

MWRA ADVISORY BOARD

WATER AND SEWER UPDATE

NOVEMBER 1990

BY JOSEPH L. NARGI

News and information on MWRA water and sewer programs, projects and policies. Provided as a service to cities and towns by the Advisory Board.

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CSO FACILITIES PLAN AND ENVIRONMENTAL IMPACT REPORT

The MWRA Board of Directors voted to file a joint Final CSO Facilities Plan and Environmental Impact Report. The recipients of the report will be the Federal District Court, the Department of Environmental Protection, and the Secretary of the Executive Office of Environmental Affairs. The submitted CSO Facilities Plan recommends the incorporation of CSO controls at each of the six receiving water basins: the Inner Harbor, Lower Charles River, Upper Charles River, Dorchester Bay, Neponset Estuary, and Alewife/Mystic River. The plan has a price tag of \$1.222 billion in 1990 dollars.

The intent of the CSO program is to decrease the amount of untreated sewerage, which enters the receiving waters, due to wet weather discharges from the outfalls. The approval of the plan by the Court, DEP, and EPA, will allow the MWRA to begin the next phase: to adopt a schedule and begin permitting, designing, and constructing the CSO facilities.

The proposed CSO Facilities Plan incorporates a deep storage tunnel system to provide 342 million gallons of storage for the Inner Harbor, Dorchester Bay and Lower Charles River basins. The 16.2 mile storage system will include a number of drop shafts with air venting and odor control facilities, two work shafts for construction purposes, and two pump stations which will convey flow after the wet weather passes. In addition, a near surface storage

system has been recommended for the Alewife/Mystic River basin consisting of a consolidation conduit for CSO storage and a small pump-out station. The Plan also calls for partial sewer separation at the Neponset Estuary, and for the continuance of ongoing system improvements and sewer separation at the Upper Charles River basin.

The Environmental Impact Report (EIR), which has to be filed due to the magnitude of the Plan, addresses any adverse environmental impacts which may result from its institution. Areas studied include: effects on surface resources (land, air and water), as well as the impact on human and cultural resources. In addition, the EIR reviews the existing conditions of the affected environment in order to provide a baseline against which impacts may be measured. The impact of constructing and operating the facilities are also analyzed, as well as the means to mitigate any adverse environmental impacts.

MDC BEACH POSTINGS

The MDC Beaches are posted with warning signs when high levels of fecal coliform and enterococcus are detected in the water. This year the number of MDC beach postings due to contamination decreased. The greatest improvement was found at Constitution Beach, which experienced a drastic decrease in bacteria counts over last year. This may be attributed to the sewer maintenance work that occurred in the area. There was relatively small improvement at Carson Beach, and Tenean Beach experienced no improvement over 1989. However, none of these beaches were posted during dry weather, which is an improvement over past beach seasons. Continued efforts by the MDC and MWRA will result in additional improvement for our beach areas.

MDC WATERSHED DIVISION BUDGET WOES

State budget cuts have taken their toll on the MDC Watershed Division. Over the past few years this division has experienced steady decreases in manpower. The Watershed Division currently employs 111 people, 54 less than in FY 1988. This staffing level is well below what is required to adequately manage the watershed area. The Watershed Division has been unable to adequately address the numerous infrastructure problems which currently exist. It is estimated that \$37 million worth of planned capital projects were non-funded by the state and the time frame for funded projects has been shifted to accommodate the lack of resources. To illustrate, flow monitors scheduled to be installed at Gates Brook last April have yet to be put in place; and a number of key programs such as: environmental enforcement, dam safety and maintenance of watershed grounds have suffered. In addition, all work at Sudbury Reservoir has been ignored with the exception of basic maintenance. Furthermore, manpower limitations have caused substantial setbacks at the Wachusett Reservoir.

MWRA ratepayers currently fund 75% of watershed protection (last year ratepayers funded 50%). The Advisory Board is concerned that the MDC provide the resources necessary to meet the standard of watershed protection required by the DEP and EPA. To this end, the Advisory Board also be working closely with the MDC and MWRA to develop the best possible solution to maximize efforts in watershed protection. Through these actions the Advisory Board hopes to avoid building a filtration plant, which has been estimated in the most recent Authority capital budget as costing \$250 to \$350 million.

DOMESTIC DEVICE RETROFIT PROGRAM

On October 2, 1990, the contract for the MWRA's Domestic Device Retrofit Program, Operation Watersense, was signed. The Authority contracted DMC Services, Inc., to conduct this \$12.5 million program. 430,700 households are expected to be retrofitted over a period of 3 years with each installation including low-flow shower heads, faucet aerators and toilet dams. Canvassers will call on each dwelling in the MWRA communities in an attempt to make appointments. Once scheduled, an installer will retrofit the dwelling with conservation devices and check for leaks.

The program, which is currently in the start-up phase, will begin retrofitting multi-family dwellings to be followed by single family homes. The communities already scheduled to participate include: Boston, Quincy, Milton, Norwood and Brookline. The program will then proceed to the remaining MWRA communities. A detailed operation plan is expected by mid-November with installations to begin in January 1991.

CONSERV 90

A water conservation conference, CONSERV 90, was held in Phoenix, Arizona in August. It was jointly sponsored by the American Water Works Association, National Water Well Association, American Water Resources Association, and American Society of Civil Engineers. More than 200 technical sessions, workshops, panel discussions, and posters created an interesting atmosphere for over 1500 conferees. The conference conducted sessions on politics, cost benefit analysis, local and regional water supply planning, and ultra low-flow toilets.

The AWWA distributed conservation awards (Camel Awards) with winners being chosen in 15 categories. Entries were submitted from 95 cities and water agencies. Massachusetts received two awards; the Town of Wellesley received an award for Marketing Communications and the MWRA received one for the Youth Education Program.

MWRA ENTRANCE FEE POLICY

The MWRA Board of Directors approved a policy establishing a method to calculate entrance fee and connection costs required of new users joining the Authority's water service area. The formula ensures that new users will be paying their fair share of the cost of the waterworks system in place at the time the user joins.

The basic formula for the fee is as follows:

$$\frac{\text{Applicants Water Consumption}}{\text{Total System Water Consumption}} \times \frac{\text{Value of Total Paid Assets of Waterworks System}}{\text{Assets of Waterworks System}}$$

The formula is based on a 5 year average of water consumption for both the applicant and the system as a whole. As for construction costs, the user will pay for the cost of providing a direct connection to the Authority's waterworks system and will be charged to the new user as they are incurred. The costs will also include expenditures by the MWRA for outside services necessary to make the connection, such as design studies, land acquisitions environmental reviews and actual construction. As the policy is now in place, its rules are applicable to the Town of Bedford, in the event the town is granted permission to become a member of the MWRA water system.

LEAK DETECTION PROGRAM UPDATE

As of October 23, 1990

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|----------------------------|----------|
| Miles of Pipe Surveyed | 6085 |
| # of Leaks Detected | 2357 |
| Estimated Leakage Detected | 30.6 MGD |
| Leakage Repaired | 28.1 MGD |

ADVISORY BOARD'S NEW LOCATION

The MWRA Advisory Board has moved to a new location. We now reside at 11 Beacon Street, Suite 1010. Although we moved, our telephone and fax numbers remain the same.

CALENDAR OF EVENTS

- December 6th - Operations Committee Meeting, Brookline.
- December 12th - MWRA Board of Directors Meeting.
- December 14th - Advisory Board Executive Committee Meeting.
- December 20th - Advisory Board Meeting, Boston at 11:30 AM.

" HAPPY HOLIDAYS "