

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 ditch banks. 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 non-erosive 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 Handbook, Part 603, for criteria used in rating specific uses.