



Wastewater Planning, Siting and Construction Management for the Massachusetts Water Resources Authority, 1988 - 2002

Problem and Strategic Goals: The Massachusetts Water Resources Authority (MWRA) provides wholesale water and wastewater services to 42 communities in Metropolitan Boston. The MWRA was established in 1985 by the Massachusetts Legislature as an independent authority with rate raising ability. The predecessor agency, the Metropolitan District Commission, was consistently underfunded, with the result that the water and sewer infrastructure of the region was failing, in violation of the law and in need of significant repair. The first task the new agency undertook was the subject of a Federal Court Order. The Boston Harbor Project was a \$3.4 billion, 12 year planning, siting, design and construction project. While the MWRA began the project under the “protection” of the Court Order, it wanted to establish credibility, confront the issue of rising rates for its services and establish strong relationships with its retail customers, the cities and towns and the bonding agencies that would be approached to underwrite the project. The agency also had to design and begin construction of mammoth new facilities on time and on budget; delays were estimated to cost \$2 million per day. RVA was a member of the public-private team guiding the project from siting of new wastewater treatment facilities in 1988 through completion of the last elements of the project in 2002.

During this time, RVA produced all of the project publications (fact sheets, press releases, speeches, articles for professional journals) and project videos (worker safety, project information, updates, etc.). RVA ran contractor conferences to attract bidders to the job and set up and staffed all of the community meetings. In addition, the firm provided still, slide and video documentation on the project so that the Board of Directors, Federal Judge, wholesale customers, rate payers and hundreds of contractors, workers and members of the media could keep track of project progress. The project drew visitors from Japan to Scandinavia, including engineers and public officials. RVA produced information in conjunction with engineering and MWRA staff members, even translating materials into Japanese for tours.

Research and Marketing Objectives: Working with MWRA Public Affairs staff and the Executive Office, RVA developed public relations materials to address all of the constituencies. The constituencies and marketing objectives included the following:

- **Bonding agencies:** Introduce the MWRA as an independent authority, capable of designing and building a world-class project and raising rates to pay off the bonds
- **Contractors:** Introduce the project, its components and the need for experience and quality bids and the Project Labor Agreement
- **Cities and Towns:** Establish the agency as competent, managing the project firmly, controlling rates, building new facilities and paying attention to O&M
- **Unions:** Expand to include more workers, a more diverse community and binding arbitration
- **Environmental groups:** Help build support for completion of the project
- **Rate payers:** Provide education about wastewater facilities and environmental goals while balancing cost and providing rate relief
- **Project abutters:** Provide information, response mechanisms and mitigation
- **The Federal Court and litigation partners:** Provide timely information, meet goals and develop a partnership to build support in the face of rate increases

The Campaign: Working with the project management, construction team and public affairs staff, RVA developed marketing and persuasive products for all of the constituencies, from the direct business customers (rating agencies on one hand, cities and towns on the other) to the indirect rate payers (local sewer bills include a component for community service and repairs). These campaign elements included:

- **Videos** targeted to the constituencies: quarterly progress videos; semi-annual summary videos; water quality and technical videos; videos for the communities to promote understanding of and support for the project; construction update videos and videos of technically challenging areas of the construction; public service announcement videos; worker training and safety videos.
- **Newsletters:** fact sheets on all elements of the project, including versions for abutter neighborhoods; environmental interests; cities and towns; construction workers.
- **Events and conferences:** to attract contractors and workers; to inform rate payers and their representatives; for the Board of Directors; and to celebrate ground breakings and dedications
- **Documentation:** Composed of slides, stills and video, these images documented work site conditions and progress each month. They helped save millions of dollars in claims for the agency by establishing baseline and changing conditions at a point in time. RVA took and catalogued more than 30,000 project images and information and thousands of feet of video, which are now catalogued in the state archives.
- **Written materials and graphics:** Articles for professional and construction journals; speeches for environmental meetings, town meetings and presentations; graphics for local and regional newspapers to explain the project and the MWRA's website; press packets for regional media; opinion editorials for weekly and daily newspapers.

Budget Allocation: The MWRA did not purchase media, but RVA prepared and distributed videos to all of the cable and commercial stations in Massachusetts on a regular basis. PSAs were prepared and distributed to offer aerial photography to regional media and to attract interest in project milestones, successfully completed. At the conclusion of the project, RVA prepared and distributed a summary CD and two-DVD set on the Boston Harbor Project to customer Cities and Towns, municipal centers, libraries and schools. RVA's entire budget (labor, print, video, etc.) was approximately \$1.6 million. This figure was far less than the savings on several change orders and the amount that would have been lost due to project delays in one day!

Results and Verification: The structure of the Boston Harbor Project was one of the primary reasons for its success. The project established strong public sector oversight of a job managed by experienced private sector firms. Yet episodes of "rate revolt" and the potential for delays that could have resulted from lack of extra funding or a lack of confidence on the part of the bond market could have impacted the project at any time. Strong project management was part of the marketing campaign strategy and it complemented the messages that the MWRA sent to its many constituencies. The best verification may be the fact that the project was completed on time and under budget, with none of the controversial coverage that afflicted other major regional construction. Preventing stoppages, encouraging support by vital constituencies, keeping funds flowing by reporting success and maintaining a positive image for bondholders and elected officials were all elements in this success. As a wholesaler, the MWRA succeeded in bringing along its members communities, which also carry the costs of local service. At the outset, some communities supported the project, while others feared they would pay the price locally for the cost of the project. The public relations approach was aimed at these concerns and strong project control helped dampen alarmist reactions, which were proven to be wrong.