

CITY OF LOS ANGELES
IRP Steering Group Workshop No. 9
February 19, 2004

MEETING MINUTES

Attendees: See Attached

OPENING REMARKS/WELCOME

Adel Hagekhalil, the City's IRP Project Director welcomed attendees and thanked everyone for their commitment to the IRP process. Mr. Hagekhalil introduced the new commissioner, appointed by the Board of Public Works (BPW), Commissioner Cynthia Ruiz, and recognized her community service and engagement on Neighborhood Councils. Mr. Hagekhalil, introduced Mr. Jim Langley, Bureau of Sanitation's Assistant Director, Mr. Joe Mundine, the Bureau's Assistant Director at the Hyperion Treatment Plant (HTP) and Mr. Tom Erb, Water Resources Manager of DWP. Also, other agencies who partner with the City, such as Burbank, Glendale and El Segundo were recognized.

As it was mentioned at the last Steering Group Work Shop (WS), Ms. Judith Wilson the previous Director of the Bureau of Sanitation who has retired, will continue to assist us with the IRP. The Mayor has appointed a new Director for the Bureau of Sanitation. Ms. Rita Robinson, the new director, was introduced and recognized for her extensive experience at the Chief Administrative Office (CAO), and both the Departments of Housing and Transportation. Also, Mr. Ray Kearney, the Bureau's Assistant Director, who is retiring from the City, was introduced and recognized for his valuable service to the City, specifically, his expertise and contribution to the conversion of the City's biosolids to the exceptional "class A biosolids." The "National Biosolids Partnership" and a few City, State and Federal awards and recognitions have been extended to Mr. Kearney to acknowledge his long service in the City and valuable contributions in the field of biosolids.

Mr. Hagekhalil thanked the Steering Group members for their role in helping the City receive the certification on Environmental Management Systems (EMS), and Management Excellent Award. We are working with the Los Angeles Unified School District (LAUSD) and Los Angeles County Sanitation District to develop Sewer Science Contest and Treatment Plant Lab as a way to help high school students and the future generations learn about disciplines of water quality and environmental engineering. Everyone was asked to review a booklet with information on this project.

We are working with the Mayor's Office to assist them in issuing a Mayor's Directive addressing all affected City departments to form an Inter-Departmental Coordination Group to resolve conflicting policies and regulation impacting long term planning of the IRP. This would facilitate better collaboration and partnering of various departments and address foreseeable obstacles early on..

Mr. Jon Mukri, the new General Manager of the Department of Recreation and Parks, has expressed commitment to the IRP process. As we have heard from our stakeholders,

coordination is very critical in our planning efforts. The revised Landscape Ordinance was brought up by the steering group members as it affects the IRP. New schools have been proposed to be built with concepts of conservation, runoff management and sustainability.

REVIEW OF WORKSHOP 9

Paul Brown, the IRP workshop facilitator, briefly reviewed the agenda for Workshop 9 covering Hybrid Alternatives and Leadership Projects. Handouts on Brief Summary of Approach to Alternatives, Hybrid Alternatives, Quick Reference – Alternative Hybrid Series 1, 2, and 3, Recommended Alternatives Fact Sheet, Cost/Benefit Chart, Hybrid Alternatives Matrix (Rainbow Chart), Integrated Alternatives Report Card Summary, and List of Potential Leadership Projects were distributed. The Steering Group feedbacks on the preliminary integrated alternatives were used and key concepts on wastewater and water management were incorporated to adopt the best elements from the top ranking preliminary alternatives as a basis for synthesizing the hybrid alternatives. Four hybrid alternatives will be selected out of a total nine hybrid alternatives through a quadrant analysis, to go through Environmental Impact Report (EIR), Financial Analysis, and Suitability Analysis. Finally, one alternative will be selected and approved out of the four preferred hybrid alternatives, for implementation in the City's Capital Improvement Program (CIP).

HYBRID ALTERNATIVES

The slide show begins with all subjects matters covered in the past eight workshops and the workshop 9, covering the hybrid alternatives, followed by workshops 10 through 13 that will focus on financial and environmental analysis.

Approach to creating hybrid alternatives through incorporation of the key concepts and steering group feedback on the preliminary alternatives is presented in a PowerPoint slide show. The key concepts for creating hybrid alternatives have the following attributes:

1. Wastewater story
 - a. Need more treatment capacity due to
 - i. Increased flows
 - ii. Runoff management
 - b. Do not need a brand new plant
 - c. Where capacity is added has tradeoffs, depending on upstream or downstream expansion
2. Water management story
 - a. Increase levels of conservation
 - b. Increase recycled water use
 - c. Beneficially use runoff
 - d. Balance costs

The hybrid alternative matrix developed is based on the wastewater options (“1”, “2”, and “3”) and water management options (“A”, “B”, and “C”).

Wastewater Options

1. Expand Hyperion to 500 mgd & upgrade Tillman (advanced)
2. Expand and upgrade Tillman to 80 mgd and expand and upgrade LAG to 30 mgd (advanced)
3. Expand and upgrade Tillman to 100 mgd (advanced)

Water Management - Recycled Water, Dry Weather and Wet Weather Runoff Options

- A. Minimum levels
 - Recycled ~ 20,000 acre-ft/yr
 - Dry runoff: 10%
 - Wet runoff: 10%
- B. Additional Benefits
 - Recycled ~ 40,000 acre-ft/yr
 - Dry runoff: 30%
 - Wet runoff: 40%
- C. More Benefits
 - Recycled ~ 45,000 to 60,000 acre-ft/yr
 - Dry runoff: 50%
 - Wet runoff: 50%

The matrix for hybrid alternatives is constructed by combining “1”, “2”, and “3” as wastewater options with “A”, “B”, and “C” as water management options. This process would result in a total of nine hybrid alternatives. Then, “leadership projects” are included in various degrees to the above nine hybrid alternatives as represented on the “rainbow chart.”

Leadership Projects included in all Hybrid Alternatives

- First Phase Projects – required to implement hybrid alternatives
 - Advanced treatment feasibility study at Tillman and LAG
 - Smart irrigation phasing
 - Alley greening phasing
 - Neighborhood recharge phasing
- Leadership Projects – visionary projects that require study before large-scale implementation.

Hybrid Alternatives Evaluation

A quadrant analysis methodology is used to evaluate the subject hybrid alternatives. The range of benefits (low, medium, or high) for various options are compared against cost (low, medium, or high). The most desirable hybrid alternatives would fall in the 1st quadrant where benefits are high with a relatively low cost.

For these analyses we need to quantify and define benefits for wastewater, recycled water, dry weather runoff, and wet weather runoff. This is of course not an exact science and there are gray areas subject to interpretation. The following descriptions delineate how wastewater benefits, recycled water benefits and runoff benefits were defined:

○ How are we defining wastewater benefits?

High = enhance capacity at existing upstream treatment plants
Med = enhance capacity at Hyperion
Low = build new plants

○ How are we defining recycled water benefits?

Volume of recycled water
Connectability

How “easy” is it to connect recycled water to the proposed uses (in terms of technology/engineering)

High = high volume of recycled water and high connectability (e.g., groundwater)
Med = high volume of recycled water and low connectability (e.g., non-groundwater)
Low = low volume of recycled water and low connectability

○ How are we defining dry and wet weather runoff benefits?

Volume of runoff managed
Volume of runoff beneficially used

- Options that offset potable water use
- Examples:

Smart irrigation

Urban runoff plants (product used for irrigation)

Local/neighborhood solutions (cisterns, on-site percolation, neighborhood recharge) and non-urban regional recharge

High = high volume of runoff managed and high beneficial use
Med = high volume of runoff managed and low beneficial use
Low = low volume of runoff managed and low beneficial use

The top four hybrid alternatives that were picked through the quadrant analysis were: Hyb 3C, Hyb 1C, Hyb 3B, and Hyb 2C. The range of projected costs for these hybrid alternatives are significantly lower than the preliminary alternatives and, the range of benefits for these less expensive alternatives are close and at times better than the preliminary alternatives.

Leadership Projects

The list of potential “Leadership Projects” delineating the project descriptions, budget, goals and study results was distributed. The leadership projects include: conservation elements, wastewater

elements, and runoff elements. Examples of each category are: “waterless urinal study” on conservation element, “brine disposal element” on wastewater element, and “demonstration project for entire block” on runoff element. The range of budget for these projects varies, and could be a low budget project of say \$50,000 to a costly project of \$10,000,000 or more.

The strategy plan for leadership projects are:

1. Prioritize the list of projects,
2. Identify site-specific locations,
3. Identify funding sources,
4. Identify stakeholders, and
5. Implementation.

○ What are leadership projects?

- Visionary projects that require study before large scale implementation
- Leadership projects allow the City to confirm the “implementability” of a promising approach from both technological, operability, public acceptance, and agency coordination perspectives

■ Potential Leadership Projects

- Wastewater Elements
 - Gray Water
- Runoff Elements
 - Porous pavement
 - Residential
 - ❖ Greening projects (onsite percolation)
 - ❖ Onsite storage/use (cisterns)

○ Implementing Leadership Projects

- City department/staff champions
- Interdepartmental coordination committees

- Community Role
 - Advisory Task Force?
 - Neighborhood Councils

Brief Summary of Approach to Alternatives

- Developing and evaluating alternatives is an essential task of the IRP, since the process will ultimately result in the selection of a preferred alternative.
- The preferred alternative will be the basis for the Capital Improvement Program and financial plan.

- Preliminary Alternatives were designed to push the envelope and included the following focuses:
 - LCMR – Low Cost/Minimum Requirements (Lower cost solutions to meet minimum requirements)
 - HA – High Adaptability [Adaptable in terms of their ability to respond to changing conditions (e.g., changing flows, technology or regulations)]
 - WR – High Beneficial Use of Water Resources (High levels of recycled water, conservation, and beneficial use of runoff that reduces the use of imported water)
 - MD – More Decentralized (More localized solutions, rather than fewer and larger regional solutions)
 - LR – Low Risk (Lower in risk from a regulatory perspective or ease of implementation perspective)
 - The estimated additional average single family monthly cost for water, wastewater and stormwater (\$2002) for the preliminary alternatives ranged between \$17/month and \$230/month.
- Using feedback from the Steering Group members and staff, the IRP technical team created three series of Hybrid Alternatives that combined the best elements from the top ranking preliminary alternatives to improve performance:
 - Hybrid Alternatives build on three series of wastewater treatment options: (1) expansion downstream at Hyperion only, (2) moderate expansion upstream at both Tillman and LAG and (3) moderate expansion at Tillman only.
 - For each series, the team included three levels of recycled water, dry weather runoff and wet weather runoff options: (A) meet minimum levels, (B) provide additional benefits, and (C) provide more benefits.
 - For each series, the team also included leadership projects needed for further investigation before implementation.
 - The estimated additional average single family monthly cost for water, wastewater and stormwater (\$2002) for the hybrid alternatives ranged between \$18/month and \$31/month (not including budget for additional studies and demonstration projects).¹

Next Steps

- Financial analysis
- Sustainability analysis
- Environmental analysis
- Implementation

¹ This represents the total average monthly cost, not a rate or bill. The current average monthly cost is about \$63. A detailed rate analysis will be conducted as part of the financial plan.

- Next Workshop
 - April 22, 2004

WRAP-UP

We will keep the doors open to all options, alternatives and leadership projects for future reference and considerations. A brief summary of the proposed alternatives will be developed in simple terms, without complicated technical details and charts for better understanding of the proposed alternatives. Please note that a lot of these leadership projects are common to all four preferred hybrid alternatives, and we need your feedback on which leadership projects should be prioritized for implementation. Also, add any leadership projects that you believe are missing and should be included.

ATTACHMENTS

- Attachment A - Feedback Report - All major questions voiced during the workshop are addressed in the Feedback Report.
- Attachment B – Steering Group Attendance list
- Attachment C – Staff Attendance list