

Message from the Editor-in-Chief



It is with immense pride and enthusiasm that we welcome you to this special edition of the Boston Society of Civil Engineering Practice Journal, dedicated to honoring the Massachusetts Water Resources Authority (MWRA) and its profound impact on the field of civil engineering.

For decades, the MWRA has stood as a shining example of innovation, dedication, and excellence in the realm of water resources management, environmental protection, and infrastructure development. As one of the nation's preeminent public agencies, MWRA has been at the forefront of tackling complex challenges related to water supply, wastewater treatment, and sewage disposal in the Greater Boston area. Through its visionary leadership and commitment to sustainability, MWRA has played a pivotal role in shaping the future of civil engineering practice not just in Massachusetts but across the country and beyond.

This journal serves as a tribute to the countless engineers, researchers, and professionals who have been instrumental in the MWRA's remarkable journey. Their unwavering pursuit of cutting-edge technologies, their emphasis on research-driven decision-making, and their passion for transforming theoretical ideas into practical solutions were the driving force behind the agency's achievements.

Within these pages, you will find a rich tapestry of articles and research papers that highlight the transformative projects and groundbreaking initiatives spearheaded by MWRA. From the ambitious construction of the Quabbin Reservoir to the establishment of state-of-the-art water treatment facilities, the MWRA's endeavors have redefined the boundaries of civil engineering practice and set new standards for resilience, sustainability, and public health.

Furthermore, this edition seeks to delve into the collaborative efforts that have fostered a robust relationship between the MWRA and the Boston Society of Civil Engineering Practice. As two entities deeply committed to advancing the science and practice of civil engineering, this partnership has been instrumental in knowledge exchange, professional development, and driving the industry's evolution.

As we celebrate the MWRA's remarkable achievements, it is also a moment to reflect on the challenges that lie ahead. Climate change, population growth, and urbanization are presenting our society with new and complex water management issues. In this context, we must draw inspiration from MWRA's legacy and continue pushing the boundaries of civil engineering practice to create sustainable, adaptive, and resilient solutions.

We extend our heartfelt gratitude to all the contributors, authors, and reviewers who have made this journal a compelling repository of knowledge and expertise. Their commitment to sharing insights and experiences will undoubtedly inspire future generations of civil engineers to rise to the challenges of their time.

A special thanks to Ali Touran, whose personal financial support has helped to make possible the production of a hard copy of this issue of the Civil Engineering Practice Journal. Ali is a good friend of the Journal, having in the past served as the Journal's Chair of the Editorial Board and as President of the Boston Society of Civil Engineers Section.

In conclusion, it is an honor to dedicate this edition of the Boston Society of Civil Engineering Practice Journal to the MWRA—a trailblazer in civil engineering practice. May the MWRA's legacy continue to inspire us all as we forge ahead in pursuit of a better, safer, and more sustainable world.

Gautham P. Das

Editor in Chief

Journal.board@bsces.org