

Land Reconstruction, Currently Mined Land

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 544



DEFINITION

Reconstruction of Currently Mined land is restoring the land to an acceptable form suitable for the planned use of the land.

PRACTICE INFORMATION

The purposes of this practice are to:

- Prevent permanent damage to the natural resources on areas affected by mining activity.
- Restore the productivity of soil to pre-mining conditions.
- Control erosion, maintain the aesthetics of the area, and provide post-mining economic use of the land.

If available, USDA soil surveys are valuable to planners in developing alternatives to restore these areas. The planning involves a

determination of available top soil or reconstruction material, storage and segregation of the soil, access roads, needed water impoundments, placement and use of overburden and spoil material, analysis of the construction material, revegetation requirements, and other related activities necessary to properly restore the disturbed areas.

The plan will provide specific guidance concerning the removal and use of soil material for reconstruction of the site.

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: 544 Land Reconstruction, Currently Mined Land			NOTES:		
RESOURCE: SOIL RESOURCE CONCERN: EROSION			Help Message: Click on form field for choice lists. Refer to Microsoft Word Users Guide (Creating a form)		
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			significant reduction in sheet and rill erosion		
WIND			significant reduction in wind erosion		
EPHEMERAL GULLY			significant reduction in ephemeral gully erosion		
CLASSIC GULLY			situational concerning classic gullies		
STREAMBANK			situational concerning streambank erosion		
IRRIGATION INDUCED			situational concerning irrigation induced erosion		
SOIL MASS MOVEMENT			significant reduction in mass movement of soil		
ROADBANK/CONSTRUCTION			significant decrease in roadbank/const. erosion		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			significant improvement in soil tilth		
SOIL COMPACTION			significant reduction in soil compaction		
SOIL CONTAMINATION					
• SALTS			situational concerning contam. from salts		
• 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					
RESOURCE: WATER					
RESOURCE CONCERN: WATER QUANTITY					
SEEPS			situational regarding seep development		
RUNOFF/FLOODING			sign. decrease in runoff/flooding		
EXCESS SUBSURFACE WATER			situational concerning excess subsurface H2O		
INADEQUATE OUTLETS			significant improvement in H2O outlet concern		
WATER MGT. IRRIGATION					
• SURFACE			significant improvement in irrigation efficiency		
• SPRINKLER			significant improvement in irrigation efficiency		
WATER MGT. NON-IRRIGATED			significant improvement in moisture use		
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		

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	sign. reduction in SWater contam./susp. sedi.
• LOW DISSOLVED OXYGEN	N/A
• SALINITY	sign. reduction in SWater contam./salinity
• HEAVY METALS	moderate reduction in SWater contam./heavy metals
• WATER TEMPERATURE	slight reduction in SWater contam./H2O temp.
• PATHOGENS	N/A
AQUATIC HABITAT SUITABILITY	significant improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• OFFSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety
• ONSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke
• OFFSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke
• ONSITE HEALTH	sign. decrease in onsite health prob./dust&smoke
• OFFSITE HEALTH	sign. improvement in offsite health
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	sign. decrease in airborn sediment/convey. prob.
AIRBORNE CHEMICAL DRIFT	insignificant
AIRBORNE ODORS	insignificant
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	moder. improvement in air condition/ temperature
AIR MOVEMENT (windbreak effect)	situational
HUMIDITY	N/A
OTHER	

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	sign. improvement in public health & safety
PRIVATE/PUBLIC VALUES	sign. improvement in private/public values
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	insignificant risk involved
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	