

May 1, 2012



Aquatic Facilities Study 2012

Alexandria, Virginia

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Executive Summary May 1, 2012 City of Alexandria, VA



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Mission Statement

To be a vibrant, safe, and attractive city of opportunity through the development of effective and efficient recreation programs, facilities, and parks for all citizens and visitors to enjoy.

*Source:
Department of Parks, Recreation, and
Cultural Activities*

City of Alexandria, VA

Introduction

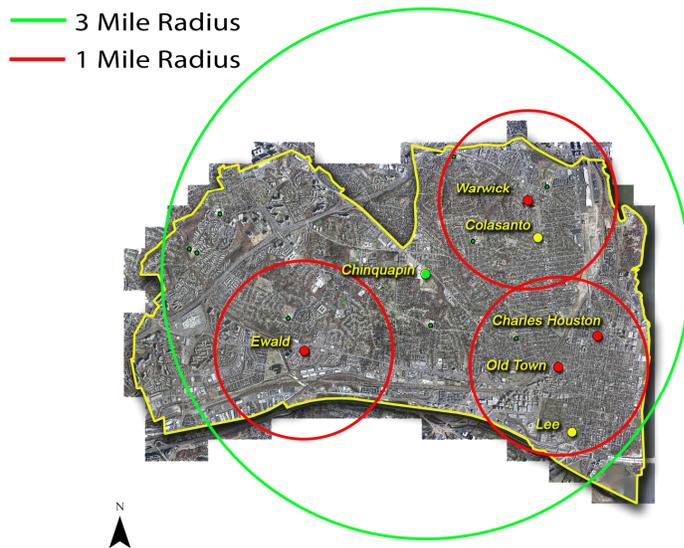
Aquatics are an important part of recreation nationwide. Aquatics often lead the list of desired public recreational amenities in city wide park plans. Additionally, a strong aquatics program is vitally important for all children and adults to learn to swim—especially in a community adjacent to a large river like the Potomac.

The City of Alexandria currently operates and maintains a system of five (5) aquatic facilities at the following sites:

Chinquapin	(Indoor – Community Size Pool)
Old Town	(Outdoor – Community Size Pool)
Warwick	(Outdoor – Community Size Pool)
Ewald	(Outdoor - Neighborhood Size Pool) <i>Note: Proposed for Closure FY 2013</i>
Charles Houston	(Outdoor - Neighborhood Size Pool)

These additional aquatic facilities were once in operation, but have now been closed:

Nannie J. Lee	(Outdoor - Neighborhood Size Pool)
Nicholas Colasanto	(Outdoor - Neighborhood Size Pool)



Life Expectancy – 5 to 10 Years

Annual Attendance – 120,000

Annual Operating Costs - \$1,600,000

Annual Revenue - \$500,000

Annual Operating Subsidy -
\$1,100,000

Annual Operating Subsidy (Per
User) \$9.17

Existing Five Pool Aquatic System

In an urban community like Alexandria service radius sizes need to be reduced due to density of population. Using a three mile service radius for Chinquapin (Indoor) – it is apparent that it is centrally located to serve the entire community. In using a one mile service radius for Warwick, Old Town, Ewald, and Charles Houston (Outdoor) – it is apparent that there were and are overlaps in service on the east side – while there are gaps in service on the west side.

With the exception of Charles Houston, the existing aquatic facilities are reaching the end of their functional and physical life expectancy with ages of over 30 years per pool.

Lee and Colasanto are currently closed due to budget reductions. Ewald is proposed for closure in FY 2013. Most of the existing facilities have limited opportunities for expansion and limited parking as currently designed.

In response to these conditions, the City contracted with Kimley-Horn and Counsilman-Hunsaker to prepare a City-wide Aquatic Facilities Study with the following objectives:

- A) Confirm the aquatic programming needs of the Community;
- B) Verify the types and quantity of facilities to meet these needs;
- C) Evaluate the most appropriate locations for facilities based on traffic patterns and use;
- D) Determine the financial impact of the construction and operation costs of the facilities;
- E) Recommend an aquatic facility system to meet the City's needs for the next 30 years.

An Executive Summary of the findings is as follows:

Planning for Diverse Aquatic User Groups

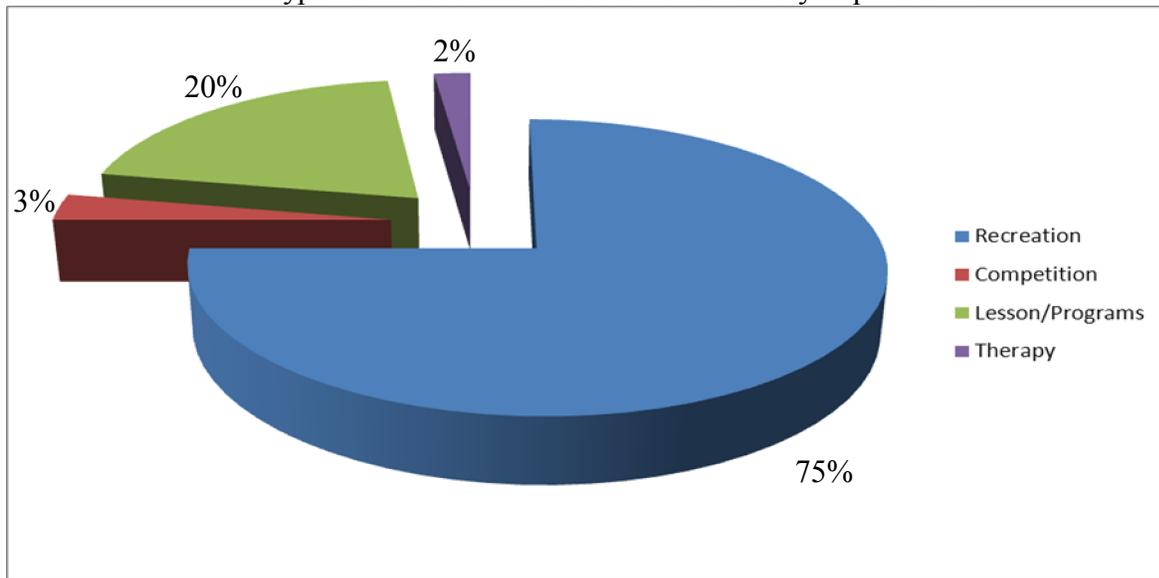
As we look at city-wide aquatic systems, it is important to include a variety of opportunities to meet the needs of all types of aquatic users. Aquatic users are typically defined by four main groups, each with a different needed configuration for aquatic spaces and different water temperatures. These uses and their characteristics are as follows:

- Recreation (Warmer and shallower water with vertical water sprays, toys, and slides)
- Lesson/Programs (Warmer water with a variety of depths for instructional programs)
- Competition (Colder and deeper water with specific lengths and widths of lanes)
- Therapy (Very warm water with depths suitable for water aerobics)

A survey by the National Sporting Goods Association states that the recreational group makes up over 90% of all aquatic users, and includes a variety of age groups—from tots to seniors. Trends show that most recreational swimming happens during the summer months and therefore supports the need for outdoor aquatics. Even communities located in areas with cold winters and short summers still desire outdoor swimming facilities for summer use.

The recreational user group prefers to have shallower and warmer water to allow for extended stays and socialization. Research by Counsilman-Hunsaker also shows that Recreation users provide 75% of the net revenue that can be generated from aquatics.

Typical Source of Net Revenue Streams by Aquatic User



Source: Counsilman-Hunsaker

New recreational aquatic facilities incorporate fun features, similar to playground equipment, for children to play and interact with; waterslides suitable for multiple age groups from tots to teens and adults; various water depths from zero-depth beach entries to plunge pools or diving areas; and other popular features for all age groups such as lazy rivers and current channels. Additionally, modern recreational aquatic facilities include more creature comforts for extended stays such as shade areas, lounge chairs, picnic tables, lockers, and concession areas.

Lessons/programming aquatic facilities can include areas for instruction for swim lessons, lifeguard training, water safety, scuba diving, etc. Each of these groups needs appropriate spaces for teaching and training. These spaces are often incorporated into competitive and recreational style pools. Swim lessons are typically the largest of the instructional groups and are considered a life-safety skill that children need to learn. Some communities have even made learning swim a requirement at their public school programs. New recreational style pools have increased children's desires to participate in swim lessons in order to be allowed to play and interact with their peers. Lesson/programming users typically provide 20% of the revenue from aquatic facilities.

The competition user group requires a pool that meets the dimensions of the regulating agency including the NFSHS (High School Standards), NCAA (Collegiate Standards), USA Swimming (Club Team Standards), and FINA (International Standards). They also prefer deeper and colder water to increase the competitive abilities of the pool. The primary distance for competitive swimming in the United States is 25 yards. Only FINA and USA Swimming's summer program requires a 50 meter dimension. Competition groups are a small but dedicated group of users who have demonstrated that they will drive long distances for practicing and competitive meets. One metric often seen in planning for competition pools for high school swim teams is to provide one competition pool per public high school. While it is true that a year round indoor competition pool facility can generate year round revenue and user fees – the cost of operating such a facility greatly reduces the net income generated. Counsilman-Hunsaker has found that competition users typically generate about 3% of the net revenue from aquatic facilities.

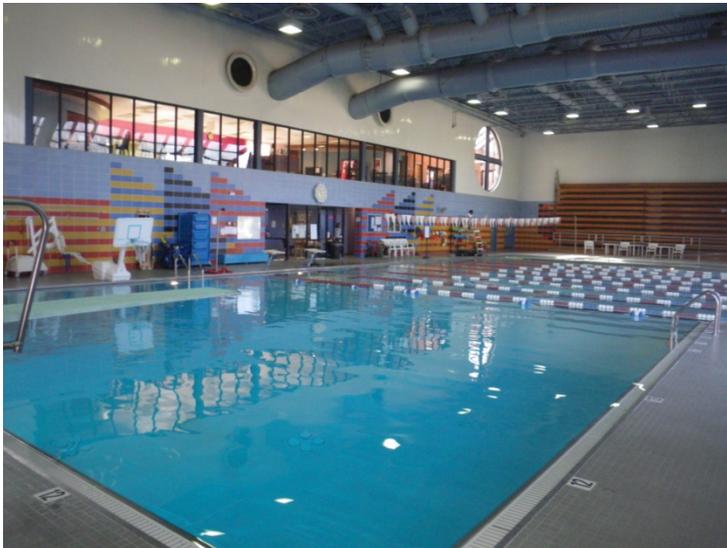
Therapy usage is currently the fastest growing aquatic user group. New research provides evidence of the benefits of aquatic exercise. While aerobic dance and cycling have decreased by 17.3% and 23.2%, respectively, from 1998-2007, aquatic exercise increased by 25% from 2004-2007. This group requires a small body of warm water that can offer a variety of classes and programs from water aerobics to exercise lap swimming. Therapy and wellness program usage typically generates about 2% of the net revenue from aquatic facilities.

Findings

When developing this aquatic facility study for the City of Alexandria, a variety of community-wide user groups were met with and considered. The findings from site visits, meeting with the health department, analysis of other area providers, staff discussions, and user group meetings were as follows for the existing pools open at the time of this study:

Chinquapin Recreation Center

In meeting with these groups it became apparent that the Chinquapin Recreation Center and its indoor aquatic facilities are crowded and do not have sufficient space for all user groups (lesson programming, therapy users and exercise swimmers, and the high school swim team. In addition, the pool was not constructed to proper competition meet dimensions. The entire Chinquapin recreation center and pool have been in and out of proposed City budgets for major repairs and total reconstruction. The facility should be replaced in the next 5-10 years.



Chinquapin Recreation Center Pool

Opened in 1985
8 Lane x 25M with Diving “L”
Centrally Located
2010 Attendance 80,000 (Includes Recreation Center)
Pool Length Non-Compliant for Competitive Meets
Traffic Congestion with Adjacent High School and Limited Parking

Old Town Pool

In meeting with Old Town Pool users and others, Old Town Pool is one of the most popular (and over-crowded) pools in the City of Alexandria. The pool is used for summer swim leagues, lesson programming, and recreation. The pool has been kept up to date to meet health department requirements. However, the facility has no modern recreation features (slides, sprays, play structures); limited deck space and shade; and an outdated bathhouse without concessions.



Old Town Pool

Opened in 1975

8 Lane x 25Y with Diving “L”

Located on East Side

2010 Attendance 16,302
(Open in Summer Only)

Lack of Recreational Amenities
(No slides or water play
elements)

Outdated Bathhouse

Warwick Pool

Warwick currently serves as a neighborhood pool in the far northeast side of town and there is no room for parking or expansion. To increase usage and alleviate crowding at Old Town – the City staff has directed day camp groups to Warwick. The park land is not owned but leased by the City. Additionally, the pool is located on a hillside and has ongoing structural issues. If there is no future pool, a sprayground would be desirable.



Warwick Pool

Opened in 1979

Irregular “L” Shaped Pool with
Diving and Wading Pool

Located in Far North East

2010 Attendance: 16,806
(Due to Day Care Groups)

Lack of Recreational Amenities
(No slides or water play
elements)

Outdated Bathhouse

Ewald Pool

In meeting with neighborhood users and others, Ewald is very lightly used and lacks good accessibility and visibility. It is the only pool on the west side of the City. A small group of users would like to keep the pool. Additionally, they stated that the entire park needed to be redeveloped and revitalized. The pool is scheduled for closure in FY 2013.



Ewald Pool

Opened in 1969

Small Rectangular Pool
(1,800 SF)

Only Pool on West Side

2010 Attendance: 704

Lack of Recreational Amenities
(No slides or water play
elements)

Outdated Bathhouse

Charles Houston Pool

The newest pool in Alexandria is Charles Houston Pool built on the old model of trying to attach a small recreation pool to each recreation center. The pool was almost not built but additional funds were found to add it a memorial to young men who lost their lives swimming in the nearby Potomac. The pool is attractive but lacks enough seating and shade and is overcrowded by day camp users. The pool is suitable for swim lessons and small group programming.



Charles Houston Pool

Opened in 2009

Small Multi-Use Pool
(1,800 SF)

- Zero Depth Entry
- Spray Bar
- Two Fitness Lap Lanes

South East Side

2010 Attendance: 4,862

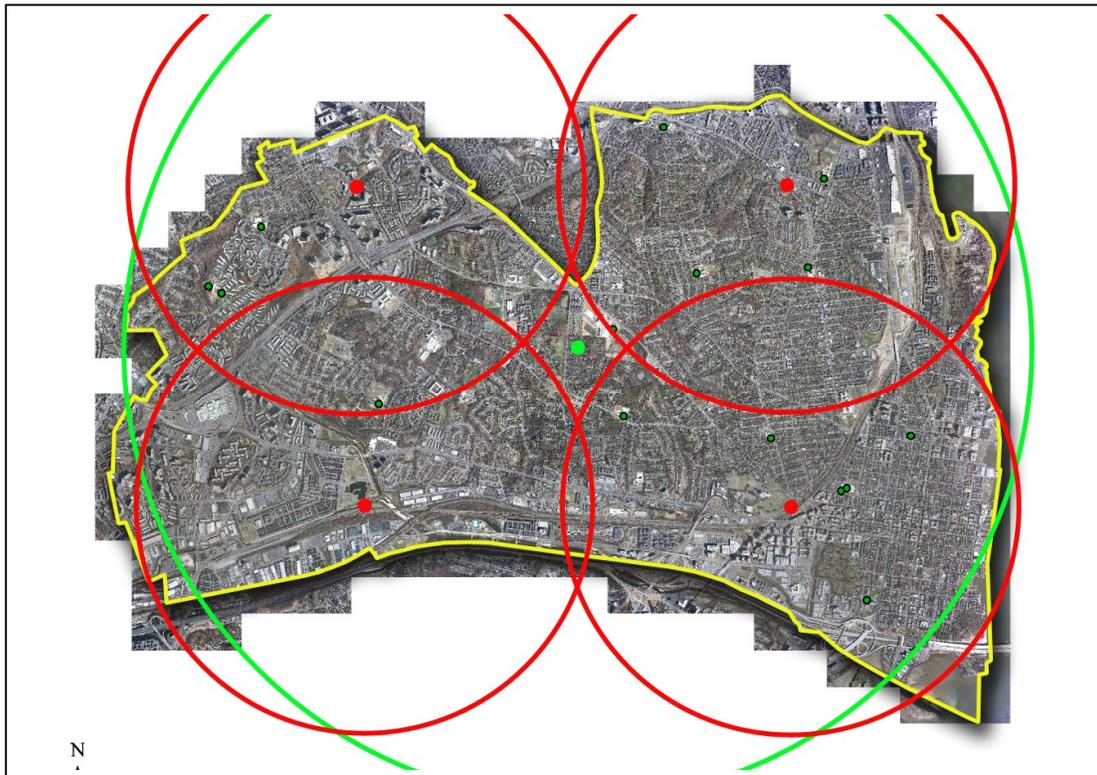
Lack of Amenities
(Shade, Lounges, Picnic Tables)

Toolbox Options and Implementation Scenarios

From the findings on the existing pools, several generic pool concepts or “Toolbox Options” were developed to address the programming needs of each user group (recreation, lesson, competition, and therapy). These options were:

- 1) Indoor Therapy Pool
- 2) Small Family Aquatic Center
- 3) Medium Family Aquatic Center
- 4) Indoor 50 M Pool
- 5) Indoor 25Yx25M w/ Leisure Pool
- 6) Spray Park (Sprayground)
- 7) Interactive Fountain

Using the information from the Findings and Toolbox Options – two implementation scenarios were developed to evaluate the cost and sustainability of a new Three Pool System (One Central Pool at Chinquapin Recreation Center w/ 25Yx25M and Leisure Pool plus One Medium Family Aquatic Center on the East Side and One Larger East Side Pool and One Medium Family Aquatic Center on the West Side) and new Five Pool System (One Central Pool at Chinquapin Recreation Center w/ 25Yx25M and Leisure Pool plus Two Small Family Aquatic Centers on the East Side and Two Small Family Aquatic Centers on the West Side).



Schematic of Five Pool Implementation Scenario

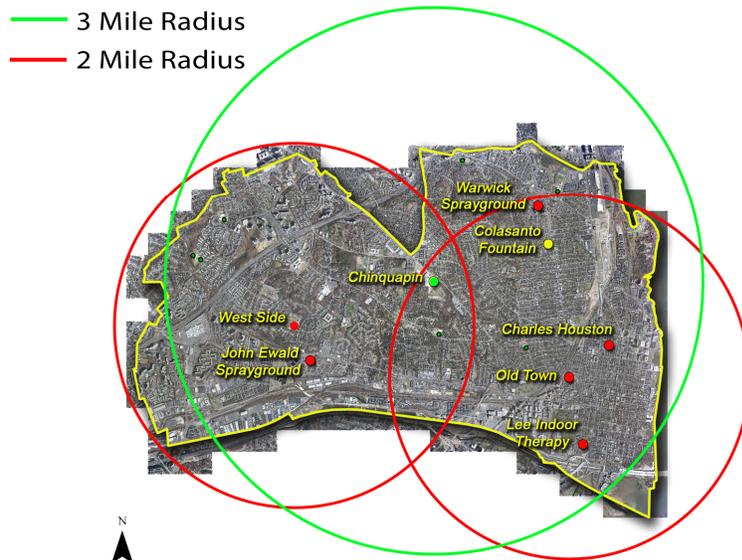
Recommendations

In consideration of the above, current funding discussions, travel time and accessibility, and the need to address all user groups in a financially sustainable manner – the recommended aquatic system from this study is a Modified Three Pool System consisting of:

- **Chinquapin:** \$28,365,000. New recreation center with new indoor 25-yard by 25-meter competition pool and indoor leisure pool, including a new fitness center with group exercise rooms, and multi-purpose rooms. (50 meter pool optional at additional cost)
- **Old Town:** \$5,507,000. New modified medium family aquatic center and bathhouse with 8-lane 25-yard lap pool and separate children's area with zero depth entry, play structure, and water slide.
- **West Side:** \$5,298,000. New modified medium family aquatic center and new bathhouse with 8-lane 25-yard lap pool and separate children's area with zero depth entry, play structure, and water slide.

And, special use aquatic facilities to provide a higher level of service as follows:

- **Warwick:** \$2,450,000. New outdoor interactive sprayground with support building and meeting space.
- **Lee:** \$3,369,000. New indoor therapy pool.
- **Ewald:** \$1,994,000. New outdoor interactive spray ground with support building.
- **Colasanto:** \$831,769. New decorative interactive water feature to fit arts district.
- **Charles Houston:** \$0. Existing lesson/play for low cost (subsidized) outreach.



Capital Cost -	\$48,655,000
Life Expectancy –	30 to 50 Years
Annual Attendance –	307,325
Annual Operating Costs -	\$3,545,000
Annual Revenue -	\$2,668,000
Annual Operating Subsidy -	\$877,000
Annual Operating Subsidy (Per User)	\$2.85

Recommended Modified Three Pool Aquatic System

Using a three mile service radius for Chinquapin (Indoor) and a two mile service radius for enlarged and improved outdoor west side pool (TBD) and outdoor east side pool (Old Town) will provide coverage while minimizing operations and development costs.

Supplemental facilities include a sprayground for the west side (Ewald) and east side (Warwick); an interactive fountain at Colasanto; and a therapy pool at Lee.

Phasing

While rebuilding the entire aquatic system at one time would be ideal, it is an unrealistic approach. Therefore, a suggested phasing and implementation plan has been developed based on the priorities of the aquatic users and other CIP items the city is undertaking.

Phase I (East Side)

Item 1A	Replace Old Town Pool	\$5,510,000
Item 1B	Upgrade Warwick with Sprayground	\$2,450,000
Item 1C	Make Minimum Repairs to Chinquapin	<u>\$ 832,000</u>
		\$8,792,000

Phase II (West Side)

Item 2A	Replace Ewald Pool at West Side	\$5,300,000
Item 2B	Upgrade Ewald Pool with a Sprayground	<u>\$1,995,000</u>
		\$7,295,000

Phase III (Central/City-Wide)

Item 3A	Replace Chinquapin Center and Pool	\$28,366,000
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Phase IV (East Side/City-Wide)

Item 4A	Lee Indoor Therapy Pool	\$3,370,000
Item 4B	Colasanto Interactive Fountain	<u>\$832,000</u>
		\$4,202,000

The total cost of the recommended plan (Phases I, II, III, and IV) as outlined above would be \$48,655,000.

Comparison and Considerations

While implementing these recommendations is our suggested approach to serving the aquatic community, it is important to consider and evaluate the implications of other scenarios. These scenarios are important to consider when evaluating the recommended plan:

1. **Do Nothing:** Invest no capital money and close existing pools due to non-compliance with new regulations and guidelines.
2. **Maintain As-Is.** Continue to operate the pools, making needed repairs to continue operation for the remainder of the pools maximum estimated useful life (5-10 years).
3. **Replace As-Is.** Rebuild the 1970's model aquatic plan by replacing all pools in their current locations and configurations.
4. **Recommended:** Replace all pools with modern aquatic facilities and relocate to better serve the entire community.

When evaluating these scenarios, the capital investment must be considered along with the overall value of the investment. Some criteria that are used to evaluate the value are: life expectancy, operating subsidy, annual visits or usage.

The following chart summarizes some of the key points that must be considered when making this decision:

	Do Nothing	Maintain As-Is	Replace As-Is	Recommended
Capital Cost	\$0	\$9,960,000	\$37,800,000	\$48,655,000
Life Expectancy	0	5-10 Years	30-50 Years	30-50 Years
Annual Attendance	0	120,000	120,000	307,325
Annual Operating Costs	\$0	\$1,600,000	\$1,600,000	\$3,545,000
Annual Revenues	\$0	\$500,000	\$500,000	\$2,668,000
Annual Operating Subsidy	\$0	\$1,100,000	\$1,100,000	\$877,000
Subsidy Per Visit	\$0.00	\$9.17	\$9.17	\$2.85

Please note that “Do Nothing” ,“Maintain As-Is”, and “Replace As-Is” are not recommended as none of them meet the current identified or future needs of the aquatic users.

In Spring 2012, lesson programs had sign-ups of 500 children with a waiting list of an additional 300. Learning to swim is an essential life-safety skill – especially in a community like Alexandria adjacent to the Potomac River. Currently, existing pools do not have the capacity to accommodate overflowing day camp users. Fiscal budgets are tight nationwide and the City of Alexandria is in the process of evaluating national trends of user fees supporting programs so that they can remain available to meet the communities needs in fiscally sustainable manner.

Historically, the City of Alexandria has a reputation for providing for a high-level of recreation services to the community including aquatics. In 2011 the *City of Alexandria Parks Needs Assesement* documented indoor and outdoor aquatics as one of the top five unmet needs of the City.

The intent of Aquatic Facilities Study and the recommendations associated with it should be used as a tool and resource to assist the public and decision makers in developing final budgeting and plans to create a new, diverse and well-thought out aquatic system that will serve the citizens of the City of Alexandria for the next 30-50 years.

City of Alexandria – Goal of Aquatics

The goal of aquatics is to promote water safety awareness while providing a broad array of programs, activities, and services to meet the needs and interests of a diverse community and facilitate the development of healthy lifestyles related to aquatic based programming.

Source: [The City of Alexandria 2010 Aquatics Business Plan](#)