

EXPLANATION

UPLAND AREAS



Slopes generally less than 10 percent; vegetative cover good; sheet and gully erosion slight; low sediment yield to tributary channels. Surficial mantle is moderately sandy, and infiltration rates are relatively high



Slopes range from 10 to 15 percent; vegetative cover fair; sheet and rill erosion locally severe; gully erosion locally severe; minor aggradation in tributary channels; moderate sediment yield to tributary channels. Surficial mantle is fine grained, and infiltration rates are generally low



Slopes range from 4 to 6 percent; vegetative cover fair; sheet erosion locally very severe; relatively high sediment yield from areas of severe sheet erosion; moderate to high sediment yield to tributary channels. Surficial mantle is fine grained, mostly derived from Pierre shale; and infiltration rates are low



Slopes range from 60 to 100 percent; badlands; vegetative cover poor to nonexistent; sheet and rill erosion very severe. Includes all areas of active badland erosion in beds of White River group and elsewhere throughout the basin. Infiltration rates lowest in the basin



Slopes are generally steep; includes all forest lands in Black Hills part of basin; vegetative cover consists mainly of coniferous forest; cover is fair to good; sheet and gully erosion slight, and sediment yield relatively low

STREAM CHANNELS



Main channels and flood plains extensively aggraded; many reaches where channels are nearly filled and well grassed. Trap efficiency of valley floor is very high. Tributary has low sediment yield to Cheyenne River. No evidence of bank cutting



Main channels are well grassed with little evidence of bank erosion; channels are well defined and able to transport much of the sediment derived from upland sources although channel systems have a very low sediment yield



Main channels have well-grassed banks and barren floor eroded in either alluvium or coarse gravel. Channel system able to transport most of the sediment contributed to them. Little evidence of bank erosion



Main channels are actively eroding in alluvium; streambank erosion severe in localized reaches. Channel system able to transport most of sediment contributed, and sediment yield is high from bank cutting



Reaches of stream channel and adjacent flood-plain areas where erosion control measures could be initiated