

Integrated Water Management

Project Category (in normal text) and <i>Specific Projects (to be added in italics per category)</i>	Expected Cost- Benefit (H, M, L)	Actual Cost		
		\$ Spent	Agency	timeframe
Water Demand Improvement (Conservation)				
Passive: voluntary, educational				
Demonstration Gardens	L	3,602,000	WCWCD	2010-16
Events				
Water Fair	L	87,000	WCWCD	2006-16
Landscaping Workshops	L			
Audits and loss control	L	29,000	WCWCD	2011-16
QWEL certifications	L			
Water checks	L	23,000	WCWCD	2006-16
Water-saving device installation/rebate	L	847,000	WCWCD	2006-16
Educational communications				
Public Education/Media campaign	L	300,000	WCWCD	2010-16
Water bill information				
Target water use	M			
Comparison water use	M			
Agriculture				
Crop Selection Education	M			
Crop Irrigation Education	M			
Passive customer conservation planning	L			
Subtotal - passive demand improvement		4,888,000		
Active: required				
Significant Water Rate Tier Structure	H			
Water Budgets	H			
Construction/Landscape ordinances	H			
Evaporation loss reduction	H			
Active customer conservation planning	H			
Turf conversions	M			
Agriculture Conservation				
Crop selection Ordinances	H			
Crop Irrigation Ordinances	H			
Subtotal - active demand improvement		\$0		
Total- demand improvement (conservation)		#####		

Uncategorized				
Conservation-dedicated staff		1,693,000	WCWCD	2006-16
Misc		291,000	WCWCD	
Water Supply Improvement (Infrastrucure)				
Culinary Water Local Delivery				
New/improved service	NA			
Meter replacement		1,800,000	St George	2006
Fault water service tubing replacement		1,261,000	Hurricane	2007-16
Booster station		1,109,000	Hurricane	2007
PRV installation		112,000	Hurricane	2009-15
Pipeline installation/replacement		386,000	Hurricane	2013
Pumping station		550,000	Hurricane	2008
Meter replacement		375,000	Ivins	2000-06
Toquerville Heights project		1,760,000	Toquerville	2013
New meter installation		72,000	Toquerville	2013
Subtotal - new/improved		7,425,000		
Leak detection, prevention, repair	H			
Downtown water line replacement		3,750,000	St George	2001-16
Airport replacement leaking cement with pvc pipe		150,000	Hurricane	2015
Aging/leaking infrastructure replacement		8,661,000	Washington	2007-09
Leak detection equipment		2,000	Ivins	2009
Replacement of old water lines		764,000	Toquerville	2010
Subtotal - leak		#####		
External Water Imports				
LPP				
Waste Water Re-Use				
Re-use system		9,422,000	St George	2004-06
Southblock re-use line		534,000	St George	2008
Sutotal - water water		9,956,000		
Secondary water delivery				
Pressurized irrigation systems		#####	WCWCD	
Desert Hills/Hidden Valley irrigation sys		600,000	St George	2000-04
Southgate irrigation pipeline		202,000	St George	2003
Mainstreet irrigation line		75,000	St George	2010
Irrigation line extension		786,000	Hurricane	2009-15
Subtotal - secondary		#####		
Stormwater capture				
Rooftop run-off capture and re-use				

Open space run-off capture and re-use			
Subtotal - supply improvement		#####	
Total - demand and supply improvement		#####	

Plan - Projects by Category and Summary of Project Costs and Benefits

Targeted Water Category and Expected versus Actural Improvement per Water Demand Category per Time									
Ag - Secondary		Culinary M&I							
Exp/Time	Act/Time	Residential		Commercial		Industrial		Institu	
		Exp/Time	Act/Time	Exp/Time	Act/Time	Exp/Time	Act/Time	Exp/Time	Act/Time





Period (E.g., GPCD/specific year)

Additional			Total	
Act/Time	Exp/Time	Act/Time	Exp/Time	Act/Time



