

# Dam, Diversion

## PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 348



### DEFINITION

A diversion dam is a structure built to divert all or part of the water from a watercourse into another watercourse for conservation purposes.

### PRACTICE INFORMATION

A diversion dam is designed to divert water from a watercourse such as a waterway or stream into another watercourse, irrigation canal, stream, water-spreading system, or another waterway.

The purpose of the practice is to improve the beneficial use of water, or divert damaging flows to another watercourse that is more stable or otherwise more

capable of reducing damage. One of the more common uses of this practice is diverting water from a stream or river into a canal used for irrigation purposes.

The impacts of a proposed diversion dam are evaluated to assure water quality, fish and wildlife, aesthetics, and other environmental concerns are considered in the design and layout of the structure (s). The practice is also carefully evaluated to assure compliance with state and local laws concerning natural watercourses.

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	Iowa	FIELD OFFICE	DATE	5/15/97
<b>PRACTICE:</b> 348 Diversion Dam			NOTES:	
<b>RESOURCE: SOIL</b> <b>RESOURCE CONCERN: EROSION</b>			<b>Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.</b>	
<b>RESOURCE INDICATORS</b>			<b>PHYSICAL EFFECTS</b>	
SHEET AND RILL			insignificant	
WIND			N/A	
EPHEMERAL GULLY			situational concerning ephemeral gullies	
CLASSIC GULLY			situational concerning classic gullies	
STREAMBANK			N/A	
IRRIGATION INDUCED			N/A	
SOIL MASS MOVEMENT			N/A	
ROADBANK/CONSTRUCTION			N/A	
OTHER				
<b>RESOURCE CONCERN: SOIL CONDITION</b>				
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			significant reduction/onsite deposition damage	
• OFFSITE			significant decrease/offsite deposition damage	
DEPOSITION/SAFETY				
• ONSITE			significantly improve onsite safety/deposition	
• OFFSITE			sign. improve offsite safety hazard/deposition	
OTHER				
<b>RESOURCE: WATER</b>				
<b>RESOURCE CONCERN: WATER QUANTITY</b>				
SEEPS			N/A	
RUNOFF/FLOODING			sign. decrease in runoff/flooding	
EXCESS SUBSURFACE WATER			insignificant	
INADEQUATE OUTLETS			significant improvement in H2O outlet concern	
WATER MGT. IRRIGATION				
• SURFACE			N/A	
• SPRINKLER			N/A	
WATER MGT. NON-IRRIGATED			N/A	
RESTRICTED FLOW CAPACITY (H2O convey.)				
• ONSITE			significant improvement in onsite drainage	
• OFFSITE			significant improvement in offsite drainage	
RESTRICTED STORAGE			sign. reduction in sedimentation of H2O storage	

<b>RESOURCE: WATER</b>	
<b>RESOURCE CONCERN: WATER QUALITY</b>	
<b>RESOURCE</b>	<b>PHYSICAL EFFECTS</b>
<b>GROUNDWATER CONTAMINANTS</b>	
• PESTICIDES	N/A
• NUTRIENTS AND ORGANICS	N/A
• SALINITY	N/A
• HEAVY METALS	N/A
• PATHOGENS	N/A
• OTHER	
<b>SURFACE WATER CONTAMINANTS</b>	
• 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
<b>AQUATIC HABITAT SUITABILITY</b>	significant improvement in Aqua. Hab. Suit.
<b>OTHER</b>	
<b>RESOURCE: AIR</b>	
<b>RESOURCE CONCERN: AIR QUALITY</b>	
<b>AIRBORNE SEDIMENT AND SMOKE PARTICLES</b>	
• 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
<b>AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS</b>	N/A
<b>AIRBORNE CHEMICAL DRIFT</b>	N/A
<b>AIRBORNE ODORS</b>	N/A
<b>FUNGI, MOLDS, AND POLLEN</b>	N/A
<b>OTHER</b>	
<b>RESOURCE CONCERN: AIR CONDITION</b>	
<b>AIR TEMPERATURE</b>	N/A
<b>AIR MOVEMENT (windbreak effect)</b>	N/A
<b>HUMIDITY</b>	N/A
<b>OTHER</b>	



<b>RESOURCE: HUMAN</b>	
<b>RESOURCE CONCERN: SOCIAL CONSIDERATIONS</b>	
<b>RESOURCE INDICATORS</b>	<b>PHYSICAL EFFECTS</b>
PUBLIC HEALTH AND SAFETY	mod. improvement in public health & safety
PRIVATE/PUBLIC VALUES	sign. improvement in private/public values
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
<b>RESOURCE CONCERN: CULTURAL CONSIDERATIONS</b>	
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	