

Recommendation: Use the calculated ROCs based on Schueler since we are not modeling runoff separately

Comparison of Runoff

Description of FLUCCS Code	FLUCCS Codes	Harper & Baker Cluster 5 ROCs by Soil Type (includes Martin and Palm Beach Counties) Mean ROCs	Harper & Baker Cluster 5 Average ROCs Across All Soil Types
Residential, Low Density	1100		0.193
<i>Hydrologic Soil Group A</i>		0.093	
<i>Hydrologic Soil Group B</i>		0.164	
<i>Hydrologic Soil Group C</i>		0.232	
<i>Hydrologic Soil Group D</i>		0.284	
Residential, Medium Density	1200		0.229
<i>Hydrologic Soil Group A/25% Impervious</i>		0.151	
<i>Hydrologic Soil Group B/25% Impervious</i>		0.202	
<i>Hydrologic Soil Group C/25% Impervious</i>		0.260	
<i>Hydrologic Soil Group D/25% Impervious</i>		0.302	
Residential, High Density	1300		0.485
<i>Hydrologic Soil Group A</i>		0.435	
<i>Hydrologic Soil Group B</i>		0.469	
<i>Hydrologic Soil Group C</i>		0.506	
<i>Hydrologic Soil Group D</i>		0.531	
Institutional + Recreational	1700+1800		
Commercial and Services	1400		0.642
<i>Hydrologic Soil Group A</i>		0.618	
<i>Hydrologic Soil Group B</i>		0.633	
<i>Hydrologic Soil Group C</i>		0.651	
<i>Hydrologic Soil Group D</i>		0.664	
Industrial	1500		
Extractive (Mines, Pits and Quarries)	1600		
Open Land	1900		0.096
<i>Hydrologic Soil Group A</i>		0.018	
<i>Hydrologic Soil Group B</i>		0.067	
<i>Hydrologic Soil Group C</i>		0.127	
<i>Hydrologic Soil Group D</i>		0.173	
Agricultural	2000		
Cropland and Pastureland	2100		
Row Crops	2140		

Citrus Groves	2210		
Upland Non-Forested	3000		
Upland Forested	4000		
Water	5000		
Wetlands	6000		
Barren Land	7000		
Transportation, Communication & Utilities	8000		0.476
<i>Hydrologic Soil Group A/50% Impervious</i>		0.425	
<i>Hydrologic Soil Group B/50% Impervious</i>		0.460	
<i>Hydrologic Soil Group C/50% Impervious</i>		0.495	
<i>Hydrologic Soil Group D/50% Impervious</i>		0.522	

Notes:

*From Table 4-24, "Evaluation of Current Stormwater Design Criteria within the State of Florida Final Rep

**The formula used is: $\text{Runoff Volume (Rv)(inches)} = 0.05 + 0.009(I)$ where I=percent impervious. Formula

***From Table 7, 2003 WERC Study Final Report to FDEP, "Evaluation of Alternative Stormwater Regulati

y for each soil type. The Harper & Baker
Coefficients (ROCs) for the PLSM

Schueler Calculated ROC	Percent Impervious Estimates by Land Use (Needed for Schueler Calculated ROC Formula)
0.182	14.70
0.303	28.10
0.653	67.00
0.898	94.25
0.831	86.80
0.257	23.00
0.064	1.50
0.050	0.00
0.050	0.00
0.050	0.00

0.050	0.00
0.064	1.50
0.950	100.00
0.050	0.00
0.739	76.60

ort" June 2007, Harper & Baker,
is from Schueler, T., 1987, Controlling
ions for Southwest Florida" by ERD.

"Cluster 5" values are intended for use when the soil groups are also

Notes
Schueler formula for the runoff coefficient is $R_v=0.05+0.009(I)$ where I is the percent impervious as a nondecimal (e.g. 16.2% impervious is 16.2 in the formula).
Applied "single-family" impervious estimate.
Applied "multi-family" impervious estimate.
How were the runoff coefficients calculated where 2003 WERC did not provide a percent impervious estimate?
Averaged two values of percent impervious from 2003 WERC (low-intensity and high-intensity commercial).
Applied number for "undeveloped rangeland/forest"

Applied number for "undeveloped rangeland/forest"
How were the runoff coefficients calculated where 2003 WERC Report, Table 7, did not provide a percent impervious estimate? What values were used?