

Greed Meadow Subwatershed is Located in the Early/Middle Upstream Area in the Red River of the North Basin

Refer To TSAC Technical Paper #11: "Red River Basin Flood Damage Reduction Framework"

FLOOD DAMAGE REDUCTION MEASURE	Red River Timing Zone (Emerson)		
	EARLY	MIDDLE	LATE
1) Reduce Flood Volume	+	++	++
a) Wetlands (providing infiltration and evapotranspiration)	+	+	++
b) Cropland BMPs (increase infiltration and evapotranspiration)	+	++	++
c) Conversion to Grassland (e.g., CRP and RIM to increase infiltration and evapotranspiration)	+	++	++
d) Conversion to Forest (forested areas generally have the lowest runoff coefficients, due to high interception and evapotranspiration)	+	++	++
e) Other Beneficial Uses of Stored Water (domestic, industrial, streamflow augment,...)	+	++	++
2) Increase Conveyance Capacity	+	-	--
a) Channelization (increasing the flow capacity of existing channels or flowages)	+	-	--
b) Drainage (creating new or improved conveyance capacity)	+	-	--
c) Diversion (of flood waters around a current damage area)	+	Variable	-
d) Setting Back existing Levees (to increase conveyance capacity)	+	-	--
e) Increase Roadway Crossing Capacity (increase conveyance potential)	+	-	-
3) Increase temporary Flood Storage	Variable	++	+
a) Gated Impoundments (longer-term detention of water in excess of downstream channel capacity)	+	++	++
b) Ungated Impoundments (shorter-term detention of water in excess of downstream channel capacity)	-	+	+
c) Restored or Created Wetlands (functioning as impoundments)	-	+	+
d) Drainage (to lower surface water and groundwater levels, which increases infiltration and temporary storage in the upper soil horizons)	-	+	++
e) Culvert Sizing (to increase temporary storage by widespread metering of runoff close to its source)	-	+	+
f) Setting Back Existing Levees (to increased floodplain storage)	+	++	+
g) Overtopping Levees (to utilize diked floodplain storage capacity when critically needed)	++	+	Variable
4) Protection/Avoidance	Variable	Variable	Variable
a) Urban Levees (community protection)	-	-	-
b) Farmstead Levees (rural property protection)	-	-	-
c) Agricultural Levees (agricultural property protection)	-	-	-
d) Evacuation of the Floodplain (removing flood prone property)	0	0	0
e) Floodproofing (raising property and flood resistant materials)	0	0	0
f) Warning and Emergency Response (notification processes)	0	0	0

Suggested

Eliminate	
Further consideration - with caution/caveats	
Further consideration	