



Soil series are grouped by permeability² and the available water capacity. The classification of soil recharge potential shows the ability of a soil type to provide potential recharge water to the unconsolidated materials below 80 inches. Soil recharge potential was estimated by the authors. Soils were scale-modified from aerial photos in the publication, Soil Survey for Brevard County, Florida (U.S. Department of Agriculture, Soil Conservation Service, 1974). Soil series were taken from the Cooperative Soil Survey program in 1965 as listed in the 1974 report (Simonson, 1962, and U.S. Department of Agriculture, 1960, supplements in 1967 and 1968), (references, sheet 3).

¹ U.S. Department of Agriculture, Soil Conservation Service, 1974.

² Permeability--The quality that enables the soil to transmit water or air, in inches per hour.

³ Available water capacity--The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil.

EXPLANATION

☒ Mining operation (sand, limonite, or marl pits).

made land Filled land.

w Water body (borrow pit, small ponds, and canals).

Map Pattern	Soil series ^{1,2}	Permeability (in/h) ^{1,2}	Available Water Capacity ^{1,3} (in/in of soil)	Recharge Potential (estimated)
■■■■■	Ca-Ca (Canaveral) Ga (Galveston) Or (Orsino) Pb (Palm Beach) PFB-PFD-Ph (Paola) Sa (Satellite) SFB-SFD (St. Lucie) We (Welaka) Ba (Basinger) Pw (Pompano) Sb (St. Johns) Ta (Tavares) Va (Valakaria) As-At (Astatula)	more than 20 more than 20	02-05 02-05 03-07 03-08 03-08 03-08 05-10	excellent excellent
■■■■■	Co (Cocoa) So-Pu (Pomello) An (Ancolite) Eq (Eau Gallie) Cp (Copeland) Eu-Ew (Eau Gallie) Tc (Terra Ceia) Ho (Holopaw) Pn-Po (Pineda) Pp (Pineda dark surface grad.) Od (Oldsmar)	6-20 6-20 2-6 2-6	02-05 02-05 05-10 05-10 10-15 10-15 20-25 10-15 10-15	good to very good good to very good
■■■■■	Fg-Fd (Felda) Im (Imnokalee) Ma (Malabar) Mu-Mk (Myakka) Pk (Parkwood) Sc (St. Johns)	6-6 6-6 6-2 6-2 6-2 6-2	10-15 10-15 10-15 10-15 10-15 10-15	poor poor

Map Pattern	Soil series ¹	Permeability (in/h) ^{1,2}	Available Water Capacity ^{1,3} (in/in of soil)	Recharge Potential (estimated)
■■■■■	Fe-Fq (Felda) Mc (Micco) Br (Bradenton) Tw (Tomoka) Ch (Chobe) Fn-Fo (Florida) Mb (Malabar) Me (Montverde) Cd (Canova) Mp (Myakka) Wa (Wabasso) Wn (Winder)	6-6 6-6 6-6 6-6 6-2	10-15 10-15 15-20 10-25 10-15	poor
■■■■■	Sw (Swamp)		Usually includes areas classed for water retention. Permeabilities vary but are considered low.	poor
■■■■■	Ck (coastal beaches) Tm (tidal marsh) Ts (tidal swamp)		Affected by ocean tides and salt water intrusion. There is little fresh-water recharge to any shallow water-bearing zone.	poor
■■■■■	Sp (spoil bank) Ur (urban land) Qr (quartzipsammations, smoothed)		Depicting urban or disturbed areas. Permeability depends on development techniques and vegetative culture.	variable

OVERLAY MAP OF THE FELLSMERE NW QUADRANGLE, FLORIDA; SOIL TYPE AND PERMEABILITY AND SHALLOW AQUIFER RECHARGE POTENTIAL

By
James M. Frazee, Jr.,
and
C. P. Laughlin
1979

OCT 25 1979
LIBRARY

49-50027

3 1818 00653447 1

M(200)
R290
7A7
S47
C1