

Windbreak/Shelterbelt Renovation

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 650



WINDBREAK/SHELTERBELT RENOVATION

Renovation involves widening, partial replanting, releasing, removing, and replacing selected trees and shrubs to improve an existing windbreak or shelterbelt.

PRACTICE INFORMATION

This practice is used to enhance the function of an existing windbreak or shelterbelt. The trees and shrubs may deteriorate due to age, chemical

damage, competition, lack of maintenance, or other reasons. When this happens, renovation is needed to increase vigor and density of desirable species of trees and shrubs.

A period of years may be needed to properly renovate a windbreak or shelterbelt.

Additional information including standards and specifications are available in the NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. 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	12/5/96
PRACTICE: 650 -Windbreak/Shelterbelt Renovation				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				insignificant	
WIND				significant reduction in wind erosion	
EPHEMERAL GULLY				slight reduction in ephemeral gully erosion	
CLASSIC GULLY				insignificant	
STREAMBANK				insignificant	
IRRIGATION INDUCED				insignificant	
SOIL MASS MOVEMENT				insignificant	
ROADBANK/CONSTRUCTION				N/A	
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH				insignificant	
SOIL COMPACTION				insignificant	
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				insignificant	
RUNOFF/FLOODING				insignificant	
EXCESS SUBSURFACE WATER				insignificant	
INADEQUATE OUTLETS				insignificant	
WATER MGT. IRRIGATION					
• SURFACE				slight improvement in irrigation efficiency	
• SPRINKLER				moderate improvement in irrigation efficiency	
WATER MGT. NON-IRRIGATED				moderate improvement in moisture use	
RESTRICTED FLOW CAPACITY					
• ONSITE				N/A	
• OFFSITE				N/A	
RESTRICTED STORAGE				insignificant	
OTHER					

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	insignificant
• NUTRIENTS AND ORGANICS	insignificant
• SUSPENDED SEDIMENTS	insignificant
• LOW DISSOLVED OXYGEN	insignificant
• SALINITY	insignificant
• HEAVY METALS	insignificant
• WATER TEMPERATURE	insignificant
• PATHOGENS	insignificant
AQUATIC HABITAT SUITABILITY	slight 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	sign. decrease in airborn chem. drift
AIRBORNE ODORS	sign. decrease in airborn odors
FUNGI, MOLDS, AND POLLEN	insignificant
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	moder. improvement in air condition/ temperature
AIR MOVEMENT (windbreak effect)	moder. improvement in air condition/ air movement
HUMIDITY	moder. improvement in air condition/ humidity
OTHER	

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	slight 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	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	insignificant
SIGNIFICANCE OF CULTURAL RESOURCES	insignificant
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	N/A
OTHER	