

CITY OF LOS ANGELES
IRP Steering Group Workshop No. 5
June 26, 2003

MEETING MINUTES

Attendees: See Attached

OPENING REMARKS

Attendees were welcomed and were provided with opening remarks on the Integrated Resources Plan (IRP) and stressed the importance of receiving the Steering Group's input in the workshops. The Workshop Agenda was briefly reviewed. The Agenda items reviewed were as follows:

- Welcome
- Advantages of Integrated Alternatives
- Recycled Water Options
- Approach to Creating Alternatives
- Wastewater Alternatives
- Break
- Wastewater Alternatives (cont.)
- Wastewater Alternatives Breakout Session
- Wrap-up

Defining Terms

To help clarify the terms used in the workshops, the following terms were defined:

- *Options* (Projects) - Individual ways to meet specific wastewater, runoff or recycled water needs
- *Single System Alternative* - Combinations of options (projects) that meet the entire single system (wastewater, runoff or recycled water) needs
- *Integrated Alternatives* - Combinations of wastewater, runoff and recycled water alternatives that meet the total integrated needs

Creating Alternatives

A graphic was used to illustrate how the IRP will combine wastewater alternatives, recycled water alternatives and urban runoff alternatives to create integrated alternative.

ADVANTAGES OF AN "INTEGRATED" APPROACH

It was suggested by a Steering Group member that we skip over the topic of "Advantages of an Integrated Approach" if no one is opposed to the importance of the Integrated Approach. There was no objection to skip the discussion of this agenda item so it was skipped.

RECYCLED WATER OPTIONS

Determining Recycled Water Demand Potential

The 3 major considerations for determining the recycled water demand potential are:

- There must be enough wastewater flows to meet anticipated recycled water demands

- Potential users of recycled water should be near existing or proposed facilities in order to minimize costs
- Recycled water must meet all regulatory requirements and be acceptable to public

Types of Recycled Water Users

The types of recycled water users are:

- Large landscape
- Industrial
- Multifamily complexes with outdoor uses
- Homeowners associations
- New master planned communities (e.g., Playa Vista)
- Environmental (Los Angeles River)
- Groundwater recharge was also evaluated for those wastewater options that involved MF/RO treatment

Tiered Approach to Recycled Water Options

Potential water users were classified into two tiers:

- Tier 1 – Water users closest to existing treatment plants and recycled water facilities (pink area on the “Tiered Recycled Water Alternatives – Draft” figure contained in the presentation material and on slide 12)
- Tier 2 – Water users that would require substantial facilities (pipelines and pump stations) to deliver recycled water (green area on the “Tiered Recycled Water Alternatives – Draft” figure contained in the presentation material and on slide 12)

Potential Recycled Water Demand

A graph was used to show the 38,8000 annual acre feet per year in Tier 1 and the 103,900 annual acre feet per year in Tier 2, which includes Tier 1 and does not take into account the available wastewater flows (which could limit this potential).

Types of Recycled Water Projects

The 4 major components in a recycled water project after treatment were presented as follows:

- Pipelines
 - To move recycled water from treatment plants to customers
 - Facilities: new pipes from 6” to 48” diameter
- Pump Stations
 - To maintain adequate system pressure
 - Facilities: main pump stations & booster pump stations
- Diurnal Storage
 - To balance night time demand with day time wastewater flows
 - Facilities: steel tanks
- End User Retrofit Cost
 - To hook-up customers to recycled water system
 - Facilities: dual plumbing systems to keep potable and recycled water separate

APPROACH TO CREATING ALTERNATIVES

All integrated alternatives must meet minimum requirements

It was reported that in the approach for putting together the alternatives, all alternatives must meet the following requirements:

- Provide adequate wastewater conveyance and treatment capacity
- Provide enough recycled water/runoff to protect the LA River
- Provide conservation savings (DWP's current plan)
- Meet current regulations
- Provide some level of beneficial use of runoff
- Meet environmental justice concerns
- Meet near-term/immediate project needs
- Prove multiple community benefits (for new or expanded treatment facilities)

Building alternatives with different focuses will allow recognition of tradeoffs

It was reported that we will look at five different focuses to build the alternatives. The five focuses/alternatives are:

- Low cost (e.g., picking the lower-cost solutions)
- High adaptability (e.g., more able to adjust to changing flow and regulatory conditions)
- High beneficial use of resources (e.g., high levels of recycled water, conservation and runoff)
- Low risk (i.e., in terms of implementation and technology)
- More decentralized (e.g., solutions based on small-scale projects at neighborhood or household level)

WASTEWATER & RECYCLED WATER ALTERNATIVES

It was reported that this workshop will present the wastewater alternatives and the recycled water alternatives. The next workshop in July will present the Runoff alternatives, and in September the integrated alternatives will be presented.

Projected Average Wastewater Flows in Year 2020 & Estimated impacts on the existing Wastewater collection system

It was review that the Total estimated wastewater flow in year 2020 = 531 million gallons per day and the percent of sewers full in 2020 was shown graphically.

Estimated possible dry weather urban runoff (DWUR) diversions

It was presented that the total estimated possible DWUR diversions in year 2020:

= 97 million gallons per day (in the entire watershed)

= 56 million gallons per day (just within the City)

The amount contributed from each area was shown graphically (see slide 23 of presentation package).

Wastewater Options

The list of wastewater options available to build alternatives was reviewed as follows:

- Reduce flows -conservation and infiltration/inflow (Will consider this during the analysis of the integrated alternatives)

- Optimize existing sewer and treatment system
- Expand existing treatment facilities
- Build new treatment facilities
- Build storage facilities (both plant and sewer system)
- Build new sewers
- Some combination of above options

Alternatives Matrix (handout)

A matrix of the options vs. the following alternatives was presented (please refer to the insert in the presentation package):

- Low Cost – WWLC1
- High Beneficial Use of Water Resources – WWWR1, WWWR2, WWWR3
- High Adaptability – WWHA1, WWHA2
- More Decentralized – WWMD1
- Low Risk – WWLR1

Wastewater & Recycled Water Alternatives

The following examples of alternatives were presented (for details about each alternative, please refer to slides 26 – 35 in the presentation package):

- Wastewater Alternative: Low cost #1 (WWLC1)
- Corresponding Recycled Water situation: Low cost
- Wastewater Alternative: High beneficial use of water resources #1 (WWWR1)
- Corresponding Recycled Water situation: High beneficial use of water resources #1
- Wastewater Alternative: High Adaptability #2 (WWHA2)
- Corresponding Recycled Water situation: High Adaptability #2
- Wastewater Alternative: More decentralized (WWMD1)
- Corresponding Recycled Water situation: More decentralized
- Wastewater Alternative: Low risk #1 (WWLR1)
- Corresponding Recycled Water situation: Low Risk

Comparison of Wastewater Alternatives

A chart was presented to compare the wastewater alternatives to show the tradeoffs how one alternative may have a higher cost but it may have more recycled water potential. See Slide 36 for an example of the comparisons.

WASTEWATER BREAKOUT SESSION

The attendees were broken into 4 groups to discuss the important considerations and ways to mitigate the concerns for the alternatives presented in the workshop. The comments from the 4 groups are presented in Attachment A.

CURRENT EVENTS IN THE NEWS

- It was announced that another 101 class/workshop will be conducted on July 15 from 9:30 a.m. to 12:30 p.m. at the 2714 Media Center Drive. The four topics that will be discussed are Planning, Finance, Regulations, & the Los Angeles River.

AGENDA FOR WORKSHOP NO. 6

The next workshop is scheduled for Thursday, July 24, 2003 from 9:30 a.m. to 12:30 p.m. Topics that will be presented are:

- Water Conservation Options
- Runoff Alternatives
 - Dry Weather
 - Wet Weather

ATTACHMENTS

- Attachment A - Wastewater & Recycled Water Alternatives Concerns & Mitigations presented in Breakout session
- Attachment B - Feedback Report - All major questions and concerns voiced during the workshop are addressed in the Feedback Report.
- Attachment C – Steering Group Attendance list
- Attachment D – Staff Attendance list

ATTACHMENT A
IRP STEERING GROUP WORKSHOP No. 5
BREAK OUT SESSION
CONSTRAINTS/CONCERNS & MITIGATION/SOLUTIONS
FOR WASTEWATER AND RECYCLED WATER ALTERNATIVES
PRESENTED IN WORKSHOP

Kelli's Group

Constraints/Concerns	Mitigation/Solutions
Indirect potable reuse – public acceptance	
Avoid/address cost	- RO cost benefit on water quality -TDS reduction benefits.
Need to address how to educate/information transfer	
Skeptical of Govt. cost/info	Credibility of third party involvement e.g. Doctors (Health) & Academia
Overall <u>cost</u> issue e.g. Rate impact	- utilize stakeholders as the messenger – Link benefits of assets to the public/users ie. Env, Social.
Bureaucratic mind vs. Public mind – need to acct. for audience	cover less info & ensure understanding.
Flow in the LA River – determine needs. Alternatives to consider?	Re-circulate smaller Amt of water reuse other water.
Need to address <u>Decentralized</u> instead of low cost options.	Perform cost benefit/economic/social benefits. Focus on multi-benefits.
Focus on quality of life <u>not</u> cost address future vision not on today's issues.	Drop cost – focus on overall goal/vision.

Paul's Group

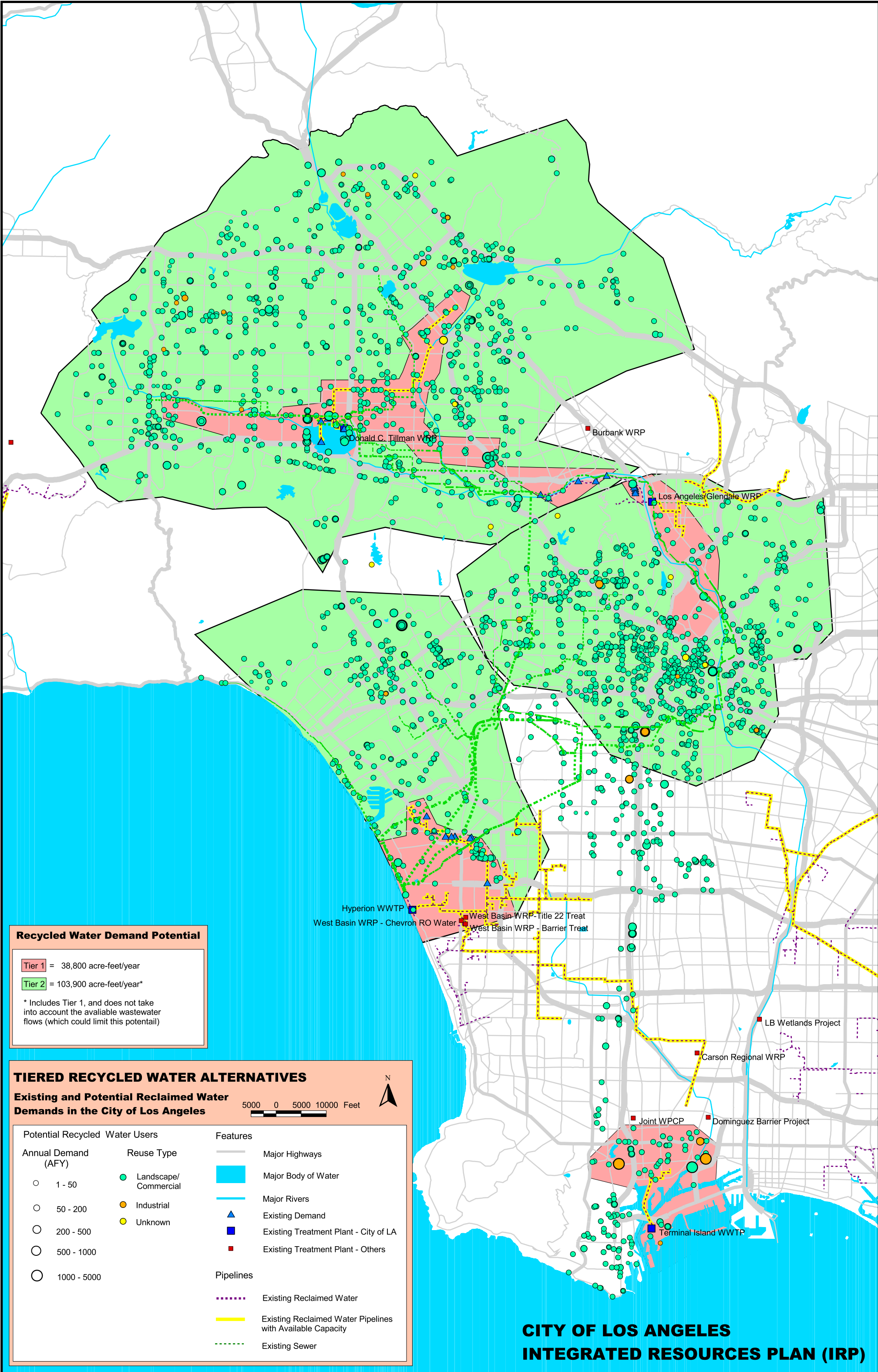
Constraints/Concerns	Mitigation/Solutions
Decrease in quality of life	Share responsibilities (benefits & costs) reward env. Responsibility. Create feed back loops
Split TWRP into dual-effluents	
Pay attention to Public perception	Open & honest public process – ind Env Process. Public information & education.
Share costs equitably	
Cost benefits. Costs of recycled water (RO) cost of environmental trade-offs.	Evaluate all costs & benefits (environmental & others).

Judi's Group

Constraints/Concerns	Mitigation/Solutions
Regulatory drivers-impact upstream	Capital + O&M costs for sewer from TWRP to HTP vs. SCAG projections TWRP level of treatment -not all TWRP flow -consider political feasibility
Optimizing potential customers (more demand south vs. west)	Consider alternative alignments of new RW line Glendale – center City (W. Bussufy)
Funding of growth infrastructure cost-effectively	New users pay expansion cost burden
Redundancy/safety concerns	Water supply reservoirs bring rack into service with appropriate treatment laolmers to decentralize water supply system
Community acceptance of responsibility – for infrastructure needs+indivisual responsibility	Public education/perodic surveys regarding option preferences
Sources of pollutants/flow	Source control/ conservation
Infrastructure limitations-building permit contingency plans	Wastewater overlay distgicts-e.g. enterprise district -encourage development near existing infrastructure/capacity -discourage opposite
Regulations – TMDLs – ww + SW	Source control, flexibility/phasing of design/planning to meet variable reg. reqs.

Heather' Group

Constraints/Concerns	Mitigation/Solutions
Need to be dear on benefits and costs	Integration
Concerned that are ignoring existing uses in sepulveda basin- wildlife, recreation, etc.	Integration
Consider impact of LA River & watershed optimization, beneficial uses, concrete vs. no concrete	Integration



Recycled Water Demand Potential

Tier 1 = 38,800 acre-feet/year

Tier 2 = 103,900 acre-feet/year*

* Includes Tier 1, and does not take into account the available wastewater flows (which could limit this potential)

TIERED RECYCLED WATER ALTERNATIVES

Existing and Potential Reclaimed Water Demands in the City of Los Angeles

5000 0 5000 10000 Feet

Potential Recycled Water Users		Features	
Annual Demand (AFY)	Reuse Type		
○ 1 - 50	● Landscape/Commercial	— Major Highways	■ Major Body of Water
○ 50 - 200	● Industrial	— Major Rivers	▲ Existing Demand
○ 200 - 500	● Unknown	■ Existing Treatment Plant - City of LA	■ Existing Treatment Plant - Others
○ 500 - 1000		Pipelines	
○ 1000 - 5000		— Existing Reclaimed Water	— Existing Reclaimed Water Pipelines with Available Capacity
		— Existing Sewer	