

Chapter 9 – Stormwater Retrofits

Introduction

This chapter provides guidance for retrofitting sites that are already developed to reduce the adverse impacts of existing stormwater runoff. A “retrofit” is a project that modifies an existing developed site for the primary purpose of improving the quality of and reducing the quantity of stormwater discharge. This is primarily achieved through disconnecting, and therefore reducing, Directly Connected Impervious Area (DCIA), as defined in [Chapter 2 - Stormwater Impacts](#).⁶⁶ Stormwater retrofits can be used to disconnect DCIA by converting impervious surfaces to pervious surfaces, redirecting runoff from impervious surfaces to adjacent pervious areas, and adding new or modifying existing structural stormwater Best Management Practices (BMPs) to infiltrate or reuse stormwater runoff from impervious areas.

This chapter describes the reasons for and benefits of stormwater retrofits, various retrofit approaches and types, identification and design of stormwater retrofits, quantifying retrofit benefits (i.e., crediting), and common retrofit applications. Additional guidance on stormwater retrofits can be found in the information resources at the end of this chapter.

What’s New in this Chapter?

- ❖ Consistency with stormwater retrofit requirements in the CT DEEP stormwater general permits
- ❖ New guidance on retrofit planning approaches
- ❖ Updated information on stormwater retrofit types and applications
- ❖ Use of stormwater retrofits for DCIA disconnection and reduction
- ❖ Use of EPA stormwater BMP performance curves for retrofit sizing and crediting
- ❖ Updated information on other resources and tools for stormwater retrofit planning and design