

ENVIRONMENTAL SUSTAINABILITY COMMUNICATION ON MINOR LEAGUE
BASEBALL TEAM WEBSITES

by

Lilian L. Faulconer

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Director of Thesis: Melanie Sartore-Baldwin

Major Department: Kinesiology, Sport Management

It is increasingly important that sports organizations consider their impact on the natural world. Sports not only require numerous resources from the natural environment but also have the potential to bring diverse groups of people together and provide them with pro-environmental messaging and behaviors. Research has examined the way that professional sports leagues communicate environmental sustainability efforts and information to fans; however, little is known about the way that one very large professional organization, Minor League Baseball, presents this information to its fans. This study utilized qualitative content analysis to examine Minor League team websites to determine if Minor League Baseball teams are communicating environmental sustainability information and which environmental sustainability practices were most frequently appearing in their web presentations.

ENVIRONMENTAL SUSTAINABILITY COMMUNICATION ON MINOR LEAGUE
BASEBALL TEAM WEBSITES

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Lilian L. Faulconer

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Lilian L. Faulconer

APPROVED BY:

DIRECTOR OF
THESIS:

Melanie Sartore-Baldwin, PhD.

COMMITTEE MEMBER: _____

Alethia Cook, PhD.

COMMITTEE MEMBER: _____

Deirdre Dlugonski, PhD.

COMMITTEE MEMBER: _____

Amy Rundio, PhD.

CHAIR OF THE DEPARTMENT
OF (Kinesiology): _____

Stacey Altman, J.D.

DEAN OF THE
GRADUATE SCHOOL: _____

Paul J. Gemperline, PhD.

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LIST OF SYMBOLS AND ABBREVIATIONS

| | | |
|-------|---|----|
| A | Class A Level of Minor League Baseball..... | 23 |
| A-ADV | Class A-Advanced Level of Minor League Baseball | 23 |
| AA | Double-A Level of Minor League Baseball | 23 |
| AAA | Triple-A Level of Minor League Baseball | 23 |
| CSR | Corporate Social Responsibility | 6 |
| LEED | Leadership in Energy and Environmental Design..... | 35 |
| MiLB | Minor League Baseball..... | 4 |
| MLB | Major League Baseball..... | 3 |
| NBA | National Basketball Association | 3 |
| NFL | National Football League | 2 |
| NHL | National Hockey League | 3 |

CHAPTER 1: INTRODUCTION

The symbiotic relationship between sport and the environment is undeniable. Sport activities originated outdoors and require not just land but numerous other natural resources for play (Falt, 2006). For example, the paper, plastic, textile, chemical, food, water, infrastructure, transportation, and energy industries are all intertwined in sports operations, each consuming different types of natural resources and often generating some type of waste or pollution (Falt, 2006; The Intersector Project, 2014). Though intended by design to provide opportunities to improve quality of life, sports activities often damage the very environment required for healthy living (Schmidt, 2006). As a result, the relationship between sport and environment has become an area of increased focus for environmentalists, sport professionals, and researchers (Babiak & Trendafilova, 2011; Baltz & Ranaswamy, 2000; Blakenbuehler & Kunz, 2014; Ciletti et. al., 2010; Falt, 2006; Groh, 2017; Henly et. al., 2012; Inoue & Kent, 2012; Mallen et. al. 2011; MacMillan, 2016; Norris et. al., 2017; Orts & Spignado, 2013; Sartore-Baldwin & McCullough, 2017; Sartore-Baldwin, 2018; Schmidt, 2006).

The notion that businesses such as sports teams should engage in activities related to the larger community or social issues is not new. However, in recent years, scholarship has been increasingly focused on two primary areas - the responsibility of sports teams to promote responsible environmental stewardship to their fans and the need to adopt environmentally sound practices within sport organizations (Inoue & Kent, 2012; Sartore-Baldwin & McCullough, 2017). One of the most common ways these areas have been investigated within sport organizations is through the lens of corporate social responsibility, a practice which requires businesses to give back to society, bringing community engagement into business plans that originally focused only on generating profits, not on using these profits for social good (Smith &

Westerbeek, 2007). This makes corporate social responsibility particularly appropriate to study from a sport context, as sports teams create significant economic, social, and environmental impacts in their communities (Babiak, 2010).

Sports organizations have grown to be incredibly profitable businesses, with teams in America's National Football League enjoying revenues that average \$286 million each year and Major League Baseball teams generating roughly \$237 million annually (Gaines, 2014). While many professional sports organizations in the United States have established community partnerships as their way of engaging in corporate social responsibility, these partnerships have focused mainly on youth sport and physical activity promotion ("About the MLB;" "About NFL Play 60;" Babiak, 2010). Major League Baseball established the Boys and Girls Clubs of America as its official charity in 1997, and partners with the organization on its Reviving Baseball in Inner Cities (RBI) program, which works to bring baseball to typically impoverished areas where the equipment needed to play baseball may not be easily accessible ("About the MLB"). The National Football League sponsors a *Play 60!* Campaign designed to reduce childhood obesity through health and fitness programs that encourage children to engage in 60 minutes of physical activity each day ("About NFL Play 60").

Partnerships and programs promoting environmental sustainability in various capacities did not emerge in sports until in the early 2000s. The National Resources Defense Council (NRDC) began establishing itself as the principal sustainability advisor to professional sports leagues in North America in 2004, and in subsequent years commissioned efficiency audits that focused on how teams managed energy, waste, and water (Blakenbuehler & Kunz, 2014; Henly et al. 2012; MacMillan, 2016; Orts & Spigonardo, 2013). By 2010, the five major professional sports leagues in America, the National Football League (NFL), National Basketball Association

(NBA), National Hockey League (NHL), Major League Baseball (MLB), and Major League Soccer (MLS), had distributed NRDC guidelines regarding solar power at stadiums (MacMillan, 2016; Orts & Spigonardo, 2013). The Green Sports Alliance, an organization that brings together teams, leagues, and venues in the movement towards environmental responsibility in sport, was founded in 2010 and hosts a yearly summit to facilitate the exchange of ideas among its members and partners and provide recognition for organizations who have made considerable impact or growth in their sustainability efforts (Green Sports Alliance, 2017). These events are often hosted in cities that are home to professional sports teams in the United States.

A considerable amount of attention regarding environmental stewardship in sports has been given to the sustainability efforts of professional leagues in the United States like the NFL, NBA, NHL, MLB, and MLS. Many of these organizations have adopted formal policies regarding sustainability or created initiatives or commissions dedicated to green behavior, such as the NBA's Green Initiative, established in 2009 (Inoue & Kent, 2012). Each of these leagues is also a member of the Green Sports Alliance and enjoys a partnership with the NRDC, who sponsors a "Greening Advisor" program for a total of eight professional U.S. sports leagues (National Resources Defense Council, 2018). The NRDC invests in research regarding professional sports' practices and programs, partnering in 2012 with the MLB to produce a report highlighting the green efforts of various professional sports teams and outlining a plan for future success (Henly et al., 2012). Web resources have grown to be another way that teams, leagues, and partners like the NRDC and Green Sports Alliance present environmental research, programs, and goals related to sports activities (e.g. NRDC "Greening Advisor," www.greensports.org).

Information on environmental sustainability is more accessible to fans when it is presented on team and league websites than in scholarly reports and articles, and sports teams and athletes are positioned to engage with society in a way that may make such information more visible to consumers than most general businesses (Babiak et al., 2012). Ciletti et al. (2010), Blakenbuehler and Kunz (2014), and Francis et al. (2017) examined the websites of NFL, NBA, NHL, MLB, and MLS teams to determine the extent to which teams communicate their commitment to environmentally responsible behavior to fans. Collectively, the three studies show that each league has some form of sustainability information present on its website, indicating a promising future for pro-environmental behavior and messaging in professional sport. However, a key piece of the professional sport system in the United States has been absent from research on sport and the environment: Minor League Baseball.

Developmental teams, like those in Minor League Baseball (MiLB), are a part of the world of professional sports yet have been left out of literature examining green behaviors and initiatives within the industry. In order to develop a better understanding of United States professional sports' commitment to adopting and especially promoting pro-environmental behaviors, attention must be given to the Minor Leagues and its 160 teams that not only develop talent for their parent teams in Major League Baseball (MLB) but contribute to local economies and influence communities all across the United States. The purpose of this study is to utilize content analysis to examine the way that MiLB teams communicate information on sustainability to their fans on their team websites.

Content analysis has been used to explore websites relative to communication in the past (Dholakia & Rego, 1998; Philport & Aribiter, 1997). Content analysis utilized in this study explored which MiLB teams communicate sustainability information to fans regarding seven

different green practices: energy use, water usage, pollution/emissions, waste control, building/grounds, vendor/supply relationships, and transportation. These practices were selected based on their use in Ciletti et al.'s 2010 examination of sustainability communication on North American professional sports teams' websites that focused on economic, social, and environmental indicators of sustainability. Following is an examination of the evolution of corporate social responsibility and its role in the sport context, the importance of communicating corporate social responsibility activities (particularly those regarding environmental sustainability practices) to sports fans, and the mechanisms through which teams have done so to date.

CHAPTER 2: REVIEW OF LITERATURE

In order to understand the belief that sports organizations have a duty to be 'green' and develop a holistic view of their efforts to do so, it is important to explore in detail the evolution of expectations for sporting organizations to be involved with more than just their respective games and the ways they have historically done so. Following is an exploration of corporate social responsibility and its expansion into the United States' sports industry.

Corporate Social Responsibility

As early as the 1940s, American businesses began to recognize that their responsibilities to their consumers lay outside of just their products or services (Stahura et al., 2013). This obligation to the greater good or broader community has come to be known as corporate social responsibility (CSR), which requires that businesses be mindful of the needs of their communities and engage in, as the name implies, socially responsible behavior (Smith & Westerbeek, 2007; Trendafilova et al., 2013). In the United States, CSR generally encompasses activities that are not typically required from companies by law but are often encompassed within a firm's philanthropy or ethics (Carroll, 1979, 1998; Stahura et al., 2013). Shaped by economic, political, and social factors, CSR has grown to encompass numerous causes and initiatives and can vary in scope and structure among different organizations based on companies' relationships with their local, national, and even international communities (Babiak & Trendafilova, 2011; Baughn et al., 2007). Though most CSR research explores how this community involvement can assist businesses in increasing their profits, scholars are beginning to study the benefits CSR provides to society (Inoue & Kent, 2012; Stahura et al., 2014).

The emergence of CSR as an important business tactic in the early 20th century was followed by the concept of the triple bottom line in the late 20th century, which was developed as

a way for businesses to operationalize CSR (Kuhlman & Farrington, 2010). The triple bottom line was first publicized by economist John Elkington in 1994, and encompasses financial, social, and environmental dimensions of analysis (Slaper & Hall, 2011). The goal of evaluating the triple bottom line is to help businesses determine the ways in which they can be more sustainable and create positive impacts in their corporations and communities (Slaper & Hall, 2011). This concept changed the way sustainability was defined in the business world, as businesses were no longer viewing it as a practice that required responsible environmental stewardship for the sole purpose of ensuring the well-being of future generations but as a concept that could provide environmental, social, and economic benefits in the present (Kuhlman & Farrington, 2010). As a result, environmental sustainability practices have become a pillar of CSR and a way for corporations to achieve robust success at the triple bottom line (Babiak & Trandafilova, 2011).

Corporate Social Responsibility in Sport

CSR participation has expanded to include the sports industry within the United States (Godfrey, 2009; Smith & Westerbeek, 2007). Sports are, at their roots, communal activities and have long fostered community connections through youth sport programs, sponsorship deals, and involvement with local philanthropies (Stahura et al. 2014). Numerous teams and leagues have their own charities or philanthropic partners. The NFL has been supporting nonprofit organizations like the United Way since the 1970s. It also has its own “NFL Charities” and physical activity promotion program for youth, *Play 60!*, mentioned previously (Babiak 2010; “About NFL Play 60”). The MLB created “MLB Charities” in the 1980s. Both the NBA and NHL established their own socially-minded programming throughout the 1990s, and in 2005, the

NBA established its “NBA Cares” program, which focuses on service and community activities related to youth and family development, health issues, and education (Babiak, 2010).

Engaging in CSR can be an opportunity to communicate team values to fans (Inoue & Kent, 2012). Sen and Bhattacharya (2001) found that consumers are likely to internalize the team values that they see demonstrated through the teams’ engagement in voluntary CSR activities. An empirical study by Walker and Kent (2009) found CSR to have a positive effect on reputation and patronage among fans of NFL teams. Other studies (Walker & Kent, 2012; Walker & Kent, 2009; Walker et. al., 2010) found numerous other corporate sport outcomes positively impacted by engaging in CSR, including a positive trickle-down effect on consumer behavior stemming from CSR program engagement and enhanced consumer assessment of organizations’ credibility. These findings indicate that communicating CSR activity to fans provides both social and economic benefits to teams. The influences of CSR on communities, consumers, and consumption position communication of voluntary CSR activities as a key tactic to achieving success at the triple-bottom-line and emphasize the need to study how CSR is communicated to fans in the professional sport context.

CSR and Natural Resource Use in Professional Sports

Sports were created outdoors and rely on numerous natural resources for play, thus attaching them to the natural environment. In addition to their connection to the natural world, sports have a tremendous impact on it, as they not only require land and equipment for fields and facilities, but also require resources to maintain these areas and arenas (Falt, 2006). Sports teams also need clothing, equipment, and transportation, which require resources from numerous industries. As a result, sports activities can be incredibly harmful to the environment: between 15-25 tons of landfill waste and nearly 60 tons of carbon dioxide pollution are generated from

just one NFL game with 70,000 fans in attendance (The Intersector Project, 2014). This amount of carbon dioxide pollution is the same generated by the average American household in a calendar year (The Intersector Project, 2014).

However, sports teams are also uniquely positioned to provide some benefit to the natural environment. For example, marketing efforts and/or business and civic partnerships can serve as opportunities to promote and communicate environmentally responsible behavior. An example is the National Wildlife Refuge Association's National Tigers for Tigers (T4T) conservation program, which uses the connection fans have to their teams' mascots to raise awareness of endangered species. For example, the mascot of University of Missouri- Columbia, known as MU or "Mizzou," is the endangered Bengal Tiger. In 1990, as part of the T4T program, the school created Mizzou Tigers for Tigers, an organization designed to create a platform to aid and promote conservation efforts of tigers (Baltz & Ranaswamy, 2000). T4T provides resources to colleges and universities to establish and maintain collegiate chapters of the program and has expanded to include a summer internship opportunity at a wildlife refuge for collegians passionate about conservation (National Wildlife Refuge Association, 2016). Through government and community partnerships that engage fans and other stakeholders in sport and communicate to fans environmental messaging through as part of the organizations' identities, teams can work to reduce their harms to the environment.

Outside of a team's operations, identity, and resource use, the activities of its fans can contribute to the organization's overall environmental impact (Falt, 2006). For example, many fans will travel great distances to see their favorite teams play. They also consume food and purchase merchandise, other activities that are connected to resource use. In just one year at the San Francisco Giant's AT&T Park, over 162,000 pounds of peanut shells are thrown away by

fans (Rios, 2015). To reduce waste generated through operations like concessions, professional teams and leagues engage in activities like recycling and composting, which is the method employed by the Giants to reduce their peanut shell waste (Rios, 2015). Teams and leagues also donate leftover food to local organizations following games or events. In 2011, the NBA's San Antonio Spurs and their concession partner Aramark established a program that packaged leftover hotdogs and pretzels from basketball games for delivery to St Vinny's Bistro at Haven for Hope, a nonprofit organization that provides services for the city's homeless population (Mitch, 2011). Following the 2017 Super Bowl in Houston, Texas, the NFL donated over 55,000 meals to local food banks (Groh, 2017).

Recognizing this profound range of impact, Schmidt (2006) identified two goals for sports teams' environmental policies and practices. The first goal is to reduce sport activities' ecological footprints and the second is to create an awareness of issues related to the environment. Completing these goals requires motivation from teams and leagues. The motivation for sports teams to adopt environmentally sound policies and practices and to communicate them to sponsors, fans, and other stakeholders is often very similar to the reasons that teams adopt other practices related to CSR- these activities improve not just communities but often companies' reputations and profits (Babiak & Trendafilova, 2011; Walker & Kent, 2010). However, it is important to note another reason that sports teams may engage in pro-environmental behavior, which is the notion of shared responsibility.

While CSR provides both the social and economic incentives for sports teams to adopt pro-environmental behavior (Babiak & Trendafilova, 2011), it is important to recognize that sports teams may engage in such behavior for ethical reasons. Tying in to the notion that businesses have a duty to be socially responsible in regards to their environmental policies and

practices is the concept of shared responsibility, which is the belief that humans should work to reverse damages to the planet even if they are not the causes of all such damages (Young, 2006). Motivation for environmentally responsible behavior, then, stems not from a desire to increase profit or appearance but from a belief that every person and organization should do their part to protect and preserve the planet's resources (Sartore-Baldwin & McCollough, 2017).

Organizations can use this belief as the motivation to engage in CSR practices related to the environment by adjusting the management strategies of their businesses. One management practice that organizations can adopt is ecocentric management, which requires organizations to consider how their business practices and decisions will shape the quality of life of humans, nonhumans, and their environments (Sartore-Baldwin & McCollough, 2017). By emphasizing more than the financial success of their organization through the consideration of the needs of their entire communities, ecocentric management provides businesses an ethical foundation that integrates CSR into core management practices.

Common Environmental Initiatives in Sport Whether their motives are socially, economically, or ethically grounded, sports teams have begun to adopt practices that reduce their impact on the environment. Reducing an organization's impact on the natural environment can take place in a number of ways. Commonly utilized are programs that reduce waste, lower energy consumption, and minimize water use (Henly et al., 2012; Trendafilova et al., 2013). Specialty events such as All-Star Games or Weeks are also used to promote or implement environmental initiatives. During the 2012 MLB All-Star Game in Kansas City, used grease from all kitchens and concession stands was collected and recycled into biofuel (Henly et al., 2012). These are just a few examples of how teams and leagues are engaging in environmental sustainability practices as a piece of their CSR activities and business operations, something that

dates back to the early 2000s and begins with the Philadelphia Eagles, who are often regarded as pioneers of the green sports movement. The Eagles, who play in the NFL, began to utilize renewable energy sources and environmentally friendly paper products at their home at Lincoln Financial Field as early as 2003 (Blankenbueler & Kunz, 2014; Henly et. al, 2012). Other activities implemented by the Eagles include planting trees to create a 6.5 acre urban forest in order to offset the carbon dioxide emissions generated by the team's jet travel each year, replacing chemical cleaning agents with environmentally friendly alternatives, implementing recycling and composting programs that divert 140 tons of waste from landfills each football season, and fueling the stadium's maintenance vehicles and equipment with biodiesel composed of used fryer oil from the stadium's concession stands (The Intersector Project, 2014).

The MLB, NBA, and NHL all launched their first league-wide green initiatives in 2008 (Babiak 2010). In 2010, the Green Sports Alliance (GSA) was created to bring together teams and leagues in the movement towards environmental responsibility in sport. Today, its membership includes 181 teams, 191 venues, and 15 leagues (Green Sports Alliance, 2017). The GSA, in addition to providing its members useful information that they can use to reduce their environmental impact or promote 'green' programming, also hosts a yearly summit. This event facilitates face-to-face interaction of individuals invested in sustainability in sport and provides the opportunity for teams, venues, and leagues to receive recognition for their initiatives as well as share their ideas and projects with one another (Green Sports Alliance, 2017). It is important to provide teams the opportunity to share their ideas and activities related to sustainability with each other. However, to maximize their impact, it is essential teams clearly communicate these ideas and activities to their fans.

Communicating Pro-Environmental Behavior

A crucial part of adopting green policies and practices is communicating this commitment to the general public. Research has shown that as teams engage in positive environmental practices, fans increasingly internalize the pro-environmental values the team presents (Inoue & Kent, 2012). This can occur for a number of reasons. Society tends to glamourize and glorify sports teams and figures, making these groups a particularly impactful and giving them a large potential to serve as positive agents of change (Stahura et al 2014). The celebrity status that most players and teams enjoy within their home communities increases the trustworthiness and favorability of their communication of persuasive messages (Alexander et al, 2011; Diehl, 2007; Godfrey, 2009; Inoue & Kent, 2012).

One tactic that teams may use to present their environmental initiatives to fans is cause-related marketing, which involves presenting fans with messages that satisfy the marketing objectives of the organization through the support of social causes (Barone et. al, 2000). Cause-related marketing has previously been explored as a vehicle for deploying and broadening CSR initiatives as well as increasing fan awareness of sports' organizations community and philanthropy work (Stahura et. al, 2014). This marketing can take place outside of games and events through a number of platforms such as radio, television, and the Internet.

Few studies exist that assess the sustainability initiatives and pro-environmental messages that professional sports teams are presenting to fans, particularly through web-based platforms, which are an important source of information regarding teams' operations and community involvement. Trendafilova et. al (2013) found that one of the indicators of increased attention on environmental CSR within sports teams and leagues is the amount of material they communicate about these efforts through their websites. Additionally, Internet searches and websites are often

used by consumers to determine organizations' commitments to social responsibility (Fleishman-Hillard International Communication, 2007; Ciletti et al., 2010). While these messages may not communicate the extent to which teams are adopting pro-environmental practices or behaviors, their presence on the website demonstrates the desire of the organizations to communicate their involvement with the practice (Trendafilova et. al., 2013). Three specific works investigating the presence of sustainability communication on the websites of professional sports teams and leagues are discussed below. These studies provide the foundation for further content analysis studies of sports websites and highlight the importance of web-based platforms as a vehicle for showcasing CSR activities to fans.

Most of the existing literature about sustainability communication on web platforms explores only professional sports teams and leagues. Scholarship in the United States is focused on the web platforms of teams within the NFL, NBA, NHL, MLB, and more recently, MLS. The following studies present various techniques of analysis utilized to explore the way that these organizations present their environmental CSR efforts to fans through team and league websites.

An Analysis of “The Big 4” Leagues: The NFL, NBA, NHL, and MLB. Ciletti et al. (2010) utilized content analysis to determine the extent of the presence of sustainability communication on the websites of 126 professional sports teams, examining websites of the NFL (33 teams), NBA (31 teams), NHL (31 teams), and MLB (31 teams). The coding for their analysis focused on the triple bottom line framework discussed earlier in this paper, emphasizing economic, social, and environmental indicators of sustainability for the organization and its larger community. They discovered that 96% percent of home pages communicate social principles or issues. Only 33% of these home pages communicate environmental principles, and none touch on economic issues. However, across leagues, they found a significant difference

between home pages that communicate environmental principles ($p < .001$). A league-wide initiative in the MLB related to the environment was mentioned on 97% of MLB sites' home pages, much greater than the NBA (32%), NHL (6%), and NFL (0%). (No information was given detailing the initiative or its longevity within the MLB.) Overall, sustainability practices communicated on the home pages of these websites were often tied or related to a social issue or value, often including information about the teams' involvement within the community, its philanthropy, or children's issues.

Ciletti et al. (2010) then conducted an additional review of pages other than the home page. Teams continued to demonstrate a large amount of communication of social principles, with 99% of sites mentioning them outside of their home pages. The number of sites communicating information related to the environment rose to 50%, again with a significant difference ($p < .001$) in this communication across leagues, the MLB again leading the pack (81%) and the NFL finishing last (24%). There were also significant differences in the environmental information communicated by leagues: NHL sites (26%) were the leader in energy use communication ($p = .011$); NBA sites communicated most about building and/or grounds (19%, $p = .001$), waste (39%, $p < .001$), pollution and/or emissions (26%, $p < .001$); NFL sites (12%) communicated the most information related to employment and labor practices ($p = .036$); MLB sites (16%) led in the communication of relationships with vendors/suppliers ($p = .007$). The NHL and NBA (16%) communicated most about transportation issues ($p = .007$).

An Analysis of the “Big 4” Plus MLS. Blakenbuehler and Kunz (2014) also examined the presence of sustainability information on the websites of professional sports teams in the United States. A total of 141 team websites were examined; these included 32 teams from the NFL, 19 from MLS, and 30 each from the MLB, NBA, and NHL. Search terms such as

'environment,' 'go green,' 'recycle,' and 'sustainability' were used. An additional review of the site was completed in order to identify pages or areas of pages dedicated to green activities and pages that contained news items that could contain information relevant to the study. Information posted under team sites' community events, news archives, sustainability, blogs, and other index links connected to the team site were used to identify each activity or initiative. Researchers recorded the online postings verbatim before placing the activities into one of four categories. These categories were operations, food service, transportation, and stadium/facilities.

Of the 141 websites Blakenbuehler and Kunz (2014) examined, 113 (80%) contained information about at least one sustainability initiative. Examples of activities related to operations include energy efficiency, recycling, and waste reduction. Food service includes activities like recycling cooking oil and paper products from concessions as well as composting and donating food. Both operations and food service activities also can involve the use of eco-friendly supplies. The installation of bike racks and information about alternative or mass transportation are activities related to sustainable transportation. Stadium and facility green initiatives include seeking energy-efficiency certification known as LEED, utilizing solar or wind power, conserving water and using signage that is energy-efficient. Of these many initiatives, recycling was most communicated, appearing on a total of 69 team websites and at least once in every league. Information about energy efficiency, alternate transportation, and LEED certification was also presented throughout each sport.

Blakenbuehler and Kunz (2014) also conducted chi-square tests of independence in order to determine if individual green initiatives were specific to one or more sport. Results were statistically significant for water conservation ($p = .03$), and analysis of the cross-tab frequencies showed baseball as more likely to participate in water conservation efforts and discuss energy

efficiency as part of their operations. Recycling was most likely to appear in basketball and baseball, while baseball and hockey were more likely to discuss waste reduction (and hockey even mentioning waste diversion). Another chi-square test of independence was used to test the four initiative categories (operations, food service, transportation, and stadium/facilities) across the individual sports (baseball, basketball, football, hockey, soccer). Results were statistically significant for both stadium/facilities ($p = .016$) and transportation ($p = .027$), with the cross-tab analysis showing baseball, soccer, and football as the most likely to support environmental initiatives related to stadiums and baseball and basketball more likely to support efforts related to transportation.

These analyses found that every sport has at least one team supporting a green effort in operations, food service, transportation, and stadium/facilities. Blakenbuehler and Kunz (2014) also found that sports utilizing outdoor facilities such as football, soccer, and baseball, are most likely to have stadium-related green initiatives. They conclude that of all the sports leagues, the MLB appears to be the “greenest,” or the most likely to have enacted environmental programs across all four categories.

MLS Sustainability Communication Analysis. Francis et al. (2017) examined the websites of the 19 MLS teams in the United States to assess their environmental efforts. Researchers created a spreadsheet with categories like Blakenbuehler and Kunz (2014), including the following: stadium design, efficiency, and functionality; waste reduction, recycling, and composting; sustainable food options; community outreach; and “various other elements of sustainability” (Francis et al 2017). They also examined the websites to determine if teams communicated an awareness of environmental issues as the motive for their commitment to their green practices.

To do so, Francis et al (2017) created 13 standards to analyze the effectiveness of each MLS team on sustainability actions. These were total attendance (from the year 2013), average attendance per game (from 2013), green building (LEED certification), construction, water conservation/reuse, green grounds management, local/organic/vegetarian food initiatives, waste management, community outreach, support for local businesses, energy use and carbon credits, parking/transit and travel. The authors found that only one MLS stadium is LEED certified, though there are other teams (two, at the time of the article's publication) pursuing certification (Francis et al., 2017). Additionally, many stadiums are using reusable or repurposed materials for renovation projects. The Portland Timbers, the only team with the LEED certified stadium, and donated the leftover construction materials from their stadium renovation project to a local Habit for Humanity. The team is also in partnership with Office Depot and the GSA to 'green' their offices. (Francis et al.,2017).

Most efforts related to water conservation and reuse were related to restrooms, which is essential to the creation of sustainable stadiums since these areas experience such a high level of traffic, with thousands of fans each game utilizing this part of the facility. The StubHub Center in Los Angeles, California, CenturyLink Field in Seattle, Washington, BBVA Compass Stadium in Houston, Texas, Gillette Stadium in Foxboro, Massachusetts, and Providence Park in Portland, Oregon, all have some form of water conservation or reuse initiative (Francis et al., 2017).

Two team websites – those of the Vancouver Whitecaps and Portland Timbers -- feature information on green grounds and facilities management. Four teams have some form of local/organic/vegetarian food initiative. One stadium, BC Place, partners with a local farm, located extremely close to the stadium, to source its food while also using the partnership to create employment and agricultural training opportunities for local residents. Additionally, this

partnership supports local businesses by gifting materials from construction at the two locations to nearby recycling agencies. The Portland Timbers donate their old electronics to a local company called Free Geek (Francis et al., 2017).

Green community outreach efforts were featured on the website of the Chicago Fire, who hosted a ‘Fire Goes Green’ match in 2010 where fans planted trees around stadium prior to the Fire game against the Houston Dynamo. Three other teams also communicated community outreach programming that related to green behavior (Francis et al., 2017). Every team website contained information about transit sustainability and all of the team stadiums are built in locations that can be accessed by multimodal transportation. While all of the websites touched on the different ways to utilize public transportation, walking, biking, or driving in order to get to games, few touched on the ways that the teams themselves might be using ‘green’ transportation.

Each of the 19 MLS teams is embracing some form of a sustainability-related initiative (Francis et al., 2017). This is growth from both the 2010 and 2014 studies previously mentioned, indicating that sustainability is increasingly becoming a part of the CSR initiatives of professional sports teams. This is supported by Trendafilova et al. (2013), who found that over a year, an increasing number of teams in the NBA, NHL, NFL, and MLB were communicating information about environmental initiatives on their websites. While this shows the potential for environmental CSR to continue to develop and grow in professional sports, present research overlooks the adoption of environmentally-based CSR programming outside of the “big five” major sports leagues in the U.S. (MLB, MLS, NBA, NFL, NHL). Additionally, though research to date has revealed a clear commitment of the MLB to environmental CSR, little is known about the sustainability initiatives of the other entity of professional baseball in the United States – Minor League Baseball (MiLB), where almost all major league players make their start.

Minor League Baseball

Minor League Baseball (MiLB) is comprised of 160 teams separated in 16 leagues playing in almost every one of the 50 states. MiLB teams provide opportunities for player development and prepare athletes for the demands of life as a Major League Baseball player, which each minor leaguer is working to become. As such, players often begin on rookie or short season teams that play from early July to late August. This level is designed for recent draft picks whose college careers would have just ended in May or June of the same year. Players then advance through Class A (“Low A”), Class A-Advanced (“High-A”), Double-A, and Triple-A levels. These teams play seasons that last from April to September. Though a developmental program for the MLB, MiLB is a separate organization with independent leadership and structure.

MiLB is governed by a President elected at the annual membership meeting of the MiLB and serves a four-year term. The President works with a Board of Trustees, composed of a club owner from each of the 16 leagues, and the Council of League Presidents, quite obviously made up of the President of each of MiLB’s 16 leagues, to develop policy and determine the direction of the organization as a whole (Minor League Baseball, 2017). MiLB teams are owned and operated by numerous entities, including major league teams, private individuals, nonprofit organizations, and local governments (Johnson, 1993). The diverse nature of ownership, plus the wide geographical range of team locations, makes MiLB a particularly interesting group to study because of the many different types of individuals and organizations who are invested in the sport across the nation. Further, MiLB is itself a booming business. The MiLB home webpage indicates an increase in total regular season attendance in 25 of the last 32 seasons. For 19 straight seasons, attendance has surpassed 33-million, which the league had not seen since the

late 1940s, a time when MiLB was comprised of more than 400 teams playing in 50 leagues (Minor League Baseball, 2017). While MLB games have a greater annual attendance total than MiLB games (reporting just over 72.5 million in 2017), attendance has declined five out of the past six MLB seasons, where MiLB attendance has continued to grow (Brown, 2017; Minor League Baseball, 2017).

These differences in attendance trends could indicate more stability in minor league markets or be due to the incredible geographic and economic accessibility of MiLB games. Only 17 states (including the District of Columbia) are home to MLB teams, while over 40 house at least one MiLB team (Chew, 2016; “MiLB.com Tickets”). Additionally, minor league teams are located in both rural and urban areas, while most major league teams are only housed in big cities. According to a 2016 study conducted by MiLB, a family of four can attend a MiLB game for just under \$65. This estimate includes two adult and two children’s tickets at a fixed price, parking, and a concessions tab of two hot dogs, two sodas, and two beers (Minor League Baseball, 2016). This is cheaper than most MLB games for just two spectators – the average cost of attending a Major League game in 2016 was \$77.92 for two people (Chew, 2016). Based on these estimates, the cost of attending a MLB game for a family of four would be, at minimum, twice as much as an MiLB game (Chew, 2016; Minor League Baseball, 2016). Adding to their value, MiLB teams often offer discounted tickets for both children and adults that are military personnel or seniors (Klebnikov, 2016; Minor League Baseball, 2016). Concessions specials and promotions can also save fans money and “contribute to making the cost of attending a Minor League Baseball game one of the best budget-friendly options among all professional sports leagues” (Minor League Baseball, 2016). The affordability of the sport combined with its vast

national presence makes it important to include in analysis of professional sports' sustainability communication.

Green Initiatives in Minor League Baseball

MiLB is a member of the GSA and has a "Green Team" initiative, which indicates a commitment to environmental responsibility at the league level (Minor League Baseball, 2017). However, there is no formal policy requiring teams to adopt green behaviors or promote sustainability, and little is known about the level of commitment that the teams are demonstrating to their fans regarding pro-environmental behaviors and policies. As many fans access information about teams' commitment to social responsibility through their respective web platforms (Ciletti et al., 2010; Fleishman-Hillard International Communication, 2007), it is important to determine what teams are communicating to their fans through their websites regarding their environmental sustainability efforts. To do so, this study employed content analysis to examine the websites of 120 MiLB teams.

CHAPTER 3: METHODOLOGY

The purpose of this study was to utilize content analysis to examine which Minor League Baseball (MiLB) teams communicate information regarding environmental sustainability on their team websites. Researchers (Dholakia & Rego, 1998; Philport & Aribiter, 1997) have utilized content analysis to study websites relative to communication in the past. More recently, Ciletti, Lanasa, Ramos, Luchs, and Lou (2010) utilized content analysis in their examination of sustainability communication through website self-presentations of North American professional sports leagues. In 2011, Mallen, Stevens, and Adams utilized content analysis to examine environmental sustainability research in a sample of sport-related journals. This study follows the framework established by these studies and the work of Blakenbuelher and Kunz (2014) and Francis et al. (2017) to determine which MiLB teams are communicating sustainability initiatives through their websites and in which area of the website information on these initiatives is most frequently appearing.

Sampling Units

The first step in the content analysis framework (Wolfe, 2002; Mallen et al., 2011) is establishing sampling units. There are 160 Minor League Baseball teams affiliated with Major League Baseball franchises and all have a website based on a root template. This study will examine the websites of Class A (A), Class A Advanced (A-ADV), Double-A (AA), and Triple-A (AAA) MiLB teams within the United States. These four classes were selected because of their similar season duration. The MiLB season for these teams begins in April and ends in September. The other teams in MiLB, members of Class A Short Season or Rookie Leagues, have different schedules and play for a much shorter period of time than the others.

There are 30 teams that play at each level, one for every MLB parent club. Teams are further divided at each level into leagues in which they compete for the duration of their regular seasons. A table of the leagues in each level included in this analysis is presented below.

Table 1
AAA, AA, A-ADV, and A Leagues

| | |
|--------------|--|
| AAA | International League (14 teams) Pacific Coast League (16 teams) |
| AA | Eastern League (12 teams) Southern League (10 teams) Texas League (8 teams) |
| A-ADV | California League (8 teams) Carolina League (10 teams) Florida State League (12 teams) |
| A | Midwest League (16 teams) South Atlantic League (14 teams) |

Unit of Text

A pilot study was conducted to determine the pages on the team websites most appropriate for review. Four websites, one from each level of play, were randomly selected for examination. Guided by the work of Blakenbuehler & Kunz (2014), Ciletti et al. (2010), Francis et al. (2017), and Trendafilova et al. (2013), the home, about, ballpark, community, and news sections of each team’s website were selected for review as part of the pilot study.

None of the home pages reviewed contained any information about the environmental sustainability practices. However, the home page was kept for analysis because it is typically the page most users are directed to when searching for teams or after clicking on web links to direct them to team sites. Only one of the four team websites in the pilot study featured an “about” section, so this was not retained as a category for further study.

While none of the four teams' "ballpark" sections presented information about the seven environmental sustainability practices, the section was retained for analysis. Two teams did mention the type of grass used for their fields on this section of their websites, indicating that other sites may provide information about their grounds that could potentially include information relevant to the current study.

Trendafilova et al. (2013) found that teams may highlight environmental CSR behaviors on the community relations sections of their web pages or in annual reports or press releases. However, none of the four teams presented any information on environmental sustainability practices in the community or news sections of their websites. Because community engagement is the core of CSR activities, the community section was retained for analysis. The news section, which contained information mainly related to ticket sales, game results, or roster changes, was not included.

Data were collected from team websites during March and April of 2018. The researcher and research assistant reviewed the material on the home, ballpark, and community pages of each team website before copying and pasting the information from each section into documents. They then reviewed the material a second time to determine if any information relevant to the study was presented on any of the three website areas.

Coding Themes

Ciletti et al. (2010) studied eleven economic, environmental, and social practices in their examination of sustainability communication on North American Professional sports teams' websites. These were energy use, water usage, pollution/emissions, waste control, building/grounds, philanthropic programs, community involvement, children, employment/labor, vendor/supplier relationships, and transportation. Seven of the eleven practices were adopted for

use in this analysis (children, community involvement, employment/labor practice, and philanthropic programs were not included because the practice definitions did not contain information specific to environmental initiatives). The seven practices and their definitions per Ciletti et al. (2010) are listed in the table below.

Table 2

Environmental Sustainability Practices and Definitions

| <u>Practice</u> | <u>Definition</u> |
|-----------------------------|---|
| Energy use | Initiatives to promote or educate fans, employees, etc, about energy use or application in its normal course of business related to energy saving or renewable energy. |
| Water usage | Initiatives to educate fans, employees, etc., about water saving or application in its normal course or business related to water saving. |
| Pollutions/Emissions | Initiatives to educate fans, employees, etc., about application in its normal course of business to reduce air pollution, including tree planting, use of clean diesel. |
| Waste Control | Initiatives to educate fans, employees, etc., about application in its normal course of business related to waste recycling/reuse/reduction. |
| Building/Grounds | Use of environment-friendly materials in the construction or maintenance of building/grounds. |
| Vender/Supply Relationships | Partnerships with locally based, minority-owned or environment-friendly vendors or suppliers. |
| Transportation | Advocate or organize carpool, public transportation, car share of fans for the purpose of environment protection |

CHAPTER 4: RESULTS

Of the 120 websites reviewed for analysis, just 17 presented some kind of information about at least one of the seven environmental practices. Seven teams at the AAA level, four at the AA level, three at the A-ADV level, and three at the A level presented environmental sustainability practice information on the home, ballpark, or community pages of their websites. Information was most often presented about waste control (9 teams), followed by building/grounds (7 teams) and vendor/supplier relationships (6 teams). Three teams shared information on energy use, three mentioned water usage, and three discussed pollution/emissions, while just one team mentioned transportation.

Only one team used the home page to communicate sustainability information. Others utilized either the ballpark (8 teams) or community (8 teams) tabs. No team communicated sustainability information on more than one area of their sites, meaning that either the material was featured in the ballpark or community sections but never in both on the same website. Tables of the environmental sustainability practices communicated at each level of play are presented below. A summary of the information shared about each practice can be found in the following section.

Teams at the AAA level presented information about pollution/emissions, waste control, building/grounds, vendor/supplier relationships, and transportation on their web platforms. These teams – the El Paso Chihuahuas, Iowa Cubs, Memphis Redbirds, Oklahoma City Dodgers, Round Rock Express, Sacramento River Cats, and Tacoma Rainiers – all play in the Pacific Coast League. A table detailing the location of environmental practices on the sites of these seven teams is presented below.

Table 3

Environmental Sustainability Practice Communication: AAA

| | <u>Energy Use</u> | <u>Water Usage</u> | <u>Pollution/ Emissions</u> | <u>Waste Control</u> | <u>Building/ Grounds</u> | <u>Vendor/ Supplier Relationships</u> | <u>Transportation</u> |
|------------------|-------------------|--------------------|-----------------------------|----------------------|--------------------------|---------------------------------------|-----------------------|
| <u>Home</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Ballpark</u> | 0 | 0 | 1 | 1 | 2 | 2 | 1 |
| <u>Community</u> | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| <u>Totals</u> | 0 | 0 | 1 | 2 | 2 | 3 | 1 |

Teams at the AA level presented information about energy use, water usage, pollution/emissions, waste control, and vendor/supplier relationships on their web platforms. Two of the three leagues at the AA level had teams that communicated this information. The Altoona Curve, Reading Fightin' Phils, and Trenton Thunder play in the Eastern League, while the Jacksonville Jumbo Shrimp play in the Southern League. A table detailing the location of environmental practices on the four sites is presented below.

Table 4

Environmental Sustainability Practice Communication: AA

| | <u>Energy Use</u> | <u>Water Usage</u> | <u>Pollution/ Emissions</u> | <u>Waste Control</u> | <u>Building/ Grounds</u> | <u>Vendor/ Supplier Relationships</u> | <u>Transportation</u> |
|------------------|-------------------|--------------------|-----------------------------|----------------------|--------------------------|---------------------------------------|-----------------------|
| <u>Home</u> | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Ballpark</u> | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| <u>Community</u> | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| <u>Totals</u> | 2 | 1 | 1 | 3 | 0 | 1 | 0 |

Teams at the A-ADV level presented information about energy use, water usage, pollution/emissions, waste control, building/grounds, and vendor/supplier relationships on their web platforms. The three teams that communicated this information – the Lake Elsinore Storm,

Modesto Nuts, and San Jose Giants – all play in the California League. A table detailing the location of environmental practices communicated on these three teams’ sites is presented below.

Table 5

Environmental Sustainability Practice Communication: A-ADV

| | <u>Energy Use</u> | <u>Water Usage</u> | <u>Pollution/ Emissions</u> | <u>Waste Control</u> | <u>Building/ Grounds</u> | <u>Vendor/ Supplier Relationships</u> | <u>Transportation</u> |
|------------------|-------------------|--------------------|-----------------------------|----------------------|--------------------------|---------------------------------------|-----------------------|
| <u>Home</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Ballpark</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Community</u> | 1 | 1 | 1 | 2 | 1 | 1 | 0 |
| <u>Totals</u> | 1 | 1 | 1 | 2 | 1 | 1 | 0 |

Teams at the A level presented information about waste control, building/grounds, and vendor/supplier relationships on their web platforms. Each of the three teams that communicated this information, the Cedar Rapids Kernels, Clinton LumberKings, and Great Lakes Loons, play in the Midwest league A table detailing the location of environmental practices communicated on the teams’ sites is presented below.

Table 6

Environmental Sustainability Practice Communication: A

| | <u>Energy Use</u> | <u>Water Usage</u> | <u>Pollution/ Emissions</u> | <u>Waste Control</u> | <u>Building/ Grounds</u> | <u>Vendor/ Supplier Relationships</u> | <u>Transportation</u> |
|------------------|-------------------|--------------------|-----------------------------|----------------------|--------------------------|---------------------------------------|-----------------------|
| <u>Home</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Ballpark</u> | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| <u>Community</u> | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| <u>Totals</u> | 0 | 0 | 0 | 1 | 1 | 2 | 0 |

CHAPTER 5: DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Many teams communicated some kind of commitment to civic engagement and highlighted ballpark features on their websites. However, as indicated in the previous section, few sites mentioned environmental sustainability initiatives. The following sections contain detailed examples of each teams' initiatives related to energy use, water usage, pollution/emissions, waste control, building/grounds, vendor/supplier relationships, and transportation. A sample of each practice copied verbatim from team websites is also provided in Appendix B.

Energy Use

The Lake Elsinore Storm, an A-ADV team in the California League, included information on team energy consumption as well as educational material for fans within the community section of the team's website. The Storm shared that through a retrofit of their stadium with energy efficient lighting, they save 101,000 kilowatts of energy and \$20,000 in energy costs each year. They encouraged fans to reduce energy consumption at home by unplugging chargers and appliances that are not in use to prevent them from continuing to use energy and increase the costs of utility bills. They also advised fans to layer up in the winter months while keeping their thermostats set between 65-68 degrees as another way to reduce energy consumption.

The Trenton Thunder, an AA team in the Eastern League, also presented information about energy saving on their website within their community section, highlighting the installation of energy efficient lighting in their stadium in 2006. The Reading Fightin' Phils, another AA team playing in the Eastern League, promoted an energy conservation jersey design

contest for students on their home page. This was the only environmental practice mentioned on any home page.

Water Usage

The Storm also presented information about water saving, informing fans of the installations of waterless urinals, reclaimed water irrigation pipes, a tankless water heater, and water saving sprinkler heads and the implementation of the Evapotranspiration Technology Irrigation System, which provides an exact measurement of necessary water dispersion. These changes saved over 25 million gallons of water and almost \$100,000 of costs over a period of two years. The Storm also encouraged fans to take shorter showers and conserve water in other areas of their homes whenever possible.

The Thunder focus on education and have sponsored a Clean Water Pledge program since 2007. This program provides students with education about water pollution and rewards those that “pledge” to adopt environmentally sound practices. It is a collaboration between the Thunder and the New Jersey Watershed Ambassadors, an AmeriCorps program sponsored by the New Jersey Department of Environmental Protection's Division of Watershed Management. The San Jose Giants, an A-ADV team in the California League, also count on community partnerships to educate fans about water usage. In 2017, the San Jose Water Company sponsored a “Water Night” at the Giants’ ballpark where educational materials were distributed to fans.

Pollution/Emissions

The Lake Elsinore Storm and Trenton Thunder presented information about pollution/emissions in the community sections of their pages. The Storm, who, as previously mentioned, shared not only how the team engages in environmental practices but also presented green tips to fans on its site, encouraged fans to purchase with the environment in mind,

suggesting buying local products and fuel efficient cars to reduce carbon emissions. The Thunder have sponsored the “Thunder Safe Routes To School Program” since the 2013 season. This program provides education to students about air pollution and ways to reduce it, such as engaging in healthy behaviors like walking to school when possible. Students are challenged to walk or bike to school 15 times each year. Those who complete the challenge are eligible to receive a ticket to a Thunder game.

The Sacramento River Cats’ “Break a Bat, Plant a Tree” program is featured in the ballpark section of the team’s website. Through this program, a tree is planted every time a bat is broken during a River Cats’ home game. According to the website, 20 trees were planted after the 2015 season.

Waste Control

Of the 17 teams that featured information on environmental sustainability practices, the greatest number (9) presented information about waste control on either the ballpark or community pages of their websites. Teams discussed past promotions and initiatives as well as opportunities for fans to recycle and reduce waste during the current baseball season. Many programs involve corporate partners that sponsor the promotions and supply parks with recycling and composting bins used to reduce waste.

The Jacksonville Jumbo Shrimp, an AA team playing in the Southern League, pioneered a Cleanest Ballpark initiative in 2017 in collaboration with Advanced Disposal. This involved presenting information about the importance of a clean ballpark through a promotion and material in the game day program and on the video board each game. The Modesto Nuts, an A-ADV team in the California League, hosted a Go Green Night during their 2017 season. This consisted of different in-game promotions and concourse activities that showed fans “the proper

way to recycle and help the environment.” The Altoona Curve, an AA team in the Eastern League, are partnering with the Intermunicipal Relations Committee to host a Hazardous Waste Pick-Up, where tires, electronics, batteries, boxes, bags & books can be recycled at their ballpark on a Saturday in the 2018 season. The Clinton LumberKings, an A team playing in Midwest League, employed fans’ help in keeping their facility “green” by including information about recycling bins on their “Ballpark A to Z” list. The Sacramento River Cats partnered with Republic Services to create a food waste program that is designed to keep concessions waste from reaching the landfill. The Lake Elsinore Storm separate all in-game beverage containers and recycled good from trash through their recycling program. Since creating the program, the Storm have saved \$40,000 each year in waste hauling costs and increased their waste diversion rate by 30%.

The Oklahoma City Dodgers, an AAA team in the Pacific League, partnered with PepsiCo to install new recycling bins in their stadium. Fans can recycle plastic beverage bottles and aluminum cans that not only reduce stadium waste but contribute to the work of other PepsiCo partners, including the Entrepreneurship Bootcamp for Veterans, which provides assistance to disabled United States veterans. The Dodgers’ recycling program also benefits The Nature Conservancy, which works ensure watersheds continue to house clean drinking water.

The Trenton Thunder also installed recycling bins in their stadium through a partnership with Mercer County, New Jersey. During the 2008 season, all four of the team’s “All 15 Year Team” Baseball Card Set Giveaways were used to promote the Mercer County Improvement Authority’s “Keep Mercer Beautiful” campaign. Outside of this partnership, the Thunder acted independently to create in-game announcements featuring the mascots to promote recycling.

The Round Rock Express, a team playing at the AAA level in the Pacific Coast League, provided educational promotions about their "Get On Base with Zero Waste" marketing program. They clarify the differences between compost, recycling, and trash for fans on their website. Games feature "Talking Trash" teaching segments designed to inform fans about what can be recycled and repurposed and encourage proper disposal of the concessions and merchandise purchased in the stadium. These programs are sponsored through the team's partnership with Texas Disposal Systems. According to the Express, "The partnership aims to greatly increase the amount of materials that can be repurposed, ensuring only chip and candy wrappers and some plastic cutlery will be landfilled after use."

Building/Grounds

The Lake Elsinore Storm shared on their website their desire to "be the leading sustainable facility in all of sports." The team utilizes environmentally friendly materials in the building and maintenance of their grounds, especially regarding water use. As highlighted in previous sections, the team installed waterless urinals, reclaimed water irrigation pipes, water saving sprinkler heads, and tankless water heaters. The Storm's Evapotranspiration Technology Irrigation System provides an exact measure of the amount of water dispersion needed.

The Iowa Cubs, an AAA team in the Pacific Coast League, installed energy efficient lights in their stadium in 2017. This is highlighted in the ballpark section of their website. The Great Lakes Loons, who play in at the A level in the Midwest League, utilize solar energy to power their scoreboard. More information on this is provided in the following section about vendor/supplier relationships, as this practice is supported by two community businesses and is part of the Loons' overall sustainability plan.

The only stadium to mention Leadership in Energy and Environmental Design (LEED) certification, the El Paso Chihuahuas' highlighted their LEED Gold certification on the ballpark portion of their website. The Chihuahuas' stadium, which received this distinction in 2015, was the first MiLB park to receive such recognition from the United States Green Building Council. LEED certifications are designed to "recognize best-in-class building strategies and practices." LEED certified facilities reduce costs and resource use, promoting responsible stewardship and positively impacting the environment. There are 110 available credits for LEED certification, and the Chihuahuas received 60 of these. Highlights of the design include bike storage spaces placed near the ballpark, close proximity to public transportation, and the use of construction materials that were certified wood, low-emitting, composed of recycled content, and produced locally. Mike Sabatini, lead designer for the project and Principal at Populous, a company that has created numerous MiLB and MLB stadiums and worked to create Southwest University Park for the Chihuahuas, had this to say about the El Paso stadium:

"From the very early stages of the design process, Populous collaborated with both MNK Architects and C.F. Jordan Construction/Hunt Construction to ensure that the design and construction of Southwest University Park was as sustainable as possible. We set out to positively impact the team and city's bottom line and to design a building on a sustainable site within the city's urban core... In turn, Southwest University Park isn't just one of the best experiences in Minor League Baseball, it's also the most sustainable."

Sabatini's statement highlights the environmental and economic benefits generated through the team's use of eco-friendly materials in the construction and maintenance of its building and grounds. As outside companies continue to partner with sports organizations as suppliers of goods and services, it will be important that industry leaders recognize the many

ways these partners can contribute to making teams and their venues more economically, environmentally, and socially responsible and sustainable at the triple bottom line. One way to do this is to consider how their relationships with local, minority-owned, or environmentally friendly businesses can shape their communities. These relationships are discussed in greater detail below.

Vendor/Supplier Relationships

Just over 40% of team websites featured information specifically related to partnerships with locally based, minority owned, or eco-friendly businesses. Information about these partnerships was housed on four teams' community pages and three teams' ballpark pages. AAA teams featured the largest amount of information regarding these partnerships, which often incorporated other environmental initiatives, such as educational programs for fans or the larger community regarding resource use. For example, the Memphis Redbirds of the Pacific League partnered with Miracle-Gro® to create a rooftop garden at their ballpark that produces plants for use in concession stands during Redbirds games. According to the site, "local and sustainable food is a major push in Memphis' culinary culture, and the Redbirds have recognized the movement with the ability to use some of the most local and sustainable food seen anywhere." The team also offers tours of the garden for school groups during their Education Days each season.

The Redbirds' website featured two quotes that speak to the space and relationship between the team and its corporate partner. The first is from John Sass, Vice President and General Manager of Miracle-Gro®, and the second is from Peter Freund, Redbirds Principal Owner. They read:

"When the Memphis Redbirds approached Miracle-Gro with a plan to repurpose the third level deck at AutoZone Park, we were thrilled to partner with them and bring this project to life. The soil and plant food we provided will help create a space that educates and inspires all who visit this iconic urban space."

-John Sass, Vice President and General Manager, Miracle-Gro®

"As we continue to prioritize connectivity within the Memphis community, we are proud to build the first urban rooftop garden in all of Minor League Baseball. And to have an opportunity to partner with Miracle-Gro on this project, one of the most innovative corporations in America, will ensure its long-term success and opens the door for an exciting evolution of how the garden can grow."

- Peter Freund, Redbirds Principal Owner

Round Rock Express Baseball partnered Texas Disposal Systems to make the team's ballpark a minimal-waste facility. Texas Disposal Systems worked with the team to create a sustainability plan consisting of composting and recycling programs that increase the organization's waste diversion rate (meaning less of their waste is being taken to landfills). Texas Disposal Systems also sponsors the in-game promotions that inform fans about waste reduction discussed previously. The Trenton Thunder, who have established partnerships (discussed previously) related to energy and water usage, also sponsor an annual Environmental Awareness Fair to showcase eco-friendly businesses and organizations at their ballpark each season. In its first five years, the fair exposed over 33,000 Thunder fans to eco-friendly companies and groups.

The Tacoma Rainiers of the Pacific Coast League provided a comprehensive list of their corporate and nonprofit partners in the community section of their website. Descriptions of each are presented alongside organizations' logos. Examples of environmentally-friendly partners of the organization include the City of Tacoma's Environmental Services Department, which "protects and restores natural resources and keeps Tacoma clean, safe and livable through garbage and recycling pickup, wastewater treatment, household hazardous waste disposal, protection from storm water pollution and many other services." PepsiCo, another corporate partner, lists a "Performance with Purpose" statement in its company description, which includes a commitment "to find innovative ways to minimize our impact on the environment by conserving energy and water and reducing packaging volume" and "to support and invest in the local communities where we operate."

The Great Lakes Loons work with corporate partners to promote sustainability within their organization. The teams' two main partners, The Dow Corning Corporation and The Dow Chemical Company, sponsor the solar-powered scoreboard discussed in the previous section. By 2020, the Loons hope to reduce total energy use, water use and waste by 50 percent. To do so, the team created an environmental advisory panel that focuses on sharing best practices, evaluating progress, and planning for future success. Members of the panel include representatives from seven nearby organizations who possess keen environmental awareness or business strategies, including the Dow Chemical Company and Dow Corning Corporation and the local nature center, community foundation, and recycling volunteers organization.

The Sacramento River Cats have numerous relationships with local and environment-friendly organizations. Three highlights include the team's partnership with Green Acres Nursery & Supply, Commerce Printing Services, and Republic Services. The River Cats and Green Acres

created the Raley Field Gardens in 2015, a community garden that provides crops to concession stands within the park and restaurants and food banks within the community. In just one year, the team produced over 250 heads of cabbage for use by these vendors. The partnership also utilizes the garden as a teaching tool to inform the community about “growing a healthy lifestyle.”

Commerce Printing Services utilizes vegetable-based ink and recycled paper to produce the Ricer Cats’ game programs and wind energy and biodiesel to power their operations. The River Cats list Commerce Printing as a “long-time partner” of the team. Republic Services implemented a food waste program at the River Cats’ ballpark. The program, which works to divert waste from landfills and reduce pollution, sends food waste from Raley Field to an anaerobic digester, where it is turned into fertilizer and low-emission fuel. Republic Services vehicles run on the fuel that is produced through this process.

The Cedar Rapids Kernels are an A level team playing in the Midwest League. The Kernels partnered with First Federal Credit Union to provide resources for a local organization, the Hawkeye Area Community Action Program’s Food Reservoir. This initiative, called “Home Run for Hunger,” organized food pick-up at local farmer’s markets throughout the summer of 2017 and resulted in the collection of 3,759 pounds of food, which created 3,133 meals that could be provided to locals struggling with food insecurity. As a result of their dedication to this initiative, the Hawkeye Area Community Action Program awarded “Best Community Partnership” to First Federal Credit Union and the Kernels in November of 2017.

Significance of Partnerships It is clear that teams rely on corporate and civic partners within their communities. While the nature of partnerships may differ between teams, these relationships help reduce organizations’ environmental impacts and extend this impact to fans and spectators who internalize the teams’ values of responsible stewardship through the various

programs and promotions that result of these partnerships. Past research indicates that outside pressures (such as the desire of community and corporate partners to engage with the team in a sustainable manner) can motivate teams to replace their traditional business practices with ones that are more environmentally friendly (McCullough & Cunningham, 2010; Trendafilova et al., 2013). As teams collaborate with groups in their communities that prioritize environmental initiatives and sustainable practices, they can begin to see the value in adopting them and receive the support and guidance needed to do so successfully. An example of this is the Great Lake Loons, who share the following on their team website:

“The Loons have defined sustainability as the long-term maintenance of organizational well-being, with a concentration in three core areas: people, planet and prosperity. While all three facets of sustainability have been a part of the Loons operation from the beginning of the franchise through the mission and goals of the Michigan Baseball Foundation, a stronger focus and emphasis on planet initiatives have been born out of ongoing planning with Dow and Dow Corning.”

Transportation

The Sacramento River Cats partner with the Sacramento Region Spare The Air to support their “River Cats Road Relief” initiative. This program provides free bicycle valet, trolley rides, and local carpool to fans. The mission statement of the program emphasizes the need to utilize these resources for the purpose of environmental protection, stating, “In order to improve the fan experience while maintaining our commitment to sustainable business practices, the River Cats are introducing River Cats Road Relief, an initiative that will reduce the number of cars coming to Raley Field, thus furthering our pledge to build a healthier Sacramento.”

Other Findings and Implications

Less than 15% of all A, A-ADV, AA, and AAA websites featured any information on environmentally friendly initiatives (as defined by Ciletti et al., 2010) on their websites' home, community, and ballpark pages. Of the forty-plus states home to MiLB teams, just ten house teams that are communicating environmental sustainability information to fans. The absence of information could indicate three things: one, that teams are engaging in environmentally responsibility behavior but are presenting the information about such initiatives on some other area of their website, two, that they are engaging in the behavior but not communicating or encouraging the widespread adoption of responsible stewardship by the team or its fans, or three, that teams are not engaging in behavior at all.

Teams not engaging in the behavior are missing out on opportunities to foster community partnerships, achieve economic success, and reduce their environmental impact, thus limiting the organizations' prosperity through a triple bottom line evaluation. Those that are employing environmental sustainability practices but not communicating them to fans are not capitalizing on the influence they have on fan behavior, as past research indicates that fans will adopt pro-environmental behaviors promoted by their sports teams (Inoue & Kent, 2012). The teams that presented environmental sustainability practice information are located in both rural and urban areas, meaning that people in all regions of the United States can be reached with pro-environmental messages through environmental sustainability communication on team websites. While this is promising, MiLB fans in roughly thirty states are currently not receiving any kind of information about sustainability through their teams' websites. If fans are never given information about the practices, there is no opportunity to inspire responsible stewardship through CSR activities.

Limitations and Directions for Future Study

In addition to creating and participating in environmentally beneficial initiatives, communicating a commitment to environmental sustainability behaviors is key to extending influence to teams' fans. In order to determine if fans are being reached with the pro-environmental messaging presented on the MiLB team websites, it would be beneficial to study the activity each team's website generates. Measuring the number of visits each page of the site receives (for example, is there greater traffic on the ballpark page than the community page) is the next step to determine if teams are being effective in their environmental sustainability communication. Understanding where fans go to access information within team's web platforms would help teams better position themselves as messengers of pro-environmental behaviors. Additionally, during the 2018 year, MiLB websites will undergo updates that make sites more responsive, and future research could also examine if the new website structure changes the way that fans access information or the way that information is presented to fans.

Social media is another way that people access information, and teams may be presenting information on environmental sustainability practices on their social media platforms that they are not featuring on their websites. Social media provides ways for fans to engage with teams that websites do not. Examining the social media profiles of teams and of MiLB as an organization could provide additional insight into the messages fans are receiving regarding environmental practices and allow for greater study on the interaction between fans, teams, and businesses on social media that might promote or highlight environmental behaviors or partnerships missed on the websites.

Conclusion

As social institutions, sports organizations have the unique ability to influence large and diverse groups of people. As sports organizations consider their impact on the environment and begin to adopt environmentally sound practices as a part of their CSR and business activities, they must be mindful of how they are communicating these practices and their organization's commitment to responsible stewardship to their fan base. One way that teams have historically presented information on such activities is through their websites, and numerous studies exist (Babiak & Trendafilova, 2011; Blakenbuelher and Kunz, 2014,; Ciletti et al., 2010; Francis et al., 2017; Trendafilova et al., 2013) that have examined the way that professional sports teams and leagues present information about sustainability initiatives to fans. However, little was known about the way that Minor League Baseball, a professional sports organization comprised of 160 teams, presents this information to its fans.

Utilizing content analysis to study the websites of 120 Minor League Baseball teams, research completed as part of this study indicated that just under 15% of MiLB A, A-ADV, AA, and AAA teams are communicating information on environmental sustainability practices through their websites. Of these, teams are most likely to communicate information on waste control, building/grounds, and vendor and supplier relationships. Future studies should examine if teams are communicating environmental sustainability practices to fans through other web platforms such as social media.

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APPENDIX A: WEBSITES REVIEWED

AAA: International League

Buffalo Bisons

<http://www.milb.com/index.jsp?sid=t422>

Charlotte Knights

<http://www.milb.com/index.jsp?sid=t494>

Columbus Clippers

<http://www.milb.com/index.jsp?sid=t445>

Durham Bulls

<http://www.milb.com/index.jsp?sid=t234>

Gwinnette Stripers

<http://www.milb.com/index.jsp?sid=t431>

Indianapolis Indians

<http://www.milb.com/index.jsp?sid=t484>

Lehigh Valley Ironpigs

<http://www.milb.com/index.jsp?sid=t1410>

Louisville Bats

<http://www.milb.com/index.jsp?sid=t416>

Norfolk Tide

<http://www.milb.com/index.jsp?sid=t568>

Pawtucket Red Sox

<http://www.milb.com/index.jsp?sid=t533>

Rochester Red Wings

<http://www.milb.com/index.jsp?sid=t534>

Scranton Wilkes-Barre Railriders

<http://www.milb.com/index.jsp?sid=t531>

Syracuse Chiefs

<http://www.milb.com/index.jsp?sid=t552>

Toledo Mudhens

<http://www.milb.com/index.jsp?sid=t512>

AAA: Pacific Coast League

Albuquerque Isotopes

<http://www.milb.com/index.jsp?sid=t342>

Colorado Springs Sky Sox

<http://www.milb.com/index.jsp?sid=t551>

El Paso Chihuahuas

<http://www.milb.com/index.jsp?sid=t4904>

Fresno Grizzlies

<http://www.milb.com/index.jsp?sid=t259>

Iowa Cubs

<http://www.milb.com/index.jsp?sid=t451>

Las Vegas 51s

<http://www.milb.com/index.jsp?sid=t400>

Memphis Redbirds

<http://www.milb.com/index.jsp?sid=t235>

Nashville Sounds

<http://www.milb.com/index.jsp?sid=t556>

New Orleans Baby Cakes

<http://www.milb.com/index.jsp?sid=t588>

Oklahoma City Dodgers

<http://www.milb.com/index.jsp?sid=t238>

Omaha Storm Chasers

<http://www.milb.com/index.jsp?sid=t541>

Reno Aces

<http://www.milb.com/index.jsp?sid=t2310>

Round Rock Express

<http://www.milb.com/index.jsp?sid=t102>

Sacramento River Cats

<http://www.milb.com/index.jsp?sid=t105>

Salt Lake City Bees

<http://www.milb.com/index.jsp?sid=t561>

Tacoma Rainiers

<http://www.milb.com/index.jsp?sid=t529>

AA: Eastern League

Akron Rubber Ducks

<http://www.milb.com/index.jsp?sid=t402>

Altoona Curve

<http://www.milb.com/index.jsp?sid=t452>

Binghamton Rumble Ponies

<http://www.milb.com/index.jsp?sid=t505>

Bowie Baysox

<http://www.milb.com/index.jsp?sid=t418>

Erie Seawolves

<http://www.milb.com/index.jsp?sid=t106>

Harrisburg Senators

<http://www.milb.com/index.jsp?sid=t547>

Hartford Yard Goats

<http://www.milb.com/index.jsp?sid=t538>

New Hampshire Fisher Cats

<http://www.milb.com/index.jsp?sid=t463>

Portland Sea Dogs

<http://www.milb.com/index.jsp?sid=t546>

Reading Fightin Phils

<http://www.milb.com/index.jsp?sid=t522>

Richmond Flying Squirrels

<http://www.milb.com/index.jsp?sid=t3410>

Trenton Thunder

<http://www.milb.com/index.jsp?sid=t567>

AA: Southern League

Biloxi Shuckers

<http://www.milb.com/index.jsp?sid=t5015>

Birmingham Barons

<http://www.milb.com/index.jsp?sid=t247>

Chattanooga Lookouts

<http://www.milb.com/index.jsp?sid=t498>

Jackson Generals

<http://www.milb.com/index.jsp?sid=t104>

Jacksonville Jumbo Shrimp

<http://www.milb.com/index.jsp?sid=t564>

Mississippi Braves

<http://www.milb.com/index.jsp?sid=t430>

Mobile Baybears

<http://www.milb.com/index.jsp?sid=t417>

Montgomery Biscuits

<http://www.milb.com/index.jsp?sid=t421>

Pensacola Blue Wahoos

<http://www.milb.com/index.jsp?sid=t4124>

Tennessee Smokies

<http://www.milb.com/index.jsp?sid=t553>

AA: Texas League

Arkansas Travelers

<http://www.milb.com/index.jsp?sid=t574>

Corpus Christi Hooks

<http://www.milb.com/index.jsp?sid=t482>

Frisco RoughRiders

<http://www.milb.com/index.jsp?sid=t540>

Midland Rockhounds

<http://www.milb.com/index.jsp?sid=t237>

Northwest Arkansas Naturals

<http://www.milb.com/index.jsp?sid=t1350>

San Antonio Missions

<http://www.milb.com/index.jsp?sid=t510>

Springfield Cardinals

<http://www.milb.com/index.jsp?sid=t440>

Tulsa Drillers

<http://www.milb.com/index.jsp?sid=t260>

A-ADV: California League

Inland Empire 66ers

<http://www.milb.com/index.jsp?sid=t401>

Lake Elsinore Storm

<http://www.milb.com/index.jsp?sid=t103>

Lancaster Jethawks

<http://www.milb.com/index.jsp?sid=t491>

Modesto Nuts

<http://www.milb.com/index.jsp?sid=t515>

Rancho Cucamonga Quakes

<http://www.milb.com/index.jsp?sid=t526>

San Jose Giants

<http://www.milb.com/index.jsp?sid=t476>

Stockton Ports

<http://www.milb.com/index.jsp?sid=t524>

Visalia Rawhide

<http://www.milb.com/index.jsp?sid=t516>

A-ADV: Carolina League

Buies Creek Astros

<http://www.milb.com/index.jsp?sid=t3712>

Carolina Mudcats

<http://www.milb.com/index.jsp?sid=t249>

Down East Wood Ducks

<http://www.milb.com/index.jsp?sid=t485>

Frederick Keys

<http://www.milb.com/index.jsp?sid=t493>

Lynchburg Hillcats

<http://www.milb.com/index.jsp?sid=t481>

Myrtle Beach Pelicans

<http://www.milb.com/index.jsp?sid=t521>

Potomac Nationals

<http://www.milb.com/index.jsp?sid=t436>

Salem Red Sox

<http://www.milb.com/index.jsp?sid=t414>

Wilmington Blue Rocks

<http://www.milb.com/index.jsp?sid=t426>

Winston-Salem Dash

<http://www.milb.com/index.jsp?sid=t580>

A-ADV: Florida State League

Bradenton Marauders

<http://www.milb.com/index.jsp?sid=t3390>

Charlotte Stone Crabs

<http://www.milb.com/index.jsp?sid=t2730>

Clearwater Threshers

<http://www.milb.com/index.jsp?sid=t566>

Daytona Tortugas

<http://www.milb.com/index.jsp?sid=t450>

Dunedin Blue Jays

<http://www.milb.com/index.jsp?sid=t424>

Florida Fire Frogs

<http://www.milb.com/index.jsp?sid=t503>

Fort Myers Miracle

<http://www.milb.com/index.jsp?sid=t509>

Jupiter Hammerheads

<http://www.milb.com/index.jsp?sid=t479>

Lakeland Flying Tigers

<http://www.milb.com/index.jsp?sid=t570>

Palm Beach Cardinals

<http://www.milb.com/index.jsp?sid=t279>

St. Lucie Mets

<http://www.milb.com/index.jsp?sid=t507>

Tampa Tarpons

<http://www.milb.com/index.jsp?sid=t587>

A: Midwest League

Beloit Snappers

<http://www.milb.com/index.jsp?sid=t554>

Bowling Green Hot Rods

<http://www.milb.com/index.jsp?sid=t2498>

Burlington Bees

<http://www.milb.com/index.jsp?sid=t420>

Cedar Rapidsernels

<http://www.milb.com/index.jsp?sid=t492>

Clinton LumberKings

<http://www.milb.com/index.jsp?sid=t500>

Dayton Dragons

<http://www.milb.com/index.jsp?sid=t459>

Fort Wayne TinCaps

<http://www.milb.com/index.jsp?sid=t584>

Great Lakes Loons

<http://www.milb.com/index.jsp?sid=t456>

Kane County Cougars

<http://www.milb.com/index.jsp?sid=t446>

Lake County Captains

<http://www.milb.com/index.jsp?sid=t437>

Lansing Lugnuts

<http://www.milb.com/index.jsp?sid=t499>

Peoria Chiefs

<http://www.milb.com/index.jsp?sid=t443>

Quad Cities River Bandits

<http://www.milb.com/index.jsp?sid=t565>

South Bend Cubs

<http://www.milb.com/index.jsp?sid=t550>

West Michigan Whitecaps

<http://www.milb.com/index.jsp?sid=t582>

Wisconsin Timber Rattlers

<http://www.milb.com/index.jsp?sid=t572>

A: South Atlantic League

Asheville Tourists

<http://www.milb.com/index.jsp?sid=t573>

Augusta GreenJackets

<http://www.milb.com/index.jsp?sid=t478>

Charleston RiverDogs

<http://www.milb.com/index.jsp?sid=t233>

Columbia Fireflies

<http://www.milb.com/index.jsp?sid=t3705>

Delmarva Shorebirds

<http://www.milb.com/index.jsp?sid=t548>

Greensboro Grasshoppers

<http://www.milb.com/index.jsp?sid=t477>

Greenville Drive

<http://www.milb.com/index.jsp?sid=t428>

Hagerstown Suns

<http://www.milb.com/index.jsp?sid=t563>

Hickory Crawdads

<http://www.milb.com/index.jsp?sid=t448>

Kannapolis Intimidators

<http://www.milb.com/index.jsp?sid=t487>

Lakewood BlueClaws

<http://www.milb.com/index.jsp?sid=t427>

Lexington Legends

<http://www.milb.com/index.jsp?sid=t495>

Rome Braves

<http://www.milb.com/index.jsp?sid=t432>

West Virginia Power

<http://www.milb.com/index.jsp?sid=t525>

APPENDIX B: EXAMPLES OF PRACTICES LISTED ON WEBSITES

Energy Use

“Students Wanted to Design Fightins’ Energy Conservation Jerseys”

-Reading Fightin Phils, Eastern League, Home Page

Water Usage

“The Thunder Clean Water Pledge is a partnership with the NJ Watershed Ambassadors, an AmeriCorps program hosted by the NJ Department of Environmental Protection's Division of Watershed Management. The pledge program, which began prior to the 2007 season, educates students about water pollution and rewards them for making a "Pledge" to live in a more environmentally sound way...”

- Trenton Thunder, Eastern League, Community Page

Pollution/Emissions

“Break a Bat, Plant a Tree is a season-long promotion and partnership with the Sacramento Region Spare The Air program. River Cats employees, fans, and partners will team up with the Sacramento Tree Foundation to plant trees in the Fall to off-set the bats broken by River Cats pitchers during the season.”

- Sacramento River Cats, Pacific Coast League, Ballpark Page

Waste Control

“Go Green Night at John Thurman Field consisted of different in-game promotions and concourse activities that taught fans the proper way to recycle and help the environment.”

- Modesto Nuts, California League, Community Page

Building/Grounds

“The goal of the Storm is to be the leading sustainable facility in all of sports. The following green changes have already been made:

Water

Installed waterless urinals

Installed reclaimed water irrigation pipes

Implemented Evapotranspiration Technology Irrigation System which measures exact amount of water dispersion needed

Added new water saving sprinkler heads

Installed tankless water heaters

Electric

Retrofitted entire stadium with new energy efficient lighting system

Waste

Implemented Recycling Program which more efficiently separates recycled goods from trash

All in-game beverage containers will be separated & recycled

SAVINGS

These changes have created great results both environmentally and in cost savings:

Water

Over 25 million gallons of water saved over two years

Nearly \$100,000 saved over the same two year period

Electric

New retrofit saves 101,000 kWh annually

Savings of \$20,000 annually

Waste

Increased recycling diversion rate from 35% to 65%

Savings of \$40,000 in waste hauling annually.”

- Lake Elsinore Storm, California League, Ballpark

Vendor/Supplier Relationships

“The Thunder have partnered with Eagle Maintenance Supply to provide Waterfront Park with all environmentally friendly paper products (paper towels, toilet paper etc) and hand soap this year.”

-Trenton Thunder, Eastern League, Ballpark Page

The Great Lakes Loons and Dow Diamond have teamed up with the Dow Corning Corporation and The Dow Chemical Company, both corporate partners, to enhance sustainability practices across all aspects of the organization. As part of the enhanced sustainability practices, the Loons have set an ambitious goal to reduce total energy use, water use and waste by 50 percent by the year 2020.

In addition, Loons organizational leaders have spent time learning from corporate sustainability leaders at both Dow and Dow Corning, as well as other regional organizations. From those conversations, the Loons have defined sustainability as the long-term maintenance of organizational well-being, with a concentration in three core areas: people, planet and prosperity.

While all three facets of sustainability have been a part of the Loons operation from the beginning of the franchise through the mission and goals of the Michigan Baseball Foundation, a stronger focus and emphasis on planet initiatives have been born out of ongoing planning with Dow and Dow Corning. This extended focus on planet initiatives will enhance the organization's overall sustainability efforts.

To help guide efforts and share best practices, the team formed the Loons Environmental Advisory Panel (LEAP). The panel, consisting of representatives from seven local businesses with an eye for environmental strategies, is working with the Loons to set more goals, suggest tactics and evaluate progress...”

- Great Lakes Loons, Midwest League, Ballpark Page

Transportation

“In order to improve the fan experience while maintaining our commitment to sustainable business practices, the River Cats are introducing River Cats Road Relief, an initiative that will reduce the number of cars coming to Raley Field, thus furthering our pledge to build a healthier Sacramento. In partnership with the Sacramento Region Spare The Air, River Cats Road Relief is a group of programs which includes free Bike Valet, Tito's Trolley, and Lasher's Elk Grove Subaru Carpool. Each program is designed to reduce Raley Field's carbon footprint and improve the experience of every fan at Raley Field.”

-Sacramento River Cats, Pacific Coast League, Ballpark Page

