INTRODUCTION

As the United States puts forth efforts to find the means to increase options for people to engage in a more active lifestyle, it appears perhaps an avenue involving not only public but private park settings has been overlooked. Although a growing number of studies, such as the one conducted by Corder, Ekelund, Steele, Wareham, and Brage (2008), work to investigate appropriate subjective and objective methods to assess physical activity in a variety of settings, there appears to be little research focusing on the effectiveness of waterpark type facilities as viable resources to enhance health.

There are currently over 1,000 waterparks operating in the United States, with the majority being privately owned (60%) and the remaining operated in the public sector (Martin & Kozen, 2009) contributing to the options people have to engage in appropriate healthy active lifestyles. With these facilities available in all regions of the U.S., it seems that they should be included in the assessment and definition of healthy parks. In many cases they are venues that are attractive and inviting by nature, especially to youths. This concept lends itself to looking at private waterparks from a baseline level to determine if they are already venues incidentally contributing to the health of youths by providing ample opportunities for MVPA, coupled with fun, to reach increased levels of energy expenditure.

PURPOSE

The purpose of the study was to assess participant patterns and the ability of the Big Splash Adventure Waterpark in French Lick, Indiana to contribute to moderate to vigorous physical activity (MVPA) for youths 4-18.

METHODS

- **Site Selection** – Big Splash Adventure Waterpark in French Lick, Indiana
- **Instrument** – System for Observing Play and Recreation in Communities (SOPARC)
- **Collection Site Preparation** – Facility segmented into 29 sub-target areas for observation resulting in a 7 cumulated main target areas for analysis.
- **Subjects** – Youths age 4-18 participating at the waterpark during the dates/times of data collection.
- **Data Collection** – Momentary time sampling was used to identify the characteristics of subjects such as age and gender. An additional observation of physical activity level was recorded as sedentary, walking, or vigorous. Two data observers recorded data simultaneously for reliability and a jury of aquatic experts was used to determine how special water based movements were to be coded.
- **Duration** – Data was collected on 4 days between March and April of 2013. Within each day the sub-target areas were observed for 4 times at consistent intervals designated as morning, lunch, afternoon, and evening.

RESULTS/CONCLUSIONS

- 75% of all movement recorded is in the MVPA range. Moderate Physical Activity was observed most often out of the 3 categories.
- Design of the attraction has an impact on who uses it, how it is used, and it’s ability to generate MVPA.
- The “Lazy River” type attraction contributes much more to physical activity levels than may be intuitively expected.
- Time of day has an impact on physically active levels and patterns of usage.
- Youths ages 13-18 spend the majority of their time engaging with the waterslides, which was mostly recorded as sedentary.
- Males 4-12 are the most active at the park producing significantly more MET’s during their visit.
- Overall, all ages and gender groupings were close in their ability to generate MVPA.
- Adaptations to SOPARC are necessary to accommodate aquatic specific movements during coding for physical activity postures.