Chapter 13 Summary

Within the transportation community, the challenge is to move beyond regulation-driven mitigation approaches and into proactive environmental stewardship. Native plants are a foundation of ecological health and function. Roadside revegetation with native plants has become a key practice for managing environmental impacts and improving conditions for healthy ecosystems. This report synthesizes an integrated approach that can be used to effectively revegetate roadsides and other disturbance areas associated with road construction, modification, or obliteration. The report will be of interest to public- and private-sector practitioners, as well as to transportation and planning professionals, land managers, policy makers, and owners and operators of roads. The report can be consulted during any phase of a revegetation project. It is also intended to serve as a foundation for future trainings.

After introducing the challenges of roadside revegetation, the report provides a systematic, interdisciplinary guide through the process in four stages. An Initiation section helps the user bridge terminology and technical expertise between non-engineers and engineers, create key relationships, and navigate the decision process in order to initiate a project. Essential steps to coordinate revegetation efforts with road planning and construction are detailed, including budgetary and scheduling issues.

Next, the Planning section guides the reader through the process of defining project objectives, assessing the site, overcoming limitations, strategizing revegetation procedures, and integrating the revegetation activities with the road project.

The Implementation section provides information on how to make the project unfold in the field, from coordinating contracts and creating budgets and timelines to caring for the plants as they mature. Implementation Guides are filled with practical how-to information for many cost-effective site treatments and revegetation tactics that are used to revegetate roadsides.

Finally, the Monitoring and Management section describes how to assess the effectiveness of the revegetation project to correct any shortcomings, improve practice, and add to future knowledge. Example monitoring protocols are included to guide readers in selecting appropriate monitoring methods for the project's goals.

When planned well, the successful establishment of desirable vegetation supports transportation goals for safety and efficiency, stabilizing slopes, reinforcing infrastructure, and improving the road user's experience by creating natural beauty and diversity along the roadside. Healthy native plant communities are often the best long-term defense against invasive and noxious weeds. Maintenance costs for managing problematic vegetation are reduced, as is the controversy that sometimes results when weeds from roadsides invade neighboring lands, or where pollution from herbicide use is a concern.

Revegetation success is a key factor in determining whether the over 12 million acres that make of the transportation corridor of the United States will be hospitable environments to plants and other forms of life — or a wasteland. It is hoped that continuing improvements in interagency cooperation, enlightened policies, better science and technology, and the dedication and innovation of field-based practitioners will continue to build a foundation for a more sustainable future.