

Pumping Plant for Water Control

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 533



DEFINITION

A pumping plant for water control is a pumping facility installed to pump water for a conservation need.

PRACTICE INFORMATION

A pumping plant for water control may be installed for a multitude of conservation purposes. This includes but is not limited to removing excess surface or ground water, filling ponds, or pumping to regulate water levels for wetland sites. Pumping plants may also be

installed to provide water for irrigation, livestock, and wildlife. This practice is especially applicable when there is a need for a high volume pump to maintain critical water levels in swamps, marshes, and constructed wetlands.

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: 533 Pumping Plant 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			situational concerning streambank erosion		
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			N/A		
• ORGANICS			N/A		
• FERTILIZERS			N/A		
• PESTICIDES			N/A		
• OTHER					
DEPOSITION/DAMAGE					
• ONSITE			N/A		
• OFFSITE			N/A		
DEPOSITION/SAFETY					
• ONSITE			N/A		
• OFFSITE			N/A		
OTHER					
RESOURCE: WATER RESOURCE CONCERN: WATER QUANTITY					
SEEPS			situational regarding seep development		
RUNOFF/FLOODING			situational concerning runoff and floods		
EXCESS SUBSURFACE WATER			situational concerning excess subsurface H2O		
INADEQUATE OUTLETS			moderate improvement in H2O outlet concern		
WATER MGT. IRRIGATION					
• SURFACE			situational concerning IWM, surface		
• SPRINKLER			situational concerning IWM, sprinkler		
WATER MGT. NON-IRRIGATED			situational concerning improved moisture use		
RESTRICTED FLOW CAPACITY (H2O convey.)					
• ONSITE			slight improvement in onsite drainage		
• OFFSITE			slight improvement in offsite drainage		
RESTRICTED STORAGE			situational concerning sedimentation of H2O stor.		

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE INDICATORS	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	N/A
• NUTRIENTS AND ORGANICS	N/A
• SALINITY	N/A
• HEAVY METALS	N/A
• PATHOGENS	N/A
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	N/A
• NUTRIENTS AND ORGANICS	N/A
• SUSPENDED SEDIMENTS	N/A
• LOW DISSOLVED OXYGEN	N/A
• SALINITY	N/A
• HEAVY METALS	N/A
• WATER TEMPERATURE	N/A
• PATHOGENS	N/A
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	insignificant
PRIVATE/PUBLIC VALUES	sign. improvement in 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	