

Structure For Water Control

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 587



DEFINITION

A structure for water control is a structure in a water management system that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation.

PRACTICE INFORMATION

These structures are normally installed in a well planned irrigation or drainage system. However, the structures may be part of a wildlife project or some type of recreation plan that involves water conveyance, flow control, or water level regulation. This practice covers the planning and functional design of the needed water control structures,

but not the detailed design or construction specifications for specific structures.

These structures are used in water management to control the stage, discharge, distribution, delivery, or direction of flow in open channels or water use areas. The structures installed under this practice may also be used to improve water quality by reducing sedimentation or to regulate water temperatures for fish production.

Additional information including design criteria and specifications are in the local NRCS Field Office Technical Guide.

The following pages list the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, and soil. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields

STATE	ANY	FIELD OFFICE	ANY	DATE	5/15/97
PRACTICE: 587 Structure for Water Control			NOTES:		
RESOURCE: SOIL RESOURCE CONCERN: EROSION			Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.		
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			N/A		
WIND			N/A		
EPHEMERAL GULLY			N/A		
CLASSIC GULLY			N/A		
STREAMBANK			N/A		
IRRIGATION INDUCED			N/A		
SOIL MASS MOVEMENT			N/A		
ROADBANK/CONSTRUCTION			N/A		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			N/A		
SOIL COMPACTION			N/A		
SOIL CONTAMINATION					
• SALTS			situational concerning contam. from salts		
• ORGANICS			situational concerning organic contaminates/soil		
• FERTILIZERS			situational concerning soil contam./fertilizer		
• PESTICIDES			situational concerning soil contam./pesticides		
• OTHER					
DEPOSITION/DAMAGE					
• ONSITE			slight reduction /onsite deposition damage		
• OFFSITE			slight decrease/offsite deposition damage		
DEPOSITION/SAFETY					
• ONSITE			slightly improve onsite safety/deposition		
• OFFSITE			slightly improve offsite safety hazard/deposition		
OTHER					
RESOURCE: WATER					
RESOURCE CONCERN: WATER QUANTITY					
SEEPS			situational regarding seep development		
RUNOFF/FLOODING			slight decrease in runoff/flooding		
EXCESS SUBSURFACE WATER			slight increase in excess subsurface water		
INADEQUATE OUTLETS			slight improvement in H2O outlet concern		
WATER MGT. IRRIGATION					
• SURFACE			moderate improvement in irrigation efficiency		
• SPRINKLER			moderate improvement in irrigation efficiency		
WATER MGT. NON-IRRIGATED			moderate improvement in moisture use		
RESTRICTED FLOW CAPACITY (H2O convey.)					
• ONSITE			slight improvement in onsite drainage		
• OFFSITE			slight improvement in offsite drainage		
RESTRICTED STORAGE			slight reduction in sedimentation of H2O storage		

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE INDICATORS	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	insignificant
• NUTRIENTS AND ORGANICS	insignificant
• SALINITY	insignificant
• HEAVY METALS	insignificant
• PATHOGENS	insignificant
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	insignificant
• NUTRIENTS AND ORGANICS	insignificant
• SUSPENDED SEDIMENTS	insignificant
• LOW DESOLVED OXYGEN	insignificant
• SALINITY	insignificant
• HEAVY METALS	insignificant
• WATER TEMPERATURE	situational concerning SWater contam./H2O temp.
• PATHOGENS	insignificant
AQUATIC HABITAT SUITABILITY	N/A
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	N/A
• OFFSITE SAFETY	N/A
• ONSITE STRUCT. PROBLEMS	N/A
• OFFSITE STRUCT. PROBLEMS	N/A
• ONSITE HEALTH	N/A
• OFFSITE HEALTH	N/A
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	N/A
AIRBORNE CHEMICAL DRIFT	N/A
AIRBORNE ODORS	N/A
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	N/A
AIR MOVEMENT (windbreak effect)	N/A
HUMIDITY	N/A
OTHER	

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	situational concerning public health and safety
PRIVATE/PUBLIC VALUES	situational regarding private/public values
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	situational regarding cultural resources
SIGNIFICANCE OF CULTURAL RESOURCES	situational regarding cultural resources
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	situational regarding cultural resources
OTHER	