TO: **Parks and Recreation Advisory Board**

FROM: **Yvette Bowden, Director, Parks and Recreation Department**

SUBJECT: **Matters from the Department**

DATE: **April 27, 2015**

A. Emerald Ash Borer Update (verbal)

B. Aquatics Feasibility Plan Update

The department is finalizing the 2015 Aquatics Feasibility Plan (AFP) that will guide decision-making and capital investment related to the aquatics division for the next five to ten years. While no Parks and Recreation Advisory Board (PRAB) action is required, the board's input on the draft plan is a critical component to ensuring the final plan aligns with, and contributes to, achieving overall community and department goals.

Boulder residents have indicated a desire for additional aquatics facilities in several planning processes, including the 2005 Boulder Parks and Recreation master plan, the 2010 Recreation Program and Facilities Plan (RPFP), the 2014 Boulder Parks and Recreation Master Plan (master plan) and the current Valmont City Park master plan update. In addition, the department would like to ensure that existing aquatics facilities and programs are maintained, managed and enhanced in alignment with best practices, industry trends and community/master plan goals.

The goals of the AFP are to:

- Provide a condition assessment of current aquatics facilities and infrastructure;
- Evaluate current and anticipated demand for aquatic facilities in Boulder as well as the current and future supply to meet demands;
- Provide case studies and industry best practices for aquatic facility development and management; and
- Develop scenarios and recommendations to ensure vibrant and innovative aquatic facilities and management strategies and provide conceptual cost estimating for capital and operating associated with recommended scenarios.

The consultant team conducted assessments of city pools through an iterative process that included site visits and data/documentation review with a goal of identifying condition of infrastructure, safety standards and ensuring quality service provision to the community. Details

of the condition assessments can be found in Appendix D of the AFP, and the capital investment scenarios provide recommendations for responding to critical deficiencies and enhancement opportunities.

In November and December 2014, staff and consultants hosted an online survey (964 respondents) and a series of workshops and public open houses (100+ attendees) to gather input from key stakeholders and the community regarding aquatics programming and facilities. Staff shared findings of the needs assessment and gathered community feedback on the capital investment scenarios at a January 2015 Community Open House and at a January meeting with key stakeholders.

The PRAB's involvement in the AFP began early in the process with a discussion around desired outcomes and needs for aquatics at the November 2014 business meeting. A PRAB liaison, board member Mike Guzek, has been included in the key stakeholder meetings and public outreach throughout the process. The PRAB discussed the findings of the Needs Assessment at the January 2015 regular meeting. At the February 2015 business meeting, the PRAB shared feedback on the department's role related to aquatics and the capital investment scenarios of the AFP.

The consultant team conducted a market analysis to provide greater insight into the community and aquatics landscape in Boulder. Boulder's population is expected to grow about 1% per year over the next five years. It is anticipated that the makeup of the population will change as it is expected to age and become more diverse and affluent over the next five years. The department is a leader in aquatic service delivery when considering the comprehensive system of programs, facilities and services it provides. Based upon data from local and national sources, interest in aquatics is strong and growing in the Boulder community.

In synthesizing the outcomes of the community input with the market analysis and facility assessments, the Consulting Team identified the below community needs related to aquatics:

NEEDS
Create an aquatics system that is efficient, sustainable and "green"
Maximize utilization of existing lap pools by developing a formal pool allocation policy
Increase availability of open lap swimming
Provide training and/or competitive aquatic facilities
Increase "watertainment" offerings in existing pools
Increase "watertainment" offerings in new outdoor pool
Increase warm water wellness opportunities

The AFP provides recommendations to improve the city's aquatic system to meet community desires and provide for the long-term management and maintenance of the department's aquatic system. Recommendations are presented within the framework of the city's three tiered "spending plan". In the fiscally constrained scenario, recommendations can be accomplished with existing funding and focus on capital maintenance of existing facilities. In the action scenario, capital enhancements can be made with additional revenue sources. Following is a summary of the fiscally constrained and action scenarios:

Pool	**Fiscally Constrained** **Capital Maintenance**	**Action** **Capital Enhancements**
East Boulder Community Center	$1.03 M	$1.3M
North Boulder Recreation Center	$.56M	$.3M
South Boulder Recreation Center	$.4M	$.06M
Spruce Pool	$1.5M	$.3M
Total	$3.5M	$1.96M
Needs Met	• An aquatic system that is efficient, sustainable and "green" • Maximized utilization of existing pools by developing a formal pool allocation policy	• Increased "watertainment" offerings in existing pools • Increased warm water wellness opportunities

The vision option provides the complete set of amenities desired by the community. The primary needs not met by the fiscally constrained and action scenarios are the community desire for additional lap swimming availability. Additionally, the city does not have a facility suited for competitive aquatics events. There are several factors identified in the needs assessment that indicate this need will continue into the future: Boulder will continue to be a community that has a strong need for lap swimming, the projected growth of user groups in the near future will require even more lap pool time and/or lanes, and Scott Carpenter Pool is nearing the end of its useful life.

Taking into consideration the state of the Scott Carpenter Pool and the unmet needs of the city's residents, the vision scenario includes five options for the replacement of Scott Carpenter Pool with the following assumptions:

- Cost estimates are based on construction occurring in 2020.
- Cost estimates for options 3, 4 and 5 are based on the development of a new facility on raw land at Valmont City Park where significant infrastructure investment would be required.

- Cost estimates for options 3, 4, and 5 are based on the development of facility as a stand-alone project.
- Magnitude of cost estimates includes all design, construction, furniture fixture and equipment and 10% contingency.

Vision Option Summary					
	Option #1	Option #2	Option #3	Option #4	Option #5
IMPROVEMENT	50M x 25 yd Pool at Scott Carpenter	50M x 25 yd Pool at Scott Carpenter Family Outdoor Aquatic Center at Scott Carpenter	Indoor Aquatic Training Center at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Competitive Venue at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Training Center at Valmont Park Family Outdoor Aquatic Center at Scott Carpenter
DEMOLITION OF SCOTT CARPENTER	$2.2M	$2.2M	$2.2M	$2.2M	$2.2M
NEW BATHHOUSE AT SCOTT CARPENTER	$1.5M	$1.5M	NA	NA	$1.5M
NEW 50Mx25 yd POOL AT SCOTT CARPENTER	$4.1M	$4.1M	NA	NA	NA
OUTDOOR FAMILY AQUATIC CENTER AT SCOTT CARPENTER	NA	$5.3M	NA	NA	$5.3M
SPRAYGROUND AND RESTROOMS AT SCOTT CARPENTER	NA	NA	$1.5M	$1.5M	NA
NEW INDOOR TRAINING FACILITY AT VALMONT PARK	NA	NA	$34.8M	NA	$34.8M
NEW COMPETITIVE AQUATIC VENUE AT VALMONT PARK	NA	NA	NA	$41.9M	NA
TOTAL MAGNITUDE OF COST	$7.8M	$13.1M	$38.8M	$45.6M	$43.8M
NEEDS MET	Minimal Lap Swimming	Minimal Lap Swimming Watertainment	Lap Swimming Training Facilities	Lap Swimming Competitive Facilities	Lap Swimming Training Facilities Watertainment

The department will consider the board's feedback as the AFP is finalized. Operational recommendations will be evaluated and then implemented over time as appropriate and in alignment with the department's annual strategic plan. Capital maintenance at aquatics facilities will be addressed through the department's annual Capital Improvement Program (CIP) starting in 2016. Capital enhancement opportunities will be evaluated as funding is identified. To address unmet community needs related to aquatics facilities and amenities, the department will further explore the vision scenarios provided by the Aquatics Feasibility Plan.

ATTACHMENTS

Attachment A - Aquatics Feasibility Draft Plan

Attachment A

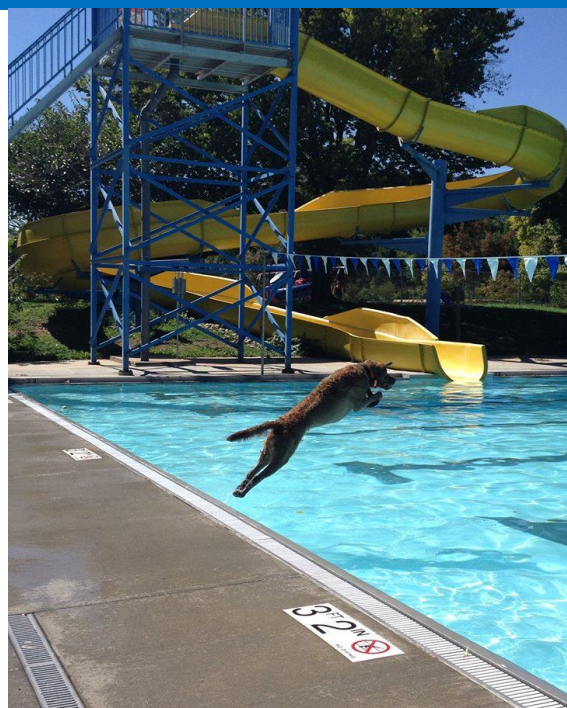
Boulder Aquatic Feasibility Plan

FINAL DRAFT REPORT

April 2015

CITY OF BOULDER

Parks & Recreation



Acknowledgements

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A special thanks to all of the community members who shared their thoughts and suggestions related to Boulder Parks and Recreation Aquatics.

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CHAPTER ONE - EXECUTIVE SUMMARY

1.1 INTRODUCTION

The City of Boulder is a growing and dynamic community with an estimated population of 100,000 inhabitants (including University of Colorado students). The community is proud of its world-class parks and recreation system that matches Boulder's national reputation for fitness, health and recreation.

The Parks and Recreation Department manages and operates a range of parks and recreation facilities, and offers recreational opportunities for people of all ages and abilities.

A significant aspect of the Parks and Recreation Department's offerings is its aquatic system. The system consists of five pools and provides a wide variety of programming and services aimed at meeting the aquatic needs of the community.

1.2 PROJECT PURPOSE AND GOAL

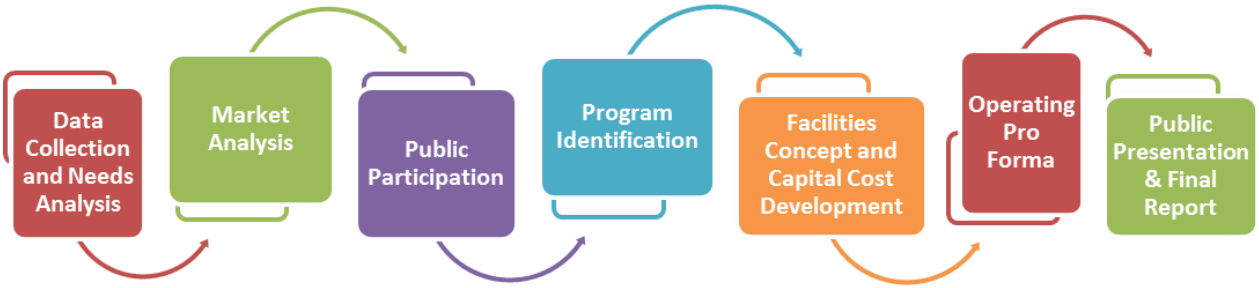
Boulder residents have indicated a desire for additional aquatics facilities in several planning processes, including the 2005 Boulder Parks and Recreation master plan, the 2010 Recreation Program and Facilities Plan (RPFP), the 2014 Boulder Parks and Recreation Master Plan (master plan) and the current Valmont City Park master plan update. In addition, Boulder Parks and Recreation (BPR) would like to ensure that existing aquatics facilities and programs are maintained, managed and enhanced in alignment with best practices, industry trends and community/master plan goals.

As directed by the master plan, BPR is conducting an Aquatics Feasibility Plan (AFP). The outcomes of the plan are to:

- Provide a condition assessment of current aquatics facilities and infrastructure;
- Evaluate current and anticipated demand for aquatic facilities in Boulder as well as the current and future supply to meet demands;
- Provide case studies and industry best practices for aquatic facility development and management;
- Develop scenarios and recommendations for Boulder to ensure vibrant and innovative aquatic facilities and management strategies;
- Provide conceptual cost estimating for capital and operating associated with recommended scenarios.

1.2.1 PROJECT PROCESS

The process of developing the Boulder Parks and Recreation *Aquatics Feasibility Plan* followed a logical planning path as illustrated below:



The foundation of the *Aquatics Feasibility Plan* was to "mine" local knowledge through the use of a creative and comprehensive public participation process. It was important to engage community members who enjoy the opportunity to participate in planning as well as to encourage to encourage thoughts from other stakeholders that typically do not voice their opinions. The public input process incorporated a variety of methods that included interviews, focus group meetings, and public forums. The data generated from these critical community interactions was used to aid the consulting team when accurately articulating the true unmet needs, addressing key operational issues, providing recommendations for business related changes, and strategizing to move the aquatic division forward for optimum results.

1.2.2 ELEMENTS OF THE PLAN

The planning process for the *Aquatics Feasibility Plan* was completed in with City of Boulder staff and included:

- The collection and analysis of available relevant information.
- Data analysis to determine inventory and condition of current facilities.
- Determination of supply and demand within the community.
- The recommendations for meeting the needs of the community through a feasibility analysis of new and improved facilities.

The data collected from the staff and onsite facility assessments allowed the consulting team to identify key factors, issues, and concerns regarding the aquatic system and how the Boulder Aquatic Division manages operations.

Specific elements for analysis requested by the recreation division leadership included assessments of the:

- 2010 Recreation Programs and Facilities Plan
- Current BPR Master Plan
- 2014 Valmont Park Master Plan
- 2014 Aquatics Audit

1.3 AQUATICS FEASIBILITY PLAN ORGANIZATION

This *Aquatics Feasibility Plan* presents the overall analysis, findings, and recommendations of the consulting team related to the areas outlined in the scope of services. This study begins with an Executive Summary that provides an overview, and the following sections respond to the desired categories outlined in the study scope to reveal findings, determine needs and to offer operational and capital improvement recommendations.

1.4 SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

Following the assessment of the Boulder Aquatic Division operations, the PROS Consulting Team identified a variety of opportunities to support the implementation of the *Aquatics Feasibility Plan*. These recommendations for the operational, programming, facility, and financial recommendation elements will guide decision-making for the next five to ten years.

1.4.1 MARKET ANALYSIS KEY FINDINGS

- **Demographic Analysis**: The City of Boulder's population is projected to grow. This growth aligns with national averages (1% annually) over the next five years. However, it is anticipated that the makeup of the Boulder population will change as it is expected to age slightly and become more diverse and affluent over the next five years.
- **Competition Analysis**: The City of Boulder is the leader in Aquatic service delivery when considering the availability of programs in the region on the basis that they provide the most facilities and the most comprehensive system of programs and services.
- **Aquatic Trend Analysis:** After analysis of several forms of survey inquiry, interest in aquatics is strong and growing.

1.4.2 COMMUNITY INPUT KEY FINDINGS

Input from the community revealed that Boulder's aquatic system has a great physical and operational presence in the community. Participants also see the system as one that is well maintained with great staff. They also enjoy the numerous programs and amenities offered. Unmet needs exist, however, as the demand for services is currently outweighing the available pool time and/or existing amenities. The following summarizes the themes of community input:

- A desire for a 50-meter competitive swimming venue.
- Boulder residents have a high demand for the availability of open lap swimming.
- A desire for an outdoor family aquatic center.
- A desire for warm water amenities to meet therapeutic needs of users with physical and mental disabilities as well as facilitate aquatics lessons and programs for all ages (youth and older adults).
- A desire for environmentally friendly, sustainable pools.
- Amenities to serve youth as they "age out" of Boulder's leisure pools.
- General support for current facilities and operations (e.g., variety of locations, amenities, and customer service levels) while recognizing opportunities for improvement

1.4.3 OPERATIONAL ASSESSMENT KEY FINDINGS AND RECOMMENDATIONS

ORGANIZATIONAL FUNCTIONALITY KEY FINDINGS

- **Alignment:** The division is functionally aligned with its program and service delivery, however, it is lacking capacity to deliver high quality and consistent services and programs.
- **Lifeguard Accountability:** Due to the geographic separation of three year-round aquatic centers and two summer pools, lifeguard accountability is a challenge. This issue is magnified by having only one of the three full-time employees charged with the oversight of the lifeguard staff. Despite having part-time lead pool managers at each facility, these staff function primarily as lifeguards. They lack the employment status and training to function consistently as an extension of the Water Safety and Guard Ops Coordinator.
- **Maintenance:** Due to the geographic separation of three year-round aquatic centers and two summer pools, the consistent day-to-day management of maintaining the pools (in particular,

water chemistry best practices and system troubleshooting) is a challenge. This challenge is magnified with only one of the three full-time employees being directly charged with the maintenance of the pools. Despite having part-time lead pool managers at each facility, with a staff function primarily as lifeguards, there is little necessary oversight of the maintenance operations. The pool managers do not have the employment status and training to function consistently as an extension of the Maintenance Logistics Coordinator.

- **Programming:** The Aquatic Division currently has a seasonal position to oversee an expansive program of group and private swim lessons, water exercise classes, and recreation swim teams at four of the five pools. As a part-time seasonal employee, this function lacks the capacity to expand programming to meet current and emerging trends desired by the aquatic community.
- **Culture:** Communication and information exchange across the division and with customers, which has started to show signs of improvement over the last year.

ORGANIZATIONAL FUNCTIONALITY - KEY RECOMMENDATIONS

- **Reclassification of Lead Pool Manager:** The reclassification of the lead pool managers to full-time employees will provide the division with the capacity to have consistent oversight of the most critical function in pool operations – lifeguard management. Additionally, full-time lead pool managers will serve not only as an extension of the Water Safety and Lifeguard Operations Coordinator to oversee the management of lifeguards, but will take the lead in troubleshooting pool maintenance issues and provide consistent implementation of water chemistry best practices. The consulting team recommends that the Aquatic Division employ three full-time lead pool managers.
- **Reclassification of Program Coordinator**: The reclassification of the Program Coordinator from ½ time to full-time will provide the capacity to meet emerging aquatic programming needs and trends, including but not limited to continued expansion of private swim lessons, promotion and expansion of wellness and therapeutic programs, and the expansion of other aquatic programs.

LIFEGUARD MANAGEMENT KEY FINDINGS

- **Lifeguard Management**: While the recently developed 2014 Aquatic Staff Manual is a vast improvement over the previous one, policies, procedures, and practices to reinforce the content of the manual are not evident.
- **Lifeguard In-Service Training**: The division is lacking a formal program to develop and provide ongoing consistent training to the lifeguard staff.
- **Personal Protective Equipment Standards**: Personal protective equipment use is not optional in today's standards of lifeguarding. It is as much to ensure proper rescuer performance as it is to provide appropriate rescue safety. The aquatic division lacks standards around the care and utilization of personal protective equipment.
- **Safety Guidelines for Patrons with Special Needs:** Under the Americans with Disabilities Act (ADA) persons with disabilities must be provided equal access and opportunity to use all of the City of Boulder's aquatic facilities. In addition to providing the necessary physical accommodations like ramps and hydro-lifts, aquatic staff must also be prepared to assist people with disabilities in normal activities and to respond appropriately in case of an emergency. Detailed guidelines for managing the safety of people with special needs can be found in the Appendix of the study.

- **Non-Swimmer Protection Policy**: The City of Boulder does not have a policy in place to test the swimming abilities of unknown swimmers and thereby increases the risk of a life-saving incident in the aquatic facilities.

LIFEGUARD MANAGEMENT KEY RECOMMENDATIONS

- Develop aquatic facility safety check list
- Enforce and reinforce lifeguard responsibilities
- Manage lifeguard vigilance
- Develop and implement a lifeguard in-service program
- Implement aquatic personal protective equipment standards
- Develop and implement a non-swimmer protection policy
- Create special needs patron safety guidelines

LAP POOL UTILIZATION KEY FINDINGS

- **Historical Scheduling:** Though the division does have "code of conduct" guidelines for user groups, it lacks formal pool allocation guidelines for user groups and has relied on historical priorities to determine pool schedules.
- **Unbalanced Schedule:** At the height of the indoor swimming season, open lap swimming availability is limited and inconsistent as 56% of prime time is utilized by user groups.

LAP POOL UTILIZATION KEY RECOMMENDATIONS

- Evaluate additional operating hours to increase availability.
- Develop formal allocation guidelines to maximize utilization of non-prime time hours.
- Develop pricing strategies that encourage utilization of pools during non-prime time hours.

PROGRAMMING KEY FINDINGS

- **Policies and Procedures:** The recently developed 2014 Aquatic Staff Manual is a vast improvement over previous editions. Policies, procedures, and practices that guide aquatic programming are in line with best practices.
- **Program Participation:** Program participation rates are very strong especially in the learn-to-swim program
- **Program Classification:** The City of Boulder has recently embarked on the classification of recreation programs and services based on the level of benefit received by the participants.

PROGRAMMING KEY RECOMMENDATIONS

- Expand programs and services in the areas of greatest need
- Adopt formalized aquatic program standards

1.4.4 FACILITY ASSESSMENT KEY FINDINGS

The consulting team prepared an assessment of each pool facility managed by the City. The team completed an on-site inspection of each aquatic facility including the East Boulder Community Center, South Boulder Recreation Center, North Boulder Recreation Center, the Spruce Outdoor Pool, and the Carpenter Park Outdoor Pool. Each facility was visited with staff that was familiar with the facility,

equipment, and recent issues. Each facility was reviewed for code violations; deferred maintenance issues; safety concerns; and functionality of pools, circulation systems, sanitation equipment, lighting, and general HVAC concerns.

Figure 1 summarizes the infrastructure and systematic deficiencies of the City of Boulder's aquatic system as identified by the consulting team.

	DEFICIENCY							
POOL	Roofing	Windows & Doors	Ventilation	Painting - Walls and Ceilings	Lighting	Aquatic Systems	Amenities	Other
North Boulder Recreation Center	*	*	*			*	*	
East Boulder Community Center	*	*	*	*	*	*	*	*
South Boulder Recreation Center	*	*	*	*	*	*	*	*
Spruce Outdoor Pool	NA	NA	NA	NA	NA	*	*	
Scott Carpenter Pool	NA	NA	NA	NA	NA	*	*	*

Figure 1 - Infrastructure and Systematic Deficiencies

1.4.5 NEEDS ASSESSMENT KEY FINDINGS

For the City of Boulder, it is critical to understand the aquatic needs of the community in order to provide offerings that are focused on a mix of traditional and emerging activities, so as to serve the market while maintaining affordability.

Each need that has been identified will support the investment in the aquatic system that is required to assist in meeting community expectations. These recommended priorities are a result of both qualitative and quantitative analyses to create and maintain an appropriate balance for planning and operations.

NEEDS
*Create an aquatic facility delivery system that is efficient, sustainable, and "green".
*Maximize utilization of existing lap pools by developing a formal pool allocation policy.
*Increase availability of open lap swimming.
*Provide training and/or competitive aquatic facilities.
*Increase "watertainment" offerings in existing pools.
*Increase "watertainment" offerings in new outdoor pool.
*Increase warm water wellness opportunities.

1.4.6 CAPITAL IMPROVEMENT RECOMMENDATIONS

FISCALLY CONSTRAINED RECOMMENDATIONS

The recommendations associated with the Fiscally Constrained Alternative address deferred maintenance at existing facilities and is funded through existing tax dollars. **Figure 2** is a summary that prioritizes improvements and the magnitude of costs for the necessary corrective actions to address the issues identified through the facility assessments.

FISCALLY CONSTRAINED SUMMARY				
POOL	HIGH PRIORITY COST	MEDIUM PRIORITY COST	LOW PRIORITY COST	TOTAL MAGNITUDE OF COST
North Boulder Recreation Center	$189,789	$200,292	$237,847	$627,927
East Boulder Community Center	$168,095	$554,373	$272,898	$995,365
South Boulder Recreation Center	$51,400	$131,442	$207,177	$390,018
Spruce Outdoor Pool	$33,048	$219,069	$776,131	$1,028,248
Scott Carpenter Pool	$157,730	$1,781,346	$0	$1,939,075
TOTALS	$600,062	$2,886,521	$1,494,052	$4,980,635

Figure 2 - Fiscally Constrained Summary

NEED MET: Creation of an aquatic facility delivery system that is efficient, sustainable, and "green".

ACTION OPTIONS

Options described in this section provide the extra services or capital improvement that could be undertaken when additional funding is available to meet need(s) with a focus on enhancements to existing facilities. **Figure 3** summarizes the costs and needs met of implementing action options for the City of Boulder's aquatic system.

Action Option Summary		
POOL	MAGNITUDE OF COST	NEEDS MET
East Boulder Community Center	$2,260,000	Watertainment Warm Water Wellness
North Boulder Recreation Center	$309,000	Watertainment
South Boulder Recreation Center	$60,000	Watertainment
Spruce Outdoor Pool	$450,000	Watertainment
Scott Carpenter Pool	NA	NA
TOTAL MAGNITUDE OF COST	$3,079,000	$0

Figure 3 - Action Option Summary

VISION OPTIONS

The fiscally constrained recommendations and action option, if implemented, will allow the aquatic division to meet three of the identified needs of the community: creation of a "green" aquatic system, and increasing warm water wellness and watertainment opportunities. The primary need that will continue to be unmet is increasing open lap swimming availability. Simply, the overall demand for lap pools and lap lanes is outweighing the supply and creating "pressure on the system".

Additionally, there are several factors identified in the analysis and assessment chapters of this report that indicate the needs will continue into the future.

- Boulder will continue to be a community that has a strong need for lap swimming.
- The projected growth of user groups in the near future will require even more lap pool time and/or lanes.
- Scott Carpenter pool is nearing the end of its useful life.

Taking into consideration the state of Scott Carpenter Pool and the unmet needs of the Boulder residents, the consulting team presents five vision options for the replacement of Scott Carpenter Pool with the following assumptions:

- Cost estimates are based on construction occurring in 2020.
- Cost estimates for options 3, 4 and 5 are based on the development of a new facility on raw land at Valmont Park where significant infrastructure investment would be required.
- Cost estimates for options 3, 4, and 5 are based on the development of facility as a stand-alone project.
- Magnitude of cost estimates includes all design, construction, furniture fixture and equipment and 10% contingency.

Figure 4 on the following page summarizes the vision options for the replacement of the 50-meter pool at Scott Carpenter Park.

Vision Option Summary					
	Option #1	Option #2	Option #3	Option #4	Option #5
IMPROVEMENT	50M x 25 yd Pool at Scott Carpenter	50M x 25 yd Pool at Scott Carpenter Family Outdoor Aquatic Center at Scott Carpenter	Indoor Aquatic Training Center at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Competitive Venue at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Training Center at Valmont Park Family Outdoor Aquatic Center at Scott Carpenter
DEMOLITION OF SCOTT CARPENTER	$2.2M	$2.2M	$2.2M	$2.2M	$2.2M
NEW BATHHOUSE AT SCOTT CARPENTER	$1.5M	$1.5M	NA	NA	$1.5M
NEW 50Mx25 yd POOL AT SCOTT CARPENTER	$4.1M	$4.1M	NA	NA	NA
OUTDOOR FAMILY AQUATIC CENTER AT SCOTT CARPENTER	NA	$5.3M	NA	NA	$5.3M
SPRAYGROUND AND RESTROOMS AT SCOTT CARPENTER	NA	NA	$1.5M	$1.5M	NA
NEW INDOOR TRAINING FACILITY AT VALMONT PARK	NA	NA	$34.8M	NA	$34.8M
NEW COMPETITIVE AQUATIC VENUE AT VALMONT PARK	NA	NA	NA	$41.9M	NA
TOTAL MAGNITUDE OF COST	$7.8M	$13.1M	$38.8M	$45.6M	$43.8M
NEEDS MET	Minimal Lap Swimming	Minimal Lap Swimming Watertainment	Lap Swimming Training Facilities	Lap Swimming Competitive Facilities	Lap Swimming Training Facilities Watertainment

Figure 4 - Vision Options for Scott Carpenter Park

CHAPTER TWO - AQUATIC DIVISION OVERVIEW

The City of Boulder's aquatic facilities and programs are a division of Boulder Parks & Recreation. The division operates and maintains five geographically balanced aquatic facilities, each with a service area of 2.5 square miles.

2.1 FACILITIES

- **North Boulder Recreation Center Aquatic Center**: The North Boulder Recreation Center pool area was designed to accommodate everyone from the youngest recreation swimmer to world-class athletes.

Photo 1 - North Boulder Recreation Center Aquatic Center

- **East Boulder Community Center Aquatic Center:** The East Boulder Community Center pool area features floor-to-ceiling windows the length of the southern and western walls, which offer amazing views and fill the pool with natural light. Both a lap pool and a warmer leisure pool are housed in the aquatic center, giving adults and children an enjoyable experience, thus creating a warm family atmosphere.

Photo 2 - East Boulder Community Aquatic Center

- **South Boulder Recreation Center Pool:** The South Boulder Recreation Center pool offers a quiet atmosphere. It's the perfect place to go for a focused swimming session. The following summarizes the features of the pool:

Photo 3 - South Boulder Recreation Center Pool

- **Spruce Outdoor Pool:** Spruce Pool is Boulder's only family oriented outdoor pool located in the heart of Boulder. The following summarizes the features of the pool:

Photo 4 - Spruce Outdoor Pool

- **Scott Carpenter Outdoor Pool:** Boulder's only 50-meter pool, great for both elite athletes and recreational swimmers. The following summarizes the features of the pool:

Photo 5 - Scott Carpenter Outdoor Pool

2.2 PROGRAMS AND SERVICES

Within the facilities mentioned above, the aquatic division directly provides a wide variety of programs and service and facilitates the utilization of the facilities by outside user groups. **Figure 5** summarizes the programs and services that are held at the City of Boulder's aquatic facilities and the method by which the programs and services are offered.

City of Boulder Aquatic Division Programs and Services	
Progams and Services Offered	**Method of Providing**
After Hour Rentals	Facilitate
Birthday Parties	Facilitate
Club Swim Team Rentals	Facilitate
Exercise Programs	Direct
Group Outings	Facilitate
High School Swim Team Practice Rentals	Facilitate
Hosting of Swim Meets	Direct and Facilitate
Master's Swimming Rentals	Facilitate
Open Lap Swim	Direct
Open Recreation Swim	Direct
Recreation Swim/Dive Team	Direct
SCUBA Rentals	Facilitate
Semi Private and Private Swim Lessons	Direct
Special Events	Direct
Swim Lessons	Direct
Synchronized Swimming Club Rentals	Facilitate
Water Polo Club Rentals	Facilitate

Figure 5 - Programs and Services Summary

CHAPTER THREE - MARKET ANALYSIS

The Market Analysis provides greater insight into the community that the aquatic division serves. In this chapter the consulting team provides analytics derived from the database of the Environmental Systems Research Institute and the recently completed City of Boulder Housing Study. This study assesses the current and future demographics of the City of Boulder. Aquatic needs of the community are identified via the results of recently completed qualitative studies, a statistically valid survey, and a comparative analysis of the aquatic services provided by competitors in Boulder Valley.

3.1 DEMOGRAPHIC ANALYSIS

An analysis of the local demographic makeup is helpful when understanding the population of the City of Boulder. This analysis is reflective of the total population and its key characteristics such as age segments, income levels, race, and ethnicity.

It is important to note that future projections will be based on historical patterns and the potential for unforeseen circumstances during or after the time of the use and economic projections. The shifts in these issues may have a significant bearing on the validity of the final projections offered in this study.

3.1.1 CITY OF BOULDER POPULATION

The population of the City of Boulder has increased slowly since the last official US Census from 97,385 residents in 2010 to 100,988 in 2015 (**Figure 6**). This represents an increase in the City's total population by an annual rate of 0.92%. This rate is in line with the national growth averages of 1% annually. Projecting forward, the growth rate is expected to continue to rise at an annual rate of just over 1% for the next 5 years. Based on those assumptions, the City is expected to have approximately 105,988 residents in 2019.

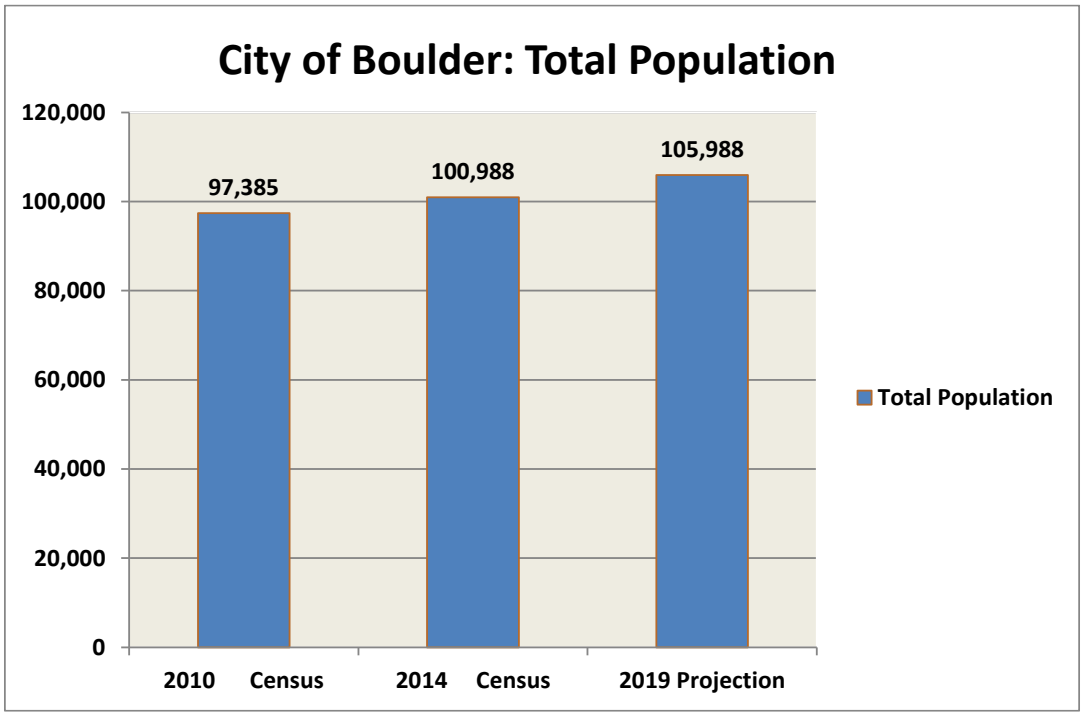


Figure 6 - City of Boulder Total Population

3.1.2 CITY OF BOULDER AGE SEGMENTATION

With an enrollment of more than 30,000 students, the University of Colorado Boulder is the largest concentration of people representing the ages of 18 and 34. The student population comes from every state in the nation and from more than 95 foreign countries. Many different ethnic, religious, academic, and social backgrounds are represented, fostering the development of a multicultural academic community that enriches each student's educational experience.

By 2019, it is projected that the active adult population (55+) will become the second highest age segment in Boulder (**Figure 7**). This group is projected to make up 22% of the population. This age group echoes a national trend as a result of increased life expectancies. The movement of the baby boomer generation through the lifespan also contributes to an aging Boulder population. It can be noted that recreation needs of the 55+ population will continue to diversify into the future.

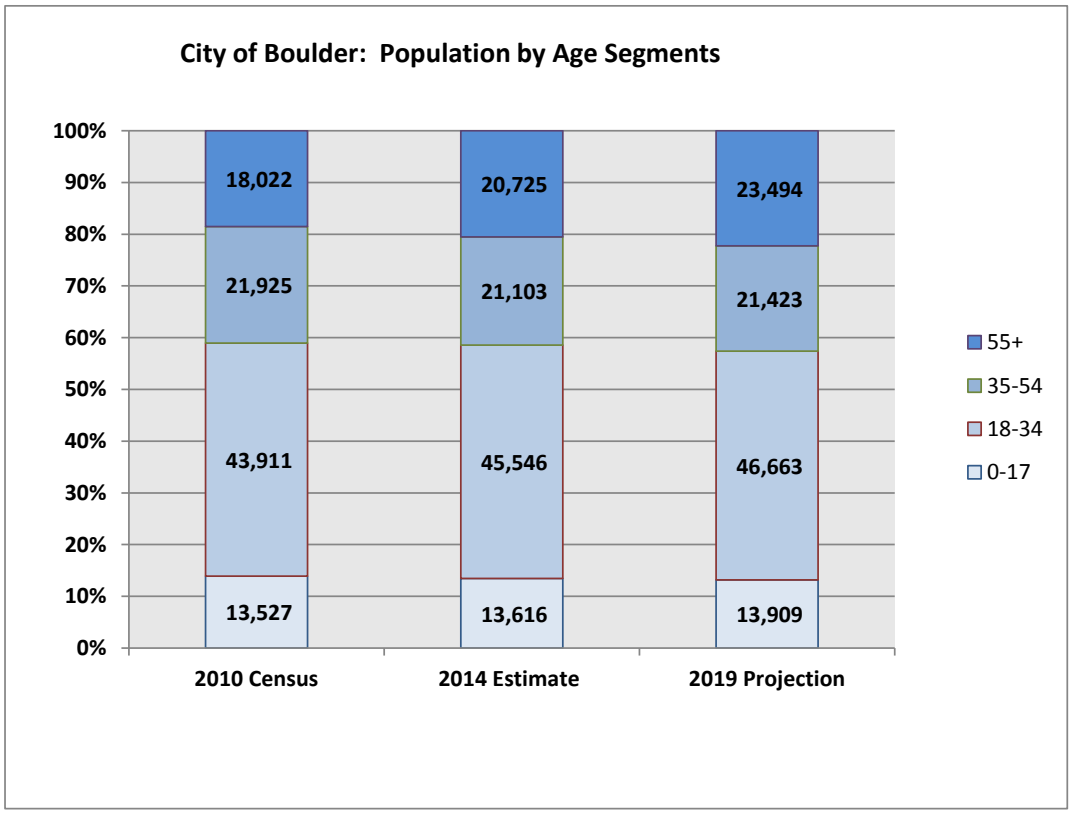


Figure 7 - City of Boulder Population by Age Segments

3.1.3 CITY OF BOULDER HOUSEHOLD INCOME

As observed in **Figure 8**, the City of Boulder will experience a significant increase in income levels over the next five years, with household income levels rising by nearly 20%.

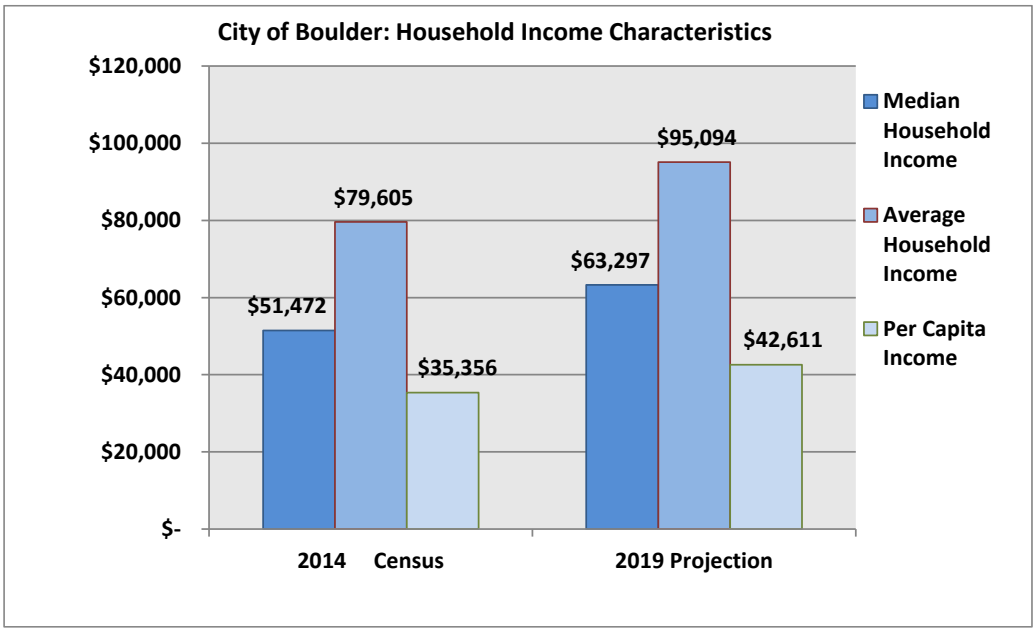


Figure 8 - City of Boulder Income Characteristics

3.1.4 RACE

From a race standpoint, the service area has a limited diverse landscape (**Figure 9**). The diversity in the community is projected to stay relatively the same through the next 5 years with the most significant change being the increase in the Hispanic population by 1.7%.

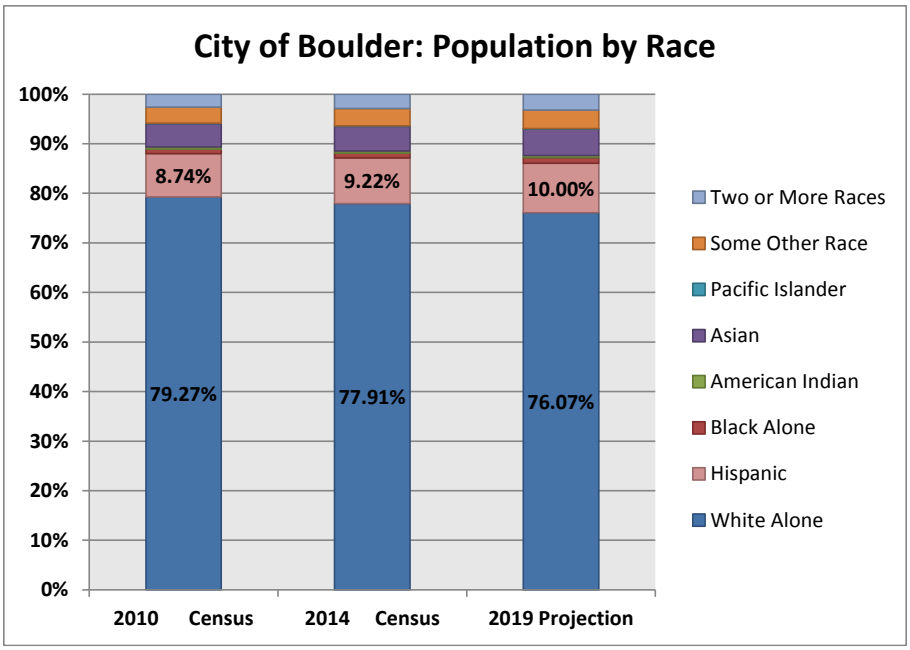


Figure 9 - City of Boulder Population by Race

3.1.5 CITY OF BOULDER HOUSING

The following key issues have been identified by the Housing Boulder sub-committee. These issues have the potential to impact housing in Boulder in the future.

- Boulder's shrinking economic middle ($65,000 to $150,000 annual) household income.
- Detached single-family homes are increasingly only affordable to the wealthy.
- Attached condos and apartments are more affordable, but less appealing to families.
- Almost 60 percent of Boulder workers live in surrounding communities.
- Shifting demographics, especially aging, and changes in housing preferences.
- How to foster diverse housing options in existing residential areas.
- How best to guide redevelopment to address Boulder's housing challenges.

3.1.6 SUMMARY

The City of Boulder's population is projected to grow. This growth aligns with national averages (1% annually) over the next five years. However, it is anticipated that the makeup of the Boulder population will change as it is expected to age slightly and become more diverse and affluent over the next five years.

Photo 6 - East Boulder Community Aquatic Center

3.2 COMPETITION ANALYSIS

PROS Consulting, in conjunction with City of Boulder staff, identified nonprofit and private aquatic providers in the City of Boulder that are interpreted as competitors of the Boulder aquatic division. The goal of the competitive analysis task is to evaluate where the City of Boulder's aquatic division is positioned in the local market. This provides insight toward how the City of Boulder operations can best meet the needs of the community in the future.

3.2.1 PUBLIC AND NONPROFIT PROVIDER COMPARISON

This section compares the scope and breadth of the offerings from other public and nonprofit providers, and a comparison of the City of Boulder's aquatic system against those offerings (**Figure 10**). Comparisons are made when considering site amenities, services, and programming offered to the community.

City of Boulder Aquatic Division Competitor Assessment Public and Non-Profit Sectors	Provider				
AMENITIES and SERVICES	City of Boulder	University of Colorado Boulder	YMCA Mapleton	The Elks	*Boulder Community Health
Provider Type	Public	Public (limited)	Non-Profit	Non-Profit	Non-Profit
Competitive Venue	0	0	0	0	0
Lap Pool - 50 meters	1	0	0	0	0
Lap Pool - 25 yards	4	3	1	1	0
Leisure Pool	4	1	1	1	1
Warm Water	0	0	0	0	1
Swim Lessons	Yes	Yes	Yes	Yes	No
Swim/Dive Team	Yes	Yes	Yes	Yes	No
Open Rec Swim	Yes	Yes	Yes	Yes	No
Open Lap Swim	Yes	Yes	Yes	Yes	No
Water Polo	Yes	Yes	Yes	No	No
Synchro Swim	Yes	No	No	No	No
Exercise Programs	Yes	Yes	Yes	No	No
SCUBA	Yes	No	No	No	No
Therapy/Rehab	No	No	No	No	Yes

Figure 10 - Public and Nonprofit Provider Comparison

- Boulder operates five aquatic facilities, whereas each of the nonprofit agencies only operates one aquatic facility. The University of Colorado operates four aquatic facilities, however, restricts their usage to students, alumni, faculty/staff and university affiliate partners.
- The two providers that compare to Boulder in terms of a comprehensive aquatic program/service delivery system is the Mapleton YMCA and the University of Colorado.
- In comparison to the public nonprofit providers, Boulder is the only agency that operates a 50-meter pool.
- Of the sites benchmarked in this section, the only current provider of a warm-water facility for the purposes of therapeutic and rehabilitative services is Boulder Community Health. This facility is reportedly going to close in December 2015.
- None of the agencies benchmarked in this section provide a true competitive venue for large swim meets.

3.2.2 PRIVATE SECTOR PROVIDER COMPARISON

This section compares the scope and breadth of the City of Boulder's aquatic system with that of private sector providers in the region and includes amenities, services, and programming offered to the community **(Figure 11)**.

City of Boulder Aquatic Division Competitor Assessment Public and Non-Profit Sectors	Provider								
AMENITIES and SERVICES	City of Boulder	Ocean First	Fraiser Meadows	Colorado Athletic Club	Rally Sport	Colorado Athletic Club - Flatirons	The Meadows Swim and Tennis	Boulder Country Club	24 Hour Fitness
Provider Type	Public	Private	Private	Private	Private	Private	Private	Private	Private
Competitive Venue	0	0	0	0	0	0	0	0	0
Lap Pool - 50 meters	1	0	0	0	0	0	0	0	0
Lap Pool - 25 yards	4	0	0	1	1	1	1	1	1
Leisure Pool	4	1	0	1	0	1	1	1	0
Warm Water	0	0	1	0	0	0	0	0	0
Swim Lessons	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Swim/Dive Team	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No
Open Rec Swim	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Open Lap Swim	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Water Polo	Yes	No	No	No	No	No	No	No	No
Synchro Swim	Yes	No	No	No	No	No	No	No	No
Exercise Programs	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
SCUBA	Yes	Yes	No	No	No	No	No	No	No
Therapy/Rehab	No	No	Yes	No	No	No	No	No	No

Figure 11 - Private Sector Provider Comparison

- Boulder operates five significant aquatic facilities, whereas each of the private sector organizations only operates one aquatic facility with the exception of Colorado Athletic Club, which operates two.
- Boulder offers the most comprehensive, aquatic program/service delivery system in comparison to the private sector providers.
- The City of Boulder is the only agency that operates a 50-meter pool.
- Frasier Meadows Retirement Community is the only provider that currently offers warm water for therapeutic and rehabilitative services.
- None of the agencies benchmarked in this section provide a true competitive venue for large swim meets.

3.2.3 SUMMARY

The City of Boulder is the leader in Aquatic service delivery when considering the availability of programs in the region on the basis that they provide the most facilities and the most comprehensive system of programs and services.

3.3 AQUATIC TREND ANALYSIS

3.3.1 NATIONAL TRENDS IN AQUATIC ACTIVITY

The Sports & Fitness Industry Association's (SFIA) 2014 Study of Sports, Fitness, and Leisure Participation reveals that swimming is a lifetime sport. Swimming activities have remained very popular among Americans, and both competition and fitness swimming have recently experienced an increase in participation. Fitness swimming is the leader in multigenerational appeal with over 26 million reported participants in 2013, a 13.5% increase from the previous year (**Figure 12**). NOTE: In 2011, recreation swimming was separated into additional categories (competition and fitness) to help identify key trends.

On the other hand, while aquatic exercise has had a strong participation base, participation in that area of aquatics is trending downward. Aquatic exercise has paved the way for a less stressful form of physical activity, allowing similar gains and benefits to land-based exercise, including aerobic fitness and resistance training with a focus on flexibility and improving personal balance. Doctors have begun recommending aquatic exercise due to the significant reduction of stress placed on weight-bearing joints and muscles for injury rehabilitation, mature patients, and patients with bone or joint problems. The pressure of the water also helps to reduce swelling from injuries.

National Participatory Trends - Aquatics											
Activity	Participation Levels						% Change				
	2008	2009	2010	2011	2012	2013	12-13	11-13	10-13	09-13	08-13
Aquatic Exercise	9,512	8,965	8,947	9,042	9,177	8,483	-7.6%	-6.2%	-5.2%	-5.4%	-10.8%
Swimming (Competition)	N/A	N/A	N/A	2,363	2,502	2,638	5.4%	11.6%	N/A	N/A	N/A
Swimming (Fitness)	N/A	N/A	N/A	21,517	23,216	26,354	13.5%	22.5%	N/A	N/A	N/A
NOTE: Participation figures are in 000's for the US population ages 6 and over											
Legend:	Large Increase (greater than 25%)		Moderate Increase (0% to 25%)		Moderate Decrease (0% to -25%)		Large Decrease (less than -25%)				

Figure 12 - National Participatory Trends - Aquatics

Photo 7 - North Boulder Recreation Center

3.3.2 ASPIRATIONAL INTEREST IN AQUATICS

Though it is important to understand the trends of participants in aquatic activities, it is equally if not more important to understand the interest of nonparticipants. Sports & Fitness Industry Association's (SFIA) 2014 Study of Sports, Fitness, and Leisure Participation reveals swimming for fitness continues to be the most popular "aspirational" sport amongst most age groups **(Figure 13)**.

City of Boulder Aquatic Division Trends Analysis Aspirational Trends			
Ages 6-12	**Ages 13-17**	**Ages 18-24**	**Ages 25-34**
Swimming for Fitness	**Swimming for Fitness**	**Swimming for Fitness**	**Swimming for Fitness**
Bicycling	Camping	Bicycling	Bicycling
Camping	Bicycling	Hiking	Camping
Hiking	Working Out with Weights	Trail Running	Hiking
Running/Jogging	Working Out Using Machines	Running/Jogging	Working Out with Weights
Ages 35-44	**Ages 45-54**	**Ages 55-64**	**Ages 65+**
Hiking	**Swimming for Fitness**	**Swimming for Fitness**	**Swimming for Fitness**
Working Out with Weights	Working Out Using Machines	Bicycling	Working Out using Machines
Swimming for Fitness	Bicycling	Working Out with Weights	Hiking
Camping	Hiking	Hiking	Fitness Classes
Bicycling	Camping	Working Out using Machines	Working Out with Weights

Figure 13 - Aspirational Trends

3.3.3 MARKET POTENTIAL

The following chart **(Figure 14)** illustrates an index of sport and leisure market potential ESRI. A Market Potential Data (MPI) measures the probable demand for a product or service in the target area. The MPI communicates the likelihood that an adult resident of the service area will exhibit certain consumer behavior when compared to the US National average. The National average is 100, therefore numbers below 100 would represent a lower than average participation rate, and numbers above 100 would represent a higher than average participation rate. Participation in swimming in the City of Boulder has an MPI of 118, which indicates a relative high demand for aquatic services among resident adults.

City of Boulder Aquatic Division Trends Analysis Sport and Leisure Market Potential			
Activity	**Expected Number of Households**	**Percent**	**Market Potential Index**
Participated in walking for exercise in last 12 months	33069	37.80%	135
Participated in jogging/running in last 12 months	23792	27.20%	214
Participated in weight lifting in last 12 moths	17362	19.90%	187
Participated in swimming in last 12 months	**16331**	**18.70%**	**118**

Figure 14 - Market Potential

3.3.4 LOCAL TRENDS – USER GROUPS

The City of Boulder facilitates the utilization of aquatic facilities for numerous user groups throughout the year. Boulder aquatic facilities are the home to a wide variety of aquatic activity that extends well beyond participation in its own programs and services, including Masters swimming, club and high school swim teams, water polo, synchronized swimming clubs, senior water exercise, and SCUBA. The following chart **(Figure 15)** provides a snapshot of the current makeup of five user groups and the substantial projected growth in their programs over the next five years.

City of Boulder Aquatic Division User Group Potential Growth	User Group				
STATS AND TRENDS	**Ocean First**	**Boulder Water Polo**	**Fairview High School Girls Swim and Dive Team**	**Mesa Youth Swim Club**	**Silver Sneakers Splash**
Current participation	19,200 annual attendance	50 members	150 team members	145 team members	3,750 annual attendance
Boulder resident participation %	50%	50%	75%	90%	75%
Anticipated growth in next 5 years	200%	10%	0%*	0%*	35%

*** If pool space were available, growth over next 5 years = 25%**

Figure 15 - Current Makeup of User Groups

3.3.5 LOCAL TRENDS – PREVIOUS STUDIES

2009 CITY OF BOULDER RECREATION PLAN SURVEY

The City of Boulder Parks and Recreation Department developed a Recreation Program and Facilities Plan. The plan came from a recommendation contained in the 2006 Parks and Recreation Department's Master Plan and the City Manager's Work Group on Recreation Financing. The goal of this plan was to help guide future decisions and resource allocations for Boulder's recreation division. As a part of the public input process for the plan, a statistically valid survey was conducted; 622 completed surveys were received.

Within the survey, a question was asked to gauge the importance and utilization of recreation activities. As shown in **Figure 16**, having access to indoor swimming pools for both open swim (laps, drop-in) and programs (swim lessons, water exercise classes) is of great importance to residents as these offerings ranked 3rd and 5th respectively. Additionally, residents indicated that the most utilized program or service that is offered by the City of Boulder Parks and Recreation Department is open swim at indoor pools. In summary, not only do Boulder residents desire having access to indoor swimming pools, but they utilize them as well.

City of Boulder Aquatic Division 2009 Recreation Facilities Plan Survey		
Recreation Activity	**Importance**	**Utilization**
Drop-in exercise	53%	51%
Fitness or health and wellness classes	46%	43%
Indoor swimming pool "open swim" (lap or drop-in swim)	**43%**	**53%**
Drop-in to a reservoir	42%	41%
Indoor swimming pool swim lessons or water exercise classes	**40%**	**24%**

Figure 16 - 2009 Recreation Plan Survey

2010 CITY OF BOULDER RECREATION CENTER PATRON SURVEY

The City of Boulder Parks and Recreation Department developed an intercept survey to determine potential interests, needs, and utilization of recreation center patrons in 2010. The goal of the survey was to help guide future decisions and resource allocation for Boulder's recreation centers. The intercept survey yielded 400 responses.

Within the survey, a question was asked to gauge the utilization of recreation center activities and amenities. As shown in **Figure 17**, of the hundreds of recreation amenities and programs offered at the recreation centers, the utilization of the aquatic facilities within the recreation centers by patrons ranked in the top five.

City of Boulder Aquatic Division 2011 Recreation Center Intercept Survey	
Recreation Activity/Amenity	**Utilization**
Weight and Strength Equipment	48.5%
Cardio Equipment	40.7%
Lap Pool	**37.2%**
Drop-In Fitness/Yoga Classes	36.9%
Leisure Pool/Hot Tub	**31.9%**

Figure 17 - 2010 Recreation Center Patron Survey

2014 BOULDER PARKS AND RECREATION DEPARTMENT MASTER PLAN

A critical element to the value of the 2014 Boulder Parks and Recreation Department Master Plan Update was the incorporation of civic engagement. As part of the civic engagement process, a community survey was conducted to gauge the opinion, interests and beliefs about the City of Boulder's parks and recreation system.

The results of the survey showed strong support for the recreation centers that offered indoor swimming. Specifically, when residents were asked to express the importance of the various components of the system, recreation centers ranked second in overall importance as indicated in **Figure 18**.

City of Boulder Aquatic Division 2014 Parka and Recreation Master Plan						
Questions		**Very Important**	**Somewhat Important**	**Not At All Important**	**Can't Say / No Opinion**	**Responses**
1	Community and neighborhood parks (i.e., with features like shelters playgrounds, paths, etc.)	538	105	7	4	654
2	Recreation centers (i.e., with features like pools, gyms, tennis courts, etc.)	**409**	**205**	30	7	651

Figure 18 - 2014 Parks and Recreation Department Survey

2014 VALMONT PARK PLAN SURVEY

The Parks and Recreation Department is currently in the process of updating the 2008 concept plan for the undeveloped portions of Valmont City Park (VCP). The original concept plan, developed with significant community input, has served as a guide for park development. Amenities included the successfully completed Valmont Bike Park (VBP), Valmont Dog Park (VDP), and the temporary Valmont Disc Golf Course (VDGC).

The goal of the project is to update the original concept plan to ensure it continues to meet the community's needs. The update process includes the administration of a statistically valid community survey, an industry trend analyses, an athletic field study, stakeholder meetings, outreach sessions with community youth groups, community meetings, and regular updates with City Council and the Parks and Recreation Advisory Board (PRAB). Through extensive data gathering, analysis, and a public outreach process, the goal for this project is to develop an updated concept plan for the undeveloped portion of VCP that will garner wide community acceptance.

One question posed in the statistically valid survey demonstrated the passion that Boulder residents have for pools. The survey asked, "In the past year, about how many times have you or any member of your household used these recreation facilities?" Residents indicated that the most utilized facilities swimming pools (46%) and leisure pools (28%), far outpacing the utilization of disc golf courses, indoor ice arenas and skateboard parks. The following chart **(Figure 19)** provides a snapshot of the question's results.

City of Boulder Aquatic Division
2014 Valmont Park Survey
Frequency of Special Facility Annual Use

Special Facility	1-12 times	12-24 times	25+	Total
Swimming pools (laps & open swim)	**26%**	**11%**	**9%**	**46%**
Leisure pools (with water play features)	**16%**	**8%**	**5%**	**29%**
Disc golf courses	16%	4%	3%	23%
Indoor ice arena (hockey & figure skating	9%	1%	1%	11%
Skateboard parks	6%	2%	2%	10%

Figure 19 - 2014 Valmont Park Plan Survey

3.3.6 SUMMARY OF PREVIOUS STUDIES

After analysis of several forms of survey inquiry, interest in aquatics is strong and growing.

CHAPTER FOUR - COMMUNITY INPUT

When conducting a study that is more recent than the research described in the previous chapter it is necessary to understand if the needs or desires of the residents in 2014 resemble the wishes of the responses that were generated in earlier studies. Thus, a key consideration to creating a vision for aquatics in Boulder is to understand current community values, needs, and desires. The assessment of these values is accomplished by triangulating information generated from stakeholder interviews, a series of focus groups, and reinforced thru a statistically valid survey. The survey is written so it reflects issues and wishes that emerged from the qualitative data gathering. Triangulation occurs when findings of the qualitative work is supported by the quantitative work. The following paragraphs discuss this process and resulting findings.

4.1 QUALITATIVE METHODOLOGY

The qualitative data collected included several leadership workshops, focus groups, open houses, and community meetings. A summary of the public input opportunities is provided below.

- Three (3) leadership workshops and four (4) stakeholder focus groups were conducted to be representative, but not exhaustive of interests affecting aquatics in the City of Boulder. These sessions included:
    - Administration and leadership
    - Users groups of the aquatic system
    - Partners and competitors
- Four (4) community open houses were conducted in order to capture representative interests, needs, and priorities of residents through an open forum. The meetings were organized and conducted by the City of Boulder.
- The Parks and Recreation Advisory Board (PRAB) has provided input throughout the project.

4.2 QUALITATIVE INPUT SUMMARY

4.2.1 WHAT IS YOUR VISION (THE KEY OUTCOMES) FOR THIS STUDY? WHAT ARE THE UNMET AQUATIC NEEDS OF THE COMMUNITY?

- 50-meter competition venue.
    - City of Boulder “home” pool is needed to host successful meets
- More open lap swimming.
- Outdoor Family Aquatic Center.
- Increased hours of operation.
- More amenities for pre-teens and teens.
- Reprioritize scheduling of user groups to maximize availability of pool time.
- To change the culture of scarcity where the demand for pool time exceeds the supply.
- Develop sustainable “green” facilities through improved lighting, air quality, water quality, acoustics, and reduction in dependency of chlorine for sanitation.
- Addition of on-deck showers should be considered.

- Replace bathhouses at Spruce and Scott Carpenter Pools.
- Leverage partnerships to enhance facilities.
- Supervision and leadership improvements.
- Define the future of Scott Carpenter pool.
- Evaluate differential pricing.
- Warm water pool for therapeutic programs, rehabilitation needs, aquatic exercise and swim lessons.
- Keep facilities, programs, and services affordable.
- Facilities that can meet all needs.

4.2.2 IS THERE ANYTHING UNIQUE ABOUT THE CITY OF BOULDER THAT NEEDS TO BE TAKEN INTO CONSIDERATION REGARDING THE DELIVERY OF AQUATIC FACILITIES AND SERVICES?

- Residents possess a strong sense of civic pride and are an engaged community.
- A culture of being healthy minded, active, and competitive exists among its community members.
- High elevation creates a great training environment.
- Boulder is a destination location.
- "Green" Community.
- World-class athletes live and train in Boulder.
- Boulder is a mecca for triathlons, which in turn creates a high demand for lap swimming.
- Great swimming coaches live and work in Boulder.

4.2.3 FROM YOUR VANTAGE POINT, WHAT ARE THE STRENGTHS OF CITY OF BOULDER'S AQUATIC PROGRAM (FACILITIES, AMENITIES, AND PROGRAMS) THAT WE NEED TO BUILD ON?

- Recent communication improvements with user groups have been well received.
- Aquatic staff is very accommodating.
- Parks and Recreation Department serves the community "phenomenally."
- Geographic location of facilities is excellent.
- Breadth of programming offered is wide.
- Quality of programming is strong.
- Facilities, programs, and services are affordable.
- Advertising/marketing/outreach is accomplished very well.
- North Boulder Community Center is a great facility and should serve as a model for improvements to other facilities.

4.3 QUANTITATIVE METHODOLOGY

PROS Consulting facilitated an online survey during the months of November and December 2014 to help establish priorities, understand community desires related to aquatics, and inform recommendations for the future improvement and direction of management of Boulder's aquatic system. The goal was to obtain a total of at least 500 completed surveys. A total of 964 surveys were completed exceeding goal expectations.

4.4 QUANTITATIVE INPUT SUMMARY

4.4.1 PLEASE INDICATE THE BPR POOLS YOU VISIT, RANKING THEM FROM MOST FREQUENTLY VISITED TO LEAST FREQUENTLY VISITED

As shown in **Figure 20**, of respondents that use the City of Boulder pools, 32% indicated that the pool they most frequently visit is the East Boulder Community Center pool. The East Boulder Community Center pool also had the highest overall frequency of visitation among respondents, while Spruce pool had the lowest frequency of visitation in the system.

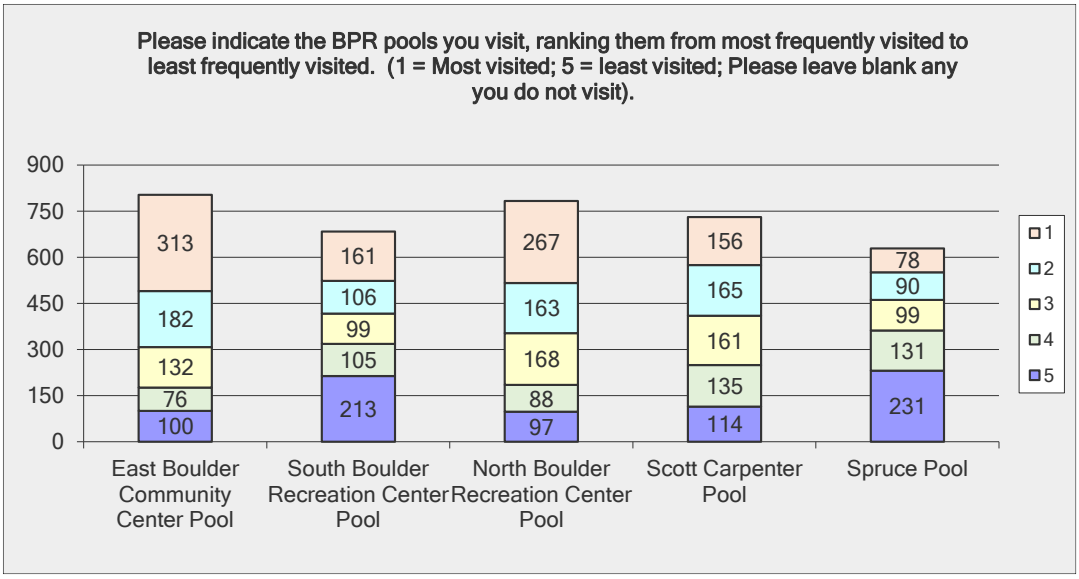


Figure 20 - BPR Pools Visited and Frequency

4.4.2 DURING THE PAST YEAR, HOW MANY TIMES HAVE YOU OR ANY MEMBER OF YOUR HOUSEHOLD USED A BOULDER PARKS AND RECREATION POOL?

In response to how often respondents have used any pool in the Boulder aquatic system in 2014, 63% indicated that they have done so 25 or more times in 2014 **(Figure 21)**. This response rate indicates respondents are frequent users of Boulder's pools.

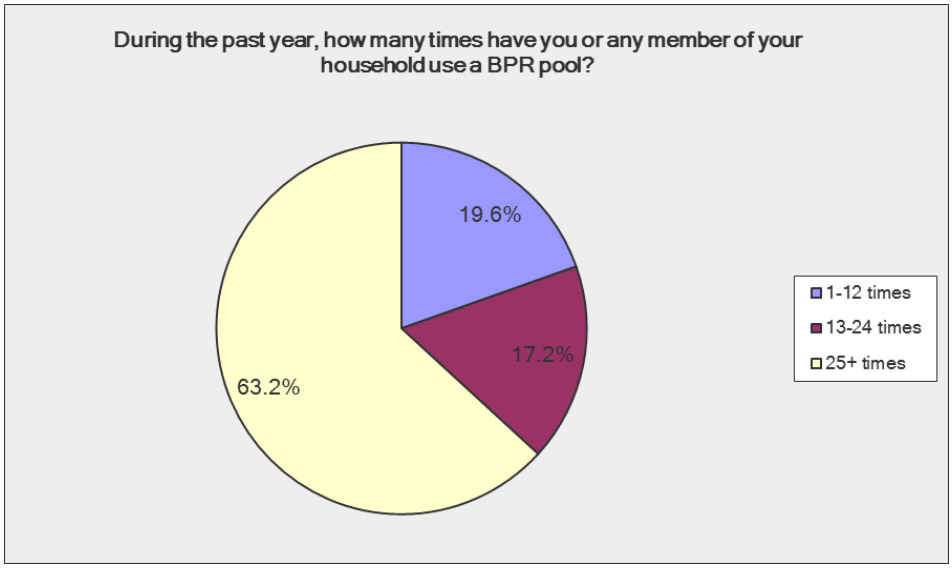


Figure 21 - Number of Days Using a Boulder Pool

4.4.3 WHAT KEEPS YOU OR MEMBERS OF YOUR HOUSEHOLD FROM USING BOULDER PARKS AND RECREATION POOLS, OR USING THEM MORE OFTEN?

Of the 686 people responding to this question, 53% (or 367) indicated that lack of availability of facilities prevented them from using the pools more often **(Figure 22)**, further validating the information gleaned from the qualitative community input sessions in which demand for services appears to outweigh the supply.

What keeps you or members of your household from using BPR pools, or using them more often?	
Answer Options	**Response Count**
Lack of availability of facilities for what I/we want to do	367
Lack of time	240
Lack of program that I/we are interested in	120
Cost	113
Lack of parking	54
Barriers to walking or biking to the facility	41
Poor health	21

Figure 22 - Barriers to Usage

4.4.4 HOW SATISFIED ARE YOU WITH BPR POOLS AND/OR AQUATICS PROGRAMS?

Of the 930 people who responded to this question, 86.1% indicated that they are Very Satisfied or Somewhat Satisfied **(Figure 23)**. While the aquatic community appears to be agreeable to the existing system, there appears to be room for improvement in the delivery and/or levels of service being offered to the community.

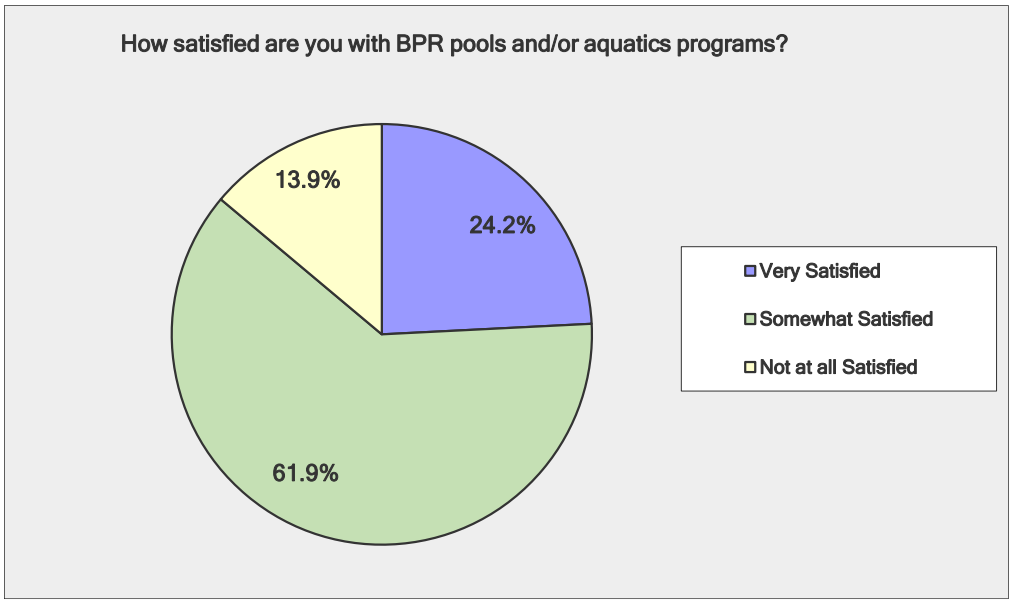


Figure 23 - Satisfaction with Aquatic Programs

4.4.5 IF YOU ARE NOT SATISFIED, WHAT WOULD IMPROVE YOUR EXPERIENCE?

Of the 964 total survey responses, only 56% chose to respond to this question. Of the 547 responses received, 63% (or 344) indicated that they would like additional or expanded amenities to increase their level of satisfaction as shown in **Figure 24**.

If you are not satisfied, what would improve your experience?	
Answer Options	**Response Count**
Additional amenities	344
Program Improvements	201
Cleanliness	184

Figure 24 - Improvements to Experience

4.4.6 WHAT AQUATICS PROGRAM(S) DO YOU OR A MEMBER OF YOUR HOUSEHOLD CURRENTLY PARTICIPATE IN? PLEASE CHECK ALL THAT APPLY.

Respondents were given the opportunity to indicate all of the programs that they participate in at the Boulder pools. Of the 918 that answered the question, 59% (or 538) indicated that they participate in Open Lap Swimming **(Figure 25).** Masters Swimming rated as second highest.

Which Aquatics Program(s) do you or a member of your household currently participate in? Check all that apply.	
Answer Options	**Response Count**
Open Lap Swim	538
Masters Swimming	456
Recreational Swimming (Open Swim)	368
Swim Team (competitive)	221
Swim Team (recreational)	89
Group Learn to Swim Lessons	80
Aquatic Fitness	76
Semi Private and Private Swim Lessons	74
Warm Water Fitness	56
Therapeutic classes	34
Expand Program	9

Figure 25 - Programs Participated In

4.4.7 WHAT ADDITIONAL PROGRAMS/AMENITIES WOULD YOU LIKE TO SEE OFFERED?

Respondents were given the opportunity to offer opinions of the additional amenities and programs that they would like to see included as part of the Boulder aquatic system. The top 3 responses as shown in **Figure 26** were: Indoor Competitive Aquatic Center (382), More Open Lap Swimming (373), and an Outdoor Family Aquatic Center (253). A Warm Water Therapy Pool received 186 "votes".

What additional programs/amenities would you like to see offered?	
Answer Options	**Response Count**
Indoor Competitive Aquatic Center	382
More Open Lap Swimming	373
Outdoor Family Aquatic Center	253
Increased Deck Space for Swim Meets	215
More Competitive Swim Times	208
Improved Spectator/Viewing Areas	187
Warm Water Therapy Pool(s)	186
Spa(s)/Hot Tub(s)	148
Outdoor Patio/Sun Decks at Indoor Pools	141
Water Slides	135
Steam Room(s)	134
More Recreational Swimming	118
AquaClimb (pool climbing wall)	115
Sauna(s)	100
Spray Grounds/Splash Pads	77
More Water Fitness Classes	76
Spray Features	71
More Swim Lesson Classes	55

Figure 26 - Additional Programs/Amenities Desired

4.4.8 HOW MANY PEOPLE ARE CURRENTLY IN YOUR HOUSEHOLD?

This indicates that respondents to the survey are representative of the community of single adults, couples without children and families **(Figure 27)**.

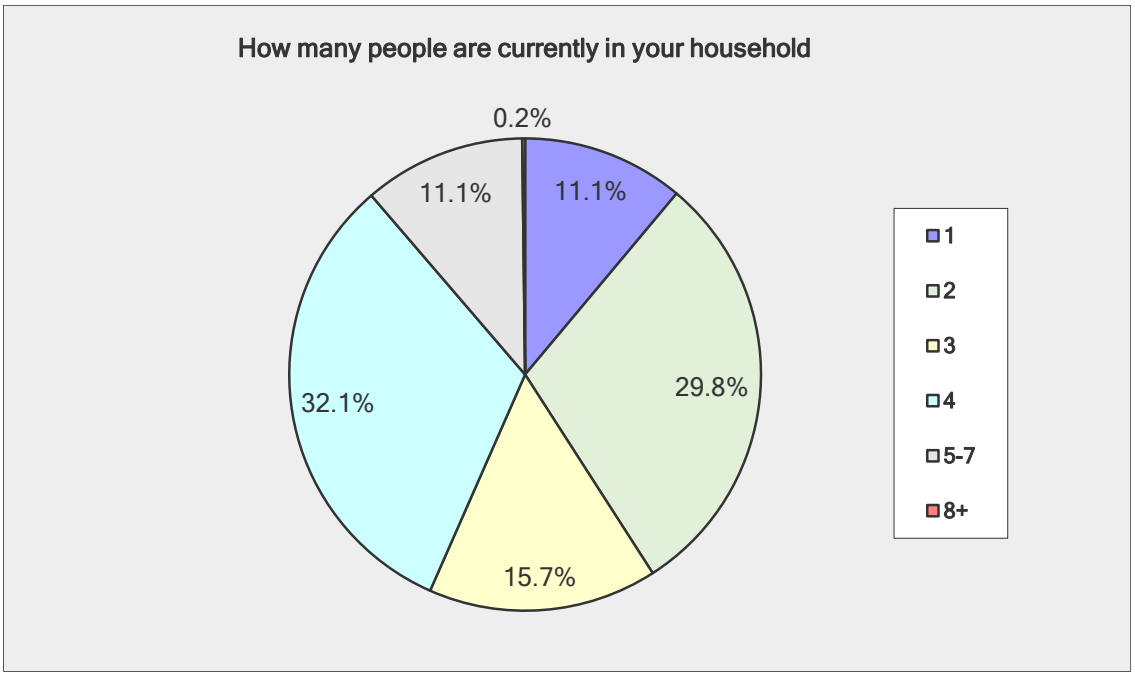


Figure 27 - People in Household

4.4.9 DO YOU LIVE IN THE CITY OF BOULDER?

70% of respondents to the survey are City of Boulder residents **(Figure 28)**.

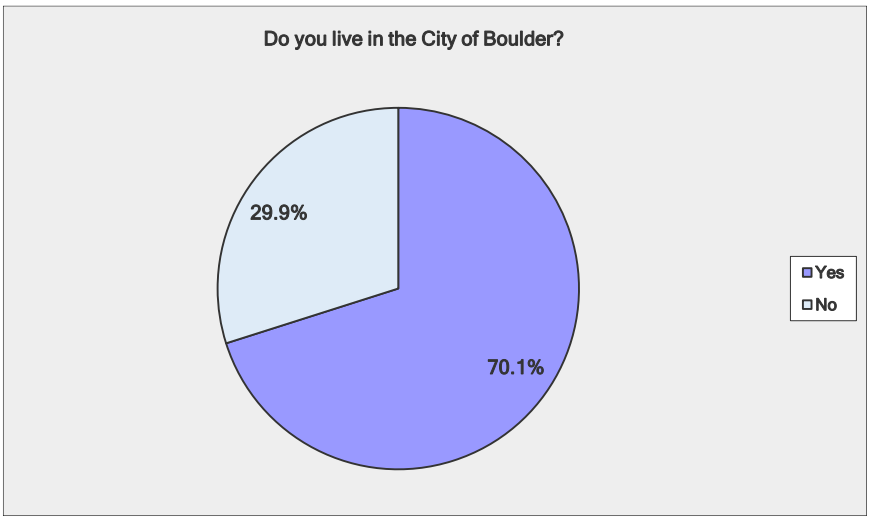


Figure 28 - Location

4.5 SUMMARY

Survey participants felt that Boulder's aquatic system has a great physical and operational presence in the community. Participants also see the system as one that is well maintained with great staff. They also enjoy the numerous programs and amenities offered. Unmet needs exist, however, as the demand for services is currently outweighing the available pool time. The following summarizes the themes of community input:

- A desire for a 50-meter competitive swimming venue.
- Boulder residents have a high demand for the availability of open lap swimming.
- A desire for an outdoor family aquatic center.
- A desire for warm water amenities to meet therapeutic needs of users with physical and mental disabilities as well as facilitate aquatics lessons and programs for all ages (youth and older adults).
- A desire for environmentally friendly, sustainable pools.
- Amenities to serve youth as they "age out" of Boulder's leisure pools.
- General support for current facilities and operations (e.g., variety of locations, amenities, and customer service levels) while recognizing opportunities for improvement.

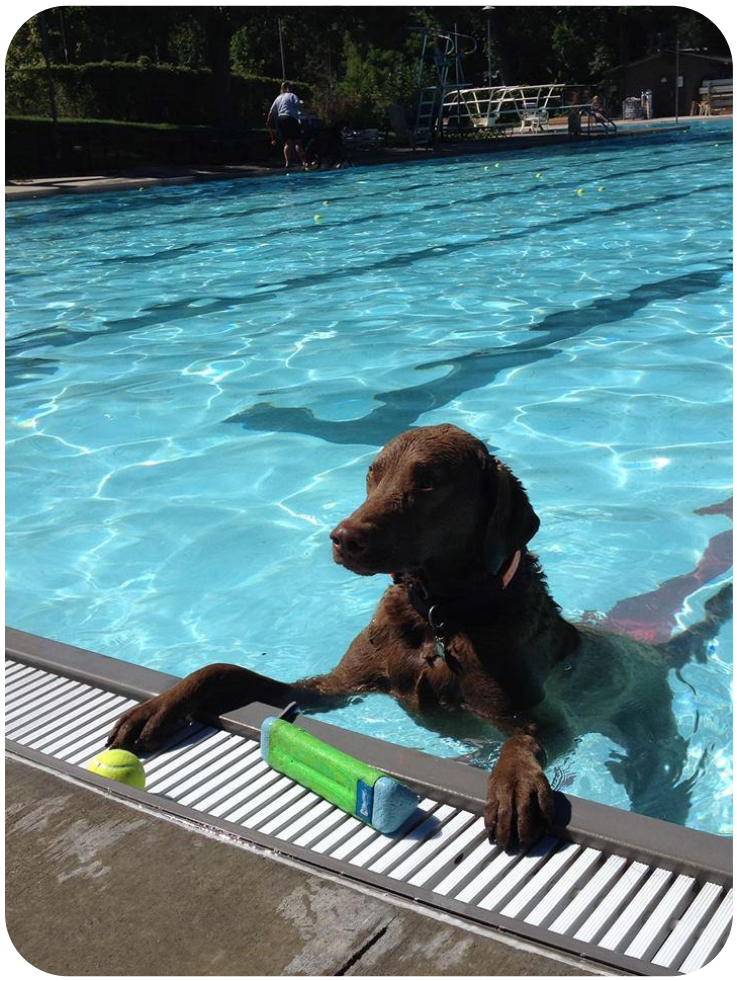


Photo 8 - Scott Carpenter Pool

CHAPTER FIVE - OPERATIONAL ASSESSMENT AND BEST PRACTICES

5.1 ORGANIZATIONAL FUNCTIONALITY

5.1.1 CURRENT ORGANIZATIONAL CHART

The following chart illustrates the current organizational structure of the Boulder Aquatic Division (**Figure 29**):

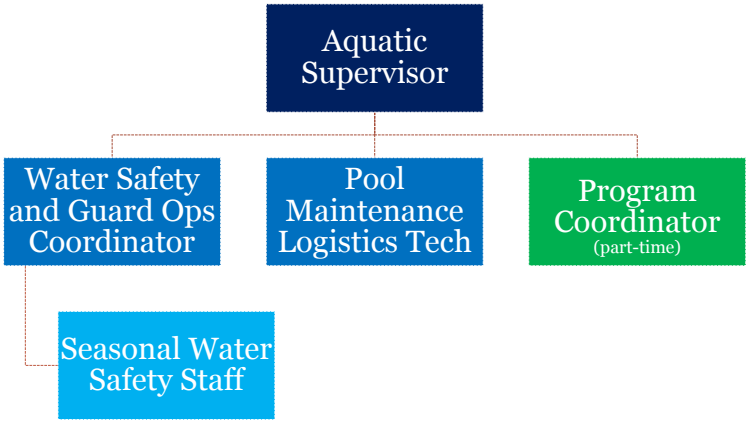


Figure 29 - Current Organizational Chart

5.1.2 KEY FINDINGS

The Boulder Aquatic Division is currently comprised of three full-time employees. They have made a conscientious effort to operate effectively and efficiently, however, further improvements are needed. The following summarizes the key findings regarding the organizational structure and operational functioning of the division.

- **Alignment:** The division is functionally aligned with its program and service delivery, however, it is lacking capacity to deliver high quality and consistent services and programs.
- **Lifeguard Accountability:** Due to the geographic separation of three year-round aquatic centers and two summer pools, lifeguard accountability is a challenge. This issue is magnified by having only one of the three full-time employees charged with the oversight of the lifeguard staff. Despite having part-time lead pool managers at each facility, these staff function primarily as lifeguards. They lack the employment status and training to function consistently as an extension of the Water Safety and Guard Ops Coordinator.
- **Maintenance:** Due to the geographic separation of three year-round aquatic centers and two summer pools, the consistent day-to-day management of maintaining the pools (in particular, water chemistry best practices and system troubleshooting) is a challenge. This challenge is magnified with only one of the three full-time employees being directly charged with the maintenance of the pools. Despite having part-time lead pool managers at each facility, with a staff function primarily as lifeguards, there is little necessary oversight of the maintenance operations. The pool managers do not have the employment status and training to function consistently as an extension of the Maintenance Logistics Coordinator.

- **Programming:** The Aquatic Division currently has a seasonal position to oversee an expansive program of group and private swim lessons, water exercise classes, and recreation swim teams at four of the five pools. As a part-time seasonal employee, this function lacks the capacity to expand programming to meet current and emerging trends desired by the aquatic community.
- **Culture:** Communication and information exchange across the division and with customers, which has started to show signs of improvement over the last year.

5.1.3 KEY RECOMMENDATIONS

The consulting team has identified three primary functions that are currently not being addressed effectively due to the limitations of the current organizational structure: pool management and lifeguard accountability, programming, and consistent maintenance. The consulting team recommends the following actions to address these operational gaps:

- **Reclassification of Lead Pool Manager:** The reclassification of the lead pool managers to full-time employees will provide the division with the capacity to have consistent oversight of the most critical function in pool operations – lifeguard management. Additionally, full-time lead pool managers will serve not only as an extension of the Water Safety and Lifeguard Operations Coordinator to oversee the management of lifeguards, but will take the lead in troubleshooting pool maintenance issues and provide consistent implementation of water chemistry best practices. The consulting team recommends that the Aquatic Division employ three full-time lead pool managers.
- **Reclassification of Program Coordinator**: The reclassification of the Program Coordinator from ½ time to full-time will provide the capacity to meet emerging aquatic programming needs and trends, including but not limited to continued expansion of private swim lessons, promotion and expansion of wellness and therapeutic programs, and the expansion of other aquatic programs.

Below is the recommended organizational chart that illustrates the proposed function of the City of Boulder's Aquatic Division (**Figure 30**):

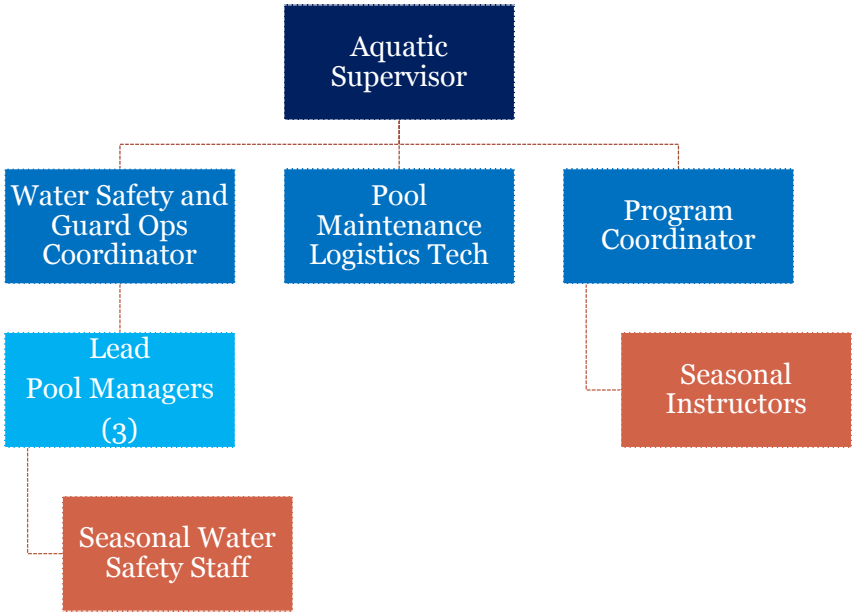


Figure 30 - Recommended Organizational Chart

5.2 LIFEGUARD MANAGEMENT

5.2.1 KEY FINDINGS

- **Lifeguard Management**: While the recently developed 2014 Aquatic Staff Manual is a vast improvement over the previous one, policies, procedures, and practices to reinforce the content of the manual are not evident.
- **Lifeguard In-Service Training**: The division is lacking a formal program to develop and provide ongoing consistent training to the lifeguard staff.
- **Personal Protective Equipment Standards**: Personal protective equipment use is not optional in today's standards of lifeguarding. It is as much to ensure proper rescuer performance as it is to provide appropriate rescue safety. The aquatic division lacks standards around the care and utilization of personal protective equipment.
- **Safety Guidelines for Patrons with Special Needs**: In the aquatic arena, besides providing the necessary physical accommodations like ramps and hydro-lifts, aquatic staff must also be prepared to assist people with disabilities in normal activities, and to respond appropriately in case of an emergency. Though the aquatic manual addresses special need patron safety, it does so with limited information.
- **Non-Swimmer Protection Policy**: The City of Boulder does not have a policy in place to test the swimming abilities of unknown swimmers and thereby increases the risk of a life-saving incident in the aquatic facilities.

5.2.2 KEY RECOMMENDATIONS

DEVELOP AQUATIC FACILITY SAFETY CHECK LIST

Many factors need constant attention in aquatic facilities. The most commonly overlooked and inaccurately assessed critical items are listed below. Attention to detail is the key to operating a safe facility. If any unsafe area of a pool is left unnoticed, there are apparent risks of personal injury to guests. Recommended regular documented checks must be completed to ensure all areas of the pool are within industry standards. Detailed information regarding the facility safety check-list can be found in the Appendix of the report.

ENFORCE AND REINFORCE LIFEGUARD RESPONSIBILITIES

It is critical that the aquatic safety rules be constantly and consistently reviewed with staff. This needs to be done in addition to in-service trainings. These basic safety rules must be incorporated at all locations. Detailed lifeguard responsibilities can be found in the Appendix of the study.

MANAGE LIFEGUARD VIGILANCE

Historically, the focus of lifeguarding has been all about rescue. However, in more recent years, aquatic understanding considers recognition more important than rescue. While rescue is vitally important, it goes hand-in-hand with recognition and vigilance. Best practices for managing lifeguard vigilance can be found in the Appendix of the study.

DEVELOP AND IMPLEMENT A LIFEGUARD IN-SERVICE PROGRAM

All of lifeguard staff receives initial training that provides the basic information and skills required for them to perform their work assignments. In-service training is necessary to retain, improve, and allow them to employ their skills and knowledge under supervised conditions so that their performance is

maximized. Best practices for developing and implementing a lifeguard in-service program can be found in the Appendix of the study.

IMPLEMENT AQUATIC PERSONAL PROTECTIVE EQUIPMENT STANDARDS

Lifesaving is a trainable technique that has been refined for maximum effectiveness. Rescue techniques are employed using specific personal protective equipment (PPE). This equipment is essential to protect the user and the victim. The following equipment is not optional. It is used to ensure proper rescuer performance and provide appropriate rescuer safety. Best practice detail for implementing PPE can be found in the Appendix of the study.

DEVELOP AND IMPLEMENT A NON-SWIMMER PROTECTION POLICY

Many aquatic facilities do not test the swimming capabilities of unknown swimmers. Frequently, tragic stories demonstrate the need to develop and implement swim test protocols. An increasing number of aquatic facilities have implemented a non-swimmer protection policy and are now successfully testing swimmers of unknown ability, especially participants of special use groups like day camps, rental groups, and birthday parties. A recommended non-swimmer protection policy can be found in the Appendix of the study.

SAFETY GUIDELINES FOR PATRONS WITH SPECIAL NEEDS

Under the Americans with Disabilities Act (ADA) persons with disabilities must be provided equal access and opportunity to use all of the City of Boulder's aquatic facilities. In addition to providing the necessary physical accommodations like ramps and hydro-lifts, aquatic staff must also be prepared to assist people with disabilities in normal activities and to respond appropriately in case of an emergency. Detailed guidelines for managing the safety of people with special needs can be found in the Appendix of the study.

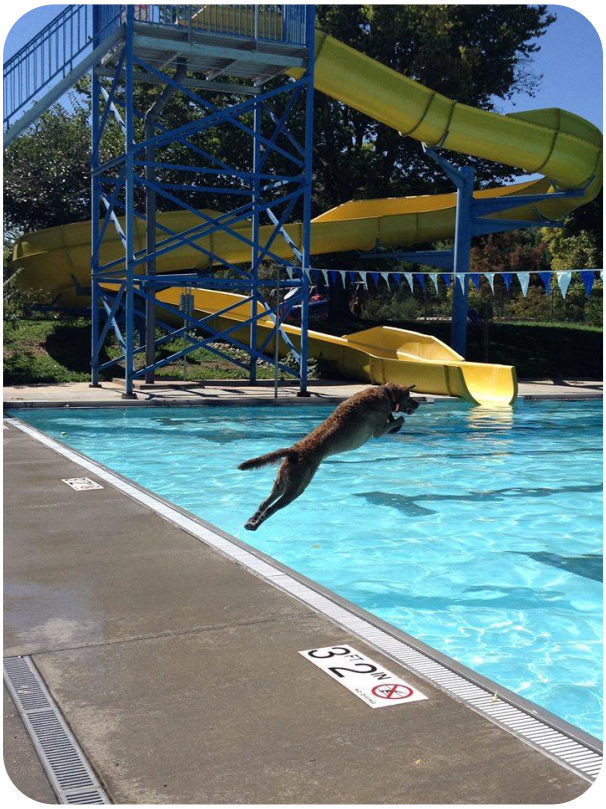


Photo 9 - Scott Carpenter Pool

5.3 LAP POOL UTILIZATION

The scheduling of aquatic facilities is often the equivalent of high level mathematics. Unlike any other recreation amenity, operators must balance a multitude of needs, often simultaneously. Additionally, scheduling must consider a number of variables, including water temperature, acoustics, and overall compatibility of uses.

In the City of Boulder, these factors are heightened by the high demand for lap swimming. National averages show a demand for open lap swimming in a community ranging from 2-5% of the population. In the City of Boulder, this demand averages 45-50% of the population having a need for regular open lap swimming. This has created a shortage of prime-time supply of lap lanes during the indoor swimming season (October – April). Following is snapshot analysis of the January 2014 pool schedules for each of the indoor facilities, Monday through Friday, during prime time (6-8am and 4-7pm) that supports the shortage of open lanes.

MORNING PRIME TIME UTILIZATION ANALYSIS (6-8AM)

As shown in **Figure 31**, lane availability for open lap swimming is significant. The availability, however, is offered inconsistently offered making it difficult for lap swimming patrons to utilize.

Prime-time Lap Pool Utilization	EBCC	SBRC	NBRC	System	% of Use
Total Prime-time Weekly Lane Hours	80	60	80	220	-
Adult User Group	33	8	0	41	19%
Youth User Group	0	18	3	21	10%
Open Lap Swim Availability	47	34	77	158	71%

Figure 31 - Morning Prime Time Utilization (6-8 a.m.)

EVENING PRIME TIME UTILIZATION ANALYSIS (4-7PM)

Lane availability for open lap swimming in the evening's is extremely limited **(Figure 32)**.

Prime-time Lap Pool Utilization	EBCC	SBRC	NBRC	System	% of Use
Total Prime-time Weekly Lane Hours	120	90	120	330	-
Adult User Group	94.5	10	14	118.5	36%
Youth User Group	0	67.5	58.5	126	38%
Open Lap Swim Availability	25.5	12.5	47.5	85.5	26%

Figure 32 - Evening Prime Time Utilization (4-7 p.m.)

SUMMARY OF PRIME TIME UTILIZATION ANALYSIS

Total lane availability for open lap swim during prime time during the indoor season is very limited for a community that has a high demand for this service **(Figure 33)**.

Prime-time Lap Pool Utilization	EBCC	SBRC	NBRC	System	% of Use
Total Prime-time Weekly Lane Hours	200	150	200	550	-
Adult User Group	127.5	18	14	159.5	29%
Youth User Group	0	85.5	61.5	147	27%
Open Lap Swim Availability	72.5	46.5	124.5	243.5	44%

Figure 33 - Summary of Prime Time Utilization

The following are the key findings that create tension in the community and the use of the lap swimming pools.

5.3.1 KEY FINDINGS

- **Historical Scheduling:** Though the division does have "code of conduct" guidelines for user groups, it lacks formal pool allocation guidelines for user groups and has relied on historical priorities to determine pool schedules.
- **Unbalanced Schedule:** At the height of the indoor swimming season, open lap swimming availability is limited and inconsistent as 56% of prime time is utilized by user groups.. As shown by the following charts for the recreation center pools, the majority of prime time is utilized by user groups and therefore availability to meet the need of open lap swimming is comprised.

5.3.2 KEY RECOMMENDATIONS

EVALUATE ADDITIONAL OPERATING HOURS

The City of Boulder could evaluate adding operational hours at East, North, and South Recreation Centers in order to meet the high demand for open lap swimming by increasing availability. Specific areas to evaluate include:

- Opening at 5:00am Monday through Friday
- Closing at 9:30pm Monday through Friday

DEVELOP A FORMAL ALLOCATION GUIDELINES

The Boulder Aquatic Division has primarily scheduled user groups in lap pools based on historical scheduling. The creation of formal allocation guidelines will encourage the maximum utilization of pools during non-prime time hours. A framework of the key elements that need to be included in the development of newly designed allocation guidelines can be found in the Appendix of the study.

DEVELOP PRICING STRATEGIES

As the demand for aquatic services continues to increase, it will be necessary to develop pricing strategies that maximize the utilization of aquatic facilities. The consulting team recommends that the Boulder Aquatic Division continue to explore pricing strategies that create options for the customer.

The following table offers examples of pricing options.

• **Primetime and Non-Primetime**	• **Incentive Pricing**
• **Premium**	• **Length of Stay Pricing**
• **Season and Off-season Rates**	• **Cost Recovery Goal Pricing**
• **Multi-tiered Program Pricing**	• **Level of Exclusivity Pricing**
• **Group Discounting and Packaging**	• **Age Segment Pricing**
• **Volume Pricing**	• **Level of Private Gain Pricing**

The most appropriate strategies for Boulder to consider are as follows:

- Primetime and Non-primetime pricing strategy – The price is set based on the time of the day. Primetime is considered to be the time of day in which the demand for the service is highest (Monday-Friday 4-7pm). Fees for the rental of the facility during this time would be set at rate that would recover 125-150% of costs incurred. To lessen the demand for "primetime", Boulder

Aquatics can lower prices for rentals of the pool during times in which demand is lower (Monday-Friday 7-9pm). This will assist in maximizing the utilization of the pools.

- Premium pricing - The price set is high to reflect the exclusiveness of the product. An example of this would be a user group paying higher rental fees for the exclusive use of a facility that prohibits the general public or other groups from participating.

5.4 PROGRAMMING

The City of Boulder operates a quality aquatic programming system with the primary offerings centering on learn-to-swim and water fitness programs as well as the Barracuda Swim Team.

5.4.1 KEY FINDINGS

Policies and Procedures: The recently developed 2014 Aquatic Staff Manual is a vast improvement over previous editions. Policies, procedures, and practices that guide aquatic programming are in line with best practices.

Program Participation: Program participation rates are very strong especially in the learn-to-swim program. **Figure 34** summarizes the participation rates for the system. Please note that consistent programming is not offered at South Boulder Recreation Center and Scott Carpenter Pools.

City of Boulder Aquatic Division
Program Participation Rates

Aquatic Facility	Registered Participants	Maximum Participants	Participation Rate
*East Boulder Community Center	1,136	1,699	67%
North Boulder Recreation Center	846	1,066	79%
Spruce Pool	311	391	80%
Total	2,293	3,156	73%

*** Water Fitness class enrollment accounts for 46% of the vacancy rates**

Figure 34 - Program Participation Rates

Program Classification: The City of Boulder has recently embarked on the classification of recreation programs and services based on the level of benefit received by the participants to ensure that community subsidies are appropriately allocated. The three levels of classification are as follows:

- Community: Programs and services offered by the Boulder Parks and Recreation Department that benefit the community as a whole. An example of a program classified as "Community" is a special event.
- Recreation: Programs and services offered by the Boulder Parks and Recreation Department that benefit the individual, but also benefit the community as a whole. An example of a program classified as "Recreation" is Learn to Swim Programs.
- Exclusive: Programs and services offered by the Boulder Parks and Recreation Department that benefit only the individual or individuals that belong to a private group. An example of a program classified as "exclusive" would be the rental of a meeting room.

Boulder Parks and Recreation aquatics programs and services categorization is show in Figure 35, per the framework provided by the Recreation Priority Index developed by BPR in 2014.

City of Boulder Aquatic Division Program Benefit Classification	
Program Area	**Benefit Level**
Aquatic - Learn to Swim	Recreation
Aquatic - Open Swim	Recreation
Aquatic - Water Fitness	Recreation
Aquatic – Group Outings	Exclusive
Aquatic – Swim and Dive Team Rentals	Exclusive
Aquatic – Other Rentals (synchro, water polo, SCUBA)	Exclusive
Aquatic - EXPAND	Community
Special Events	Community
Water Safety Training	Recreation

Figure 35 - Program Benefit Classification

5.4.2 KEY RECOMMENDATIONS

Overall, programming in the aquatic division is providing quality services. With continued focus on delivering high quality programs and services and the inclusion of the following best practice recommendations, the consulting team is confident that the division will successfully achieve its intended outcomes.

EXPAND PROGRAMS AND SERVICES IN THE AREAS OF GREATEST DEMAND

Ongoing analysis of the participation trends of aquatic programming in Boulder is significant when delivering high quality programs. By doing so, staff will be able to focus their efforts on the programs and services of the greatest need and reduce or eliminate programs and services where interest is waning.

Areas of greatest need of programs and services for staff to focus on delivering as identified through community engagement for programs and services are as follows:

- Learn to Swim
- Warm Water Wellness
- Water Exercise
- Therapeutic Programs
- Recreation Swim Team

ADOPT FORMALIZED AQUATIC PROGRAM STANDARDS

Aquatic program standards are developed to support core programs and services. The standards focus on delivering a consistently high quality experience while achieving operational and cost recovery goals. Standards by which programs need to be developed and administered ought to be created. This will assist staff in its continual pursuit to deliver high quality consistent programs to the community. They will also aid in achieving the cost recovery goals. A complete listing of the standards can be found in the Appendix of this report.

CHAPTER SIX - INDUSTRY TRENDS

6.1 POOL TYPOLOGY

6.1.1 POOL TYPES

The design of aquatic facilities has evolved significantly in the last 20 years. Although the trend has been to create overall fitness, wellness and cultural facilities link together as a recreation center. In some cases, individual aquatic facilities are programmed, designed, and constructed as stand-alone facilities. In other communities, aquatics may be phase one in a multiphase project. In all cases, the selection of aquatic leisure activities now attempts to accommodate all ages of participants. Multipurpose facilities and new aquatic technology is now allowing the development of facilities that even accommodate late teen/early adult and active aging adults traditionally absent from aquatic facilities.

The overall selection of individual aquatic facilities and activities are based on direct input from the community, user groups, stakeholders, and the owners to determine the most appropriate mix within a facility. All aquatic facilities are to be designed to meet the specific requirements of the current edition of the Colorado Health Department Swimming Pool Code.

There are a wide variety of individual aquatic components and support facilities that have been included in the design of the most recent aquatic facilities. Not all of these components are included in every facility. Each community typically selects the appropriate aquatic component based on their community's needs.

6.1.2 LEISURE LIFESTYLE POOLS AND WATERTAINMENT

These pool areas have become increasing more popular due to the inter-generational appeal they have for conducting programs, providing a place for recreation watertainment and fostering social interaction. The warm water is inviting and provides a pool temperature that encourages long term use. In order to understand what aquatic trends will become popular and how to design for multi-generational programming, it is important to review the fundamentals and benefits of play, what motivates an individual to participate, and how each age group plays in the water.

PHYSICAL DEVELOPMENT

Swimming can improve strength, balance and improve flexibility. It provides an aerobic benefit that is relatively injury free in comparison to other sports. "The water's unique properties allow the pool to provide an environment for people of all abilities" states the Aquatic Exercise Association. "Buoyancy creates a reduced impact exercise alternative that is easy on the joints, while the water's resistance challenges all the muscles. Water lends itself to a well-balanced workout that improves all major components of physical fitness- aerobic training, muscular strength and endurance, flexibility and body composition." It is also a sport that can be a lifetime activity; participants may be 1 or 101 years old.

SOCIAL DEVELOPMENT

Through social play children and adults learn to cooperate and appreciate the importance of taking others' needs and feelings into account. Playing together fosters awareness and understanding of a variety of values and attitudes. These great strides in development all happen while the person is laughing and establishing friendships; while they are having fun. Water is a safe sport for children of all ages and proficiency levels. Learn to swim and aqua classes can be socially enjoyable while at the same time provide fitness benefits.

A water sport promotes fitness and cultivates a positive attitude. An accomplishment of finally mastering the back float or competing in a swim meet can help to increase self-esteem. Spend some time at a pool and count the times you hear *"Watch me mom!"* Playing in the water promotes increased energy levels and promotes children to strive for physical achievement.

Water is iconic to stress relief; soothing waterfalls, gentle rains, calm waters. Swimming forces you to regulate breathing and allows more oxygen to flow into muscles. The warm water of a wellness pool or whirlpool can help to calm nerves, stimulate cardiovascular circulation, and soothe the mind and body.

AGE GROUPS – HOW THEY PLAY

Each age group plays and responds differently to areas of the pool and its amenities. An accomplished aquatic designer understands the "play needs" of each generation and translates this into their pool designs. This ensures that there are multiple options for everyone to engage users at the pool.

Understanding the needs for multiple programming spaces is another design consideration often overlooked by an inexperienced team. Knowing what areas can double as teaching spaces, training areas and recreational swim/buy outs and rentals, while still meeting guest's needs is an acquired skill. For example, current channels or lazy rivers can be used for resistance or assistive walking classes during one time of the day and can then be used as a recreational river to serve another group. Warm water wellness pools provide a place for therapy and rehabilitation but also present adequate and appropriate depth and temperature for learn-to-swim lessons.

Ultimately, it is important to provide a safe environment for any type of play, especially in the water. Supervision is imperative in any type of design. Understanding how these facilities operate help the design team to properly place offices, observation and seating areas for easy maintenance and safety.

6.1.3 PROGRAMMING FOR TODDLERS

3-5 YEARS

This age group plays in small groups, uses props, pretend plays and does it passionately with no absolute goals in mind. Blissful. Individually they are building confidence and socially they are learning to share and cooperate. In the water they respond to interactive play including small dumping buckets, floatables and children's slides. Slides that accommodate several children at once are timeless. The three year old initially rides with the assistance of their parent, as they become more daring they go down in pairs holding hands, and eventually they are racing their peers down the same slide.

Aquatic lessons should be fun and kept to smaller numbers, say five children per class. In the pre-school level skills will range from kicking their feet at the edge of the pool to swimming up to 25 yards on their front and back.

6.1.4 PROGRAMMING FOR YOUNG CHILDREN

5 TO 8 YEARS

At this age kids are starting to play formal and informal games with their peers. There may be a winner, per say, or just the common goal of accomplishing a task (e.g. hopscotch). This play helps them to refine their social skills and understand cooperation, teamwork and competition. Role playing is popular amongst this age group and imitating their role models is a popular pastime (playing house). Providing a multi-level play structure with props such ropes, ladders, cubby spaces, and interactive play will encourage their imagination.

It is imperative to a child of this age to be challenged and be provided the opportunity to demonstrate their talents and abilities *(Watch me dad!)*. The leisure, activity pools and lazy rivers facilitate this type of play. It takes courage to ride the flume slide for the first time, engage in a game of water basketball, or hold your best friend's hand down the adventure channel and navigate an inflatable obstacle course.

Aquatic programming begins to take the form of children's masters and diving classes. Students begin to build upon their learned abilities moving onto the next level in their swimming abilities. It is still important to continue to offer learn-to-swim classes, especially in lower income areas where children have not had the benefit of aquatic recreation.

6.1.5 PROGRAMMING FOR TEENS AND TWEENS

8 TO 13 YEARS

At this age we become more organized and structured. Achievement becomes more important and we are starting to set goals and milestones for ourselves. The activity pool, with deeper water, provides the challenging environment. Flume slides, mat racer slides, activity pools, floatables, net walks, water basketball, aqua climbing walls, surf simulators, rope swings, etc. The more exciting and challenging the more appealing the activity becomes. Studies also show that playing can enhance the learning process - the more physical the play– moving, stretching, and resistive – the better.

Programming includes junior lifeguarding, advanced swimming and diving. These help to build endurance, strength, speed and increase overall fitness levels. An activity night or designated swim night with peers is attractive as this age group is beginning to thrive socially outside the family unit.

TEENS

It is common knowledge that during our teenage years our socialization moves from our families to our peer groups. We channel our energy (fun) into specialized clubs, youth groups, volunteer activities, and team sports. The complexity has moved from blissful play to that of self-awareness and social standing.

In addition to the entertainment value of the challenging environments of their previous peer group, teenagers desire separate social spaces. These often difficult-to-please demographics do not want to always hang out with mom and dad. An aquatic craze among those participants is the "Teen Zone". This is a separate, yet very visible, section of the deck or grass area that is programmed for this specific group. Within their "own space" they can socialize, enjoy popular music, engage in social interactive activities like 'rock and roll ban, guitar hero or others" and just hang out to be social.

Aquatic programming for this age group could include lifeguard and instructor training, and competitive swim groups.

6.1.6 PROGRAMMING FOR ADULTS AND ACTIVE AGING

ADULTS

We have a big lesson to relearn here. Play. Somewhere along the way we concluded that grown up play is viewed as a weakness and the successful people just work; we need permission to play again. We have just agreed that play is a mind and body integration and social necessity. Play is a relaxed spontaneity that should be embraced, even into adulthood.

Adults should revisit what fun was for them as a child. Many adults that were involved in competitive swim groups are seeking out adult swim master programs. Water exercise, aerobics, water polo, aqua

jog and resistance walk programs translate into fun adult programming. Adults have fun on waterslides too.

PARENTS

The pool is an ideal opportunity for parents of young children to meet like-minded people who share common interests. Take a quick scan over the pool area and you will find moms and dads congregating in the zero depth area with their tots. It is also common to find parents floating down the lazy river with a baby or sleeping child strewn across their lap. It is also pretty cool to be able to tell your friends that you beat your dad down the mat racer slide.

Aquatic programming to support the parent network is important; parent/infant, parent/toddler and adult swim classes.

ACTIVE SENIOR ADULTS

Swimming is one of the best exercise and social environments available to seniors. It is safe and easy on the body, allowing people to move their bodies without bearing their weight. It is an ideal way for seniors to get in shape and improve their overall wellbeing. For some disabled and seniors, water gives them a sense of freedom as they freely move around in the water.

An aquatic fitness class is a great social outlet for seniors. Warm water lap lanes and wellness pools provide popular warm water activities such as silver sneakers, aqua restore (stay young with water) low impact aqua fitness, aqua walking, and underwater bikes. Vortex and lazy rivers offer assistive walking opportunities and whirlpools and social benches offer social spaces enjoyed by this age group.

Do not forget about the non-aquatic amenities in any age group, let alone seniors. Areas that promote socialization outside of class, a café or comfortable deck seating are ideal. This is an attractive amenity that promotes return guests.

HOW PEOPLE PLAY TOGETHER

Multi-generational recreation and fitness provide something for everyone under one roof; swimming is ageless. It is often said that families that play together, stay together. For example, recreational swimming provides seniors occasion to frequent the aquatic facility with their children and grandchildren. Teenagers can challenge their younger siblings or parents to a game of basketball in the water. Or we can just relax together floating down the lazy river.

It is interesting to watch the interaction between age groups; best friends, rivals, siblings, parents, and grandparents. This is where a cross over into each area of the pool occurs and where we find a social interaction between generations. Water brings together generations and allows everyone an opportunity to benefit individually and together.

There are a number of elements that typically constitute a leisure pool. Each leisure pool can be configured differently depending upon the specific programmatic needs of each owner.

Leisure pools can include any or all of the following for activities:

- Zero-depth entry (with or without a wave component)
- Activity area
- Lazy river (current channel)
- Multipurpose/lap lanes
- Waterslides
- Whirlpool spas

ZERO-DEPTH ENTRY POOL

A zero-depth entry is programmed for younger patrons with accessibility challenges. Typically separated into an active play zone and a less active zone, the zero-depth entry pool accommodates a full range of bathers and programmatic activities. There are a variety of activities that take place in this water depth. Often there is a passive side with minimal spray play features. An active area consists of a myriad of spray play features such as geysers, spray arches, play structures with dump buckets, and other interactive devices. This play zone is programmed for younger bathers and contains play amenities designed accordingly.

A zero-depth entry provides patrons access into the pool through a gentle slope into two feet of water. A path of relatively undisturbed water will remain to allow access to deeper water without being splashed by the play features. A sloped control ramp is designed at two feet to speed transition from the zero-depth entry into the lap lanes and the lazy river if that feature is programmed into the design.

Depending on size or depth of the pool, the maximum depth of the higher activities component of the leisure pool range from 3'-6" to 7'. This area, with deeper water provides pre-teens and teens a more challenging environment for play, and an area for learn to swim programs for all ages.

A wave component can be added to this leisure pool to add diversity to the aquatic experience.

MULTIPURPOSE ACTIVITY AREA

The multipurpose activity area is also accessed off of the zero-depth entry and provides a variety of program and water multipurpose activities. This area is located adjacent to the main leisure area but separate enough to ensure there are a variety of uses that appeal to a wide range of user groups. This area can accommodate water basketball, volleyball, and underwater seating zones.

Adjacent to the main leisure pool, typical facilities can include a lazy river (current channel) and optionally a lap lane/activity pool.

LAZY RIVER (CURRENT CHANNEL)

A lazy river (current channel) is typically seven to eight feet wide, three feet six inches deep, and of varying lengths. Pumps generate a current that forces the water around a circuitous route. The lazy river (current channel) can be designed for inner tubes specifically, and/or foam tubes and life jackets. Besides the recreation experience of floating, the river (channel) has the capability of being programmed for water fitness and wellness use in the form of resistance and assisted walking.

ADVENTURE RIVER

The adventure river differs from a typical lazy river due in part to the addition of waves from the wave caisson in the wave area. Other features provided to increase user excitement are rapids, wall sprays, and over hanging spray features. When the river is programmed for therapeutic or instructional programs, these features may be turned off to provide an environment better suited for the intended use.

WATERSLIDES

Typical waterslides in aquatic facilities consist of two body flumes, but the total number of flumes that can be incorporated is unlimited, as can be seen in waterslide parks. Waterslides are typically located adjacent to the leisure pool. There are a number of choices to the flumes that are selected that include open, enclosed, translucent, or opaque. Typically one flume is open and one is enclosed. Flumes can also be designed to accommodate tubes that create more of an interactive connection to other aquatic experiences in a facility with tube use in a current channel and/or a wave pool. The waterslides can terminate into either a plunge pool in the leisure pool or can be taken to a run-out that functions as a

deceleration lane. The run-out has gained in popularity to assist in reducing operational expense. To further enhance the waterslide experience, timers can be added to facilitate healthy competition between riders.

The slides may vary in length between 120 feet to 300 feet. This length includes a minimum 40 feet deceleration lane that is required for these slides. A typical slide tower varies in height between 20 feet and 35 feet.

MULTIPURPOSE LAP LANES

This area of a leisure pool functions to provide a warm water area for users to enjoy a zone for multi-faceted programs such as learn to swim, water aerobics, and short distance lap swimming. The area has water depths ranging from 3'6' to sometimes 10'-0". Traditionally, stairs service this dynamic area to provide gracious access for patrons of all ages.

WHIRLPOOL SPAS

Whirlpools are extremely popular attractions in aquatic facilities. Typically heated to 103°F most whirlpools are designed to accommodate 10 to 20 users per pool. Whirlpools would also be designed with two means of access into the pool: stairs and an accessible ramp at 1:12 slope.

Whirlpools can be used in a variety of ways. Those uses include social interaction, after swim warm-up area, and physical therapy. Whirlpools are utilized by all age groups and are typically well used. In some instances, aquatic facilities provide two whirlpools, restricting one to an adults' only pool and the other operated at 95°F for family use.

6.1.7 WELLNESS/THERAPY POOLS

There are a number of components that are now being added to most new facilities to provide warm water program abilities that appeal to both the oldest and youngest users. The wellness/therapy pool provides a water temperature between 88 and 93 degrees Fahrenheit. The emerging trend is the use of these bodies among active aging adults in the early morning hours until noon. In the afternoon, these pools are heavily utilized for learn to swim classes. In the evening hours they become a family place for individual wellness activities or zones for parental learn to swim classes designed to assist their children in this important life time achievement. Each wellness/therapy pool can be configured differently depending on the specific programmatic needs of each owner. These venues are often located in an area close to the locker rooms, but are out of the main view of the lobby.

6.1.8 COMPETITION POOLS

Competition pools range from 25 yards to 50 meters in length and typically accommodate 6 to 10 lanes. Depending whether a diving component is included in the design of the competition pool, the pool depth will range from 6 feet to 13' – 6' for 1-meter springboard diving and a deep end depth of 18 feet for a 10-meter diving platform.

The competition pool width varies with the number of lanes desired. Each lane is a minimum of 7 feet wide with an 18 inch buffer outside the last lane, which helps to reduce wave action. Each competition pool would include wave quelling rope lanes that prevent waves from one competitor interfering with another. Starting platforms, timing equipment pace clocks, and other accessories are also typically designed for the competition pool. The number of lanes selected at municipal facilities depends on availability in the community.

A minimum number of six lanes are required for swim meet competitions. As requirements for competition pools do change from time to time, confirmation of current and future competition pool requirements need to be finalized with USA swimming or National Federation of High Schools. Eight lanes are desired in most locations. Ten lanes are becoming a goal for most communities with significant swimming programs for training, events, and lap swimming. If other pools are available in the community for use for competitions, the size and number of swim lanes can be based on utilization and programs rather than the occasional competition. Appropriately evaluating the specific programmatic needs of the competition pool can ensure the capital cost of any additional swim lanes can be factored and if necessary, funds can then be incorporated into other leisure/fitness facilities.

6.2 ARCHITECTURE AND INFRASTRUCTURE

6.2.1 NEGATIVE AIR PRESSURE

One of the first things that most pool environments have problems with is keeping the natatorium air pressure negative in relation to adjacent spaces and the outdoors. This is one of the most important considerations in good pool design. Without a negative air pressure, pool smells will travel into the lobby and humidity will permeate ceiling cavities. The resulting migration can cause all kinds of damage to finish materials that are not corrosive resistant in their nature.

6.2.2 VAPOR CONTROL

As with the negative air pressure noted above, control of vapor migration is even more important. If vapor is allowed to escape from the natatorium, it can migrate into exterior wall insulation or roof insulation. If moisture is allowed to contaminate an exterior envelope insulation layer, the insulating value will be compromised if it gets cold enough to condense. As observed in the photos below, water vapor has been allowed to migrate into exterior roof soffits and expresses itself with big icicles.

Photo 10 – Example of Water Vapor Migration

A vapor barrier system must be installed as a continuous vapor retarder in walls, roofs, and particularly at intersections and penetrations. A diagram of a properly designed vapor retarder system for a pool enclosure is shown below.

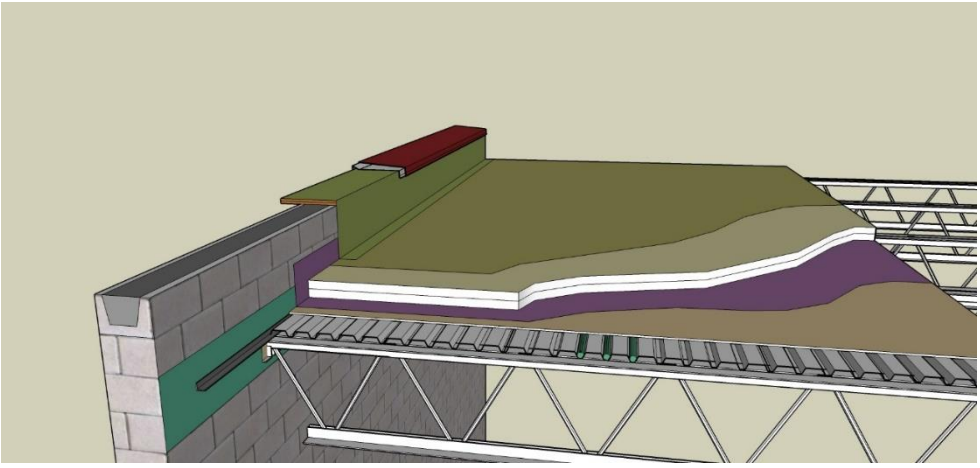


Photo 11 – Example of Vapor Retarder System

6.2.3 HIGH PERFORMANCE PAINT SYSTEMS

Natatoriums are full of chlorinated, high humidity, warm air. This is a recipe for corrosion of any mild steel product that it comes in contact with. That includes structural steel roofs, columns, brackets, supports, conduit, electrical boxes, bolts, stairs, bracing, light fixtures, drinking fountains, door hardware, and the list goes on and on. Our primary protection from this insidious degrading of materials is twofold. The first layer of protection is usually a galvanized zinc coating or zinc paint system, and the second layer is typically an epoxy paint that has a good permeance rating. With both of these systems in place, generally long-term protection is garnered of these steel elements. Below are some examples of poor coating protection and what can happen in fairly short order if coatings are not properly specified.

Photo 12 Examples of Results of Improper Painting in Aquatic Facilities

6.2.4 DECK SLIP RESISTANCE

A common problem for pool venues is the slip resistance of the walking decks adjacent to pools. Most decks are not nearly abrasive enough to keep everyone safe. Slip and fall cases are very common in pool environments. Specifying the proper floor surface or finish is imperative. Long-term slip resistance can be costly, but low cost systems do exist. An acid etched concrete finish is one of the most inexpensive surfaces for a pool deck. The key is to get a very aggressive texture to assure long term performance. For an existing slippery deck, there are several options, starting with the least expensive as "Safety Grooving" on the left, followed by various textured ceramic porcelain tile products. All will perform very well over the long haul.

Photo 13 – Example of Safety Grooving of Concrete Pool Deck

Photo 14 – Example of Ceramic porcelain tile decking

6.2.5 LIFE GUARD VISIBILITY

As a lifeguard, being able to see all of the pool without obstructions or reflections is imperative. To achieve this, the pool design must acknowledge where lifeguards will be stationed. The pool design must not create large obstructions that obscure portions of the pool.

Reflective glare from windows creates blind areas in the pool and lifeguarding issues. Control of window placement and shading will reduce the potential for glare. Roller shades that extend automatically work well for this purpose. Another way to combat reflective glare is to introduce additional overhead lighting via skylights or artificial lighting. By providing more foot candles of light reaching the bottom of the pool, the contrast between the pool and the reflective surface is reduced, thereby allowing better visibility of the pool bottom.

Photo 15 – Example of Water Play That Create Obstructions

Photo 16 – Example of Proper Lighting Design

6.2.6 SEPARATION OF POOLS

Recent pool designs have utilized the idea of separating competition pools from recreation pools due to their different acoustical demands. Coaching competitive swimmers in the same room as waterslides, sprays, and interactive features for kids does not work well. The pool at North Boulder Recreation Center is an example, contrasted with East Boulder Community Center pool, which has combined them in one large enclosure.

Photo 17 – Example of Separation of Pools to Create Optimal Experiences and Improve System Efficiency and Effectiveness

6.2.7 FAMILY CHANGING ROOMS

A growing trend for community recreation centers is the need for family changing rooms. As first introduced at the East Boulder Community Center, the trend is to incorporate individual changing cabanas as an alternative locker room space for families, persons with disabilities, and transgender individuals. The demand for this type of space to support pool venues is ever increasing.

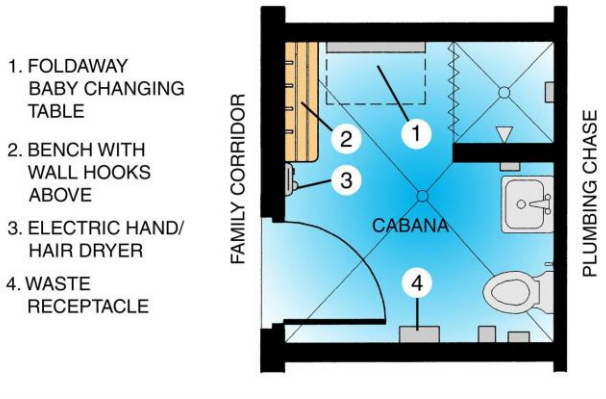


Photo 18 – Example of Best Practice Floor Plan of Family Changing Room

In fact, it is a growing trend to provide facilities with all family locker rooms, in lieu of gender specific locker rooms.

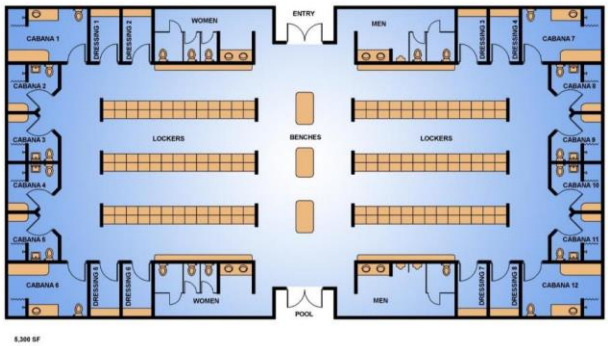


Photo 19 – Example of Best Practice Floor Plan of Family Locker Room

6.2.8 NATATORIUM ACOUSTICS

Swimming pool enclosures are naturally very poor acoustic spaces. They have all of the very worst conditions for acoustical intelligibility. All of the walls, floors, roofs and water surfaces are naturally reflective surfaces. This makes the space very lively. Add to this a very high roof or ceiling and you have a recipe for an acoustical disaster. Moving water, such as a spray or water falls, creates a noise that dwells in the middle of the speech frequency range. So if you combine a space with long reverberation times and the sound of moving water, it's no wonder the lifeguards cannot be heard over the accumulation of noise. Introducing acoustically absorptive materials into the pool helps to reduce the reverberation time tremendously. The reduction of this noise helps to improve the work of the lifeguard and their communication with patrons more intelligibly.

Examples of acoustical treatment can vary from perforated acoustical roof deck, to PVC encased lapendary baffles to vertical hanging acoustic baffles, to acoustic wall panels.

Photo 20 – Example of Best Practice of Acoustical Treatment PVC Encased Lapendary Baffles

6.2.9 NATATORIUM LIGHTING

Lighting of swimming pools is very important to the safety of the patrons. If the lifeguards can't see the bottom of the pool due to poor lighting, then every swimmer is at risk of not being rescued when the dangers of drowning occurs. In the past very high wattage (High Intensity Discharge) HID light sources were used. These fixtures worked well in lighting large open high bay areas, however, they are not as energy efficient as some of the newer fluorescents and LED fixtures. Most of these HID fixtures have been replaced with high output fluorescents as a means of reducing energy use. However, often the replacement fixtures do not provide an equivalent amount of foot candles to the bottom of the pool. A photometric prediction model is recommended to help assure proper light distribution and light levels throughout the space.

Photo 21 – Example of Best Practice Example of Aquatic Facility Lighting Fixture

6.3 SYSTEMS

6.3.1 WATER TREATMENT AND CHEMICAL EFFICIENCY

The latest technology for pool water treatment includes regenerative media filters and UV (Ultra Violet) secondary sanitation treatment.

REGENERATIVE MEDIA FILTERS

Regenerative media filters remove particles from dirty pool water by forcing the water through a thin layer of powdery filter media that captures the unwanted dirt, oils, and other nasty materials suspended in pool water.

It should also be noted that regenerative media filters are the only category of swimming pool filter that capture a large percentage of microorganisms that are too small to be effectively captured by more traditional sand filtration. All regenerative filters use some sort of powdery coating material such as diatomaceous earth or perlite to filter unwanted elements from the swimming pool water. Diatomaceous earth (DE) is a fossilized material that is mined and refined for use as a filter medium. Perlite is derived from volcanic rock that is superheated to create the powdery substance used in filtration. Both of these substances consist of small particles that have large surface areas, in relation to their overall size, to capture the unwanted materials in pool water. Usage of this technology results in improved filtration and reductions in water consumption.

Photo 22 – Example of Regenerative Media Filter

UV (ULTRA VIOLET)

Ultraviolet Pool Systems harness the power of ultraviolet light to lower chemical levels, eliminate chlorine by-products, and to make pools safe, healthy, and easier to manage because the system adds an extra layer of sanitation by altering the DNA of targeted organisms such as algae, bacteria, viruses, cysts and protozoa as well as eliminating organic matter.

Photo 23 – Example of UV Sanitation System

6.3.2 ENERGY USE

There are a number of energy saving strategies that can be implemented in an aquatics facility. Many of which have already been utilized in the current facilities. Some of the measures include variable speed drives on pool pumps and HVAC fans, high efficiency condensing boilers, heat recovery units, and pool covers to reduce evaporation.

Photo 24 – Example of Variable Speed Drive Pool Pump

Photo 25 – Example of Pool Cover

CONCLUSION

Swimming ranks first among all ages as the most popular recreational activity in the nation. Aquatic recreation has become more complex over the years, kind of like play. Everything has stepped up a notch and people demand more entertainment value. First understand who your patrons are, and then understand how they play, and ultimately you will be successful as a "professional of fun".

CHAPTER SEVEN - FACILITY ASSESSMENTS

The consulting team prepared an assessment of each pool facility managed by the City. The team completed an on-site inspection of each aquatic facility including the East Boulder Community Center, South Boulder Recreation Center, North Boulder Recreation Center, the Spruce Outdoor Pool, and the Carpenter Park Outdoor Pool. Each facility was visited with staff that was familiar with the facility, equipment, and recent issues. Each facility was reviewed for code violations; deferred maintenance issues; safety concerns; and functionality of pools, circulation systems, sanitation equipment, lighting, and general HVAC concerns.

7.1 EAST BOULDER COMMUNITY CENTER POOL

The East Boulder Community Center pool area features floor-to-ceiling windows the length of the southern and western walls, which offer amazing views and fill the pool with natural light. Both a lap pool and a warmer leisure pool are housed in the aquatic center, giving adults and children an enjoyable experience, thus creating a warm family atmosphere. The following summarizes the features of the aquatic facility:

Leisure Pool	Lap Pool	Hot Tub
50,000 gallons	198,000 gallons	2,500 gallons
Water temp: 89°	Water temp: 81°	Water temp: 104°
Ramp, stair and ladder entry	Water life, stair & ladder entry	Stair entry
Shallowest point: 6in.	Shallowest point: 4ft.	Depth: 3ft. 6in.
Deepest point: 4ft.	Deepest point: 7ft.	
Large water slide	8 lanes	
Dinosaur tot slide	25 yards	
Bubble bench		
Current channel		

Photo 26 - East Boulder Community Center Pool

7.1.1 OPPORTUNITIES AND CONSTRAINTS

The East Boulder Community Center aquatic venue is physically constrained severely on three sides due to the proximity of lake, bike trail, and fire lane. Opportunities are limited as any expansion to the natatorium would require the lake edge to be modified along with the trail and fire lane. Due to the high water table, a very expensive excavation to increase site facility amenities is challenged. A special dewatering well permit would also be required from the state. A small addition limited to the area of the existing sun deck might be an option. See the aerial photo below for details.

Photo 27 - Constraints and Opportunities - East Boulder Community Center

7.1.2 KEY ASSESSMENT FINDINGS

The assessment identified the following areas of deficiencies at East Boulder Community Center pool. Details of the assessment can be found in the Appendix. To address deferred maintenance and key deficiencies at EBCC requires an investment of $995,000.

- Pool Deck
- Roofing Structure
- Painting
- Ventilation
- Lighting
- Windows and Doors
- Solar Heating System
- Sanitation System
- Amenities including slide tower and tots slide
- Risk Management including pump pit platform, handicap lift and anti-slip material

7.2 NORTH BOULDER RECREATION CENTER POOL

North Boulder Recreation Center Aquatic Center: The North Boulder Recreation Center pool area was designed to accommodate everyone from the youngest recreation swimmer to world-class athletes. The following summarizes the features of the aquatic facility:

Leisure Pool	Lap Pool	Hot Tub
50,000 gallons	240,000 gallons	5,000 gallons
Water temp: 89°	Water temp: 82°	Water temp: 104°
Zero depth entry	Ramp and ladder entry	Stair entry
Deepest point: 3ft. 6in.	Shallowest point: 3ft.	
Large water slide	deepest point: 12ft.	
Tot slide	8 lanes	
2 basketball hoops	25 yards	
Bubble bench	1-meter diving board	
Play features	Drop slide	

7.2.1 OPPORTUNITIES AND CONSTRAINTS

North Boulder Recreation Center is located in a dense urban site and is challenged with very limited parking capacity. Any additional space added to the facility would require additional parking. Unfortunately, there is no available space for increasing parking capacity.

Photo 28 - Constraints and Opportunities - North Boulder Recreation Center

7.2.2 KEY ASSESSMENT FINDINGS

The assessment identified the following areas of deficiencies at North Boulder Recreation Center pool. Details of the assessment can be found in the Appendix. To address deferred maintenance and key deficiencies at NBRC requires an investment of $640,000.

- Pool Deck
- Roofing Structure
- Ventilation
- Windows and Doors
- Solar Heating System
- Sanitation System
- Amenities including diving board

7.3 SOUTH BOULDER RECREATION CENTER POOL

South Boulder Recreation Center Pool: The South Boulder Recreation Center pool offers a quiet atmosphere. It's the perfect place to go for a focused swimming session. The following summarizes the features of the pool:

Lap Pool
200,000 gallons
Stair, ladder and ramp entry
Water temp: 80°
Shallowest point: 2ft. 6in.
Deepest point: 12ft.
6 lanes
25 yards
1-meter diving board

Hot Tub
2,500 gallons
Stair entry
Water Temp: 104°
Depth: 3ft. 6in.

Photo 29 - South Boulder Recreation Center

7.3.1 OPPORTUNITIES AND CONSTRAINTS

South Boulder Recreation Center is 40 year old facility that is experiencing facility-wide infrastructure issues and amenities and spaces within the facility have limited ability to meet community need. The aquatic wing is located on the southwest side of the facility and is built into the hillside. Adjacent to the southwest wall is a newly constructed solar water heating collector unit. Any addition that might be contemplated to the existing aquatics area would require the relocation of the solar collectors and anticipate the need for hillside excavation in an area with a high water table. This would be very expensive and would not be a prudent long-term investment.

Photo 30 - Constraints and Opportunities - South Boulder Recreation Center

7.3.2 KEY ASSESSMENT FINDINGS

The assessment identified the following areas of deficiencies at South Boulder Recreation Center pool. Details of the assessment can be found in the Appendix. To address deferred maintenance and key deficiencies at SBRC requires an investment of $408,000.

- Roofing Structure and Walls
- Painting
- Ventilation
- Lighting
- Windows and Doors
- Solar Heating System
- Sanitation System
- Amenities including diving board
- Risk Management including stainless steel gutter corrosion

7.4 SPRUCE OUTDOOR POOL

Spruce Outdoor Pool: Spruce Pool is Boulder's premier family oriented outdoor pool located in the heart of Boulder. The following summarizes the features of the pool:

Lap Pool	Wader Pool	Deck Features
198,000 gallons	50,000 gallons	Duck tot slide
Stair, ladder & lift entry	Ramp and ladder entry	Bucket drop
Water temp: 81°	Water temp: 81°	Arch spouts
Shallowest point: 4Ft.	Shallowest point: 2ft. 6in	Water garden
Deepest point: 7ft.	Deepest point: 4ft.	
8 lanes		
25 yards		

7.4.1 OPPORTUNITIES AND CONSTRAINTS

The Spruce Outdoor Pool facility sits on a dense urban site in central Boulder. It is surrounded by properties on two sides, and streets on the other two sides. There is no available space for expansion on this site. Parking is very limited and cannot be expanded without acquiring additional property.

Photo 31 - Constraints and Opportunities - Spruce Outdoor Pool

7.4.2 KEY ASSESSMENT FINDINGS

The assessment identified the following areas of deficiencies at Spruce Outdoor Pool. Details of the assessment can be found in the Appendix. To address deferred maintenance and key deficiencies at Spruce Pool requires an investment of $1,028,000.

- Filtration System
- Water Circulation System
- Bathhouse beyond useful life
- Perimeter Fencing

7.5 SCOTT CARPENTER OUTDOOR POOL

Scott Carpenter Outdoor Pool: Boulder's only 50-meter pool, great for both elite athletes and recreational swimmers. The following summarizes the features of the pool:

Lap Pool
295,000 gallons
Stair and ladder entry
Water temp: 81°
Shallowest point: 2ft
Deepest point: 4ft.
6 lanes
50 meters
Cove area
Large slide pool

Deep Well
100,000 gallons
Ladder entry
Water temp: 81°
shallowest point: 5ft.
Deepest point: 10ft.

7.5.1 OPPORTUNITIES AND CONSTRAINTS

Scott Carpenter Outdoor Pool is located in the middle of Scott Carpenter Park and adjacent to Boulder Creek. Being located in a community park with other recreational amenities, available parking is often a challenge for park visitors and the ability to increase parking capacity is constrained. Scott Carpenter Pool currently is located in the "Flood Plain" and was subjected to some minor flooding last year. Current regulations would require the facility to be raised two feet above flood stage elevation or modify the bathhouse to be equipped with flood-proof doors and openings. FEMA has proposed a new flood map of Boulder Creek, which shows that the pool and bathhouse will no longer be in the flood plain; however, this new map has not yet been adopted and is subject to modifications.

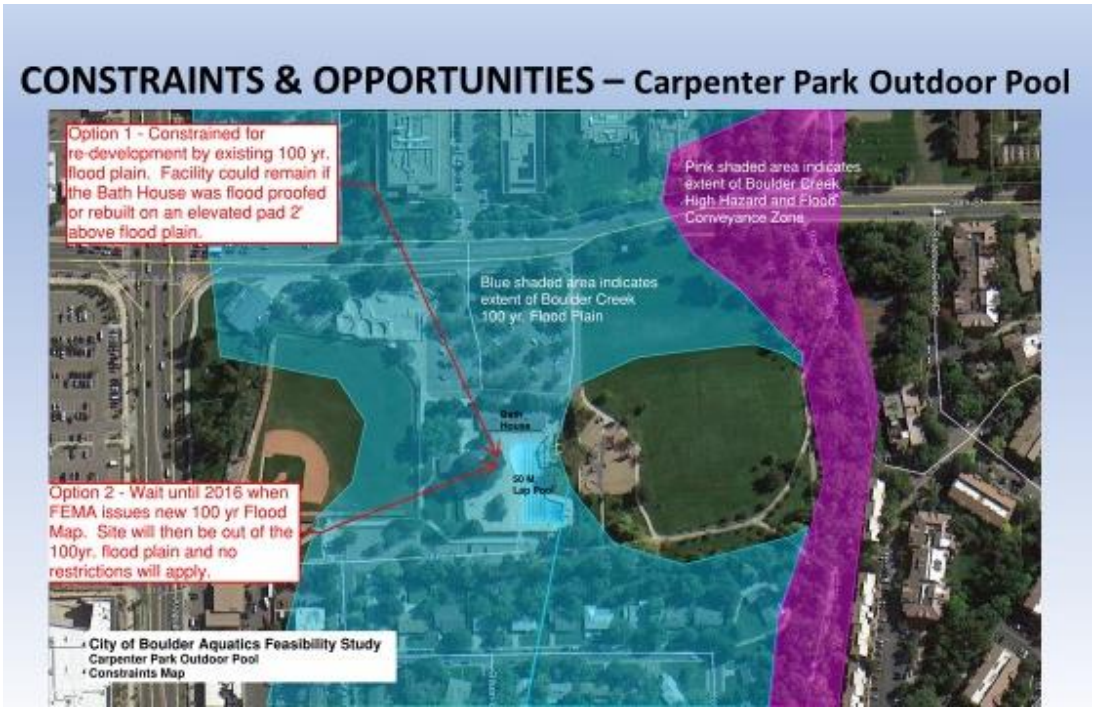


Photo 32 - Constraints and Opportunities - Carpenter Park Outdoor Pool

7.5.2 KEY ASSESSMENT FINDINGS

The assessment identified the following groupings of deficiencies at Scott Carpenter Pool. To address deferred maintenance and key deficiencies at Scott Carpenter Pool requires an investment of $1,939,075 and given the age of the facility, these improvements are not recommended. Details of the assessment can be found in the Appendix.

- Pool Shell
- Pool Heater Booster Pump
- Pool Circulation Pump
- Sanitation System
- Bathhouse
- Diving Boards
- Flume Slide and Slide Tower
- Perimeter Fencing

7.6 SUMMARY OF FACILITY ASSESSMENT

Figure 36 summarizes the infrastructure and systematic deficiencies of the City of Boulder's aquatic system as identified by the consulting team.

	DEFICIENCY							
POOL	Roofing	Windows & Doors	Ventilation	Painting - Walls and Ceilings	Lighting	Aquatic Systems	Amenities	Other
North Boulder Recreation Center	*	*	*			*	*	
East Boulder Community Center	*	*	*	*	*	*	*	*
South Boulder Recreation Center	*	*	*	*	*	*	*	*
Spruce Outdoor Pool	NA	NA	NA	NA	NA	*	*	
Scott Carpenter Pool	NA	NA	NA	NA	NA	*	*	*

Figure 36 - Summary of Facility Assessment

CHAPTER EIGHT - NEEDS ASSESSMENT

For the City of Boulder, it is critical to understand the aquatic needs of the community in order to provide offerings that are focused on a mix of traditional and emerging activities, so as to serve the market while maintaining affordability. This section of the report summarizes the priorities for the City of Boulder's aquatic division from which specific recommendations and strategies will be developed. Needs are identified by the consulting team based on industry best practices and previous analyses:

- Comprehensive facility, program and operational assessments
- Extensive public input
- Focus groups with staff, key stakeholders, and community leadership
- Market analysis

8.1 OVERALL OBSERVATIONS

In synthesizing the outcomes of the community input with the market analysis and facility assessments, the consulting team has identified the following strengths and weaknesses of the division as well as opportunities and threats.

8.1.1 STRENGTHS

- Wide variety of aquatic programs and services offered
- Geographically balanced pools
- Knowledgeable, professional, accommodating staff
- Strong customer service
- Reasonable fees
- Strong program instructors
- Safe and well maintained aquatic environments
- Existing community and City government advocates for the aquatic division
- Political goodwill

8.1.2 WEAKNESSES

- Aquatic facilities are in various stages of their lifecycle and in need of repair and renovation.
- Demand for access to pools is outweighing supply particularly for open lap swimming and warm water wellness programming.
- Scheduling practices are "historical".
- Lack of aquatic facilities for competitive swim meets and events.
- Pool systems and infrastructure are aging and becoming increasingly inefficient.

8.1.3 OPPORTUNITIES

- Local community is active, recreation oriented, and competitive.
- The aquatic division is viewed as the leading provider of high quality services in the City.

- Boulder is a mecca for biathlons, triathlons, and iron man competitions.
- Strategic leadership is in place to continually improve the culture within the division.
- Improving economy.
- Philanthropic and financially committed community that will fundraise and/or support bond initiatives to construct facilities and amenities that are most needed.
- Closure of Mapleton warm water wellness pool at end of 2015.
- Willingness to expand partnerships and sponsorships.
- Valmont Park Master Plan has created placeholder for potential expansion of indoor recreation facilities including aquatics.
- Consistent, stable demographics.

8.1.4 THREATS

- City is landlocked and future opportunities to expand the system will be limited.
- Minimal opportunity to expand footprint of aquatics at existing locations.
- Closure of Mapleton warm water wellness pool at the end of 2015.
- Competing needs for capital improvement funding.
- Operating in a culture of scarcity.

8.2 NEEDS

Each need identified supports the investment that is required to meet community expectations. The priority assignment for each need is not a measure of importance. Rather, these recommended priorities are a result of both qualitative and quantitative analyses to create and maintain an appropriate balance for planning and operations.

NEEDS
* Create an aquatic facility delivery system that is efficient, sustainable, and “green”.
*Maximize utilization of existing lap pools by developing a formal pool allocation policy.
*Increase availability of open lap swimming.
*Provide training and/or competitive aquatic facilities.
*Increase “watertainment” offerings in existing pools.
*Increase “watertainment” offerings in new outdoor pool.
*Increase warm water wellness opportunities.

8.3 SUMMARY

As a whole, the aquatic division has performed effectively within the constraints of the existing facilities in meeting the needs of the community and developing a culture of continuous improvement. As has been the case with most agencies, the Great Recession inhibited the division's ability to expand on the strong foundation that was established in the last decade of the 20th century and the first decade of the 21st century, but it is strategically positioned to successfully manage itself forward within the "aquatic" niche that it fills in Boulder. With its balanced demographics buoyed by the University of Colorado, the niche that it has carved out as the leader of aquatic facilities and programs, and the strength of the national and local participation trends in swimming, the market in which the City of Boulder's aquatic division operates is primed to become a hotbed for aquatics, both now and well into the future.

Photo 33 - Scott Carpenter Pool

CHAPTER NINE - CAPITAL IMPROVEMENTS

In order to plan and prioritize capital investments, the department applies specific guiding principles based on the City's Capital Improvement Program (CIP) guiding principles. The CIP guidelines prioritize the maintenance of current assets over the development of new facilities. The departmental CIP framework is also utilized to determine and plan CIP projects and make budget decisions that are sustainable over time. These criteria (e.g., safety compliance, commitment, efficiency, revenue) and priorities are also focused on maintaining the integrity of the current infrastructure and facilities before expanding and/or enhancing programs and facilities.

The community, through the 2014 master planning process, indicated strong support for this concept of prioritization. Even with the indications of a modest economic turnaround and the renewal of the .25 Cent Sales Tax, funding is not sufficient to take care of all aging assets and build new facilities.

The result was the development of a three-tier spending plan that acknowledges a stark fiscal reality, leading to the continuous rebalancing of priorities and their associated expenditures. Each tier reflects different assumptions about available resources.

- The **Fiscally Constrained Alternative** has plans for prioritized spending within existing budget targets. The intention of this alternative is to refocus and make the most of existing resources with the primary goal being for the department to maintain services. The actions associated with the Fiscally Constrained Alternative address deferred maintenance at existing facilities and is funded through existing tax dollars.
- The **Action Alternative** describes the extra services or capital improvement that should be undertaken when additional funding is available. This includes strategically enhancing existing programs, beginning new alternative programs, adding new positions, or making other strategic changes that would require additional operational or capital funding. In coordination with the CMO, PRAB, and City Council, BPRD would evaluate and analyze potential sources of additional revenue, including but not limited to capital bond funding, partnerships, program income, grants, and existing or new taxes.
- The **Vision Alternative** represents the complete set of services and facilities desired by the community. It is fiscally unconstrained but can help provide policy guidance by illustrating the ultimate goals of the community, and by providing a long-range look to address future needs and deficiencies. In this feasibility plan, the VISION Alternative addresses aging facilities to make improvements in operational effectiveness and the overall sustainability of the park and recreation system. Funding for vision projects would be derived from partnerships, private investments and new tax dollars.

Figure 37 on the following page summarizes the three-tier spending plan.

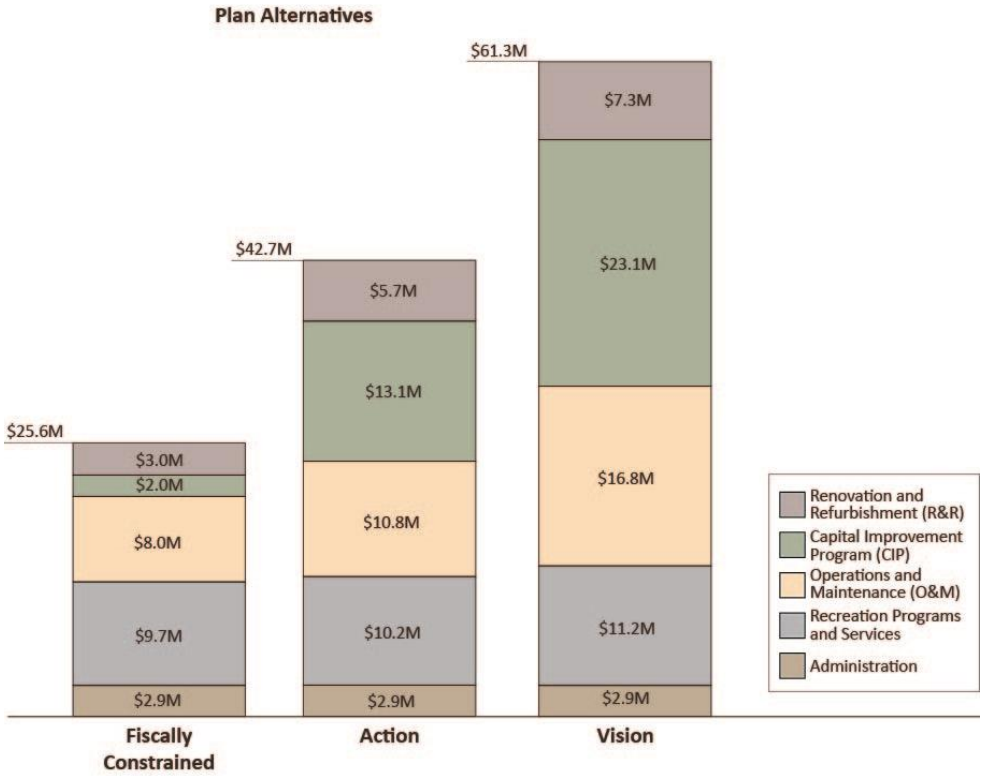


Figure 37 - Three-tier Spending Plan

9.1 FISCALLY CONSTRAINED RECOMMENDATIONS

Recommendations found in this section can be accomplished within existing department funding and focus on the maintenance of existing facilities. **Figure 38** is a summary that prioritizes improvements and the magnitude of costs for the necessary corrective actions to address the issues identified through the facility assessments. Details of the prioritization of fiscally constrained improvements can be found in Appendix D.

FISCALLY CONSTRAINED SUMMARY				
POOL	HIGH PRIORITY COST	MEDIUM PRIORITY COST	LOW PRIORITY COST	TOTAL MAGNITUDE OF COST
North Boulder Recreation Center	$189,789	$200,292	$237,847	$627,927
East Boulder Community Center	$168,095	$554,373	$272,898	$995,365
South Boulder Recreation Center	$51,400	$131,442	$207,177	$390,018
Spruce Outdoor Pool	$33,048	$219,069	$776,131	$1,028,248
Scott Carpenter Pool	$157,730	$1,781,346	$0	$1,939,075
TOTALS	$600,062	$2,886,521	$1,494,052	$4,980,635

Figure 38 - Fiscally Constrained Summary

Need Met: Creation of an aquatic facility delivery system that is efficient, sustainable, and "green".

9.2 ACTION OPTIONS

Options described in this section provide the extra services or capital improvement that could be undertaken when additional funding is available to meet need(s) with a focus on enhancements to existing facilities. The following provides a pool by pool summary of the action options recommended by the consulting team. The concepts presented are simply recommendations to address unmet needs, and any final concepts or enhancements would include community engagement similar to that of a playground renovation.

9.2.1 EAST BOULDER COMMUNITY CENTER POOL

The Consulting Team recommends the following for the East Boulder Community Center Pool **(Figure 39)**:

- Remove water slide thereby increasing the size of the pool within existing footprint for increased programming, play value, and warm water therapy.
- Replace child "watertainment" feature with industry trend features.
- Upgrade lazy river to current channel to increase programming and play value for children, teens, adults, and seniors.

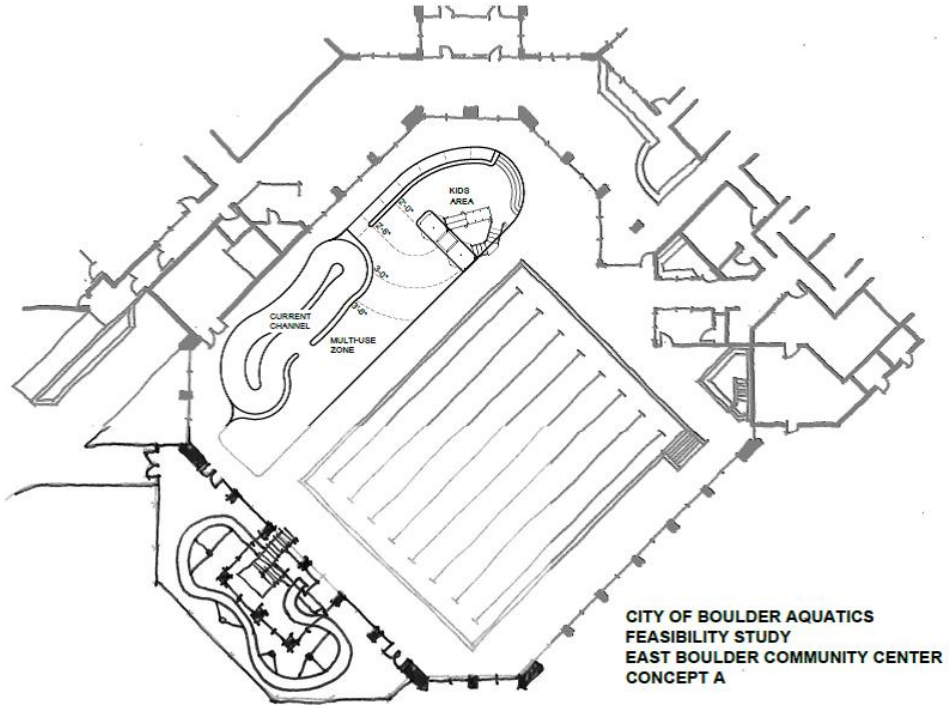


Figure 39 - Action Concept for East Boulder Aquatic Center Improvements

Needs Met:

- **Increase "watertainment" offerings**
- **Increase warm water wellness opportunities**

Magnitude of Cost = $ 2.26 Million

9.2.2 NORTH BOULDER RECREATION CENTER POOL

The Consulting Team recommends the following for the North Boulder Recreation Center Pool **(Figure 40)**:

- Replace child "watertainment" feature with industry trend features to increase play value for children and adults.
- Add "timing system" to flume slide to increase play value for teens and adults.

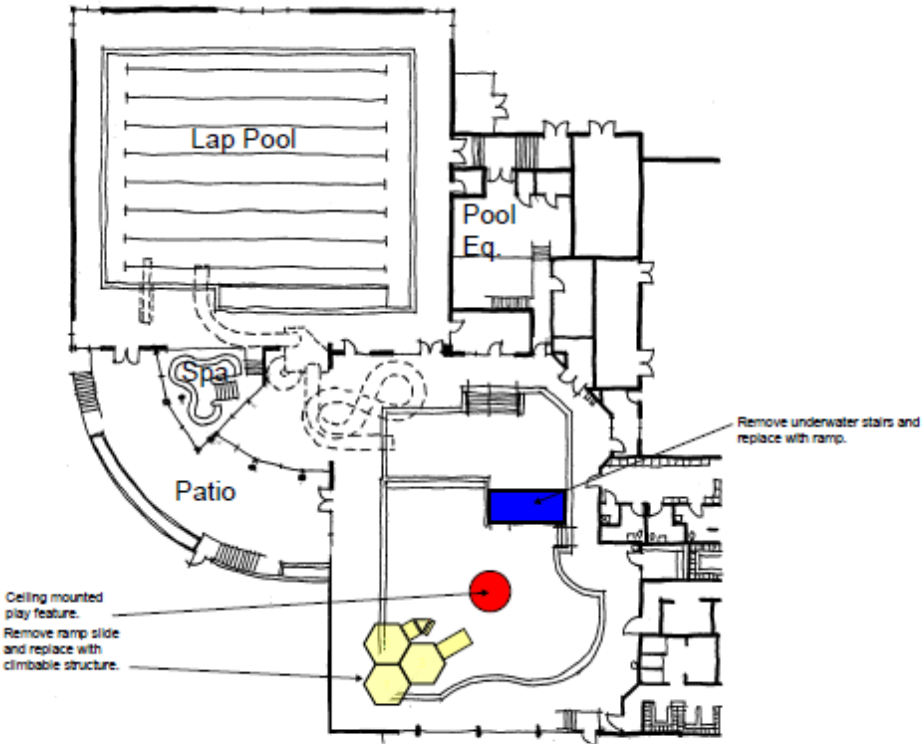


Figure 40 - Action Concept for North Boulder Aquatic Center Improvements

Need Met:

- **Increase "watertainment" offerings**

Magnitude of Cost = $ 309,000

9.2.3 SOUTH BOULDER RECREATION CENTER POOL

Given the constraints of the South Boulder Recreation Center, the facility-wide infrastructure issues, and the limitations of the facility to meet community need, it is expected that the entire facility will undergo significant renovations or replacement within the next 10-15 years. As part of the renovations or replacement of the facility, it is recommended that the aquatic facility also be considered for major renovation or replacement. In the interim, the consulting team recommends that the facility add a climbing wall at the edge of the deep end.

Need Met:

- **Increase "watertainment" offerings**

Magnitude of Cost: $60,000

Photo 34 - Aqua Climbing Wall Example

9.2.4 SPRUCE OUTDOOR POOL

Renovate the leisure pool to include a modern spray pad with interactive water features to appeal to younger children and their parents **(Figure 41)**.

Figure 41 - Action Concept for Spruce Outdoor Pool Improvements

Need Met:

- **Increase "watertainment" offerings**

Magnitude of Cost = $450,000

9.3 SUMMARY OF ACTION FUNDED OPTIONS

The following table **(Figure 42)** summarizes the costs and needs met of implementing action options for the City of Boulder's aquatic system.

Action Option Summary		
POOL	MAGNITUDE OF COST	NEEDS MET
East Boulder Community Center	$2,260,000	Watertainment Warm Water Wellness
North Boulder Recreation Center	$309,000	Watertainment
South Boulder Recreation Center	$60,000	Watertainment
Spruce Outdoor Pool	$450,000	Watertainment
Scott Carpenter Pool	NA	NA
TOTAL MAGNITUDE OF COST	$3,079,000	$0

Figure 42 - Action Option Summary

9.4 VISION OPTIONS

The fiscally constrained recommendations and action options presented in this chapter, if implemented, will allow the aquatic division to meet three of the needs identified in Chapter Eight. The primary need that will continue to be unmet is increasing open lap swimming availability. As noted in previous chapters of this report, open lap swimming is a primary need in the community that is currently not being met because of two primary reasons:

- The aquatic division has historically focused on meeting the training needs of user groups first and foremost. (Competitive event needs have only been met on a small scale as the City of Boulder's aquatic facilities were not designed as competitive venues.)
- The growth of user groups over the last five years has increased their needs for both time and lap lanes.

Simply, the overall demand for lap pools and lap lanes is outweighing the supply and creating "pressure on the system".

Additionally, there are several factors identified in the analysis and assessment chapters of this report that indicate the needs will continue into the future.

- Boulder will continue to be a community that has a strong need for lap swimming.
- The projected growth of user groups in the near future will require even more lap pool time and/or lanes.
- Scott Carpenter pool is nearing the end of its useful life.

9.4.1 THE STATE OF SCOTT CARPENTER POOL

Scott Carpenter Pool is a 50-year-old 50-meter pool located in what is currently designated as a flood plain. It was previously thought that due to its location in the flood plain that the pool could not be repaired or replaced in its existing location. FEMA, however, has proposed a new flood map of Boulder Creek, which shows that the pool and bathhouse will no longer be in the flood plain. This new map has not yet been adopted and is subject to modifications.

As noted previously, the condition assessment conducted on the 50-year-old facility indicates that the pool requires nearly $2M in repairs. To contextualize the magnitude of repair costs, the consulting team has drawn on a facility management best practice – and one utilized by the City of Boulder – known as Facility Condition Index (FCI). The FCI is an industry standard that rates the condition of a facility or asset at a particular point in time. The FCI utilizes a numeric rating system to rank the assets. The FCI is determined by dividing the projected costs of repairs by the estimated replacement value (ERV) of that asset. The FCI is a ratio that serves as an integral element of identifying work priorities and graphic representation of the numeric rating system as shown below in **Figure 43**:

Figure 43 - Graphic of Facility Condition Index Model

When applying the above methodology, the FCI (repairs divided by replacement value) for Scott Carpenter Pool is .26. This indicates that the pool is in poor condition and it is recommended that the City consider the replacement of Scott Carpenter Pool.

Taking into consideration the state of Scott Carpenter Pool and the unmet needs of the Boulder residents, the consulting team presents five vision options for the replacement of Scott Carpenter Pool with the following assumptions:

- Cost estimates are based on construction occurring in 2020.
- Cost estimates for options 3, 4 and 5 are based on the development of a new facility on raw land at Valmont Park where significant infrastructure investment would be required.
- Cost estimates for options 3, 4, and 5 are based on the development of facility as a stand-alone project.
- Magnitude of cost estimates includes all design, construction, furniture fixture and equipment and 10% contingency.

9.5 VISION OPTION 1

The Consulting Team offers the following Vision Option 1 for the replacement of Scott Carpenter Pool **(Figure 44)**:

- Construct a new 50-meter x 25-yard pool that would allow the City to slightly increase outdoor lap swimming.
- Construct a new bathhouse

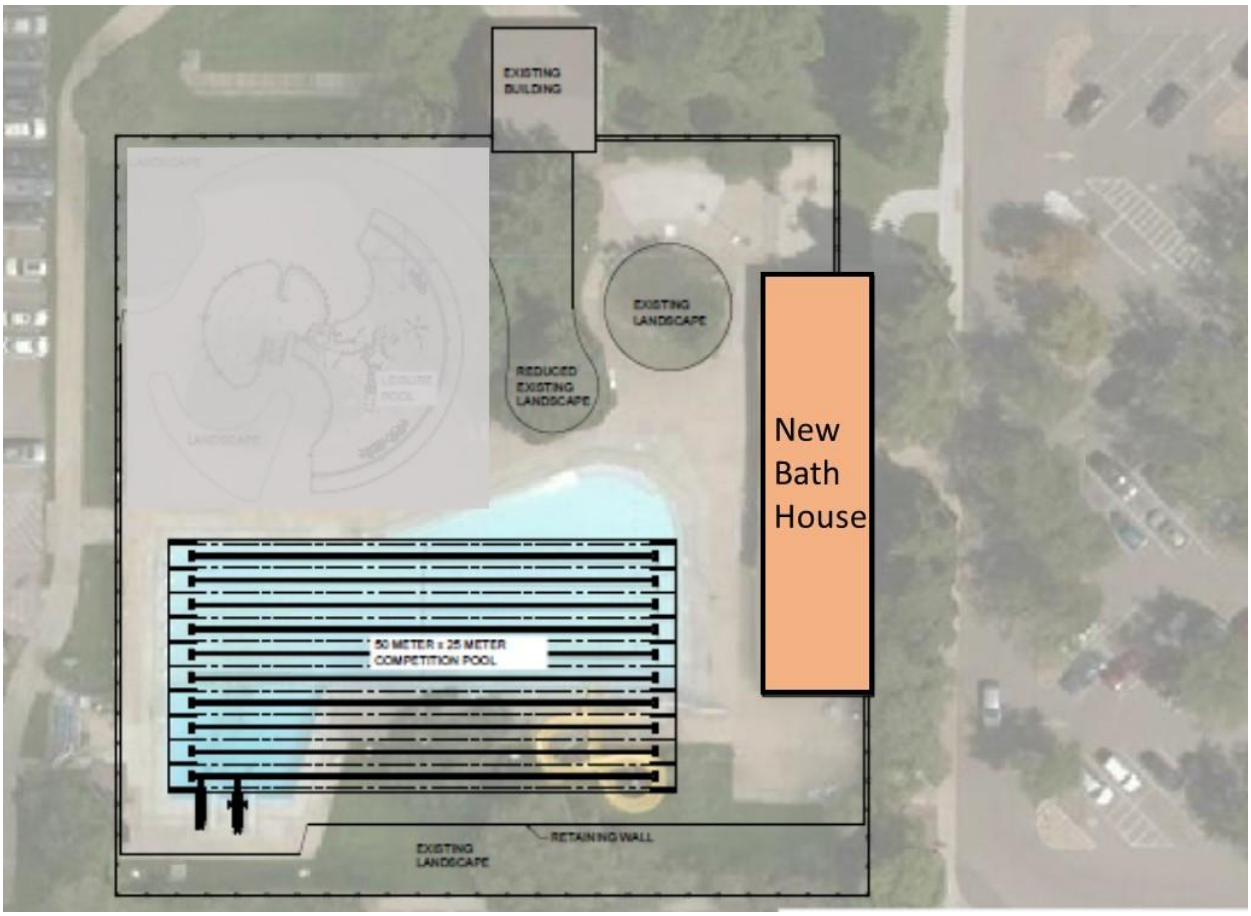


Figure 44 - Vision Option 1 Concept for Scott Carpenter Pool

Needs Met: Minimally meets need for increased open lap swimming as this option replaces the current 6 lane pool with a 10 lane pool.

Magnitude of Cost = $7.8 Million

9.6 VISION OPTION 2

The Consulting Team offers the following Vision Option 2 for the replacement of Scott Carpenter Pool **(Figure 45)**:

- Construct a new 50-meter x 25-yard pool that would allow the City to slightly increase outdoor lap swimming.
- Construct a new, state of the art, outdoor family aquatic center to meet the community need of outdoor recreational swim experiences. Amenities can include sun-deck, zero-depth entry, zip-lines, water slides, climbing walls, shallow water play features, cabanas, etc.
- Construct a new bathhouse and concession facility.

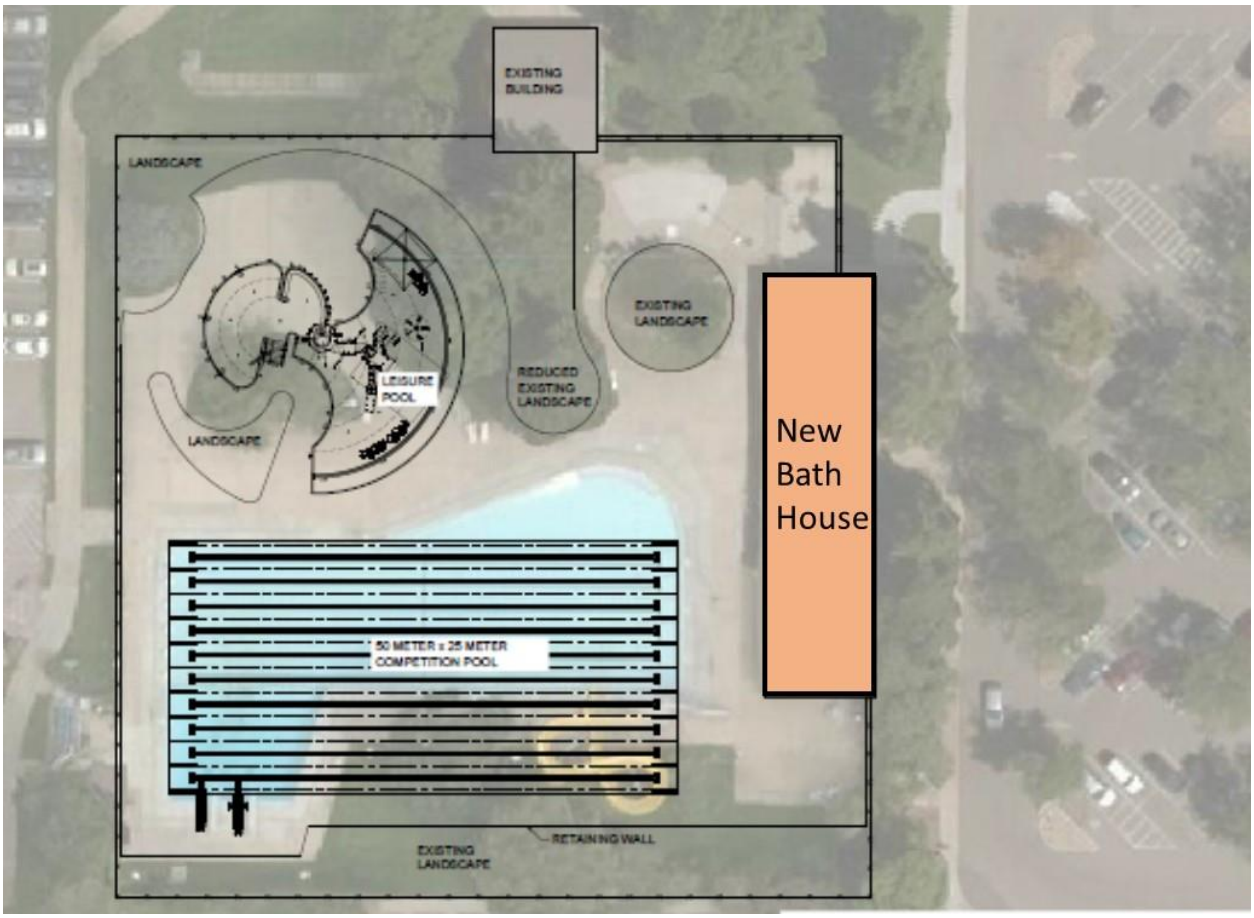


Figure 45 - Vision Option 2 Concept for Scott Carpenter Pool

Needs Met:

- **Minimally meets increased need for open lap swimming as this option replaces the current 6 lane pool with a 10 lane pool.**
- **Increase "watertainment" offerings in new outdoor pool.**

Magnitude of Cost = $13.1 Million.

9.7 VISION OPTION 3

The Consulting Team offers the following Vision Option 3 for the replacement of Scott Carpenter Pool **(Figures 46 and 47)**:

- Replace current 50-meter pool with a 3,000-6,000 sq. ft. enclosed sprayground, thereby providing an outdoor recreation aquatic experience for residents.
- Replace current bathhouse with restroom facility.
- Construct a 50-meter indoor aquatic training center at Valmont Park with an outdoor aquatic component. Training facility would consist of 10 lane, 50 meter Olympic size swimming pool with 1 and 3 meter diving boards. This action would shift competitive user groups to the new facility and free up time at East, North, and South for open lap swimming while providing for outdoor "recreation" swimming.

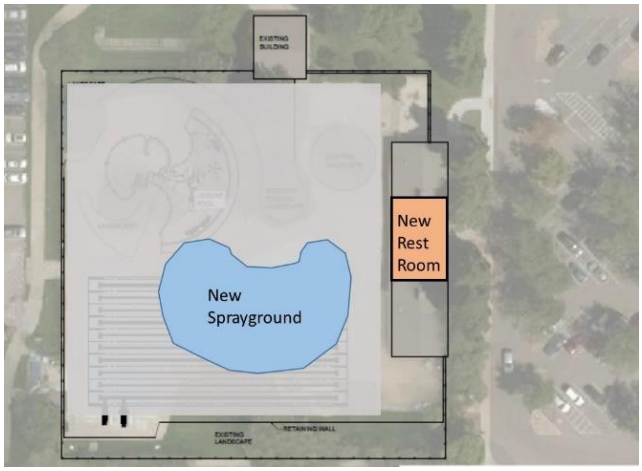


Figure 46 - Sprayground Concept for Scott Carpenter Pool

Figure 47 - Indoor Aquatic Training Facility footprint at Valmont Park

Needs Met:

- **Increase open lap swimming availability**
- **Provide indoor aquatic training facility that meets competitive needs for practices**

Magnitude of Cost = $38.8 Million

9.8 VISION OPTION 4

The Consulting Team offers the following Vision Option 4 for the replacement of Scott Carpenter Pool **(Figure 48)**:

- Replace existing 50-meter pool with a 3,000-6,000 sq. ft. enclosed sprayground, thereby providing an outdoor recreational aquatic experience for residents.
- Replace current bathhouse with restroom facility.
- Construct a 50-meter indoor aquatic competitive venue (large spectator seating area for 800, a weight and fitness area, team locker rooms, concessions and a training/assessment/therapy area) at Valmont Park with outdoor aquatic component. This action would shift competitive user groups to the new facility; provide a venue for aquatic competitions in Boulder; and free up time at East, North, and South for open lap swimming while providing for outdoor "recreation" swimming.

Photo 35 - Example of Indoor Aquatic Competitive Facility at Valmont Park

Figure 48 - Indoor Competitive Facility Footprint at Valmont Park

Needs Met:

- **Increase open lap swimming availability**
- **Provides competitive aquatic facilities that meets needs for both training and competitive events**

Magnitude of Cost = $45.6 Million

9.9 VISION OPTION 5

The Consulting Team offers the following Vision Option 5 for the replacement of Scott Carpenter Pool:

- Replace existing 50-meter pool and bathhouse with a new, state of the art, outdoor family aquatic center to meet the community need of outdoor recreational swim experiences. Amenities can include sun-deck, zero-depth entry, zip-lines, water slides, climbing walls, shallow water play features, cabanas, etc., and new bathhouse/concession facility.
- Construct a 50-meter indoor aquatic training center at Valmont Park with an outdoor aquatic component. This action would shift competitive user groups to the new facility and free up time at East, North, and South for open lap swimming while providing for outdoor "recreational" swimming. This action would shift competitive user groups to the new facility; provide a venue for aquatic competitions in Boulder; and free up time at East, North, and South for open lap swimming while providing for outdoor "recreation" swimming.

Photo 36 - Example of Outdoor Family Aquatic Center at Scott Carpenter Park

Needs Met:

- **Increase open lap swimming availability**
- **Provide competitive aquatic facilities**
- **Increase watertainment through new outdoor pool**

Magnitude of Cost = total $43.8 Million

Photo 367 - Example of Indoor Aquatic Training Facility at Valmont Park

9.10 SUMMARY OF VISION OPTIONS

Figure 49 summarizes the vision options for the replacement of the 50-meter pool at Scott Carpenter Park.

Vision Option Summary					
	Option #1	Option #2	Option #3	Option #4	Option #5
IMPROVEMENT	50M x 25 yd Pool at Scott Carpenter	50M x 25 yd Pool at Scott Carpenter Family Outdoor Aquatic Center at Scott Carpenter	Indoor Aquatic Training Center at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Competitive Venue at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Training Center at Valmont Park Family Outdoor Aquatic Center at Scott Carpenter
DEMOLITION OF SCOTT CARPENTER	$2.2M	$2.2M	$2.2M	$2.2M	$2.2M
NEW BATHHOUSE AT SCOTT CARPENTER	$1.5M	$1.5M	NA	NA	$1.5M
NEW 50Mx25 yd POOL AT SCOTT CARPENTER	$4.1M	$4.1M	NA	NA	NA
OUTDOOR FAMILY AQUATIC CENTER AT SCOTT CARPENTER	NA	$5.3M	NA	NA	$5.3M
SPRAYGROUND AND RESTROOMS AT SCOTT CARPENTER	NA	NA	$1.5M	$1.5M	NA
NEW INDOOR TRAINING FACILITY AT VALMONT PARK	NA	NA	$34.8M	NA	$34.8M
NEW COMPETITIVE AQUATIC VENUE AT VALMONT PARK	NA	NA	NA	$41.9M	NA
TOTAL MAGNITUDE OF COST	$7.8M	$13.1M	$38.8M	$45.6M	$43.8M
NEEDS MET	Minimal Lap Swimming	Minimal Lap Swimming Watertainment	Lap Swimming Training Facilities	Lap Swimming Competitive Facilities	Lap Swimming Training Facilities Watertainment

Figure 49 - Vision Option Summary

CHAPTER TEN - VISION OPTIONS PRO FORMA

As part of the process of developing the feasibility study, input from the community helped to establish priorities for new aquatic facilities within the community. In response to the question, "What additional programs/amenities would you like to see offered", respondents were given the opportunity to respond to all of the additional amenities and programs that they would like to see included as part of the Boulder aquatic system. The top two responses related to new aquatic facility development were:

- Indoor Competitive Aquatic Center
- Outdoor Family Aquatic Center

10.1 INDOOR COMPETITIVE AQUATIC CENTER AT VALMONT PARK

10.1.1 FINANCIAL ASSUMPTIONS AND PROJECTIONS – INDOOR COMPETITIVE AQUATIC CENTER

The consulting team utilized the following set of high-level assumptions for the development of an indoor competitive aquatic center at Valmont Park as shown in Options 3, 4, and 5 of Chapter 9 to create financial projections:

- Rental income will equal approximately $500,000 – the primary source of revenue for the venue. This analysis does not include system impacts with the transfer of substantial rental activity to a new facility.
- Primary functions of the facility will be:
    - User groups rentals
    - Open lap swimming
- Two fulltime employees will be required for the operation of the facility (Facility Operations and Maintenance).
- Part-time staffing (desk attendants, lifeguards, maintenance attendants, event staffing, etc.) will account for 70% of the nearly $500,000 personnel budget needed to operate the facility.
- 50% of concession revenue will be paid out to a third party vendor.
- Operational partnerships were not considered as part of the pro forma development.
- An endowment fund equaling 10% of the operational budget will be created to offset future capital expenditures.

From these assumptions, PROS Consulting projects that a competitive aquatic center at Valmont Park will operate at a 55% cost recovery and require a subsidy in the form of partnership agreements and/or general fund subsidy to offset the operating loss ($566,000).

PLEASE NOTE: Changes to the membership structure of the Boulder Recreation Center system will need to occur if a new facilities are constructed at Scott Carpenter and Valmont Parks. It is highly recommended that a full financial analysis of the Recreation and Aquatic Facility system be conducted in conjunction with the 2015 Recreation Center Feasibility study.

BASIC PRO FORMA

The following table **(Figure 50)** summarizes the financial operations for the first year of a competitive aquatic center at Valmont Park.

Pro Forma Revenues & Expenditures
VALMONT PARK AQUATIC FACILITY
BASELINE: REVENUES AND EXPENDITURES

SERVICE TITLE	Revenues	Expenditures	Revenues Over (Under) Expenditures	Cost Recovery - Percent
Rentals and User Fees	$540,000.00	$1,171,300.50	($631,300.50)	46%
Concessions	$150,000.00	$85,500.00	$64,500.00	175%
Total	$690,000.00	$1,256,800.50	($566,800.50)	55%

Figure 50 - Valmont Park Aquatic Facility Baseline Pro Forma

REVENUE AND EXPENDITURE SUMMARY

The following tables **(Figures 51and 52)** summarize the revenue and expenditures for the operations of an indoor competitive aquatic center at Valmont Park.

RENTAL AND USER FEES

Pro Forma Revenues & Expenditures
VALMONT PARK AQUATIC FACILITY
RENTAL AND USER FEES

REVENUES		
TOTAL REVENUES		**$540,000.00**
EXPENDITURES		**BUDGET**
PERSONNEL SERVICES		
Total	**Personnel Servic**	**$499,068.64**
SUPPLIES		
Total	**Supplies**	**$97,250.00**
OTHER SERVICES & CHARGES		
Total	**Other Services**	**$468,500.00**
CAPITAL REPLACEMENT FUND		
Total	**Transfers**	**$106,481.86**
TOTAL EXPENSES		**$1,171,300.50**
NET REVENUE/(LOSS)		**($631,300.50)**
cost recovery**		46.1%

Figure 51 - Revenue and Expenditures: Rental and User Fees

CONCESSIONS

Pro Forma Revenues & Expenditures VALMONT PARK AQUATIC FACILITY CONCESSIONS		
REVENUES		
TOTAL REVENUES		**$150,000.00**
EXPENDITURES		
SUPPLIES		
Total	**Supplies**	**$75,000.00**
OTHER SERVICES & CHARGES		
Total	**Other Services**	**$10,500.00**
NET REVENUE/(LOSS)		**$64,500.00**
cost recovery**		175.4%

Figure 52 - Revenue and Expenditures: Concessions

10.2 OUTDOOR FAMILTY AQUATIC CENTER AT SCOTT CARPENTER PARK

10.2.1 FINANCIAL ASSUMPTIONS AND PROJECTIONS – OUTDOOR FAMILY AQUATIC CENTER

The consulting team utilized the following set of high-level assumptions for the development of an outdoor family aquatic center at Scott Carpenter Park as shown in Option 5 of Chapter 9 to create financial projections:

- Primary source of revenue will be season passes and daily admissions to equal approximately $300,000.
- Two part-time managers will be required for the operation of the facility.
- The summer swim season will be 101 days (Memorial Day weekend through Labor Day weekend).
- Pool will operate approximately 70 hours per week.
- Primary functions of the aquatic facility will be:
    - Informal Recreation Swimming
    - Special Events
    - After Hour Rentals

- All formal aquatic programming, including swim lessons, water exercise classes, swim teams, and specialty programs will be conducted at the other aquatic facilities.
- Operational partnerships were not considered as part of the pro forma development.
- An endowment fund equaling 10% of the operational budget will be created to offset future capital expenditures.

From these assumptions, PROS Consulting projects that an outdoor family aquatic center at Scott Carpenter Park will operate at an 93% cost recovery and require a subsidy in the form of partnership agreements and/or general fund subsidy to offset the operating loss ($27,000).

PLEASE NOTE: Changes to the membership structure of the Boulder Recreation Center system will need to occur if a new facilities are constructed at Scott Carpenter and Valmont Parks. It is highly recommended that a full financial analysis of the Recreation and Aquatic Facility system be conducted in conjunction with the 2015 Recreation Center Feasibility study.

BASIC PRO FORMA

The following table **(Figure 53)** summarizes the financial operations for the first year of an outdoor family aquatic center at Scott Carpenter Park.

Pro Forma Revenues & Expenditures

SCOTT CARPENTER FAMILY AQUATIC CENTER

BASELINE: REVENUES AND EXPENDITURES

SERVICE TITLE	Revenues	Expenditures	Revenues Over (Under) Expenditures	Cost Recovery - Percent
Passes	$298,125.00	$343,791.91	($45,666.91)	87%
Special Events	$20,500.00	$14,535.50	$5,964.50	141%
Concessions	$30,000.00	$17,100.00	$12,900.00	175%
Total	$348,625.00	$375,427.41	($26,802.41)	93%

Figure 53 - Scott Carpenter Family Aquatic Center Baseline Pro Forma

REVENUE AND EXPENDITURE SUMMARY

The following tables **(Figures 54-56)** summarize the revenue and expenditures for the operations of an outdoor family aquatic center at Scott Carpenter Park.

PASSES

Pro Forma Revenues & Expenditures SCOTT CARPENTER FAMILY AQUATIC CENTER PASSES		
ACCOUNT TITLE		BUDGET
REVENUES		
TOTAL REVENUES		**$298,125.00**
EXPENDITURES		BUDGET
PERSONNEL SERVICES		
Total	**Personnel Servic**	**$136,538.10**
SUPPLIES		
Total	**Supplies**	**$41,250.00**
OTHER SERVICES & CHARGES		
Total	**Other Services**	**$134,750.00**
TRANSFERS		
Total	**Transfers**	**$31,253.81**
TOTAL EXPENSES		**$343,791.91**
NET REVENUE/(LOSS)		**($45,666.91)**
cost recovery**		86.7%

Figure 54 - Revenue and Expenditures: Passes

SPECIAL EVENTS

Pro Forma Revenues & Expenditures SCOTT CARPENTER FAMILY AQUATIC CENTER SPECIAL EVENTS		
REVENUES		
TOTAL REVENUES		**$20,500.00**
EXPENDITURES		
PERSONNEL SERVICES		
Total	**Personnel Service**	**$3,235.50**
SUPPLIES		
Total	**Supplies**	**$10,000.00**
OTHER SERVICES & CHARGES		
Total	**Other Services**	**$1,300.00**
TOTAL EXPENSES		**$14,535.50**
NET REVENUE/(LOSS)		**$5,964.50**
cost recovery**		141.0%

Figure 55 - Revenue and Expenditures: Special Events

CONCESSIONS

Pro Forma Revenues & Expenditures SCOTT CARPENTER FAMILY AQUATIC CENTER CONCESSIONS		
REVENUES		
TOTAL REVENUES		**$30,000.00**
EXPENDITURES		
SUPPLIES		
Total	**Supplies**	**$15,000.00**
OTHER SERVICES & CHARGES		
Total	**Other Services**	**$2,100.00**
NET REVENUE/(LOSS)		**$12,900.00**
cost recovery**		175.4%

Figure 56 - Revenue and Expenditures: Concessions

10.3 FINANCIAL SUMMARY

Figure 57 summarizes the financial operations of the construction of an indoor competitive aquatic center at Valmont Park and the outdoor family aquatic center at Scott Carpenter Park.

PLEASE NOTE: Changes to the membership structure of the Boulder Recreation Center system will need to occur if a new facilities are constructed at Scott Carpenter and Valmont Parks. It is highly recommended that a full financial analysis of the Recreation and Aquatic Facility system be conducted in conjunction with the 2015 Recreation Center Feasibility study.

Pro Forma Revenues & Expenditures

BOULDER NEW AQUATIC FACILITY DEVELOPMENT

BASELINE: REVENUES AND EXPENDITURES

SERVICE TITLE	Revenues	Expenditures	Revenues Over (Under) Expenditures	Cost Recovery - Percent
Rentals and User Fees - Valmont	$540,000.00	$1,171,300.50	($631,300.50)	46%
Concessions - Valmont	$150,000.00	$85,500.00	$64,500.00	175%
Passes - Scott Carpenter	$298,125.00	$343,791.91	($45,666.91)	87%
Special Events - Scott Carpenter	$20,500.00	$14,535.50	$5,964.50	141%
Concessions - Scott Carpenter	$30,000.00	$17,100.00	$12,900.00	175%
Total	$1,038,625.00	$1,632,227.91	($593,602.91)	64%

Figure 57 - Boulder Aquatic Facility Development Baseline Pro Forma

CHAPTER ELEVEN - CONCLUSION

The overall vision and mission of the Boulder Aquatic Division has evolved over the past decade as the city continues to develop as a community comprised of healthy-minded, physically active citizens who love swimming. This evolution creates challenges and opportunities for the aquatic division to operate effectively and efficiently while renovating and developing world-class facilities.

Following the assessment of the Boulder Aquatic Division operations, the PROS Consulting Team identified a variety of opportunities to support the development of the *Aquatic Feasibility Plan*. These recommendations for the operational, programming, facility, and financial recommendation elements will guide decision-making for the next five to ten years.

11.1 OPERATIONAL ASSESSMENT KEY RECOMMENDATIONS

11.1.1 ORGANIZATIONAL FUNCTIONALITY KEY RECOMMENDATIONS

- Reclassification of Lead Pool Manager
- Reclassification of Program Coordinator

11.1.2 LIFEGUARD MANAGEMENT KEY RECOMMENDATIONS

- Develop aquatic facility safety check list
- Enforce and reinforce lifeguard responsibilities
- Manage lifeguard vigilance
- Develop and implement a lifeguard in-service program
- Implement aquatic personal protective equipment standards
- Develop and implement a non-swimmer protection policy
- Create safety guidelines for patrons with special needs

11.1.3 LAP POOL UTILIZATION KEY RECOMMENDATIONS

- Evaluate additional operating hours
- Develop formal allocation guidelines
- Develop pricing strategies

11.1.4 PROGRAMMING KEY RECOMMENDATIONS

- Expand programs and services in the areas of greatest need
- Adopt formalized aquatic program standards

11.2 CAPITAL IMPROVEMENT RECOMMENDATIONS

11.2.1 FISCALLY CONSTRAINED RECOMMENDATIONS

The recommendations associated with the Fiscally Constrained Alternative address deferred maintenance at existing facilities and is funded through existing tax dollars. **Figure 58** is a summary that prioritizes improvements and the magnitude of costs for the necessary corrective actions to address the issues identified through the facility assessments.

FISCALLY CONSTRAINED SUMMARY				
POOL	HIGH PRIORITY COST	MEDIUM PRIORITY COST	LOW PRIORITY COST	TOTAL MAGNITUDE OF COST
North Boulder Recreation Center	$189,789	$200,292	$237,847	$627,927
East Boulder Community Center	$168,095	$554,373	$272,898	$995,365
South Boulder Recreation Center	$51,400	$131,442	$207,177	$390,018
Spruce Outdoor Pool	$33,048	$219,069	$776,131	$1,028,248
Scott Carpenter Pool	$157,730	$1,781,346	$0	$1,939,075
TOTALS	$600,062	$2,886,521	$1,494,052	$4,980,635

Figure 58 - Fiscally Constrained Recommendations

NEED MET: Creation of an aquatic facility delivery system that is efficient, sustainable, and "green".

11.2.2 ACTION OPTIONS

Options described in this section provide the extra services or capital improvement that could be undertaken when additional funding is available to meet need(s) with a focus on enhancements to existing facilities. **Figure 59** summarizes the costs and needs met of implementing action options for the City of Boulder's aquatic system.

Action Option Summary		
POOL	MAGNITUDE OF COST	NEEDS MET
East Boulder Community Center	$2,260,000	Watertainment Warm Water Wellness
North Boulder Recreation Center	$309,000	Watertainment
South Boulder Recreation Center	$60,000	Watertainment
Spruce Outdoor Pool	$450,000	Watertainment
Scott Carpenter Pool	NA	NA
TOTAL MAGNITUDE OF COST	$3,079,000	$0

Figure 59 - Action Option Summary

11.2.3 VISION OPTIONS

The fiscally constrained recommendations and action option, if implemented, will allow the aquatic division to meet three of the identified needs of the community. The primary need that will continue to be unmet is increasing open lap swimming availability. Simply, the overall demand for lap pools and lap lanes is outweighing the supply and creating "pressure on the system".

Additionally, there are several factors identified in the analysis and assessment chapters of this report that indicate the needs will continue into the future.

- Boulder will continue to be a community that has a strong need for lap swimming.
- The projected growth of user groups in the near future will require even more lap pool time and/or lanes.
- Scott Carpenter pool is nearing the end of its useful life.

Taking into consideration the state of Scott Carpenter Pool and the unmet needs of the Boulder residents, the consulting team presents five vision options for the replacement of Scott Carpenter Pool. **Figure 60**

summarizes the vision options for the replacement of the 50-meter pool at Scott Carpenter Park with the following assumptions:

- Cost estimates are based on construction occurring in 2020.
- Cost estimates for options 3, 4 and 5 are based on the development of a new facility on raw land at Valmont Park where significant infrastructure investment would be required.
- Cost estimates for options 3, 4, and 5 are based on the development of facility as a stand-alone project.
- Magnitude of cost estimates includes all design, construction, furniture, fixtures, and equipment and 10% contingency.

Vision Option Summary					
	Option #1	Option #2	Option #3	Option #4	Option #5
IMPROVEMENT	50M x 25 yd Pool at Scott Carpenter	50M x 25 yd Pool at Scott Carpenter Family Outdoor Aquatic Center at Scott Carpenter	Indoor Aquatic Training Center at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Competitive Venue at Valmont Park Sprayground at Scott Carpenter Park	Indoor Aquatic Training Center at Valmont Park Family Outdoor Aquatic Center at Scott Carpenter
DEMOLITION OF SCOTT CARPENTER	$2.2M	$2.2M	$2.2M	$2.2M	$2.2M
NEW BATHHOUSE AT SCOTT CARPENTER	$1.5M	$1.5M	NA	NA	$1.5M
NEW 50Mx25 yd POOL AT SCOTT CARPENTER	$4.1M	$4.1M	NA	NA	NA
OUTDOOR FAMILY AQUATIC CENTER AT SCOTT CARPENTER	NA	$5.3M	NA	NA	$5.3M
SPRAYGROUND AND RESTROOMS AT SCOTT CARPENTER	NA	NA	$1.5M	$1.5M	NA
NEW INDOOR TRAINING FACILITY AT VALMONT PARK	NA	NA	$34.8M	NA	$34.8M
NEW COMPETITIVE AQUATIC VENUE AT VALMONT PARK	NA	NA	NA	$41.9M	NA
TOTAL MAGNITUDE OF COST	$7.8M	$13.1M	$38.8M	$45.6M	$43.8M
NEEDS MET	Minimal Lap Swimming	Minimal Lap Swimming Watertainment	Lap Swimming Training Facilities	Lap Swimming Competitive Facilities	Lap Swimming Training Facilities Watertainment

Figure 60 - Vision Option Summary

APPENDIX A - FORMAL ALLOCATION GUIDELINES

PRIORITY USE SYSTEM

Following is a list of user types in priority order. This priority list needs to be used as a guide in allocating pool space, while still ensuring a balance of programming is offered for the residents of Boulder.

LANE ALLOCATION CONSIDERATIONS

Groups in good financial standing with the City of Boulder will be allocated pool time, utilizing the Priority Use System as a framework. While this system provides a framework for allocation, the City of Boulder Aquatics staff will need to distribute pool space and times with the goal of ensuring that a balance of activities and opportunities are available to residents of varying aquatic interest. Users may not monopolize desirable pool time so as to jeopardize a variety of programming opportunities being offered to the residents of Boulder. If competing requests for allocation takes place, the following factors will be considered in allocation of lanes:

- Percentage of residents vs. nonresidents
- Size of program
- Total number of Boulder residents in the organization/program
- Type of program
- Consistent use of previous allocation
- Adherence to permit requirements and facility rules and regulations during previous commitments

Once pool permits have been issued, additional pool time will be permitted only if space is available during the time requested. At least a two-week advance written notice is required if an organization wishes to cancel the permitted lane. If the canceled permitted lanes are not needed for city programs, staff will notify other existing permit holders via email of the lane availability, and allocate the available pool space to the first respondent. All permitting of pool space will be approved in writing.

To ensure safe and quality workouts, organizations are expected to limit the number of participants entering the pools in relationship to the number of lanes they are permitted.

NONPROFIT STATUS

In order to be classified as a nonprofit organization, verification demonstrating good standing with the State of Colorado is required by June 30th of each year for returning organizations and at the time of permit application submission for new applicants.

RESIDENT ORGANIZATIONS

In order to qualify as a resident organization, at least 50% of an organization's participants using the pools must be Boulder residents. Participants are defined as "unduplicated" (# of different people). Organizations with both adult and youth programs are classified separately by program.

Organizations that have not applied for a permit at the pools within the last 12 months will be required to submit organization program rosters with full home addresses of participants (business addresses, PO boxes, etc. are not acceptable) to the pools at the time the permit application is submitted. Newly formed organizations must submit their roster to the pools prior to the first day of use. This roster will be compared to the information submitted with the permit application and user category classification adjustments will be made as warranted.

It is recommended that the aquatic division track not just residency but also total participation.

CLASSIFICATION IN PRIORITY USE CATEGORIES

For determining placement in the Priority Use Categories, participation levels during the 12-month period prior to each seasonal application deadline are used. If 50% or more participants are residents, the organization will be categorized as a resident organization (youth and adult programs calculated separately) for the upcoming permit period.

APPLICATION PROCESS

Applications for pool permits will be accepted twice per year for priority processing. Application/permit dates are approximate and may be adjusted based on school calendars and/or staff schedules. Permitting periods may vary each year in order to adhere to the Boulder Valley School District's school-year calendar, and/or pool maintenance schedules.

Hours requested on the permit application are to include warm up, stretching, and cool down time. Permits requested after the application deadline for each permitting period will be issued on a space availability basis.

CANCELLATIONS

Permitted groups cannot exchange or sublet their allocated pool space to any other group and will be responsible for paying for all lanes permitted.

If non-weather related cancellations are requested by a group, credit will only be given with two or more weeks advanced written notification to aquatic staff.

PERMIT GROUP ATTENDANCE

Member information for each organization will be entered into the City's recreation software system and each person will be issued an Activity Passport card to be swiped upon entering the pools. A fee for the Activity Passport cards will be charged for participants. In the event an organization has a new participant that has not been added to the organization's roster, they will be asked to sign-in upon entry to the pools and be counted as a nonresident unless proof of Boulder residency is provided. New members will be given a grace period in which to obtain an Activity Passport card. Members that continually participate with an organization without obtaining an Activity Passport card may be denied access until a card is obtained. Organizations will be required to provide staff with information on new and deleted members on at least a monthly basis in order to update the automated system.

RESIDENCY CLASSIFICATION FOR BILLING PURPOSES

Organizations will be classified as resident or nonresident on a quarterly basis. At the conclusion of each calendar quarter, staff will determine the number of resident and nonresident participants from each organization (youth and adult programs calculated separately). If the percentage of resident participants during the concluding quarter is 50% or greater, the organization will be classified as a resident organization for that quarter and billed accordingly. If the percentage of resident participants during the concluding quarter is less than 50%, the organization will be classified as a nonresident organization for that quarter and be billed accordingly.

PAYMENT

Organizations will be billed quarterly. Payment of invoices will be due upon receipt and is considered delinquent if not received within thirty days of invoice date. Permits may be canceled with lanes reallocated and facility access denied if payment is not received on time. Late payments may also result in loss of priority standing for the following permitting season and a requirement for advance payment may be instituted.

TOURNAMENT RENTALS

Organizations can apply for use of the pools for swim meets, although the City is limited in the number of meets that can be held each year pursuant to the operating conditions for the facility. Fees are charged on a per-hour basis and only include use of the lap pools. Staff will provide timely notice to permit groups regarding permit changes due to meets schedules.

PROHIBITED USES

Permits will not be issued to organizations that compete with City programs. Private instruction requires authorization by the City of Boulder Aquatic Supervisor.

APPENDIX B – LIFEGUARD MANAGEMENT BEST PRACTICES

DEVELOP AQUATIC FACILITY SAFETY CHECK LIST

RECOMMENDED GUARD STANDARDS:

- Position guard staff in an area where there is the least amount of glare; staff must respond to the day's changing weather conditions and position of the sun.
- Guards need to be positioned in an elevated chair or stand by the pool's edge; mobility is okay, but limit walking as it hinders scanning.
- Never guard from any standard height chair; this furniture needs to be banned on the deck as they impair proper guarding.
- Swimming lessons must have lifeguard(s) guarding the pool in addition to lesson instructor(s).

LIFE SAVING EQUIPMENT:

- Tube buoys straps worn and gathered need to always be with the guard. Keep them in hand when actively guarding.
- Blood-borne pathogen equipment such as a mask and gloves need to always be with the guard (not elsewhere).
- Spinal management equipment must be readily accessible; head pad must be secured to board.
- Statutory equipment - shepherd's pole, ring buoy, emergency summons – must accompany the lifeguard.

SWIMMING POOL:

- Slope change line needs to be on the bottom of the pool to alert swimmers and guards. They also need to be at the beginning of areas with dramatic depth changes.
- Rope and float safety line must be on the surface. The shallow side of slope change line is to be 5 feet maximum depth.
- Check pool drain covers regularly for a secure fit; both pull and push to ensure connection.

DECK AREA:

- Standing water is the number one cause of pool injuries. Squeegee as needed, resurface as necessary.
- Depth markers must be visible from in the water (on the pool or building wall) and from on the deck, sides, and ends; there must be a maximum of 2' depth differential and 25' linear distance between markers.
- Proper anchoring of pool ladders is critical; if loose, they contribute to slip and fall incidents and can cause entrapment between the ladder and the pool wall, above or below water.
- There must be GFCI protection for all electrical circuits on deck and in service areas.
- Use off-deck storage as much as possible; any on-deck storage cannot impede movement around the pool or create potential danger for pool patrons.

OPERATIONAL PROTOCOLS:

- Emergency Action Plan must be posted where accessible to staff. Staff needs to commit these plans to memory.
- In service training is to be regular and documented (names, date, length, topics, leaders, etc.)
- Lifeguard credentials are to be on file and current; list of those expiring within the next month must be kept and duly noted to staff.

- Observation reports of guards must be documented by staff and/or patrons.

ENFORCE AND REINFORCE LIFEGUARD RESPONSIBILITIES

It is critical that the aquatic safety rules be constantly and consistently reviewed with staff. This needs to be done in addition to in-service trainings. These basic safety rules must be incorporated at all locations:

1. Each lifeguard is to have a rescue tube (buoy) with them at all times.
2. If the swimming facility has deep water of more than 5 feet in depth, a rope and float line must cross the pool. It is to be placed on the shallow side of the change in slope between the shallow and deep portions of the pool. If there is a natural or constant slope, it needs to be placed where the water becomes 5 feet deep. The distinction of separate areas must exist in both pools and open water areas.
3. If deep water (over 5 feet) exists, the lifeguard is to perform deep-water testing of all swimmers, with no exceptions. The swimmer must demonstrate at least 50 feet of acceptable crawl stroke followed immediately by 60 seconds of treading water. This test is to be competed in deep water. Qualified swimmers for deep water are to be designated by the use of wristbands, swimming caps, marking of the shoulder with waterproof marker, or some other form of identification.
4. Each lifeguard station or position needs to be assigned a specific area or zone of responsibility. In a pool or open-water area with multiple zones, it is critical that every part of every zone, and especially the seams between the zones, be both highly visible and readily accessible to lifeguards.
    - A chart depicting each lifeguard's zone needs to be posted where they can regularly review their area of responsibility.
    - A lifeguard must employ the practice of completely and thoroughly scanning their entire area of responsibility every 10 seconds; eye movement is to be maintained to provide that coverage frequency.
    - Lifeguards are assigned the responsibility to be diligent and to pay close attention to their duties; conversing with others, reading, or performing other tasks while in rotation is not acceptable.
    - Lifeguards are to be placed around the pool so that there is no more than 20 seconds of separation from one guard to another in any given zone.
    - Lifeguard duty cycles are to be designed to ensure alert and attentive personnel, and shift changes will not cause a disturbance in the quality of protection offered to the swimmers.
5. Lifeguard staffing needs to increase to allow the guarding zones to decrease in size if water becomes turbulent.
6. If water turbulence becomes dangerous or distorts vision, or if visibility is otherwise diminished, it is advised that swimming be halted until conditions return to normal.

MANAGE LIFEGUARD VIGILANCE

Historically, the focus of lifeguarding has been all about rescue. However, in more recent years, aquatic understanding considers recognition more important than rescue. While rescue is vitally important, it goes hand-in-hand with recognition.

Recognition can be defined as **constant vigilance.** The practice of recognition through constant vigilance is the guarding skill that improves lifeguard effectiveness. Unfortunately, the greatest dedication and most thorough training cannot eliminate the natural human limitations that challenge every lifeguard's ability to be vigilant. About 500 to 700 children will likely drown in guarded pools each year because of the difficulty for motivated and well trained guards to remain vigilant.

Several studies have been conducted to illustrate that human concentration on a specific activity declines over time. Measurable decreases in attention were regularly demonstrated after thirty minutes of directed behavior with some decrement noted in only fifteen minutes. Research has also shown that while alertness increases with the frequency of critical signs, it actually decreases with a preponderance of noncritical signals. This may explain why a larger number of aquatic tragedies occur in small flat-water pools than in crowded wave pools or on water attractions.

Other factors also adversely affect a guard's ability to be watchful such as:

- Elevated temperatures and increased humidity dull the senses and have been shown to reduce vigilance from optimal by as much as 45%.
- Sharp or loud noises can divert a guard's attention from scanning by evoking involuntary eye movement in the direction of the source of the sound. Attention grabbing noise may be beneficial for spotting a vocal swimmer in distress, but is very distracting in a noisy pool or if the sound originates outside the pool area.
- Time of day is another factor to be considered. The results of a recent study showed that it took three times longer for a lifeguard to spot a submerged mannequin in the evening than it did before noon. The cause, visibility, fatigue or natural circadian rhythms is immaterial. The adverse effect must be countered.

Natural human limitations cannot be significantly altered and cannot be disregarded. However, efforts toward quality lifeguard management and training can minimize the deleterious effects of the above limitations.

KEEP ROTATIONS SHORT:

Lifeguards are not to exceed 30 minutes of active surveillance duty without assigned short concentration break. At worst, a guard requires a 10-minute break every hour. Any tasks the guard performs while not scanning need to be varied.

PRACTICE SCANNING SKILLS:

Emphasize proactive scanning with lifeguards. Use techniques like 10/10 and "The Five Minute Scanning Strategy" to ensure attentive guarding. Accept no performance that is below desired standards. Be sure to give guards the tools they need and then require the use of those tools.

KEEP LIFEGUARDS ALERT:

Managers need to develop a practice where their presence on the pool deck can be observed. Guards need to be monitored. Monitoring takes place visually and by using observation reports. Monitoring and unannounced drills need to be used to help keep guards alert. Be diligent to catch them doing it right, and then recognize positive behavior and correct areas that need improvement. Watch for signs of fatigue and make changes as necessary. Expect exceptional performance from lifeguards. The only job while

actively lifeguarding is to keep the patrons safe. Do everything possible to keep them alert, vigilant, and well prepared for any occurrence that may arise.

DEVELOP AND IMPLEMENT A LIFEGUARD IN-SERVICE PROGRAM

All of lifeguard staff receives initial training that provides the basic information and skills required for them to perform their work assignments. In-service training is necessary to retain, improve, and allow them to employ their skills and knowledge under supervised conditions so that their performance is maximized.

It is critical that the lifeguard staff employ skills and judgment that are immediate and precise. Action or inaction may be critical to the safety of the patrons. This requires regular practice and review of both normal (i.e., scanning, rule enforcement, conflict recognition/resolution, conditioning, and other responsibilities) and emergency (i.e., CPR, first aid, water rescue, spinal injury management, etc.) skills. Proper aquatic in-service training program need to address the following principles:

1. An in-service training program is to be developed and implemented. Use well researched procedures specific to your needs. It is best to rely on tools such as **In-Service Training for Aquatic Professionals.** This system is endorsed by the National Safety Council and the American Camping Association.
2. Scheduling of in-service training needs to be frequent. Maximum recurrence of training typically takes place during the summer busy season or after an influx of new staff. Regular and consistent times need to be established so that staff can plan accordingly. It is recommended that 4 hours of in-service training be provided to each lifeguard each month. Timing and frequency will be scheduled to best fit particular program and curricula. In general, daily or weekly training is best, biweekly is good, and monthly is minimal.
3. Attendance must be mandatory. Lack of in-service participation needs to result in disciplinary action toward the employee. Suspension from the work rotation can be one form of discipline. Nonparticipation negatively affects the morale and cohesiveness of your staff and the safety of the patron of the swimming pool.
4. During training, use real life scenarios with human victims. While mannequins are useful for initial training of skills, a reliance on them misleads staff. It is important to become comfortable with performing skills on live subjects. Safety scenarios need to be altered and varied from one exercise to another. All trainees are required to actively participate in all training exercises.
5. Periodically, non-aquatic staff may be included in the sessions. This allows for aquatic staff to experience how non-aquatic staff members may be best utilized in the event of an emergency.
6. All training must be memorialized and records kept for at least three years. Staff signatures, not just typed or trainer-written names on the form, are to identify attendance.

IMPLEMENT AQUATIC PERSONAL PROTECTIVE EQUIPMENT STANDARDS

Lifesaving is a trainable technique that has been refined for maximum effectiveness. Rescue techniques are employed using specific equipment. This equipment is essential to protect the user and the victim. The following equipment is not optional. It is used to ensure proper rescuer performance and provide appropriate rescuer safety.

TUBE

The tube provides the rescuer with protection and prevention from sinking. It also provides the victim with buoyancy and prevents the lifeguard from having to fully support the victim's weight.

- The tube must be in possession of the on-duty lifeguard at all times, no exceptions!
- The strap is to be worn by the lifeguard and gathered to prevent catching on the chair during exit.
- The tube can be used as a barrier for the lifeguard in the event of an emergency (i.e., keeps the guard in control, keeps the victim away from the lifeguard, supports four to five victims' heads above the static water line).

MASK & GLOVES

The mask protects the lifeguard from ingesting vomit or other bodily fluids. Gloves give the rescuer protection from blood borne pathogens and give the victim assurance that their rescuer will not panic and quit before the rescue is complete.

- Mask and gloves will always be with the guard, preferably in a fanny pack.
- Virtually all drowning and near drowning incidents involve bodily fluids, especially vomit, which has the potential to be expelled into the guard's mouth if they do not utilize a mask.
- The guard will not use these protective devices if they are not readily available. The fanny pack must be worn at all times while at the pool facility. This will ensure they are prepared if they have to respond to an emergency off the pool deck.

TRAINING

Every lifeguard is required to be certified, a facility must take extra precautions into consideration.

- Conduct training that will focus specifically on Personal Protective Equipment utilization and practice.
- During training, "create" artificial body fluids using fake blood and Alka-Seltzer. This strategy will help prepare your guards to adapt to encountering this scenario.
- Regularly verify that lifeguards are properly equipped and rescue-ready.

Lifeguards train and practice in closed environments, usually free of blood borne pathogens and actual drowning victims. It may be difficult to conceive of such a remote and unfamiliar danger as a blood borne pathogen, but the exposure, once experienced, has the potential to be life changing and irrevocable.

DEVELOP AND IMPLEMENT A NON-SWIMMER PROTECTION POLICY

Many aquatic facilities do not test the swimming capabilities of unknown swimmers. Frequently, tragic stories demonstrate the need to develop and implement swim test protocols. An increasing number of aquatic facilities have implemented a non-swimmer protection policy and are now successfully testing swimmers of unknown ability, especially participants of special use groups like day camps, rental groups, and birthday parties.

Following is a recommended policy for non-swimmer protection, including all children and adults that are part of an outside group (rentals, special events, birthday parties, etc.).

TEST:

Swim test to determine swimming ability. Users who do not take the test, or children under seven years old, may automatically be designated as non-swimmers.

MARK:

Clearly mark all users to identify swimming ability.

PROTECT:

Most aquatic incidents happen in shallow water (3'-5'). Protect non-swimmers, especially younger children, by restricting them to the shallow end and adding additional layers of protection.

1. The non-swimmer is actively engaged in a swim lesson or activity with staff.

2. The non-swimmer is actively supervised, within arms-reach of an adult parent or caregiver; and/or

3. The non-swimmer is wearing a properly fitted US Coast Guard approved Life Jacket.

Any change in policy and procedure may encounter difficulties in administration and implementation. Although modifications and new innovations to a policy are anticipated to overcome implementation challenges, the spirit of a policy needs to be fully implemented. A non-swimmer protection policy must be enforced at all times without exception. Failure to do so may put the City of Boulder “at risk” in the event of an incident. More importantly, failure to enforce this or a similar policy leaves your swimmers at risk.

SAFETY GUIDELINES FOR PATRONS WITH SPECIAL NEEDS

Under the Americans with Disabilities Act (ADA) persons with disabilities must be provided equal access and opportunity to use all of the City of Boulder’s aquatic facilities. In addition to providing the necessary physical accommodations like ramps and hydro-lifts, aquatic staff must also be prepared to assist people with disabilities in normal activities and to respond appropriately in case of an emergency.

Although there are many types of disabilities, it is most important to remember that everyone is a person first. Within the recreation department, there are several scenarios in which lifeguards may be asked to work with or supervise people with disabilities; and your role will vary based on the situation, age of the person and the person’s ability to understand safety and directions.

<u>Drop-In/Free Swim:</u>

For a drop-in, a patron with a disability has paid the entrance fee to the rec center and is coming to swim either in the lap or leisure pool. As with any other patron, as a lifeguard your role is to supervise them in the pool to make sure they are being safe and following the pool rules. Your role does not include helping patrons dress, use the restroom or transferring people in or out of wheelchairs. People needing additional support with these types of activities are able to bring an assistant in to the recreation

center free of charge to help them. Our pools all have water wheelchairs, accessible entries into the pools (lifts, ramps, zero depth entry) and assistive floatation devices (life jackets, water belts, etc.). If a patron would like to use this equipment, please watch to ensure they are using it correctly.

Registered Class/Swim Lesson:

In this situation, a patron has pre-registered for a class and requested an accommodation. At this point, an EXPAND staff will complete an assessment with the patron and decide upon some accommodations to help make the lesson a positive, successful experience for everyone. Accommodations may include things such as a visual schedule of the lesson plan, helping a patron transfer into or out of the pool and having an extra City of Boulder staff to assist the patron in the water. Swim instructors will be given information about the person in their class and the accommodations being made for them ahead of time. Staff who will be in charge of physically assisting individuals will be trained in the correct procedures to ensure they do not hurt themselves or the patron. This includes things such as transferring people in and out of wheelchairs, using adaptive aquatics equipment and assisting patrons in the rest room. Please do not attempt to physically assist someone without the proper training – both your and the patron's safety are of upmost importance!

In general, lifeguards need to:

- Recognize individuals with various challenges and communicate effectively with them.
- Be able to safely and efficiently assist each of them in case of need.
- Be proactive to prevent a potentially dangerous situation from becoming an emergency.
- Modify rescue protocols and procedures; regularly practice how to assist these patrons.
- Increase guard-to-swimmer ratios to provide adequate protection in pools that include groups of swimmers with disabilities.
- The aquatic staff must remember individuals with disabilities are people first, people who are to be treated with the same level of respect and dignity that would be afforded to any patron.

Boulder Parks and Recreation has a dedicated therapeutic recreation division in the EXPAND program. EXPAND is available as a resource to support everyone having an enjoyable, inclusive experience. Additional training on supporting patrons with disabilities should be provided twice a year and on an as-needed basis.

APPENDIX C - PROGRAM STANDARDS

Program standards are developed to support core services. The standards focus on delivering a consistent high quality experience while achieving operational and cost recovery goals as well as marketing and communication standards that are needed to create awareness and customer loyalty.

To assist staff in its continual pursuit of delivering high quality consistent programs to the community and in achieving the cost recovery goals, the following are the standards by which programs need to be developed and administered.

HIGH-QUALITY EXPERIENCE STANDARDS

For core services, the following standards must be in place to promote a high-quality experience:

- Instructor or program coordinators' qualifications are consistent with in-the-field experience in the program specialty for which they are responsible.
- The instructor-to-participant ratios are appropriate for the participant to feel safe and attended to.
- The program is provided in the appropriate safe and clean space, either indoor or outdoor, designed for that program.
- Minimum and maximum numbers of participants are set for the program or class that will allow for a high-quality experience.
- Equipment or supplies that are used by the participant are high quality, safe, and appropriate for the participants to use or consume.
- The length of the program is commensurate with the attention capability of the participants to respond effectively and enjoy themselves in the activity.
- Appropriate support staff or volunteers are in place to help guide participants and support teachers or program supervisors.
- Staff is trained in first aid and CPR. Volunteers are trained in first aid and CPR when appropriate.
- A first aid kit is readily available and accessible in less than a minute.
- Staff and volunteers are trained in customer service and diversity training to make all participants feel welcome and appreciated.
- Customer feedback methods are in place to seek input from participants on their expectations of the program and the results of their experience. This should include pre- and/or post-evaluation focus groups or trailer calls.
- Pricing of services is explained to participants and/or parents on the level of investment they are making in the program and the level that aquatic division is investing in their experience.
- Each instructor or program supervisor will be provided a toolbox that includes their class or program roster, with phone numbers or email addresses, customer evaluations for users, pertinent information and emergency phone numbers, thank you cards for participants at the end of the class, and an introduction sheet of what will occur in the program or class, how it will be conducted, and what outcomes we hope to achieve.

- All class or program policies are available to the instructor or program supervisor to adequately explain policies to the user.
- Appropriate recognition and awards are given at the end of the program to participants based on outcomes achieved or skills learned.
- New staff, volunteers, and contract employees working with children will have background checks by the Boulder Police Department.
- Any disciplinary actions taken by an instructor or program supervisor with a program participant will be written and documented.
- Class, program curriculum, or work plans will be prepared by the instructor and program supervisor before the class or program begins and is signed off by the appropriate program staff.
- Staff will be dressed in the appropriate uniform that includes a nametag.
- Drivers that transport participants must have the appropriate license, certifications, and authorization.
- Equipment or program space will be inspected prior to the class or program; noted by the instructor or program supervisor; and recorded daily, weekly, and monthly.
- Performance measures tracked will be shared with instructors or program staff at the end of each session.
- Exit interviews will be conducted with part-time staff before they leave each season and noted in their file as to re-hire or not.
- A class or program budget will be prepared for each activity and shared with the instructor or supervisor on how class monies are spent. Final budget results will be documented at the end of the program area and shared with the supervisor or manager.
- Appropriate required licenses and certifications set by law will be reviewed and filed before programs begin.

OPERATIONAL AND PRICING STANDARDS

- Pricing of services will be established based on cost-of-services and overlaid into programs or classes based on primetime and non-primetime rates, location, time, age segment, group, and level of exclusivity that users receive over and above use by general taxpayers. Staff will be trained in setting prices.
- Scholarship programs will be in place for those that require financial assistance.
- Quarterly results of cost of service for programs will be posted and shared with staff on all services regardless of whether they are underperforming, meeting, or exceeding the recovery goals.
- Each year, competitor and other service providers will be benchmarked and evaluated for changes they are making and how they compare with division efforts in their core services provided.
- Partnerships with core program services will be updated yearly, their level of contribution will be documented, and tracking performance measures will be shared with each partner.

- Non-core services will be evaluated yearly and reduced, eliminated, or transferred to other service providers reducing the impact on staff time.
- Maintenance and aquatic staff will annually discuss standards for programs.

EAST BOULDER COMMUNITY CENTER - AQUATICS ASSESSMENT					ESTIMATED COSTS			
——— CLASSIFICATION OF ISSUES ———					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
Natatorium	Pool decks are very slippery in high traffic areas		Arch	Provide new textured tile surface	5,260 SF	$13.00	$68,380	H
Natatorium	Pool decks are very slippery in high traffic areas			Alternate: Safety grooving	0 SF	$4.50	$0	H
Natatorium	Space overheats in the summer - since asphalt shingles were installed		Arch	Repair direct/ indirect evaporative cooling system	Covered in CIP		$0	H
Natatorium	Interior roof structure and deck is discolored as it has never been repainted. There are very slight signs of corrosion, but not a structural concern.		Arch	Repaint interior roof structure and decks with high performance coating	12,600 SF	$5.00	$63,000	M
Natatorium	Primary steel truss is discolored as it has never been repainted.		Arch	Repaint interior roof truss structure with high performance coating.	3,670 SF	$5.00	$18,350	M
Natatorium	Interior walls are discolored as only the lower 10 of wall has been repainted.			Repaint interior walls with high performance coating	5,872 SF	$3.50	$20,552	M
Natatorium	Recent roof replacement			No work is required			$0	H
Natatorium	Both supply and return air grilles are located up high in space and does not facilitate good air circulation at pool level. Causes stagnant air (with chloramines) to layer on the surface of the pool.		Arch	Redirect R/A duct down to the deck level	1 LS	$15,000.00	$15,000	H
Natatorium	Staff has indicated that lighting level at night seems to be quite low since the lights were changed to florescent fixtures.		Arch	Add supplemental lights to increase brightness. Add 8 high output florescent fixtures at perimeter	8	$250.00	$2,000	H
Natatorium	Light fixtures in the cupola are all burned out and have not been relamped since the building was built. Access to the fixtures is not easy.			Replace all existing fixtures with new LED fixtures so that re-lamping is infrequent.	12	$250.00	$3,000	L
Natatorium	Windows on north side of aquatics adjacent to the water slide leaks water into the Vending area. Weep holes in the sill of the frame is blocked by sealant, so that water that breaches the glazing gasket has no where to escape.		Arch	Clean out weep holes at base of frame and replace tempered glass lite.	85 SF	$12.00	$1,020	M
Natatorium	Sun glare from the western sun causes problems with lifeguarding the pool. Existing sun shades do not afford enough glare reduction.			Install new fabric shade with a denser mesh fabric and a higher shading coefficient. Install new roller shade with 2% openness Trevira CS fabric for reduced glare.	1,920 SF	$30.00	$57,600	M
Exterior	The perimeter roof gutters are leaking at nearly every gutter seam and in some cases directly through rusted out gutter bottoms.			Replace all of the gutters and downspouts at the perimeter of the aquatics roof & paint with poly urethane	214 LF	$20.00	$4,280	M
Natatorium	Slide tower structure is showing some minor corrosion where epoxy coating has failed and has not been repaired.		Arch	Clean rusted areas, treat with zinc primer and repaint entire stair structure and flume supports with high performance coating	1 LS	$20,000.00	$20,000	H
Natatorium	Door frame bottoms at Pool Equipment Room, and Pool Storage Room have minor sign of corrosion where epoxy paint has failed and not been repaired.		Arch	Clean rusted areas, treat with zinc primer and repaint entire frame and door with high performance coating	170 LS	$5	$850	M
Natatorium	The perimeter roof deck where it joins the exterior wall may be showing some sign of corrosion. Without a lift it is not clear if this discoloration is corrosion or just discolored spray foam insulation		Arch	Have a maintenance staff make a close observaton of roof and wall joint to assess condition of deck and joint	TBD		$0	H
Natatorium	In Pool Storage 155 the platform over the pump pit may not meet building code regulations. Upper ladder supported by the top rung of the pump pit ladder does not meet OSHA safety requirements			Remove storage platform from over the pump equipment	300 SF	$3.00	$900	H
Steam Room	The steam room door was replace with an opaque door. This restricts visibility into the room.		Arch	Replace (E) steam room door with an anodized aluminum and glass door.	1 LS	$1,200.00	$1,200	M

APPENDIX D – DETAILED FACILITY ASSESSMENT MATRICES

EAST BOULDER COMMUNITY CENTER POOL FACILITY ASSESSMENT (PG 1 OF 2)

EAST BOULDER COMMUNITY CENTER - AQUATICS ASSESSMENT					ESTIMATED COSTS			
——— CLASSIFICATION OF ISSUES ———					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
Pool Issues								
Natatorium	There is a slight chloramine smell that progressively increased during usage		Aquatics	Install supplimental disinfection system on lap, leisure and whirlpool	3	$45,000.00	$135,000	**M**
Natatorium	Solar heating system overheats pool water		Mechanical	Energy consutant need to balance system			$0	**H**
Natatorium	Pool Tile needs to be cleaned and repaired		Aquatics	Calcium deposits removed and touch up grouted	1	$55,000.00	$55,000	**L**
Natatorium	Remove calcium buld up form deck, deck drain and seal deck concrete		Aqautics	Calcium deposits removed, clean stainless steel and passivate	1	$15,000.00	$15,000	**M**
Natatorium	When existing sand filters need to be replaced utilze Regenerative Media filters		Aquatics	When existing sand filters fail replace with Regenerative Media filters for increased water quality and lower operational expenses	2	$75,000	$150,000	**L**
Whirlpool	Whirlpool is drianed weekly		Aquatics	Consider water transfer system	1	$2,500.00	$2,500	**H**
Leisure Pool	Tots slide has been damaged and occupies considerable space. Replace, relocate and add landing pad		Aquatics	relocated new slide on edge	1	$50,000.00	$50,000	**M**
Leisure Pool	Slide starter basin has missing grill		Aquatics	Install new grill	1	$1,000.00	$1,000	**M**
Leisure Pool	Repair damaged tile where required		Aquatics	Tile maintenance	1	$15,000.00	$15,000	**H**
Leisure Pool	Water slide is at the end of its useful life. Slide obstructs lifegurding duties, and current channel is too short.		Aquatics	Remove Water Slide, enlarge pool for programming, add tot slide, complete lazy river, and add ceiling mounted water play features				**L**
Leisure Pool	The existing body slide is getting to the end of it's life, is a lifeguarding challenge due to the blind spots around it.			Replace existing body slide with new bodyslide, stair tower, runout chute and building envelop enclosure at the sun deck area				**L**
Lap Pool	Pool interior has been badly stained and needs to be replastered		Aquatics	Remove and replace aggregate interior	1	$75,000.00	$75,000	**M**
Lap Pool	Anti-slip matts have been placed on stair gutter. Provide permenant potection		Aquatics	Install flush mounted gutter grate and no hand hold	1	$2,000.00	$2,000	**H**
Lap Pool	Handicap lift hose is tripping hazzard		Aquatics	Replace lift with battery powered lift	1	$8,500.00	$8,500	**H**
Lap Pool	Sun coming throught the windows has caused algae growth on pool surface		Aquatics	Provide algae mitigation system during summer months	1	$10,000.00	$10,000	**L**
							$0	
							$0	
							$0	
Construction Costs subtotal							$795,132	
	General Conditions (4.3%)						$34,191	
	Builders Risk, Gen Liab, Sub Bond Insur. (2.6%)						$20,673	
	Payment & Performance Bonds (.87%)						$6,918	
	Permits & Fees (City to waive)						$0	
	Taxes (Exempt)						$0	
	Overhead & Profit (4%)						$31,805	
	Contingency 10%						$88,872	
	Sub Total						$888,719	
Soft Costs								
	Professional Fees (12% remodel)						$106,646	
	Furniture, Fixtures and Equipment (Allowance)						$0	
	Construction Testing (Allowance)						$0	
	Reimbursable Expenses (Allowance)						$0	
Total Costs							**$995,365**	

EAST BOULDER COMMUNITY CENTER POOL FACILITY ASSESSMENT (PG 2 OF 2)

NORTH BOULDER RECREATION CENTER POOL FACILITY ASSESSMENT

NORTH BOULDER RECREATION CENTER - AQUATICS ASSESSMENT					ESTIMATED COSTS			
CLASSIFICATION OF ISSUES					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
Leisure Pool	Pool decks are very slippery in high traffic areas		Arch	Provide new textured tile surface	3,470 SF	$13.00	$45,110	H
Leisure Pool	Pool decks are very slippery in high traffic areas			Alternate: Safety grooving	0 SF	$4.50	$0	H
Leisure Pool	The supply duct over the entrance to the Sauna room has come apart due to over pressurization		HVAC	Determine the cause of the duct failure and repair the duct. There could be a downstream blockage or clogged supply difuser. Re-balance air system.	1 LS	$2,500.00	$2,500	H
Lap Pool	In the Lap Pool, vertical uninsulated roof drain piping sweats during cold weather and drips condensate water on to decks			Insulate all of the vertical roof drain piping and paint to match wall	75 LF	$25.00	$1,875	M
Lap Pool	Steel support framing above the corner windows in the Lap Pool is showing some signs of slight rust. The likely cause is condensate is forming on the surface during cold weather			Clean surface rust, Clean off paint and re-prime with zinc primer, repaint with high performance coating, and install sealant in open joints where rusting was most prevalent.	50 LF	$75.00	$3,750	H
Lap Pool	Some of the stainless steel handrails on the wall are showing signs of heavy tarnish, especially at the escutchion plates		Arch	Remove handrails and cover plates and clean thoroughly. Re-install handrails.	12 LF	$15.00	$180	M
Lap Pool	In cavity of the corner windows there is a missing vaper barrier which allows humid air to enter the exterior wall system and roof insulation. (See report by Building Envelop Solutions dated 5/20/2014)		Arch	Install ice and water shield vapor barrier membrane in cavity behind spandrel panel in cavity above the roof deck.	1 LS	$20,000.00	$20,000	H
Exterior walls at Lap Pool	At the corner window sills of the Lap Pool, efflorescence has developed in the CMU below the sills. The suspected reason for this to occur is the joints between the concrete sill blocks are leaking water and the sill blocks themselves are not water resistant.		Arch	Install sealant in each joint between sill blocks and treat the entire sill with a water repellant coating. Clean the efflorescence from the existing CMU	70 LF	$75.00	$5,250	H
Leisure Pool	Glare occurs in afternooon		Arch	The windows need to have roller shades installed to reduce the glare. Install new roller shade with 2% openness Trevira CS fabric for reduced glare.	252 SF	$30.00	$7,560	M
Leisure Pool	Return air duct grilles are dirty with lint.			Clean return air duct grilles.	1 LS	$250.00	$250	M
Leisure Pool	Air quality and humidity levels are not as good as they could be.			Replace existing RTU with new unit and with larger capacity.	1 LS	$40,000	$40,000	L
Roof	Moisture migration study (prepared by Building Envelope Solutions dated 5/20/2014) identified several areas of the roof that have been compromised by moisture infiltration		Arch	Repair roof areas identified, replace wet insulation and extend vapor barrier up parapet walls	16,000 SF	$4.00	$64,000	H
Pool Issues								
Leisure Pool	Pool is heavily used and uses a significant amont of chlorine. Consider water transfer system		Aquatics	Water Transfer system	1	$3,000.00	$3,000	H
Natatorium	Chloramine smell		Aquatics	Install supplemental disinfection system on lap,leisure and whirlpools	3	$45,000.00	$135,000	M
Leisure Pool	Replace Gadgets and Gimmos with ceiling mounted spray play amenties		Aquatics	Determine appropriate amenities			$0	M
Leisure Pool	Large ramp slideshould be consider to be replaced to update amenities		Aquatics	Provide ADA feature and more open space				M
Leisure Pool	Pool decks are slippery		Aquatics	Provide new tectured deck surface			$0	H
Natatorium	Clean all tile and stainless steel surfaces to remove calcium and corrosion		Aquatics	Clean, passivate and regroute	1	$25,000.00	$25,000	M
Lap Pool	Diving Board is out of alignment		Aqautics	Reinstall stand	1	$8,000.00	$8,000	H
Natatorium	Solar heating system not functioning		Mechnaical	Determine how to prvent over heating and update system			$0	H
Natatorium	When existing sand filters fail replace with Regenerative Media filters		Aquatics	When existing sand filters fail replace with Regenerative Media filters for increased water quality and lower operational expenses	2	$75,000	$150,000	L
Natatorium	Underwater stairs are a hazard for the small children		Aquatics	Replace underwater stair with a short ramp transition.			$0	H
Natatorium	Body flume excitement has waned		Aquatics	Add timing system to body flume ride to generate more excitement and competition			$0	L
							$0	
Construction Costs subtotal							$511,475	
	General Conditions (4.3%)						$21,993	
	Builders Risk, Gen Liab, Sub Bond Insur. (2.6%)						$13,298	
	Payment & Performance Bonds (.87%)						$4,450	
	Permits & Fees (City to waive)						$0	
	Taxes (Exempt)						$0	
	Overhead & Profit (4%)						$20,459	
	Contingency 10%						$57,168	
	Sub Total						$571,676	
Soft Costs								
	Professional Fees (12% remodel)						$68,601	
	Furniture, Fixtures and Equipment (Allowance)						$0	
	Construction Testing (Allowance)						$0	
	Reimbursable Expenses (Allowance)						$0	
Total Costs							**$640,277**	

SOUTH BOULDER RECREATION CENTER POOL FACILITY ASSESSMENT

SOUTH BOULDER RECREATION CENTER					ESTIMATED COSTS			
——— CLASSIFICATION OF ISSUES ———					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
Lap Pool	Roof deck and structure is covered in a foam insulation product and is hard to tell if the vapor seal is in tact.		Arch	With a lift, investigate integrity of joints where wall meets the roof and also where framing members join the roof deck. If needed, install new foam sealant into open joints to secure an integrated vapor barrier.	1 LS	Allowance	$25,000	H
Lap Pool	Roof Deck and Structure is dirty and looks unappealing			Re-paint entire roof structure with new compatible coating system.	7,100 SF	$5.00	$35,500	L
Lap Pool	Roofing was replaced recently -			No work required			$0	
Lap Pool	The walls of the natatorium have been painted recently, but the south wall, which is actually retaining earth had a leak in the waterproofing. The waterproofing was repaired and the wall was repainted. The surface preparation of the wall was not well done and has left the surface with an irregular texture. The wall looks like it is peeling paint. It is strictly a cosmetic issues, but looks unsightly.		Arch	Remove all of the existing coatings with high pressure water or sand blasting and recoat wall with new high performance coating	1,700 SF	$8.50	$14,450	M
Lap Pool	In a few of the drywall soffits there are some taped joints that have cracked and have breached the vapor barrier surface envelope.			Repair taped joint and repaint with high performance coating	30 SF	$7.00	$210	H
Lap Pool	One of the plastered walls has water damage and plaster is peeling off.			Determine where moisture is coming from and correct, repair plaster surface and re-paint with high performance coating.	10 SF	$10.00	$100	H
Lap Pool	Steel framing supporting the east wall window system is showing minor corrosion at the floor		Arch	Clean up framing and prime with zinc primer and then topcoat with high performance coating	1 LS	$1,000	$1,000	H
Lap Pool	One of the exterior sun deck doors is pad locked with a chain. This is not a required exit door, but is not an acceptable means of securing an exterior door.		Arch	Repair the locking mechanism and remove chain and padlock	1 LS	$750.00	$750	H
Pool Issues								
Lap Pool	Natatorium has Chloramine smell		Aquatic	Install Supplemental Disinfection on Lap Pool and Whirlpool Spa	2	$45,000.00	$90,000	M
Lap Pool	Natatorium has Chloramine smell		Mechanical	Install Deck level exhaust	1	$55,000.00	$55,000	L
Lap Pool	Stainless steel gutter corners need to have coorosion removed and passivated		Aquatic	Clean and passivate	1	$5,000.00	$5,000	H
Lap Pool	Diving Board Stand has Paint Peeling		Aquatic	Repaint diving stand and service	1	$9,000.00	$9,000	H
Lap Pool	Solar System needs to be blance and protected from over heating		Mechanical	Energy consultant working on system				H
Whirlpool	Whirlpool exterior tile needs to be cleaned		Aquatic	Remove calcium deposits and touch up grout	1	$12,000.00	$12,000	M
Whirlpool	Whirlpool interior needs to be polished		Aquatic	When drained sand floor and seat areas	1	$3,000.00	$3,000	M
Lap Pool	Replace Lap Pool Filtration with Regenerative Media Filters		Aquatic	When existing sand filters fail replace with Regenerative Media filters for increased water quality and lower operational expenses	1	$75,000	$75,000	
Lap Pool	No recreation amenities		Aquatic	Add climbing wall to deep end of pool			$0	M
							$0	
							$0	
							$0	
							$0	
							$0	
Construction Costs subtotal							$326,010	
	General Conditions (4.3%)						$14,018	
	Builders Risk, Gen Liab, Sub Bond Insur. (2.6%)						$8,476	
	Payment & Performance Bonds (.87%)						$2,836	
	Permits & Fees (City to waive)						$0	
	Taxes (Exempt)						$0	
	Overhead & Profit (4%)						$13,040	
	Contingency 10%						$36,438	
	Sub Total						$364,381	
Soft Costs								
	Professional Fees (12% remodel)						$43,726	
	Furniture, Fixtures and Equipment (Allowance)						$0	
	Construction Testing (Allowance)						$0	
	Reimbursable Expenses (Allowance)						$0	
Total Costs							$408,107	

SPRUCE POOL FACILITY ASSESSMENT

SPRUCE POOL					ESTIMATED COSTS			
——— CLASSIFICATION OF ISSUES ———					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
	Very dated Bath House, but was updated in last 8-10 yrs.		Arch	Update finishes	2,500 SF	$220.00	$550,000	L
	Very dated Bath House, but was updated in last 8-10 yrs.		Arch	Alternate: Demolish existing bath house and build new	0 SF	$360.00	$0	L
	Perimeter security fence is 6' high chain link fence but is not truly a security fence. After hours breach of fencing occurs regularly and is a risk		Arch	Replace existing fence with wrought iron vertical picket fence	440 LF	$60.00	$26,400	H
	Parking is limited		Arch	No room to expand parking				L
	Exisitng pool deck is slip resistant. No problems		Arch	no change			$0	H
Pool Issues								
Pools	All pools on same filtration system. Consider separate systems		Aquatics	Install filtration system on kid pool and spray ground	1	$175,000.00	$175,000	M
Pools	Heating system tempermental		Aquatics	Operator has determined how to manually over ride system	2	$35,000.00	$70,000	L
Pools	Consider new and improved amenties		Aquatics	Increase city wide appeal			$0	L
Pools	Consider using Perlite instead of DE on Filters		Aquatics	Easier Filter Cleaning			$0	H
Pools	No Pool cover		Aquatics	Add pool cover for extended season			$0	M
							$0	
							$0	
							$0	
							$0	
Construction Costs subtotal							$821,400	
	General Conditions (4.3%)						$35,320	
	Builders Risk, Gen Liab, Sub Bond Insur. (2.6%)						$21,356	
	Payment & Performance Bonds (.87%)						$7,146	
	Permits & Fees (City to waive)						$0	
	Taxes (Exempt)						$0	
	Overhead & Profit (4%)						$32,856	
	Contingency 10%						$91,808	
	Sub Total						$918,079	
Soft Costs								
	Professional Fees (12% remodel)						$110,169	
	Furniture, Fixtures and Equipment (Allowance)						$0	
	Construction Testing (Allowance)						$0	
	Reimbursable Expenses (Allowance)						$0	
Total Costs							**$1,028,248**	

SCOTT CARPENTER POOL FACILITY ASSESSMENT

SCOTT CARPENTER PARK POOL					ESTIMATED COSTS			
CLASSIFICATION OF ISSUES					OPTION 1 - BASICS			PRIORITY
LOCATION	DESCRIPTION OF ISSUE	BLDG	DISCIPLINE	CORRECTIVE ACTION REQUIRED	UNIT TAKEOFF	UNIT COST	TOTAL	
	Very dated Bath House, but was updated in last 8-10 yrs.		Arch	Update finishes	0 SF	$220.00	$0	M
	Very dated Bath House, but was updated in last 8-10 yrs.		Arch	Alternate: Demolish existing bath house and build new	3,800 SF	$360.00	$1,368,000	M
	Pool site in flood plain		Arch	Determine long range outlook				
Pool Issues								
Pool	Replace water slide, stairs narrow, flume protrudes into lap lane		Aquatics	Consider options	1 LS	$25,000.00	$25,000	M
Pool	Pool has a considerable leak		Aquatics	Determine source and repair	1 LS	$50,000.00	$50,000	H
Pool	Pool heater needs booster pump for more efficient use.		Aquatics	Determine flow and design pump	1 LS	$6,000.00	$6,000	H
Pool	Pool pump pit floods		Aquatics	Consider vertical centrifical pump	1 LS	$25,000.00	$25,000	H
Pool	Diving Boards do not meet code requirement		Aquatics	Remove diving boards and replace with other deep water amenities	1 LS	$45,000.00	$45,000	H
Pool	No pool cover		Aquatics	Add pool cover for extended season	1 SF	$30,000.00	$30,000	M
							$0	
Construction Costs subtotal							$1,549,000	
	General Conditions (4.3%)						$66,607	
	Builders Risk, Gen Liab, Sub Bond Insur. (2.6%)						$40,274	
	Payment & Performance Bonds (.87%)						$13,476	
	Permits & Fees (City to waive)						$0	
	Taxes (Exempt)						$0	
	Overhead & Profit (4%)						$61,960	
	Contingency 10%						$173,132	
	Sub Total						$1,731,317	
Soft Costs								
	Professional Fees (12% remodel)						$207,758	
	Furniture, Fixtures and Equipment (Allowance)						$0	
	Construction Testing (Allowance)						$0	
	Reimbursable Expenses (Allowance)						$0	
Total Costs							**$1,939,075**	

To pursue any of the vision options as detailed in this report, the City of Boulder should seek out and evaluate partners for the capital and operational costs. Agencies that have generally been identified as potential partners include the Boulder Valley School City, Boulder Community Health, Frazier Meadows Retirement Community, Ocean's First Divers, and The YMCA of Boulder Valley. Opportunities for partnership also may exist within the private sector.

PARTNERSHIP DEVELOPMENT

The following are classification of types of partnerships that Boulder could consider, as well as a suggested approach to organizing partnership pursuits. This is not an exhaustive list of all potential partnerships that can be developed, but can be used as a reference to identify priorities for partnership development.

The following five classifications of partners are recommended for the site:

1. **Operational Partners**. Partners who help maintain facilities and assets, promote amenities and site usage, support site needs, provide programs and events, and/or maintain the integrity of the facility through labor, equipment, or materials.
2. **Vendor Partners.** Service providers and/or contractors who can gain brand association and notoriety as a preferred vendor or supporter in exchange for reduced rates, services, or some other agreed upon benefit.
3. **Service Partners.** Nonprofit organizations and/or friends groups that support efforts to provide programs and events, advocacy and education, and/or collaboratively serve specific constituents in the community.
4. **Co-branding Partners.** Private organizations that can gain brand association and notoriety as a supporter in exchange for sponsorship or co-branded programs, events, marketing, and promotional campaigns, and/or advertising opportunities.
5. **Fund Development Partner.** Private nonprofit organizations with the primary purpose to leverage private sector resources, grants, land and/or other public funding opportunities, and resources from individuals and groups within the community to support site goals and objectives for mutually agreed strategic initiatives. This could include a financial partner that can help with a maintenance endowment or a friends group to help raise money for capital or operational costs.

The key to any partnership will be for the partner to bring value to the project in the form of operational revenue, capital revenue to construct a facility, or enhance visitation and user group participation. The key to effective partnering is not to create an entitled partner dependent on the City to support their users' needs, but contributes to the value of the project.

In developing effective partnerships it is important to have partnership principles in place to help manage the partnerships effectively. The following are partnership principles to consider:

- Common values (trust, respect, honesty, and identifiable "Way of Work" Behaviors such as collaboration, respect for each other's expertise, decision making protocol, recognition for contributions as a partnership.
- Identify partners in which your individual competencies and/or core capacity mutually complements or enhances each other's work and role in the development and management of the facility.

- Success is identified and described along with shared goals and outcomes for the facility and for the partners involved in the development and operation of the facility.
- Success of a partnership in a developed community center facility is based on the agreed upon goals and financial outcomes desired for the facility as a whole first versus individual partnership spaces. All spaces in the facility are considered shared space and are prioritized on a prime time and non-prime time basis based on individual partner's needs. This is available to any partner first who is part of making the whole facility a success.
- Ensure clarity of roles, responsibilities, timelines, money involved in capital and operational costs and deliverables to the community based on an agreed-to operating pro-forma and capital cost investment. Pro-forma is updated annually for clarity. This is outlined in a partnership agreement on the front in that it describes a preferred future and why each partner is involved in the development and operation of the facility.
- Time is taken to evaluate and ultimately celebrate success of the facility by all partners involved.

EXAMPLE OF PARTNERSHIP POLICIES:

Examples of effective partnerships require the City and capital partner to have an effective vision statement.

VISION STATEMENT - EXAMPLE

"The Vision for the City of Boulder is to provide high quality parks, recreation facilities, and programs that citizens and visitors desire and will support financially that creates a community of choice to live, work, and play now and for future generations."

PURPOSE

This policy is designed to guide the process for the City in their desire to partner with private, nonprofit, or other governmental entities for the re-development, design, construction, and/or operation of the aquatic facility.

Boulder would like to identify for-profit, nonprofit, and governmental entities that are interested in proposing to partner with the City to construct a new aquatic facility. A major component in exploring any potential partnership will be to identify additional collaborating partners that may help provide a synergistic working relationship in terms of resources, community contributions, knowledge, and political sensitivity. These partnerships should be mutually beneficial for all proposing partners including the City, and particularly beneficial for the citizens of Boulder.

ISSUES TO BE ADDRESSED

Boulder has developed partnerships over many years that have helped to support the management of parks and recreation facilities and programs services, while also providing educational and recreational opportunities for the citizens of Boulder. The recommended policy will promote fairness and equity within the existing and future partnerships, while helping staff to manage against what may cause conflicts internally and externally. Certain partnership guidelines must be adopted by the City of Boulder for existing and future partnerships to work effectively. These partnership guidelines are as follows:

- All partnerships will require an upfront presentation to the City of Boulder that describes the reason for creation of the partnership and establishes an outcome that benefits each partner's involvement.
- All partnerships will require a working agreement with measurable outcomes that hold each partner accountable to the outcomes desired and to each other and will be evaluated on a yearly basis with reports back to the City on the outcomes of the partnership and how equitable the partnership remains.
- All partnerships will track direct and indirect costs associated with the partnership investment to demonstrate the level of equity each partner is investing.
- Each partner will not treat one another as a client-to-client relationship, but will create a partnership culture that focuses on planning together on a yearly basis or as appropriate; communicating weekly/or monthly on how the partnership is working; and annually reporting to each other's board or owners on how well the partnership is working, and the results of their efforts to the taxpayers of Boulder.
- Full disclosure by both partners to each other will be made available when issues arise.
- Annual informing of each other's staff on the respective partner's values, yearly goals, and work plans so both partners are in-tune with issues the partners may be dealing with that could affect the partnership policy or agreement as it applies to finances, staffing, capital costs, political elements, or changes in operating philosophies.

EXPECTED OUTCOMES AND BENEFITS

- Increased visibility.
- Increase in services and programs.
- Tax dollars spent on services are maximized through collaboration.
- Public believes in and supports the role of the City in partnerships.
- Promotes a positive image.
- Public involvement enriches their understanding of the City.
- Engaged public enhances current and future development of programs and facilities.
- Provides alternatives for manpower, recreation sites, financial resources, supplies, materials, etc. for a more comprehensive system.
- Shared vision and goals.
- Allow the City the opportunity to make a vision a reality.
- Reach more people, provide more services, reduce expenditures, and generate more revenue.
- Eliminates duplication of efforts, strengthen communities, and achieve greater outcomes.

GUIDING PROCEDURES

PUBLIC/PUBLIC PARTNERSHIPS

The policy for public/public partnerships is evident with the City based on their working with the Boulder Valley School District in Boulder. Working together on the development, sharing, and/or operating of parks and recreation facilities and programs will be as follows:

- Each partner will meet with the Boulder Park Board and staff annually to plan and share activity-based costs and equity invested by each partner in the partnership.
- Partners will establish measurable outcomes and work through key issues to focus on the coming year between each partner to meet the desired outcomes.
- Each partner will focus on meeting a balance of 50% equity for each agreed-to partnership and will track investment costs accordingly.
- Each partner will assign a liaison to serve each partnership agency for communication and planning purposes.
- Measurable outcomes will be reviewed quarterly and shared with each partner, with adjustments made as needed.
- Each partner will act as an agent for the other partner, thinking collectively as one rather than two separate agencies for purposes of the agreement.
- Each partner will meet with the other partner's respective board or owner annually to share results of the partnership agreement.
- A working partnership agreement will be developed and monitored together on a quarterly or as-needed basis.
- If conflicts arise between partners, the City's Parks and Recreation Director will meet with the partner's highest ranking officer to resolve the partnership issue. It should be resolved at the highest level or the partnership will be dissolved.
- No exchange of money between partners will be made until the end of the partnership year. A running credit will be established that can be settled at the end of the planning year with one check or will be carried over to the following year as a credit with adjustments made to the working agreement to meet the equity level desired.

PUBLIC/NOT-FOR-PROFIT PARTNERSHIPS

The partnership policy for public/not-for-profit partnerships with the City and the not-for-profit community of service providers is seen in associations working together in the development and management of facilities and programs. These principles are as follows:

- The not-for-profit partner agency or group involved with the City must first recognize that they are in a partnership with the City to provide a public service or good; conversely, the City must manage the partnership in the best interest of the community as a whole, not in the best interest of the not-for-profit agency.
- The partnership working agreement will be year-to-year and evaluated based on the outcomes determined for the partnership agencies or groups during the planning process at the start of the partnership year. At the planning workshop, each partner will share their needs for the partnership and outcomes desired. Each partner will outline their level of investment in the

partnership as it applies to money, people, time, equipment, and the amount of capital investment they will make in the partnership for the coming year.

- Each partner will focus on meeting a balance of 50% equity or as negotiated and agreed upon as established in the planning session with the City. Each partner will demonstrate to the other the method each will use to track costs, how it will be reported on a monthly basis, and any revenue earned.
- Each partner will appoint a liaison to serve each partnering agency for communication purposes.
- Measurable outcomes will be reviewed quarterly and shared with each partner, with adjustments made, as needed.
- Each partner will act as an agent for the other partner to think collectively as one, not two separate agencies. Items such as financial information will be shared if requested by either partner when requested to support a better understanding of the resources available to the partnership.
- Each partner will meet the other's respective board on a yearly basis to share results of the partnership agreement.
- If conflicts should arise during the partnership year, the City's Park and Recreation Director and the highest-ranking officer of the not-for-profit agency will meet to resolve the issue.
- It should be resolved at this level or the partnership will be dissolved. No other course of action will be allowed by either partner.
- Financial payments by the not-for-profit agency will be made monthly to City as outlined in the working agreement to meet the 50% equity level of the partnership.

PUBLIC/PRIVATE PARTNERSHIPS

The policy for public/private partnerships is relevant to the City and could include businesses, private groups, private associations, or individuals who desires to make a profit from use of the City facility or programs. It would also be evident if the business, group, association, or individual who wishes to develop a facility on park property, to provide a service on City-owned property, or who has a contract with the City to provide a task or service on the City's owned facilities. The partnership principles are as follows:

- Upon entering into an agreement with a private business, group, association or individual, the City board and staff must recognize that they must allow that entity to make a profit.
- In developing a public/private partnership, the City board and staff, as well as the private partner will enjoy a designated fee from the contracting agency, or a designated fee plus a percentage of gross dollars less sales tax on a monthly, quarterly or yearly basis, as outlined in the contract agreement.
- In developing a public/private partnership, the City board and staff as well as contracted partners will establish a set of measurable outcomes to be achieved. A tracking method of those outcomes will be established and monitored by the City board and staff. The outcomes will include standards of quality, financial reports, customer satisfaction, payments to the City, and overall coordination with the City for the services rendered.

- Depending on the level of investment made by the private contractor, the partnership agreement can be limited to months, a year, or multiple years.
- The private contractor will provide on a yearly basis a working management plan they will follow to ensure the outcomes desired by the City board and staff to achieve the goals of the partnership set out in the partnership recital. The work management plan can and will be negotiated, if necessary. Monitoring of the work management plan will be the responsibility of both partners. The City board and staff must allow the contractor to operate freely in their best interest, as long as the outcomes are achieved.
- The City has the right to advertise for private contracted partnership services, or negotiate on an individual basis with a bid process based on the professional level of the service to be provided.
- If conflicts arise between both partners, the Parks and Recreation Director and the highest ranked officer from the other partnership will try to resolve the issue before going to each partner's legal councils. If none can be achieved, the partnership shall be dissolved.

THE PARTNERING PROCESS

The steps for the creation of a partnership with the City are as follows:

- The City will create a public notification process that will help inform any and all interested partners of the availability of partnerships with the City at Valmont Park. This will be done through notification in area newspapers, listing in the brochure, or through any other notification method that is feasible.
- The proposing partner takes the first step to propose partnering with the City.
- To help in reviewing both the partnerships proposed, and the project to be developed in partnership, they ask for a Preliminary Proposal according to a specific format.
- If the initial review of a Preliminary Proposal yields interest and appears to be mutually beneficial based on the City mission and goals, and the selection criteria, a City staff or appointed representative will be assigned to work with potential partners.
- The City representative is available to answer questions related to the creation of an initial proposal, and after initial interest has been indicated, will work with the proposing partner to create a checklist of what actions need to take place next. Each project will have distinctive planning, design, review, and support issues. The City representative will facilitate the process of determining how the partnership will address these issues. This representative can also facilitate approvals and input from any involved City staff member, providing guidance for the partners as to necessary steps.
- An additional focus at this point will be determining whether this project is appropriate for additional collaborative partnering, and whether this project should prompt the City to seek a Request for Proposal (RFP) from competing/ collaborating organizations.
- For most projects, a Formal Proposal from the partners for their desired development project will need to be presented for the City's official development review processes and approvals. The project may require approval by the City attorney's office.
- Depending on project complexity and anticipated benefits, responsibilities for all action points are negotiable, within the framework established by law, to assure the most efficient and

mutually beneficial outcome. Some projects may require that all technical and professional expertise and staff resources come from outside the City's staff, while some projects may proceed most efficiently if the City contributes staff resources to the partnership.

- The partnership must cover the costs that the partnership incurs, regardless of how the partnered project is staffed, and reflect those costs in its project proposal and budget. The proposal for the partnered project should also discuss how staffing and expertise will be provided, and what documents will be produced. If City staff resources are to be used by the partnership, those costs should be allocated to the partnered project and charged to it.
- Specific Partnership Agreements appropriate to the project will be drafted jointly. There is no specifically prescribed format for partnership agreements, which may take any of several forms depending on what will accomplish the desired relationships among partners. The agreements may be in the form of:
    - Lease Agreements
    - Management and/or Operating Agreements
    - Maintenance Agreements
    - Intergovernmental Agreements (IGAs)
    - Or a combination of these and/or other appropriate agreements
- Proposed partnership agreements might include oversight of the development of the partnership, concept plans and architectural designs, development and design review, project management, and construction documents, inspections, contracting, monitoring, etc. Provision to fund the costs and for reimbursing the City for its costs incurred in creating the partnership, facilitating the project's passage through the development review processes, and completing the required documents should be considered.

If all is approved, the partnership begins. The City is committed to upholding its responsibilities to partners from the initiation through the continuation of a partnership. Evaluation will be an integral component of all partnerships. The agreements should outline who is responsible for evaluation, the types of measures used, and detail what will occur should the evaluations reveal that partners are not meeting their partnership obligations.