



A 30-Year History

30 Years of the MWRA and Advisory Board

Creating the Best Regional Water and Wastewater Solution in the United States

The following document covers the 30-year history of the MWRA and Advisory Board with a timeline of major MWRA accomplishments in each calendar year and a narrative of the Advisory Board's involvement in the process of shaping the MWRA of today. Below is a brief history of how the MWRA and Advisory Board came to be, followed by six 5-year periods, and a final look at the future challenges facing both entities.

With the Acts of 1984, the **Massachusetts Water Resources Authority (MWRA)** and a separate entity, the **Advisory Board**, were created and put into effect on July 1, 1985 (Fiscal Year 1986). The MWRA took control from the previous agency that handled water and wastewater services in the Greater Boston area, the **Metropolitan District Commission (MDC)**, which had failed to provide services in compliance with federal and state regulations.

The true genesis of the MWRA came in December of 1977 when Congress passed amendments to the Clean Water Act that allowed publicly owned treatment works (POTW) like the MDC to apply for a waiver from requirements to upgrade secondary treatment. The MDC applied in 1979 and was denied. In December of 1982 the City of Quincy filed a suit against the MDC claiming violation of the **Massachusetts Clean Water Act** for discharges from the Nut and Deer Island facilities into Boston Harbor. Judge Paul Garrity was assigned to the case. Congruently, the Conservation Law Foundation sued the MDC in June of 1983 in federal court, claiming that sewage discharges violated the federal Clean Water Act. Judge Mazzone was assigned the case.

In July, 1983, Judge Garrity appointed Charles M. Haar as Special Master and he issued the Report of the Special Master in August of 1983 recommending that the MDC evaluate the need for an independent sewerage authority. In November of 1983 Judge Garrity issued an **injunction barring new sewer tie-ins until a new independent authority was created** and set a trial date to consider placing the MDC in receivership. In December of 1984, due to federal and state court decisions, the Massachusetts Legislature passed the Acts of 1984 that established the MWRA and the Advisory Board, set to take effect for the following fiscal year, beginning on July 1st.

To get their foot in the door and have control over the new MWRA, the **Environmental Protection Agency (EPA)** also filed a suit, which was then joined with the existing Conservation Law Foundation suit in January 1985. Also at this time, the newly created Advisory Board of the MWRA reviewed the first MWRA current expense budget for Fiscal Year 1986, and shortly thereafter, the MWRA assumed responsibility for the MDC water and sewer systems. After assuming control, the MWRA Board of Directors voted to build new treatment facilities on Deer Island in response to the recommendation of the **Final Environmental Impact Report**. Additionally, the report recommended that the existing Nut Island Treatment Plant be decommissioned and converted into a headworks facility when the South System flows were transferred to the new Deer Island Treatment Plant (DITP).

At the tail end of 1985 Judge Mazzone found the MWRA to be liable for the MDC's acts, which mainly entailed underinvestment in the water and wastewater systems to the point of near system failure. Judge Mazzone issued a court-ordered schedule for projects deemed necessary for compliance with the Clean Water Act which included a series of deadlines.

The following timeline starts from Day 1 of MWRA control of the waterworks and wastewater systems.

1986 to 1990

A New Era

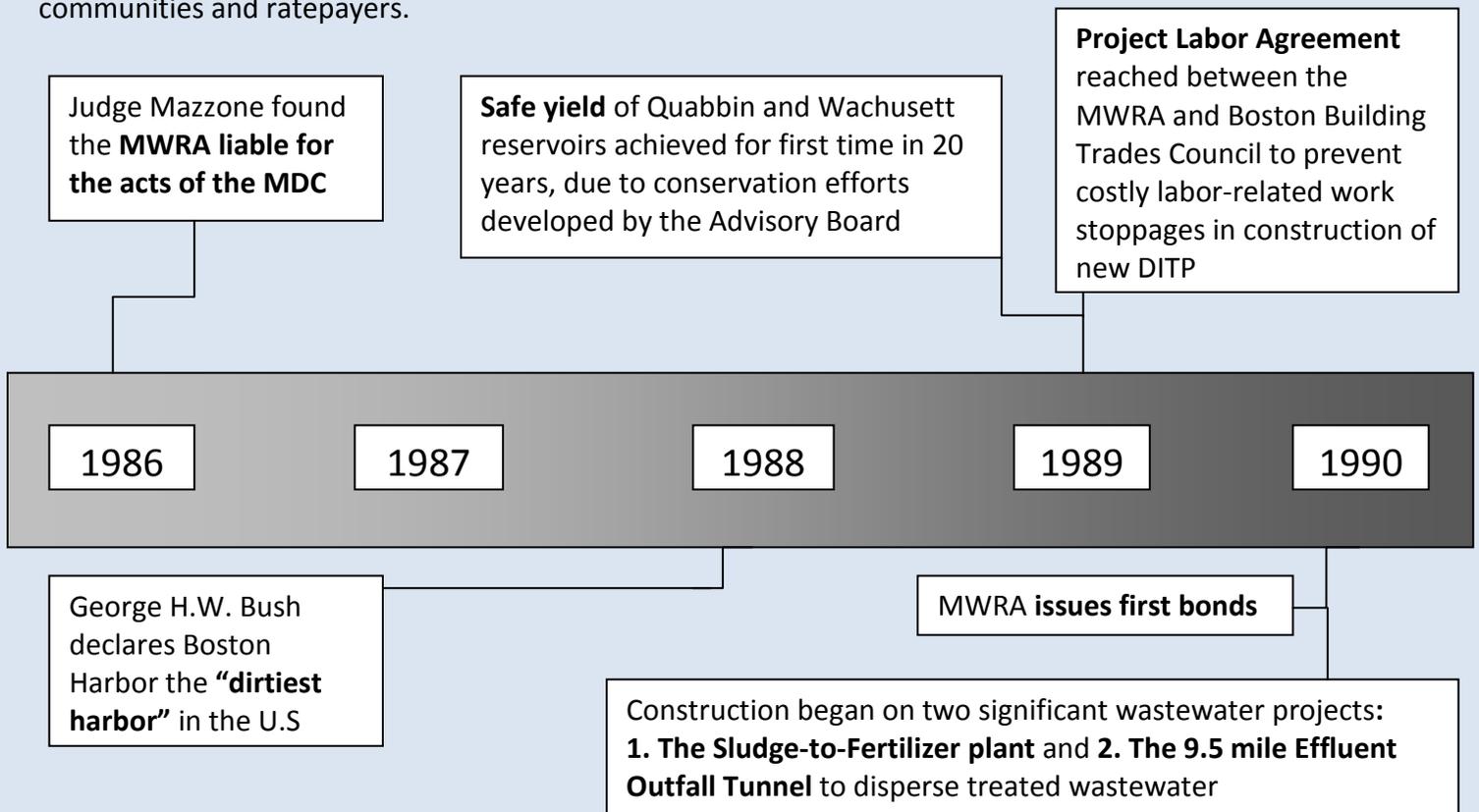
The MWRA Begins to Borrow for Court-Mandated Projects and the Advisory Board Fights to Cut Costs

The early years of the MWRA followed a consistent theme: state and federal court mandates and legal decisions went against the Authority costing ratepayers billions of dollars. By January 1986, Judge Mazzone found that the MWRA was liable for the acts of the MDC, meaning that the Authority not only had to comply with new mandates, but also address previous failings of the old agency. The cost of these mandates required that the Authority have the ability to borrow, which the MDC had not been able to do. The costs associated with this borrowing have become the main driver of rate assessment increases ever since with \$7.9 billion in capital spending being borrowed from 1986 through 2014.

In addition to fighting back against the more stringent mandates handed down, the Advisory Board also helped craft MWRA policy to allow for compliance with existing mandates. In 1987, the Advisory Board developed a rate assessment policy to encourage water conservation and recommended that the MWRA begin metering wastewater. Because of these policies, by 1989 water demand had dropped and the safe yield of Quabbin and Wachusett reservoirs was achieved for the first time in 20 years.

During this period the Advisory Board also took aim at the state for forcing control of the Clinton Wastewater Treatment Plant on the Authority, for which the MWRA assumed operational responsibility in 1987. The cost of operating the facility was the main concern of the Advisory Board, which fought to ensure the state or the Town of Clinton pay for its fair share (*see 1991-1995 for more information on Clinton*).

This initial period set the tone regarding the role that the Advisory Board has had to play in keeping MWRA costs under control for the sake of the ratepayer. In 1990 the Advisory Board forced the Authority to lower its proposed combined rate assessment increases down from 46% to 20%. Controlling rate assessment increases has always been one of the driving forces for Advisory Board members because they represent their communities and ratepayers.



1991 to 1995

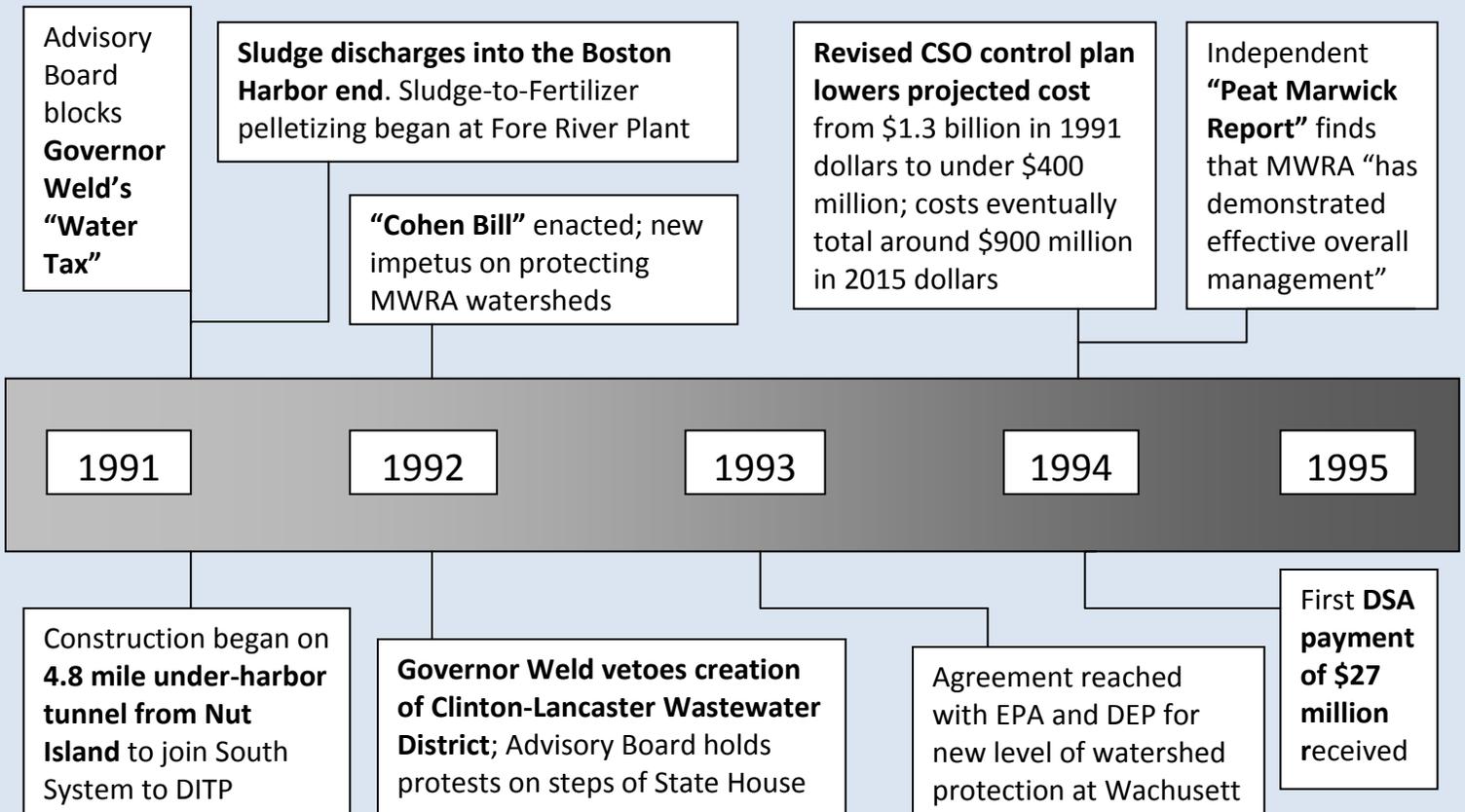
In Full Swing

The MWRA and Advisory Board Optimize Water and Sewer Systems and Policies

The Advisory Board focuses on fairness for all of its communities. This philosophy led to a lawsuit against the Town of Clinton for nonpayment of user charges, as all communities must pay their fair share of the system. The initial court ruling favored the MWRA in the amount of \$6.1 million, but was appealed to the Supreme Judicial Court (see 1996-2000 period for result). A cry for fairness from member communities also led the Advisory Board to restructure the sewer rate methodology, creating a new “flow-based” method in June 1995. This sewer rate methodology has been in place ever since and the Advisory Board, through its dedicated members, was instrumental in getting all communities to agree on a fairer system.

In addition to fairness among communities, the Advisory Board pushed for fairness from regulators, pointing out that state and federal mandates were costing ratepayers millions of dollars and increasing the cost of water and sewer services rapidly. To address this, the Advisory Board put forth an initiative to have the Legislature enact the Commonwealth Sewer Rate Relief Fund (Debt Service Assistance), which allowed the MWRA to recoup some of its debt service expenses on court-mandated projects. Additionally, the Advisory Board pushed to have some court-mandated projects rolled back in size and scope for the purpose of saving eventual debt service costs that would be picked up by ratepayers. As an example, in October 1995, the proposed secondary treatment “Battery D” was eliminated from the Deer Island construction plan saving an estimated \$125 million in design and construction costs. Finally, in 1991, the Advisory Board spearheaded legal action against Governor Weld’s proposed “water tax” and won the landmark decision.

With the introduction of Debt Service Assistance and the continued financial oversight performed by the Advisory Board, the FY1995 rate assessment increase was kept to 0% for the first time since the MWRA was created 10 years earlier. Unfortunately, this would not become the norm, as increasingly stringent state and federal regulations continued to hammer the Authority and subsequently, the ratepayers.



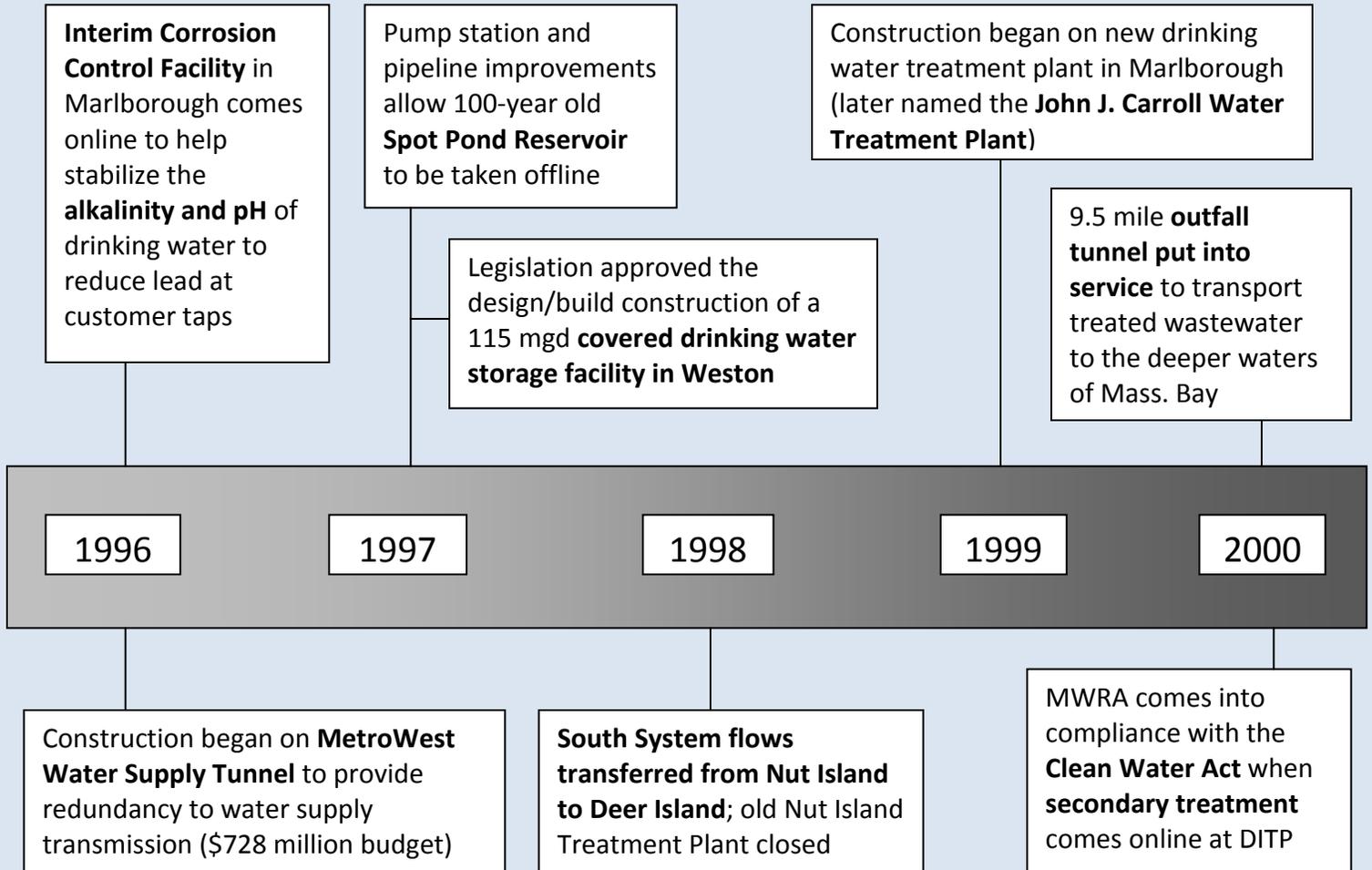
1996 - 2000 Cutting Back

The Advisory Board Combats Rising Water and Sewer Rate Assessments

Not all major costs of the Authority were court-ordered, many projects were done to improve the system and ensure quality water and wastewater services could be provided with no interruptions in service. An example is the MetroWest Tunnel, which provides redundant water supply transmission to MWRA customers. Construction began in June of 1996 but because it was not considered to be court mandated it was not eligible for Debt Service Assistance. By December 1996 the Advisory Board had successfully petitioned to make the project eligible, gaining vital funding to offset the cost to ratepayers.

Also, in 1996 the Advisory Board finished the drawn out battle over the costs of the Clinton Wastewater Treatment Plant by securing \$4 million from the Legislature as part of a settlement agreement of the lawsuit against the Town of Clinton. While this was a great victory at the time for the Advisory Board, continued attempts by the state to push off expenses of this facility onto the MWRA have led to various battles.

While major accomplishments were reached during this period – namely, transferring South System flows from Nut Island to Deer Island – the impacts of rising costs on communities and ratepayers reached almost extreme levels and the Advisory Board was once again forced to take the role of “fiscal watchdog.” In 1999, the Advisory Board recommended cutting \$10.8 million from the MWRA’s budget and \$91.9 million from the MWRA’s capital plan to combat rising rate assessments. These cuts led to conversations about how to reduce spending through personnel costs (personnel study) and capital projects (5-year CIP spending cap). *(see next period)*



2001 - 2005

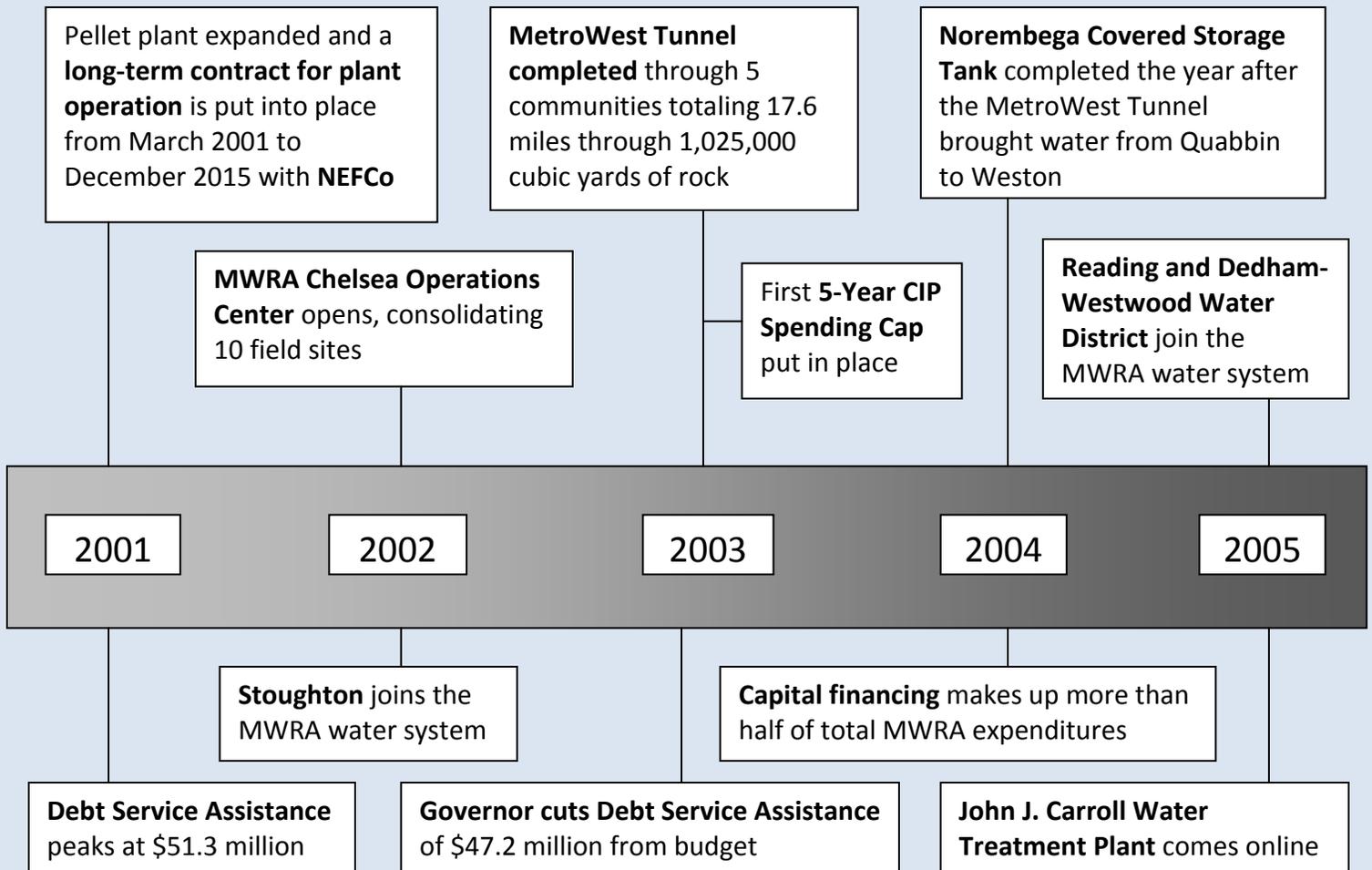
Brand New Waterworks System

Completion of Major Water Initiatives and Entry of New Water Communities

The beginning of 2001 held the finishing touches on the Deer Island Treatment Plant as the punch-list was completed. This turned significantly more attention to the waterworks system and between 2003 and 2005 three major initiatives were completed, including the MetroWest Tunnel, the Norembeqa Covered Storage Tanks, and the John J. Carroll Water Treatment Plant.

These significant projects, detailed below, optimized the waterworks system and helped support the expansion of the system with Stoughton, Reading, and Dedham-Westwood all joining the MWRA between 2002 and 2005. Important to note is that the Enabling Act explicitly calls for the Advisory Board to vote on any new communities who wish to join the MWRA. At this time, there was discussion about whether the MWRA should sell more water with opposition coming from certain environmental groups who were calling for more water conservation. Ultimately, the Advisory Board's member communities decided that more water customers could be served by the MWRA without any harm to the system while also lowering the shared costs of the system by adding new members.

Finally, this period illustrates one of the most significant steps that the Advisory Board has taken to combat rising costs of debt service: the institution of a **5-Year CIP Spending Cap**, put in place for the 2004-2008 timeframe. The cap set a strict limit on the amount of capital spending that could be undertaken by the Authority. The cap was extremely effective and was followed up by two 5-Year CIP Spending Caps since then in 2009-2013 and the measurably lower cap for 2014-2018.



2006 to 2010 Planning Ahead

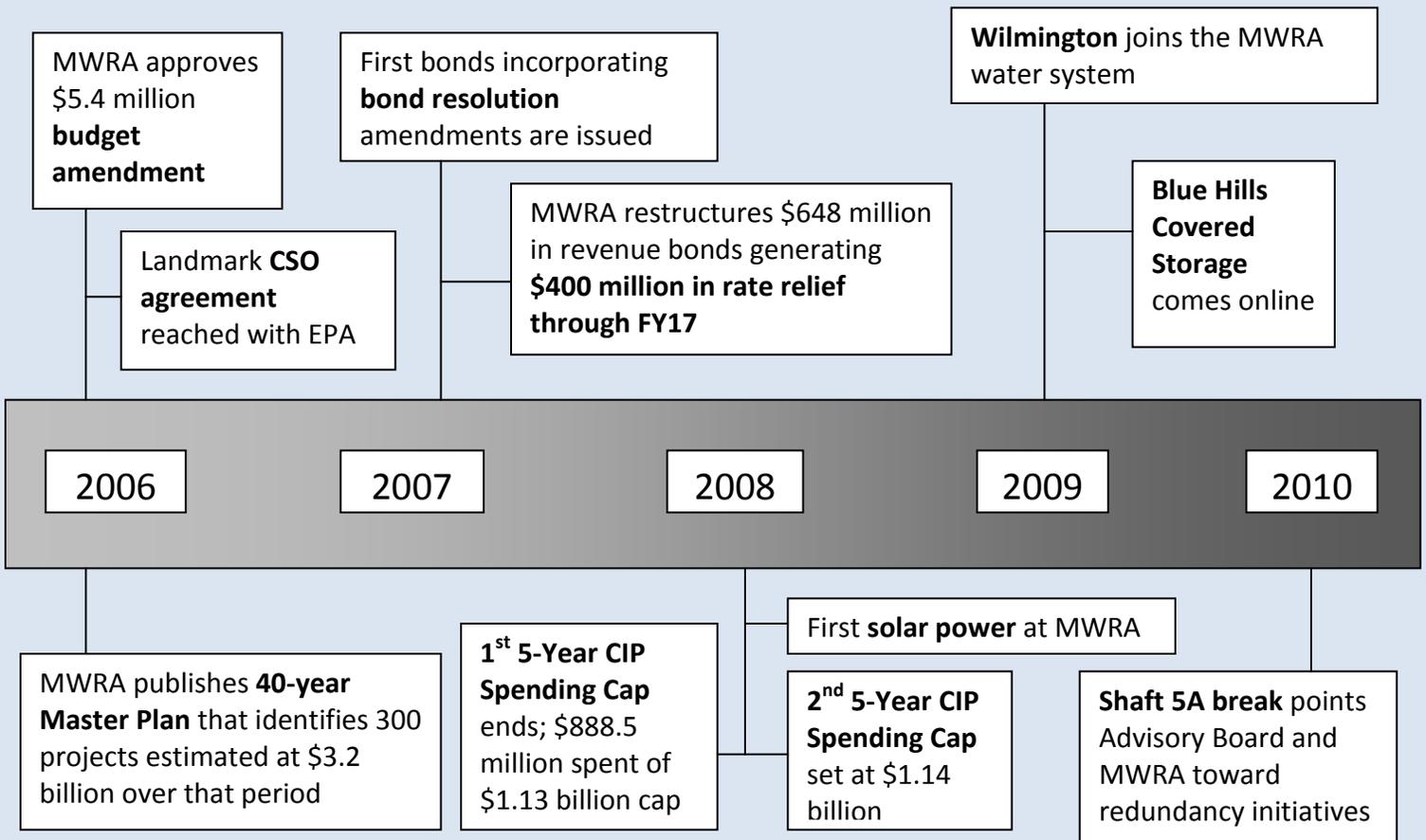
Creation of the Master Plan and a 5-Year Capital Spending Cap

The most common “fight” that the Advisory Board had to undertake prior to 2006 was with state and federal regulators over increasingly stringent regulations and mandates. But between 2006 and 2010, the Advisory Board focused mainly on how the Authority could alter its organizational structure and philosophy to save ratepayer money, while still delivering the same level of service.

First, the Advisory Board continued to recommend that the Authority develop a “Master Plan” that prioritized projects and detailed what areas of the system needed to be focused on and in what order. With this list of priorities, the Advisory Board helped develop the second 5-year capital spending cap with the Authority, which would limit the amount of capital spending that could be done from 2009 to 2013. Additionally, the Master Plan was able to identify more efficient ways to restructure the organization.

Restructuring also led to a question of how large, in terms of personnel, the Authority should be to run efficiently. In February 2010, the Advisory Board wrote a letter to the Board of Directors of the MWRA requesting that the Authority undertake a staffing study to determine the appropriate level of staffing for the organization. The staffing study then allowed the Authority to slowly restructure, while keeping their personnel costs low as skyrocketing health care costs were offset by a declining headcount.

Finally, one of the simple but significant victories from this “Planning Ahead” period was the removal of the “back-up landfill” annual standby fee of \$1.25 million. After years of paying to keep a landfill in Utah on retainer, in the event the residuals plant failed, the Advisory Board successfully got the requirement reduced to the point where a few less distant back up options would suffice, savings millions of dollars.



2011 to 2015

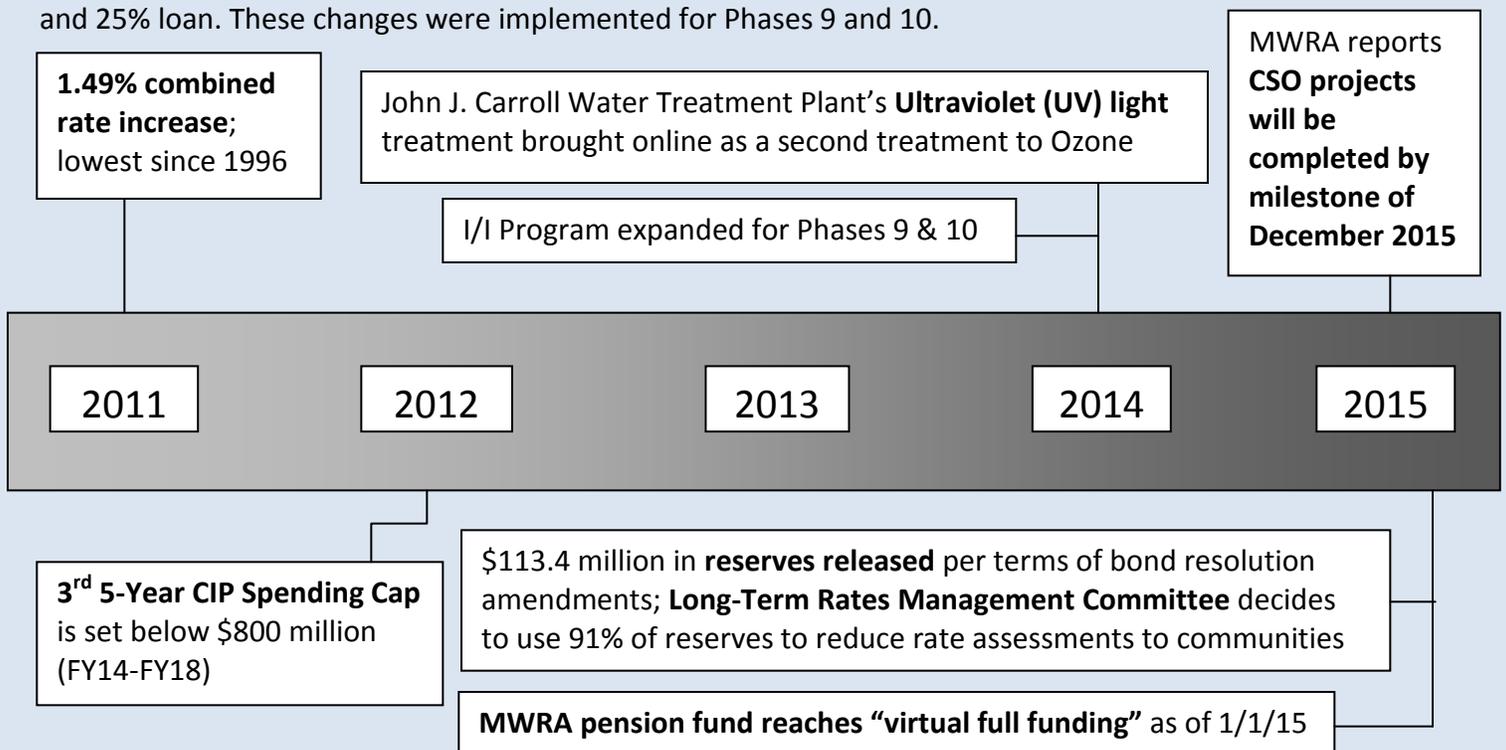
The Home Stretch

Sustainable and Predictable Rate Assessments for Communities and Ratepayers

With both water and wastewater systems having gone through substantial transformations prior to 2011, the real challenge in the “Home Stretch” was managing rate assessment increases while the costs of major projects were paid off through debt service each year. There were points when the Advisory Board and Authority have had an adversarial relationship, like in 2011 when the Advisory Board called for a 0% rate increase with an eventual compromise of 1.49% accepted. After that, the Advisory Board staff and membership reached agreement with the MWRA on an approach aimed at “sustainable and predictable” rate increases, allowing communities to better plan for each year’s budget.

This approach to rate assessment increases was based on the structure of outstanding debt related to previous court-ordered projects and the schedule to pay off that debt. The Advisory Board got onboard with this approach when the MWRA agreed to certain stipulations. First, the Advisory Board pushed for any annual surplus to go toward **defeasing, or pre-paying, future debt service**, targeting the most challenging years for debt service. For example, in its 2012 budget review the Advisory Board put a “bulls-eye” on FY2017, which was considered a challenging year for debt service and a risk for a high rate assessment increase. While initially projected to have a rate increase of 8%, FY2017 now complies with the Advisory Board’s mantra of **“Four No More,”** which means no more combined rate assessment increases over 4% ever again.

Finally, the Advisory Board scored three major victories on behalf of member communities. First, the Advisory Board fought hard for a landmark infrastructure bill, which was passed in 2014 and provided funding for new communities to join the system on the waterworks side by covering half of their entrance fee. Second, the Advisory Board recommended that a new payment plan be accepted for entrance fees to make it easier financially for new communities to join the system; this was adopted by the MWRA Board of Directors in 2014. The third victory was the expansion of the I/I Local Financial Assistance Program, which provides communities funding to do crucial I/I work. The Advisory Board recommended doubling the program from \$40 million phases to \$80 million phases and changing the split of the program from 45% grant and 55% loan to 75% grant and 25% loan. These changes were implemented for Phases 9 and 10.



The Future

Advisory Board and Authority Plan for Future Without Court-Mandated Projects

This document isn't meant to be a victory lap of the Advisory Board or the MWRA. Instead, it is reminder of how far the system has come, and the lens through which we view the challenges ahead. Often, Advisory Board recommendations can take years to develop before their effects are fully realized. New challenges, not foreseen at this time, will inevitably materialize. But below are the challenges we can see on the horizon right now, and how the Advisory Board plans to address them.

In January 2018, the MWRA will commence a three-year performance assessment of the **Long-Term CSO Control Plan**, including post-construction monitoring. A report will be made by December 2020, with the EPA and MassDEP then making final decisions regarding water quality standards for the Charles River and Alewife Brook. It is important that the Advisory Board continue to highlight the impacts of the CSO control plan, because while this will mark the end of work associated with these court-mandated projects, the costs of these projects will be felt by ratepayers for years to come.

With the understanding that the Authority is approaching the end of court-mandated work, the Authority now enters a stage of “debt-management” due to the costs of these projects, slowly being paid down over time. The Advisory Board, therefore, no longer has a role in scaling back capital spending as aggressively as before, instead aiming its sights on how to combat the capital financing costs created by past capital spending (Note: there are still significant capital projects on the horizon, especially related to water redundancy initiatives, but these pale in comparison to previous capital spending levels). To this end, the Advisory Board has laid down a significant challenge as peak debt service years approach: **“Four No More.”** This means no more combined rate assessments increases above 4% from year to year, ever. One thing to keep in mind is that 4% is not a target, it is a ceiling.

But the Advisory Board is not simply setting a ceiling; there are specific ways in which the Advisory Board has continued to support the reduction of future rate increases. First, with the policy recommendation of **“defeasing” debt service**, and then with an agreement with the Authority to aim for **“sustainable and predictable”** rate assessments each year, both of which are policies that the Advisory Board expects to be carried into the future. Also, the Advisory Board continues to strive for revenue sources outside of rate assessments, evident in the Infrastructure Bill of 2014. The Advisory Board will work within the parameters of this bill to provide sources of funding for the “forgotten infrastructure.”

On the policy side, the Advisory Board will continue to fight unnecessarily stringent regulations such as **MassDEP's molybdenum limit** for fertilizer (10 mg/kg for pastureland), which forces the MWRA to ship its pellets out of state, increasing the carbon emissions related to placing the product. While this topic may not excite the majority of ratepayers, it's a prime example of poorly conceived regulations that make it harder for the MWRA to operate on a daily basis and undermine the ability of the MWRA to collaborate with other interested parties, such as Western Massachusetts farmers who would benefit from cheap and effective biosolids (fertilizer).

“The Future” signifies a shift away from the rat race of catching up with changing regulations, and instead leading the nation in efficiencies of water and wastewater systems to deliver the best possible service to communities and their ratepayers. The Advisory Board will continue to work with the Authority to ensure that all decisions are made in the best interest of current member communities and encourage non-member communities to join the system (on the water side only) to be able to take advantage of the great resources that the MWRA has developed over the past 30 years.