Total

\$15,000,000

## Portfolio A - Status Quo and Stormwater Capture

Portfolio	A - S	status Quo and S	tormwater Capture			
Catego	ory	Capital Cost (\$)	\$15,000,000			
Supply a		28,200,000	\$28,200,000			
Production Distribution Storage		116,100,000		Supply and Production		
		33,000,000		<ul><li>Distribution</li></ul>		
Other CIP		15,000,000	\$33,000,000			
		192,300,000		■ Storage		
		102,000,000	\$116,100,000			
Supply a	nd Pro					
Option		Supply and Pr	roduction Program Components	Capital Cost		
IW-0	Treat	Treated Imported Water from MWD				
LSW-0	Arroyo Seco Canyon Project			\$7,400,000		
LSW-1a	Arroyo Seco to Eaton Canyon Raw Water Pipeline			\$6,600,000		
WUE-0	Conservation Programming to Meet Future Regulations			\$7,700,000		
Base GW	Current Groundwater Production			0		
GW-0	W-0 Well Rehabilitation and New Well Replacement, Importance Level 1		\$6,500,000			
Totals		\$28,200,000				
Distributi	on					
		Distribution F	Program Components	Capital Cost		
Distributio	n Reh	abilitation and Repl	acement, Importance Level 1	\$116,100,000		
			Total	\$116,100,000		
Storage						
		Storage Pro	ogram Components	Capital Cost		
Storage R	Storage Rehabilitation and Replacement, Importance Level 1			\$33,000,000		
			Total	\$33,000,000		
Other CIF						
		Other C	IP Components	Capital Cost		
Other CIP	Comp	oonents		\$15,000,000		

Portfolio B - Maximize MWD Supply/Minimize Local CIP

Categ	ory		Capital Cost (\$)		
Supply and 15,100,000 Production		15,100,000	\$15,000,000 \$34,700,000		
Distribution		293,200,000		■ Su	pply and
Storage		34,700,000			oduction
Other CIP		15,000,000		■ Dis	stribution
Total		358,000,000	\$293,200,000		orage her CIP
Supply	and	Production			
Option		Supply a	nd Production Program Components		Capital Cost
IW-0	Trea	ted Imported W	ater from MWD		0
LSW-0	/-0 Arroyo Seco Canyon Project				\$7,400,000
WUE-0 Conservation Programming to Meet Future Regulations		amming to Meet Future Regulations		\$7,700,000	
Total					\$15,100,000
Distrib	ution				
		Distribu	ition Program Components		Capital Cost
Distribu	tion F	Rehabilitation ar	nd Replacement, Importance Level 1		\$116,100,000
Distribu	tion F	Rehabilitation ar	nd Replacement, Importance Level 2		\$177,100,000
				Total	\$293,200,000
Storage	9				
		Stora	ge Program Components		Capital Cost
Storage	Reha	abilitation and F	Replacement, Importance Level 1		\$33,000,000
Storage Rehabilitation and Replacement, Importance Level 2			\$1,700,000		
				Total	\$34,700,000
Other (	CIP .				
Other CIP Components C					Capital Cost
Other C	Other CIP Components				
				Total	\$15,000,000

## Portfolio C - Maximize Local Supplies

			1.1	
Categ	jory	Capital Cost	\$15,000.00	0
Supply ar		\$166,200,000	\$41,800,000 \$15,000,00	
Productio		<b>#</b> 000 000 000		
Distribution \$293,980,000				
	Storage \$41,800,000			\$166,200,000 Supply &
Other CIF		\$15,000,000		Production
	Total	\$516,980,000	\$293,980,000	<ul><li>Distribution</li></ul>
				■ Storage
				= storage
				Other CIP
Supply ar	nd Produ	uction		
Option			on Program Components	Capital Cost
IW-0		Imported Water f		Oapital Cost
IW-2		na Groundwater S		\$16,000,000
LSW-0		Seco Canyon Proj	0 0	\$7,400,000
LSW-1a			nyon Raw Water Pipeline	\$6,600,000
LSW-1	-	Seco to Eaton Cal	-	\$4,000,000
LSW-5	,	Infrastructure	i Toject	φ4,000,000
LAG-3a			DW from LAG-WRP for	\$21,800,000
LAO-Ja	Advanced Treatment of RW from LAG-WRP for Recharge			Ψ21,000,000
SW-2				\$3,000,000
SW-3	Centralized Stormwater Recharge at Eaton Wash			\$6,100,000
SW-5	Decentralized Stormwater Recharge, Tier 2			\$76,300,000
WUE-0	Conservation Programming to Meet Future Regulations			\$7,700,000
Base GW	Current Groundwater Production			0
GW-0	Well Projects, Importance Level 1			\$6,500,000
GW-00	Well Projects, Importance Level 2		\$400,000	
GW-2a	Add Niti	rate Treatment to	the Monk Hill Wells	\$7,500,000
GW-2b	,	Perchlorate & VO	C Treatment to the Sunset	\$2,900,000
	Wells		Total	\$166,200,000
Distributi	on			
	Distr	ibution Program	Components	Capital Cost
Distributio	n Rehab	ilitation and Repla	acement, Importance Level 1	\$116,100,000
Distributio	n Rehab	ilitation and Repla	acement, Importance Level 2	\$177,100,000
Expansion	s Neede	ed to Meet Future	Demands	\$340,000
Distributio	n Resilie	ncy and Redunda	incy	\$440,000
			Total	293,980,000
Storage				
	Sto	orage Program C	omponents	Capital Cost
Storage Rehabilitation and Replacement, Importance Le			ment, Importance Level 1	\$33,000,000
Storage Rehabilitation and Replacement, Is			ment, Importance Level 2	\$1,700,000
Storage R	esiliency	and Redundancy	1	\$7,100,000
			Total	\$41,800,000
Other CIF	,			
		Other CIP Com	ponents	Capital Cost
Other CIP	Compor	nents		\$15,000,000
			Total	\$15,000,000

Portfolio D – Maxir		mize Sustainable S	ize Sustainable Sources and Practices	
Cate	gory	Capital Cost (\$)	\$41,800,000 \$15,000,000	
Supply an		158,600,000	\$41,000,000	Supply and Production
Distribution		294,230,000	\$158,600,000	Distribution
Storage		41,800,000		Storage
Other CIF	)	15,000,000		Storage
	Total	509,630,000	\$294,230,000	Other CIP
Supply a	nd Produc	tion		
Option			tionProgram Components	Capital Cost
IW-0		mported Water from N	• •	
LSW-0	Arroyo Se	eco Canyon Project		\$7,400,000
LSW-4	-		Arroyo Seco Water for Drinking	\$7,100,000
LSW-5	Natural In	frastructure	<u> </u>	C
NP-1	Tunnel W	ater to Brookside Gol	f Course	\$1,100,000
Grey-1	Greywate	r Program		\$26,000,000
SW-2	Altadena	Drain diversion to the	Arroyo Seco Spreading Grounds	\$3,000,000
SW-5	Decentral	ized Stormwater Rec	harge, Tier 2	\$76,300,000
WUE-2	Conservation Programs to Meet Future Regulations Plus 25% Additional Outdoor Conservation			\$20,400,000
Base GW	Current Groundwater Production			C
GW-0	Well Projects, Importance Level 1			\$6,500,000
GW-00	Well Projects, Importance Level 2			\$400,000
GW-2a	Add Nitrate Treatment to the Monk Hill Wells			\$7,500,000
GW-2b	Nitrate, Perchlorate and VOC Treatment to the Sunset Wells			\$2,900,000
Total		\$158,600,000		
Distributi	ion			
		Distribution Progra	m Components	Capital Cost
Distribution	n Rehabilit	ation and Replaceme	ent, Importance Level 1	\$116,100,000
Distribution	n Rehabilit	ation and Replaceme	ent, Importance Level 2	\$177,100,000
Expansion	ns Needed	to Meet Future Dema	ands	\$340,000
Distribution	n Resiliend	cy and Redundancy		\$440,000
Distribution	n Energy E	Efficiency		\$250,000
			Total	\$294,230,000
Storage				1
		Storage Program	<u> </u>	Capital Cost
Storage R	\$33,000,000			
	Storage Rehab/Replacement, Importance Level 2			\$1,700,000
Storage Resiliency and Redundancy Projects				\$7,100,000
Other Off			Total	\$41,800,000
Other CIF		Other Old Or	an an anta	Canital Cast
Other OID	Company	Other CIP Cor	iiponents	\$15,000,000
Other CIP	Other CIP Components			

Total \$15,000,000

Portfolio E - Maximize Direct Use of Stormwater and Recycled Water					Atta
Ca	tegory	Capital Cost			
Supply &	Production	\$65,400,000	\$34,700,000 \$15,000,000		
Distribution	on	\$293,540,000	\$65,400,00		
Storage		\$34,700,000		Supply and Production	
Other CII	Р	\$15,000,000		Distribution	
	Total	\$408,640,000	\$293,540,000	Storage	
				Other CIP	
Supply a	nd Productio	n			
Option	Sup	ply and Product	ion Program Components	Capital C	ost
IW-0	Treated Impo	orted Water from I	MWD		0
IW-1 Agricultural Spot Market or Lor		Spot Market or Lo	ng-Term Transfer		0
1144.0	F			40.000	

Option	Supply and Production Program Components	Capital Cost
IW-0	Treated Imported Water from MWD	0
IW-1	Agricultural Spot Market or Long-Term Transfer	0
IW-3	External Groundwater Banking	\$2,000,000
LSW-0	Arroyo Seco Canyon Project	\$7,400,000
LSW-1	Arroyo Seco Pump Back Project	\$4,000,000
LSW-4	Upgrade Behner WTP to use Arroyo Seco water for drinking	\$7,100,000
LAG-3b	Advanced Treatment of Recycled Water from LAG for Direct Use	\$15,800,000
SW-2	Altadena Drain Diversion to the Arroyo Seco Spreading Grounds	\$3,000,000
NP-1	Tunnel Water to Brookside Golf Course	\$1,100,000
WUE-0	Conservation Programming to Meet Future Regulations	\$7,700,000
Base GW	Current Groundwater Production	0
GW-0	Well Projects, Importance Level 1	\$6,500,000
GW-00	Well Projects, Importance Level 2	\$400,000
GW-2a	Add Nitrate Treatment to the Monk Hill Wells	\$7,500,000
GW-2b	Nitrate, Perchlorate and VOC Treatment to the Sunset Wells	\$2,900,000
	Total	\$65,400,000

Distribution	
<b>Distribution Program Components</b>	Capital Cost
Distribution Rehabilitation and Replacement, Importance Level 1	\$116,100,000
Distribution Rehabilitation and Replacement, Importance Level 2	\$177,100,000
Expansions Needed to Meet Future Demands	\$340,000
Total	\$293,540,000

Storage	
Storage Program Components	Capital Cost
Storage Rehabilitation and Replacement, Importance Level 1	\$33,000,000
Storage Rehabilitation and Replacement, Importance Level 2	\$1,700,000
Total	\$34,700,000

Other CIP	
Other CIP Components	Capital Cost
Other CIP Components	\$15,000,000
Total	\$15,000,000

\$15,000,000

\$15,000,000

Total

Portfolio Cate		ainable Groundwa Capital Cost	ter, Conservation, Stormwate	r Capture Attachment	
Supply & Productio		\$76,300,000	\$15,000,000		
Distribution	n	\$293,980,000	\$76,300,000	<ul><li>Supply and Production</li></ul>	
Storage		\$41,800,000		<ul><li>Distribution</li></ul>	
Other CIF		\$15,000,000			
	Total	427,080,000	\$293,980,000	■ Storage	
				Other CIP	
Supply ar	nd Produc	ction			
Option			on Program Components	Capital Cost	
IW-0	Treated I	mported Water from I	MWD	0	
IW-2	Pasadena	a Groundwater Stora	ge Program	\$16,000,000	
LSW-0	Arroyo Se	eco Canyon Project		\$7,400,000	
LSW- 1a	Arroyo Se	eco to Eaton Canyon	Raw Water Pipeline	\$6,600,000	
LSW-1	Arroyo Se	eco Pump Back Proje	ct	\$4,000,000	
LSW-5	Natural in	frastructure		0	
NP-3	Local Non-Potable Project			\$10,000,000	
WUE-1	Conservation Programs to Meet Future Regulations Plus 10% \$12,000,000 Additional Outdoor Conservation				
Base GW	Current Groundwater Production			0	
GW-0	Well Projects, Importance Level 1			\$6,500,000	
GW-00	Well Projects, Importance Level 2			\$400,000	
GW-2a	Add Nitrate Treatment to the Monk Hill Wells			\$7,500,000	
GW-2b				\$2,900,000	
GW-3	Connect High Nitrate Wells to a Local Non-Potable System – in conjunction with NP-3 \$3,000,0				
			Total	\$76,300,000	
Distributi					
D: ( '' ''		Distribution Program	•	Capital Cost	
		·	ent, Importance Level 1	\$116,100,000	
Distributio	n Rehabili	tation and Replacem	ent, Importance Level 2	\$177,100,000	
Expansion	s Needed	to Meet Future Dem	ands	\$340,000	
Distributio	n Resilien	cy and Redundancy		\$440,000	
			Total	\$293,980,000	
Storage					
		Storage Program (	Components	Capital Cost	
Storage R	ehabilitatio	on and Replacement,	Importance Level 1	\$33,000,000	
Storage R	ehabilitatio	on and Replacement,	Importance Level 2	\$1,700,000	
Storage R	Storage Resiliency and Redundancy \$7,100,00				
			Total	\$41,800,000	
Other CIP					
	Pr	ogram Components		Capital Cost	

Other CIP Components