

RESULTING P INDEX

The P Index is obtained by multiplying the site and transport characteristics totals – Part A (Table 1) by the phosphorus source totals – Part B (Table 2). The results are interpreted according to guidelines in Table 3.

On sites with a LOW or MEDIUM vulnerability rating, it is possible to use a nitrogen-based budget to determine application rates. On sites with a HIGH or VERY HIGH vulnerability rating, it is necessary to use a phosphorus-based budget to determine application rates.

Assessing the P Index Results

The numerical result of the P Index has no absolute value, but is immediately translated into a qualitative rating (LOW, MEDIUM, HIGH, or VERY HIGH). For each qualitative rating a description is given for the level of concern that each specifically assessed field has for P loss potential (Table 3). Some general guidance is given for each qualitative level as to the intensity and type of remedial action or mitigation that would be necessary to reduce P loss risk.

Conservation Planning Notes

Since output from the P Index includes information that is specific to each of the site and transport characteristics – Part A (Table 1) and phosphorus source management – Part B (Table 2), the conservation planner can identify which characteristics/management have the greatest influence in determining the final vulnerability rating and may be targeted for remedial action. Table 14 may be used to record notes to explain, clarify, and/or define site characteristics and source management used to evaluate a site. Each factor can be revisited and planning changes made, thereby changing the resulting P Index. For example, terraces can be installed, thereby lowering soil erosion and the final P Index. Similarly, the P Index can be lowered by reducing the planned P application rate.

Table 14. Conservation Planning Notes.

Client Name:	County:	Date:
Planner:	Field(s):	Crop:
Site and Transport Characteristics	Remarks	
Soil Erosion		
Runoff Potential		
Leaching Potential		
Potential to Reach Water Body		
Phosphorus Source Management		
Fertility Index Value		
P Application Source and Rate		
P Application Method		
Waste Water Application		

GLOSSARY (as used in the P Index the following definitions apply)

No Surface Outlet – The combination of slope and permeability of the application site that will not discharge surface flow from that site in a 2 year – 24 hour rainfall event.

(This level of evaluating runoff is not intended to require calculation for the rainfall events but is intended to evaluate those sites that do not have external surface flows during most years. Where these sites occur, additional comments may need to be recorded on the back of form FL-CPA-41)

Compost – animal wastes and plant debris that has gone through the composting process.

Biosolids – Residuals, domestic wastewater residuals and/or septage as defined in Chapter 62-640 Florida Administrative Code. Biosolids include co-compost with a minimum of 50% biosolids.

Landform - Any physical, recognizable form or feature of the earth's surface, having a characteristic shape and produced by natural causes.

Examples of individual landforms and their definitions are:

Karst - Topography with sinkholes, caves, and underground drainage that is formed in limestone, gypsum, or other rocks by dissolution, and that is characterized by sinkholes, caves, and underground drainage.

Knoll - A small, low, rounded hill rising above adjacent landforms.

Subsurface Drainage – Lowering of the water table in order to improve vegetative growth, remove surface runoff from wet areas, or relieve artesian pressure. Subsurface drainage can be achieved by either using drainage tile or drainage ditches, typically spaced at regular intervals.

REFERENCES

Brown, R.B., A.G. Hornsby, and G.W. Hurt. 1991. Soil ratings for crop production and water quality protection. Circular 959. Florida Cooperative Extension Service, University of Florida, Gainesville, FL.

Florida Ecological Sciences Staff. 1999. Florida Agronomy Field Handbook, Chapter 6. USDA, NRCS, Gainesville, FL.

Florida Phosphorus Index Work Group. 2000. The Florida phosphorus index. <http://efotg.nrcs.usda.gov/treemenuFS.aspx?Fips=12001&MenuName=menuFL.zip> (The Florida Phosphorus Index sheets are located in Section IV of the Table of Contents under C.Tools.)

Thomas, B.P., L. Law, Jr., and D.L. Stankey. 1979. Soil Survey of Marion County, Florida. USDA/SCS in cooperation with the University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experimental Stations and Soil and Water Science Department; and Florida Department of Agriculture and Consumer Services.