



# City of Alexandria Aquatic Facilities Study

City Council Meeting  
September 24, 2013

# Alexandria Aquatics Today

## Existing Facilities

- 30+ Years Old  
(Excluding Charles Houston)
- Physically and Functionally Obsolete
  - Outdated infrastructure
  - Significant operating and capital costs
  - Chinquapin is not regulation length for competition
  - Do not meet all current standards (ADA/Code)
  - Lack of recreation amenities



Colasanto CLOSED



Old Town



Warwick



Nannie J. Lee CLOSED

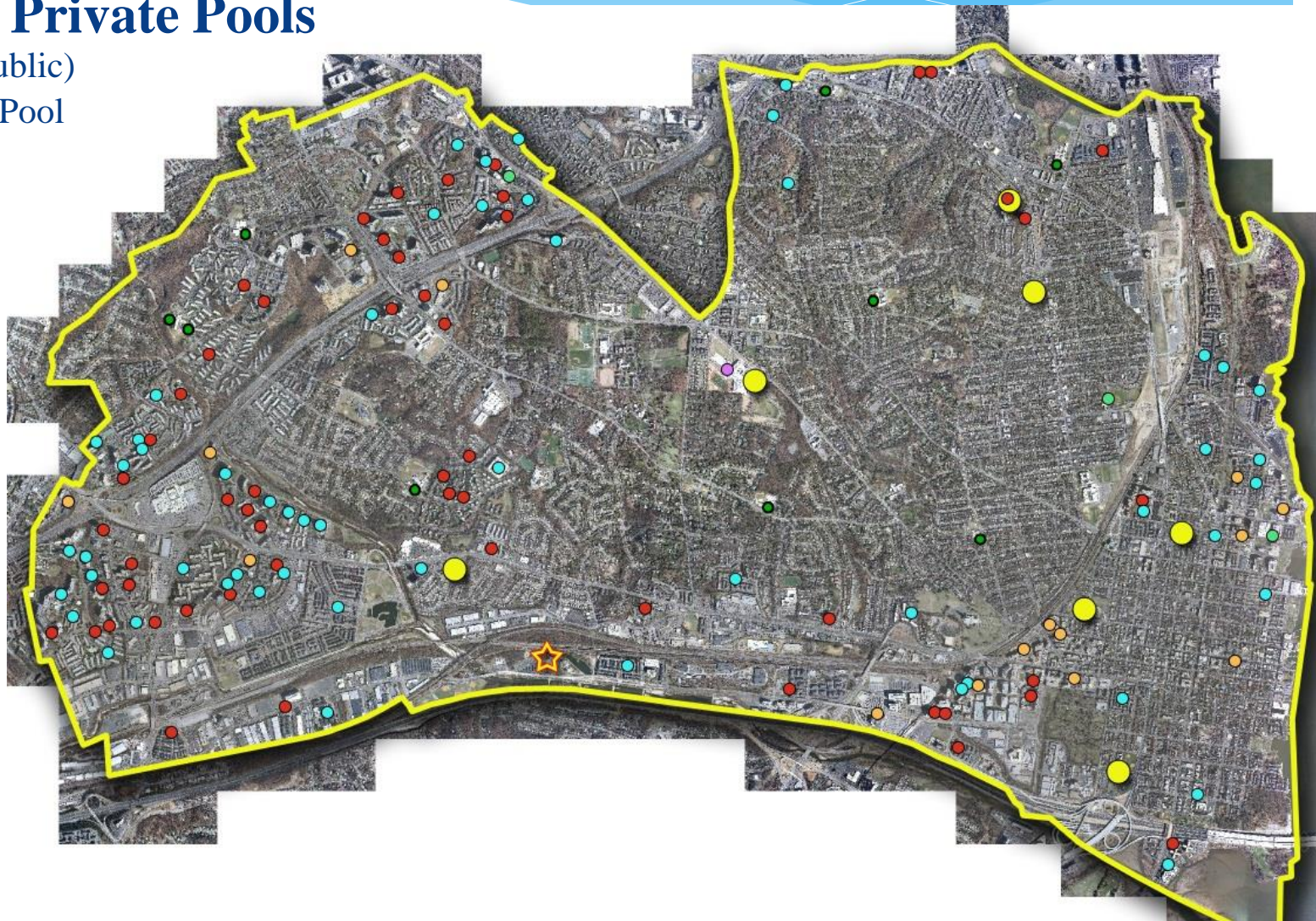


Ewald CLOSED

# Alexandria Aquatics Facilities

## Public and Private Pools

- City pool (public)
- Private Apt. Pool
- Condo Pool
- Private pool
- Hotel Pool
- ★ Water Park



# Approved FY 2014-2023 CIP

Project	Facilities Study Recommendation	Approved FY2014-2023 CIP	AAA
Chinquapin Aquatics Center (25mx25yd)	\$28.4 M	\$500K 50m Feasibility FY14 \$17.5million FY16-17	\$2.5 million for 50m
General Aquatics	-----	\$5 million FY18	\$2.5 million
Ewald Sprayground	\$2.0 M	-----	-----
Old Town Pool	\$5.5 M	-----	-----
Warwick Sprayground	\$2.5 M	\$92K Pool Operating for One Year Only	-----
Colasanto Interactive Water Feature	\$0.8 M	-----	-----
Lee Center Therapeutic Facilities	\$3.4 M	-----	-----
West End Pool	\$5.3 M	-----	-----
<b>Total</b>	<b>\$47.9 M</b>	<b>\$23million</b>	<b>\$5 million</b>

# Chinquapin 2013 Work Update

HVAC Work Underway, to be completed November 4, 2013.

RFP for Feasibility Study for 50m Pool and Renovated Recreation Pool:

- Out for solicitation Sept. 9
- Proposals due Oct. 11
- Consultant begins work late fall/early winter 2013

City/Advocates for Alexandria Aquatics (AAA) Partnership development:

- Memorandum of Understanding under review
- Regular meetings between AAA and City staff

# Warwick Pool Update

- FY2014 Operating Budget included funding to keep Warwick Pool open for one season (Summer 2013)
- Significant capital investment required to maintain the existing pool for additional years
- AAA in discussions with the Virginia Theological Seminary (property owners) regarding future support for the site
- Warwick Village Community Fall 2013 Survey finds continued support for a pool at this site

# Outstanding Issues

- FY2014-2023 General Aquatics Funding of \$5 million
- Existing Closed Facilities
- Warwick Pool Operation FY14-15 and Beyond
- Operating Subsidy and Cost Recovery Program for Aquatics

# RPCA Staff Recommendations

- New Community Pool at Warwick, including necessary renovations to the existing community building (\$1.5 million)
- Decommission Colasanto Pool (\$300K)
- Decommission Nannie J. Lee Pool, providing therapeutic aquatics at Chinquapin (\$300K)
- New Family Aquatic Center at Old Town (\$5.5M)
- New Family Aquatic Center at Ewald or Ben Brenman Park (\$5.5M)
- Consider and Implement Resource Allocation Program for Aquatics, reducing need for significant ongoing subsidies

# Warwick Community Pool



- New Community Pool at Warwick, including necessary renovations to the existing community building (\$1.5 million)

# Decommission Colasanto and Nannie J. Lee Pools



- Decommission Colasanto Pool (\$300K)
- Decommission Nannie J. Lee Pool, providing therapeutic aquatics at Chinquapin (\$300K)



# Family Aquatics Center Old Town



- New Family Aquatic Center at Old Town (\$5.5M)

# Family Aquatic Center West End



- New Family Aquatic Center at Ewald or Ben Brenman Park (\$5.5M)

# Resource Allocation Program

	Current System
Annual Attendance	120,000
Annual Operating Costs	\$1,600,000
Annual Revenues	\$500,000
Annual Operating Subsidy	\$1,100,000
<b>Subsidy Per Visit</b>	<b>\$9.17</b>

- Consider and Implement Reasonable Resource Allocation Program for Aquatics, reducing need for significant ongoing subsidies

# Resource Allocation Program

- Mostly Individual – elite competition swimming or diving teams
- Considerable Individual – swim teams
- Individual/Community – swim lessons
- Considerable Community – recreation pools
- Mostly Community – spraygrounds

# Questions?

# Additional Information

- \* The following slides are for background details if needed.

# Current Trends in Aquatics

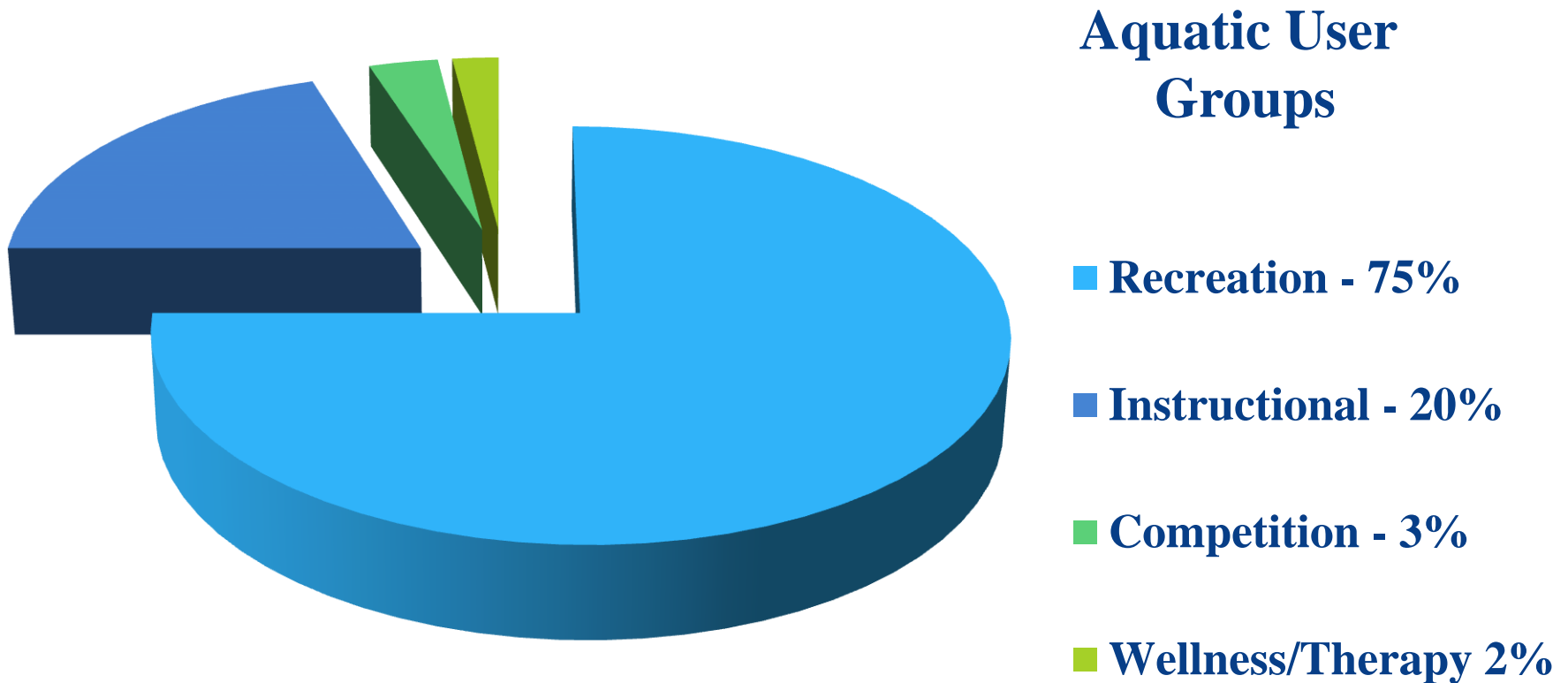
- Therapeutic facilities
- Recreational pools with play features
- Competition with recreation features
- Instructional with zero depth entry
- Interactive Fountains
- Spraygrounds



# Determining the Direction of Aquatics in Alexandria

- What users groups do we serve?
- What facility types do we provide?
- What level of operating subsidy do we sustain?

# Aquatic Needs in Alexandria



## User Groups

### Facility Types

	Instruction	Fitness	Physical Therapy	Recreation	Therapeutic Play	H.S. Competition	International Competition
Small Recreation Pool	X	X	X	X	X		
Medium Recreation Pool	X	X	X	X	X	X	
Therapy	X	X	X	X	X		
25m x 25yd Competition	X	X		X		X	
50m x 25yd Competition						X	X
Sprayground				X	X		

# 2012 Aquatics Facilities Study

- **Kimley-Horn and Associates**  
Nationally known engineers, aquatics designers, and park planners with local office in Reston, VA
- **Counsilman Hunsaker**  
The leading aquatic planning and design firm in the United States

# Aquatic Needs in Alexandria

## 2013 Alexandria Needs Assessment

- 48% have a need for an indoor swimming pool  
Of those, 61% say their need is currently unmet.
- 38% have a need for an outdoor swimming pool  
Of those, 63% say their need is currently unmet.
- Indoor and outdoor swimming pools ranked 9<sup>th</sup> and 10<sup>th</sup> (out of 30) most important recreation facilities.

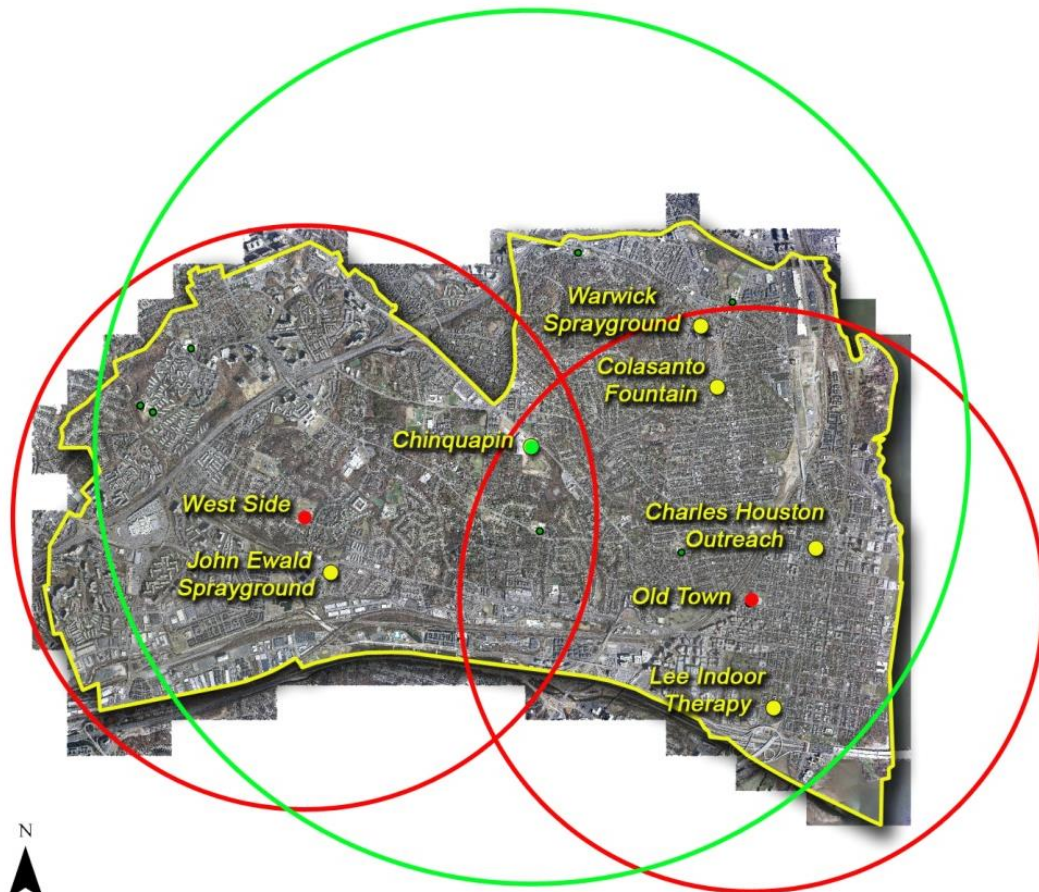
# Aquatic Needs in Alexandria

## Comparison of Aquatic Systems

Current Pool System	Desired Pool System
<ul style="list-style-type: none"><li>• Out of date infrastructure</li></ul>	<ul style="list-style-type: none"><li>• Infrastructure to meet current code</li></ul>
<ul style="list-style-type: none"><li>• Does not meet recreation swimmer and instructional needs</li></ul>	<ul style="list-style-type: none"><li>• Focused on recreation swimmer and instructional needs</li></ul>
<ul style="list-style-type: none"><li>• Does not provide for sanctioned swim competition</li></ul>	<ul style="list-style-type: none"><li>• Ability to host regional competitive events</li></ul>
<ul style="list-style-type: none"><li>• High per person operating cost</li></ul>	<ul style="list-style-type: none"><li>• Lower operating cost per person</li></ul>
<ul style="list-style-type: none"><li>• Low attendance capacity</li></ul>	<ul style="list-style-type: none"><li>• Higher attendance capacity</li></ul>
<ul style="list-style-type: none"><li>• Does not meet changing demographics</li></ul>	<ul style="list-style-type: none"><li>• Meets higher pre-K, elementary, and senior projections</li></ul>

# Aquatics Facility Study Recommendations

## Three Pool System



Includes Additional Specialty Aquatic Amenities

**Replace all pools with modern aquatic facilities and add new West End facility to better serve the entire community.**

- Total Capital Cost - \$48,655,000
- Life Expectancy – 30-50 years
- Annual Attendance – 307,325
- Annual Operating Costs - \$3,545,000
- Annual Revenue - \$2,668,000
- Annual Operating Subsidy - \$877,000
- Subsidy per Visit - \$2.85

# Warwick Sprayground



Project Cost: \$2,450,000

Includes new community room (rentals)



# Warwick Pool Alternatives

## Aquatics Study

Upgrade Warwick Park with Spray Ground and Construct Community Building

**Estimated Cost:** \$2,450,000

## Alternative 1

- Demolish and remove existing children's pool only
- Construct new interactive spray ground.
- Construct new site access paths with landscaping.
- Renovate and upgrade existing main pool and diving well.
- Renovate existing bathhouse and pool deck

**Estimated Cost:** \$1,928,730 - \$2,356,760

## Alternative 2

- Demolish and remove existing children's pool and existing main pool
- construct new interactive spray ground.
- Construct new site access paths with landscaping.
- Renovate existing bathhouse and pool deck
- Construct new minimum park facility building for spray ground support

**Estimated cost:** \$1,798,180 - \$2,097,730

# Warwick Pool Alternatives

## Alternative 3

- Minor repairs to the existing children's pool, main pool, and bathhouse
- Transfer of programming and maintenance to local non-profit organization via sub-lease

**Estimated Cost:** \$843,520 - \$1,029,790

## Alternative 4

- Demolish and remove existing children's wading pool and main pool.
- Construct new small recreation/community pool
- Replace outdoor pool deck.
- Renovate existing community building/bath house.

**Estimated Cost:** \$1,279,327 - \$1,546,532

# Old Town Pool Alternatives

## Aquatics Study

Replace Old Town Pool with Medium Family Aquatic Center and new bathhouse

**Estimated Cost: \$5,510,000**

## Alternative 1

- Demolish and remove existing children's training pool and construct new leisure pool with play features
- Renovate existing main pool
- Replace and upgrade outdoor pool deck
- Renovate and upgrade existing bathhouse

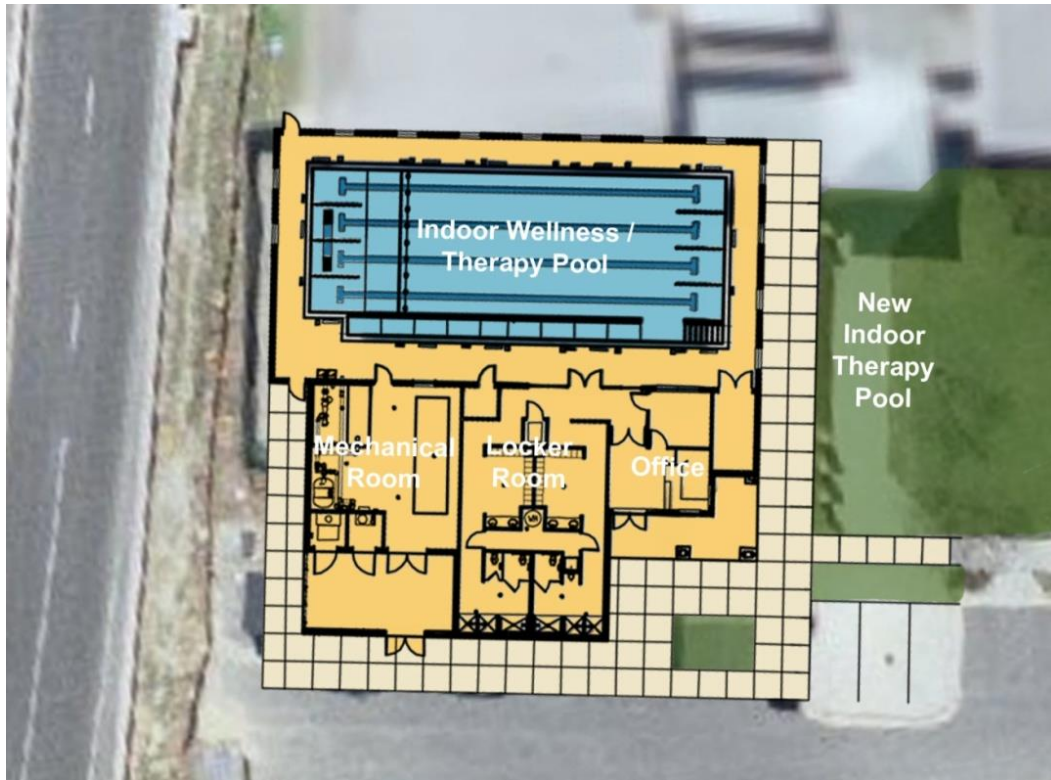
**Estimated cost: \$1,111,560 - \$1,217,730**

## Alternative 2

- Demolish and remove existing children's training pool and construct new leisure pool with play features
- Demolish and remove existing main pool and construct new competition/lap pool
- Replace and upgrade outdoor pool deck
- Renovate and upgrade existing bathhouse

**Estimated cost: \$3,173,880 - \$3,720,500**

# Nannie J. Lee: Indoor Wellness and Therapy Pool



Project Cost: \$3,370,000



# Nannie J. Lee Pool Alternatives

## **Aquatic Study**

Replace Lee Center pool with indoor Wellness/Therapy Pool

Estimate cost: \$3,370,000

## **Alternative 1**

Demolish and remove existing pool and construct new interactive therapeutic spray ground with overhead canopy

Estimated cost: \$924,130 - \$1,109,720

## **Alternative 2**

Demolish and remove existing pool and construct new therapeutic pool with overhead canopy

Estimated cost: \$1,103,130 - \$1,329,220

# Ewald Sprayground



Project Cost: \$1,995,000

Includes support building and improved parking<sup>31</sup>

# Colasanto Interactive Fountain



Project Cost: \$832,000

# Chinquapin Aquatics Center

w/ 25Y x 25M Pool and Recreation Pool



Project Cost: \$28,366,000

# Chinquapin Aquatics Center Alternatives

## Aquatics Study

- Make minimum repairs in phase 1, **Estimated Cost:** \$832,000
- Replace Chinquapin Recreation Center with 25 x 25 Pool and Leisure Pool, **Estimated Cost:** \$28,366,000

## Alternative 1

- Construct new community recreation and aquatics center to replace existing center
- Construct adjacent new three tier parking structure for 150 automobiles

**Estimated Cost:** \$29,818,030 - \$31,977,770

## Alternative 2

- Convert existing non-regulation/competition, to lap pool, leisure pool (with size modifications), and new diving well.
- Construct separate new competition natatorium on site to house new full size competition pool with requisite support areas and connect existing and new facilities
- Construct adjacent new three tier parking structure for 150 automobiles

**Estimated Cost:** \$16,815,990 - \$19,479,380

# Chinquapin Aquatics Center Alternatives

## Alternative 3

- Modify the existing building and structural system by adding 8,000 SF floor area.
- Demolish and remove existing non-regulation/competition pool plus diving well and leisure pool.
- Construct new regulation size pool, new leisure pool and new diving well.

**Estimated Cost:** \$6,313,120 - \$7,795,070

## Alternative 3

- Study feasibility and, if feasible, construct a separate 25y x 50m competition pool.
- Renovate existing pool to create a recreation pool.

**Estimated Cost:** \$20,000,000

# Additional Aquatic Facilities



- Spraygrounds at Warwick and Ewald
- Therapy Pool at Nannie J. Lee
- Interactive Fountain at Colasanto
- Maintain existing community pool at Charles Houston



# Comparison of Scenarios

(from Facilities Study)

	Do Nothing	Maintain as-is	Replace as-is	Recommended
Capital Costs	\$0	\$9,960,000	\$37,800,000	<b>\$48,655,000</b>
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	\$9.17	\$9.17	\$2.85

# Existing Conditions - Warwick



# Existing Conditions - Old Town



# Existing Conditions - Ewald



# Existing Conditions - Nannie J. Lee



# Existing Conditions - Colasanto



# Current Trends in Aquatics



Competition with recreation features  
Instructional with zero depth entry



# Current Trends in Aquatics



## Interactive Fountains Spraygrounds



# 2012 Aquatics Facilities Study

- Confirm aquatics programming needs of the community;
- Verify the types and quantity of facilities to meet those needs;
- Evaluate the most appropriate locations based on traffic patterns and use; and
- Determine the financial impact of construction and operation costs required to meet the aquatic needs of the City for the next 30 years.

# Aquatic Needs in Alexandria

## Recreational Facilities (75% of Users)

Designed to be family oriented - serving young children, teens, parents, as well as seniors:

- Zero-Depth or Beach Entry
- Interactive Splash Play Areas
- Variety of Water-Based Interactive Elements
- Shade Structures



# Aquatic Needs in Alexandria

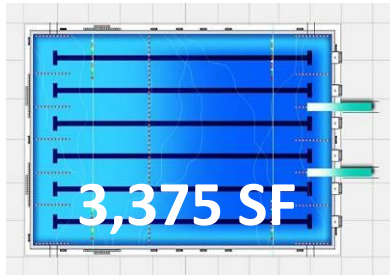
## Instructional Facilities (20% of Users)

- Learn to swim
- Water safety instruction  
Lifeguard instruction
- Life safety skills
- Survival swimming
- Scuba
- Other aquatic skills

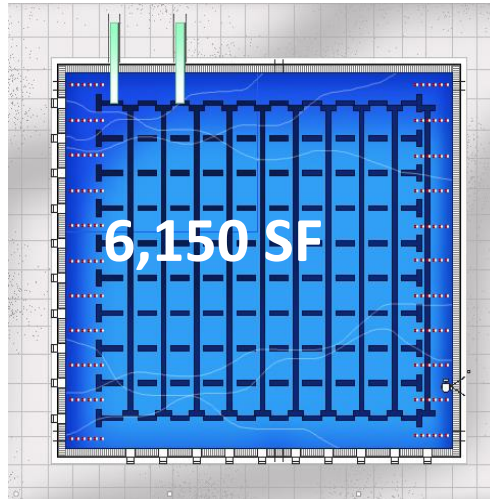


# Aquatic Needs in Alexandria

## Competition Facilities (3% of Users)

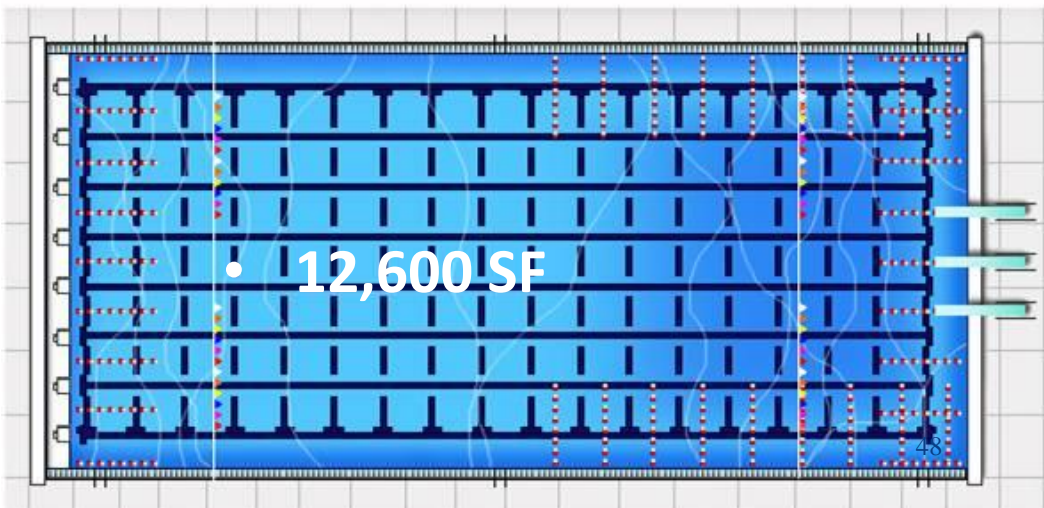


- 25 - Yard
- 6 25-Yard Lanes



### 25-Yard By 25-Meter

- 25-Yard Lanes
- 10 25-Meter Lanes



- 50-Meter by 25-Yard
- 8 or 10 (50-Meter Lanes)
- 17-22 (Cross Course
- 25-Yard Lanes)

# Aquatic Needs in Alexandria

## Wellness/Therapy Facilities (2% of Users)



### Programmed Activities

- Instructional, Fitness, Wellness, Therapeutic
- Aquatic EXercise increased from

- 5.8 million in 2004
- 7.2 million in 2007\*\*

### Trends 1998-2007\*

- Aerobic dance decreased by 17.3%
- Cycling decreased by 23.2%



Source: The Aquatic Therapist\*  
Aquatic EXercise Association\*\*

# Aquatics Facility Study

## Existing City Pools



# Aquatics Facility Study

## Cost of Current System

Capital Cost	\$9,960,000
Life Expectancy	5-10 years
Annual Attendance	120,000
Annual Operating Costs	\$1,600,000
Annual Revenues	\$500,000
Annual Operating Subsidy	\$1,100,000
Subsidy per Visit	\$9.17

# Aquatics Facility Study

## Other Considerations:

- 2011 Park and Recreation needs assessment found an existing unmet need for both indoor and outdoor aquatics
- 500 registered for spring lessons
  - 300 on wait list
- Insufficient capacity and availability for summer day camps
- City is evaluating national trend of user fees supporting operations to maintain a fiscally responsible system

# Aquatics Facility Study

## **Alexandria Aquatic User Needs are Unique:**

- Higher Density Requires Smaller Service Radius
- Location of Facilities Needs to be Central to Users
- Locate Facilities Near Public Transportation
- Land Resources are Limited for New Facilities
  - Consider Joint Use of School / Park Sites

# Aquatic Facilities Scenarios

## **Do Nothing/No Investment**

Invest no money and close existing pools due to non-compliance with new regulations and guidelines.

## **Maintain As-Is**

Continue to operate the pools, making needed repairs to continue operation for the remainder of each pool's useful life (5-10 years).

## **Replace As-Is**

Rebuild the 1970's model aquatic plan by replacing all pools in their current locations and configurations.

## **Study Recommendation**

Phased replacement of old pool system with modern aquatic facilities (relocate or rebuild to better serve the entire community).

# Project Costs and Scope of Work:

## Chinquapin Recreation Center's HVAC Renovations and Upgrades Two Projects Within One

- I. HVAC Work: This concerns replacement of major mechanical components, equipment, ductwork, piping, and roof top units with new. The new system will increase patron comfort throughout the center. Additionally, completed work will allow remote control system access for immediate adjustment of settings.
- II. Architectural Work: This concerns replacement and improvement of various architectural systems. New work includes installation of new storefront for the pool office, new south entrance, storefront system for compliance with Americans with Disabilities Act (ADA), new vented all-metal lockers at men's and women's locker rooms, and other miscellaneous improvements such as new ceilings, new paint finish, and new signage.

Total HVAC Work .....	\$1.5 million dollars
Total Architectural Work .....	\$465 thousand dollars
Project Budget.....	\$2.0 million dollars.

September Progress

## New Construction Work:



New electrical switchgear system.



New Aaon air-handlers to serve locker rooms (one of two).



Removal of existing natatorium units and RTU #3.



Electrical connections in progress.

September Progress

## New Construction Work:



Insulating ductwork to  
Administration Office.



Refrigeration lines installation and  
new ductwork at Locker Room



Fan coil refrigerant lines and  
pipe insulation work.



Connecting new pumps to new  
boilers.

September Progress

## New Construction Work:



Insulating new ERUs and RTU  
#3 curbs.



New power service.



Skylight-screens ready to be  
removed.