
Preface

This book is intended to be a resource to cost-effectively assess the performance of, and schedule maintenance for, stormwater treatment practices. Maintenance should never occur without an accurate assessment of the operating condition of a stormwater treatment practice. Thus, this book first details how to assess the performance of a stormwater treatment practice. It provides distinct levels of standardized assessment methodology, in increasing cost and difficulty, from which the user can select only those methods that are necessary. It also provides instructions on how to successfully complete an assessment of a stormwater treatment practice, including all required tasks, sample and data analysis, and other items. Finally, the book provides detailed guidance on how to use the information gathered during assessment to select and schedule the most appropriate maintenance actions.

The methods presented in this book will:

- Help users select cost-efficient assessment methods
- Help users develop an assessment program
- Ensure that an assessment program yields meaningful results
- Provide guidelines for reporting results and scheduling maintenance
- Allow for more meaningful comparisons between assessment and maintenance results of different stormwater treatment practices

The intended audience for this book includes engineers, planners, consultants, watershed district personnel, municipal staff, and natural resource managers, among others. Thus, case studies have been included, when possible, to provide practical examples related to the concepts discussed.

The research project that preceded this book and led to the development of much of the material was funded by the Minnesota Pollution Control Agency with C. Bruce Wilson as project manager. The authors would like to thank Bruce and all the staff at the Minnesota Pollution Control Agency for their confidence in us to deliver a quality product. Several partner projects that provided material for the case studies were funded by the Local Road Research Board of Minnesota, Metropolitan Council Environmental Services, Minnehaha Creek Watershed District, Minnesota Department of Transportation, Mississippi Watershed Management Organization, and the US Environmental Protection Agency. The authors wish to

thank many individuals and organizations for their contribution to the completion of these projects which led to the development of this book: Brooke C. Asleson, Lawrence A. Baker, William R. Herb, Raymond M. Hozalski, Omid Mohseni, John L. Nieber, Bruce N. Wilson, the University of Wisconsin Extension, Emmons and Olivier Resources, South Washington Watershed District, Ramsey-Washington Metro Watershed District, Sarah M. Stai, Westwood Professional Services, Three Rivers Park District, City of Blaine, and Wenck Associates, Inc. The authors especially thank Brooke C. Asleson, Lawrence A. Baker, William R. Herb and John L. Nieber for contributing material that led to the development of this book. The authors also thank Bob Newport at US EPA Region 5 for his continual support of this effort.

Minneapolis, MN, USA
Valparaiso, IN, USA
Minneapolis, MN, USA

Andrew J. Erickson
Peter T. Weiss
John S. Gulliver

Optimizing Stormwater Treatment Practices
A Handbook of Assessment and Maintenance
Erickson, A.J.; Weiss, P.T.; Gulliver, J.S.
2013, XII, 337 p., Hardcover
ISBN: 978-1-4614-4623-1