

Attachment A

City of Los Angeles IRP Steering Group Workshop No. 7 September 25, 2003

FEEDBACK REPORT

1. Are there any representatives from the Bureau of Engineering in attendance today?

There were no representatives from the Bureau of Engineering at Workshop 7, but there have been representatives at previous workshops. We've raised this point with the Bureau of Engineering, and Mr. Gary Moore, the new City Engineer (head of the Bureau of Engineering), will attend the next workshop.

There are several divisions in the Bureau of Engineering that are participating in the IRP at the Management Advisory Committee (MAC) level:

- Tim Haug, Bureau of Engineering, Executive Division
- Varouj Abkian, Bureau of Engineering, Environmental Engineering Division
- Ara Kasparian, Bureau of Engineering, Environmental Group
- Phil Richardson, Bureau of Engineering, Streets & Stormwater Program
- Dan Comorre, Bureau of Engineering, Wastewater Conveyance Engineering Division

The MAC meets monthly to discuss the direction and progress of the IRP.

2. Are you adding the alternative (requested by us) of constructing a sewer from the Tillman Water Reclamation Plant to the Hyperion Treatment Plant as an alternative to address future wastewater flows, instead of expanding existing upstream treatment plants or building new plants?

Yes. We are looking at the alternative of conveying the future flows downstream to the Hyperion Treatment Plant, and it will be one of the alternatives that will be discussed and reviewed as part of the performance and cost evaluation.

3. What is the length and size of the \$280 million East Central Interceptor Sewer?

The East Central Interceptor Sewer is 11 miles long and 96 inches in diameter.

4. Did you say that there is a plan listing what streets, bridges, sewers, and other infrastructure the City is going to build, and if so, is it available to us?

There is a capital improvement plan (CIP) for the various infrastructure programs, like streets and wastewater. The Office of the Chief Legislative Analyst has copies of all the CIPs that were adopted by the City Council. The Mayor's Office recently established a blue ribbon committee to look at the financial needs to meet the City's infrastructure needs that are addressed in the various CIPs.

5. Is the next workshop on a Wednesday (November 5th)?

Yes. Workshop 8 will introduce the Integrated Alternatives on Wednesday, November 5, 2003.

- 6. In the summaries of the Advisory Group Session 3 meetings that were mailed to the Steering Group, the following corrections are needed for the Lake View Terrace meeting summary: there were 3 Steering Group members in attendance; it was Occidental College, not Pierce College, which constructed the parking lot to capture the runoff; and controlling population and over development should be added as a major concern discussed at the meeting.**

All of the summaries from the Advisory Group Session 3 have been revised and are attached for your convenience. The summaries were revised to be more consistent. All summaries now report the number of IRP Stakeholders from each group who attended. Most of the previous summaries, like the Lake View Terrace meeting summary, did not initially contain a breakdown of the attendees by stakeholder group.

- 7. What does TMDL mean?**

TMDL is an acronym for Total Maximum Daily Loads which is the maximum amount of a particular pollutant that a particular stream, lake, estuary or other waterbody can assimilate without being affected or damaged, or 'handle' without violating state water quality standards.

- 8. What do mean by “drivers” and why are the IRP Guidelines shown as a driver? Shouldn’t the IRP Guidelines be replaced with population, urbanization, and ground cover?**

“Drivers” are the principle factors that influence the City’s planning process. Population is certainly a major driver, but there are others. For the example of runoff management, the TMDLs are a large and important regulatory “driver” that the City must address. The IRP Guidelines are drivers in the sense that they establish the framework in which planning process responses must be formulated. Throughout the IRP process, we have been identifying drivers and potential responses to address the issues that are associated with the drivers, and the Steering Group’s input has been critical to developing these responses.

- 9. Does beneficial uses include potable water?**

Yes. There are about 30 beneficial uses listed by the regulators including drinking water, habitat, wildlife, shellfish harvesting, commercial and industrial activities, and many others.

- 10. The estimate that runoff is 2/3 of the rainfall - is that Citywide? What would be the portion of runoff in the inner City where almost all ground is paved?**

Runoff is a portion (**about 1/3, not 2/3**) of the total volume of water that is produced in a rain event in the entire regional watersheds including all the open space of the Santa Monica Mountains as well as Angeles Forest. This calculation is based on land use, permeability, and studies conducted by the Los Angeles County Department of Public Works. If 100% of the land is covered with impermeable material, then the runoff will be 100% of the rain by volume.

- 11. How many times of year on average do we get a ½ inch rain and a 1-inch rain?**

Based on historical long-term information, we receive about 26 days of rain a year on average:

- 15 storm events are between 0 and 1/2"
- 7 storm events are between 1/2" and 1"
- 4 storm events are greater than 1"

12. How often per year do we have a ½ inch rain, and does ½ inch of rain over the 460 square miles of Los Angeles produce 1.7 billion gallons of water?

See response to Question 11. A ½ inch of rain over the 463 square miles in the City of Los Angeles will produce 1.7 billion gallons of **runoff** (4 billion gallons of water falls over the 463 square miles of Los Angeles in a ½ inch rain). If you look at a 40 year period, about 60% of all rain events will produce ½ inch or less of rain per event and about 85 to 90% will be 1 inch or smaller. When we did the Standard Urban Stormwater Mitigation Plan (SUSMP) for the Regional Water Quality Control Board, we calculated that a ¾ inch or less rain event would capture 85% of all the rain events that occur in this area.

13. For your typical single-family residence, you show a nice green lawn, but it is legal for residents to pave 100% of their lawn. Fifteen months ago, Councilmember Garcetti made a motion to study some protection for prohibiting 100% paving of front lawns. Over a year ago, the Planning Department said they will look into it and have a draft ordinance within 4 to 6 weeks. There is now a draft ordinance, but it is not public yet. We've been told that the various departments are reviewing it and that it will be available to the public in two weeks. My request is that this group gets a copy of the draft ordinance. Is that too much to ask?

In following-up on this issue, we have been informed that the ordinance is still in the process of being drafted. A meeting has been scheduled with members of Councilmember Reyes' Office, Councilmember Garcetti's Office, City Planning Department, and the Bureau of Sanitation to discuss the paving ordinance issue for single-family residence.

14. For your typical single-family residence drawing, you don't show parkway. In our neighborhood, we had 13 parkways paved over in the past few years. We've asked the Bureau of Engineering to correct this, but they said that there are guidelines that permit the paving of the parkways. We've asked the Bureau of Engineering for a copy of these guidelines 2 year ago, but they have not provided us a copy yet. I'm requesting that this group get a copy of the guidelines that permit parkway paving.

The attached Bureau of Engineering Standard Plan S-470-0, "Standard Street Dimensions", generally describes and regulates the dimensions of various types of streets within the City. Item Nos. 2, 3 and 4 under Standard Street Conditions address issues relating to sidewalk. Depending on the nature of the street and need, it is possible that a full width sidewalk is constructed in front of single-family residences.

15. Why is the IRP department not part of the internal review of the Ordinances/ Guidelines that will have an effect on runoff?

We have internal meetings with the Bureau of Engineering and the Department of Building and Safety regarding runoff issues. We are aware of the paving ordinance and the development of the ordinance, and we will do our due diligence to incorporate our runoff management interests in the ordinance. See response to questions 13 and 22.

16. It is good to hear that you have ongoing conversations with the Bureau of Engineering and the Department of Building and Safety, but since they never attend the workshops, they are not hearing the importance issues raised at the workshops.

We haven't met with the Bureau of Engineering and the Department of Building and Safety specifically about the front lawn paving draft ordinance issues; however, we are meeting with them about other issues related to the stormwater permit. The newly appointed City Engineer (head of the Bureau of Engineering) is Gary Moore who headed the Watershed

Protection Division in the Bureau of Sanitation, and he is acutely aware of the challenges the City is facing with the runoff management requirements. And the BOE, Planning, Parks and Recreation, and Building and Safety Departments, as well as the County and others, have participated in our MAC and TAC meetings throughout the project, so project information is shared with them. Representatives from Building and Safety were at this workshop.

- 17. Since the paving issues have been brought up at previous workshops, you should have been meeting with Engineering, Planning, and Building and Safety on this issue. The mechanism that BOE has for approving various BMPs and technology is a code that has nothing to do with what we are trying to accomplish. In terms of looking at long-term issues, changing bureaucracies does take a long time. If we are not addressing the big barriers right now, we are not going to be able to incorporate them in the long-term plan. Otherwise, our long-term plan will state that while these are desirable options, we cannot recommend them because a certain department doesn't allow it right now. Even though the IRP is long term, we need to start addressing the walls that are in our way right now and getting specific answers to specific ordinances right now.**

We agree, which is why we brought in staff from other departments like City Planning and Building and Safety to hear the discussion at the workshops and to seeing how it relates to things that are going on in their departments. See response to question 22.

- 18. The Bureau of Sanitation should be lobbying the City Council today to make all paving on private property permeable. Then the impact of paving would be positive.**

The Bureau of Sanitation is working with the Bureau of Engineering, Bureau of Street Services, and the Department of Water and Power to study the benefits and disadvantage of the use of permeable payment.

- 19. Besides the impact of paving front yards, we need to also consider other impacts to runoff like the addition of Granny flats that requires no city notification. These incremental impacts accumulate into a significant impact that the Bureau of Sanitation should address now.**

See response to Question 22.

- 20. We should also consider the positive impact of paving from the water supply side; no water is needed for irrigation.**

We will forward this idea to DWP so they can consider if they want to take this into account in future water demand planning.

- 21. Paving for use of parking doesn't necessarily mean impermeable. Gravel and other broken material can be used for parking; it doesn't need watering and it is permeable.**

This is correct.

- 22. "Integrated" means that we get the rest of the bureaucrats in here to talk to us.**

"Integrated" means that the City needs to move forward with a coordinated set of policies to maximize the opportunities for implementation of the IRP. We are going to form a group comprised of staff from the Department of City Planning, Department of Building and Safety, Bureau of Engineering, Bureau of Sanitation, Councilmember Reyes office (chair of Planning and Urban Land Use (PLUM) committee) and Councilmember Garcetti's office (Vice Chair of the Environmental Quality Committee) to address existing policies/ordinances that impact the goals of the IRP. The group will also include input from key stakeholders.

23. I don't think Building and Safety will allow me to have a permit to use a cistern. They should be here to hear these concerns.

Two representatives from the Department of Building and Safety attended the workshop (for their names, please refer to Attachment C – Staff/MAC Attendance sheet). Permits were obtained for the cistern along with the other runoff management best management practices (BMPs) used at the example test site (Hall House). The process was not complicated, costly or time-consuming.

24. When we reduce the runoff by 15% using cisterns, it will effect both runoff quality and flood protection. The pollutants from the lawns and streets will not run off to the rivers.

The use of cisterns will take the runoff off peak to reduce the risk of flooding. The quality of the runoff could be improved somewhat with onsite retention because the pesticides, fertilizers, pet waste, and other pollutants that occur on the property would not runoff to the street. The Water Master and the Los Angeles Regional Water Quality Control Board will have to address the water quality issues if the water in the cisterns will be used for irrigation as some of the water will infiltrate through the ground. The more pollutants that are managed at the local neighborhood level, the less pollutants will have to be managed at the regional level.

25. Who's going to determine when you can open up the tank (cistern) to let the water out?

The cistern system includes a pump that is used for the irrigation system and the City can have remote access to pump out the water prior to a storm or for a controlled first flush.

26. When you are talking about the use of French drains as an option to reduce runoff from driveways in single-family residence, do you mean gravel?

Yes, gravel, and other type of porous pavement which will change the driveways from impervious to pervious.

27. The San Fernando Valley has looked into doing some of the local/neighborhood solution demonstrated at the Hall house, but we are running into Pueblo Rights problems where the City is saying its owns the rain so the runoff has to be routed to the stormdrain.

The City's Water Rights is based on the assumption that a certain percentage of the rainwater will percolate into the ground and recharge the groundwater table. But the City of Los Angeles Department of Water and Power is very supportive of these types of ideas that encourage every individual property owner to capture as much rainwater as they can.

28. The City regulations allows me to pave over most of my lawn, which if I did, I could get rid of my gardener from \$80 to \$125 per month and then I could build a larger cistern and sell the excess water to my neighborhood, coming out ahead economically.

It is unlikely that you would be allowed to sell the water from the cistern.

29. The Hall house is a great example to solve the runoff problem. I built a small wall around my backyard and piped all of the water into my backyard so 100% of the water percolates into the groundwater. The Pueblo Water Rights Act states that the City owns the groundwater, but there is no indication that the City claims to own the rain so by capturing the rainwater and recharging it onsite, you don't violate even a remote aspect of the water rights issue.

See response for Question 27.

30. How do you get improved quality of runoff by capturing 100% of the clean rainwater and inserting it into the groundwater? It seems that this would concentrate the pollutants in the runoff because the pollutants in the streets are constant so when I reduce the flow, I'll increase the percentage of pollutants?

The quality of the runoff could be improved somewhat with onsite retention because the pesticides, fertilizers, pet waste, and other pollutants that occur on the property would not runoff to the street. Also, it is correct that the decrease in the amount of the remaining flow could increase the concentration of street related pollutants. Both of these factors would need to be considered on a site-specific basis. Pilots of these types of facilities should form the basis for estimates of runoff quality improvements or concentration issues.

31. If I wanted to install the runoff management options used at the Hall house at my houses, would I be able to get the permits, and if so, how hard would it be to get the permits.

When TreePeople retrofitted the Hall house, they did not apply for any exemptions. They went through the normal permit process and were able to get a permit.

32. Is there any opportunity to revisit the landscape ordinance that is currently being revised?

Yes. The things that are being proposed in the IRP will require policy reviews and possible revisions throughout the City. An example of another change that is needed is the requirement for properties owners to route all the rainwater runoff to the street. The City of Santa Monica has turned it around to require property owners to not send the rainwater to the street. The IRP will propose recommendations to change some of the requirements/policies that could conflict with the goals of the IRP.

33. If we contain the rainwater onsite and allow it to percolate to the groundwater, we may be contaminating the groundwater with pollutants from the property, creating a problem if the groundwater has to be cleaned. If we leave it on the surface, we can clean the pollutants more easily. If we allow public properties to be used for recharging the groundwater, we need to control the pollutants that they can use/contain on their property.

The Los Angeles and San Gabriel Rivers Watershed Council is conducting a study to monitor various runoff management best management practices (BMPs) sites to see if there is any contamination happening. The Hall house is fully monitored by U.C. Davis and the U. S. Forest Service to determine if any contamination is occurring. Typically, the types and quantities of pollutants found in residential lawns (pesticides, fertilizers, and pet waste) do not pose a significant threat of contaminating the groundwater. The soil acts to clean and filter most of the pollutants out of the water before they reach the groundwater. Currently billions of gallons of rainwater percolate through residential lawns every year, yet there has been no significant groundwater contamination attributed to water percolating through residential lawns. The biggest threat to groundwater contamination from residential homes is pollutants on driveways from parked automobiles, but there are options to reduce these pollutants, like the use of a driveway drywell.

34. The requirement for the Los Angeles County Stormwater Permit (as well as the Ventura County Permit) is that 100% of the runoff generated by the 85% storm, which is about a ¾ inch storm, must be captured, infiltrated or treated, but it's not for all

development. Only the moderate size to large size commercial development, a housing subdivision, industrial site, or even at the single-family house size if it adjacent to an environmental sensitive area is subject to this requirement. In 1992 Santa Monica imposed the same requirement on every structure or remodel of significance, including single-family residences, for the 1-inch storm. So the BMPs discussed today can be seen in Santa Monica over the past 10 years.

No response required.

35. A comment was made to continue the presentation and hold all questions to the end, as they will be answered in the presentation or were already answered when the tour of the Hall House was given.

No response required.

36. Farmers have used these solutions being discussed today for years. Every downspout could be connected to a dry well. The estimated retrofit cost of \$10,000 would not cover the use of Grasscrete, as it is very expensive. Do you know of any less costly solutions similar to Grasscrete?

Grasscrete is a type of paving that uses interlocking concrete blocks with gaps to allow grass to grow between the blocks and rain to infiltrate. This type of paving technology has been enhanced and has gotten cheaper. Some newer products (Grasspave and others) that use recycled plastic blocks are a lot safer, cheaper, and work better than Grasscrete.

37. In Pasadena there is a city facility called the Casita del la Arroyo on Arroyo Boulevard overlooking the Arroyo just south of the Colorado Boulevard Bridge where there are a lot of porous pavement options installed.

No response required.

38. It is now allowable to pave the entire side and back yard. Also, for multi-family residential properties, the landscape ordinance does not apply to properties of 6 units or less which means that it doesn't apply to the inner city. The landscape ordinance is currently being revised and the IRP should be a part of the revision process.

Yes. See response to Question 22.

39. The actual commercial properties do not have as much landscaping as you have shown in the examples. The trend is that more and more of the backyard is being replaced with more structures and less lawn. If there is not a change in thinking, the City will be paved over. For less runoff, you can remove the pavement and replace it with curb filled with decomposing grass, but the City will not allow you to put in this kind of driveway.

See response to Question 22.

40. You need more public education of these ideas to the masses, like schools, so that the public will agree with these solutions.

The IRP includes a public outreach component that will promote the IRP goals to the general public including outreach to schoolchildren through Nature Tours conducted by TreePeople.

41. Many other neighboring cities are already requiring some of these same solutions, but the City of Los Angeles is under siege with more development. We need to force this

issue and start now with requiring these solutions because until you get started, it's not going to happen.

See response to Question 22.

42. The City requirement that all stormwater must be routed to the street must be changed immediately.

See response to Questions 22 and 32.

43. Since it reduces runoff and allows groundwater recharge, open space should be considered as infrastructure, and any new development in transportation corridors should be required to add additional open space for any open space developed.

See response to Question 22.

44. In the pie chart breaking down the percentage of runoff removed, there is no identification of which solution corresponds to which percentage?

The pie chart depicting the percentage runoff reduction per solution was revised and is attached.

45. In addition to the cistern at every house, there should be a solution where one big cistern is used for an entire neighborhood.

Yes. The neighborhood recharge solutions provide neighborhood treatment and storage facilities (larger cisterns).

46. Have you thought about doing a demonstration site for runoff BMPs on a commercial corridor?

In the next year or two, there will be a major demonstration site in the upper Los Angeles River watershed in the Valley for the runoff management Best Management Practices (BMPs) solutions. It is the Sun Valley Project. See response to question 57.

47. Currently in Granada Hills the City is building a huge new facility for the Fire Department that is totally covered with concrete. There is not a single blade of grass planned for the site. It would be nice if we could capture this example to show the policy that need to be changed.

See response to Question 22.

48. I would like to see more details about how the solutions proposed on private property will be maintained to not cause a pollution problem.

For the cisterns on private property local/neighborhood solution, the City might have some control over the pumping system. The other local/neighborhood solutions may not have any City maintenance oversight. These potential maintenance problems and other issues will be considered when determining the overall risk associated with the solutions. Demonstration projects will help in determining both the appropriate level of maintenance and the cost to the residents in maintaining either private or communal cistern systems.

49. With respect to the issue of allowing granny flats, I don't think it is a problem. If people are allowed to take care of their parents at their home, then it will be less costly to the public than if the government has to take care of them.

When considering changes to any policies, all economical costs and benefits should be considered.

50. If a community was interested in implementing some of these local/neighborhood runoff management solutions, would TreePeople be willing to help do an estimate?

Yes, TreePeople currently helps people implement the runoff management solutions. The Los Angeles Unified School District is currently planning to retrofit/build 1,000 schools in the next ten years, and the IRP process brought together the environmental health and safety team and the construction team for the school district to meet with TreePeople and the IRP staff to discuss ways they can implement some of the runoff management solutions in the school retrofits and constructions. The school district was very receptive to these suggestions.

51. The City should be setting an example by implementing the runoff management solutions in the design of fire, police, and other City facilities.

See response to Question 22.

52. In City ordinances, we need to define open space as something green, not something paved.

See response to Question 22.

53. The Quinbe Fund, which funds improvements to the mega parks, could be used as a funding source for the IRP. The funds should be used for more local parks, instead of the large central parks.

Funding sources for the IRP will be considered in the financial plan.

54. Before these local/neighborhood runoff management solutions will be implemented, you have to provide economic incentives. Otherwise, no one will do it.

The IRP will consider providing economic incentives to property owners to encourage them to implement the local/neighborhood runoff management solutions.

55. Has anyone invited Manuel Mollinedo of the Department of Recreation and Parks to any of these meetings?

Manuel Mollinedo, General Manager of the Department of Recreation and Parks, is a member of the Management Advisory Committee (MAC). Bill Lukehart of the Department of Recreation and Parks was scheduled to attend the September 25th workshop, but was unable to attend at the last minute. The Bureau of Sanitation has been meeting with the Department of Recreation and Parks to discuss the multi-benefit projects that are possible with the runoff management aspect of the IRP.

56. We need to know what the cost of a square foot of paving has on the City with respect to all environmental issues.

The cost of managing the runoff will depend on the methods used, and at this time, we don't have enough information to know which methods will be used. Managing the runoff to the extent that is mandated by the new regulations is something new, so there is insufficient data to accurately estimate the cost per square foot of impervious pavement at this time. The relationship between cost and benefits is type of information will be developed as the runoff management methods are introduced and evaluated.

57. What is the status of the Sun Valley Watershed project?

In November 1998, the County organized an inter-agency team to see if it would be feasible to retrofit Sun Valley. The feasibility study took 2.5 years to conclude that it is feasible. The County then budgeted \$50 million for the project and the environmental impact report (EIR) process started. The EIR took 1.5 years and is scheduled to be released in October (2003). Once the EIR is approved, the construction may begin. Several large first phase projects have already been designed: Sun Valley Park and the underground cistern at Tuxford Green. It will take 10 to 15 years to complete all projects.

58. Is there lower air-conditioning cost as a result of implementing the local solutions?

The use of trees increases the amount of shading, and energy cost savings will result as the impacts of shading reduce the amount of air conditioning that is needed.

59. You should gather information about all of the runoff management solutions that are being used around the world, and put them in a report for us to see.

The IRP is investigating all major methods used for runoff management.

60. Once the DWP has good results from the pilot study using smart irrigation systems, the City should start mandating institutional users to use smart irrigation systems.

The smart irrigation system pilot study is looking at large multi-family residential properties in the San Fernando Valley, and the study will be expanding to other properties. In early 2004, DWP plans to have an incentive program to customers who install smart irrigation systems.

61. Irvine Ranch also has an incentive program for the use of smart irrigation systems that created a very effective participation.

The Irvine Ranch smart irrigation systems were first used to prevent the landscaping from dying in new developments. Irvine Ranch then realized that there were other benefits, so they created incentives for others to use smart irrigation systems.

62. Street sweeping should be considered an option to reduce the trash and other pollutants that flow into the stormdrain.

The City already conducts a comprehensive street sweeping program.

63. How much of the stored stormwater runoff will have to be used to grow a tree?

Not all trees require the same amount of water. A native oak tree will have 12 feet of roots before a leaf will come out. If we plant appropriate vegetation, the cistern water will be sufficient. There is a model that shows how long the cistern water will last depending on which plants are planted.

64. You can refer to the Watershed Council website at lasgrwc.org to see a list of native plants that can be used instead of the commonly used exotic plants. Native plants don't need irrigation once they are started.

No response required.

65. We need to consider the positive aspect of dry weather runoff. The dry weather runoff washes pollutants from the street which if diverted to the wastewater system; it would be treated and used for groundwater recharge.

Diversion of dry weather runoff is, in fact, one of the methods that the IRP is considering. The wastewater treatment system is already handling a wide range of pollutants, and the

City's treatment processes must meet regulatory requirements that vary depending on the way that the treated effluent may be used (including groundwater recharge). Dry weather diversion is seen as a very promising approach, but we need to make sure that the effluent regulations continue to be met.

66. For the Seattle example using no curb and gutter, how can you have a sidewalk without curb and gutter? Unless you have a perfect grading, the sidewalk will be muddy.

In the Seattle example, the sidewalk is set back from the street. We will have to be selective about where each of the solutions can be used.