

Decreasing the Water Footprint of New Development

Integrating Land Use and Water Planning

Upper Colorado River Basin Water Forum

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WESTERN RESOURCE
ADVOCATES

Land Use Affects Water Use



Highlands Ranch



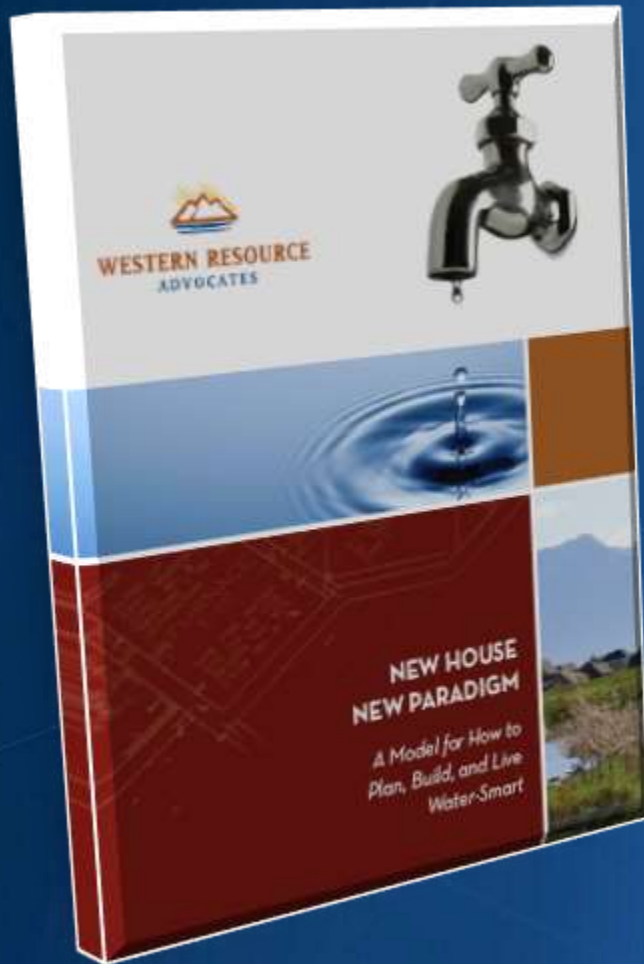
Stapleton
(Redevelopment)



Glass House
(Downtown)



New House, New Paradigm



- Integration of
 - smart planning,
 - green building, and
 - on-going programs
- Existing developments provide case-studies
- Density & Outdoor Use



Water Use and Density

25,000 People	Density		
	Low	Medium	High
Single family	7,000	5,000	3,000
Small multifamily	2,000	3,000	4,000
Large multifamily	717	2,124	3,531
Water Use (AF)	3,141	2,828	2,514
Difference (AF)		314	627
		-10%	-20%
Population	25,000	25,001	25,002



Land Use Leadership Alliance Training Program (LULA)

- Educating local land use decision-makers on legal tools and techniques and collaborative decision-making to address complex land use issues



Land Use Terms

- Comprehensive Plan
 - Community goals/aspirations for future development. Dictates public policy for transportation, utilities, land use, recreation, and housing. Big scale, long-term.
- Zoning Ordinances
 - Separate uses of land based on mapped zones. Often includes building height and lot coverage.
- Subdivision/Site Plan Regulations
 - Divide property into legal parcels. Establish position of streets, drainage, parking, utilities, landscaping, etc...



Comprehensive Plan

■ Water Element!

■ Goal

- Absorb market demand w/o increasing total water use

■ Objective

- Drop per capita use 15% in 15 years

■ Strategy

- Reduce indoor water use

■ Technique

- Incentivize replacement of toilets



20 Questions (27, really)

- Does your comprehensive plan contain a water element?
- Does water element identify water conservation strategies and implementation techniques?
- Is the water element consistent with the policies of your water provider?
- Does comprehensive plan quantify the water demand that would result from projected population growth?



Zoning

- Denser Development (more du/acre)
 - Expand multi-family options
 - Mixed use development
- Infill (make it easy)
- PUDs are a “deal” so plug them full of conservation measures
- Overlay Zones/Transit Oriented Develop.



Subdivision/Site Plan

- Cluster Development (reduce lot sizes)
- Landscape Code
 - Plant list, turf limits, soil amendment, irrigation system requirements
 - Landscape plan check
 - Irrigation plan check
- Avoid “scattered DNA”

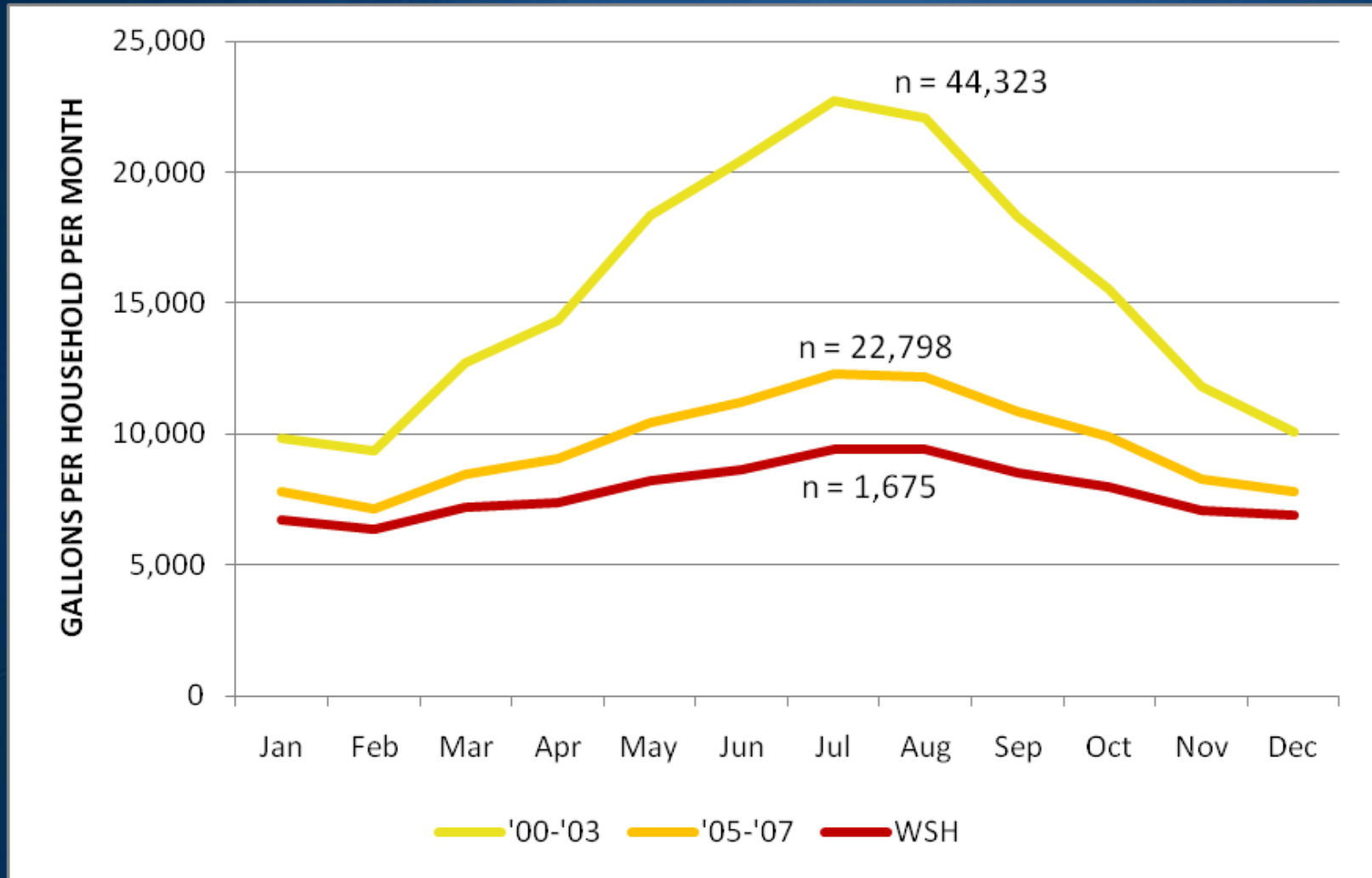


Water Techniques

- Incorporate land use in demand projections
 - Discuss land use as demand management strat.
- Demand-based tap fees
- Plumbing/Building Code
 - WaterSense or equivalent
 - Submetering
- Take the lead!
 - SNWA-led land use regulations
 - EBMUD service rules



Outdoor Use: SNWA



What You Can Do

- Read your comprehensive plan
 - Use the 20 questions!
 - Look at zoning code
- Meet your planner
- Talk to your friends
- Use this presentation
- Develop water demands per land use
- Get involved



Questions & Comments

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