September 2010

SHALLOW WATER DEVELOPMENT AND MANAGEMENT

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service—Practice Code 646

SHALLOW WATER DEVELOPMENT AND MANAGEMENT

Shallow water development and management is the inundation of lands to provide habitat for fish and/or wildlife.

PRACTICE INFORMATION

This practice is applicable to lands where water can be impounded or regulated by diking, excavating, ditching, and/or flooding. It can also be used to provide refuge habitats for native fish during high flow periods.

The purpose is to provide habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water for at least a part of their life cycle.

Site selection is important to successfully carrying out this practice. Soils must have a low permeability or seasonal high water table. The site must be free of hazardous materials, and the water supply must be adequate to maintain water levels between 1 to 18 inches in depth over the majority of the area during the inundation period. Operation and maintenance is very important to ensure that this practice functions as intended throughout its expected life.

COMMON ASSOCIATED PRACTICES

Shallow Water Development and Management is commonly used in a Conservation Management System with the following practices:

- Dike (356)
- Structure for Water Control (587)
- Irrigation Water Conveyance (428)
- Pipeline (516)
- Pond (378)
- Wetland Wildlife Habitat Management (644)

Refer to the practice standard in the local Field Office Technical Guide and associated Job Sheets for further information.

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 landowner 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.

Shallow Water Development and Management

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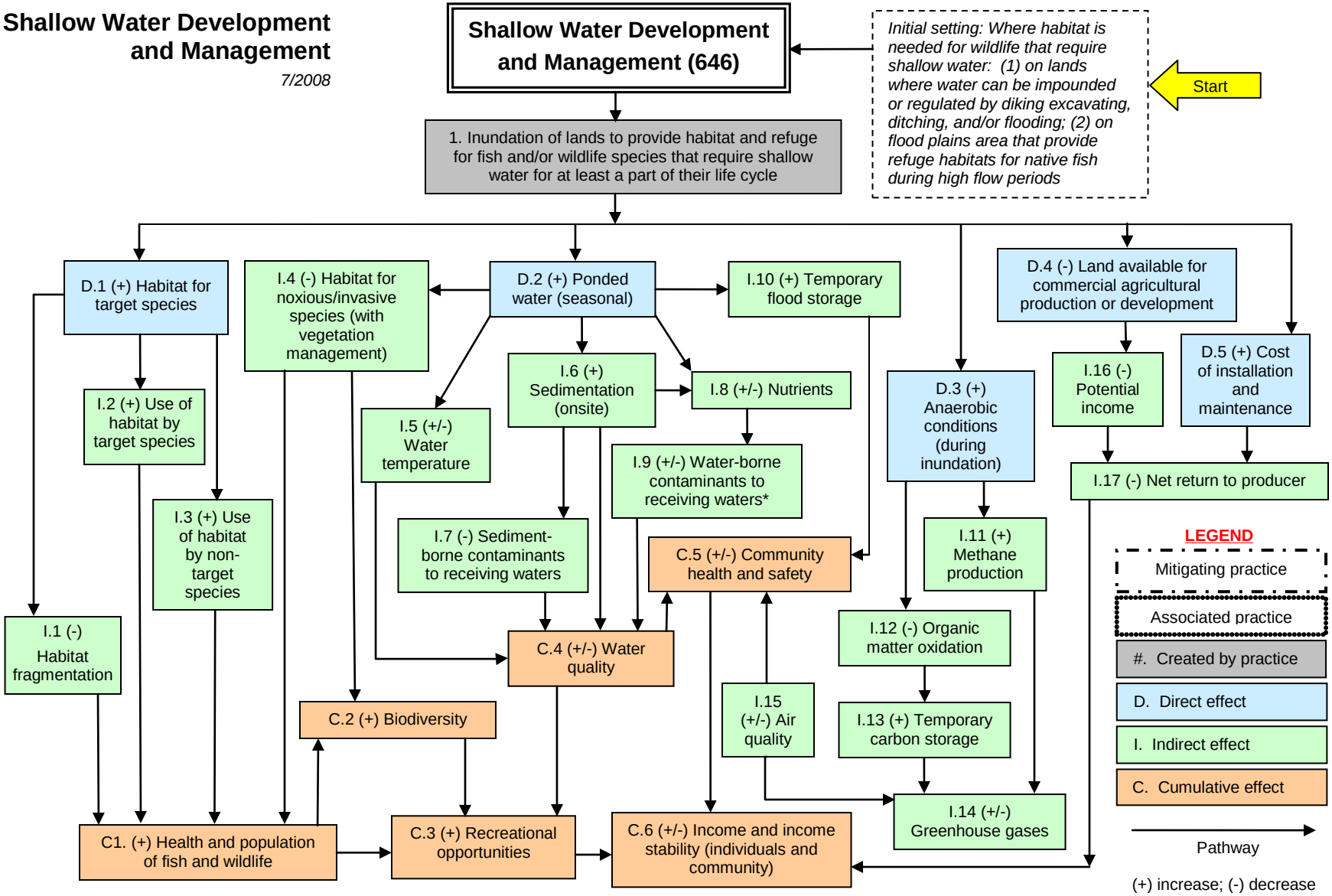

Note: Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.

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.