SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Student Opinions of the Olentangy River and the Fifth Avenue Dam Removal and Ecological Restoration Project

A Descriptive Report of the Environment and Social Sustainability Lab
(ESSL DR1-2013)

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

About the Environment and Social Sustainability Lab

The Environment and Social Sustainability (ESS) Lab is a community of scholars working to build scientific understanding of environmental and social sustainability in an interdisciplinary context. We collaborate to describe, analyze, and communicate environmental problems and potential solutions. We are staffed by a core group of affiliated faculty members and students representing a range of social sciences with focus on the environment and natural resources. In addition to a core of faculty leaders, the Environmental and Social Sustainability (ESS) Lab serves as a clearing-house, tailored to particular projects, by gathering research and support personnel from across the campus and nation as needed.

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Suggested Citation

Burnett, E.A. 2013. *Student opinions of the Olentangy River and the Fifth Avenue Dam Removal and Ecological Restoration Project.* The Ohio State University, School of Environment and Natural Resources.

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Survey Development and Distribution

The survey questions addressed in this report were a small part of a sustainability survey that was sent out to OSU students by the Environmental and Social Sustainability Lab in The Ohio State University College of Food, Agricultural and Environmental Sciences School of Environment and Natural Resources. The survey portion described here was sent out on behalf of Friends of the Lower Olentangy Watershed (FLOW), but may also be useful to others interested in student opinions of the Olentangy River. Details about the full survey assessment of sustainability knowledge can be viewed at www.ess.osu.edu/home.

The survey was emailed to 10,000 undergraduate students enrolled at The Ohio State University in the spring of 2013. A total of 2,321 students began the survey, however only 1,613 students completed the entire survey. The survey was distributed using Qualtrics, with several email reminders to encourage responses. Fifty-eight percent of respondents were female, while 42% were male. The mean age was 36.8 years, however the median age was 21 years. The majority of respondents (76.7%) lived off-campus.

Analysis

The data were analyzed using Statistical Program for the Social Sciences (SPSS/PC+20). Analysis involved descriptive statistics, frequency distributions, measures of central tendency (mean, median, mode), and valid percentages. Valid percentages were gathered by eliminating missing responses from the variable being analyzed. All percentages shown are valid percentages. The following sections of the report summarize the survey results. Each section includes response frequencies and percentages for the relevant survey questions. Results are illustrated using figures and tables.

Results

A total of 14 questions were asked on the survey, however the first question was set up to be skip-logic, causing some respondents to answer certain questions that were not asked of other respondents (Table 1). This first question asked respondents whether or not they visited the Olentangy River, riverside parks, or the Olentangy Trail during the past year. Respondents who answered “yes” to this question (65.5%) were asked seven questions directly related to the river, parks, and trail, followed by six final questions. Respondents who answered “no” (34.5%) skipped the first seven questions and answered only the six final questions on the survey.

This section of the report will be divided into two sub-sections. The first section will detail the seven questions asked only of respondents who were visitors during the past year, and the second section will go over the questions asked of all respondents.

Table 1. Organization of Survey Questions

Questions asked ONLY of respondents who visited the Olentangy River, the riverside parks, or the Olentangy Trail during the past year (n = 1061)	
1	How often did you visit the Olentangy River during the past year?
2	How often did you visit the riverside parks during the past year?
3	How often did you visit the Olentangy Trail during the past year?
4	During the past year, which Olentangy riverside park did you visit most often?
5	What types of activities bring you to the Olentangy River, riverside parks, or the Olentangy Trail?
6	What do you enjoy about the Olentangy riverside environment?
7	What do you dislike about the Olentangy riverside environment?
Questions asked of ALL respondents (n = 1621)	
8	What one factor do you believe has the largest negative impact on the water quality of the Olentangy River?
9	What do you believe will be the most important benefit of the Fifth Avenue Dam Removal and Ecological Restoration Project on the Olentangy River?
10	How many years from now do you think it will take before this portion of the riverside ecosystem is restored to health?
11	How important is the Olentangy River to you?
12	To what extent in the next year do you intend to participate in recreational opportunities provided by the Olentangy River, riverside parks, or the Olentangy Trail?
13	Given the changes taking place with the Olentangy River, what recreational opportunities would you like there to be more of on or next to the river?

Visitors During the Past Year

Visiting Frequencies. Respondents who visited the Olentangy River, riverside parks, or Olentangy Trail during the past year reported a low visiting frequency (Figure 1). About a third of the respondents (35.5%) said they visited the riverside parks a few times during the year, however a similar amount of respondents (37.5%) reported that they didn't visit these parks at all. Nearly half (46.8%) of respondents said they visited the Olentangy River a few times during the year.

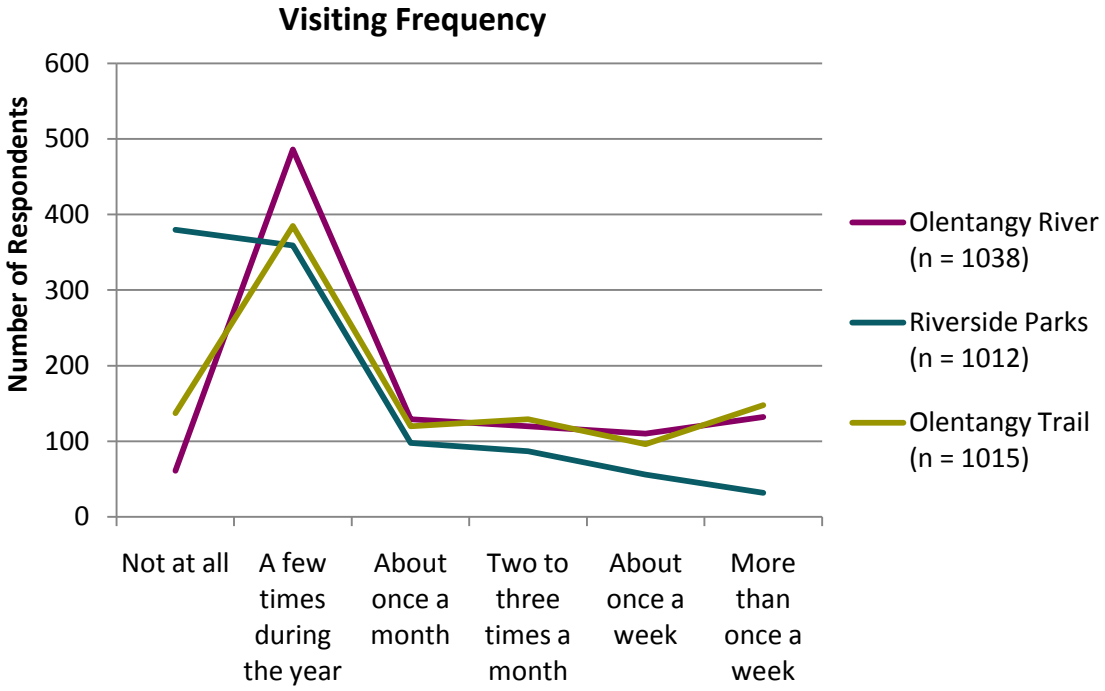

Figure 1. Frequency with which respondents visited the Olentangy River, riverside parks, and Olentangy Trail.

When asked which Olentangy riverside park they visited most frequently, nearly a third of respondents (29.8%) marked that they visited the Side by Side Park the most often, and about a quarter of respondents (25.3%) said they visited the Clinton-Como Park the most often (Figure 2). Other popular parks included Big Run Preserve, Rush Run Park, and Anheuser-Busch Sports Park.

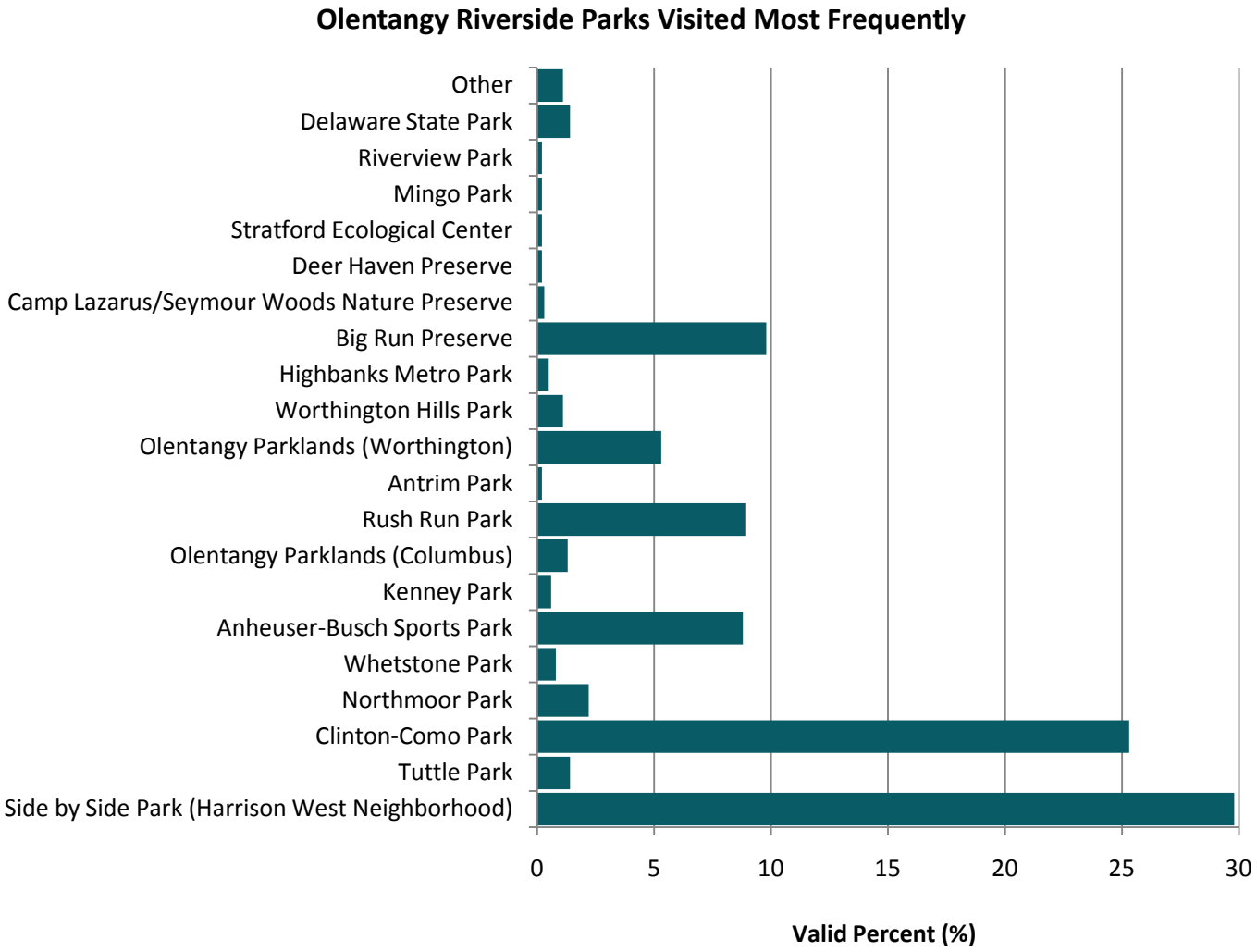

Figure 2. Olentangy riverside parks visited most frequently by respondents (n = 975).

Visiting Respondents Interests and Opinions. Respondents reported a variety of activities that bring them to the Olentangy River, riverside parks, and the Olentangy Trail (Figure 3). Walking or hiking was the most popular activity, followed by jogging or running, observing nature, and bicycling. Respondents who selected 'other' as an activity commonly wrote that they visited the river, parks, and trail to do community service, play with their dogs, and study.

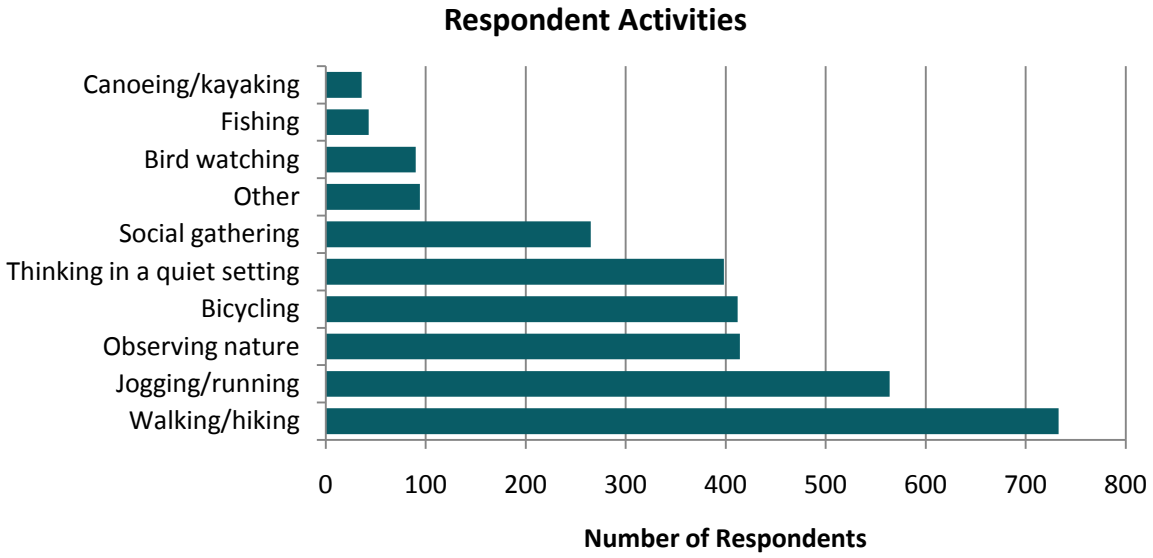

Figure 3. Types of activities that bring respondents to the Olentangy River, riverside parks, and the Olentangy Trail (n = 1036).

The most popular aspects of the Olentangy riverside environment that respondents said they enjoyed were the trails (walking, hiking, biking, and skiing), quiet waterside setting, and shade trees (Figure 4). Some respondents who selected 'not applicable' may feel that there is nothing enjoyable about the areas where they visit. This was evidenced in the 'other' comments, where several people commented that the state of the river was 'nasty' and had trash, which makes it unpleasant. There were many more positive notes, however, about the opportunities these areas provide to escape the vehicular traffic, noise, and crowds of the city, as well as the chance to educate or play with children.

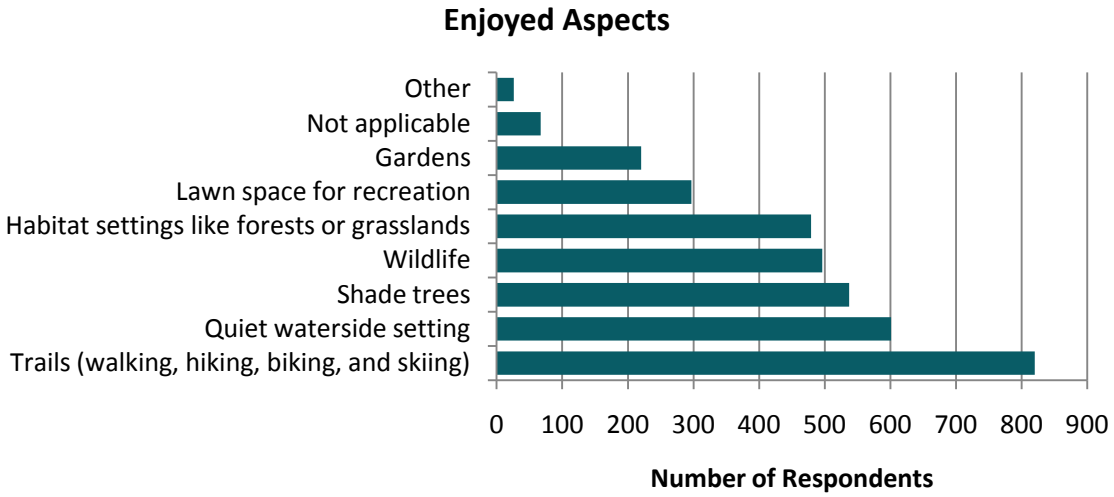

Figure 4. Aspects that respondents enjoyed about the Olentangy riverside environment (n = 1031).

When asked what they disliked about the Olentangy riverside environment, the most popular response was litter or trash (Figure 5). Many respondents selected 'not applicable,' which may suggest that there was nothing about the riverside environment that they disliked, or that they have never been to the Olentangy River. Of the 100 comments received from respondents who selected 'other,' the vast majority were in complaint of the low water levels, the polluted state of the water, and the odors coming from it. Words such as "terrible," "disgusting," "ugly," "poor quality," and "depleted" were used repeatedly to describe the condition of the riverside environment. Many students also commented that they disliked the construction areas near the river and the traffic caused by bikers and runners on the Olentangy Trail. Several people expressed concern about their safety along the river.

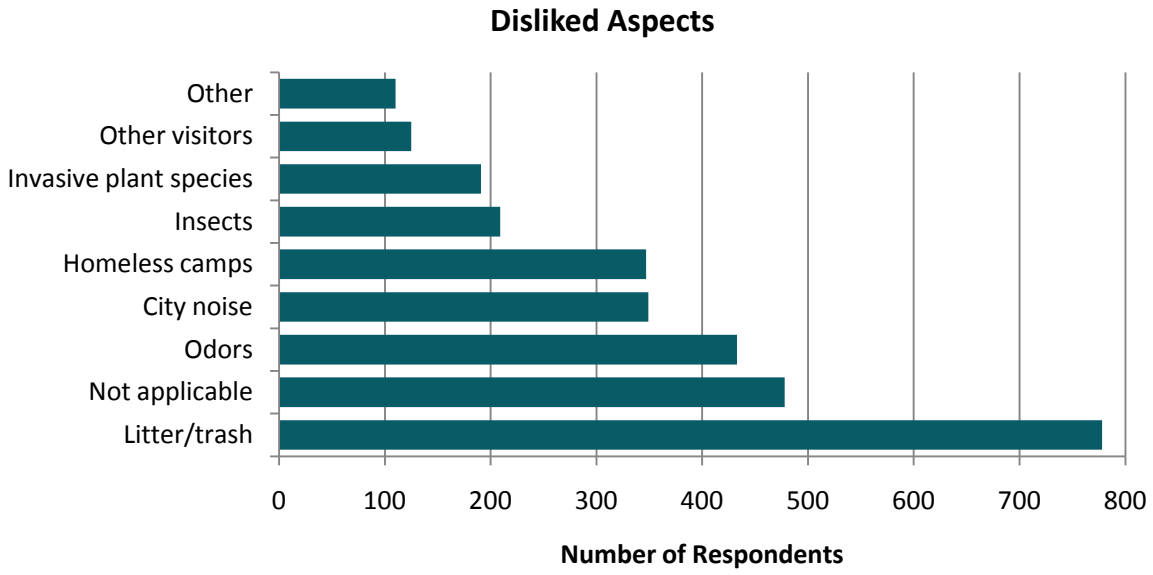

Figure 5. Aspect that respondents disliked about the Olentangy riverside environment (n = 1533).

Visitors and Non-visitors During the Past Year

The following questions were asked of all respondents, regardless of whether or not they visited the Olentangy River, riverside parks, or Olentangy Trail during the past year.

Beliefs About the Olentangy River and Restoration Project. All respondents were asked several questions regarding their beliefs about the river and the Fifth Avenue Dam Removal and Ecological Restoration Project. Respondents were asked to choose which factor had the largest negative impact on the water quality of the Olentangy River (Figure 6). About one third of the students (32.1%) believed that litter or trash has the largest negative impact on the river, and a similar portion of students (29.5%) believed that the most negative impact is caused by storm water that washes in from surrounding properties, parking lots, and streets. Of those who selected 'other,' many students commented that they believed agriculture, remaining dams, and urban non-point pollution from the Columbus region—including pollution due to construction—have the largest negative impact on the river.

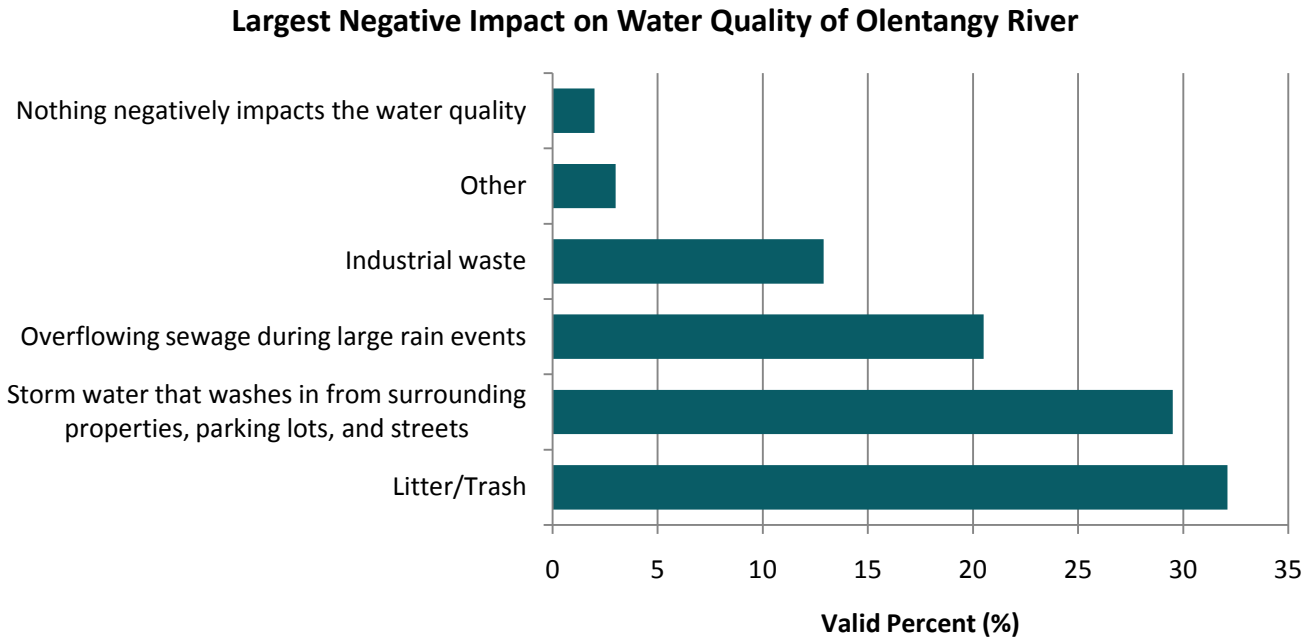

Figure 6. Factors that respondents believed had the largest negative impact on the water quality of the Olentangy River (n = 1547).

Respondents were asked to mark what they believed would be the most important benefit of the Fifth Avenue Dam Removal and Ecological Restoration Project on the Olentangy River (Figure 7). Over a

quarter of respondents (28.6%) marked that they didn't know, which suggests that many OSU students are unaware of any ecological, recreational, or community benefits of the project. A similar portion of students (25.7%) marked that improved wildlife habitat would be the most important benefit, followed by improved water quality (20.8%).

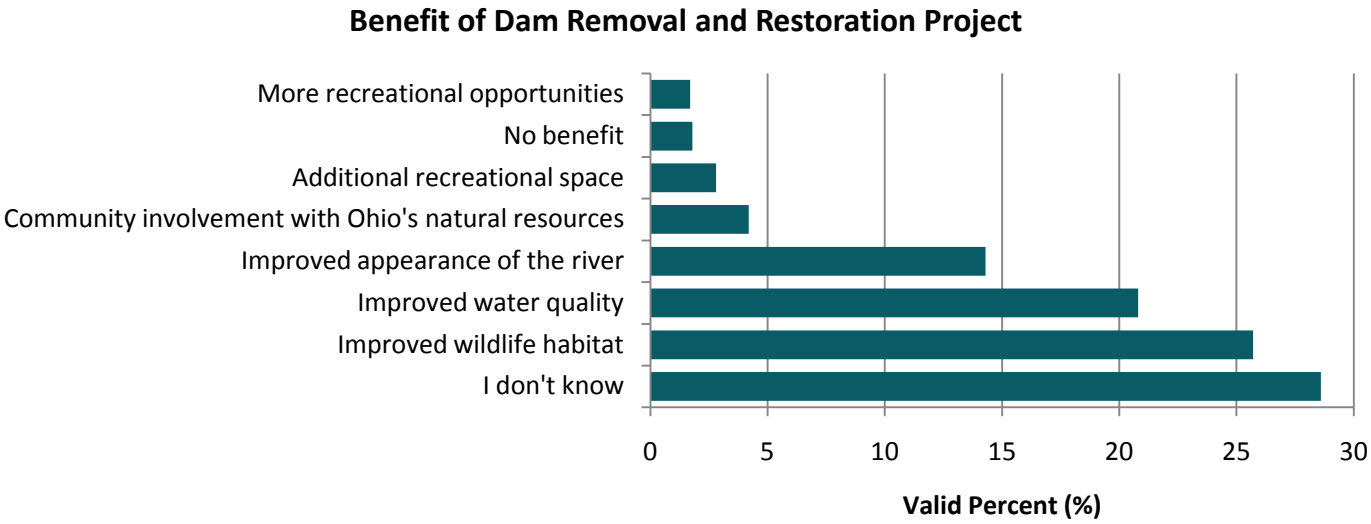

Figure 7. Respondents' perceived benefits of the Fifth Avenue Dam Removal and Ecological Restoration Project (n = 1555).

When asked how many years it will take before the restored portion of the riverside ecosystem is restored to health, a third of respondents guessed that the process would take about 6 to 10 years (Figure 8). As this question was open-ended, responses ranged from 1 to 100 years, and some students (1%) stated that they believed the riverside ecosystem would never truly be restored to health because of perpetual urban pollution and invasive species. Students noted the subjectivity of the term "health" in the context of the riverside ecosystem, and explained that they were unaware of how the project goals defined a state of riverside ecosystem health.

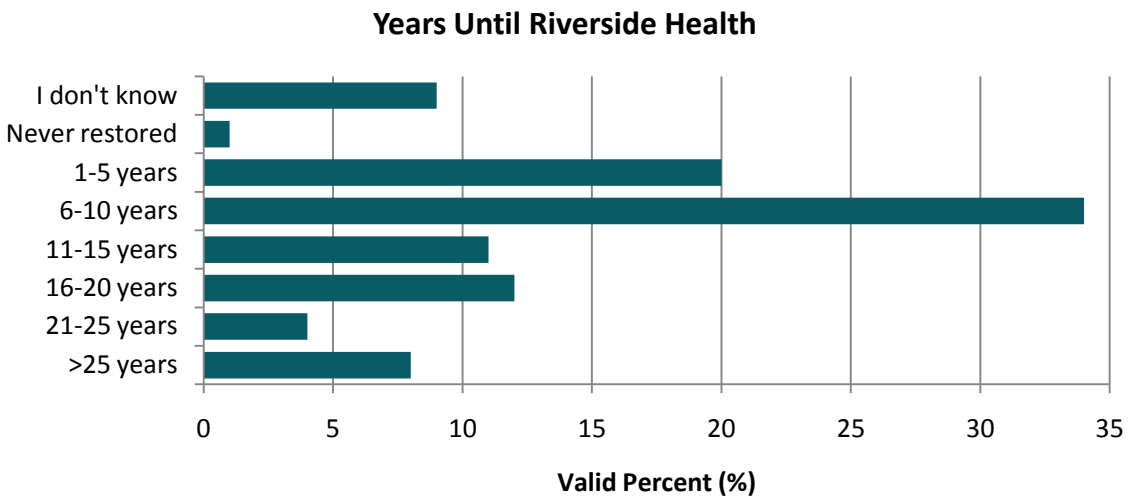

Figure 8. Years estimated by respondents for the restored portion of the riverside ecosystem to be restored to health (n = 864).

Responses to these questions suggest that many of the students of The Ohio State University have a misunderstanding of the biggest negative impacts to the river, of how a restoration project functions to strengthen the river ecosystem, and of the length of time river ecosystems take to establish after restoration efforts.

Values and Intentions. In order to get a better idea about student's personal feelings toward the river, all respondents were asked a series of questions about their values and intentions in relation to the river ecosystem. When asked how important the Olentangy River was to them, students responded positively (Figure 9). Over a third (37.1%) of respondents said the river was somewhat important to them, and nearly half (41.8%) said the river was either important or very important to them.

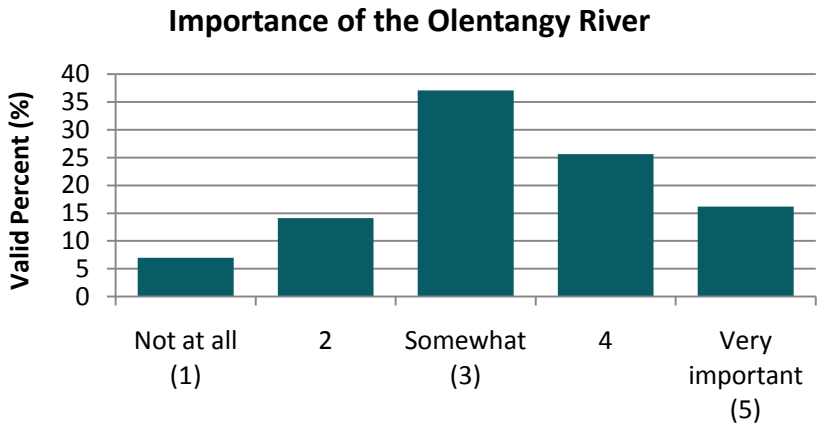

Figure 9. The amount of importance respondents felt the Olentangy River had to them (n = 1576).

To measure intentions, respondents were asked to what extent in the next year they intended to participate in recreational opportunities provided by the Olentangy River, riverside parks, or the Olentangy Trail (Figure 10). About a quarter (24.5%) of students responded that they did not intend to participate in these opportunities at all, whereas over half (52.6%) said they intended to participate at least somewhat, if not to a great extent.

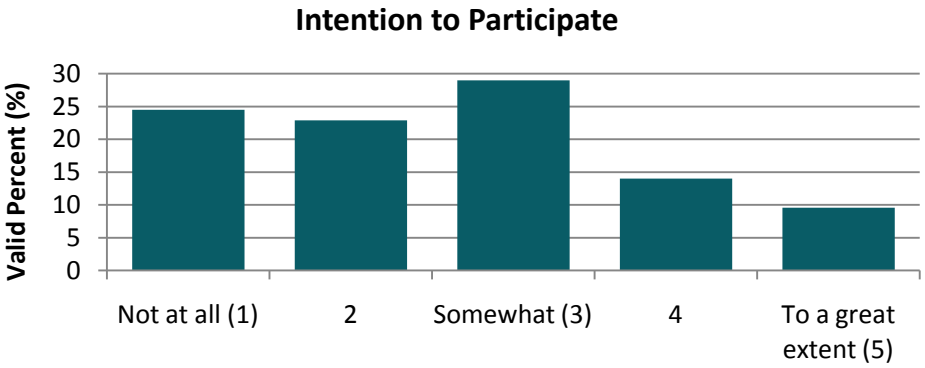

Figure 10. Respondents' intentions to participate in the next year in recreational opportunities provided by the Olentangy river, riverside parks, or the Olentangy Trail (n = 1576).

In order to learn what specific activities students were interested in enjoying near the river, respondents were asked what recreational opportunities they would like there to be more of on or next to the river. This question was open-ended so that students felt free to be creative with their ideas. The huge variety of imaginative responses was grouped generally into 6 categories using content analysis in order to estimate how interests differed between sets of activities. A detailed list of terms included under each of these categories can be found in the Appendix. Generally, there was widespread interest in becoming more involved with the river through recreation, education, and cleanups (Figure 11). After tallying responses into categories, the most popular category of activities that students would like to see more of was water sports, which included kayaking, canoeing, fishing, and boating (n=258). This was followed by an interest in land sports (n=110), nature or wildlife observation opportunities (n=75), and green space (n=71).

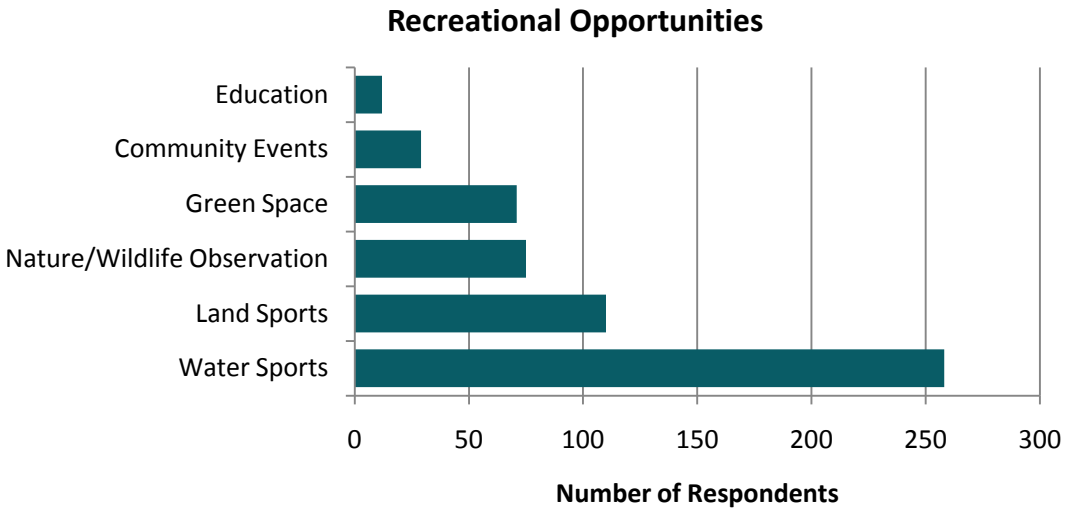

Figure 11. Recreational opportunities that respondents would like there to be more of on or next to the Olentangy River (n = 555).

Appendix

Recreational Opportunities Students Would Like More of On or Next to the River

Following is a list of specific activities students wrote in their response to question 13 (i.e., “Given the changes taking place with the Olentangy River, what recreational opportunities would you like there to be more of on or next to the river?”). Respondent answers were grouped into six broad categories for easier analysis.

Water Sports included rafting, canoeing, kayaking, paddleboat rides, watercraft races, watercraft rental, watercraft lessons, watercraft tours along the river, river taxi boat transportation to downtown Columbus, fishing, swimming, and boating.

General Sports included running, walking, cycling, volleyball, softball, rock climbing, yoga, bike rental, marathon training, exercise stations along the trail, and disc golf.

Picnicking included an interest in more grills, picnic tables, swings, playgrounds, green space, and parks.

Observing Nature included an interest in docks, observation decks, wooden walkways along the river, benches, natural areas with no recreation (e.g., wetlands, forests, and other wildlife habitat), gardens, bird watching opportunities, and river walks.

Education included an interest in a nature center, children science activities, classes on the river, signs along the trail, and outdoor classroom areas.

Community Events included an annual river float, concerts, festivals, markets, community river cleanups, and a running or cycling fundraiser opportunity to help pay for river, wetland, and park expenses.

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