

## Benefits of Cover Crops

### Reduction of soil erosion

Vegetative top growth covers the soil, while roots bind the soil underneath protecting from wind and water erosion.

### Addition of organic matter

Cover crops add organic matter but the amount really varies depending up on the cover crop species and the conditions under which it is grown.

### Improved water retention in the soil

Soils with higher levels of organic matter will withstand dry conditions better than eroded soils.

### Reduction of nutrient loss

Cover crops that take up nutrients can help reduce losses to leaching. Additionally, once the cover crop dies, the nutrients stored in the tissues return to the soil.

### Improve soil fertility

Nitrogen-fixing cover crops return nitrogen back to the soil, providing nutrients for subsequent crop rotations. Some deep rooted crops can also transfer nutrients deep in the soil profile to the surface. Root action may provide a source of phosphorus, making it available to other plants.

Check the OMAFRA web site for more information on cover crops.

To participate in the  
Healthy Soils Check Up Program  
contact:

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# Healthy Soils Check-up Program

Using soil testing optimizes  
nutrients, reduces erosion,  
and keeps soil fertile.



**Bay of Quinte**

Remedial Action Plan

Healthy Bay • Healthy Community

[www.bqrap.ca](http://www.bqrap.ca)

### **This program provides farmers with:**

1. Agronomic soil testing with analysis being done by an OMAFRA accredited soil lab.
2. Detailed field maps showing contours (slopes) and areas within the field that are more prone to erosion.

Knowing your baseline nutrient levels and then setting target levels will help save money on fertilizer and reduce phosphorus runoff. As well, implementing the 4 R's of fertilizer application will minimize nutrient transport from fields and maximize crop uptake and utilization.

The field maps will identify key erosion sites to help you adopt Best Management Practices (BMPs) to keep soil on your fields and out of local waterways.

#### **Priority areas are:**

- **South Sidney watershed**
- **Lower Napanee watershed**
- **Hay Bay**

**Other areas will be considered on a case by case basis as funding allows**

#### **Costs to the farmer**

The soil testing is **FREE**

#### **Cover crop grant rate**

The grant for cover crop seed is \$10.00 per acre - maximum grant is \$1000.00  
Grant amount determined by review committee

### **When thinking about soil nutrients, here are some questions to consider.**

1. What nutrients do my fields need?
2. What is the soil test telling me?
3. How do I maximize the return from the nutrients in the soil without compromising subsequent yields?
4. Am I applying too much for too little fertilizer/manure?

Soil testing can answer these questions.

### **What are farmers saying...**

In regards to the staff of the Bay of Quinte Remedial Action Plan, I found them very polite, professional, and helpful in explaining and carrying out this project.

These results will be a benefit for my operation for several years. I plan to attend the seminar in December, to get a better understanding of the results and the program.

Thanks for including our farm in this project.

*Glen Wilman, South Sidney Township*

Soil testing can provide information on the level of nutrients already present in your fields. Knowing these values will allow for proper application of fertilizer/manure to optimize crops yields.

It can also save you money if results indicate that no application is needed.

### **Tables:**

P205 and K20 recommendations for various crops and soil test values.

Soil Test (ppm)	P205 recommendations(lb/ac)			
	Corn	Beans	Wheat	Alfalfa
8 - 9	62	36	27	54
21 - 25	18	0	0	0
> 31	0	0	0	0

Soil Test (ppm)	K20 recommendations(lb/ac)			
	Corn	Beans	Wheat	Alfalfa
31 - 45	125	81	27	285
101 - 120	27	27	18	62
> 151	0	0	0	0

Tables adapted from the Nutrient Management Workbook 2003