Scenario 1 - TMDL Compliance with Advanced Nutrient Removal

Pros	Cons
Fewest environmental permits required	A lot of problems
Low risk of failure and unexpected cost	RO water going into creek and wasted
	$100 million to dump back into creek
	No MWD-LRP funding
	May not qualify for Prop 1 or any grants
	This is the “No Project” alternative (will lose EPA lawsuit)
	Not a chance
	No beneficial re-use
	No Multi-benefit
	Still Expensive
	Fails to meet TMDL & Groups objective
	Water still in the creek from Facility
	Possible cost of using Brine line (x3)
	Seasonal discharge? Fish flow?
	How to supply water reliability cost effectively with minimal environmental impact (highest best use)
	Single benefit
	High Cost of O&M
	No reuse
	Benefits none
	Schedule looks aggressive
	No beneficial use of water
	No income
	Purpose of proposal is to get out of creek
	Still has uncertainty about future of Malibu Creek regulations, future facilities may be required
	No funding source
	Fewest environmental permits required
	If recycled water is cut back may need to enhance the treatment plant
	No outside support from other agencies
	Need support to take brine line
	Worst option
	No: political partners economic partners, offsetting benefits
	Meets perceived environmental benefit without looking at water system
	Lost resource, no income from resource
	Need to import same amount of water from MET

Scenario 2 - New Seasonal Storage Reservoir and Reuse Partner

Pros	Cons
No Prime	100% Recycle (purple)
No treatment plant	Not enough cost – effective users (V.G. ….
No discharge to creek	New Reservoir in wildlife corridor
Why is public support for project red?	Regulatory challenge (to say the least)
Get way out of the creek	Puts money down the drain (No local district use benefit
Recreational reservoir	Prohibitive cost
Possible partner is Ventura agriculture, do to restricted pumping of ground water	Key components not addressed (red dots)
More partnering opportunities	Issues with users
	Two users instead of one
	LADWP will not build pipeline to Braemar Country Club (less users than Encino option)
	Most of cost is reservoir
	No identified place for reservoir
	Too long to construct
	Reservoir concerns
	High cost to benefit ratio
	No potable reuse
	Unknown on Partnership
	Long lead time
	Cost is high & questionable
	Difficulty in buying a new site
	New reservoir is problematic without a specific site
	What's the upper L.A. River Watershed Masters position?
	HEPA permitting issues
	11 year time frame
	Massive cost is hard to sell
	Can we get support from public?
	Legally challenging considering – EIR, R/W right of way, public support for reservoir
	EIR is expensive
	Messaging to lots of different constituents
	Water does not benefit producers of it.
	(L.A. Benefits LV does not)
	Special treatment to reuse water, was this cost estimate?
	High Risk of failure
	10 years at least to Malibu Creek compliance

Scenario 3 - New Seasonal Storage Reservoir and DPR

Pros	Cons
Retains all water within the service area district	Highest cost approach
Reduces reliance on imported water (x2)	Brine line costly and uncertain alignment
Shorter pipeline	Highest potable water
Best long term solution	Highest gross revenue
Upside to a drought - pass regulation easier like DPR	Good water reduction scenario
DPR could start as IPR & as regs change, could switch to all DPR	Will people
Goal long term, cost benefit	Same issues with new reservoir as 2
Does the scenario include the income from selling potable H20?	More rate payer pain (low probability of continued public assistance or financing)
We use our own water	Doubles the rates
Will reduce imported water from Delta	Too long
Need to think about phasing, can DPR be built sooner?	Red dots
	More expensive
	DPR unknown when and what will be required
	Brine line
	New reservoir
	High cost of construction O&M
	Not approved system yet- uncertainty
	Environmental concerns on reservoir
	Brine disposal
	Expensive
	Uncertainty
	Longer implementation project has execution risk
	11 year time frame
	Direct portable reuse is most difficult public challenge
	Cost is huge challenge
	All problems with dam from previous page: safety, R/W, dam safety, public support
	Is 2 year cost schedule correct?
	Can we mitigate all reservoir issues
	Noise
	Equipment work etc.
	No benefit or compliance of Malibu Creek
	High risk of failure or unexpected costs
	Is 12 year cost correct?

Scenario 3 - New Seasonal Storage Reservoir and DPR

Pros	Cons
Water Supply benefit (reduces import to district) (x4)	Brine disposal challenge- 2 concerns
1 plant, not 2	Could take years to get IPR permit
Plant already being upgraded	Uncertainty
Low cost	Schedule looks aggressive
Lower risk of unexpected cost and environmental supports	Not phase able?
Get water	Brine Line
Messaging is easiest; constituents share value	Comment: Compare locating the plant on existing site and possible alternate Brine line to coast
Need Partnerships with Met & colleagues / for redundancy benefit?	Need to couple increase in local portable water with reduction in use overall
Overall thought: Highest beneficial use to cost ratio	People don't increase domestic irrigation – grass thereby negative benefits)
3rd Party issue (from going to distribution system) CMWD or could be partner ship	Gray water reuse on site still needed
Hits the goals (not red dots)	Expensive
Shorter time frame	Can Brine Line run through Malibu?
1 of 2 favorites	
Less uncertainty of regulatory than DPR	
Less dependence on imported water	
Lesser environmental concerns	
Reusing water	
Best long term solutions	
Upside to drought- Pass regulation easier like DPR	
DPR could start as IPR & as regs change. Could switch to all DPR.	
Benefit is quick (2016 vs. 2020)	
Less environmental impact, so should be able to get permits	
O&M offset by income	
Get more income	
More benefit out of existing facilities	
The best option	
Regional approach to shipping H20 to colleagues	
Value not included: unbought potable H20	
Benefit to using in local area versus value of negotiated sale of H20 to third party	
Possible to divert in summertime to save $ from effort	

Scenario 5 - Encino Reservoir for Seasonal Storage and Reuse Partner

Pros	Cons
Pro- Line agreement to Woodland Hills C.C. (View lake) Adds circulation	Brine disposal
Lowest cost – existing reservoir (x3)	Biggest risk is agreement w/ DWP (x2)
IPR/DPR is an add-on potential (x3)	Risk of recycled water being used less in future
Most viable	No potable water reuse
Potential golf courses to add along the way	Reliance on partnership
Pierce has purple pipe but no supply	Need pumping both ways
Shorter time frame (x3)	Water benefits others, not LV
Already planning to go to Woodland Hills Country Club	Exporting some RW permanently (x2)
Low O&M cost (no membranes) (x2)	2 messages (LV residents, Encino residents)
Less uncertainty of regulatory than DPR	Nutrient-salt analysis (surface vs Aquifer vs ocean) should be done
Less dependence on imported water	
Lesser environmental concerns	
Reusing water	
Lower pipeline cost because L.A. might build it	
Could go back and forth in pipes	
Got LV reservoir- 500 Aft	
Some monetary benefit	
Reuse 100% of LVMWD H2) not possible	
Possible long term solution subject	
No Brine line required (x2)	
Elimination of potable water to reclaimed water system	
Low risk option, likely to get support	

Scenario 6 - Regional IPR with Encino Reservoir

Pros	Cons
Can add on DPR later (x2)	Siting of new IPR plant
Can benefit LV with recycled water & potable water	Same benefit as Scenario 4 but costs more
Can get funding now	Uncertainty of Brine line
Low risk	Cost
Public messaging wouldn't need to be tailored to Woodland Hills, LV.	Partnerships
Use others money	Brine waste could be a real long-term issue
Use existing infrastructure	Public perception for IPR
Low risk in terms of environmental and public stopping project	Why is timeline for Scenario 5 and 6 the same?
Malibu creek compliance sooner	A lot more complicated
Can be phased - scene 5- scene 6	O&M must be higher for IPR
Many choices for treatment	NEPA problematic with easements on parkland
Pipeline cost could be 0	Higher revenue from potable sales (pays for operations but not 1st costs)
Shorter timeline possible?	Higher costs
Income could offset O&M	Scenario 4 is cheaper and easier but similar
Mulholland pipe alignment should be considered	Nimby issues for plant construction (no direct benefit)
Permitting could be easier	Need DWP's agreement
Same Pros as Scenario 5	Possible geologic problems
	Political issue with homeowner resistance to putting RW in Encino Reservoir