# White Paper – Marion Country Park and Lake User Survey
## Katlynn Brock, MacKenzie Cline, Abigail Mason, Hunter Mussetter, and Aaron Stewart

As part of the Natural Resources and Environmental Science (NRES) capstone course, our interdisciplinary, student team created and implemented a survey for Marion County Park and Lake (MCPL) in Marion, Kansas. The MCPL does not currently have any management plans in place, therefore, a survey of the visitors' and residents' knowledge and perception of the lake is useful data for a future management plan. A sample survey from a previous NRES capstone course was first tailored to increase its conciseness and relevance to current ecological, planning, and management concerns at the lake. The survey asked residents and visitors to rank lake and park activities from most important to least important while an open-ended portion aimed to expose visitors' and respondents' concerns about the lake and park. When the survey was completed, an Institutional Review Board (IRB) application was prepared for submission. After IRB approval, the MCPL superintendent posted the prepared survey on the Marion County Lake and Park Facebook Page. Data from the survey responses was then analyzed and evaluated to determine current conditions and perceptions of the Park and Lake. This information is vital to guiding future decisions to restore, replace, improve, or add aspects to the Lake and Park while maintaining visitor and resident support.

Results showed residents and visitors prioritized fishing, camping, and walking/hiking around the lake, but strongly agreed that poor water quality and algal blooms had prevented them from participating in lake activities. Further, many MCPL residents expressed a desire to privatize their docks and stated that they would even be willing to pay an annual fee to do so. Additionally, residents and visitors emphasized trends in the closed-ended portion of the survey by expressing a concern for the effect of algal blooms on their fishing and swimming activities. Many survey respondents noted the need for education on these environmental impacts on the lake and how to mitigate their effects, especially for new lake residents.

As the intent of this survey was to collect visitors' and residents' knowledge and perception of the lake for a future management plan, recommendations for lake planning and management can be made from the survey results. Since residents strongly desire the opportunity to privatize their docks, we recommend they be given the opportunity to pay an annual fee to privatize their docks. These annual fees collected can be used to enhance fishing opportunities around the lake as fishing is a valued activity at the lake. Because the heated fishing dock is a highly important feature that is reported to be of low quality, using the money from private dock fees to install more public docks and improve the heated fishing dock would be ideal. Additionally, previous groups have found that geese significantly contribute to the growth of algal blooms at the lake. Given the respondents had strong concerns regarding water quality and no strong or consistent views on geese, we recommend getting rid of the geese, but educating residents and visitors as to how this benefits the lake. Lastly, the results of our survey indicate that there is a substantial demand for accessible information regarding lake regulations and activities. Thus, tools such as interpretive signage, a MCPL newsletter, and regular updating of the Park and Lake's website are opportunities to educate visitors and residents on MCPL's ecology and rules. These recommendations derived from survey results can serve as a foundation for a future management plan that promotes ecological sustainability and health while maintaining visitor and resident experience.