

Chapter 1 - PLANNING AND DESIGN MANUAL INTRODUCTION

Introduction

This manual will provide technical guidance for the control of erosion, sediment, and stormwater from nonpoint sources (NPS) and for the preparation of erosion, sediment, and stormwater control plans¹ as needed. Erosion, sediment, and stormwater together form the largest type of NPS pollution. NPS pollution, as its name implies, cannot be traced to an exact point, rather this type of pollution is diffuse (not concentrated or localized, i.e., discharge from a factory) in nature and is generally associated with overland flow (which carries with it sediment, organic materials, nutrients, and toxins). Although the exact sources of NPS pollution are not easily identifiable, there are many potential sources including:

- Construction site runoff carrying sediment, chemicals, and debris. Permits may be required by OPC for this activity.
- Urban stormwater that runs off buildings, streets, and parking lots carrying with it oil, grease, lead, fertilizers, pesticides, herbicides, and other pollutants.
 - Leachates from septic tanks or landfills that may pollute the groundwater or nearby surface waters.
 - Agricultural runoff that carries animal wastes, pesticides, fertilizers, and sediment (topsoil).
 - Forestry operations that result in erosion from forests where the soil has been disturbed.
 - Surface mining that results in disturbed sediments. Permits may be required by OPC for this activity.

To address these potential sources of NPS pollution, this manual contains Best Management Practices that can be selected and combined into an overall erosion, sediment, and stormwater control plan.

It shall be the responsibility of the owner/operator to prepare and submit an erosion, sediment, and stormwater control plan for permit approval.

¹For the purposes of this manual, all references to plans will be called erosion, sediment, and stormwater control plans. Practices presented in this manual are useful in the development of plans to meet various permit requirements. Individual permits may have other specific names and requirements which will vary for the particular permit sought.