

WATER AND SEDIMENT CONTROL BASIN

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service—Practice Code 638



WATER AND SEDIMENT CONTROL BASIN

A water and sediment control basin is an earthen embankment or combination ridge and channel constructed across the slope and minor water courses to form a sediment trap and water detention basin.

Water and sediment control basins are generally installed on land that is relatively steep and undulating where past erosion has caused channels to form, permanently altering the terrain. Therefore, contour farming, stripcropping, terraces, and other practices that involve farming on the contour may not be suitable on fields where this practice is used.

PRACTICE INFORMATION

The purpose of this practice is to improve the farmability of sloping land, reduce erosion, trap sediment, reduce and manage runoff, and improve water quality. This practice applies to sites where:

- The topography is generally irregular or undulating.
- Water concentrates and causes gullies to form.
- Sheet and rill erosion can be controlled by other conservation practices.
- Runoff and sediment are causing damage to land, crops, water, and/or facilities.
- Soil and site conditions are suitable.
- Adequate outlets can be provided for disposal of runoff water.

COMMON ASSOCIATED PRACTICES

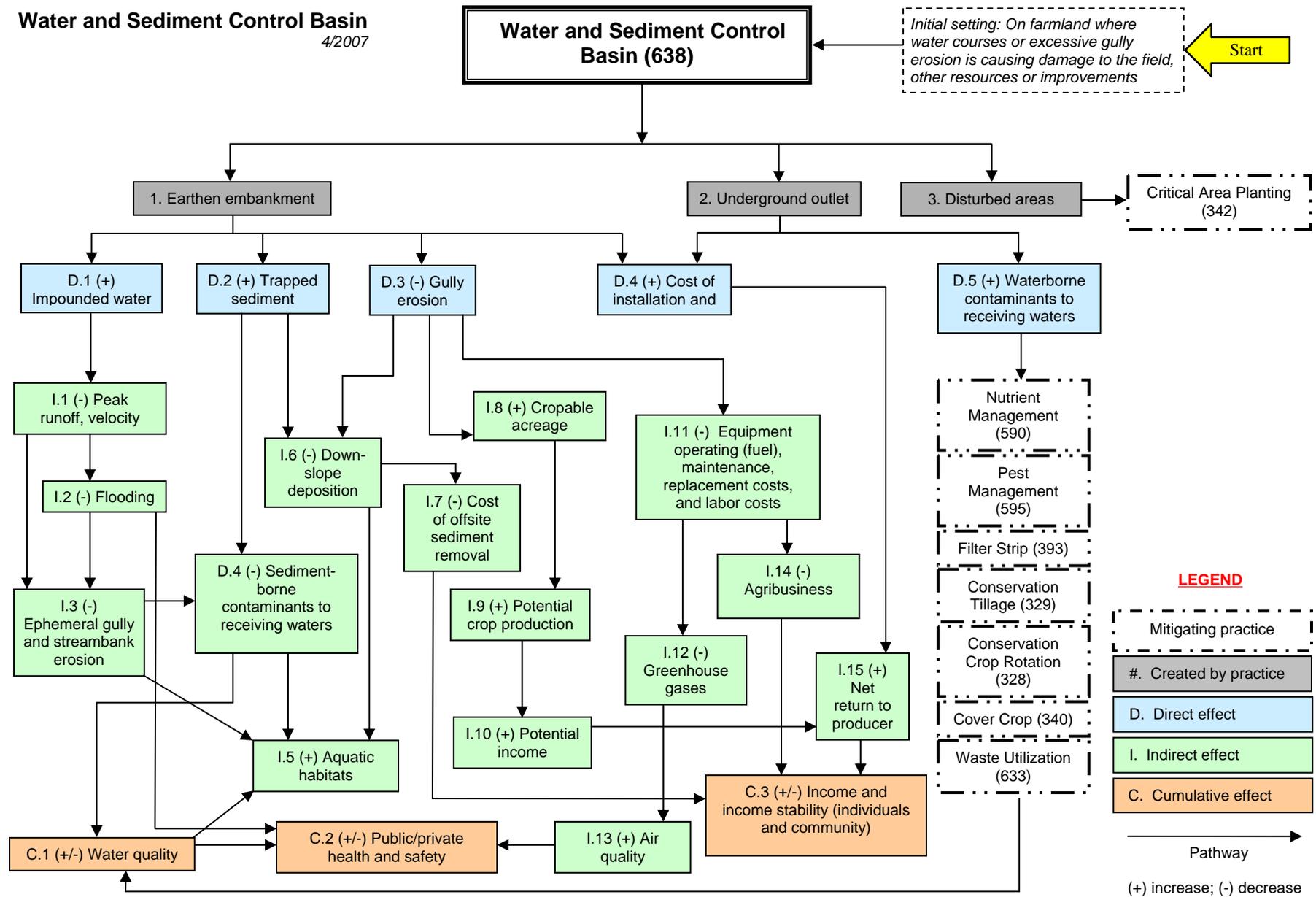
Sheet and rill erosion may continue to be a problem following installation of water and sediment control basins. Additional practices are needed to protect the sloping upland areas of the fields. Water and Sediment Control Basin is commonly used in Conservation Management Systems with practices such as Conservation Crop Rotation (328), Residue and Tillage Management (329, 345, 346), and Cover Crop (430) to reduce sheet and rill erosion, as well as Critical Area Planting, Filter Strip, and Nutrient Management to protect down-slope water quality.

For further information, refer to the practice standard in the local Field Office Technical Guide and associated specifications and job sheets.

The following page identifies the effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

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Note: Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.

The diagram above identifies the effects expected to occur when this practice is applied according to NRCS practice standards and specifications. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. All income changes are partially dependent upon market fluctuations which are independent of the conservation practices. Users are cautioned that these effects are estimates that may or may not apply to a specific site.