

Water Quality and Watershed Protection Funding Opportunities



Green Vision Workshop
October 24, 2007



Topics

Irvine Ranch Water District

- Integrated funding for environmental planning and management at the watershed level
- Funding needs and opportunities
- Allocation-based rate structures
- Funding generation potential
- Legislative proposal

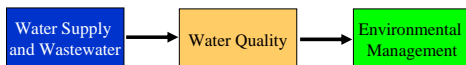
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Integrated Funding for Water Resources/Environmental Planning and Management at the Watershed Level

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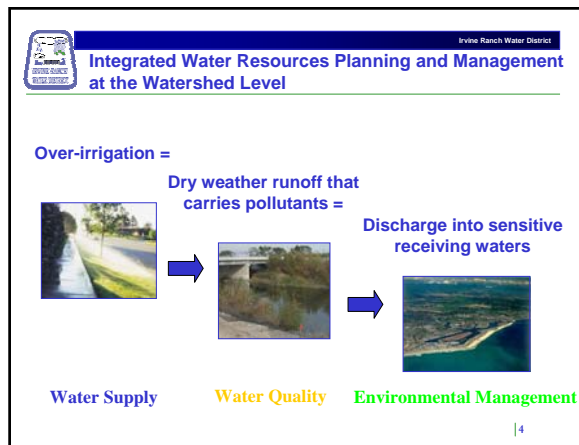
- Recognizing the critical intertie of water "fiefdoms"

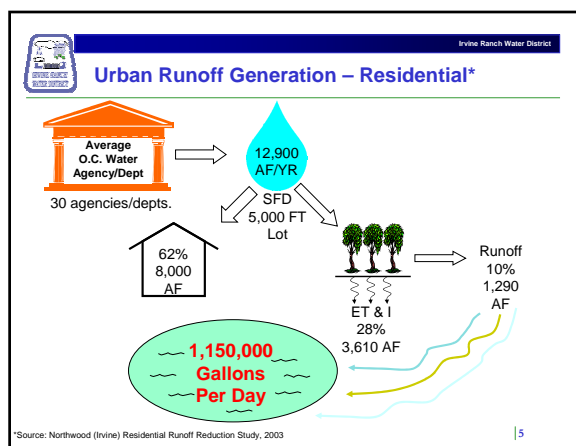



- Breaking down the "silos" of water supply, wastewater and storm water planning and management functions.
 - Integrate multiple agency, environmental community and regulatory entity interests and needs.
 - Largest context possible: institutional, geographical and environmental.
- Embracing the "Cradle to Grave" approach

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Watershed Protection Projects - Funding Attributes and Opportunities

Source Control	Funding Attributes	Funding Opportunities
<ul style="list-style-type: none"> Education/BMP's On-site runoff retention Irrigation control 	Low capital costs, high operating costs	Bonds*, Grants, City/County General Funds * Prop 12, Prop 13, Prop 50, Prop 84, Measure M
Treatment <ul style="list-style-type: none"> Diversions Treatment wetlands De-centralized treatment 	High capital costs, moderate/high operating costs	
Habitat Restoration and Enhancement <ul style="list-style-type: none"> Land acquisition Habitat restoration Invasive species control 	High capital costs, moderate operating costs	


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What is an Allocation-Based Conservation Rate Structure?

- Allocates water to customers based upon land use-specific indoor uses and landscaping needs
- Encourages use within allocation through a significantly tiered commodity pricing system
- Provides revenue neutrality for agency
- Generates “over allocation” revenue for water use efficiency, source control and urban runoff treatment (IRWD specific)




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Refinements to Residential Base Allocation



Single Family Detached House (4 occupants)

+

Outdoor Allocation:


- Irrigated area seasonal needs (Eto)

+

Variances:

- Pool
- Additional occupants
- Medical needs
- Others



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Allocations for Non-uniform Sites

- Standard Indoor Use Allocations (detached, condo, apartment)
- Total lot area information from GIS
- Landscaped area determined as % of the lot area - ratios established
- Variances applied

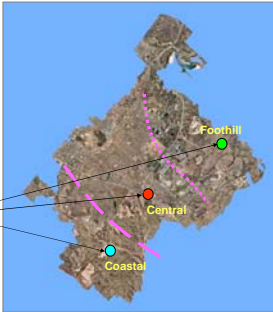
Allocation system works in both new and old neighborhoods | 9




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Landscape Allocations

- Based upon landscaped area and real time evapotranspiration
 - Cool season turf
 - Irrigation system efficiency - 80%
- IRWD has three weather stations (IRWD originally used historic Eto data)



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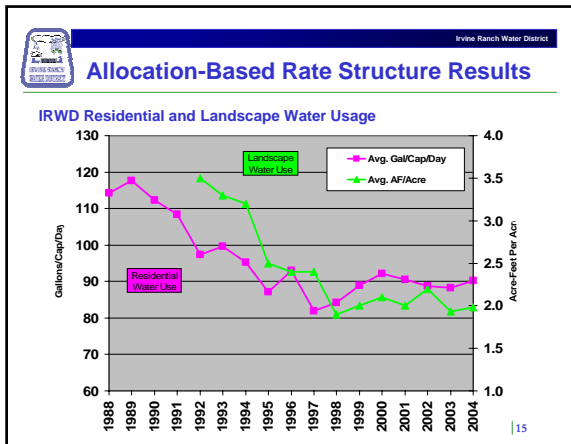
Allocation-Based Rate Structure

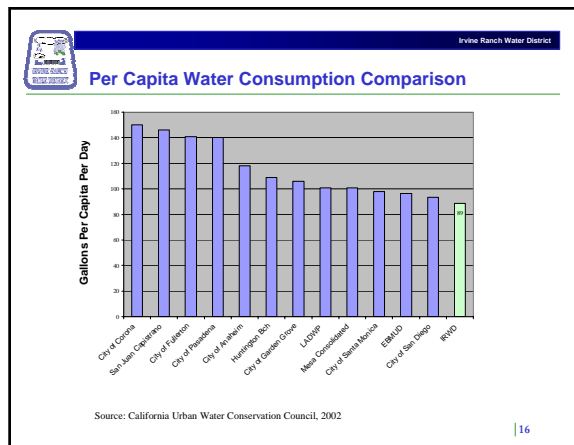
TIER	BREAK POINT (% of Allocation)	RATE
Low Volume	0 - 40%	\$0.75
Base	41-100%	Base rate \$0.91
Inefficient	101-150%	2x base \$1.82
Excessive	151-200%	4x base \$3.64
Wasteful	201+%	8x base \$7.28

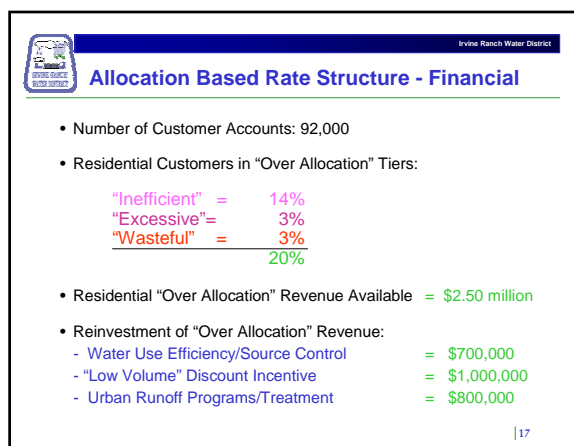
100% of water needed for indoor/outdoor uses


- Typical Residential Fixed Charge = \$6.75/month (3/4" meter)
- Typical Residential Commodity Bill = \$16.00/month (15 ccf)
\$22.75/month - typical
- Rates among lowest in County

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Legislative Proposal

- Concept:** Legislation creating a voluntary incentive-based program for Cities and Special Districts to implement Allocation-based Conservation Rate Structures
- Eligibility:** Qualifying rate structure must apply land-use based water allocations with tiered pricing.
- Incentives:** Specific authorization for an agency to use the rate revenue from "over-allocation" consumption for the following programs:
 - Structural and non-structural water use efficiency BMP's and program funding and recycled water conversions.
 - Runoff reduction, management and treatment strategies for Clean Water Act compliance (nexus: over-irrigation causes runoff and pollutant transport).
 - Energy reduction/AB 32 compliance programs related to water operations.
- Additional Attributes:** Legislation would provide a clear structure and process for Proposition 218 compliance – "reasonable and proportionate"

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Next Steps

- Legislative stakeholders working group to develop bill language:
 - Association of California Water Agencies
 - League of Cities, CSDA, CSAC
 - Environmental community/NGO's
 - Development industry
- Find member of the legislature to sponsor bill
- Advocate

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