

Final Report:
Ex Post Benefits of the Ashtabula River Dredging Project:
Preliminary Data Collection
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Abstract

Dredging the Ashtabula River Area of Concern (AOC) began during Autumn, 2006. A draft plan of work has been developed which evaluates benefits to Ashtabula County in four areas: 1) residential housing, 2) recreation, 3) commercial shipping and 4) new businesses. To develop the data base for ex post estimation of benefits, the pre-dredging status of these areas is needed. For residential housing and commercial shipping, there is sufficient published data. For recreation and new businesses there is not sufficient published data. To establish a pre-dredging baseline from which benefits can be estimated three surveys were conducted; 1) recreational boaters who rented docks on the Ashtabula River during 2006, 2) marinas and yacht clubs operating on the Ashtabula River during 2006, and 3) dry businesses in the Ashtabula River Harbor Area during 2006. The recreational and business environment of the Ashtabula River Harbor Area has deteriorated steadily over the past 10-15 years as the navigability and environmental quality of the Ashtabula River has deteriorated and boaters moved elsewhere. The challenge is how to attract boaters and other recreational visitors back to the Harbor Area.

Introduction

Dredging of the Ashtabula River Area of Concern (AOC) began during Autumn, 2006. Six of 14 beneficial use impairments in the AOC were identified through the RAP process. These environmental problems have numerous causes and are well documented in the Ashtabula River CMP/EIS. Ex post (after the dredging event) estimation of the benefits of the Ashtabula River Dredging (ARDP) project is critical to confirm the ex ante (before the dredging event) benefit estimates on which benefit cost ratios were based. Theoretical studies of Great Lakes cleanups such as Waukegan, IL. (Braden et al J Great Lakes Res. 30(4) 474-491 2004) indicate the benefits far outweigh the cleanup costs. We propose to document the benefits of the Ashtabula Cleanup. The Project Investigators and the collaborators have developed a draft plan of work which evaluates benefits to Ashtabula County in four areas: 1) residential housing, 2) recreation, 3) commercial shipping and 4) new businesses. The benefits accruing to these four areas will capture a high percentage of the total benefits.

To develop the needed data base for ex post estimation of benefits, the pre-dredging status of these four areas of study is needed. For residential housing and commercial shipping, there is sufficient published data to establish the base after the dredging is completed. For

the recreation sector and new businesses there is not sufficient data collected that can be used to establish the pre-dredging status of existing businesses and recreational boaters. Therefore, the focus of this project has been to gather data during 2006 and early 2007 to establish a baseline from which benefits can be estimated. Three surveys were conducted; 1) recreational boaters who rented docks on the Ashtabula River during 2006, 2) marinas and yacht clubs operating on the Ashtabula River during 2006, and 3) dry businesses defined as members of the Harbor Area Business Association excluding marinas and yacht clubs operating in the Ashtabula River Harbor Area during 2006

Each survey is discussed in more detail in separate sections of the report. General results are presented in this overview. Rick Brewer was a key participant in the success of the surveys, being the primary contact with marinas (including yacht clubs) and through the marinas with boaters. Susan Boehme was instrumental in helping obtain a USEPA small grant to further the output of this project.

The recreational and business environment of the Ashtabula River Harbor Area has deteriorated steadily over the past 10-15 years as the navigability and environmental quality of the Ashtabula River has deteriorated and boaters have moved elsewhere. The three surveys jointly support this conclusion. The challenge facing the City of Ashtabula, Ashtabula County and the Ashtabula River Harbor Area is how to attract boaters and other recreational visitors back to the Harbor Area. The closing of the lift bridge during 2008 will be a major inconvenience to road traffic crossing the Ashtabula River and will slow redevelopment of the Ashtabula River Harbor Area.

Ashtabula River/Harbor Recreational Boater Survey: Pre-Dredging 2006

Six hundred boaters who docked at marinas in the Ashtabula River Harbor Area during 2006 were surveyed during Autumn 2006 into Winter 2007 about boating experiences in the Ashtabula River during the 2002 to 2006 period. Rick Brewer served as the point person in making marina contacts. In some cases marinas released their lists of boaters renting docks to Mr. Brewer and he mailed the surveys. In other cases, marina operators preferred to mail the questionnaires. Some of the marina operators closed their businesses for the season and left for Florida and other winter places before we were able to contact them. Co-PI Frank Lichtkoppler worked with Rick Brewer in making these contacts.

A total of 308 boaters responded for a 51 percent response rate. However, the real response rate may be higher. The dock tax data presented with the marina survey shows only 582 wet slips were rented during 2006. Eight respondents were not included in the data base because they did not boat in the Ashtabula River during 2002-2006 or they did not boat at all during these years. The compiled boater data is attached to this report as Appendix A; the compiled data includes a summary of the comments. Detailed comments are available from the investigators on request.

The number of responding boaters renting a slip from a Harbor Area marina or yacht club increased from 206 (69%) in 2002 to 276 (92%) in 2006. About 16 percent also rented a slip in another location and 22 percent used a boat ramp in another location. Ninety-two

percent planned to rent a slip in the Harbor Area during 2007. This result suggests that new boaters came to the Ashtabula River during this 2002 to 2006 period. What we cannot learn from this survey is how many boaters left the Ashtabula River because of the poor boating environment and other factors since boaters who left were no longer renting docks and thus not part of the survey sample.

The number of boaters reporting boat damage within the Harbor Area more than doubled from 32 (16% of 206 docking in the Harbor Area) in 2002 to 65 (24% of 276 docking in the Harbor Area) in 2006. Average damage reported by boaters was \$689 in 2002 and \$867 in 2006. Propeller damage was reported by 66 percent of those reporting damage during the 5-year period; other types of damage reported included keel damage, outdrive damage, lower unit damage, hull damage plus others. The major problems encountered at the Harbor Area reported by boaters were, not surprisingly, inadequate channel depth, inadequate depths at berth or slip, poor water quality and zebra mussels.

During the 5-year survey period, the average boater spent about 36 days at the Ashtabula River each year, took their boats away from the slip or dock 27 times, and went fishing about 17 times. There was little variation reported from year to year. Fishing and recreational cruising or sailing were the major activities reported by boaters.

Boaters were asked to report slip rental, boat ramp, haul in, haul out, and winter storage fees during 2006. Slip rental fees are probably underestimated because they are included in yacht club dues in some cases and boaters did not always report yacht club dues. Haul in, haul out and winter storage fees are frequently bundled. Average slip rental plus boat ramp fees were \$1152 (N = 275). Average haul in, haul out, plus winter storage fees were \$619 (N = 235). The average of all reported fees was \$1621 (N = 285).

Boaters were asked for their opinion about how the dredging project would affect the City of Ashtabula Community and the County of Ashtabula. In both cases the average response was a moderate positive economic impact; the response alternatives were 1) large negative economic impact, 2) moderate negative economic impact, 3) no economic impact, 4) moderate positive economic impact, and 5) large positive economic impact.

Respondents were provided two opportunities to comment, one on the dredging project and one on the questionnaire. The largest set of comments were about how badly the dredging was needed and the length of time it took to get the project underway. Another set of comments focused on how the dredging project would have a positive impact on the city and area, on ease and safety of navigation of the river, on removal of contaminants and debris and water quality, and the improved habitat of the river. A third set of comments focused on communications with boaters during the dredging project, some positive but mostly negative about lack of communications with boaters on what they needed to know to navigate safely during dredging operations. Fourth, more than a few commented on the need to extend dredging further upstream to the 24th street bridge to include Brockways marina.

In summary, many boaters have endured the problems of navigating the Ashtabula River because of its attraction as a recreational boater site, perhaps just because it is home. In addition to inconvenience of boating, boaters have incurred substantial boat damage costs; costs reported by responding boaters alone totaled over \$56,000 during 2006. Adding the convenience and safety of a dredged river will make the river much more attractive to boaters and hopefully attract boaters who left the river to return.

Ashtabula River Harbor Area Marina and Yacht Club Survey: Pre-Dredging 2006

There are 11 marinas on the Ashtabula River; all were surveyed beginning in mid-December, 2006. Eight completed the questionnaire. A ninth reported that it is not a marina in the usual sense but a member club with 32 members who are past employees of Conrail and Norfolk & Southern. Marina and yacht club surveys were hand delivered to these businesses by Rick Brewer. The compiled marina/yacht club data is attached to this report as Appendix B.

Seven marinas reported having 700 in-the-water slips available during 2006. Five reported 174 transient slips, largely slips not rented for the season. The weighted usage of these 700 docks was reported as 66% which suggests that 462 of these docks were rented in 2006. Based on information from the dock tax records, 520 docks were rented in total during 2006 (Figure 1) which includes two marinas which did not respond to the survey. There was a general decline of docks rented on the Ashtabula River based on the dock tax records.

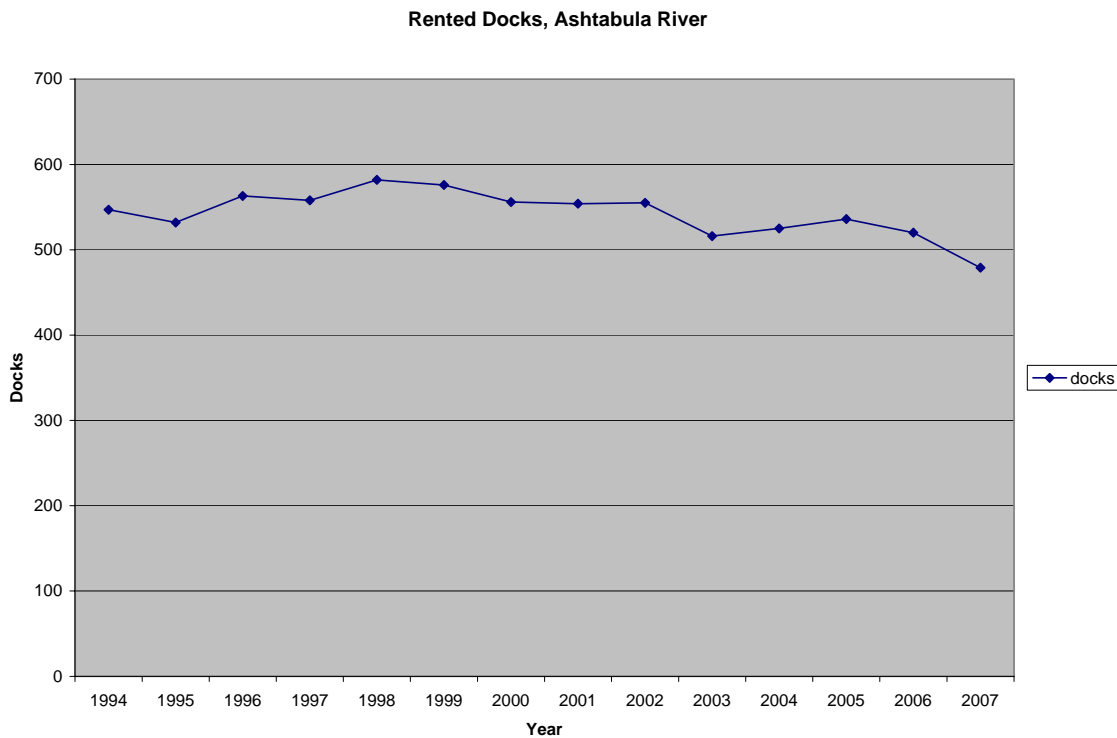


Figure 1. History of dock rentals on Ashtabula River based on dock tax of \$25 per rented dock. Trend is from 547 in 1994 to 479 in 2007.

Marinas employed an average of 1.5 full-time (permanent + seasonal) and 2.7 part-time employees in 2006. Gross receipts and gross expenses were about \$280,000 in 2005; marinas reported by expenditure categories so there is no implication for profits or losses. These marine businesses are small compared to marinas in the western basin of Lake Erie; the largest marinas grossed less than \$700,000 in 2005. Six of the eight responding marinas reported that over 75 percent of gross revenues came from Harbor Area activity. Two of 8 have a boat repair facility. Seven of 8 made capital improvements in the past 5 years; and seven of 8 plan new capital developments in 1, 3 or 5 years.

In order to better understand the marine business environment and how many boaters have left the Ashtabula River, we continue to ask marinas to try to identify boats/boaters who docked in the River in 2002 but are no longer present. At Sutherland Marine, for example, which has few docks but has a major indoor storage facility, the manager was able to identify that 59 of 165 boats stored over 2001-02 were no longer in the area (personal conversation on 8/23/2007). In many of these cases, the owner is deceased, in others has moved to another location. ARU does not maintain records of boaters docking at their facility. In 2007 ARU had 67 docks (personal conversation on 8/23/2007), but had only 32 docks occupied and had paid dock rental taxes on 34 docks (dock rental records). We are continuing to seek this information from other marinas and yacht clubs.

The marinas and to a lesser extent the yacht clubs have lost boaters to alternative sites because of debris and environmental problems in the Ashtabula River and to newly competitive marinas in the vicinity. With the dredging project scheduled for completion by the end of 2007, the ability of marinas to attract boaters from these alternative sites is the critical issue. The closing of the lift bridge will not help either the marinas or the Harbor Area businesses during 2008.

Ashtabula River Harbor Area Business Survey: Pre-Dredging 2006

The harbor area business surveys were mailed in mid-December, 2006 to 63 businesses that are members of the Harbor Area Business Association excluding marinas and yacht clubs. There were two follow-up mailings during January; in August 2007 additional surveys were hand delivered to 6 businesses that had either not completed the questionnaire during the previous winter or had gone into business during the spring/summer of 2007. Twenty five businesses completed the survey for a response rate of 40 percent. The compiled business data is attached to this report as Appendix C.

Among the responding businesses, the largest number contained a gift shop (9), followed by entertainment (museums, tours, etc.) (4), restaurants (3) and variety stores (3). Fourteen had been in business for more than 5 years, 3 were in their first year. The two largest businesses among the respondents were a car dealer and a goodwill store, neither of which may be in the Harbor Area but are association members. Most of these businesses gross less than \$1 million, but two, excluding Goodwill and the car dealer, reported gross receipts of \$1 – 2 million. Ten of 21 businesses reported that 0-15 percent of their gross revenues in 2005 derived from Harbor Area activity, 6 reported 16-50 percent and 6 reported over 50

percent of revenues derived from Harbor Area activity. Twelve of 22 businesses reported making capital improvements in the past 5 years. Eight plan new developments in the next 1, 3, or 5 years.

There appears to be much transition among the dry businesses in the Ashtabula River Harbor Area. There is hope that increased boater traffic will bring increased revenues to area businesses. New businesses are starting while others fail for lack of activity. Empty storefronts provide options for new business if boater traffic increases and the boaters come to the Harbor Area to shop, eat and visit museums.

Funding

Funding for this project was provided in part by the Lake Erie Protection Fund (LEPF). The LEPF is administered by the Ohio Lake Erie Commission. Information on the LEPF can be found at www.epa.state.oh.us/oleo. The LEPF is supported Ohioans who voluntary purchase the *Erie... Our Great Lake* license plate, featuring the Marblehead Lighthouse.