

## Attachment B

### City of Los Angeles IRP Steering Group Workshop No. 6 July 24, 2003

## FEEDBACK REPORT

#### 1. **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 'handle' without violating state water quality standards.

#### 2. **What time period are the TMDLs measured for compliance, like daily or monthly average?**

It depends on the TMDL. For example, the beach bacterial TMDL allows a certain number of days that the TMDL bacterial standard can be exceeded during the year from 0 days during the summer season and up to 17 days during rain events in the winter season.

#### 3. **Who sets the TMDL levels?**

The Regional Water Quality Control Board is the regulatory agency that sets the TMDL standards for waterbodies in our region. The U.S. Environmental Protection Agency sets the standards for the states and regions, but each state/regional board can set more stringent standards or less stringent regulations as the conditions warrant.

#### 4. **How we define and measure the TMDLs is not important. What is important is do we meet the TMDL standards and if not, what are we going to do about it.**

We don't have an argument yet about the TMDLs. The TMDL discussion so far was simply responses to the questions.

#### 5. **In regard to the TMDL issues that you are discussing, are you talking about managing the 10% of water that doesn't runoff to the ocean/bay when it rains?**

When we are talking about wet weather runoff, we are talking about all the flowing water that is produced in a rain event, i.e. all of the water that does not soak into the ground. Runoff is a portion (about 1/3) of the total volume of water that is produced in a rain event in the entire regional watersheds. This includes all the open space of the Santa Monica Mountains as well as Angeles Forest. Most of the rainwater (about 2/3) soaks into the ground, and the exact percentage varies depending on the type of soil, ground coverage, lay of the land, and ground saturation. Later in the presentation, we will discuss the amount of water that we will be trying to manage in wet weather.

#### 6. **It appears that from slide 16 that only about 1/3 of the rainfall runs off (most percolates into the ground) and out of the 125 billion gallons of runoff produced in an average year, we are only going to manage a small fraction: 3.8 billion gallons. Since percolation into the ground significantly minimizes the runoff, can decreasing hardscape be an option?**

On slide 16, the 125 billion gallons of runoff produced is for the entire average year. The 3.8 billion gallons targeted for management is per rain event, **not per year**. If we have 33 rain

events a year (of ½ inch or less), we will manage 33 X 3.8 billion gallons of runoff = 125 billion gallons per year. Approximately 2/3 of the rain that falls in our region is absorbed in the ground, used by the vegetation, or evaporates into the atmosphere. The remaining 1/3 is runoff. Decreasing impermeable surfaces (pavement, concrete sidewalks, driveways, structures, etc.) will decrease the amount of runoff. The IRP will look at several options of increasing percolation which will reduce runoff.

- 7. On slide 17 the graph shows the regional historic runoff per rain year and the average runoff over the entire 100 years (125 billion gallons). This average for projecting future runoff that we will have to manage seems optimistic because as the urban area grows and more surface area is covered, the runoff will increase as it has over the last 100 years.**

The graph on slide 17 does **not** show the actual runoff that occurred for each of the last 100 years. The graph shows what the runoff would have been in each year if the current land coverage was assumed for the entire 100 year period (based on the amount of rain recorded in each year). Therefore, the increase in urbanization over the last 100 years does **not** affect the runoff shown per year on the graph or the average runoff over the entire 100 years. Also, this graph does **not** indicate the amount of runoff we will be managing. It only shows the runoff and average runoff that occurred over the last 100 years (adjusted for present land coverage) to demonstrate the quantity and the variability that is unique to runoff.

- 8. Should we look at 1 or 2 standard deviations of the mean, instead of managing the average?**

One standard deviation from the mean is probably between 125 and 150 billion gallons, but this does **not** represent the amount we have to manage. What we want to convey is the magnitude of the runoff that occurs and that managing some portion of it will be difficult.

- 9. If you followed the average every 10 years, would you see a trend?**

Based on the eyeballing the graph, the average every 10 years would be very close to the 125 billion gallons because the El Niño and the droughts seem to occur about every 10 years.

- 10. What you are talking about now are estimates based on land use and runoff coefficients, but when we get much further along, we will have to look at real flow data that we have over the last 30 to 50 years which might show that the estimates are not very accurate. The rainfall records dating all the way back to 1900 cannot be very accurate.**

We can look at the records dating back to no earlier than 1938 when the Los Angeles River was channelized and the flow gauging was installed.

- 11. You will have to take into account for future presentations that all new development is going to require onsite runoff retention which will decrease the average.**

That is a good point, and it will be considered when we do modeling for the alternatives.

- 12. When SUSMP requires new development to retain on site or treat the runoff from the first ¾ inch of rain, why is the IRP goal to only manage the first ½ inch?**

The Standard Urban Storm Water Mitigation Plans (SUSMPs) is a regulation set by the Los Angeles Regional Water Quality Control Board that requires new large developments to retain on-site the runoff produced in the development from a rainstorm that is ¾ inch or less. The City is trying to achieve compliance to a different regulation through its strategy of

managing the runoff from a ½ inch or less rain event. The City has calculated that compliance for the Santa Monica Bay Bacterial TMDL can be achieved if the runoff from each ½ inch or less rain event is managed. This is why the City chose the ½ inch criteria as a starting point to achieve compliance. The SUSMP deals with management of runoff at each site and the bacterial TMDL is a regional runoff management regulation.

- 13. The bacterial TMDL does not say that managing ½ inch rain event will achieve compliance. The bacterial TMDL sets the loading criteria and the number of days that the TMDL bacterial standard can be exceeded during the year. By using these standards, the City has calculated that they can achieve compliance by managing the runoff from ½ inch or less rain events.**

This is correct so if the ½ inch strategy does not achieve compliance, the City will have to manage more runoff. The management of ½ inch is not necessarily the goal of the IRP. It is just the City's current management strategy.

- 14. Why is the City selecting ½ inch criteria for the entire City? The depth for complying with the TMDL will probably vary throughout the City.**

The ½ inch is just a placeholder and it will have a range attached to it.

- 15. The slide that indicates that there is 125 billion gallons of runoff to manage per year is deceptive because it is not broken down into rain events.**

Slide 17 only shows the runoff and average runoff that occurred over the last 100 years (adjusted for current land coverage) to demonstrate the quantity and the variability that is unique to runoff. Slide 20 shows the amount of runoff that the City will have to manage per ½ inch rain event (3.8 billion gallons) if our strategy is correct for complying with the TMDL regulations.

- 16. Instead of us taking the time to discuss what the problems are, lets go on to discuss what we are going to do about the problem.**

The options for runoff management will be discussed next.

- 17. In the Common Ground Report there is a map that shows the spatial distribution of the rainfall by region which should be included in this presentation.**

The figure showing the spatial variation of the average precipitation in the watersheds (Figure 2-4 on page 20) can be found at:

[http://www.rmc.ca.gov/pdf/2\\_Watershed\\_Description.pdf](http://www.rmc.ca.gov/pdf/2_Watershed_Description.pdf)

- 18. For the runoff management options, what do you mean by non-urban regional recharge?**

This runoff management option would recharge the groundwater aquifer with the runoff from open space and canyons that are non-urbanized (i.e. areas where runoff is not contaminated by streets).

- 19. For the runoff management options, does treatment include wetlands?**

Yes.

- 20. How big of a factor is washing cars in the driveway to the dry weather runoff problem?**

It used to be a significant portion, but people are using car washes a lot more than they used to.

**21. Would it be practical to give rate payers (citizens) free car wash vouchers which the car wash companies could use to offset their water bills?**

Incentives are always an option.

**22. The Metropolitan Water District (MWD) is about to launch a program to give rebates to people who purchase smart irrigation systems.**

Check MWD's website (<http://www.mwd.dst.ca.us>) in the future for more information about the rebates. DWP is also doing a pilot program for smart irrigation systems.

**23. Smart design of buildings should be one of the options for source control.**

Smart building design will be added as an option for source control

**24. Eliminating all dry weather flow in the streets will create a pollution problem in the rivers and bay when the first rain event occurs. Instead of eliminating the dry weather flow, we should wash the streets and divert the runoff to the wastewater system for treatment.**

Washing the streets/urban areas and treating the runoff wash water will be added as an option.

**25. How many wetlands areas are there in/around Los Angeles?**

Wetlands restoration and constructed wetlands are new approaches for water treatment.

Current wetlands projects include the tide gate restoration project in Playa Vista and a pilot project in the Sepulveda Basin where there are some current wetland type of habitat.

**26. 95% of all natural wetlands in California have been destroyed.**

In the past as open space became more and more limited, the natural wetlands were often destroyed and developed because their value to the ecosystem was not fully appreciated. The current trend to gain the multi-benefit of wetlands is the construction of new wetlands and wetlands reconstruction.

**27. Why don't you show the many wet weather runoff source control options used here at the Media Tech Center office complex?**

In 1998 before we knew that the Bureau of Sanitation would occupy one of the buildings in the Los Angeles Media Tech Center, the office complex was selected as a demonstration site for use of some novel wet weather runoff source control methods. The site was graded and the speed bumps were designed to slow down the runoff and channel it for infiltration through the planter area, pavement, or to a French drain/trough in the back of the complex. Some things we've learned from the project is that we have to reduce ponding with some grading refinements and the French drain did not work well enough so we are replacing it with a 6 inch leach line that will leach in small rain events but will allow water to pass through in intense rain events, reducing the threat of flooding.

**28. Since wetlands are so important to source control of runoff, should the IRP get involved in saving the wetlands like in Playa Vista?**

The IRP is looking at using wetlands for treatment of urban runoff and as a final stage in wastewater treatment.

**29. How do you deal with the problems associated with wetlands like mosquitoes?**

There are methods to reduce mosquitoes. Mosquitoes can be controlled through the use of fish and amphibian species that eat mosquito larvae and through vegetation management.

**30. For the wet weather runoff source control options, what is a wet pond?**

A wet pond is always wet from runoff flowing into it. A wet pond can be converted into wetlands by only adding vegetation. A dry pond on the other hand is only wet when it rains.

**31. Since the City is so interested in runoff, why did the City not stop the U.S. Army Corp of Engineers from dumping building material into Hansen Dam and why is the Army Corp not involved with the IRP?**

The U. S. Army Corp of Engineers is participating in the IRP in the Management Advisory Committee (MAC) which meets monthly to discuss the direction of the IRP. The U.S. Army Corp of Engineers did not inform the City's Department of Recreation and Parks who manages the area around the Hansen Dam that they were going to dump the non-toxic, nuisance building material into the dam. The Army Corp of Engineers is the managing authority of the Hansen Dam.

**32. There is also concern that the Army Corp of Engineers put tens of thousands of cubic yards of material that was dredged from other river channels into the headwaters of the Tujunga in a channel that is in its natural state. In March of 2003 the City Council voted for a resolution that asked the Army Corp of Engineers to expeditiously remove the material, and at this time there is questions about how much of the material they are going to remove. There is also concern that there are not enough restroom facilities at the Hansen Dam recreational area which may lead to possible water contamination from the 4,000 weekly visitors.**

The Army Corp of Engineers is the managing authority of the Big Tujunga and Little Tujunga. The Army Corp of Engineers is participating in the IRP in the Management Advisory Committee (MAC). The Department of Recreation and Parks is also involved in the IRP as a member of the MAC and the Technical Advisory Committee (TAC).

**33. The problems in our neighborhood that are leading to runoff problems are the paving of entire lawns and the illegal dumping. The IRP should acknowledge and address these problems.**

Other possible runoff source management techniques the IRP could suggest are to reward residents for having gardens/landscape or to require residents to have at least some sort of landscape (set a percentage). Another solution for improving quality is for stronger enforcement of illegal dumping.

**34. The Zoo Drive and the parking lot for the Los Angeles Zoo are going to incorporate some of the runoff management methods.**

The parking lot of the Zoo will be designed to incorporate the runoff management techniques: runoff is directed to vegetative areas, slow down the off peak flow, capture and treat pollutants. There was a plan to construct Zoo Drive with pervious pavement, but due to maintenance concerns, the pervious pavement will not be used.

**35. Another runoff problem is that commercial buildings are being built up to the sidewalks leaving no green space area.**

Requiring better building to lot ratios can be another runoff management option.

**36. We need to know what percentage each of the runoff management techniques will reduce runoff to determine the best methods to use.**

The percentage of runoff reduced from each management technique will be considered as the alternatives are put together.

**37. The state just passed a bill to allow property owners of all R-1 zoned houses to add another building to their property. Allowing more buildings on lots will contribute to runoff problems.**

Housing needs and pollution control must be considered jointly.

**38. We also need to work on fixing the lack of integration and conflicting policies between City Departments. An example of conflicting policy is that paving unpaved alleys is considered a good thing by some City departments and bad by others because it leads to more runoff.**

To discuss the conflicting alley paving policy, we will continue our efforts to request the Bureau of Street Services to participate in the IRP Management Advisory Committee (MAC) or the Technical Advisory Committee (TAC).

**39. Another policy that needs to be changed is the law that requires cars to be parked on a paved area. And one option to mitigate excessive residential paving is to require more on-site runoff retention with more paving.**

To address these policies, we will continue our efforts to request the Department of Building and Safety to participate in the IRP Management Advisory Committee (MAC).

**40. There seems to be a disconnect between the Department of Building and Safety and the Bureau of Sanitation.**

We will continue our efforts to request the Department of Building and Safety to participate in the IRP Management Advisory Committee (MAC).

**41. The option of vegetative swales and strips for managing the runoff quantity should also be added as an option for managing the runoff quality.**

Several of the options to reduce quantity will also contribute to better quality including Wetlands and Vegetated Swales and Strips.

**42. New laws, like the one that makes it easier for property owners of all R-1 zoned houses to add another building to their property, are contrary to the goals of the IRP to reduce runoff and maintain groundwater recharge levels.**

The goal of the runoff management is **not** to stop pavement and ground coverage. The goal is to improve quality and reduce the quantity of pollutants that have to be managed.

Groundwater recharge through the spreading grounds is used to maintain groundwater levels.

**43. Unless the City is stricter in approving variances to developers, community plans that are revised to include the goals of the IRP will not be effective.**

We will continue our efforts to request the Department of Building and Safety to participate in the IRP Management Advisory Committee (MAC).

**44. As the workshop meeting day was changed to Thursdays to accommodate and allow more representatives from the council district to attend the workshop, are there any**

**council districts being represented today? And if so are you informing the council about the concerns being addressed in the IRP workshops?**

Yes, there are representatives from some council districts in attendance. Councilmember Reyes is interested in the greening possibilities that are available to comply with the water quality mandates. Councilmember Reyes is also chair of the Planning & Land Use Management Committee (PLUM) and he is doing what he can to insure that developers are complying with regulations and providing benefits to the community.

**45. Is there a way to submit our (Steering Group's) concerns to the entire City council?**

All of the recommendations that come out of the IRP will be submitted to the Council because the Council determines policy. Councilmember Reyes is very interested in green building design and other interests that he brings to PLUM. Councilmember Reyes also oversees Building and Safety. Several runoff management options being discussed fall within the Department of Public Works so they can be accomplished at a very simple level.

**46. The fact that Councilmember Reyes has 2 representatives here today speaks very highly of him and that no other council districts are represented speaks not so highly for the rest.**

Although Councilmember Reyes district was the only Council District represented at Workshop 6, several other Council Districts have been represented at previous workshops. Also Council Districts 1, 4, 7, 8, 9 and 13 are participating in the IRP Management Advisory Committee (MAC).

**47. What we are trying to accomplish is a revolutionary change in how we perceive runoff: from a nuisance that we had to rush to the ocean to a valuable resources that we should capture and use. How much of the water that falls as rain is rushed out to the ocean, 90%? We should use cistern and other methods to capture it, like Israel.**

The main drivers for managing the urban runoff are the new regulations that are being imposed on the City. The recommendations from the IRP will also drive the runoff management, but what is recommended by the IRP will depend on the focus the stakeholders value most. The preferred focus may be the "High Beneficial Use of Water Resources," but at this stage, we don't know what the preferred focus is. Also, out of the average of 350 billion gallons of rain (15") that falls each year in the region, only 36% (125 billion gallons), **not 90%**, runs off to the ocean for the most part (the county and Army Corp of Engineers capture some and divert it from the dams into groundwater recharge basins, augmenting groundwater supplies). The remaining 64% (225 billion gallons) is absorbed in the ground, used by the vegetation, or evaporates into the atmosphere.

**48. We should pressure the MWD to offer economic incentives for percolation of runoff as a method to augment the water supply. This may make the larger regional projects more feasible.**

We will consider this as an option in the financial plan.

**49. How much does it cost the City for every square foot of pavement (runoff cost)?**

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.

- 50. As the IRP plan for 2020 is realized, what do we do next? Do we plan for more and more population density? If you don't want a City of 10 million people, don't put in the infrastructure for 10 million people.**

Land use criteria is the means to address growth concerns. The Bureau of Sanitation and the Department of Water and Power are obligated to provide the infrastructure necessary to service the residents. The Bureau of Sanitation is also mandated by law to plan and provide wastewater facilities for the future residents based on SCAG's population projections.

- 51. Every Thursday the Negative Declarations are published in the paper, and if there are developments/projects that you are concerned about, you should voice your concerns to the commissioners or appropriate decision-making body.**

- 52. In Phase I of the IRP (the IPWP), one of the ideas developed to promote water conservation was to meter the water use in each apartment, instead of one meter for the entire complex. Now the PUC has a rule that if you meter the water in every apartment you become a utility and have to go through that process. We need to change the laws and to educate the City departments like Building and Safety who mandates that runoff has to flow to the street.**

We will continue our efforts to request the Department of Building and Safety to participate in the IRP Management Advisory Committee (MAC).

- 53. Gray water systems contain pollutants that shouldn't be used for irrigation. We should keep the gray water in the sewer for treatment at the plant and then reuse the recycled water.**

Gray water systems are addressed in the wastewater service function.

- 54. To address Jerry's concern about what we do next, in 20 years, I and others of the younger generation will be around to perpetuate the value changing ideas of the IRP. Also the more densely populated that Los Angeles becomes is not necessarily a bad thing because as the population becomes more densely populated rather than spreading into open space areas, the less land we will affect environmentally.**

- 55. We need to aggressively lobby to get federal and state funding for the projects.**

Obtaining outside funding is an important goal of the IRP and will be addressed in the financial funding portion of the project

- 56. Failure to provide infrastructure to support growth, as some have suggested, is going to create a disaster. We've already experienced such disasters in our freeways/highways and housing. If we don't plan for growth, you may turn on your faucet one day and get air, not water.**

The Bureau of Sanitation and the Department of Water and Power are obligated to provide the infrastructure necessary to service the residents. The Bureau of Sanitation is also mandated by law to plan and provide wastewater facilities for the future residents based on SCAG's population projections.

- 57. Does 2/3 of the rain fall infiltrates in the ground water? I thought that region wide around 80% of the rain runs off.**

Approximately 2/3 of the rain that falls in our region is absorbed in the ground, used by the vegetation, or evaporates into the atmosphere. The remaining 1/3 is runoff.

**58. Is the assumption that the capacity at the wastewater treatment plants will have to be increased if runoff is diverted to the plants taking into account the option of storage to increase capacity?**

The City will not have enough excess treatment capacity in dry weather at 3 of the 4 plants in 2020 to accommodate the dry weather runoff (110 mgd in region/58 mgd in City) unless we do something else with the wastewater. Storage options are available to manage the increased wastewater flow generated from just the increase in population.

**59. With the discussion of the structural options (facilities) available for runoff management, I'm anxious that your focus is on these structural solutions to manage runoff.**

The focus for managing runoff is first to use source control methods, and then only the runoff that is not managed through source control methods will be managed with one or a combination of the four structural options: Diversion to Wastewater System, Runoff Treatment and Discharge, Runoff Treatment and Beneficial Use, and Non-Urban Regional Recharge.

**60. Is the structural option (facilities) of Runoff Treatment and Beneficial Use only considering treatment facilities? Other options to use are sub-watershed scale, neighborhood scale, green treatment and storage facilities.**

The option of "Runoff treatment and beneficial use" is considering facilities (including wetlands and other greener treatment processes) as a last stage method for managing the runoff. Other options including neighborhood scale/household scale green treatment and storage facilities are being considered under the source control options.

**61. Change wording to make options more descriptive.**

We will strive to be more descriptive in naming the options.

**62. Is the goal of the IRP to increase the quality of life for the citizens currently living in the City or is the goal to find the maximum efficiency of the system?**

The primary objectives of the IRP developed by the Steering Group are:

- Protect the Health and Safety of the Public
- Provide Effective Management of System Capacity
- Protect the Environment
- Enhance Cost Efficiency
- Protect Quality of Life
- Promote Education

**63. We've heard about many of the conflicts there are with policy enforced by Building and Safety and runoff source control methods so why is Building and Safety not participating in the IRP?**

We are in the process of bring Building and Safety to the table.

**64. There is not enough stress being put on individual's responsibility in reducing runoff.**

Several options for individual responsibility in reducing runoff fall into the source control options including sweeping sidewalks and driveways (instead of washing with a hose), using smart irrigation systems, washing vehicles at car washes, using cistern, using retention grading.