

## Feasibility of Water Management Strategies

Agenda Item 5

## **Planning Framework Definitions**

- Surface Water Management Strategy a water management strategy proposed to eliminate a Surface Water Shortage, reduce a Surface Water Shortage, or generally increase Surface Water.
- A River Basin Plan is a collection of **water management strategies** supported by a summary of data and analyses designed to ensure the surface water and groundwater resources of a river basin will be available for all uses for years to come, even under drought conditions.

## **Criteria to Evaluate Water Management Strategies**

- Effectiveness
  - Analyze Performance Measures (via modeling)
  - Cost/benefit incl. capital and annual costs (\$/MGD)
- Reliability (especially during drought)
- Permitting/regulatory including potential interbasin impacts
- Environmental impacts
- Socioeconomic impacts
- Interstate or Interbasin effects
- Water quality impacts and considerations

Color Code								
Potential Moderate/High Adverse Effect	Potential Low Adverse Effect	Likely Neutral Effect (either no effect, or offsetting effects)	Potential Low Positive Effect	Potential Moderate/High Positive Effect				

Water Management Strategy	Strategy Type	Consistency with Regulations	Reliability of Water Source	Environmental Impacts and Benefits <sup>1</sup>	Socioeconomic Effects	Potential Interstate or Interbasin Effects	Other Water Quality Considerations
Conservation Pricing Structures	Demand- side - Municipal	Consistent	Strategy reduces demand and extends supply, increasing water source reliability for other demands	Impacts: None anticipated:	Moderate anticipated effects - Customers that cannot reduce water use may face economic hardship. Reduced billing revenue for utilities may cause financing issues or lead to further rate increases	No anticipated effects	No anticipated impacts
Toilet Rebate Program	Demand- side - Municipal	Consistent	Strategy reduces demand and extends supply, increasing water source reliability for other demands	Impacts: Low anticipated impacts - Minor additional waste from discarded inefficient toilets	Low anticipated Effects - Positive benefit for homeowners from upgrading appliances for lower cost and reduced water billings (if billed at unit rate). Adverse effect due to need to hire implementation and compliance staff which would contribute to rate increase.	No anticipated effects	No anticipated impacts
Landscape Irrigation Program and Codes	Demand- side - Municipal	Consistent	Strategy reduces demand and extends supply, increasing water source reliability for other demands	Impacts: None anticipated Benefits: Water quality of receiving waters may be improved by reducing runoff from landscaping	Low anticipated effects - Mandates to meet standards may cause financial hardship for homeowners. No anticipated effects to homeowners from educational programs. The need to hire implementation and compliance staff would contribute to rate increase.	No anticipated effects	See Environmental Benefits
Leak Detection and Water Loss Control	Demand- side - Municipal	Consistent	Strategy reduces demand and extends supply, increasing water source reliability for other demands	Impacts: None anticipated	Cost of program implementation could result in rate increase, no impact, or potential rate decrease, depending on circumstances	No anticipated effects	No anticipated impacts