Waste Storage Pond (WSP) Decommissioning or Replacement:

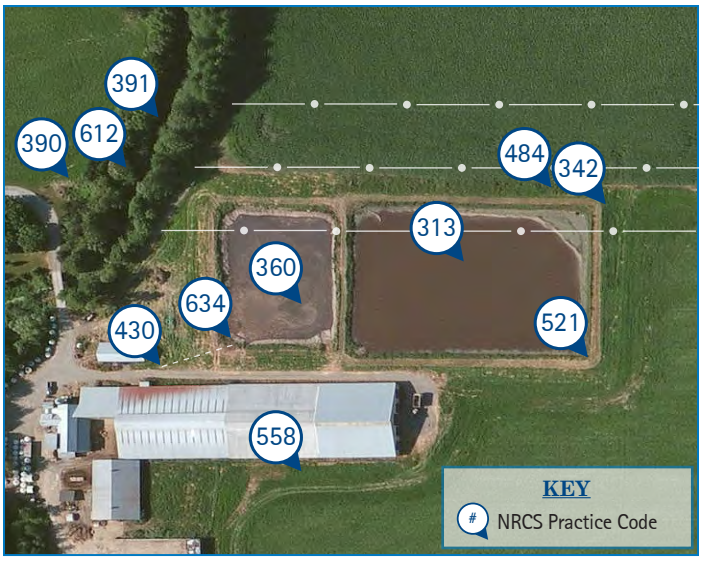
Using NRCS Practices to Improve Water Quality

Practice Overview

Purpose: *To decommission a WSP that is no longer in use and/or construct a new WSP that meets the storage requirement of the producer and that complies with current NRCS standards.*

Introduction

A waste storage pond (WSP) is an earthen waste impoundment that temporarily stores organic wastes such as manure and wastewater. USDA's Natural Resources Conservation Service (NRCS) uses a group of practices to decommission a WSP that is no longer in use and/or construct a new WSP that meets the storage requirement of the producer and that complies with current NRCS standards.



313 Waste Storage Facility

This practice is used to temporarily store wastes such as manure, wastewater, and contaminated runoff as a storage function component of an agricultural waste management system.

521 Pond Liner

This practice is used to reduce seepage losses from ponds or waste storage impoundments constructed for water conservation and environmental protection.

342 Critical Area Planting

This practice is used on highly disturbed areas such as road construction areas, conservation practice construction sites, and other areas degraded by human activities or natural events.

484 Mulching

This practice may be used alone or in combination with other practices to provide erosion control, suppress weed growth and facilitate the establishment of vegetative cover.

558 Roof Runoff Management

This practice may be applied as a part of a resource management system to improve water quality by diverting roof water away from manure collection areas.

612 Tree Establishment

This practice is for establishment of woody vegetation for habitat improvement.

391 Riparian Forest Buffer

This practice is for establishment of woody buffer in areas adjacent to streams, lakes, ponds, and wetlands.

390 Riparian Herbaceous Cover

This practice may be applied as part of a resource management system to support and provide habitat (food, shelter, and water) for aquatic and terrestrial organisms.

430 Irrigation Pipeline

This practice is used to implement nutrient management of liquid manure by proper field application.

634 Waste Transfer

This practice is used to transfer manure between collection and storage facilities.

360 Closure of Waste Impoundments

This practice applies to agricultural waste impoundments that are no longer needed as a part of a waste management system and will be permanently closed or converted.

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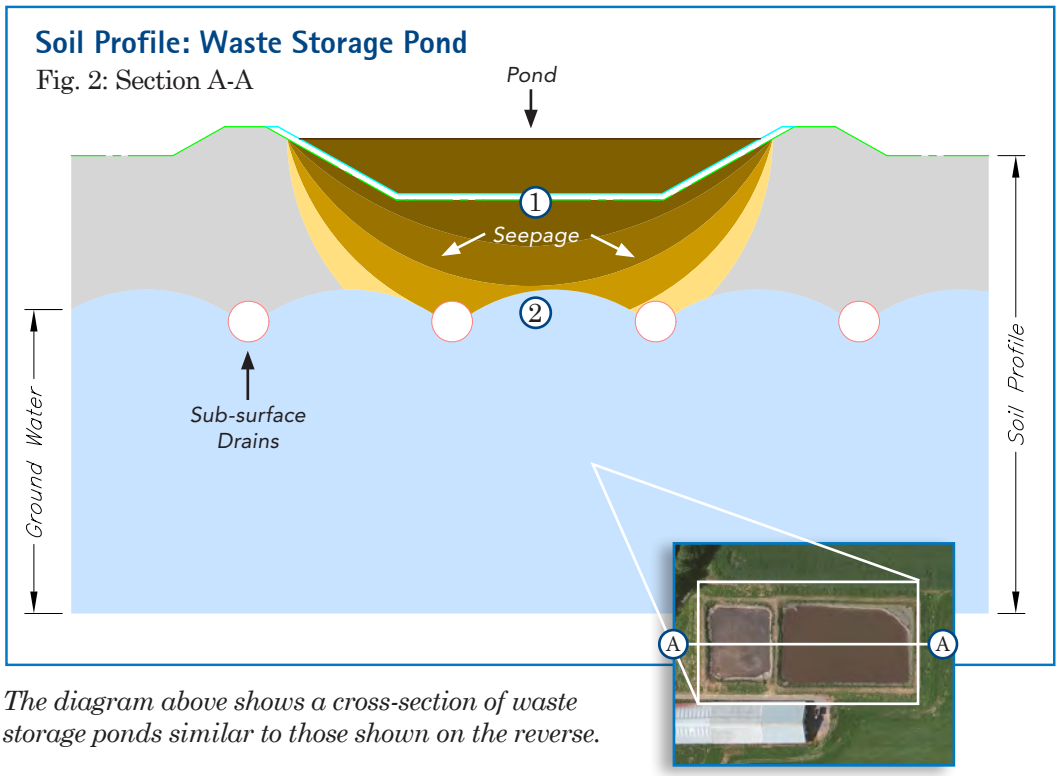

The diagram above shows a cross-section of waste storage ponds similar to those shown on the reverse.

A Threat to Water Quality

Outdated WSPs have the potential to leak, directly impacting ground and surface water quality. Fig. 2 (#1) shows seepage in a WSP, leaking fecal coliform and nutrients to the ground water below. Once the ground water is contaminated, natural sub-surface drains, as shown in Fig. 2 (#2), may carry contaminates directly to nearby adjacent fish-bearing streams.

An embankment failure of a WSP could significantly degrade water quality resources. Should a WSP failure occur, the poximity to a salmon-bearing stream could result in a massive fish kill and also have long term impacts on other downstream resources, such as shellfish beds.

The best solution to the threat of contamination from WSPs is to incorporate the suite of practices NRCS uses to decommission a WSP that is no longer in use and/or construct a new WSP that meets the storage requirement of the producer and that complies with current NRCS standards.

Using NRCS practices and standards will insure that nearby fish-bearing waterways are protected and producers have adequate waste storage capacity.

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To learn more about these practices or sign-up for technical and financial assistance, contact your local NRCS field office.

Or visit:

www.wa.nrcs.usda.gov