

# TERRACE

## PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service—Practice Code 600



### TERRACE

A terrace is an earthen embankment, channel, or a combination ridge and channel constructed across the slope to intercept runoff.

### PRACTICE INFORMATION

This practice generally applies to cropland, but may also be used on other areas where field crops are grown such as wildlife or recreation lands. Terraces are installed for one or more of the following purposes:

- Reduce slope length for erosion control
- Reduce sediment content in runoff water
- Improve water quality
- Intercept and conduct runoff to a safe outlet
- Retain runoff for moisture conservation
- Prevent gully development
- Reform the land surface for better farmability
- Reduce flooding

A variety of terrace configurations has developed as a result of research and field experience. Four common types of terraces include *broad-based*, which are farmed on both sides and used on more uniform gently sloping fields; *flat channel*, which are used to conserve moisture; *steep backslope*, which result in a benching effect; and *narrow*

*based*, which have permanent cover planted on both sides of the ridge.

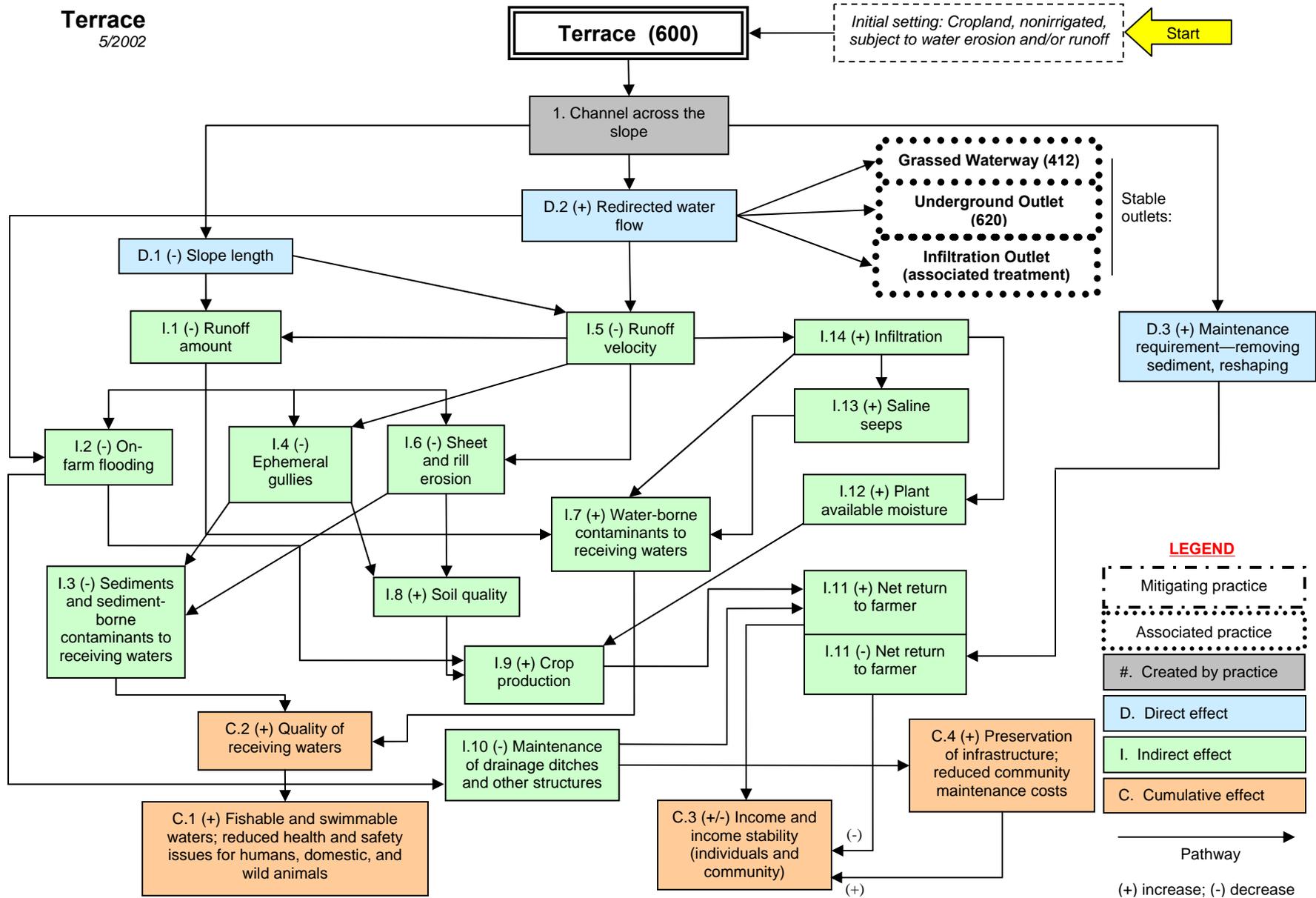
Terraces require careful design, layout, and construction. Terraces may be parallel on fairly uniform terrain or vary from parallel when the terrain is undulating. Since parallel terraces are more acceptable, designs often provide for cuts and fills to improve terrace alignment and farmability. Channel grades may be uniform or variable as long as the water velocity is nonerosive and meet other design criteria. The runoff from terraces may be handled by grassed waterways or underground pipe outlets depending on site conditions and economics. Soil infiltration may also be utilized for disposal of runoff when level terraces are installed and the soil is sufficiently permeable to remove the water stored in the channel before crop damage occurs.

### COMMON ASSOCIATED PRACTICES

Terrace is commonly used in a Conservation Management System with practices such as Conservation Crop Rotation (328), Nutrient Management (590), Pest Management (595), and Irrigation Water Management (449).

For more information, refer to the practice standard in the NRCS Field Office Technical Guide and associated specifications and design criteria.

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.



**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.