

**Board of Stark County
Commissioners Storm Water
Education Program
330-451-7405**

**Stark County Storm Water
Public Involvement/
Public Education (P.I.P.E.)
Committee Members:**

City of Alliance

City of Canton

Village of East Canton

Jackson Township

Keep Alliance Beautiful

City of North Canton

Perry Township

Plain Township

Stark County Health Department

Stark County Park District

Stark County Soil & Water
Conservation District

Stark County Regional
Planning Commission

**“Proper Planting
With Clawd”**



Stark County, Ohio

Proper Planting



Whether you have a small garden in your back yard or are a farmer of an industrial farm, proper planting is vital to our water. The Nimishillen Creek, Tuscarawas River, and Mahoning River Watersheds are impaired (poor water quality). The primary causes of impairment are pathogens (disease causing organisms), phosphorus, failing septic tanks, and crop production.

- Crop production is responsible for 50-70% of the surface waters in the U.S. being contaminated through soil erosion, over-grazing, pesticide, fertilizer, and manure application

Best Farming Practices

- Do not farm directly adjacent to any water source
- Maintain wells
- Follow safe manure, fertilizer, pesticide applications
- Manage all farm waste - human, animal, hazardous chemicals
- Create a buffer of trees, shrubs, etc. between planting area and water sources

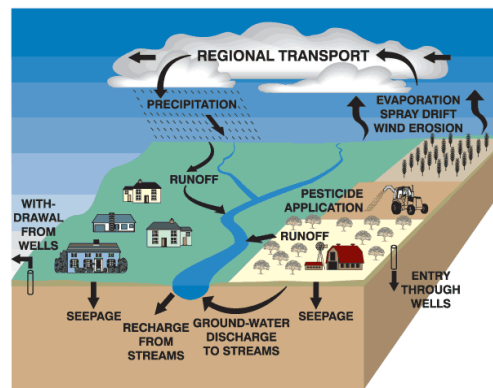
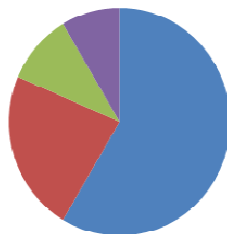
Samples containing pesticide residue - 62%

Samples exceeding pesticide maximum residue limit - 25%

Sample containing illegal pesticides - 7%

Samples exceeding maximum illegal residue limit - 6%

Vegetables in supermarkets containing illegal pesticides and excessive pesticides



Organic Farming-

- **Means** - uses green manure, compost, and natural (chemical free) fertilizers - if every farmer in the U.S. converted to organic, 500 million pounds of harmful pesticides could be eliminated from the environment annually
- **Builds healthy soil** - crop rotation and natural cultivation helps to control weeds and produce healthy plants
- **Helps combat erosion** - organic fields have several more inches of topsoil and 1/3 the erosion loss than chemically treated fields
- **Supports water conservation/health** - organic farming helps keep our water supplies clean by stopping polluted runoff, using mulch, and less irrigation conserves water
- **Discourages algae blooms** - phosphorus and runoff from petroleum-based fertilizers cause algae blooms which can be very toxic
- **Supports animal health and welfare** - animals living on organic farms are exposed to clean, chemical free grazing that keeps them healthier and more resistant to illness

ORGANIC VS CONVENTIONAL

Vegetables	Minerals (in milliequivalents)							
	Type of Soil Management	Calcium	Magnesium	Potassium	Sodium	Manganese	Iron	Copper
Snap Beans								
Organic	40.5	60.0	99.7	8.6	60.0	227.0	69.0	
Conventional	15.5	14.8	29.1	0.0	2.0	10.0	3.0	
Cabbage								
Organic	60.0	43.6	146.3	20.4	13.0	94.0	48.0	
Conventional	17.5	15.6	53.7	0.8	2.0	20.0	0.4	
Lettuce								
Organic	71.0	49.3	176.5	12.2	169.0	516.0	60.0	
Conventional	16.0	13.1	53.7	0.0	1.0	1.0	3.0	
Tomatoes								
Organic	23.0	59.2	146.3	8.5	68.0	1936.0	53.0	
Conventional	4.5	4.5	58.6	0.0	1.0	1.0	0.0	
Spinach								
Organic	96.0	293.9	257.0	69.5	117.0	1584.0	0.0	
Conventional	47.5	46.9	84.0	0.8	1.0	19.0	0.5	

Research conducted by Firman E. Bear at Rutgers University in the Natural Gardener's Catalog (1995)