

January 28, 2004

Ohio Lake Erie Commission  
One Maritime Plaza  
Fourth Floor  
Toledo, OH 43604-1866

Re: Lake Erie Protection Fund Final Report

This letter concerns the final report for the Lake Erie Protection Fund grant titled "One pass fall tillage with 30% residue and adequate seed bed preparation" from the Henry Soil and Water Conservation District. As stated on the interim report, this program was very successful in 2002 and continued its popularity even with adverse weather conditions in 2003.

This grant provided the District to lease a power unit for a tillage tool called the Dyna-Master. The Dyna-Master provided deep tillage action with a soil finisher for an adequate seedbed for spring planting. This tool also left sufficient crop residue to protect the soil from winter and early spring erosion.

This tool was to combat the ongoing problem of stale seedbeds with no cover in Henry County. Stale seedbeds tilled in the fall are highly susceptible to winter and early spring erosion. The power unit made the Dyna-Master a turnkey operation for farmers renting it. It also allowed farmers without a large horsepower tractor to rent this piece of conservation tillage equipment.

This tool has become quite popular in Henry County the last two years. Farmers were extremely satisfied with the tillage tool's unique dual action of deep tillage and a level seedbed. They also appreciated the residue left which kept the soil from blowing or washing over the winter and early spring. The residue also protected the soil from sealing off like a road surface promoting surface water runoff.

The Henry Soil and Water Conservation District owned the Dyna-Master in 2000, and rented it out to farmers without providing a power unit for the first two years. Farmers had to supply their

own horsepower to run the conservation tillage tool. The figures below show the increase in use of the Dyna-Master with the power unit for the last four years.

<u>Year</u>	<u>No. Of Renters</u>	<u>Acres Used</u>
2000 – without Power unit	2	80
2001 -       ”       “       “	7	230
2002 – with Power unit	29	1,269
2003 -       “       “       “	19	800

As you can see, the first year with a power unit on the Dyna-Master saw an increase of over 1,000 acres and 22 renters. We also had a decrease in 2003 of over 400 acres.

This can easily be explained. The Dyna-Master is a dry weather tool. The wet weather in the summer and fall of 2003 did not allow us to complete all the acres that were signed up. The farmers that used the Dyna-Master have been very pleased and are very interested in using the tool again. A high percentage of these farmers fall plow or use the stale seedbed method. One farmer did a test plot for us, comparing the Dyna-Master to fall plowing. This farmer saw a seven-bushel increase in the Dyna-Master plot compared to the fall plowing.

I also am enclosing two pictures of the Dyna-Master in use. One is in very heavy residue and the other is in mowed wheat stubble at our tillage demonstration day in 2002. Five different types of tillage equipment were demonstrated. Hands on demonstrations were done by all five types of equipment and the Dyna-Master was one of them. Over 50 farmers attended this event. Other promotions, such as being on display at the county fair and articles in our newsletter, have been quite successful with the amount of acres rented.

New and innovative equipment projects like this are necessary in ascertaining one of the strategic actions of the Lake Erie Protection and Restoration Plan of increasing conservation tillage in the Lake Erie watershed.

The Henry SWCD would like to continue this project with the Dyna-Master or a piece of new conservation tillage equipment. We will be striving to achieve this goal through further grants.

I would like to thank the commission for this grant and look forward to working with you on others.

Sincerely yours,

Bob George  
District Administrator, Henry SWCD

BG/bss

Enc.