Westminster and Eagle County**

Westminster uses a PUD process for all sites two acres or greater and thus aims to limit all development approvals to the resultant of negotiation. Water conservation is a key consideration with the PUD approval process, particularly in regard to site design and landscaping. See Westminster’s PUD code (1-4-7) and comprehensive plan amendment code (1-5-21).

Eagle County and Eagle River Water and Sanitation District (ERWSD) work together to incorporate water-saving measures into new developments in the PUD process. Three developments have incorporated water efficiency measures as a result: Fox Hollow, 6 West and Sanctuary. Measures included outdoor irrigation budgets and planting limited to those on the Colorado State University recommended list.

Additionally, ERWSD included language in the PUDs to allow for future adjustments. “These requirements may be adjusted with approval of the Eagle River Water and Sanitation District if such adjustments maintain the water efficiency goals as outlined in these requirements.”