



Improving Safety at Ohio State Park Beaches

December 24, 2012

Project Summary

A thorough review of signage at Ohio State Park beaches was conducted in order to assess the relative effectiveness of message delivery, especially as these messages relate to swimmer safety. Surveys of park management staff as well as park visitors were conducted in order to gauge the efficacy of current signage. Standardized photographs were collected to document the current state of signage. A SWOT analysis was used to examine the current state and to make recommendations to park management for improvements.

This report includes recommendations in the following areas:

- Standardizing key safety messages
- Effective placement of signage
- Standardizing format and fonts for improved recognition
- Improvements to first-person delivery of safety messages

Project Purpose and Goal

In many cases the most common causes for drowning, injuries and complaints at Ohio State Park beaches are, to some extent, already being addressed with current signage. The intended result of this project is to improve message delivery and public understanding of these messages by making specific, fact-based recommendations to park management on the four areas outlined above.

Project Methodology

The project team spent three months gathering information via surveys and photo exhibits in order to gain a true understanding of current beach safety-message delivery, and the visitor's comprehension of same. These surveys were conducted in face-to-face visitor interviews, web-based questionnaires and through social media. Photographic exhibits were gathered from park managers by requesting three types of photos be taken at each state park beach: Close-up of rules, rules in context to the beach, and over-all beach setting. This information was reviewed using a SWOT analysis and recommendations were made for improvements based on the data.

Project Team

For more information about this project, please contact:
Matthew Bourne, Matthew.Bourne@dnr.state.oh.us, 740-858-6652
Angelo Dass, Angelo.Dass@das.state.oh.us, 614-728-9141
Carl Lynch, CELynch@dps.state.oh.us, 614-995-5914
Martin McAllister, Martin.Mcallister@dnr.state.oh.us, 740-858-6652
Sue Shultz, sue_shultz@adamhsals.org, 740-354-5648

IMPROVING SAFETY AT OHIO STATE PARK BEACHES

Project Advisor: Scott Fletcher, Deputy Chief
Ohio Department of Natural Resources
Division of Parks and Recreation
2045 Morse Road, Building C
Columbus, Ohio

PROJECT PARTICIPANTS:

Matthew Bourne
Park Manager 4
ODNR, Div. of Parks
and Recreation
4404 S.R. 125
West Portsmouth, Ohio
45663

Angelo P. Dass
Management Analyst
Supervisor
Mainframe Print Center
Dept. of Admin. Services
2080 Integrity Dr. North
Columbus, Ohio 43209

Carl E. Lynch, Jr.
Admin. Assist. 4
Dept. of Public Safety
1970 West Broad St.
Columbus, Ohio 43223

Martin McAllister
Dist. Park Manager
ODNR, Div. of Parks
and Recreation
4404 S.R. 125
West Portsmouth, Ohio
45663

Susan Shultz
Interim Exec. Director
Adams, Lawrence, Scioto
Co.
Alcohol, Drug Addiction
and Mental Health Board
919 7th St.
Portsmouth, Ohio 45662

IMPROVING SAFETY AT OHIO STATE PARK BEACHES

Table of Contents

| | | |
|---------------------|---|----|
| Section I | Project Description | 2 |
| Section II | Expected Purpose and Goal | 3 |
| Section III | Action Plan and Execution | 3 |
| Section IV | Information Gathering | 4 |
| Section V | Information Analysis | 7 |
| Section VI | Project Results | 10 |
| Section VII | Benefits to Agency, Organization or Work Unit | 15 |
| Section VIII | Team Dynamics | 16 |
| Section IX | OCPM Workshop Knowledge, Theories, Models, Principles or Techniques | 17 |
| Section X | Implementation of Results | 18 |
| Guide to Appendices | | 20 |
| Appendix A | Strategic Plan | 21 |
| Appendix B | Quantitative Data Graphs | 29 |
| Appendix C | Draft Beach Attendant Guide | 32 |
| Appendix D | Gantt Chart | 33 |
| Appendix E | Final Status Report | 34 |
| Appendix F | Expense Report | 36 |
| Appendix G | Communications Plan | 37 |
| Appendix H | Charter | 38 |

SECTION I: PROJECT DESCRIPTION

Public swimming beaches of are one of Ohio State Park's most popular attractions in the summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

Providing visitors with a safe, high-quality outdoor recreational experience at state park beaches is a very high priority for the Ohio Division of Parks and Recreation. The issue of safety messages, signage design and placement, and first-person message delivery are keys to a safe swimming experience.

A thorough analysis of signage at Ohio State Park beaches was conducted in order to assess the relative effectiveness of safety message delivery, especially as these messages relate to beach users. Surveys of park management staff and park visitors were conducted in order to gauge the efficacy of current signage. Standardized photographs were collected to document the current state of signage. A SWOT analysis was used to examine the current state of existing signage and to make recommendations to park management for improvements.

This report includes recommendations in the following areas:

- Classification of key safety messages
- Effective placement of signage
- Standardizing format and fonts for improved recognition
- Improvements to first-person (staff and volunteers) delivery of safety messages

SECTION II: EXPECTED PURPOSE AND GOAL

The purpose of this project was to work with the management staff of Ohio State Parks to conduct a systematic review of beach signage and the associated beach safety messages conveyed on such signage. Based on this review, the team would make a determination if changes were warranted and then draft specific recommendations regarding these changes. The fundamental goal of this project is to improve the delivery of beach safety messages to increase safety and reduce the potential for accidents, injuries and fatalities. The message itself as well as its format, delivery and placement would be examined closely to ensure that the visiting public not only understands the message but is also exposed to the right message, in the right place, at the right time.

SECTION III: ACTION PLAN AND EXECUTION

The project charter guided the initial effort of the team as we identified the customers, objectives, deliverables and milestones. Key to the entire project was the three information gathering avenues: visitor survey, park manager survey and the photo exhibits. Information from these three queries was closely examined using the SWOT analysis by each team member. The team then met to compare their individual analyses and merge their findings into one SWOT summary that encompassed all valid issues. A SWOT summary was prepared for each area: the visitor survey, the park management survey and the photo exhibit. These three summaries were then used as the basis for our strategic plan (Appendix A.) The strategic planning process resulted in our focusing on four primary goals:

- 1) Standardization of key safety messages
- 2) Recommending effective placement of signage
- 3) Develop standards for sign formatting and design
- 4) Develop recommendations for using staff and volunteers to convey safety messages

During the strategic planning process, the team identified specific action steps that would address each goal and then divided the assignments according to the interest, access, expertise and individual skills of each team member. At a final strategic planning meeting, the team reviewed these individual findings, refined the actions and outcomes and then identified specific recommendations that could be made to the Division of Parks and Recreation on the subject of beach signage and safety.

SECTION IV: INFORMATION GATHERING

The first step in gathering information consisted of meeting with our project sponsor, Deputy Chief Fletcher to discuss the proposed project idea and to understand what, if any, research had been done in this area previously. While an existing beach operations manual was located, it was found to deal primarily with life guards despite the fact that nearly all state park beaches are now unguarded. Little was found that dealt with identifying key safety messages and refining the delivery of these messages so that visitors were more likely to encounter, read, understand and retain these key messages.

Three primary avenues were used to gather information:

- 1) Visitor survey
- 2) Park Manager survey

3) Photo exhibit

Visitor Survey

A list of questions was assembled to measure visitor demographics, interest in safety and knowledge and retention of park rules. These questions were:

- 1) Are you male or female?
- 2) What is your age?
- 3) Does a lifeguard on duty influence your decision on where to swim?
- 4) Does safety influence your decision on where to swim?
- 5) Have you read and understood our safety rules?
- 6) If you answered yes, where did you read them?
- 7) If you answered yes, can you repeat any of the safety rules?
- 8) Are you easily able to identify the permissible boundaries of the swim area?
- 9) Additional comments or suggestions.

Park Manager Survey

Another list of questions was assembled to gather information from park managers. These questions were:

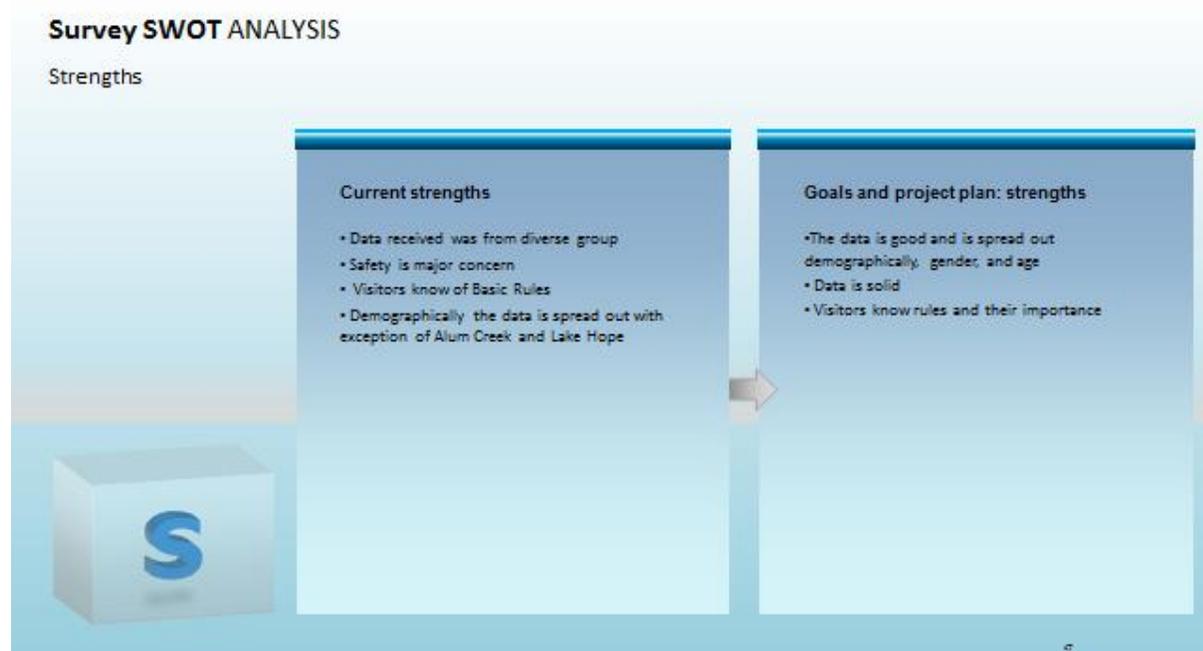
- 1) What is your position at the park?
- 2) Does your park have a swimming and/or boating area?
- 3) Is your swimming area adjacent to a boating area with unlimited horsepower?
- 4) What is the length of your beach?
- 5) What is the maximum depth of your designated swim area?

- 6) What is the distance from the shore to the deepest point in the designated swim area?
- 7) Are swimming rules posted?
- 8) If rules are posted, are they posted at the beach entrance or the water's edge?
- 9) Does the swimming area signage have text, graphics or both?
- 10) Are posted rules visible from all points on the beach?
- 11) Are posted rules visible from the sand area?
- 12) Are the rules readable from any position in the water?
- 13) Do you feel your signage is adequate?
- 14) What materials are you using to mark the swimming areas?
- 15) What do you feel are the top three hazards to swimming on your beach?
- 16) What are your top three law enforcement problems with regard to swimming?
- 17) What are your top three information issues with regard to signage?
- 18) From your experience, what could be done to improve the visitor's beach/swimming experience?

The survey questions were developed in cooperation with the Project Sponsor and the Division of Parks and Recreation Law Enforcement Staff Officer. Visitor surveys were conducted in person at Buckeye Lake, Alum Creek and Deer Creek State Parks but primarily through the Division's social media outlets including Facebook. Exactly one hundred people participated in the visitor survey. Park Management surveys were web-based as well, however, park managers were invited to participate via e-mail and a link to the survey was provided. Thirty-seven state park beaches were represented in the survey. A web-based survey tool was used and the data was collated in a Microsoft Excel spreadsheet.

SECTION V: INFORMATION ANALYSIS

The surveys contained both quantitative and qualitative data. Relevant quantitative data was graphed (Appendix B.) Qualitative data proved most valuable and was reviewed independently by team members who conducted a SWOT analysis on their own. Then the team conducted the same exercise as a group to see where there was or was not agreement. This secondary SWOT analysis provided an opportunity for each team member to explain their interpretation of the data including the additional anecdotal comments from visitors and park managers. The next five graphics illustrate the primary SWOT analysis conducted by the team.



Survey SWOT ANALYSIS

Weaknesses



Current weaknesses

- Visitors have long list of issues with the beach
 - Safety, Litter, Geese, Etc...
- Wording on "No Flotation"
- Cost\$\$- Money to pay for this at Beaches
- Water Quality

Goals and project plan: weaknesses

- Our main focus should be signage
- The verbiage for flotation devices should be crystal clear and be approved by ODNR
- We find ways to make and enforce the signage cost effective
- Is Water Quality being communicated at all beaches

4

Survey SWOT ANALYSIS

Opportunities



Current opportunities

- Beach attendant Initiative
- Camper Host Program
- Lifeguard on duty is not important to visitors
- Get all communication of all signage standardized

Goals and project plan: Opportunities

- Team needs to find out more about these programs and how to efficiently utilize them with cost as a factor
- Lifeguard not as important as having a system for enforcing rules – Beach attendant, Park Ranger, Police
- All Signage needs to be the same across all the beaches

4

Survey SWOT ANALYSIS

Threats



Current threats

- Drowning – Adult & Children
- Unclear message from current signage
- floatation devices
- Visitors miss signage or don't read
- Goose Poop
- Patrons swimming ability
- Alcohol
- Littering
- No lifeguard

Goals and project plan: threats

- Buoys – Placement and Standardized material
- Make verbiage clear & concise
- Signage designating no floatation device
- Make Signage Visible – Triangle Sign
- Establish heirarchy and SOP for signage enforcement of rules
- Goose Poop – Not Applicable
- Swimming Ability – Not Applicable
- Alcohol Guidelines on Rules
- Personnel Recommendations for Lifeguards

20

Survey SWOT ANALYSIS

Summary



SWOT summary

- Standardize all Signage
 - Material
 - Lettering
 - Verbiage
- No floatation signage needs the verbiage to be correct
- Communication of Rules needs to be clear and standard at all beaches
- Utilize volunteer beach attendants where possible to reduce cost
- Share results of this survey with managers and stakeholders

21

SECTION VI: PROJECT RESULTS

Our project team agreed that the outcome(s) of the project were in some ways successful and in others, unexpected. At the outset, the project began with a somewhat broad objective of reviewing several aspects of state park beach management including signage, safety, delineation, buoys and water testing. It quickly became apparent, through background research and the surveys conducted, that the scope was too large and that a significant improvement in beach safety might be obtained with simply a careful review of signage in order to address possible failings in message delivery.

It is possible that this is the first time a systematic, state-wide review and assessment of beach signage has been conducted in Ohio State Parks. Through careful examination of messages, placement and design, it was determined that key messages were likely not being adequately delivered to the park visitor. Subtle design features such as font and type size were also contributing to poor message delivery. The team identified the following four recommendations based on our research:

1) CLASSIFY KEY SAFETY MESSAGES AND ORGANIZE INTO THREE PRIMARY CATEGORIES:

Critical Safety Warnings

These warnings would consist of those messages that park management recognizes as most important to swimmers and beach users. These warnings are considered so important it warrants having them posted so they are readable from any position in the designated swim zone and the water/sand interface. These

signs would be erected in a three-sided arrangement to provide for maximum 360 degree visibility. The team further recommended that these messages be very concise and include the following:

- No Diving
- Parents watch kids
- Swim in designated areas only
- Use only Coast Guard approved floatation devices
- Open water has hidden hazards
- Do not drink and swim
- (Appropriate Water Quality Advisory messages, as per Division guidelines. Provide a space at the bottom of each Critical Safety Warning sign so this message can be posted and removed as necessary.)

Primary Prohibitions

Primary prohibitions would include those actions prohibited under park rules and most likely to cause injury or death as well as any prohibitions deemed a priority or particularly problematic by the local park manager. These may include:

NO:

- Non-Coast Guard approved flotation devices
- Alcohol
- Glass containers
- Littering
- Pets (except in designated areas)
- Fires
- Fishing in swim area

General Information

These messages would include those that special delineations, directional messages, and special announcements or courtesy messages. These would be park-

specific and written by the park manager to address issues at that particular beach. These might include:

- Do not leave valuables unattended
- No lifeguard on duty
- Complete list of rules available at park office
- Entering designated swim area
- Entering pet-friendly area

2) PLACE SIGNS AT STRATEGIC LOCATIONS ACCORDING TO FLOW OF VISITOR FOOT TRAFFIC AND THE SPECIFIC CATEGORY OF MESSAGE BEING DELIVERED AT THAT LOCATION.

The team discovered in its research that often various categories of messages were being combined on a single sign, making it wordy, difficult to read and therefore overlooked by the visitor. The placement of these signs was also a problem, as they were often placed in the “approach zones” where arriving visitors were more focused on “getting to the fun” rather than stopping to read very lengthy messages. Also, multiple signs of various colors and designs would occasionally be erected on the same structure, creating a confusing arrangement of messages that were again overlooked by the visitor.

3) DESIGN SIGNS IN A FORMAT AND COLOR THAT MIRRORS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (“OMUTCD”).

The use of standardized colors, fonts and type sizes on traffic control devices is well documented by the Federal Highway Administration (FHA). All across America drivers can, at a glance, easily recognize signs as a warning, regulation or information. The team suggests that state parks mirror these color schemes and fonts so as to make messages

more recognizable and more likely to be internalized. Fonts and type size are also important. The FHA has a number of fonts used on traffic control devices. Details can be found in the strategic plan (Appendix A). The recommended font for beach signage is “Series E.” The recommendation for type-point size is three inches of letter height per 30 feet of distance for 20/40 vision. The recommended colors are as follows:

Critical Safety Warnings: Yellow background with black text/symbols (indicates hazard)

Primary Prohibitions: White background with red text (indicates regulatory)

General Information: Brown background with white text (Indicates informational)

4) MAKE GREATER USE OF VOLUNTEERS AND NON-COMMISSIONED STAFF TO CONVEY SAFETY MESSAGES TO BEACH USERS.

Since 1999, the number of state park beaches using life guards has declined from 66% to less than 5%. For inland beaches, this trend is not likely to reverse in the near future. In 2012, the Division of Parks and Recreation piloted a new program designed to place part-time, non-life guard certified employees (“Beach Attendants”) at a select number of beaches. The intended purpose was *not* to provide a rescue service, but rather provide a staff presence that could reinforce safety warnings, provide information to visitors, perform routine beach maintenance and restroom cleaning as well as call for EMS if and when needed. All indications are that the program was a success. Visitors are often focused on having fun when they arrive thus can easily miss safety warnings and signs. A trained staff person, paid or volunteer, is the ultimate in safety message delivery. The team recommends a greater use of paid and volunteer beach attendants and that the following changes/additions to the program are implemented:

- Develop a Beach Attendant Manual that can be used to orient new Attendants as well as provide for more effective and consistent procedures and messages.
- Consider using reliable volunteers such as Camper Hosts to serve as Attendants
- Provide Attendants with effective communication such as MARCS portable radios or cell phones.
- Make Attendants easy to identify by way of “uniform” shirts, canopies, flags, etc.
- Train all attendants and staff, specifically maintenance employees who routinely work the beach areas, how to respond to specific incidents. This way consistent safety messages are being delivered from those employees who are most likely to encounter visitors engaging in risky behavior. For instance, people mowing grass should feel comfortable asking swimmers to return to the designated swimming area. If there is no compliance, the maintenance person could call a commissioned officer or manager to deal with the issue. At least in this way, more eyes are open to the potential risks. See Appendix C for a sample guide.

SECTION VII: BENEFITS TO AGENCY, ORGANIZATION OR WORK UNIT

Public swimming beaches are one of Ohio State Park's most popular attractions in summer.

While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

Providing visitors with a safe, high-quality outdoor recreational experience at state park beaches is a very high priority for the Ohio Division of Parks and Recreation. The issue of safety messages, signage design and placement, and first-person message delivery are keys to a safe swimming experience. We believe the state parks who implement the recommendations in this report will enjoy increased safety due to the following:

- A standardized approach to sign design and placement
- An increased emphasis on consistent and concise safety messages
- An expansion of the beach attendant program by means of reliable volunteers

Due to the winter season, these recommendations have yet to be implemented in the state park system. Other than the statistical analysis of injury and drowning data from Ohio State Parks, the effectiveness of these recommendations will be very difficult to assess. Our research has shown that there is room to improve the delivery of safety messages at Ohio State Parks. If the improved signage results in saving even one life, the project will have been a success. As with nearly all safety programs however, the accident avoided is the most difficult to document.

SECTION VIII: TEAM DYNAMICS

Our team worked extremely well together. We had nearly 100% attendance at each meeting and all participated actively. The evolution of the team was interesting since it revolved around the particular interest, skill-set and work environment of each team member. Each brought their own particular talent to the team. Ground rules were established at the first meeting and consisted of the following:

- a. Must call and e-mail team leader if unable to attend or will be late to a meeting
- b. Everyone must actively participate in team meetings
- c. All members and their ideas are treated equally
- d. Respect of each team member and their opinion is expected
- e. Keep discussion as positive and constructive as possible
- f. All information must be kept confidential
- g. All team members are responsible to limit sidebars
- h. Do not take disagreements personally
- i. Conflict resolution will be handled with a “Parking Lot with Handicapped Spot” theme. There is a 3 minute time limit for individual responses from each team member

Team leadership evolved as well. As individuals became more pressed for time, others would step in and take more of a leadership role. If any one member had input or reservations about a particular subject of discussion or action step, each felt very comfortable speaking up. No team member had to be urged to meet time lines as all were fully committed to the project. Overall, it would have been difficult to assemble a more cooperative team.

SECTION IX: OCPM WORKSHOP KNOWLEDGE, THEORIES, MODELS, PRINCIPLES, OR TECHNIQUES

The following three OCPM courses, as well many others, and their associated principals were applied during the management of this project:

1. ORGANIZATIONAL PROBLEM SOLVING AND DECISION MAKING

Gap Analysis

The ability to accurately define a problem is one of the most important aspects to problem solving. Critical thinking can then be used to analyze the problem using a “gap analysis”. The team asked “*What are we trying to accomplish?*” and “*What is the current and desired state of this issue?*” These questions indicated a need for basic research which began to fill the gaps in our understanding of the issue. This process uncovered significant weaknesses in the delivery of critical safety messages at Ohio state park beaches.

2. INFORMED DECISION MAKING

Fundamentals of Survey Research

After conducting the gap analysis it was determined that additional information needed to be gathered from both park managers and park visitors. Due to time constraints, cross-sectional surveys were conducted to get a snapshot of the current state of safety message delivery at Ohio state park beaches. A small number of in-person interviews were conducted and it was quickly determined that this was not an efficient method for gathering data, even though the data was very good. The team then shifted to web-based questionnaires. The park manager survey was presented to park managers via their

administration as mandatory and the response rate was nearly 100%. The visitor surveys were posted on the Division of Parks and Recreation Facebook page and over 100 people responded. The relative sample sizes therefore were in the extreme on both ends of the spectrum. In retrospect the validity of some questions was weak. If the surveys were conducted again, the questions would be improved significantly.

3. STRATEGIC PLANNING

SWOT Analysis

The information gathered in the visitor surveys as well as the photo exhibits submitted by the park managers were analyzed using the “SWOT” approach (Strengths, Weaknesses, Opportunities, and Threats.) First, team members analyzed the information individually. Then the group met and discussed their positions on each point and subsequently developed joint SWOT results. (See SECTION V). These results laid the foundation for our strategic plan we used to develop specific goals and action steps resulting in the recommendations contained in this report. (See SECTION VI)

SECTION X: IMPLEMENTATION OF RESULTS

Implementation of the results of this study will involve the following steps:

1. Make the report and the recommendations available to all park managers in Ohio by way of the Division of Parks and Recreation intranet.
2. Sample signs will be produced at the sign production facility at Dillon State Park and will follow the recommendations in this report on design, format and placement. These

templates can then be easily used for future, standardized sign orders from each state park.

3. A presentation will be made at a state park management team meeting explaining the project and its goals
4. A recommendation will be made to develop a training program for beach attendants.
5. Managers will be encouraged to evaluate their beach signage annually for needed replacements or maintenance.

GUIDE TO APPENDICES

| | | |
|------------|---------------------------------|-------------|
| Appendix A | Strategic Plan | Pages 20-27 |
| Appendix B | Quantitative Data Graphs | Pages 28-30 |
| Appendix C | Sample Beach Attendant Guide | Page 31 |
| Appendix D | Gantt Chart | Page 32 |
| Appendix E | Final Status Report | Pages 33-34 |
| Appendix F | Expense Report | Page 35 |
| Appendix G | Communications Plan | Page 36 |
| Appendix H | Charter | Page 37-39 |

Appendix A

STRATEGIC PLAN

For

Improving Safety at Ohio State Park Beaches

STRATEGIC PLAN

TABLE OF CONTENTS

| Section | Page |
|---|-------------|
| I. Project Background | 22 |
| II. Project Overview | 22 |
| III. Project Mission | 22 |
| IV. Project Methods and Information Gathering | 22 |
| V. Identifying Problems | 24 |
| VI. Goals and Action Plans | 24-28 |

I. Project Background

The public swimming beaches of Ohio State Parks are one of the most popular attractions in summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

This project proposes to work with Ohio State Park managers to:

- Provide a thorough review of signage and management efforts centered on public safety and communication of hazards at public beaches.
- Offer recommendations for improving how hazards are identified and communicated to visitors.
- Provide for consistent messages system-wide.
- Determine the relative effectiveness of existing mechanisms that provide information to beach users.

II. Project Overview

Our project overview is to develop a proposal for signage content, design and placement on Ohio State park beaches. Our project will simplify beach rule comprehension and increase visibility from beaches as well as swimming areas.

III. Project Mission

To improve visitor's safety at Ohio State Park Beaches, by evaluating existing signage and making recommendations on standardizing concise and effective safety messages.

IV. Project Methods and Information Gathering

The project team and stakeholders felt that the most important aspect was the ease of reading and understanding the posted beach rules. Information for the project was derived from two sources, management staff of the state park beaches and customers using public beaches.

A survey containing 17 questions was sent to managers of 35 Ohio State Park Beaches. The beaches varied in size and water depth.

A customer survey link was also posted on Facebook. The survey had 10 questions, 99 customers completed the questionnaire. The respondents were a mix of male and female as well as age groups spanning from under 18 to 55+.

In order to capture the current state of beach signage in the State Park Beaches, team members visited several beaches in Central and Southern Ohio. The project team took pictures of the

current signage, as well as the signage position as it relates to the beach. Park managers were asked to submit photos of their current beach signage using the following criteria; close up of the rules; rules in respect to the beach; and a wide view of the beach.

V. Identifying Problems

The project team used the SWOT analysis approach in analysing survey data and photograph exhibits. This analysis indicated potential problems with conveying safety messages effectively.

VI. Goals and Objectives

Goal 1: Standardize key safety messages

Action Plan:

- A. Establish primary categories for messages.
- B. Draft verbiage to be recommended to stakeholders
- C. Circulate for review and comment from stakeholders

Critical Safety Warnings – visible from all points on beach and swim area
(Yellow with black text)

- No Diving
- Parents watch kids
- Swim in designated areas only
- Use only Coast Guard approved floatation devices
- Open water has hidden hazards
- Do not drink and swim
- (Water Quality Advisory messages, as per Division guidelines. Perhaps provide a space at the bottom of each Critical Safety Warning sign so this message can be posted and removed as necessary.)

Priority Prohibitions – posted at all beach entrances (White with red text)

No:

- Non-Coast Guard approved flotation devices
- Alcohol
- Glass containers
- Littering

- Pets (except in designated areas)
- Fires
- Fishing in swim area

General Information – posted at areas designated by the park manager (“park-brown” with white text)

- Do not leave valuables unattended
 - No lifeguard on duty
 - Complete list of rules available at park office
 - Swimming prohibited beyond this point
 - Entering designated swim area
 - Entering pet-friendly area
 - Pets prohibited beyond this point
- (Other messages chosen by park manager)

Goal 2: Recommend effective placement of signage

Action Plan:

- A. Draw layout of beach and signage
- B. Maximize visibility of all safety signs
 - Three sided signs to maximize the visibility of critical safety warnings
 - Clearly designate swim areas
 - Prohibitive signs located at beach entrance
 - Informational signs placed at discretion of management

Goal 3: Develop standards for sign formatting, (i.e. color, font, size, etc.)

Action Plan: Recommendation based on ODOT regulations, policy and codes as defined by The Ohio Manual of Uniform Traffic Control Devices (OMUTCD).

In following the current OMUTCD standard, ODOT defines the categories as follows:

- **Regulatory signs** give notice regulations. Regulatory signs may be administrative, permissive or prohibitive in nature.
- **Warning signs** give notice of a situation that might not be readily apparent.

- **Informational signs** show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information.

A. Designate colors for type of message.

Using OMUTCD's standards of color is practical for three reasons:

1. Majority of public is already familiar with color of signs and their meanings
2. Research has been done by Federal Highway Administration (FHWA)
3. Signage is effective on highways and standards are already established

Regulatory

The current OMUTCD standards use the following lettering/background for the following signage.

- Administrative: Black/White
- Prohibitive: Red/White
- Permissive: Green/White

Warning/Hazard

- The OMUTCD standard uses a yellow background with black lettering for all warning signs.

Guide/Informational

The current OMUTCD standards use the following lettering/background for the following signage:

- General Information: White/Green or White/Blue
- Recreational: White/Brown

The Project Team member's recommendation for signage color is:

Critical Safety Signs: Yellow background with black text
Priority Prohibitive Signs: White background with red text
General Information Signs: Park Brown with white text

B. Font

OMUTCD standards current use the Federal Highway Administration (FHWA) established font. The font has six series from B to F. Series B has the narrowest letters and F has the widest letters. Series E is the most commonly used, our Project Team recommends this font size due to familiarity and ease of reading.



C. Size

Word messages should be as brief as possible and the lettering should be large enough to provide the necessary legibility distance. A minimum specific ratio of 1

inch of letter height per 30 feet of legibility distance should be used based on 20/40 corrected vision standard.

D. Mandated Codes

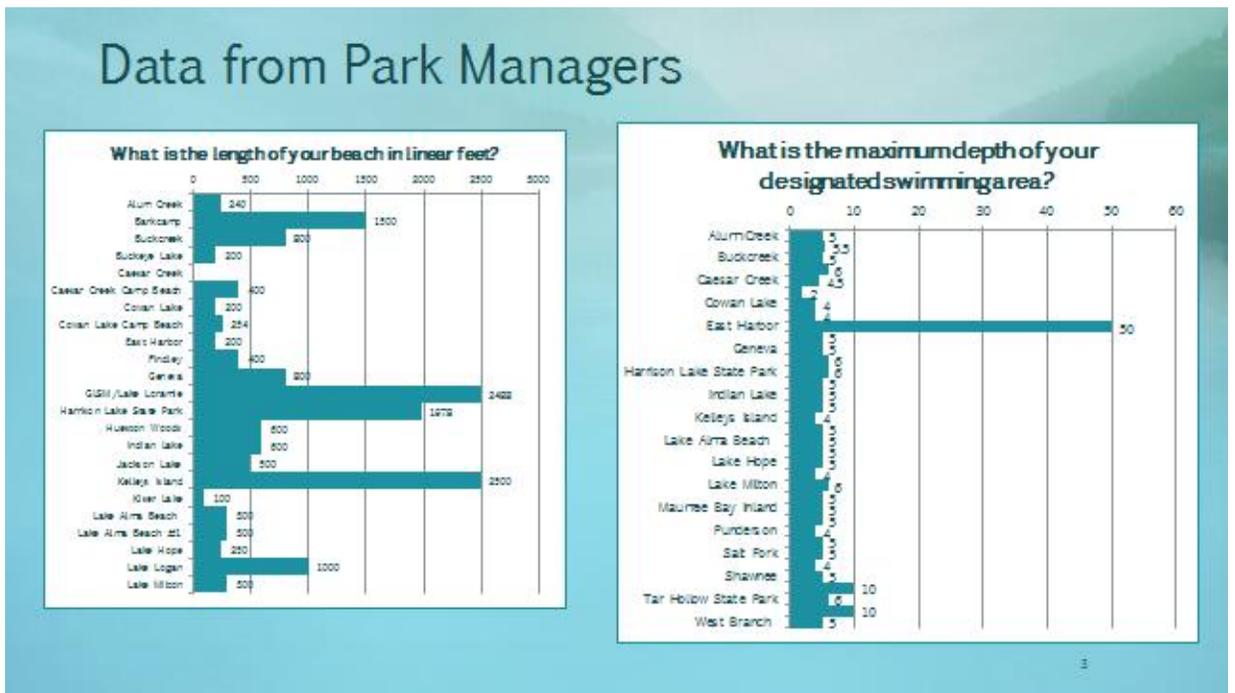
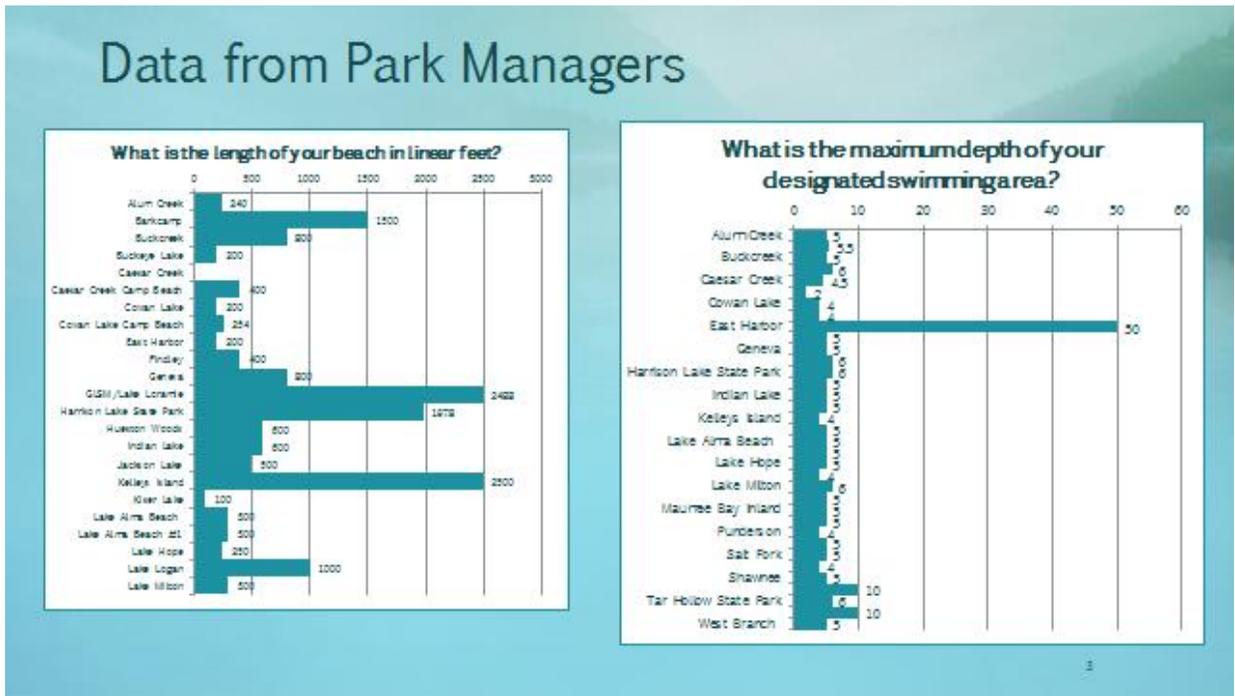
Currently there is no uniformed code for beach signage. Adopting standards similar to current highway signage with adjustments for specialized messages would a step toward standardizing signage on all beaches.

Goal 4: Develop recommendations on the use of staff and volunteers to convey safety messages

Action Plan:

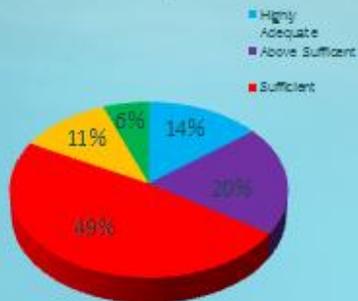
- A. Evaluate existing orientation and curriculum
- B. Develop beach attendant rules and orientation
- C. Recommend park management mandate beach safety training for staff and volunteers

Appendix B



Data from Park Managers Continued

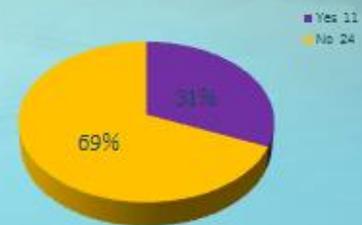
Do you feel your signage is adequate?



Are the rules readable from any position in the water?



Are posted rules readable from the sand area?



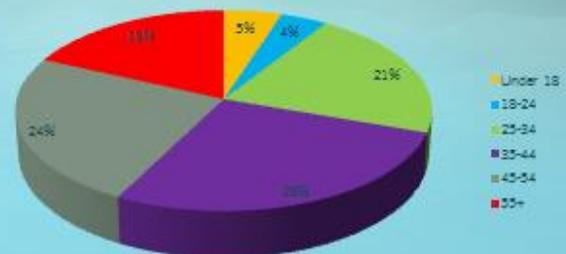
5

Data from Visitors

Are you male or female?



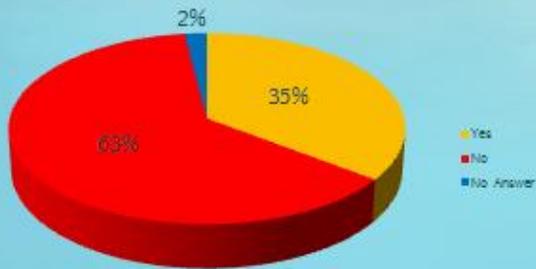
What is your age?



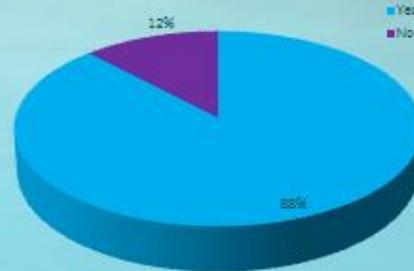
12

Data from Visitors Continued

Does a lifeguard on duty influence your decision to swim at beach?



Does safety influence your decision for picking a beach to swim?



13

Data from Visitors Continued



14



Appendix C

BEACH ATTENDANT

The public swimming beaches of Ohio State Parks are one of the most popular attractions in summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

THE PRIMARY RESPONSIBILITY OF THE BEACH ATTENDANT IS TO CONVEY SAFETY MESSAGES AND OTHER INFORMATION TO THE VISITORS OF OHIO STATE PARK BEACHES. ATTENDANTS ARE TO ENCOURAGE THE VISITING PUBLIC TO TAKE NOTICE OF ALL SAFETY SIGNS.

POSTED AT ALL BEACH ENTRANCES:

No:

- Non-Coast Guard approved flotation devices
- Alcohol
- Glass containers
- Littering
- Pets (except in designated areas) Show public where these areas are
- Fires
- Fishing in swim area

POSTED ALONG SHORE OF ALL SWIM AREAS:

- No Diving
- Parents watch kids
- Swim in designated areas only
- Use only Coast Guard approved flotation devices
- Open water has hidden hazards
- Do not drink alcohol and swim
- Follow Water Quality Advisory messages, as per Division guidelines.

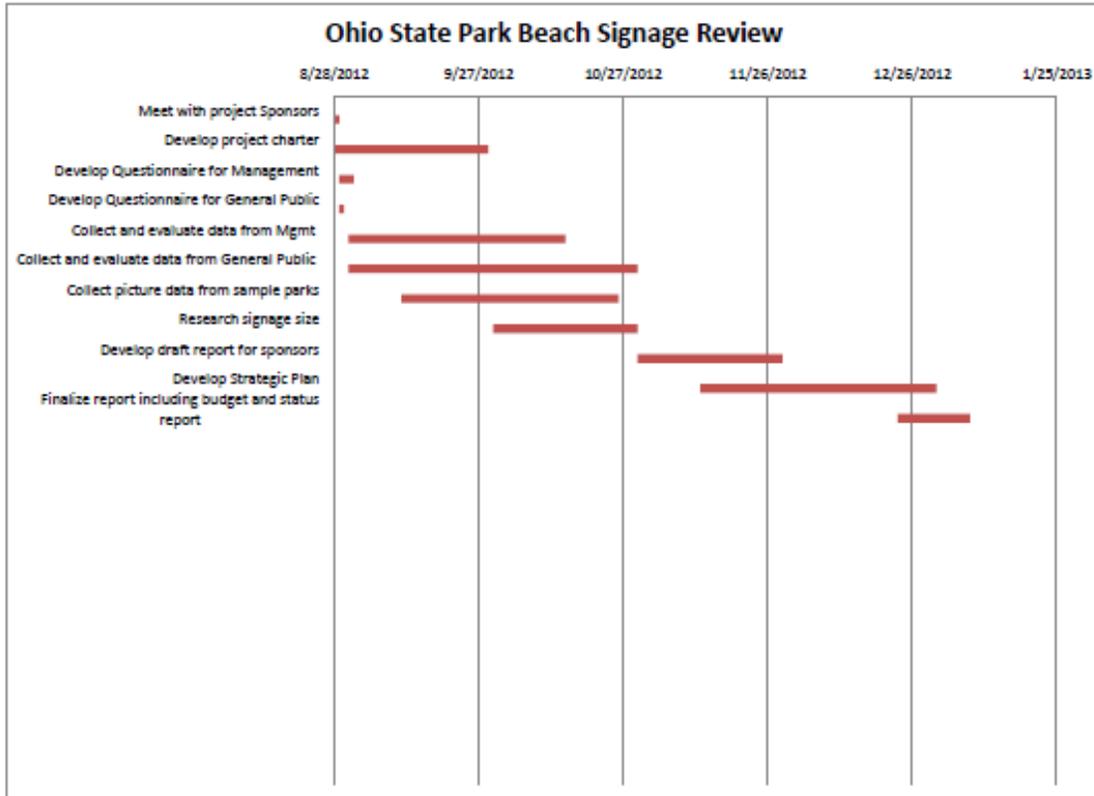
POSTED AS DIRECTED BY LOCAL PARK MANAGER:

- Do not leave valuables unattended
- No lifeguard on duty
- Complete list of rules available at park office
- Swimming prohibited beyond designated area (point out locations)
- Designated swim area (point out locations)
- Pet-friendly area (point out locations)
- The use of sun screen, and shade tents
- Emergency contact numbers

GENERAL INFORMATION

Beach Attendants are to be visible to the public and available to answer questions about the park and beach safety. They are to be aware of their surroundings and possible hazards including, unattended children and swimmers outside the designated swimming areas. While on duty, Attendants must also conduct hourly restroom checks for cleanliness and needed supplies.

Appendix D – Gantt chart



Appendix E

Project Status Report

Project Summary

| REPORT DATE | PROJECT NAME | PREPARED BY |
|-------------------|--|------------------|
| December 31, 2012 | Improving Safety of Ohio Beach Signage | Carl E Lynch Jr. |

Status Summary

Our project addresses improving the overall safety of Ohio beaches through the beach signage. We currently are in the process of obtaining data from both the park managers and public visitors of the various beaches.

Project Overview

| TASK | % DONE | DUE DATE | DRIVER | NOTES |
|---|--------|------------|--|-------|
| Meet with project Sponsors | 100 | 8/28/2012 | Needed to determine direction of project | |
| Develop project charter | 100 | 9/30/2012 | Needed to determine direction of project | |
| Collect questionnaire from park personnel | 100 | 10/01/2012 | Needed to formulate recommendations for improved signage | |
| Collect questionnaire from general public | 100 | 10/15/2012 | Needed to formulate recommendation for improved signage | |
| Collect picture data from sample parks | 100 | 10/30/2012 | Needed to formulate recommendation for improved signage | |
| Process and graph questionnaire from park personnel | 100 | 10/30/2012 | Needed to formulate recommendation for improved signage | |
| Process and graph questionnaire from general public | 100 | 10/30/2012 | Needed to formulate recommendation for | |

| | | | |
|-------------------------|-----|-----------|---|
| | | | improved signage |
| Developing Final Report | 100 | 1/07/2012 | Needed to formulate recommendation for improved signage |

Budget Overview

| CATEGORY | SPENT | % OF TOTAL | ON TRACK? | NOTES |
|----------------|-------|------------|-----------|--|
| Group Expenses | N/A | N/A | Yes | Although there was not a determined budget for the project, the costs involved is the total manpower and mileage costs for each project team member in order to complete project recommendations (appendix for detailed expense log will be attached to final project report.) |

Risk and Issue History

| ISSUE | ASSIGNED TO | DATE |
|--|-------------|-----------|
| Possible lack of response from general public | Matthew | 9/25/2012 |
| <p>No issues since last report. All team members have been completing task on time.</p> <p>General public responded well. Responses came from a wide demographic. Respondents included male and female as well as age groups from 18 to 55+.</p> | | |

Conclusions/Recommendations

The final recommendation for the project will be a written proposal to the park managers. The proposal includes guidelines that will standardize the signage at all beaches.

Appendix F – Expenses

| # of Meeting | Date | Location | Time Started | Time Finished | Total Time |
|--------------|------------|---|--------------|---------------|------------|
| 1 | 8/1/2012 | OSU - John Glenn School | 3:00 PM | 4:15 PM | 1:15 |
| 2 | 8/28/2012 | OSU - John Glenn School | 2:00 PM | 4:45 PM | 2:45 |
| 3 | 9/11/2012 | OSU - John Glenn School | 3:00 PM | 4:30 PM | 1:30 |
| 4 | 9/20/2012 | OSU - John Glenn School | 3:00 PM | 4:35 PM | 1:35 |
| 5 | 9/24/2012 | OSU - John Glenn School | 3:00 PM | 3:15 PM | 0:15 |
| 6 | 9/27/2012 | Conference Call | 4:00 PM | 5:30 PM | 1:30 |
| 7 | 10/12/2012 | OSU - John Glenn School | 1:45 PM | 2:10 PM | 0:25 |
| 8 | 10/16/2012 | Conference Call | 11:30 AM | 12:05 PM | 0:35 |
| 9 | 10/24/2012 | OSU - John Glenn School | 1:50 PM | 2:40 PM | 0:50 |
| 10 | 10/30/2012 | Conference Call - Stakeholder | 12:10 PM | 12:40 PM | 0:30 |
| 11 | 11/9/2012 | Conference Call | 1:45 PM | 3:00 PM | 1:15 |
| 12 | 11/12/2012 | Stages Pond - State Park | 10:30 AM | 2:30 PM | 4:00 |
| 13 | 11/18/2012 | Stages Pond - State Park | 10:00 AM | 2:00 PM | 4:00 |
| 14 | 12/13/2012 | OSU - John Glenn School | 4:00 PM | 4:45 PM | 0:45 |
| 15 | 12/20/2012 | Stages Pond - State Park | 11:00 AM | 4:00 PM | 5:00 |
| | | | | Total Time | 26.10 |
| | | Average Time per Employee (\$21.00/hr * 5 people) | | | \$105.00 |
| | | | | Total Cost | \$2,740.50 |

| OCPM Expenses Log | | | | | | | | |
|--------------------|------------|-------------|-------------|------------|--|---------------------------|-----------------------|---------------------------------|
| Date | Start Time | Finish Time | Total Time | Mileage | Description of Task | Mileage & Additional Cost | Dollar Amount on Time | Project Member |
| 9/4/2012 | 2:00 PM | 3:30 PM | 1.50 | 40 | Picture of Buckey lake | \$7.00 | \$31.50 | Angelo |
| 11/12/2012 | 10:30 AM | 2:30 PM | | 205 | Stages Pond - State Park | \$35.88 | | Everyone |
| 11/18/2012 | 10:00 AM | 2:00 PM | | 205 | Stages Pond - State Park | \$35.88 | | Everyone |
| 12/20/2012 | 11:00 AM | 4:00 PM | | 205 | Stages Pond - State Park | \$35.88 | | Everyone |
| 9/24/2012 | 1:00 PM | 2:30 PM | 1.50 | 70 | Stroud's Run Park | \$12.25 | \$31.50 | Sue Shultz |
| 8/28/2012 | 2:00 PM | 4:30 PM | 2.50 | 176 | Meeting with Stakeholder(Caesar Creek) | \$30.80 | \$52.50 | Carl, Martin, Matthew, & Angelo |
| | | | | | Forward Total From Meeting Sheet | \$2,740.50 | | |
| Totals | | | 5.50 | 901 | | \$2,898.18 | \$115.50 | |
| Grand Total | | | | | | \$3,013.68 | | |

Appendix G – Communications Plan



Ohio Department of Natural Resources
Project for OCFM – Cohort 46

Communication Plan

| ID | Communication | Start Date | Finish Date | Description | Frequency | Format | Owner | Recipient/ Attendees |
|----|---|------------|-------------|--|--|---|-----------------------------------|----------------------------|
| 1 | Meeting Minutes - Physically meeting | 8/21/2012 | | Meeting Details | Weekly In place of Missed Meeting | Microsoft Word | Sue Shultz | Project Stakeholders |
| 2 | Conference Call | 9/24/2012 | | Meeting Details | | Telephone | Angelo Dass | Project Stakeholders |
| 3 | Status Reports | 10/1/2012 | | Detailed Report on the progression of Project | Vary | Microsoft Word | Carl Lynch | Project Stakeholders |
| 4 | Management Surveys | 9/8/2012 | 9/20/2012 | Survey on Beach Signage and Location | | Google Docs, Internet, and Microsoft Excel | Matthew Bourne & Matt Monta | Park Managers |
| 5 | Visitor's Survey | 9/25/2012 | | Swimming Survey focusing on Safety | Once | Facebook, Twitter | | Visitors to State Parks |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |

Appendix H – Project Charter

CHARTER

Title: IMPROVING SAFETY AT OHIO STATE PARK BEACHES

SCOPE

Sponsor: Scott D. Fletcher, Deputy Chief, Ohio State Parks

Objective: This project proposes to work with Ohio state park managers to do the following:

- Provide a thorough review of signage and management efforts centered on public safety and communication of hazards at public beaches.
- Offer recommendations for improving how hazards are identified and communicated to visitors.
- Provide for consistent messages system-wide.
- Determine the relative effectiveness of existing mechanisms that provide information to beach users.

Background: The public swimming beaches of Ohio State Parks are one of the most popular attractions in summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

Providing visitors with a safe, high-quality outdoor recreational experience at state park beaches is a very high priority for the Ohio Division of Parks and Recreation. Examining issues such as water testing, safety and informational signage, law enforcement and delineation of special-use zones will be an important step in reaching this goal.

Customers/Stakeholders:

- Ohio Department of Natural Resources, Division of Parks and Recreation
- Visitors to Ohio State Park Beaches

Customer Requirements/Expectations:

- Thorough review of signage centered on public safety and communication of hazards at public beaches.
- Recommendations for improving how hazards are identified and communicated to visitors.
- Consistent messages system-wide.

Final Deliverable:

Final Deadline: **December 31, 2012**

Reviews and Approvals Required

| Interim Deliverable | Review | Approval | Reason |
|---------------------|--------------|----------|-------------------------------|
| Park Manager Survey | Project Team | Fletcher | Confirm or reject assumptions |
| Visitor Survey | Project Team | Fletcher | Confirm or reject assumptions |
| Photo Exhibit | Project Team | Fletcher | Document current status |
| | | | |

Assumptions

| Assumption | Confirmed | Rejected |
|---|-----------|----------|
| There is a non-standard approach to beach signage. | Yes | |
| Standardization might lead to increased visitor safety. | Possible | |
| Park Managers and visitors need standardization. | Yes | |
| State beach signage can be compatible with USACE rules and reg's. | Yes | |
| | | |
| | | |
| | | |
| | | |
| | | |

RESOURCES

Team Assignments

Project Leader: Martin McAllister

Project Team: Angelo Dass, Carl Lynch, Matthew Bourne, Martin McAllister, Susan Shultz

Budget: (Expense report only.)

Other Resources:

Potential consultants, knowledge experts: Park Managers, USACE Superintendents, National Parks and Recreation Association, Matt Monta (Social Media Advisor)

MILESTONE LIST

Milestones

| Milestone | Estimated Hours |
|---|-----------------|
| Conduct Surveys | 80 |
| Develop photo exhibit | 40 |
| Assemble current sources of information and literature on beach management. | 16 |
| Redefine scope if necessary based on three milestones above. | 8 |
| | |
| | |

COMMUNICATION PLAN

| Who? | Needs to Know What? | When? | In What Form? |
|--------------|---------------------|---------|-----------------------------|
| Stakeholders | Draft Scope | 8-28-12 | Meeting |
| Stakeholders | Survey Results | 10-1-12 | Conference Call |
| Stakeholders | Photo Exhibit | 10-1-12 | Conference call/Web meeting |

RISK MANAGEMENT PLAN

| Risk | Probability | Impact | Contingency Plan/ Individual Responsible |
|---------------------------------|-------------|--------------|---|
| Poor response to visitor survey | High | Large | Team conduct small survey |
| Poor response to manager survey | Low | Low-Moderate | Mandate |
| Inadequate photos | High | Large | Team take photos |

EVALUATION PLAN

| Desired Outcome | Evaluation Method | Success Measurement |
|--------------------------------------|-------------------|---------------------------|
| Improved delivery of safety messages | Future survey | Increase in understanding |
| Fewer drowning's/injuries | Park reports | Report data |



Improving Safety at Ohio State Park Beaches

Presentation

Brought to you by the

Buckeye Beach Bums

OCPM Cohort #46

Scope - Background



The public swimming beaches of Ohio State Parks are one of the most popular attractions in summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

Providing visitors with a safe, high-quality outdoor recreational experience at state park beaches is a very high priority for the Ohio Division of Parks and Recreation. Examining issues such as water testing, safety and informational signage, law enforcement and delineation of special-use zones will be an important step in reaching this goal.

Team Charter: Objective



This project proposes to work with Ohio state park managers to do the following:

- Provide a thorough review of signage and management efforts centered on public safety and communication of hazards at public beaches.
- Offer recommendations for improving how hazards are identified and communicated to visitors.
- Provide for consistent messages system-wide.
- Determine the relative effectiveness of existing mechanisms that provide information to beach users.

Stakeholders

Scott Fletcher – Team Sponsor

- Deputy Chief - State of Ohio Parks – (ODNR)

Customers

- Ohio Department of Natural Resources, Division of Parks and Recreation
- Visitors to Ohio State Park Beaches

Advisors and Support

- Cindy Holodnak - Associate Director, Outreach and Engagement (OSU)
- Tamara Henderson – Training Program Manager (DAS)





Team Dynamics – Role Call

Martin McAllister – Team Leader

- District Park Manager -ODNR

Sue Shultz – Scribe and Time Keeper

- Interim Exec. Director
 - Adams, Lawrence, and Scioto County – Alcohol, Drug Addiction and Mental Health Board

Carl Lynch – Backup Scribe and Timekeeper

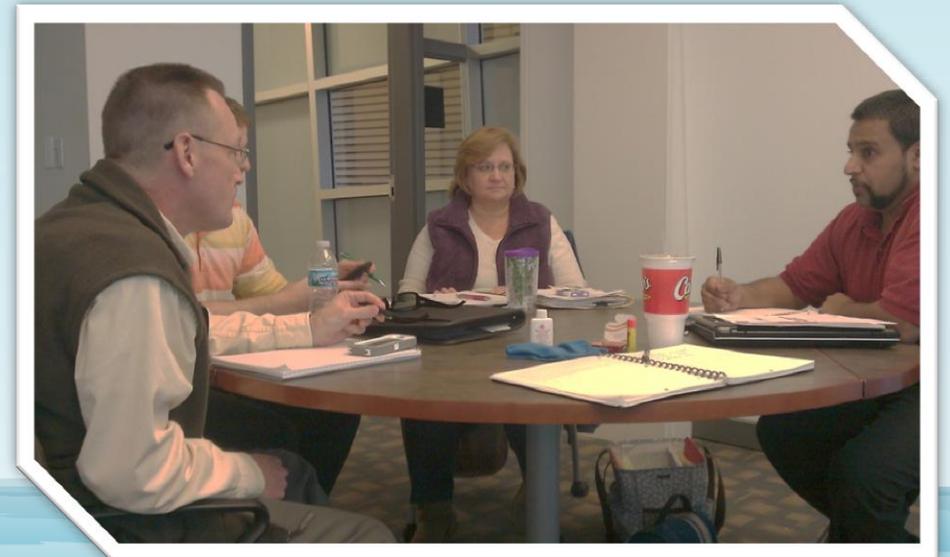
- Program Administrator 3- DPS

Matthew Bourne – Backup Facilitator

- Park Manager 4 - ODNR

Angelo Dass – Facilitator

- Management Analyst Supervisor 1 -DAS



Team Dynamics: Guidelines



1. Must call and e-mail team leader if unable to attend or will be late to a meeting
2. Everyone must actively participate in team meetings
3. All members and their ideas are treated equally
4. Respect of each team member and their opinion is expected
5. Keep discussion as positive and constructive as possible
6. All information must be kept confidential
7. All team members are responsible to limit sidebars
8. Do not take disagreements personally
9. Conflict resolution will be handled with a “Parking Lot with Handicapped Spot” theme. There is a 3 minute time limit for individual responses from each team member



Communication Plan

| Communication | Start Date | Finish Date | Description | Frequency | Format | Owner | Recipient/ attendant |
|--------------------------------------|------------|-------------|---|----------------------------|----------------------------------|-----------------------------|-----------------------------|
| Meeting Minutes - Physically meeting | 8/21/2012 | 12/20/2012 | Meeting Details | Weekly | Word | Sue Shultz | Project Team |
| Conference Call | 9/24/2012 | 12/11/2012 | Meeting Details | In place of Missed Meeting | Telephone | Angelo Dass | Project Team / Stakeholders |
| Status Reports | 10/1/2012 | 12/26/2012 | Detailed Report on the progression of Project | Vary | Word | Carl Lynch | Project Stakeholders |
| Management Surveys | 9/8/2012 | 9/20/2012 | Survey on Beach Signage and Location | Once | Google Docs, Internet, and Excel | Matthew Bourne & Matt Monta | Park Managers |
| Visitor's Survey | 9/25/2012 | 10/15/2012 | Swimming Survey focusing on Safety | Once | Facebook, Twitter | | Visitors to State Parks |



Information Gathering



1. Visitors Survey

- Face to Face – Buckeye Lake & Alum Creek
- Facebook & Twitter – 100+ Surveys gathered

2. Management Survey

- Covering 35+ parks
- Used Google Docs to implement the survey

3. Pictorial Survey on Current Signage

- Pictures taken meeting certain criteria



Management Survey



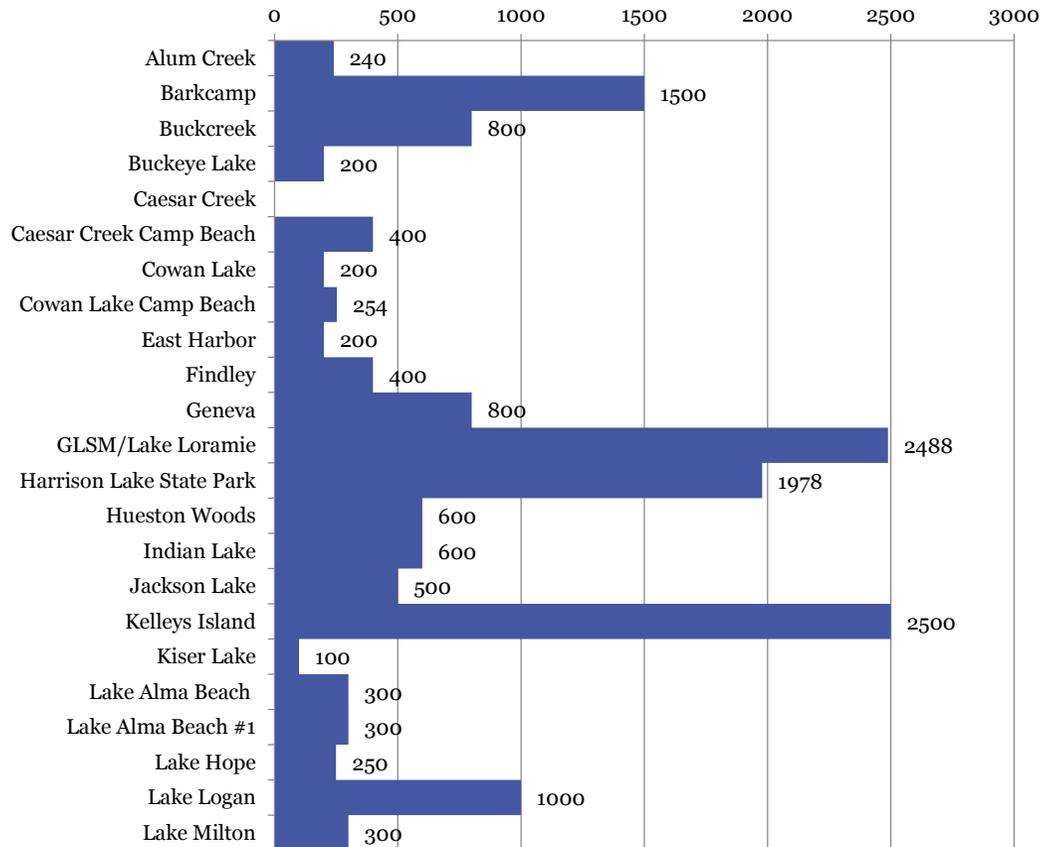
- Park Manager response was mandated by Division leadership
- Everyone participated
- Help from Matt Monta (ODNR) and Google Docs on making and implementing the survey
- Many Park Managers were satisfied with current signage and enforcement of rules



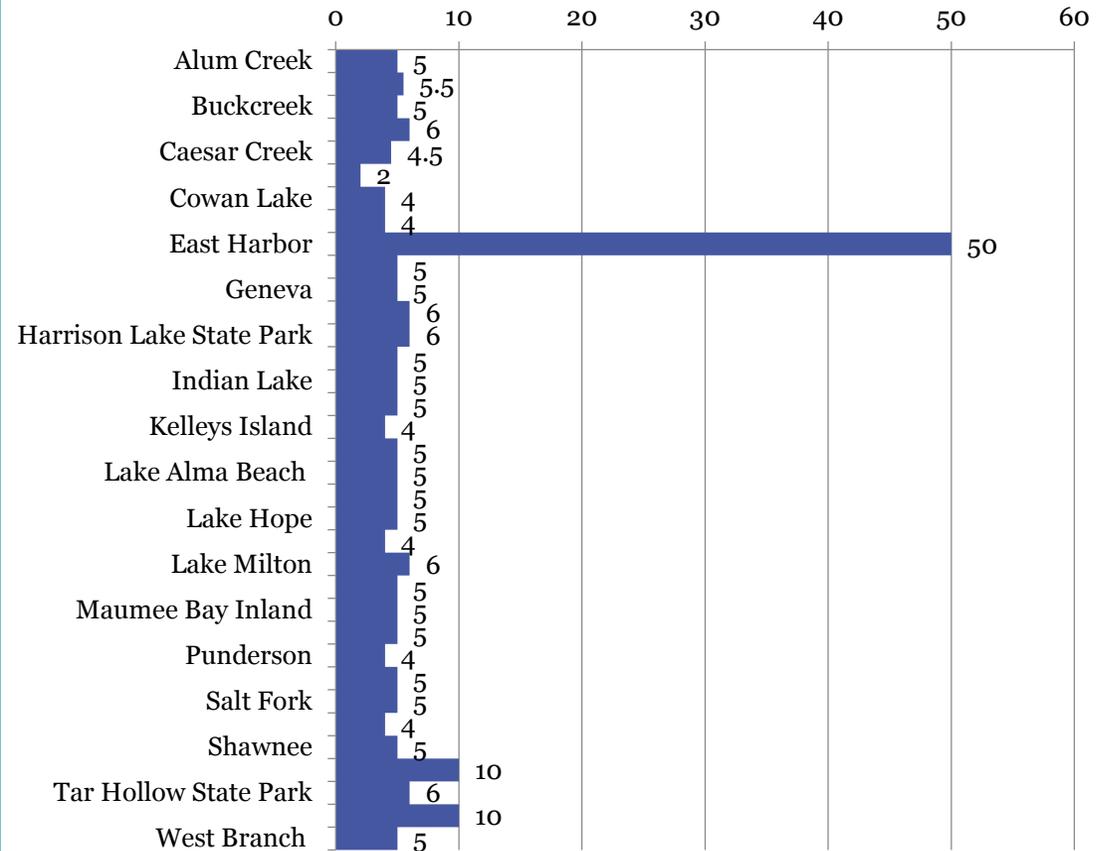
Analysis of Data – Management Survey



What is the length of your beach in linear feet?



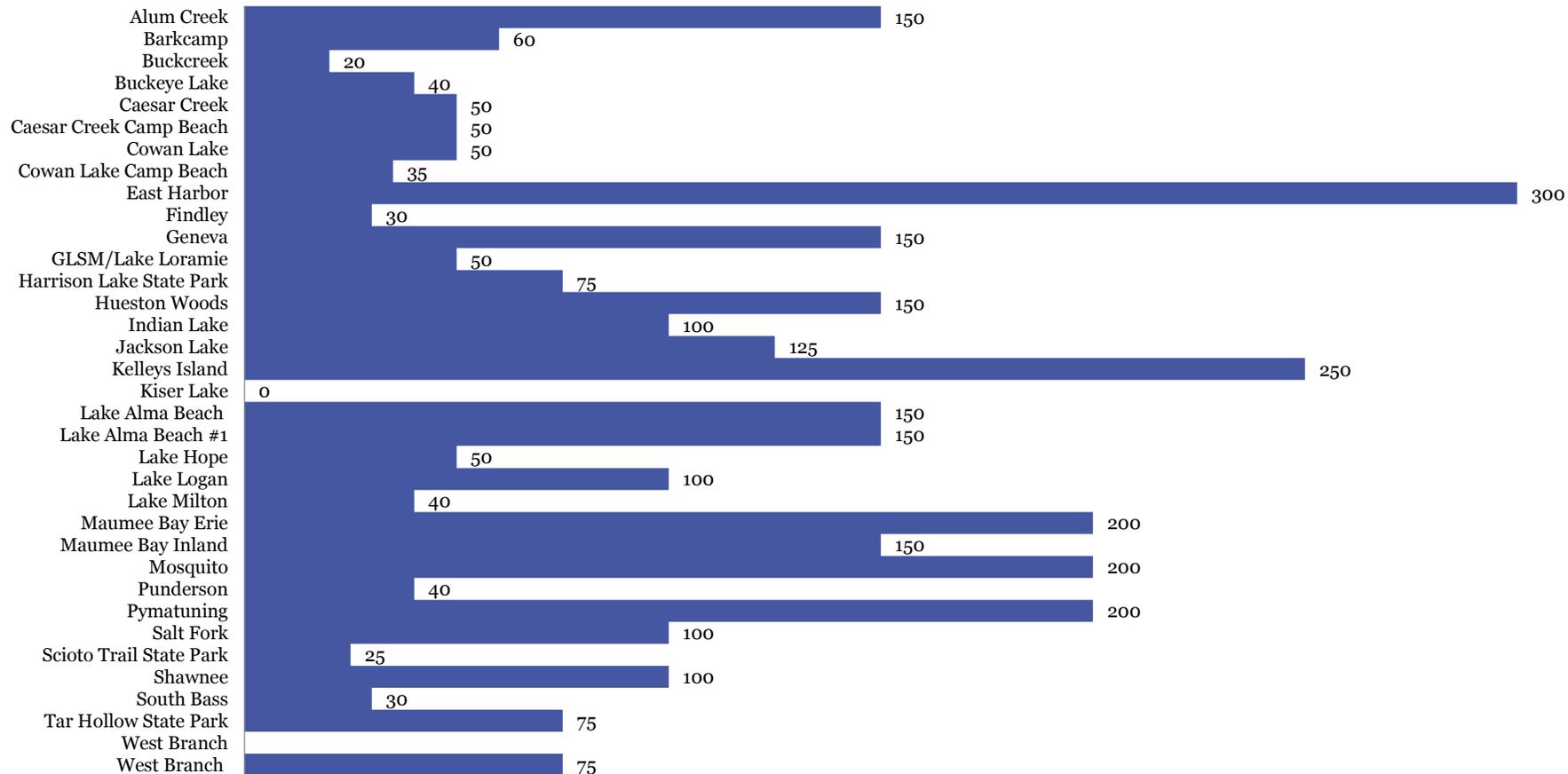
What is the maximum depth of your designated swimming area?



Analysis of Data – Management Survey Continued



■ What is the distance from your shore to the deepest point in the swimming area in linear feet?



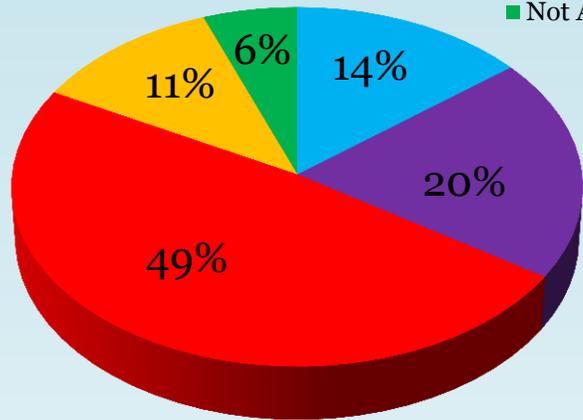
Analysis of Data – Management Survey Continued

Do you feel your signage is adequate?

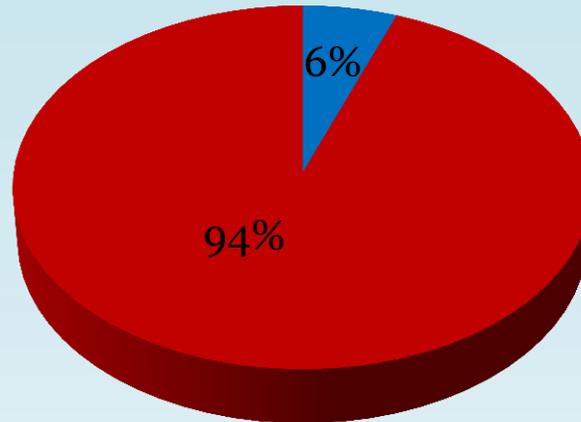
Are the rules readable from any position in the water?

Are posted rules readable from the sand area?

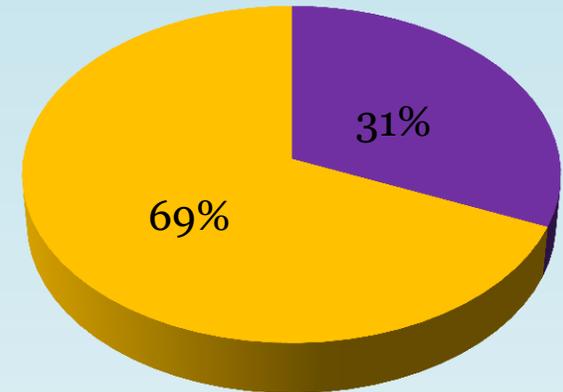
- Highly Adequate
- Above Sufficient
- Sufficient
- Below Adequate
- Not Adequate



- 2 Yes
- 33 No

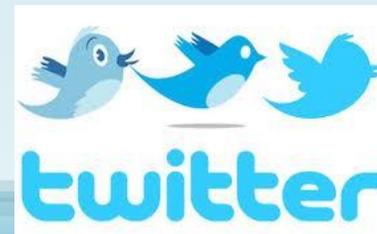
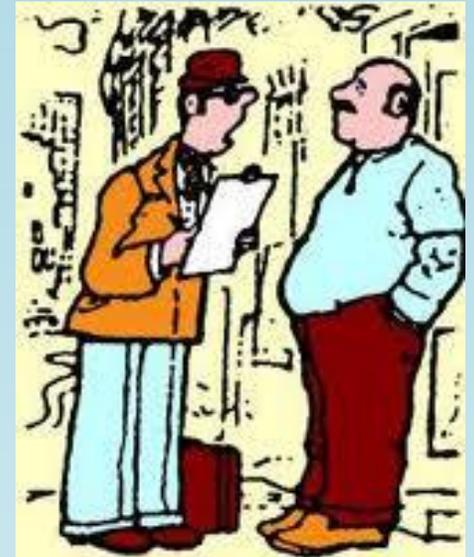


- Yes 11
- No 24



Visitor's Survey

- First tried to conduct face-to-face surveys
 - Handful of Surveys
 - Buckeye Lake, Alum Creek, and Shawnee
 - Too long of a process with little data
- Gathered from Facebook and Twitter with the help of ODNR
 - A hundred plus responses
 - Solid data from diverse group
 - Age
 - Sex
 - Beach Location



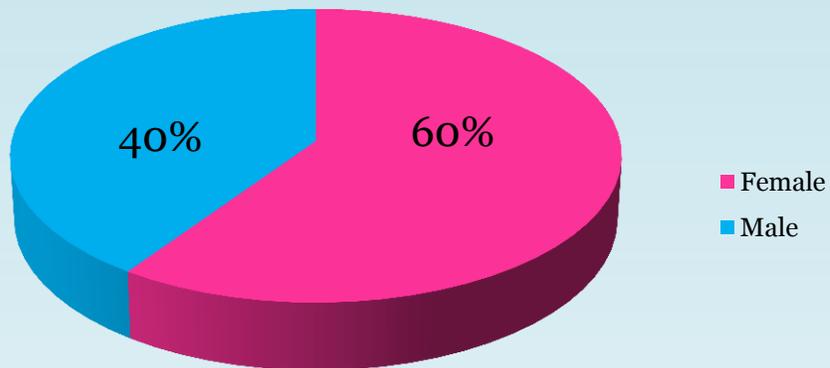
Analysis of Data – Visitor's Survey

Beach Location

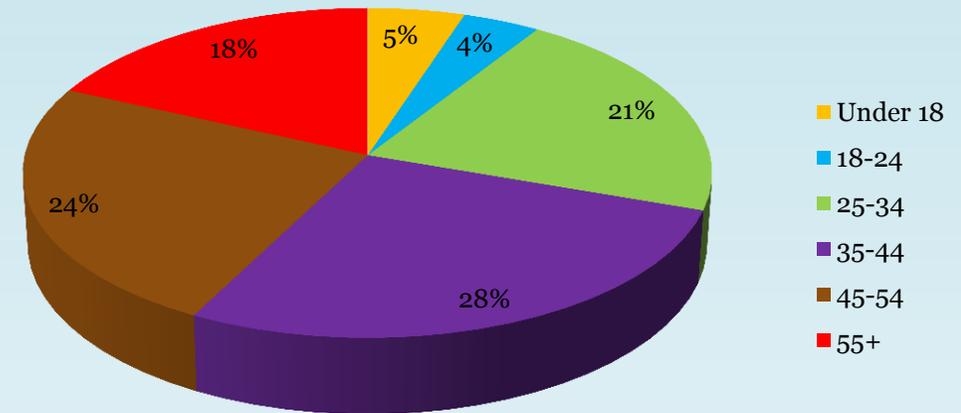


Analysis of Data – Visitor's Survey Continued

Are you Male or Female?

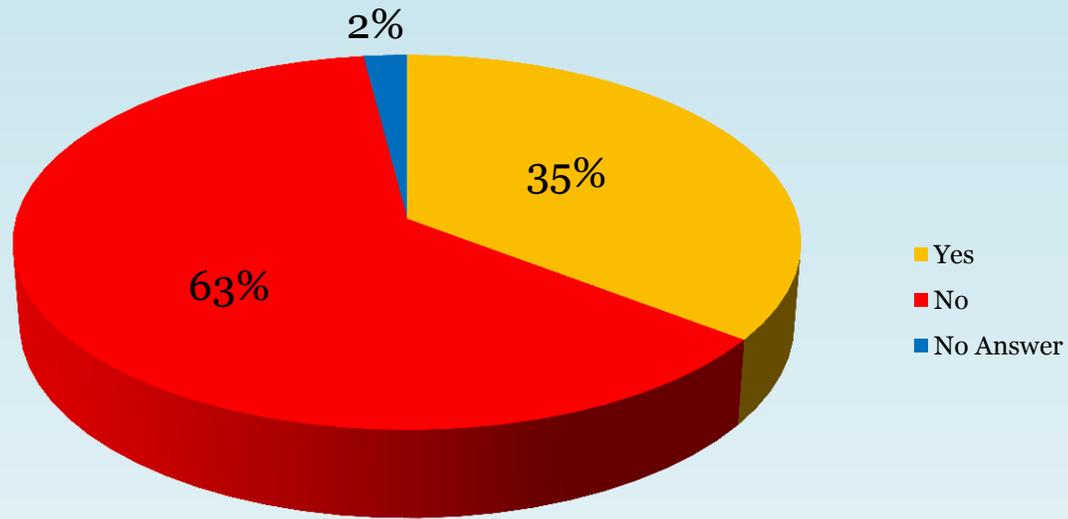


What is your age?

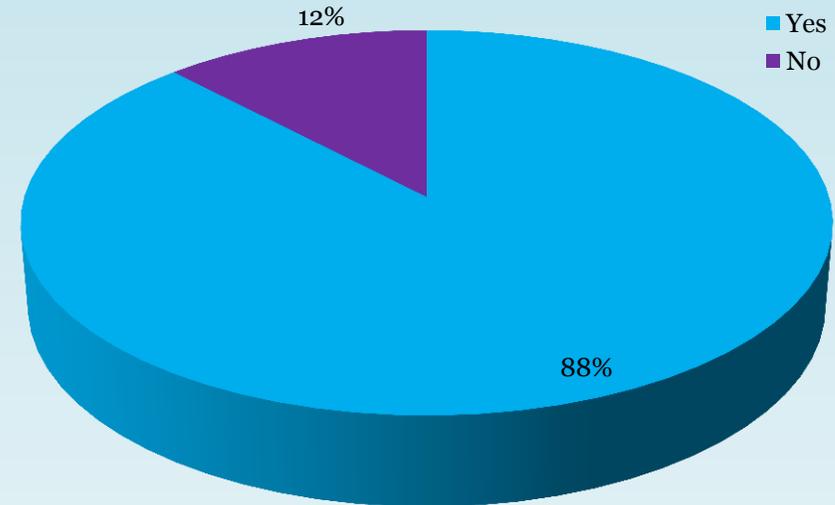


Analysis of Data – Visitor's Survey Continued

Does a lifeguard on duty influence your decision to swim at beach?



Does safety influence your decision for picking a beach to swim?



Survey SWOT ANALYSIS

Strengths



Current strengths

- Data received was from diverse group
- Safety is major concern
- Visitors know of Basic Rules
- Demographically the data is spread out with exception of Alum Creek and Lake Hope



Goals and project plan: strengths

- The data is good and is spread out demographically, gender, and age
- Data is solid
- Visitors know rules and their importance

Survey SWOT ANALYSIS

Weaknesses



Current weaknesses

- Visitors have long list of issues with the beach
 - Safety, Litter, Geese, Etc...
- Wording on “No Flotation”
- Cost\$\$- Money to pay for this at Beaches
- Water Quality



Goals and project plan: weaknesses

- Our main focus should be signage
- The verbiage for flotation devices should be crystal clear and be approved by ODNR
- We find ways to make and enforce the signage cost effective
- Is Water Quality being communicated at all beaches

Survey SWOT ANALYSIS

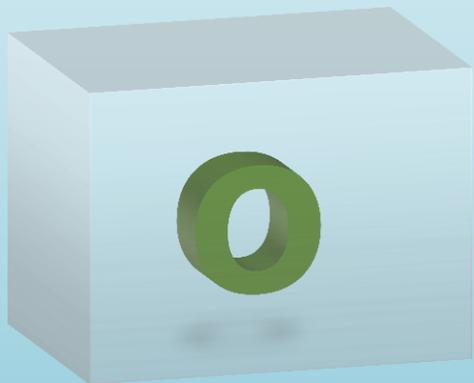
Opportunities

Current opportunities

- Beach attendant Initiative
- Camper Host Program
- Lifeguard on duty is not important to visitors
- Get all communication of all signage standardized

Goals and project plan: Opportunities

- Team needs to find out more about these programs and how to efficiently utilize them with cost as a factor
- Lifeguard not as important as having a system for enforcing rules – Beach attendant, Park Ranger, Police
- All Signage needs to be the same across all the beaches



Survey SWOT ANALYSIS

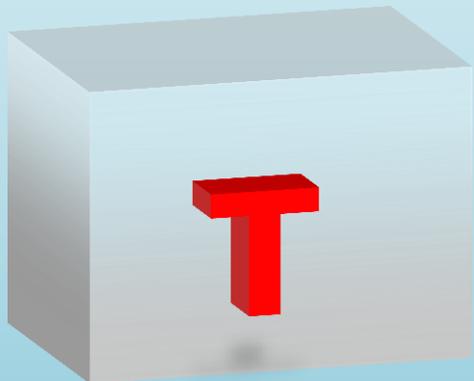
Threats

Current threats

- Drowning – Adult & Children
- Unclear message from current signage
- floatation devices
- Visitors miss signage or don't read
- Goose Poop
- Patrons swimming ability
- Alcohol
- Littering
- No lifeguard

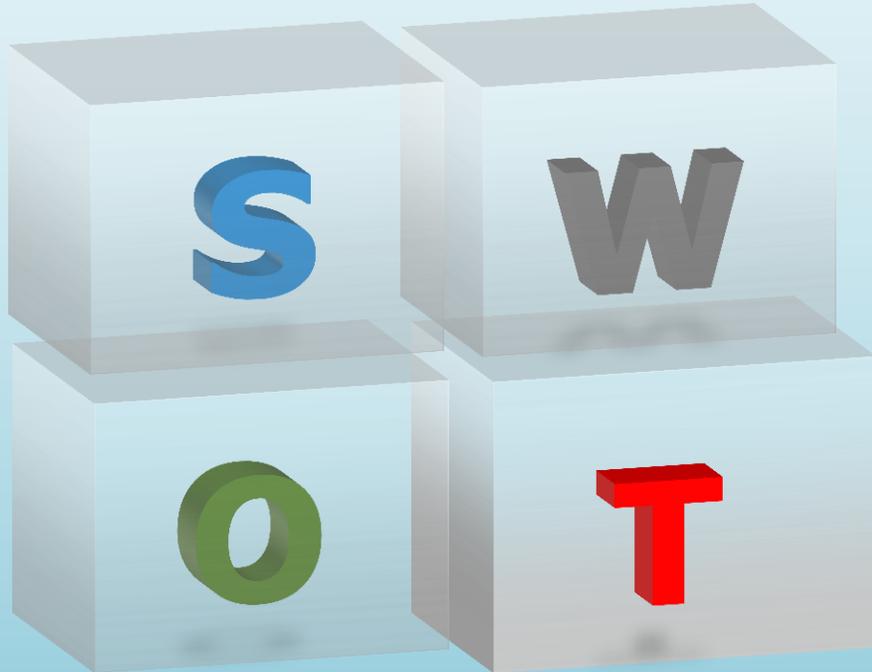
Goals and project plan: threats

- Buoys – Placement and Standardized material
- Make verbiage clear & concise
- Signage designating no floatation device
- Make Signage Visible – Triangle Sign
- Establish heirarchy and SOP for signage enforcement of rules
- Goose Poop – Not Applicable
- Swimming Ability – Not Applicable
- Alcohol Guidelines on Rules
- Personnel Recommendations for Lifeguards



Survey SWOT ANALYSIS

Summary



SWOT summary

- Standardize all Signage
 - Material
 - Lettering
 - Verbiage
- No floatation signage needs the verbiage to be correct
- Communication of Rules needs to be clear and standard at all beaches
- Utilize volunteer beach attendants where possible to reduce cost
- Share results of this survey with managers and stakeholders

Pictorial Survey of State Park Beaches



- Park Managers took pictures of their parks
- Every Park was Different !?!?
 - Safety Messages
 - Material
 - Format
- Set Criteria for Pictures
 1. Main picture of the “Beach Rules”
 2. “Rules” in Perspective to the Beach
 3. Wide View of the Beach



Rules in Perspective to the Beach– Alum Creek



Wide View of the Beach – Alum Creek



Close Up of the Rules – Hueston Beach



Rules in Perspective to the Beach Hueston Beach



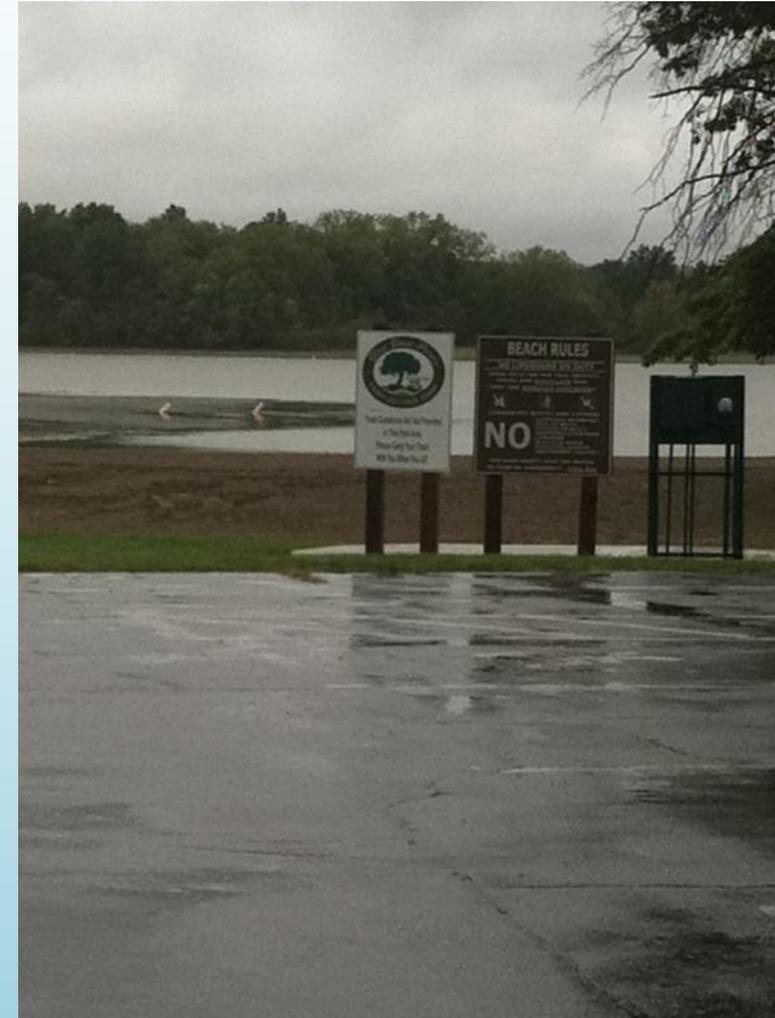
Close Up of the Rules – Geneva



Wide View of the Beach – Geneva



Rules in Perspective to the Beach– Geneva



Strategic Plan



Project Mission Statement

To improve visitor's safety at Ohio State Park Beaches, by evaluating existing signage and making recommendations on standardizing concise and effective safety messages.

Strategic Plan

Goals and Objectives

1. Classification of Key Safety Messages
2. Effective Placement of Signage
3. Standardization Format and Fonts for Improved Recognition
4. Improvements to First-Person (staff and volunteers) Delivery of Safety Messages



1. Classification of Key Safety Messages



Establish primary categories for messages.

- Critical Safety Warnings
- Priority Prohibitions
- General Information

Draft verbiage to be recommended to stakeholders

Circulate for review and comment from stakeholders

Critical Safety Warning



These warnings would consist of those messages that park management recognizes as most important to swimmers and beach users.

These warnings are considered so important as to warrant having them posted in such a way as to be readable from any position in the designated swim zone and the water/sand interface.

Critical Safety Messages



- No Diving
- Parents watch kids
- Swim in designated areas only
- Use only Coast Guard approved floatation devices
- Open water has hidden hazards
- Do not drink and swim
- (Appropriate Water Quality Advisory messages, as per Division guidelines. Provide a space at the bottom of each Critical Safety Warning sign so this message can be posted and removed as necessary.)



Primary Prohibitions

Primary prohibitions would include those actions prohibited under park rules and most likely to cause injury or death as well as any prohibitions deemed a priority or particularly problematic by the local park manager.

Primary Prohibitions Rules

NO:

- Non-Coast Guard approved floatation devices
- Alcohol
- Glass containers
- Littering
- Pets (except in designated areas)
- Fires
- Fishing in swim area



General Information



These messages would include those that special delineations, directional messages, and special announcements or courtesy messages. These would be park-specific and written by the park manager to address issues at that particular beach.

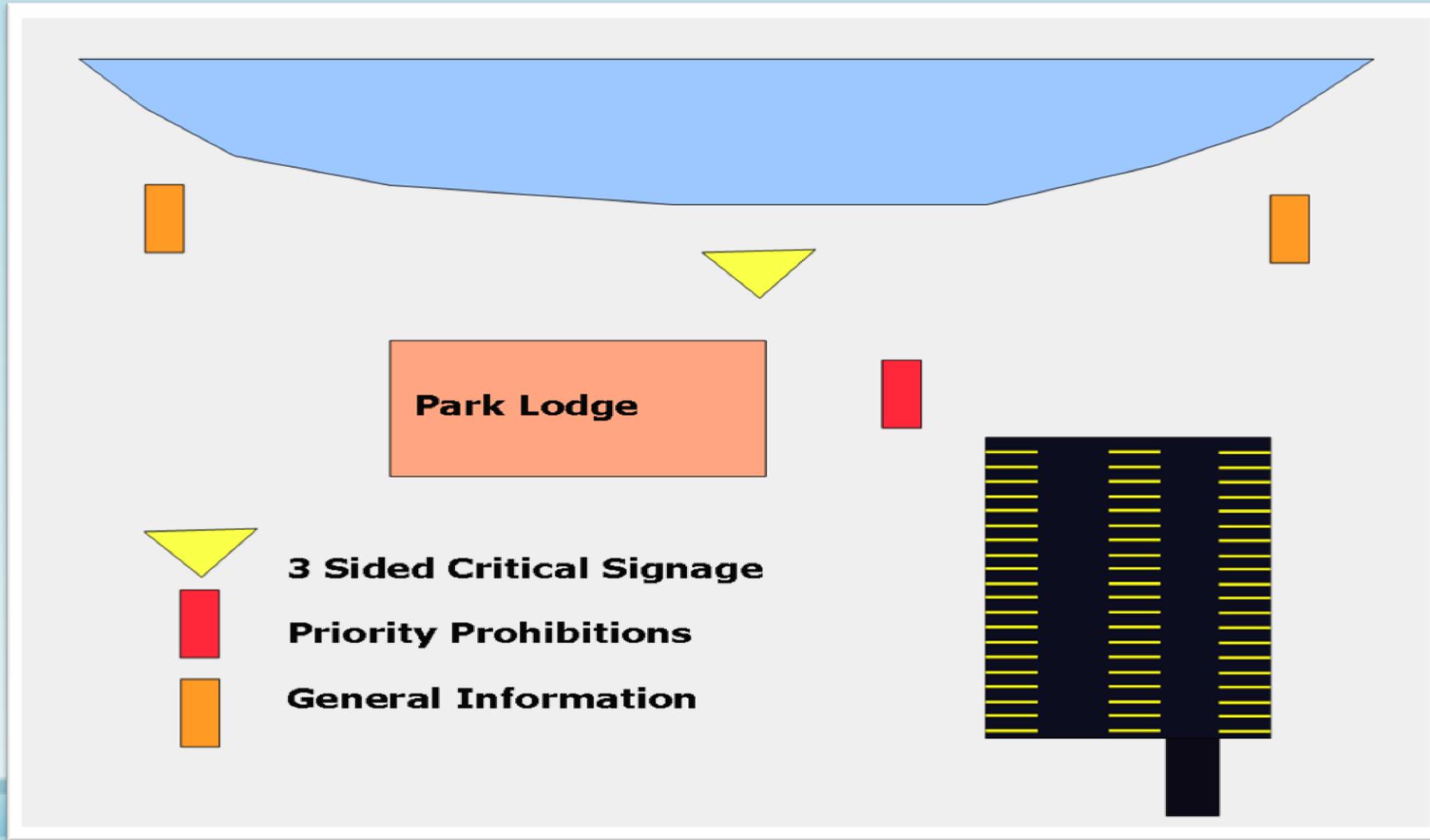
Examples of General Information



- Do not leave valuables unattended
- No lifeguard on duty
- Complete list of rules available at park office
- Entering designated swim area
- Entering pet-friendly area



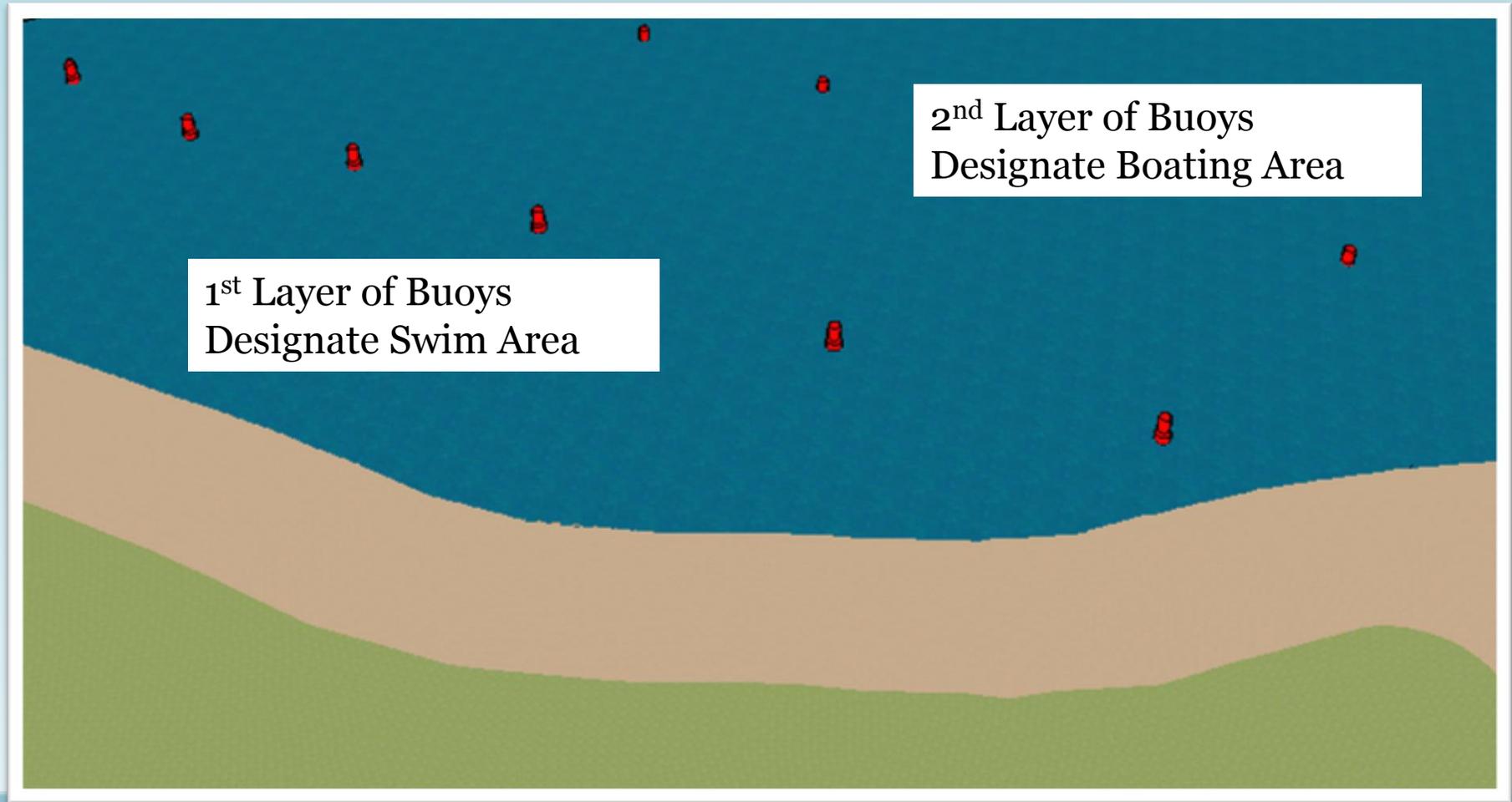
2. Effective Placement of Signage



3 Sided Sign Maximize the Visibility of Critical Safety Warnings



Designated Swim Area



3. Standardization Format and Fonts for Improved Recognition



Recommendation based on ODOT regulations, policy and codes as defined by The Ohio Manual of Uniform Traffic Control Devices (OMUTCD).

1. Classification of Color to mimic ODOT's signage
 - Regulatory, Warning / Hazard, & Guide / Informational
2. Format of signage to use standardized font
 - OMUTCD standards current use the Federal Highway Administration (FHWA) established font
3. Mandate Codes
 - Enforce standards through Mandates and Policy

Classification of Color



- Regulatory
 - The current OMUTCD standards use the following lettering/background for the following signage.
 - Administrative: Black/White
 - Prohibitive: Red/White
 - Permissive: Green/White
- Warning/Hazard
 - The OMUTCD standard uses a yellow background with black lettering for all warning signs.
- Guide/Informational
 - The current OMUTCD standards use the following lettering/background for the following signage:
 - General Information: White/Green or White/Blue
 - Recreational: White/Brown

Classification of Color



The team's recommendation is for the 3 classifications of signage to mimic the OMUTCD classifications.

- Critical Safety Signs
 - Yellow background with Black text
- Priority Prohibitive Signs
 - White background with Red text
- General Information Signs
 - Park Brown with White text

Format of Signage to use Standardized Font



OMUTCD standards current use the Federal Highway Administration (FHWA) established font. The font has six series from B to F. Series B has the narrowest letters and F has the widest letters. Series E is the most commonly used, our Project Team recommends this font size due to familiarity and ease of reading.

- **Series B**
- **Series C**
- **Series D**
- **Series E**
- **Series E Modified**
- **Series F**

Series B

Series E

Series C

Series E(M)

Series D

Series F

Legibility Distance for Maximum Visibility



A minimum specific ratio of 1 inch of letter height per 30 feet of legibility distance should be used based on 20/40 corrected vision standard.





4. Develop recommendations on the use of staff and volunteers to convey safety messages

- Evaluate existing orientation and curriculum
- Develop beach attendant rules and orientation
- Recommend park management mandate beach safety training for staff and volunteers

BEACH ATTENDANT

- 1. BEACH CANS**
- 2. BEACH LITTER**
- 3. PARKING LOT/PICNIC LITTER**
- 4. GRASS AREA LITTER**
- 5. RESTROOM CLEANING**
- 6. HOSE OFF PAVILION**
- 7. CLEAN GATOR**
- 8. CLEAN/ORGANIZE STORAGE AREAS**
- 9. LIST SUPPLIES NEEDED**

The crew that is at the beach will be working on the above list get with them to see what is left to accomplish on the list.

Bat could be assigned a special project to work on depending on weather (i.e. clean curbs, trimming, painting, clean grills etc)

DURING YOUR SHIFT YOU SHOULD BE VISIBLE ON THE BEACH FRONT CHECKING/EMPTYING THE CANS, LITTER AND AVAILABLE FOR THE PUBLIC TO CONTACT AS WELL AS KEEPING AN EYE ON THE CROWD AS WELL AS RESTROOM CHECKS. YOU HAVE A SET OF CONTACT NUMBERS AVAILABLE TO GIVE TO THE PUBLIC IF THEY NEED ASSISTANCE.

If you need clarification of your duties see me.

**Loren R Hart
Operations Manager
Alum Creek Region**



BEACH ATTENDANT

The public swimming beaches of Ohio State Parks are one of the most popular attractions in summer. While providing excellent outdoor recreational opportunities, beaches can also pose significant hazards such as drowning, boating accidents and possibly, under certain conditions, exposure to harmful water-borne bacteria.

THE PRIMARY RESPONSIBILITY OF THE BEACH ATTENDANT IS TO CONVEY SAFETY MESSAGES AND OTHER INFORMATION TO THE VISITORS OF OHIO STATE PARK BEACHES. ATTENDANTS ARE TO ENCOURAGE THE VISITING PUBLIC TO TAKE NOTICE OF ALL SAFETY SIGNS.

POSTED AT ALL BEACH ENTRANCES:

No:

- Non-Coast Guard approved flotation devices
- Alcohol
- Glass containers
- Littering
- Pets (except in designated areas) Show public where these areas are
- Fires
- Fishing in swim area

POSTED ALONG SHORE OF ALL SWIM AREAS:

- No Diving
- Parents watch kids
- Swim in designated areas only
- Use only Coast Guard approved flotation devices
- Open water has hidden hazards
- Do not drink alcohol and swim
- Follow Water Quality Advisory messages, as per Division guidelines.

POSTED AS DIRECTED BY LOCAL PARK MANAGER:

- Do not leave valuables unattended
- No lifeguard on duty
- Complete list of rules available at park office
- Swimming prohibited beyond designated area (point out locations)
- Designated swim area (point out locations)
- Pet-friendly area (point out locations)
- The use of sun screen, and shade tents
- Emergency contact numbers

GENERAL INFORMATION

Beach Attendants are to be visible to the public and available to answer questions about the park and beach safety. They are to be aware of their surroundings and possible hazards including, unattended children and swimmers outside the designated swimming areas. While on duty, Attendants must also conduct hourly restroom checks for cleanliness and needed supplies.

Recommendation for Orientation & Curriculum



- Everyone that works should feel comfortable conveying safety messages
 - From the volunteer “Beach Attendants” to the maintenance staff
 - The primary responsibility of the Beach Attendant and Staff is to convey safety messages and other information to the visitors of Ohio state park beaches. Beach Attendants and Staff are to encourage the visiting public to take notice of all safety signs.



Summary

The team has come to the conclusion that one approach to improving safety at Ohio state park beaches is to mandate a methodology of message delivery through the following

1. Classification of Key Safety Messages
2. Effective Placement of Signage
3. Standardizing Format and Fonts for Improved Recognition
4. Improvements to First-Person (staff and volunteers)
Delivery of Safety Messages



Review and Follow Up

The team further recommends an annual review of signage and safety message delivery to ensure the public has the greatest exposure to the most critical, concise safety messages.



Our OCPM Project Team would like to thank the following:

- Scott Fletcher of the Ohio Division of Parks and Recreation
- The park managers of Ohio State Parks
- Cindy Holodnak of OSU
- Tamara Henderson of the Department of Administrative Services
- And the Visitors to Ohio State Parks



Question & Answer Period