

Section II-iii-J

Water Management

Interpretations of soils for water management are given as limitations for pond reservoir areas; embankments, dikes, and levees; excavated pond (aquifer-fed); and as restrictive features that affect drainage, irrigation, terraces and diversions, and grassed waterways.

Pond reservoir area is the area that holds water behind a dam or embankment. Soils best suited to this use have a low seepage potential, which is determined by the permeability and depth to fractured or permeable bedrock, or other permeable material.

Embankments, dikes, and levees are raised structures of soil material constructed to impound water or protect land against overflow. They generally are less than 20 feet high and are constructed of "homogeneous" soil material (without a core zone) and compacted to medium density.

Excavated ponds (aquifer-fed) are bodies of water created by excavating a pit or dugout into a ground-water aquifer. Excluded are ponds which are fed by surface runoff or that have embankments that impound water 3 feet or more above the original surface.

Drainage is the process of removing excess surface and subsurface water from agricultural land. Soil features are listed that affect grading, excavation, and stability of trench sides or ditchbanks. Features are also listed which might affect productivity after drainage is installed. The availability of drainage outlets must also be considered.

Irrigation is the controlled application of water to supplement rainfall for supporting plant growth. Soil features are listed that affect design, layout, construction, management, or performance of an irrigation system.

Terraces and diversions are embankments or a combination of an embankment and a channel constructed across a slope to control erosion by diverting or storing surface runoff instead of permitting it to flow uninterrupted down the slope. Soil features are listed that affect the construction of terraces and diversions and that may cause problems after construction.

Grassed waterways are natural or constructed channels that generally are broad and shallow and are covered with erosion-resistant grasses. They are used to conduct surface water to outlets at a nonerosive velocity. Soil features are listed that affect the construction and maintenance of the waterway, and also that affect the growth of grass after construction.

See the National Soil Survey Handbook, Part 620, for criteria used in rating specific uses.

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Soil name and map symbol	Limitations For			Features Affecting			
	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
BhB BERKSHIRE	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope, soil blowing	Limitation: large stones, soil blowing	Limitation: large stones
BkB BERKSHIRE	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones	Limitation: droughty, large stones
BkC BERKSHIRE	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones, slope	Limitation: droughty, large stones, slope
BkD BERKSHIRE	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones, slope	Limitation: droughty, large stones, slope
Bo BIDDEFORD	Slight:	Severe: hard to pack, ponding	Severe: slow refill	Limitation: frost action, percs slowly, ponding	Limitation: percs slowly, ponding	Limitation: erodes easily, percs slowly, ponding	Limitation: erodes easily, percs slowly, wetness
BuB2 BUXTON	Moderate: slope	Severe: hard to pack, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness
BuC2 BUXTON	Severe: slope	Severe: hard to pack	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, slope

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C.F. CUT AND FILL LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
D.L. DUNE LAND	Severe: seepage, slope	Severe: piping, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, fast intake, soil blowing	Limitation: slope, soil blowing, too sandy	Limitation: droughty, slope
DeB DEERFIELD	Severe: seepage	Severe: piping, seepage, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, slope	Limitation: droughty, fast intake, wetness	Limitation: too sandy, wetness	Limitation: droughty
G.P. GRAVEL PITS	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, fast intake	Limitation: large stones, too sandy	Limitation: droughty, large stones
Ha HADLEY	Moderate: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
HfC HARTLAND	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, slope	Limitation: erodes easily, slope	Limitation: erodes easily, slope
HfD HARTLAND	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, slope	Limitation: erodes easily, slope	Limitation: erodes easily, slope

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HkB HINCKLEY	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, too sandy	Limitation: droughty, large stones
HkC HINCKLEY	Severe: seepage, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, slope, too sandy	Limitation: droughty, large stones, slope
HkD HINCKLEY	Severe: seepage, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, slope, too sandy	Limitation: droughty, large stones, slope
HrB HOLLIS	Severe: depth to rock	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock	Limitation: depth to rock, droughty
HrC HOLLIS	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
HrD HOLLIS	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
HtB HOLLIS	Severe: depth to rock	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock	Limitation: depth to rock, droughty

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HtC HOLLIS	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
ROCK OUTCROP	Severe: depth to rock, slope	Slight:	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
HtD HOLLIS	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
ROCK OUTCROP	Severe: depth to rock, slope	Slight:	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
Lk LIMERICK	Moderate: seepage	Severe: piping, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, flooding, frost action	Limitation: flooding, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness
LyB LYMAN	Severe: depth to rock	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock	Limitation: depth to rock, droughty
LyC LYMAN	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope

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LyD LYMAN	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
LzC LYMAN	Severe: depth to rock, slope	Severe: piping, thin layer	Severe: no water	Limitation: deep to water	Limitation: depth to rock, droughty, slope	Limitation: depth to rock, slope	Limitation: depth to rock, droughty, slope
ROCK OUTCROP	Severe: depth to rock, slope	Slight:	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
M.L. MADE LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
MoA MONARDA	Slight:	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: wetness	Limitation: percs slowly, wetness	Limitation: wetness
MrA MONARDA	Slight:	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: wetness	Limitation: percs slowly, wetness	Limitation: wetness
PbB PAXTON	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth

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PbC PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PcB PAXTON	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
PcC PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PcD PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PdB PAXTON	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
PdC CHARLTON	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope, soil blowing	Limitation: large stones, soil blowing	Limitation: large stones
PdC2 PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope

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PdC2 CHARLTON	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope, soil blowing	Limitation: large stones, slope, soil blowing	Limitation: large stones, slope
PdD2 PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
CHARLTON	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope, soil blowing	Limitation: large stones, slope, soil blowing	Limitation: large stones, slope
PeB PAXTON	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
CHARLTON	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones	Limitation: droughty, large stones
PeC PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
CHARLTON	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones, slope	Limitation: droughty, large stones, slope

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PeD PAXTON	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
CHARLTON	Severe: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones, slope	Limitation: droughty, large stones, slope
PfB PERU	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: soil blowing, wetness	Limitation: percs slowly, rooting depth
PkB PERU	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: percs slowly, rooting depth
PkC PERU	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, rooting depth, slope
RcA RIDGEBURY	Moderate: seepage	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: wetness	Limitation: percs slowly, wetness	Limitation: wetness
RdA RIDGEBURY	Moderate: seepage	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: droughty, wetness	Limitation: percs slowly, wetness	Limitation: wetness

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Rf RIFLE	Severe: seepage	Severe: excess humus, ponding	Moderate: slow refill	Limitation: frost action, ponding	Limitation: ponding	Limitation: ponding	Limitation: wetness
SA SACO	Moderate: seepage	Severe: piping, ponding	Severe: cutbanks cave	Limitation: flooding, frost action, ponding	Limitation: flooding, ponding	Limitation: erodes easily, ponding	Limitation: erodes easily, wetness
ScA SCANTIC	Slight:	Severe: hard to pack, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: percs slowly, wetness	Limitation: erodes easily, percs slowly, wetness	Limitation: erodes easily, rooting depth, wetness
Sd SCARBORO	Severe: seepage	Severe: piping, ponding, seepage	Severe: cutbanks cave	Limitation: cutbanks cave, ponding	Limitation: ponding	Limitation: ponding, too sandy	Limitation: wetness
SkB SCIO	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: cutbanks cave	Limitation: erodes easily	Limitation: erodes easily	Limitation: erodes easily
SkC2 SCIO	Severe: slope	Severe: piping	Severe: no water	Limitation: cutbanks cave, slope	Limitation: erodes easily, slope	Limitation: erodes easily	Limitation: erodes easily, slope
SuC2 SUFFIELD	Severe: slope	Severe: hard to pack	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, slope

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SuD2 SUFFIELD	Severe: slope	Severe: hard to pack	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, slope
SuE2 SUFFIELD	Severe: slope	Severe: hard to pack	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, slope
To TOGUS	Severe: seepage	Severe: piping, ponding, seepage	Severe: cutbanks cave	Limitation: frost action, ponding, subsides	Limitation: ponding	Limitation: ponding, too sandy	Limitation: wetness
Va VASSALBORO	Severe: seepage	Severe: excess humus, ponding	Slight:	Limitation: frost action, ponding	Limitation: ponding	Limitation: ponding	Limitation: wetness
WmB WINDSOR	Severe: seepage	Severe: piping, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, fast intake, slope	Limitation: soil blowing, too sandy	Limitation: droughty
WmC WINDSOR	Severe: seepage, slope	Severe: piping, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, fast intake, slope	Limitation: slope, soil blowing, too sandy	Limitation: droughty, slope

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Wn WINOOSKI	Moderate: seepage	Severe: piping, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, flooding, frost action	Limitation: flooding, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily
WrB WOODBIDGE	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: soil blowing, wetness	Limitation: percs slowly, rooting depth
WrC WOODBIDGE	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: slope, soil blowing, wetness	Limitation: percs slowly, rooting depth, slope
Wsb WOODBIDGE	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: percs slowly, rooting depth
Wsc WOODBIDGE	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, rooting depth, slope