



**Senate and House Joint Ag Committee**

**June 5 2018**

**Chairman Hackett, Vice Chair Hoagland, Ranking Member O'Brien, Chairman Hill, Vice Chair Koehler, Ranking Member Patterson and Members of the Agriculture Committees  
RE: Senate Bill One review**

I am Ronald Wyss. I am here today representing the Lake Erie Foundation. Our mission is to create and maintain a healthy Lake Erie now and forever as defined by drinkable water, recreational contact and edible fish. I want to thank you for your time and commitment to our great State. I am a lifetime farmer with a diversified grain and vegetable operation. I served on the Ohio Phosphorus Task force 1 and 2. I also served on the OEPA Technical Advisory Group on water quality.

We all want clean healthy water for our communities and our own families. It is a non-partisan issue. Senate Bill 1 was a good faith effort to move us forward towards that goal. We thank you for its passage. It has been three years since it's implementation and the results are mixed at best. In the meantime other initiatives have also been implemented and still loading to our rivers and lakes is not subsiding. We need to do more.

The recent OEPA mass balance report clearly indicates that agriculture runoff is by far the largest source of nutrient loading entering the western basin (80%+). We must find a working solution to support farmers as they transition to practices that will reduce runoff. The recent White Paper by nine respected Ohio scientists prioritizes several management practices that will have the most impact on reducing nutrient runoff. We agree with them. The top priorities are listed below:

**The first priority—Soil Tests and agronomic application rates.**

The cost of soil testing has dropped drastically with technology innovation. With the recommended 3 year testing regimen, the cost is about one dollar per acre. Commercial fertilizer users purchase fertilizer and it will actually save them money to not apply fertilizer where they already have adequate Soil Test Phosphorus (STP) levels. The economic return is immediate. The Tri State Fertility Guide recommends no more applications of phosphorus when the soil test reaches 40 PPM. Current reporting from soil test companies indicate more than half of Ohio acres have adequate phosphorus levels now. Think of the money that farmers could save by testing at 2.5-acre grids and using variable rate application equipment. This is a win-win.

Soil tests are also inexpensive for livestock growers but they are in a different position. Historically, the recommendations for manure application were nitrogen based which allowed phosphorus applications three to five times the crop needs. This constant over



application of phosphorus has led to fields with soil tests as high as 400 PPM and even over 1000 PPM. Those fields are currently described as **legacy fields**. The Grand Lake St Marys watershed is an example of this historical application regimen. The distressed watershed classification still allows continued application of manure until the soil test exceeds 150 PPM. There have been small reductions of loading at GLSM, but not enough to foresee the removal of the distressed watershed classification anytime in the near future.

Current manure soil test recommendations currently allow applications to continue until Soil Test Phosphorus (STP) levels reach 150 PPM. Many in the industry call this the “**environmental**” level. Historical research and current edge of field studies confirm that phosphorus runoff increases with soil test levels. We do not believe there is anything environmental about a 150 PPM STP. The current Phosphorus Risk Index will allow applications to continue at 400 PPM. This is illogical.

### **The second priority—placement of nutrients below the ground.**

Research clearly demonstrates that placement of nutrients below the surface of the ground reduces runoff. Phosphorus in commercial fertilizer is highly soluble. When it is spread on the surface of the ground with broadcast equipment it is highly susceptible to run off. Inserting it into the ground 4” to 6” deep greatly reduces runoff. The equipment to do this is expensive and is much slower than broadcasting fertilizer. Providing support to farmers and commercial fertilizer dealers through cost share or grant programs would be of significant value. These funds could also be used as matching funds for national USDA or GLRI programs.

Application of manure on the surface is also risky. That was clearly demonstrated by the fish kills last summer when manure was applied at recommended rates. Providing placement toolbars for manure is not a significant change from current total equipment required or speed of operation. Just use a different toolbar. They are expensive, but not very expensive when total costs are amortized over the life of the equipment. We support cost share programs to finance the adaptation of sub surface placement of manure. There are USDA programs where state funds can be used as matching funds.

### **The Third Priority—Control Erosion**

NRCS Programs are available to farmers now. Filter Strips, grass waterways and blind inlets. Agencies are working to gain participation.

### **The Manure Conversion Moonshot Project.**

This is an initiative of the Lake Erie Foundation. There are too many farms with more nutrients than they have acres that can utilize those nutrients. This surplus of nutrients is the direct result of too many animals in a geographic area. This results in the over application of manure and very high phosphorus runoff. It is not an Ohio problem. It is a



nationwide problem with almost every State having at least one example of this situation. In fact, it is a worldwide problem. Other States that are more directly impacted by this situation are North Carolina, Pennsylvania, Maryland, Virginia, Florida, Arkansas, Iowa, Texas, Utah, and Washington. For Ohio the first example is Grand Lake Saint Marys.

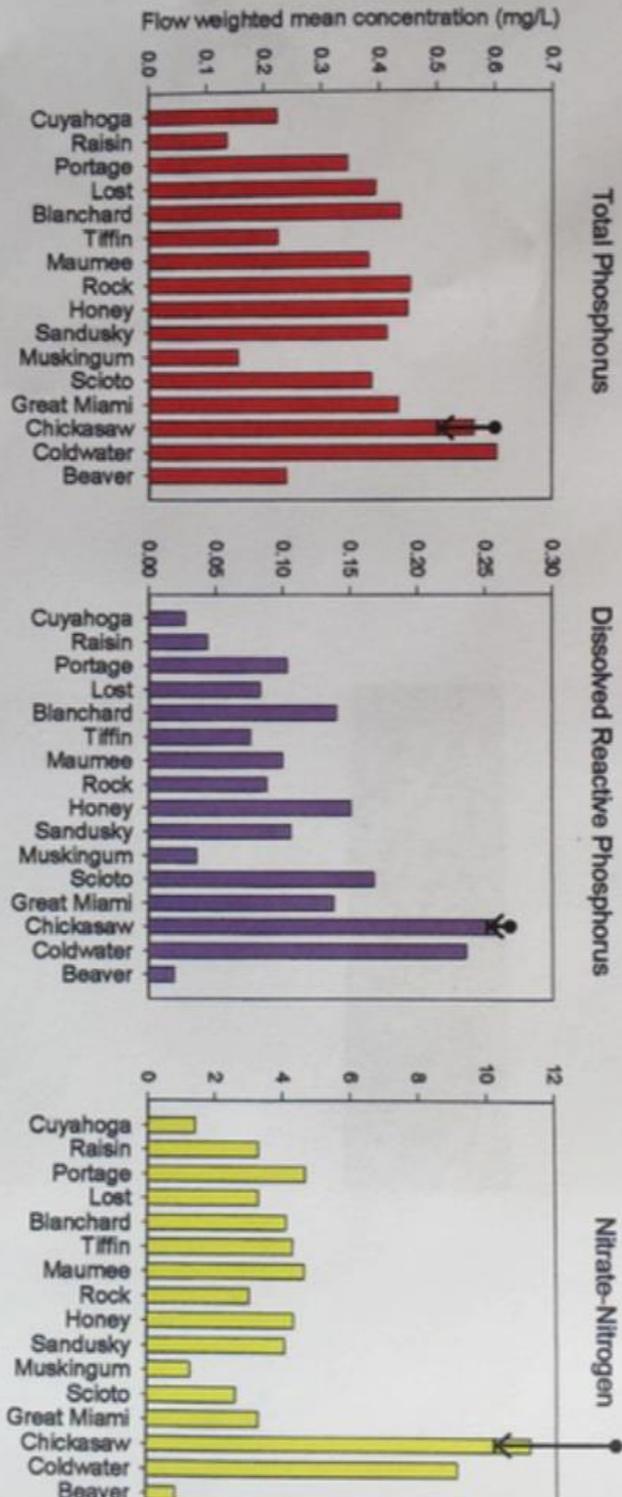
We believe the solution to this problem is to cost effectively convert the high water content, low value manure to a high value dry product that can be transported to the fields that need the nutrients to reach there agronomic goals. Through our pursuit of this project we have found there is a significant amount of research and innovation occurring across the nation. Although significant effort is being expended across the nation, there is limited communication and even less sharing of information. We are working to get national support for this program. We envision a panel to work with participants in the US and around the world to develop technologies to cost effectively convert manure to products that can be distributed to fields that need additional nutrients. The goal is to reduce costs by innovation, technology; scale of manufacturing and using advanced manufacturing.

We supported Senate Bill 1, but it and other measures are not having the impact required to reduce loading to our waters. We need to add additional measures that require all nutrients are applied agronomic rates as recommended by the Tri State Fertility Guide.

Thank you for your time and attention. I am available for questions.

Ronald Wyss  
Board Member, Agriculture Committee Chairman  
Lake Erie Foundation

## Five year average annual FWMC



- Although trends are in the right direction, there is still work to be done
- May need to consider alternatives to reduce SRP

