



SUMMARY

The Alice Ferguson Foundation's Potomac Watershed Trash Summit

March 16, 2006

At: The World Bank • Washington, DC

Summary of Next Steps for the Region (Group Action Planning Wrap-Up Session/Reports from Panel Sessions)

- ▶ **Learning from the Los Angeles River Watershed Project: TMDLs and How Trash Leads to Water Quality and Public Support**
 1. Go forward with the process of listing the Anacostia River as an Impaired River for trash.
 2. Explore opportunities for obtaining federal and state grants.
 3. Conduct a Trash Total Maximum Daily Load (TMDL)-like study and perform an economic analysis of the effects a Trash TMDL would have on the Anacostia region.
 4. The effort must be cooperative and be watershed based, including many partners.
 5. Use a combined budget across departments to finance.
 6. Provide a platform for the public to voice its opinions and meet regularly to monitor progress and network.

Detailed Panel Session Notes

Learning from the Los Angeles River Watershed Project: TMDLs and How Trash Leads to Water Quality and Public Support

Synopsis: The country's first Trash Total Maximum Daily Load (TMDL) was established for the Los Angeles River Watershed. Hear varied perspectives of principals involved with the Trash TMDL (a regulator, regulatee, and key stakeholder). Learn about "Proposition O", which passed with overwhelming public support (76% of the popular vote) in the City of Los Angeles to fund cleaning trash and address watershed quality for the Los Angeles River. Discuss ways the Potomac Watershed can utilize LA's technical research and how trash gets us to better water quality.

Facilitator: *Jon Capacasa, Director, Water Protection Division, EPA Region III*

Panel Members:

- Jonathan Bishop, Executive Officer of Los Angeles Regional Water Quality Control Board
- Leslie Mintz, Legislative Director, Heal the Bay, Los Angeles, California

- Scott Lines, Storm Water Program Analyst, City of Long Beach, California
- Timothy Sobelman, Office Chief, California Department of Transportation
- Robert Boone, Anacostia Watershed Society
- Ted Graham, Water Resources Program Director, Department of Environmental Programs, Metropolitan Washington Council of Governments

► **Presentation by Jonathan Bishop**

1. Cleaning up the Los Angeles River Watershed began in 1996, following the filing of a lawsuit against the California Regional Water Quality Control Board for not properly managing water quality issues related to floatable materials (e.g. packaging materials, beverage containers, tires, steel, and liquids).
2. In March 2001, the Environmental Protection Agency (EPA), Heal the Bay, and Santa Monica BayKeeper signed a consent decree that required the establishment of a Total Maximum Daily Load (TMDL) for floatable materials as well as solid, suspended, and settleable materials.
3. The Los Angeles Regional Water Quality Control Board finalized its Trash TMDL and implementation plan in September 2001; EPA approved the Board's Trash TMDL in 2002.
 - a. Soon thereafter, the Coalition for Practical Regulation sued the county, claiming the Board did not conduct a thorough cost-benefit analysis, environmental analysis, or assimilative capacity analysis.
 - b. In January 2006, higher courts upheld the Trash TMDL strategy on all accounts except for environmental documentation.
 - c. 2006 will be the first year for the Board to enforce compliance with the Trash TMDL.
4. Development details of the Trash TMDL for the Los Angeles River Watershed:
 - a. Set numeric target for the watershed's Trash TMDL at zero.
 - i. How you define "zero" dictates how much flexibility you have when attaining the trash reduction goal because it is inevitable that some trash will appear in waterways.
 - b. Assessed assimilative capacity of waterways for trash.
 - c. Identified annual waste load *reductions* over a 10-year period for each type of trash source (commercial businesses, industries, residential communities, etc.).
 - i. Assuming the waterways of the LA River Watershed will have reached the Trash TMDL numeric target of zero at the end of the 10-year period, the waste load *allocation* will be set at zero for each trash source.
 - d. Established baseline monitoring over a 4-year period, focusing on different land use types.
 - i. Found that the commercial and industrial land use areas generated the highest amount of trash, followed by mixed urban land use areas.
 - e. Defined methods for enforcing compliance with the waste load reductions/allocations and numeric target for the Trash TMDL.
 - i. In California, an implementation plan *must* be created when establishing a TMDL.

- ii. The implementation plan for the LA River Watershed's Trash TMDL included an anti-litter campaign and the insertion of partial and full capture devices in storm water catch basins.
5. *Key message: Organizing watershed cleanups is not enough; a regulatory hammer must be in place to realize success.*

► **Presentation by Leslie Mintz**

1. Heal the Bay and its partners had to overcome “cultural inertia” when promoting a trash free initiative in the Los Angeles River Watershed.
 - a. The organization observed a shift in cultural response from, “Why do we have to do this?” to “How do we do this?”
2. Reason for success realized to date?
 - a. Heal the Bay and its partners used legal action to bring attention to the watershed's trash issue (stick).
 - b. Heal the Bay and its partners created a collaborative bond measure to fund the trash free initiative (carrot).
3. In collaboration with multiple partners, Heal the Bay campaigned for passage of Proposition O during the November 2004 election. This proposition requested the issuance of a \$500 million bond to fund the removal of trash from storm water drainages, rivers, and beaches (in addition to funding other water quality measures).
 - a. Residents of the City of Los Angeles passed the proposition and by March 2006, \$25 million has been allocated to insert capture devices in storm water catch basins.
4. Heal the Bay is now working to amend a California statute so that storm water maintenance fees can be collected among select taxpayers.
5. Strengths of the LA River Watershed's Trash TMDL:
 - a. Establishment of the TMDL is tied to an implementation plan.
 - b. The numeric target of zero has functional equivalency (because no capture device is 100 percent effective).
 - c. TMDL has interim enforceable limits.
6. When the Coalition for Practical Regulation claimed the numeric target of zero posed economic hardships for residents of the LA River Watershed, proponents of the TMDL turned toward various studies to prove that a healthy environment yields a healthy economy.
7. *Key message: The Potomac River Watershed is ahead of the game because it is starting the trash initiative with political buy-in. However, you need to remain vigilant and make sure the goals of the treaty/ action plan are upheld.*

► **Presentation by Scott Lines**

1. Like the Washington, DC, metropolis, the City of Long Beach is an urbanized community with a high density populace.
2. Long Beach spans 872 square miles and is located at the mouth of the Los Angeles and San Gabriel Rivers.
 - a. 12,000 tons of trash were collected along city beaches in 2005.
3. Typically, federally appropriated dollars support only the construction of capture devices in local municipalities. Thus, municipal governments must use other

- funds to cover the costs for operating and maintaining the structural devices that separate trash from storm water.
- a. To clean its portion of the LA River Watershed, the City of Long Beach had to apply for grant funding; nearly \$10.55 million has been awarded to the city since 2001.
 4. Trash source control programs (e.g. beach cleanups, street sweeping, and curbside recycling) cost roughly \$16 million per year.
 5. Types of structural Best Management Practices (BMPs) for which the City of Long Beach has received funding:
 - a. Catch basin inserts, which trap bacteria in addition to floatable waste and solid, suspended, and settleable materials.
 - i. 1,844 have been installed at 600 locations.
 - b. Vortex separation systems, which help collect trash along highways.
 - i. Installed at two locations; collected 15,000 pounds of trash in 2005.
 - c. Trash net system, which is located at pump stations but requires expensive upkeep (cranes are needed to remove nets).
 - i. Installed at five pump stations.
 6. As of March 2006, the City of Long Beach has three pump stations without any type of capture device.
 - a. The city has applied for funds to create and install an “imaginative trash capture device”. Lines worked with an engineer to create a blueprint for the device, which he hopes will collect 225,000 pounds of trash in one year.
 7. *Key message: Grants are a good source of financial support for operating and maintaining capture devices and are also a good way to test new technology.*

► **Presentation by Timothy Sobelman**

1. The California Department of Transportation (Caltrans) has three components within its TMDL implementation plan: trash source control, structural devices, and public education.
2. Caltrans initiated a pilot program to develop and evaluate capture devices. Designs for capture devices that ultimately receive Caltrans approval have the following features:
 - a. Full capture system with a small footprint;
 - b. Non-proprietary so that competitive bidding is allowed;
 - c. Safe maintenance;
 - d. Maintenance friendly (e.g. device only has to be cleaned out once a year);
 - e. Drains within 72 hours to discourage egg laying among breeding mosquitoes; and
 - f. Passes test for hydraulic design flows.
3. Overall goal of the pilot program is to construct *smaller* storm water capture devices that are *better* than the more traditional devices and *cost less* to build and maintain.
 - a. One challenge of the program is identifying a single capture device that can address multiple TMDLs (e.g., trash and nitrogen).

4. Once structural designs have been approved, Caltrans develops a range of citing characteristics and evaluates hundreds of locations for initial placement of the new designs.
 - a. Recently approved designs are: well-screen linear radial, wedge wire inclined screen, and direct flow inclined screen.
 - b. Caltrans intends to construct the new approved capture devices during summer 2006.
5. Regarding public education, the Don't Trash California campaign (www.donttrashcalifornia.com) is being marketed through television, radio, sporting events and similar avenues.
 - a. The campaign began at the local level in Fresno.
6. *Key message: Use technological advancements to construct capture devices that are more efficient and cost effective.*

► **Presentation by Robert Boone**

1. In the Anacostia River Watershed, the District used to have “Litter Bugs” who only had to pay a \$25 fine for littering; today we now have “Litter Thugs” who have to pay a \$25,000 fine for littering.
2. Actions the Anacostia Watershed Society has implemented to date:
 - a. Stenciling “Anacostia River Watershed” on curbs above storm drains.
 - b. Installing trash booms, netting trash traps, and trash screens.
 - c. Operating a trash skimmer along the waterways.
 - d. Advocating the purchase of a street sweeper.
 - e. Organizing an annual Earth Day cleanup.
 - f. Mobilizing volunteer action.
 - g. Educating the public.
3. *Key message: You have to break the chains of denial before you can succeed at cleaning up a waterway/watershed.*

► **Presentation by Ted Graham**

1. To establish a TMDL in the Potomac River Watershed, we must consider the following actions:
 - a. List the Potomac River as an impaired waterway under the Clean Water Act so that a TMDL can be established.
 - b. Conduct a TMDL analysis:
 - i. Collect data on how much trash is being generated and where;
 - ii. Identify trash reduction needs;
 - iii. Develop an implementation plan; and
 - iv. Conduct a cost-benefit analysis to evaluate the pros and cons of having a trash free environment.
 - c. Procure a continual commitment from local governments (keep the political will alive); and
 - d. Pass legislation that requires implementation of the agreed-upon TMDL.
2. *Key message: We need to improve the working relationships among different agencies and departments. Without a strong multi-agency partnership, it will be difficult to realize success under the TMDL implementation plan.*

► **Question and Answer Session**

- *Do you have to create a TMDL first?*
No. You can design and implement an action plan first. You also don't have to list the river as an impaired water body under the Clean Water Act before establishing a TMDL (or implementation plan) because you can create TMDLs for waters that are *threatened* with impairment. [Jon Capacasa]
- *How do you find money to support your storm water management activities?*
Traditional funding sources include statewide bonds and grants. But you can also try to collect maintenance fees for storm water devices, or even enlist support for county-wide bonds. An interesting idea a community could consider is using third party audits to evaluate your water quality control program. *Note:* when it comes to passing bond initiatives, you will garner more support among elected officials if you poll the voters first. [Leslie Mintz]

