



City of Elk Grove
Aquatic Center Study

PREPARED BY THE SPORTS MANAGEMENT GROUP

December 10, 2015

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Prepared For
The City of Elk Grove

By
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Executive Summary

Introduction

The City has identified an extensive list of community and civic facilities needed to support a growing population. A challenge for the City is securing sufficient funding for these capital projects. With limited funding resources, it is important that funds be allocated in a manner that maximizes the community benefit.

An opportunity exists to develop community facilities within the 76-acre undeveloped Civic Center site. It is envisioned that the Civic Center project would create the social “heart” of Elk Grove, supporting a variety of community needs with 20 acres of development and 50 acres of open space. Phase I of the proposed Civic Center Master Plan includes an Aquatic Center, Senior Center, and Veterans Hall.

The planning and development of an outdoor aquatic facility is intended to serve the interests of residents, address the unmet demand for competitive aquatics in Elk Grove, and reflect the City Council’s vision and goals for the community. Construction bids for this project were received in July 2015 and were substantially over the \$11.9 million construction budget (excluding the facility roadway). The construction bids were rejected, allowing staff time to review the bid packages and develop information necessary to provide alternatives for the Council’s consideration.

The City of Elk Grove retained the Sports Management Group (TSMG), a national recreation and aquatics planning firm, in October 2015. The Sports Management Group has augmented the team with longtime collaborator, Aquatic Design Group (ADG). ADG is an aquatic design and engineering firm

with over 2,500 public pool projects. TSMG reviewed aquatic center plans, studies, and construction bid information, and created alternative facility options with estimates of financial performance for the Council’s consideration. The analysis is reported in this study, which includes the following:

1. Peer Review - A peer review of the recently bid project.
2. Market Positioning - An assessment of the underlying assumptions regarding the market positioning of the proposed facility.
3. Financial Analysis - Development of the probable cost to operate and maintain the center and the revenue potential derived from that operation.
4. Economic Stimulus - An assessment of the economic stimulus of the proposed facility.
5. Analysis of Prior Study - An analysis of the aquatic center study prepared by Hotel & Leisure Advisors, LLC.
6. Alternative Options - Development, discussion, and comparison of three alternative aquatic options.

Tasks 1 through 4 relate to the aquatic center design¹ referenced as Option 1: Aquatic Center with Diving Tower. These tasks are presented in the first section of this report, titled “Option 1: Aquatic Center with Diving Tower.” The features of this design are listed in the report (see Introduction). Task 6 is presented in a separate section titled “Design Alternatives.”

¹ Bid package titled “Elk Grove Aquatic Facility”, dated June 10, 2015, and the subsequent addenda

Executive Summary

Peer Review

The consultant team conducted a Peer Review of the bid package drawings and specifications, focusing on the swimming pools. The objective was to identify conditions, if any, that resulted in a higher than expected swimming pool cost when compared to “typical” Northern California public swimming pool projects. Value engineering, re-design, and elimination of the 10-meter dive tower would substantially reduce the cost and improve the operational performance of the pools. A representative list of issues can be found in the report. Some issues include:

- There is approximately double the area of pool deck than is typical between the 50-meter pool and the bleachers.
- The 50-meter Pool and Dive Pool have turnover flow increases of 35% and 31% respectively. This requires larger pipes, pumps and filters increasing the cost of the pool construction.
- The number of lifeguard chairs specified is more than double of the industry standard. The number of racing platforms and touchpad timing systems is also more than necessary.
- Both pools are designed with underdrain systems increasing the construction cost in a manner that is not typical for swimming pools in California. Furthermore, with a concern about hydrostatic pressures and ground water, it seems remiss that the pools are not designed with hydrostatic relief valves as is typical for California pools.

Market Positioning

It is the City Council's strategic imperative to develop a complex capable of attracting “regional, state, national, and international users.” If the objective includes generating sufficient revenue to offset the operational cost, it is unlikely this objective will be achieved.

Regional, national, and international events are awarded based on a number of criteria, such as history of event hosting, team caliber and reputation, level of volunteer support, and proximity to large cities, airports, and tourist entertainment. The most coveted events, the USA Swimming Olympic Trials and World Championships, are now held in large stadiums using temporary pools.

Aquatic facilities can provide economic benefit for the host city; however, as the level of event increases from local to national, the likelihood of attracting events decreases. This is attributable to the number of facilities competing for the events and the rotation schedule used by the governing bodies to distribute national and regional events throughout the country. Bids are awarded for national events from 1-4 years prior to the event. Typically, Sports Councils/Convention and Visitor Bureaus submit bids, in conjunction with a local organizing committee. Bids are submitted in advance, and in many cases, presentations are made at the National Convention or to a designated group. This is a time-intensive process and requires a substantial amount of funding for promotions and entertainment, and often requires a pre-payment to the National Governing Body. Hosting a major event does not translate to generating major revenue. The financial reality of hosting major events is that the host facility often absorbs a financial loss.



Executive Summary

Local and regional level competitions, while more prevalent, are also limited in number. The most successful approach to hosting local events is to identify the events that are held each year in the local area, county, and state and begin a strategic “campaign” with local organizing groups to relocate the event to Elk Grove. Local meets generate the most revenue over time. Revenue is derived from rental fees, fees for equipment use, and recovery of direct costs. However, this does not mean that the pools will operate at a profit. Local meets are often used as fundraising events for the local teams that are regular users of the facility. The pool rental fees are discounted and the teams keep a large percentage of the revenue generated by the event to fund a portion of the teams’ operating cost.

Careful consideration must be given to the fiscal realities of a competitive aquatic venue and the market for meets, rentals, and events. There must be a commitment to hosting meets, matches, and events. Summary sheets describing a range of California aquatic centers are provided in the report to illustrate the competitive market.

Financial Analysis

The financial analysis is a projection of the probable operating costs for the facility and the revenue potential that can be generated from its operation. The analysis is based on a series of assumptions that include hours of operation, fees and charges, programming and scheduling priorities. These assumptions and the detailed financial analysis can be found in the report. To perform the financial analysis, The Sports Management Group assessed the space program, the potential of the programmed spaces in the facility, and the uses, events, and activities that reflect the mission and goals of the City.

Probable Operating Costs

The major expense categories for the operation of an aquatic center are salaries and benefits, utilities and chemicals, repairs and maintenance, supplies, insurance, marketing, and capital reserves. Salaries and benefits might be part of an operating agreement; however, for this analysis, the estimated costs for salaries and benefits are included.

The probable annual costs for the operation are presented in a range from low to high expense and stated in 2015 dollars. The total probable cost of operation ranges from \$1,397,000 to 1,573,000.

Aquatic Center Financial Summary

	LOW	AVERAGE	HIGH
Annual Expenses	\$1,397,000	\$1,485,000	\$1,573,000
Annual Revenue	\$366,000	\$398,000	\$430,000
Annual Net Subsidy	(\$1,207,000)	(\$1,087,000)	(\$967,000)
Cost Recovery	23%	27%	31%

Executive Summary

Revenue Potential

Revenue generated from the operation of the aquatics center consists of fees for lap swim, masters program, competitive events, rentals, swim teams, and sales of merchandise, food and beverages. The development of synchronized swim teams, expanded water polo leagues, and recreational swim teams will assist in reaching revenue targets. Concessions and merchandise are considered cost neutral in the revenue assumptions and/or as an organizational fundraiser.

The revenues are presented in a range from low to high and stated in 2015 dollars. The total annual revenue ranges from \$366,000 to 430,000.

Cost Recovery

Based on the preceding expense and revenue analysis, which reflects the consultant's conservative approach to the overall analysis, it is The Sports Management Group's opinion that the aquatic center will require an operating subsidy of \$1,207,000 (low) to \$967,000 (high). Cost recovery ranges from a low of 23% to 31%. This is a "baseline subsidy" after several years of operation. The subsidy in years 1 through 3 will could be higher as programs are initiated. An explanation of "low", "average", and "high" cost recovery is provided in the report.

The estimated 23% to 31% cost recovery is attributable to the high cost of operation and the limited revenue that can be generated to offset those costs. Expenses are slightly higher than average due to the anticipated cost of a management contract, estimated at \$20,000 to \$25,000 per month. The revenue generation for the pools is expected to be low. Revenue from competitive aquatics typically represents the smallest percentage of revenue generated from aquatic programs—less than 10%. Due to the specialized and limited use of the 10-meter tower, it does not generate net revenue.

Economic Stimulus

The Sports Management Group provided city staff estimates for economic modeling. The assumptions used to develop these estimates can be found in the report.

The estimates include:

Number of events with overnight stay:	20
Number of rooms rented per event:	200
Total number of room rentals:	4,000
Total number of meals (non-concession):	39,200

Analysis of Prior Study

The Sports Management Group reviewed the May 2014 "Market Feasibility Study Report" that assessed market demand and financial feasibility of a proposed outdoor waterpark, adventure park, and a competitive aquatic complex. The study was commissioned by P3I, the selected developer, and prepared by Hotel & Leisure Advisors, LLC (H&LA). The revenue and expense forecasting was prepared for the combined facilities and re-allocated to create a separate economic analysis of the aquatic center. In the opinion of The Sports Management Group, the H&LA estimated revenue is \$250,000 higher than is likely to be realized.

The assumptions used to create the financial models are helpful in understanding the differences. The Sports Management Group reviewed the H&LA assumptions and found this clarification from H&LA that appears to be the source of many of those differences: "It is important to note, that as both the aquatic center and the waterpark will operated by the same operator, the facility will have shared expenses in several of the Undistributed Expenses line items" (H&LA A-9). The assumptions of the two financial models can be found in the report.



Executive Summary

Design Alternatives

The consultant team developed three project options for consideration. Each option serves a different program objective, and each has unique operating costs, revenue potential and cost recovery.

Option 2: Competitive Aquatic Center

Option 3: Multi-Use Aquatic Center

Option 4: Full Service Aquatic Center

Order-of-magnitude estimates of construction cost were developed for Options 2-4, as well as order-of-magnitude cost recovery and operational subsidy. The assumptions underlying these estimates can be found in the report.

In preparing alternatives for the City’s consideration, the dive tower has been exchanged for other amenities that provide broader use, or generate more

revenue, with potentially less liability than this fixed structural element. If a dive tower is desired, a needs assessment is recommended to quantify the demand. Because of its specialized use, and the high degree of training and practice required to safely dive from the 10-meter platform, there are relatively few divers nationally.

There are many variations in the size of pools. The size, features, and depth of a pool is determined by the program intent, demand, the available funding for capital and operations, and other factors. Determining the number of swimmers to be accommodated every hour is necessary to “right size.” Common lap pool sizes and features, along with profiles of popular pool choices, can be found in the report.

A summary of the design alternatives is presented below, in comparison to Option 1.

Comparison of Design Alternative Options

	OPTION 1	OPTION 2	OPTION 3	OPTION 4
<i>Construction Cost</i>	\$20.3 million	\$13.4 million	\$13.0 million	\$16.8 million
<i>Cost Recovery</i>	23% - 31%	20% - 28%	28% - 36%	52% - 62%
<i>Subsidy</i>	-\$1,200,000 to -\$967,000	-\$1,100,000 to -\$900,000	-\$900,000 to -\$750,000	-\$750,000 to -\$500,000
<i>Surface Area</i>	21,660sf	14,775sf	11,985sf	22,300sf
<i>Pools</i>	50-meter pool 32-meter dive pool 10-meter dive tower	50-meter pool 4-lane warm-up pool	35-meter pool 6-lane pool sprayground	50-meter pool 6-lane pool recreation pool
<i>Long Course Lanes</i>	8	8	0	8
<i>Short Course Lanes</i>	35	25	21	27
<i>Occupancy</i>	1,083	738	599	1,115

Introduction

Introduction

Elk Grove has experienced explosive population growth since incorporating as a city in 2000. During this 15 year span the population has grown from just under 60,000 to over 164,000, a 173% increase. The population of Elk Grove is projected to reach 210,000 by 2030. The City has identified an extensive list of community and civic facilities needed to support this population. A challenge for the City is securing sufficient funding for these capital projects. With limited funding resources, it is important that funds be allocated in a manner that maximizes the community benefit.

An opportunity exists to develop community facilities within the 76-acre undeveloped Civic Center site. It is envisioned that the Civic Center project would create the social “heart” of Elk Grove, supporting a variety of community needs with 20 acres of development and 50 acres of open space. Phase I of the proposed Civic Center Master Plan includes an Aquatic Center, Senior Center, and Veterans Hall.

“Distinguish Elk Grove as a city with an array of opportunities for sports and cultural activities for residents of all ages and backgrounds, with venues that also promote and leverage economic growth.”

City Council Vision and Goals

City Council vision statement and goals for fiscal year 2015-2016 and fiscal year 2016-2017

The planning and development of an outdoor aquatic facility is intended to serve the interests of residents and to address the unmet demand for competitive aquatics in Elk Grove. The planning and design of a premier aquatic center reflects the City Council’s vision and goals for the community.

In 2014, the City explored an option to lease a portion of the proposed Civic Center site to a developer who would build and operate a water park, adventure park, and aquatic center. The City subsequently revised the scope of the project and commissioned an architectural firm to design a stand-alone, competitive aquatics complex. Construction bids for this project were received in July 2015 and were substantially over the \$11.9 million construction budget (excluding the facility roadway). The construction bids were rejected, allowing staff time to review the bid packages and develop information necessary to provide alternatives for the Council’s consideration.

The Sports Management Group (TSMG), a national recreation and aquatics planning firm, was retained by the City of Elk Grove in October 2015. TSMG reviewed aquatic center plans, studies, and construction bid information, and created alternative facility options with estimates of financial performance for the Council’s consideration. This document reports these findings, and provides development alternatives with capital and operational cost modeling. Concurrently, TSMG reviewed the Senior Center and Veterans Hall projects; a separate report has been issued for the analysis of these two projects. It is of critical importance that the City afford to own what it can afford to build. The objective is a Civic Center project that is financially and operationally viable, and that is sustainable over its lifetime.

Introduction

The Sports Management Group has augmented the team with longtime collaborator, Aquatic Design Group (ADG). ADG is an aquatic design and engineering firm with over 2,500 public pool projects. ADG has applied their extensive experience in project design and delivery within budget to provide order-of-magnitude costs for the alternative pool options.

This study reports the findings and conclusions regarding the development of the Elk Grove Aquatic Center. The study included the following analysis:

1. Peer Review - A peer review of the space program, features, amenities and construction costs for the recently bid project.
2. Market Positioning - An assessment of the underlying assumptions regarding the market positioning of the proposed facility.
3. Financial Analysis - Development of the probable cost to operate and maintain the center and the revenue potential derived from that operation.
4. Economic Stimulus - An assessment of the economic stimulus of the proposed facility.
5. Analysis of Prior Study - An analysis of the aquatic center study prepared by Hotel & Leisure Advisors, LLC.
6. Alternative Options - Development and discussion of three alternative aquatic options and a matrix of the three proposed option.

Tasks 1 through 4 relate to the aquatic center design¹ referenced as Option 1: Aquatic Center with Diving Tower. These tasks are presented in the first section of this report, titled "Option 1: Aquatic Center with Diving Tower." This design includes the following features:

- 50-meter x 25-yard all-deep competitive pool
- 32-meter x 25-yard all-deep dive pool with a 10-meter diving tower and 3- and 1-meter springboards
- 10 person therapy pool (hot tub)
- 14,800sf bathhouse (locker rooms, access control, storage, etc.)
- 3,600sf of mechanical space
- Shaded bleacher seating for 600
- 15 acres of developed site, parking, and expansion space

Task 6 is presented in a separate section titled "Design Alternatives."

¹ Bid package titled "Elk Grove Aquatic Facility", dated June 10, 2015, and the subsequent addenda

Option 1:

*Aquatic Center with
Diving Tower*

Peer Review

The consultant team conducted a Peer Review of the bid package drawings and specifications, focusing on the swimming pools. The objective was to identify conditions, if any, that resulted in a higher than expected swimming pool cost when compared to “typical” Northern California public swimming pool projects. The list that follows provides a representative sampling of issues identified in this review.

1. The swimming pools are designed with structural expansion joints in the floors and walls, which will increase the cost of the pool construction.
2. The pool decks are larger than normal square footage for pools of this type. The 50-meter pool, for example, shows dimensions of 40-feet of concrete decking between the pool and the spectator bleachers. This is approximately double the area of a typical 50-meter pool.
3. The large swimming pool concrete deck area has further increased cost with color patterns requiring four different pours.
4. The 50-meter pool is designed with a 3.89 hour turnover. The industry standard for this type of pool is a 6 hour turnover rate. This 35% increase in flow requires larger pipes, pumps and filters increasing the cost of the pool construction. For example, a 6-hour turnover rate would require a 40-horsepower circulation pump motor. The design's 3.89 hour turnover rate requires a 50-horsepower circulation pump motor.
5. The Dive Pool is designed with a 4.13 hour turnover. The industry standard for this type of pool is a 6 hour turnover rate. This 31% increase in flow requires larger pipes, pumps and filters increasing the cost of the pool construction. For example a 6 hour turnover rate would require a 60-horsepower circulation pump motor. The design's 4.13 hour turnover rate requires a 100-horsepower circulation pump motor.
6. The pool filters must also be sized larger to accommodate the high turnover rates. High rate sand filters are NSF listed to operate at 5-20 gallons per minute per square foot of filter media area. Industry standards are to size the filters at an approximate 15 gpm per square foot of filter media area. The pools are designed with filters operating at 12 gpm per square foot of filter media area. This results in the filters being oversized and additional 20% further increasing the cost of the filters.
7. The pool filters are designed with 39.76 square foot tanks, which will backwash at rates between 596 gpm to 795 gpm flow to the sanitary sewer. Because of the size of the filter tanks and the small backwash pit, the sanitary sewer line is designed as a 12" line. Typical pools are designed with 4" to 6" sanitary sewer lines to control cost.
8. Both pools are designed with proprietary rim-flow gutter stones increasing the cost of the pool construction.
9. The specifications call for six lifeguard chairs for the 50-meter pool and an additional four chairs for the dive pool. Ten (10) lifeguard chairs is more than double of the industry standard.

Option 1: Aquatic Center with Diving Tower

10. Both pools are designed with underdrain systems increasing the construction cost in a manner that is not typical for swimming pools in California. Furthermore, with a concern about hydrostatic pressures and ground water, it seems remiss that the pools are not designed with hydrostatic relief valves as is typical for California pools.
11. The 50-meter pool is designed with 16 racing platforms and the dive pool is designed with 10 racing platforms. These racing platforms cost an approximate \$4,500 each. It is unlikely that 10 would be used at one time.
12. Both the 50-meter and the dive pool are designed with touchpad timing system junction boxes at each racing platform anchor for total of seventy (70) locations. It is highly unlikely that swim meets will be held at all 70-locations, and unnecessarily increases the cost.
13. The site design preserves an exceptionally large area for “team prep” and future expansion. Although the intent of the design feature is unknown, there is a very large plaza between the parking area and aquatic facility with expansive concrete and landscape. This site design has significantly impacted the cost for landscaping, fencing, and site lighting and will, therefore, impact operational costs.

In addition to design issues that impact capital costs, there are issues that impact maintenance and operations costs. Two examples are:

1. The underwater pool lights specified are 500-Watt incandescent lights with an expected lamp life of 3,800 hours compared to the industry standard of LED lights using 70-Watts with an expected lamp life of 50,000 hours.
2. Because of the size of the filter tanks, the horizontal tanks are stacked upon each other. The filter face piping runs in-front of the tanks making servicing difficult due to a lack of accessibility. Also the stacked tanks can be a concern in a seismic event.

Market Positioning

The planning and design of the Elk Grove Aquatic Center (referenced as Option 1) reflects the City Council's vision and goals for the community. It is the City Council's strategic imperative to develop a complex capable of attracting "regional, state, national, and international users." If the objective includes generating sufficient revenue to offset the operational cost, it is unlikely this objective will be achieved.

To understand the likely positioning of the proposed complex in the competitive venue market, and the probability of successfully bidding to host various levels of events, it is important to know the competitors, and factors that can impact the selection process. Since the time this project began design, there have been changes in the inventory of competitive event venues. This has created even more competitors vying for a decreasing number of events.

Regional, national, and international events are awarded based on a number of criteria, such as history of event hosting, team caliber and reputation, level of volunteer support, and proximity to large cities, airports, and tourist entertainment. The most coveted events, the USA Swimming Olympic Trials and World Championships, are now held in large stadiums using temporary pools. Seating requirements range between 10,000 and 15,000 seats, precluding hosting by some of the largest aquatic centers.

Aquatic facilities can provide economic benefit for the host city; however, as the level of event increases from local to national, the likelihood of attracting events decreases. This is attributable to the number of facilities competing for the events and the rotation schedule used by the governing bodies to distribute national and regional events throughout the country.

Local and regional level competitions, while more prevalent, are also limited in number. For most aquatic facilities, local competitions represent their "core events", including high school dual meets, state competitions at the high school level, and masters and senior age group levels. Individual clubs will host invitational meets. Teams typically pay a rental fee for the use of the facility.

Hosting a major event does not translate to generating major revenue. The financial reality of hosting major events is that the host facility often absorbs a financial loss.

Securing an Event

The process for securing an aquatic event differs with the level of the event. The national event bidding process is managed by the national governing body for that sport (NGB). The process and the site selection criteria vary for each event. Some selections are made through a site selection committee; others are selected through direct negotiations with the administrative group charged with the selection by the NGB. Bids are awarded for national events from 1-4 years prior to the event. Typically, Sports Councils/Convention and Visitor Bureaus submit bids, in conjunction with a local organizing committee. Bids are submitted in advance, and in many cases, presentations are made at the National Convention or to a designated group. This is a time-intensive process and requires a substantial amount of funding for promotions and entertainment, and often requires a pre-payment to the NGB.

Option 1: Aquatic Center with Diving Tower

The steps for bidding on regional events are similar but may have fewer requirements. Often, the bidding process for a regional competition is managed by the administrative committee of that region during the National Convention. However, even this level of event can require both a considerable amount of time and money to secure. Securing a partnership with a college or university is required to host NCAA Division II, Division III, or NAIA Championships.

Local event site selection is frequently determined by cost, availability, and demand. Since the number of local events generally is far greater than the regional and national schedule, a city may find itself turning away local events depending on the utilization of its facility and program schedule. The most successful approach to hosting local events is to identify the events that are held each year in the local area, county, and state. The next step is to begin a strategic “campaign” with local organizing groups to relocate the event to Elk Grove.

Local meets generate the most revenue over time. Revenue is derived from rental fees, fees for equipment use, and recovery of direct costs. However, this does not mean that the pools will operate at a profit. Local meets are often used as fundraising events for the local teams that are regular users of the facility. The pool rental fees are discounted and the teams keep a large percentage of the revenue generated by the event to fund a portion of the teams’ operating cost.

Careful consideration must be given to the fiscal realities of a competitive aquatic venue and the market for meets, rentals, and events. There must be a commitment to hosting meets, matches, and events. The operator and staff must have the skill and determination to build this center into a top contender for meets.

Competitive Market

The Bay Area has a number of outstanding aquatic venues and is adding to the inventory. Currently under construction at the University of California, Berkeley is the Aquatic Dive Center with a stretch 50-meter pool and a 10-meter tower. This is in addition to the outstanding facilities at Stanford University and the new Santa Clara International Swim Center. The City of Santa Clara has completed schematic design for a \$120 million aquatics center.

Summary sheets describing a range of California aquatic centers are provided to illustrate the competitive market.

The summary sheets include the annual cost recovery from the operation of the facility. These are preceded by a brief case study of the Santa Clara International Swim Center.

Option 1: Aquatic Center with Diving Tower

Case Study:

Santa Clara International Swim Center

Typically, the local swim clubs and teams for whom the aquatic center is their “home pool” serve as the hosts for the events. To attract larger events, some aquatic centers do not charge the hosting team a rental fee for the event. For example, the City of Santa Clara partners with the Convention and Visitors Bureau (CVB), swim clubs, and city officials to attract larger national events. In most cases in Santa Clara, the CVB and swim clubs take the lead in attracting events, as the city staff do not have the expertise to attract or host such events.

The hosting of higher-quality meets is dependent on partnership agreements, scheduling priorities, and event impacts. Typically, these partnerships extend to provisions for “home base” space for the partner organizations (swim club) and year-round access and priority uses. The Santa Clara Swim Club (SCSC) has partnered with the City of Santa Clara to operate, train, and host meets at the ISC. The number and caliber (local, regional, national, international) of swim, dive, and synchronized swim meets will have an impact on the accessibility and overall financial performance of the aquatic center.



For instance, the Santa Clara Swim Club had 11 events scheduled for the International Swim Center in 2014. These events impacted the parking, access, and/or pool closure of the swim center.

Despite the success of the facility to attract national and international meets, it has been necessary for the City of Santa Clara to provide over \$600,000 of General Fund support annually to fund the shortfall between revenue and expenses.

Due to its age and wear, the ISC is in danger of losing eligibility to host top tier events.

Option 1: Aquatic Center with Diving Tower

George F. Haines International Swim Center



LOCATION:

2625 Patricia Drive
Santa Clara, CA 95051

DESCRIPTION:

The City of Santa Clara George F. Haines International Swim Center opened in 1967 as a state-of-the art competition swim center. The center is host to world-class competition, events, and training. The ISC is home to the Santa Clara Swim Club, the Santa Clara Aquamaids, and the elite Santa Clara Diving Club.

AMENITIES:

- 10,300sf building with shower/locker rooms, meeting room
- Spectator seating for 5,000
- Secondary structure for dryland training

NUMBER OF BODIES OF WATER: 3

Competition Pool

- 50-meter x 25-yard
- 5' - 8' deep
- 8 long course lanes

Training Pool

- 75' x 42'
- 4' - 4.5' deep

Diving Well

- 75' x 60'
- 17' deep
- Dive tower
- Three 1-meter diving boards
- Two 3-meter diving boards

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	27%
<i>Net Loss:</i>	(\$615,800)

Option 1: Aquatic Center with Diving Tower

William Woollett Jr. Aquatics Center



LOCATION:

4601 Walnut Avenue
 Irvine, CA 92604

DESCRIPTION:

This facility has two 50-meter pools and an instructional pool and is heavily scheduled for high school training and meets and club teams from the surrounding areas. It has premier status in the region; and, with the capacity to seat 5,500 spectators it is in demand for hosting large meets.

AMENITIES:

- 13,000sf building with shower/locker rooms, meeting room
- Permanent spectator seating for 1,500
- Temporary bleacher seating for 4,000
- Concession stand

NUMBER OF BODIES OF WATER: 3

Competition Pool

- 50-meter x 25-yard
- 8 short course lanes, 17 long course lanes

Diving Pool

- 50-meter x 25-yard
- 7' - 13' deep
- Two 1-meter diving boards
- Two 3-meter diving boards
- 8 short course lanes, 17 long course lanes

Instructional Pool

- 25-meter x 25-yard

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	39%
<i>Net Loss:</i>	(\$1,275,900)

Option 1: Aquatic Center with Diving Tower

Rose Bowl Aquatics Center



LOCATION:

360 N Arroyo Boulevard
 Pasadena, California 91103

DESCRIPTION:

Located just south of the Rose Bowl Stadium, this world-class aquatic facility offers year round aquatic and fitness programming to children, youth, families and seniors. Operated by a 501c3, it is estimated to serve more than 250,000 patrons annually.

AMENITIES:

- Shower/locker rooms
- Clubhouse
- Fitness and weight training center
- Two conference rooms
- Cafe
- Pro shop

NUMBER OF BODIES OF WATER: 5

50-Meter Competition Pool

- 50-meter x 25-yard
- 6.5' deep
- 8 long course lanes, 20 short course lanes

Recreation & Diving Pool

- 50-meter x 25-yard
- 3.5' - 7' deep
- Seven diving boards
- Dive tower with 10, 7, 5 meter platforms

Warm Water Therapy Pool

- 3.5' - 6' deep
- 91 degrees

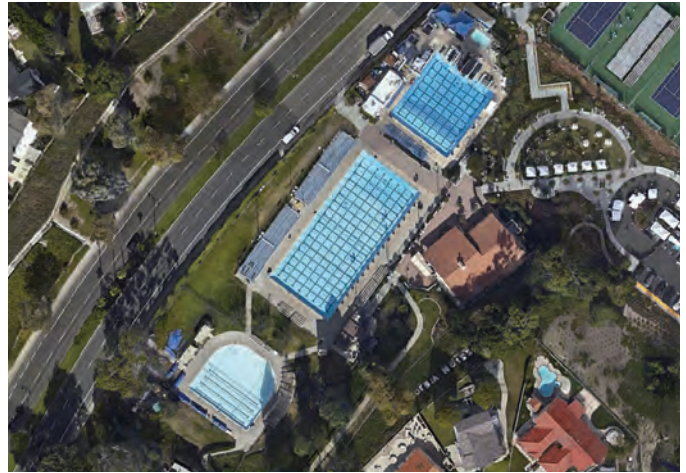
Hydrotherapy Spas (2)

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	83%
<i>Net Loss:</i>	(\$1,003,000)

Option 1: Aquatic Center with Diving Tower

Marguerite Aquatics Center



LOCATION:

27474 Casta Del Sol
Mission Viejo, CA 92692

DESCRIPTION:

The center is a four-pool complex, operated by the Nadadores Swim Club. It is home to one of the largest swimming and diving clubs in the U.S. and has regional status. The club has had athletes at every Olympics since 1976. This is primarily a training and competition venue.

AMENITIES:

- Shower/locker rooms
- Bleachers

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	<i>19%</i>
<i>Net Loss:</i>	<i>(\$420,000)</i>

NUMBER OF BODIES OF WATER: 4

50-Meter Competition Pool

- 50-meter x 25-yard
- 6.5' – 11.5' deep
- 8 long course lanes
- Bulkhead

Warm-Up Pool & Diving Well

- 25-meter x 25-yard
- Two 1-meter diving boards
- Two 3-meter diving boards
- Dive tower with 10-meter, 7-meter & 5-meter platforms

Shallow Recreation Pool

Spa

Option 1: Aquatic Center with Diving Tower

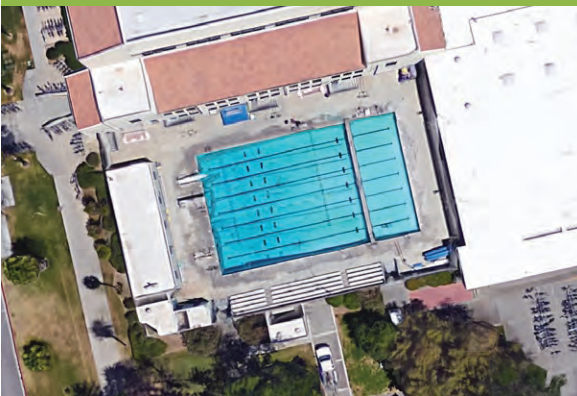
University Aquatics Facilities

In addition to the venues previously discussed, these premier university facilities are also part of the aquatic competitive market within the state. These facilities accommodate the training and competition needs of a variety of aquatics sports (swimming, water polo, diving) and frequently serve as venues for top tier competitive events.

SCHAAL AQUATICS CENTER



HICKEY POOL



UC Davis

DAVIS, CALIFORNIA

The Hickey Pool opened in 1938. The largest pool in the UC system, the Schaal Aquatics Center opened in 2004.

NUMBER OF BODIES OF WATER: 3

Schaal Aquatics Center

- 65-meter x 25-yard with two bulkheads
- Spectator seating for 500
- Two 3-meter diving boards
- Two 1-meter diving boards

Hickey Pool

- 33-meter x 7 lanes
- Bulkhead
- 1-meter diving board
- 3-meter diving board
- Bench seating

Recreation Pool

Option 1: Aquatic Center with Diving Tower



UC Berkeley - Spieker Aquatics Complex

BERKELEY, CALIFORNIA

The Spieker Aquatics Complex, currently the university’s only aquatic center, is used by NCAA athletes as well as community swimmers, students, and postgraduates. A new diving facility is currently under construction that will add two bodies of water to UC Berkeley’s pool inventory: a 50-meter pool with a diving tower and diving boards, and a warm water spa.

NUMBER OF BODIES OF WATER: 1

Spieker Pool

- 50-meter x 25-yard
- 1-meter diving board
- Bleacher seating



Stanford University – Avery Aquatic Center

STANFORD, CALIFORNIA

The Avery Aquatic Center is considered one of the premier competitive aquatics facilities in the nation. The Maas Diving Center has been called “the finest outdoor diving facility in the country.”

NUMBER OF BODIES OF WATER: 4

Avery Competition Pool

- 37-meter x 20-meter
- 11’ – 14’ deep
- 1-meter and 3-meter diving boards

Maas Diving Center

- 25-meter x 17-meter
- Dive tower with 10, 7.5, 5, 3, 1 meter platforms
- 1-meter and 3-meter diving boards

Belardi Pool

- 50-meter x 25-meter
- Tapers to 11’ deep
- Bleacher seating

Baker Pool

- 50-meter x 25-yard
- 4.5’ – 8.5’ deep

Option 1: Aquatic Center with Diving Tower



USC - Uytengsu Aquatics Center

LOS ANGELES, CALIFORNIA

Renovated in 2014, the Uytengsu Aquatics Center was formerly named the McDonald's Swim Stadium, which hosted the 1984 Olympic Games.

NUMBER OF BODIES OF WATER: 3

Competition Pool

- 50-meter x 25-yard
- Two bulkheads
- Spectator seating for 1,500-2,500

Diving Pool

- 25-yard x 25-yard
- Diving tower with 10, 7.5, 5 meter platforms

Warm Water Spa

UC San Diego - Canyonview Complex

SAN DIEGO, CALIFORNIA

UCSD's Canyonview Aquatics Complex is considered a premier national swimming facility. The West Pool was constructed in 2006, adding an all-deep competitive venue.

NUMBER OF BODIES OF WATER: 3

West Pool - All-Deep Competition Pool

- 50-meter x 25-yard
- 7' deep
- Spectator seating for 1,000

East Pool - Diving Pool

- 50-meters x 25-yards
- Diving tower with 5, 3, 2 meter platforms
- Spectator seating for 336

Warm Water Spa

Financial Analysis

The financial analysis is a projection of the probable operating costs for the facility and the revenue potential that can be generated from its operation. The analysis that follows is based on a series of assumptions that include hours of operation, fees and charges, programming and scheduling priorities. The probable operating costs are based on the space program, and assumptions on the operating model. To perform the financial analysis, The Sports Management Group assessed the space program, the potential of the programmed spaces in the facility, and the uses, events, and activities that reflect the mission and goals of the City. Detail of the financial analysis is found on page 20, followed by the assumptions.

Probable Operating Costs

The major expense categories for the operation of an aquatic center are salaries and benefits, utilities and chemicals, repairs and maintenance, supplies, insurance, marketing, and capital reserves. Salaries and benefits might be part of an operating agreement; however, for this analysis, the estimated costs for salaries and benefits are included. A brief discussion of these expense categories follows.

Operator: Salaries, taxes, and employee benefits represent approximately 50% to 60% of the operating cost. The quality of staff will have a profound impact on the use and financial performance of the facility. Professional management and aggressive marketing will affect the number and type of events hosted at the facility and, in addition, will drive swim team uses, competitive events, and master swim enrollments.

It is the intent of the City to enter into a management agreement for the operation of the center. A fee of \$20,000 to \$25,000 per month has been assumed.

Utilities and chemicals are the second largest expense category for this building type. Utility costs include electricity, gas, water, sewer, and refuse disposal. To contain these costs, the financial analysis assumes that the building will employ energy-efficient design and will use pool covers nightly. Utility costs are based on traditional energy management systems and current best practices. To estimate the costs, the units of electricity, gas, and water that would be consumed daily to operate the proposed pools were calculated. City utility rates were applied to the daily consumption and annualized to project the yearly cost. Chemical costs were calculated based on water volume and the likely water filtration rates.

Repairs and maintenance are the next highest expense category. The staffing model includes facility operations personnel who will perform many of these services. The operating model assumes the operator will hire a Building and Pool Maintenance Technician that is trained in the operation of pools and building systems. Specialized services may be performed by professional contractors, i.e. an electrician or plumber, and are included in the estimated annual costs.

The cost for repairs and maintenance is expected to be lower than the expense shown in Year 1 when the facility is new and building systems and equipment are under warranty. The figure reflects the baseline for anticipated expense in Year 2 and Year 3.

Materials and supplies include general goods required for the daily operation and maintenance of the facility, i.e. janitorial supplies, paper products used in restrooms, office supplies, staff shirts, lifeguard uniforms, etc.



Option 1: Aquatic Center with Diving Tower

Marketing and promotions - “Build it and they will come” will apply to only a small portion of the market and to some of the aquatic center’s activities. The expense budget includes an allocation for marketing and promotion of the facility, competitive swim venue bid package submittals, rentals, and activities. The operating assumption is that the City will provide limited marketing assistance in the form of existing City outreach and communication efforts.

Building and maintenance reserve - The projected operating expense includes an annual allocation to a capital reserve set-aside account. This account provides funding for major repairs or renewal of the building systems, pools, and other aquatic center features. The “reinvention” of the facility with new features is important for maintaining a competitive edge and market share.

Consideration should be given to setting aside approximately one percent of the facility construction costs each year to fund the reserve account. Over time, this should be adjusted for inflation. Based on the estimate of construction cost, a \$110,000 annual allocation to a capital reserve fund has been included in the probable operating costs. If this fund is not included, a plan should be developed for funding major repairs and replacements.

The probable annual costs for the operation are provided in the table that follows. The expenses are presented in a range from low to high expense and stated in 2015 dollars. The total probable cost of operation ranges from \$1,397,000 to 1,573,000.

Figure 1 - Aquatic Center Probable Costs

	LOW	HIGH
Management Fee	\$240,000	\$300,000
Staffing & Benefits	\$333,000	\$378,000
Marketing	\$26,000	\$31,000
Communication and Technical Services	\$16,000	\$21,000
Supplies: Building and Program	\$22,000	\$27,000
Repair and Maintenance	\$52,000	\$65,000
Service Agreements	\$43,000	\$50,000
Utilities	\$355,000	\$364,000
Bank Fees/Accounting/Legal	\$80,000	\$100,000
Insurance and Tax Payments	\$70,000	\$75,000
Contingency	\$40,000	\$42,000
Capital Outlay	\$10,000	\$10,000
Building and Maintenance Reserve Fund	\$110,000	\$110,000
Total	\$1,397,000	\$1,573,000

Option 1: Aquatic Center with Diving Tower

Revenue Potential

Revenue generated from the operation of the aquatics center consists of fees for lap swim, masters program, competitive events, rentals, swim teams, and sales of merchandise, food and beverages. The development of synchronized swim teams, expanded water polo leagues, and recreational swim teams will assist in reaching revenue targets. Concessions and merchandise are considered cost neutral in the revenue assumptions and/or as an organizational fundraiser.

RATES AND CHARGES

Proper pricing is essential to building a customer base while generating sufficient revenue to offset operating costs. It is important that fees reflect the quality of amenities offered while providing acceptable rates to the intended market. Rates for lap swim, rentals and events, and swim team uses must encourage participation to achieve revenue targets. The fee assumptions are presented after the financial analysis detail.

The revenue potential from the proposed aquatic center's operation is provided in Figure 2. The revenues are presented in a range from low to high and stated in 2015 dollars. The total annual revenue ranges from \$366,000 to 430,000.

Cost Recovery

Figure 3 details three scenarios of cost recovery potential. "High" cost recovery is determined by dividing the highest total revenue potential by the lowest probable operating expenditures. "Low" cost recovery is determined by dividing the lowest total potential revenue by the highest probable operating expenditures. "Average" cost recovery is determined by dividing the average total potential revenue by the average probable operating expenditures. Based on the preceding expense and revenue analysis, which reflects the consultant's conservative approach to the overall analysis, it is The Sports Management Group's opinion that the aquatic center will require an operating subsidy of \$967,000 to \$1,207,000.

Figure 2 - Aquatic Center Potential Revenue

	LOW	HIGH
Lane Rental & High School Swim Meet - EGUSD	\$32,920	\$36,400
Masters Swim Program	\$19,000	\$28,000
Lap Swim Program	\$45,000	\$55,000
Team Rentals	\$176,000	\$196,000
Vending	\$1,000	\$1,000
Cabana Rentals	\$4,000	\$6,000
Event Weekend Rental - USA Swim/Collegiate	\$88,000	\$108,000
	\$366,000	\$430,000

Option 1: Aquatic Center with Diving Tower

Figure 3 - Aquatic Center Financial Summary

	LOW	AVERAGE	HIGH
Annual Expenses	\$1,397,000	\$1,485,000	\$1,573,000
Annual Revenue	\$366,000	\$398,000	\$430,000
Annual Net Subsidy	(\$1,207,000)	(\$1,087,000)	(\$967,000)
Cost Recovery	23%	27%	31%

The estimated 23% to 31% cost recovery is attributable to the high cost of operation and the limited revenue that can be generated to offset those costs. Expenses are slightly higher than average due to the anticipated cost of a management contract, estimated at \$20,000 to \$25,000 per month. When the terms of the management contract are defined, the cost could be higher. In 2014, the City solicited proposals for a pool operator and the proposed management fees were higher than those listed above.

The revenue generation for the pools is expected to be low, and it will require years to build the teams and to position the center for hosting meets. Revenue from competitive aquatics typically represents the smallest percentage of revenue generated from aquatic programs—less than 10%. Due to the specialized and limited use of the 10-meter tower, it does not generate net revenue. The highest revenue generation is derived from learn-to-swim and family recreation, in a pool with high value play features such as slides and sprays, followed by water fitness classes. These programs require different types of pool and program intent than Option 1 provides.

Cities provide competitive pools to serve the interest of citizens, not for revenue generation. As with parks, competitive pools do not generate sufficient revenue to offset their operating cost.

The opinion of operating subsidy is \$1.2 million to \$967,000 annually, however, this is a “baseline subsidy” after several years of operation. The subsidy in years 1 through 3 would be higher as programs are initiated and a USA sanctioned swim club is identified and/or developed that is capable of hosting meets.

For each of the options and cost recovery models, costs could be reduced if the facility is closed during low use times or off-season. A baseline subsidy is provided to illustrate costs after the facility is past the initial opening phase. In year 1, maintenance costs are lower because the facility is new and repairs are under warranty.

Cost Recovery

Description	Low	Average	High
COST RECOVERY POTENTIAL			
	Low	Average	High
Cost Recovery Potential	23%	27%	31%
Annual Net Subsidy	-\$1,207,000	-\$1,087,000	-\$967,000
Probable Operating Costs	\$1,397,000	\$1,485,000	\$1,573,000
Potential Revenue	\$366,000	\$398,000	\$430,000

Elk Grove Competitive Aquatics Expenses

Operating Expense Detail	Low	High
<input type="checkbox"/> Operating Expense	\$1,397,000	\$1,573,000
<input checked="" type="checkbox"/> Management Fee	\$240,000	\$300,000
<input type="checkbox"/> Staffing	\$247,000	\$280,000
<input checked="" type="checkbox"/> Full-Time Staff	\$206,000	\$231,000
<input checked="" type="checkbox"/> Part-Time Staff	\$41,000	\$49,000
<input checked="" type="checkbox"/> Full-Time Benefits	\$72,000	\$81,000
<input checked="" type="checkbox"/> Part-Time Benefits	\$14,000	\$17,000
<input checked="" type="checkbox"/> Marketing	\$26,000	\$31,000
<input checked="" type="checkbox"/> Communication & Technical Services	\$16,000	\$21,000
<input checked="" type="checkbox"/> Supplies: Building and Program	\$22,000	\$27,000
<input checked="" type="checkbox"/> Repair and Maintenance	\$52,000	\$65,000
<input checked="" type="checkbox"/> Service Agreements / Contract Services	\$43,000	\$50,000
<input checked="" type="checkbox"/> Utilities	\$355,000	\$364,000
Bank Fees / Accounting / Legal	\$80,000	\$100,000
<input checked="" type="checkbox"/> Insurance and Tax Payments	\$70,000	\$75,000
<input checked="" type="checkbox"/> Contingency	\$40,000	\$42,000
<input checked="" type="checkbox"/> Capital Outlay	\$10,000	\$10,000
<input checked="" type="checkbox"/> Building and Maintenance Reserve Fund	\$110,000	\$110,000

Revenue Option 1

Description	Low	High
<input type="checkbox"/> REVENUE POTENTIAL	\$366,000	\$430,000
<input type="checkbox"/> Lane Rental Elk Grove School District	\$31,000	\$34,000
<input type="checkbox"/> High School Swim Meets - Midweek	\$1,920	\$2,400
<input type="checkbox"/> Masters Swim Program	\$19,000	\$28,000
<input type="checkbox"/> Lap Swim Program	\$45,000	\$55,000
<input type="checkbox"/> Competitive Club Swim Team	\$53,000	\$62,000
<input type="checkbox"/> Competitive Club Dive Team	\$53,000	\$62,000
<input type="checkbox"/> Synchronized Swim Team	\$44,000	\$44,000
<input type="checkbox"/> Water Polo Leagues	\$26,000	\$28,000
<input type="checkbox"/> Vending	\$1,000	\$1,000
<input type="checkbox"/> Cabana Rentals	\$4,000	\$6,000
<input type="checkbox"/> Comp. Event Weekend Rental-USA Swim	\$80,000	\$100,000
<input type="checkbox"/> Comp. Event Weekend Rental-Collegiate	\$8,000	\$8,000

Option 1: Aquatic Center with Diving Tower

Financial Analysis Assumptions

Market Segment

The Elk Grove Aquatic Center was designed to be a premier destination venue for hosting competitive regional, national, and world-class events.

Conceptually, the facility would be home to multiple collegiate, high school, and regional club teams for training and competition; and would be available to the public for lap swimming. The intended uses are swimming, diving, synchronized diving, water polo, and synchronized swimming. The project design includes future expansion space.

A review of previous studies indicates that there is demand for access to more water and features, such as the 10-meter dive tower, that currently do not exist in Elk Grove. The demand is driven in part by the following:

- The Elk Grove School District does not provide pools at any school sites. School District enrollment was approximately 62,000 students during the 2014-2015 school year.
- The Piranha Swim Team (club team) has 370 swimmers
- There is a limited inventory of existing aquatic facilities, which include the Barbara Wackford Center, Jerry Fox Swim Center, and private swim and fitness centers

Facility Features

The bid documents for the Elk Grove Aquatic Center competitive venue include:

- **50 meter x 25 yard competition pool with a depth of 6'-7" throughout**
- **10 meter high dive platform and springboards**
 - 10 meter platform
 - 7.5 meter platform
 - 5 meter platform
 - 3 meter springboard
 - 1 meter springboard
- **32 meter x 25 yard dive pool with a depth of 17 ft.**
- **14,800 sq. ft. of building spaces including:**
 - Administration building with offices, conference room
 - 2 team meeting rooms
 - Lifeguard station
 - First aid station
 - Mechanical space
 - Locker rooms and restrooms
 - Concessions
 - Team equipment storage space
- **10 ft x 15 ft therapy pool**
- **Canopy shaded bleacher seating for 600**
- **Large turf area**
- **44' x 48' block wall enclosure, uncovered, for bulk pool storage items**

Option 1: Aquatic Center with Diving Tower

Expense and Revenue Assumptions

The assumptions listed below were applied to estimate the probable annual operating costs and revenue potential for the Elk Grove Aquatic Center. The analysis is based on 15,000sf of building space, an outdoor 50 meter X 25 yard all-deep water competition pool, and a 10 meter high dive platform with a 32 meter x 25 yard deep-water pool.

Projections of expense do not include start-up costs and other one-time costs associated with opening a new facility. A pre-opening budget is in addition to the costs presented in the analysis of operating expenses and revenue potential. All revenues and expenses are stated in 2015 dollars.

Cost recovery, the percentage of revenue that is generated to offset operating cost, is calculated based on a series of assumptions. Changes to any assumption, for example the hours of operation or fees, will change the rate of cost recovery. “Low” cost recovery is calculated using the highest probable expenses and lowest probable revenue, while “high” cost recovery indicates the “best case” performance. Achieving “average” cost recovery, or the mid-range of expense and revenue projections, is likely to require 3-4 years of operation.

OPERATING ASSUMPTIONS

Program:

Facility will be open year round, seven days a week.

Elk Grove Unified School District Swim Teams, Local Swim Club(s), Master’s Swim, Lap Swim, Clinics, Synchronized Swim, Synchronized Dive, Water Polo, and Competitive events will be scheduled.

Swim lessons, fitness, and recreational swim will not be scheduled at this facility. The depth of the water (all deep) will result in the pool classification as “a special use pool.” Additionally, the agreement in place

with the Cosumnes Community Services District includes a “not to compete” program policy. The City prefers to complement the District’s offerings. There are no “drop-in, open public swim” times scheduled.

Long course events are a distance of 50 meters and **short course** events are 25 yards. There are typically two seasons. The short-course season runs from late September to the end of March. The long-course season runs from April to the end of August.

Hypothetical schedules were developed based upon typical patterns of use, shown on the following page. Creating schedules allows testing of the capacity of the pools to support the various uses.

Salaries

For this study, the staff necessary to operate and manage the facility has been listed and wages and benefits assigned. Staff might be contractors and paid under the management services agreement. The purpose of listing them is to identify the staffing and costs.

Utility Costs

POOL UTILITIES

Utility costs are based on calculation of energy and water use by the engineering staff of Aquatic Design Group. Annual cost estimates were developed using the actual City utility rates (per therm, kilowatt, and gallon).

ELECTRICITY AND GAS

Costs per square foot of area based on rates provided by the City at the highest assigned rate. Due to various tiers, usage time periods, service charges and fees, the highest billing rate were applied for this estimate.

Option 1: Aquatic Center with Diving Tower

Figure 4 - Aquatic Center Financial Summary

	FALL/WINTER/SPRING	SUMMER
50-METER POOL SCHEDULE		
MASTER'S SWIM - LAP SWIM AVAILABLE		
Monday - Friday	5:30am - 9:00am	5:30 am - 9:00am
	7:00pm - 9:00pm	7:00pm - 9:00pm
Weekends	7:00am -11:00am	7:00am -11:00am
LAP SWIM		
Monday - Friday	11:00am - 2:00pm	11:00am - 2:00pm
ELK GROVE UNIFIED SCHOOL USE		
Monday - Friday	3:00pm - 5:00pm	n/a
ELK GROVE UNIFIED SCHOOL DISTRICT WATER POLO		
Monday - Friday	3:00pm - 5:00pm	n/a
	<i>Games on Wednesday & Thursday</i>	
WATER POLO LEAGUES		
Monday - Friday	7:00pm - 9:00pm	6:00pm - 8:00pm
DIVE POOL SCHEDULE		
SWIM CLUBS & DIVING CLUB - USE 50 METER POOL & DIVE POOL ON WEEKENDS		
Monday - Friday	5:00pm - 7:00pm	4:00pm - 6:00pm
Weekends	9:00am - 11:00am	9:00am - 11:00am
SYNCHRONIZED SWIM		
Monday - Friday	7:00pm - 9:00pm	6:00pm - 8:00pm

Energy Efficiency

POOL COVERS

Pool covers will be placed on the pools overnight to conserve energy.

MECHANICAL SYSTEMS

Final design may include energy efficient systems that may reduce energy costs.

Scheduling

Priority for scheduling pool use will be for competitive events, with second tier daily priority to the Elk Grove Unified School District.

School District Use

The High School Swim Teams will train during the hours of 3pm - 5pm Monday - Friday throughout Fall/Winter/Spring. When the School District swim teams are training in the pools, they will be closed to the public. The School District will provide lifeguarding staff.

Swim Clubs

Local swim clubs will have second tier priority for training purposes after the School District. Swim clubs will provide lifeguarding staff.

Option 1: Aquatic Center with Diving Tower

REVENUE ASSUMPTIONS

Use Assumptions

The high school swim teams, swim clubs, water polo, and synchronized teams use the pool for training on weekdays.

The pools are available for hosting USA Swimming meets and other aquatic competitions or events on twenty (20) weekends. High School meets are held on weekdays.

Public use is provided through the Master's Swim program concurrent with lap swim periods.

Lane Rentals

The revenue projection assumes an increase in the total amount of lane rental fees paid by the School District. The rental fee for meets, for purposes of this study, is shown as additional to the rental fees for training.

Swim Meets

USA Swimming Meets: Rentals for competitive events assume twenty (20) weekends, or 40 days, for higher-level competitive use. These weekends typically include Friday as a set-up day. It is projected there will be more weekend competitive uses. There may be arrangements made to waive fees in order to attract these event organizers. These events will impact daily user access to the facility and the ability to raise rates in this area. The rental rate for an all-day competitive use is \$2,000 per day. Hourly rental assumptions are that the user will be charged \$225 for peak times (Friday-Sunday) and \$150 per hour for non-peak times. Hosting organization will provide staffing.

High School Meets: Assumes a total of 10 high school meets during the school year. High school meets are typically held on weekdays and the fee may be

negotiated with the School District for an annual rental fee. For purposes of this study, 10 high school meets have been included at an additional fee.

Swim Clubs

Fees will be applied to all swim clubs.

Elk Grove Unified School District

The assumed rental fee provides a discounted annual rate and is negotiable by the City. The fee does not include weekend competition rental fees or new programming.

Capacity

3,100 competitors and spectators per day for large events.

Masters Swim

The program will be coached and lifeguards will be provided by the Master's team.

Fee for daily drop-in: \$7.50 per visit

Monthly fee for Masters program: \$75.00

Lap Swim

Lanes will be set aside during specified times for lap swimmers. No coaching is provided.

Fee Assumption: \$6.00 per visit

Monthly fee for lap swim: \$55.00

Canopy Rentals

Staff will rent tents by the hour for shade spots on the turf area.

Concessions

Concessions revenue is shown as net and assumes a "fundraiser" arrangement with hosting organization.

Economic Stimulus

An objective for the development of an aquatics center is to create an economic stimulus for the local economy. To assess the potential economic benefit, the City requested estimates of the type and quality of likely events, numbers of competitors and spectators, overnight lodging estimates, and other figures that could be used to project the economic benefit from these events and the associated sports tourism. The type of meets that are hosted will impact the number of participants and spectators.

The Sports Management Group provided city staff estimates for economic modeling. The following assumptions were used to develop these estimates:

- Twenty (20) meets will attract regional (or greater) participation
- Five percent (5%) of participants eliminated during the first day of trials will leave the event
- The majority of spectators are family members. The rental of lodging assumes families will share a room and is based upon the number of participants

- Location and easy access to fast food and markets will impact participants using those services during the day
- Concessions are operated and revenue retained by the host committee

The following estimates were provided to the City:

Number of events with overnight stay:	20
Number of rooms rented per event:	200
Total number of room rentals:	4,000
Total number of meals (non-concession)	39,200

Analysis of Prior Study

The Sports Management Group reviewed the May 2014 “Market Feasibility Study Report” that assessed market demand and financial feasibility of a proposed outdoor waterpark, adventure park, and a competitive aquatic complex. The study was commissioned by P3I, the selected developer, and prepared by Hotel & Leisure Advisors, LLC (H&LA). Hotel & Leisure Advisors, LLC is a national hospitality consulting firm specializing in feasibility studies and impact analysis for hotels, outdoor and indoor waterparks, resorts, golf courses, restaurants, and other leisure real estate. The H&LA study was thoughtful, detailed, and well-researched, and provided a fair assessment of the challenges of building a successful competitive aquatics program.

The revenue and expense forecasting was prepared for the combined facilities and re-allocated to create a separate economic analysis of the aquatic center. The waterpark and adventure park appeal to a different market segment than competitive swimming. The business model for the combined facility is very different from the stand-alone competitive aquatics complex. It is not meaningful to compare the operating cost, revenue, and cost recovery of the combined complex to the stand-alone competitive aquatics center.

The H&LA revenue and expense allocation for the competitive aquatics center is summarized below:

Estimated revenues	\$643,721
Estimated expenses	\$1,092,069
Annual subsidy	(\$448,348)

Diving revenue: H&LA estimated revenue includes income from platform diving, noting that there are very few 10 meter diving towers in the state with the nearest dive tower at Stanford University.

However, there are at least ten (10) diving towers in California, with four in Northern California and a fifth under construction at the University of California, Berkeley. The opportunity to host major diving championship will be very limited.

The Sports Management Group’s analysis of the financial feasibility and marketability of a “stand-alone” competitive aquatic complex, without the waterpark and adventure park, estimates a much higher annual operating subsidy.

Estimated revenue	\$398,000
Estimated Expenses	\$1,485,000
Annual subsidy	(\$1,087,000)

The Sports Management Group reviewed the H&LA assumptions to understand the differences and found this clarification from H&LA that appears to be the source of many of those differences: “It is important to note, that as both the aquatic center and the waterpark will operated by the same operator, the facility will have shared expenses in several of the Undistributed Expenses line items” (H&LA A-9).



Option 1: Aquatic Center with Diving Tower

Figure 5 - Undistributed Expense Line Item Comparison

EXPENSE	H&LA	TSMG	DIFFERENCE
Labor	\$200,000	\$355,000	\$155,000
Management Fee	\$20,000	\$270,000	\$250,000
Repair & Maintenance	\$100,000	\$105,000	\$5,000
Utilities	\$250,000	\$288,000	\$38,000
Contingency & Capital Outlay	\$0	\$50,000	\$50,000
Reserves for Replacement	\$34,000	\$110,000	\$76,000
Total	\$604,000	\$1,178,000	\$574,000

The most significant Undistributed Expense line item differences between H&LA and The Sports Management Group are summarized in Figure 5.

In the opinion of The Sports Management Group, the H&LA estimated revenue is \$250,000 higher than is likely to be realized. Reducing the H&LA revenues by \$245,000 and adding \$574,000 of expenses results in an adjusted annual subsidy of:

Revenue	\$398,000
Expenses	\$1,666,000
Annual Operating Subsidy	(\$1,268,000)

The assumptions used to create the financial models are helpful in understanding the differences.

H&LA Waterpark, Adventure Park and Aquatics Complex Assumptions

- The combined facility has a single operator and management team with some shared expenses borne by the entire operation and not attributed to each component. There are assumed efficiencies in one management team for all three components.
- A management fee of 3% of the net revenue of the combined components
 - H&LA listed a management fee of \$20,000 for competitive aquatics the first year (3%)
- Concessions is operated through the management agreement
- Parking fees are charged
- Proceeds from Corporate Sponsorships revenue are assigned to operating income
- Retail sales will provide a revenue stream for the facility
- Replacement reserve is based on 5% of total revenue
- Competitive Aquatic Center is open six days a week, year-round

Option 1: Aquatic Center with Diving Tower

The Sports Management Group Assumptions

TSMG developed assumptions for a stand-alone competitive aquatics center. As a single facility, there are not the same opportunities revenue sharing or distribution of expenses among multiple facilities.

- A management fee of \$20,000 to \$25,000 per month is estimated, as the facility is not anticipated to generate net revenue
- Competitive Aquatic Center is open seven days a week, year-round
- Concessions is a shared expense and revenue among users groups/rentals:
 - Fundraising opportunity for the event host
 - Limited operating hours through the management agreement
- Marketing and IT services all borne by the facility
- Replacement reserve fund of 1% of construction cost, adjusted for construction inflation
- Landscape costs assigned to the aquatics center
- Therapy pool costs assigned to the aquatics center
- Except for a large national or international meets, parking is free

Design Alternatives

Introduction

In July 2015, the City issued a bid package to pre-qualified contractors for the construction of the Competitive Aquatics Center, referenced below as Option 1. The lowest bid for the onsite construction (onsite does not include roadway) was \$20.3 million. This is approximately \$8.4 million over the allocated funding for the project. The City has rejected all bids and is exploring options.

Option 1: Aquatic Center with Diving Tower (Bid Project)

An option for the City is to increase funding allocation and construct the project as designed. This course of action is not recommended. As described in the Peer Review, value engineering, re-design, and elimination of the 10-meter dive tower would substantially reduce the cost and redesign would improve the operational performance of the pools. Also, the guiding principal of the project was the City Council's goal of developing a sports venue "... that attracts state, national, and international users." Irrespective of changes to the project, and as described in the Marketing Positioning chapter of this report, it is unlikely the aquatics center can achieve this objective. The events that the facility will host will provide some economic benefit for the community, however, not at the level of the premier events. Lastly, funding the annual operating subsidy may be the greatest financial challenge. The annual operating subsidy is estimated at approximately \$1 million plus, in perpetuity. Over time, the subsidy is likely to increase as the facility ages. Most cities subsidize their pools, and the typical source of funding is the city's general fund.

Alternative Options

The consultant team developed three project options for consideration. Each option serves a different program objective, and each has unique operating costs, revenue potential and cost recovery. These options are illustrative of a "type" of aquatic center that serves different categories of users. The options are listed below and described in this section of the report. The section concludes with a matrix that compares the features and costs all the options presented.

Option 2: Competitive Aquatic Center

Option 3: Multi-Use Aquatic Center

Option 4: Full Service Aquatic Center

ORDER-OF-MAGNITUDE CONSTRUCTION COSTS

Order-of-magnitude estimates of construction cost were developed for Options 2-4. The construction cost estimates include the direct construction, a site development allowance, and contractor profit, overhead, a design contingency, bonds and insurance. The cost estimates were developed using unit costs or cost-per-square-foot for each specific components. The costs are based on actual costs from recently built public pools in California.

Design Alternatives

The order-of-magnitude estimates are based on assumptions that differ from Option 1.

- The pools would be engineered and designed to industry standards, using the most cost efficient design, materials, and construction methods.
- The items listed in the Peer Review section would be corrected or implemented in Options 2-4, reducing the capital and the operating costs.
- The area within the fence is significantly reduced. The area includes the buildings, pools and deck, and approximately an acre of lawn area.

This report estimates the construction costs only. The City will add the “soft costs” to identify the total project cost. Soft costs include architectural and engineering fees, construction management, permits and testing, owners costs, and design and construction contingencies. The order-of-magnitude costs are in current dollars and must be escalated to the mid-point of construction. The detailed order-of-magnitude estimates can be found in the Appendix.

Bathhouse Size

The size of the bathhouse is determined, in part, by the size of the pools. The state’s health code specifies the required number of showers, toilets, and sinks based on bather load that is determined by the amount of surface area of the pools. The Elk Grove bathhouse for Options 2-4 is estimated at approximately 13,000 gross square feet with 4,000sf for locker rooms. Approximately 4,000sf is used for pool mechanical equipment, chemical storage, and equipment storage. The total square footage used for Options 2-4 is less than Option 1, which is approximately 15,000sf.

Note: When comparing with peer facilities, some facilities report only the bathhouse square footage and do not include 3,000 to 4,000 sf for the pool mechanical equipment, chemical storage, and equipment storage in that total.

PLATFORM DIVING

Option 1 included a 10-meter diving tower as a significant and distinguishing feature. A diving tower is a structure used for competitive diving consisting of vertical rigid platforms at specific levels: 1-meter, 3-meter, 5-meter, 7.5-meter, and 10-meter heights. Competition is held on the 5-meter, 7.5-meter and 10-meter levels while the lower levels are for training and practice.



The dive tower is intended to serve the City’s long-term vision of providing quality amenities and service for its residents and visitors. The proposed dive tower can support regional and national competitions

and possibly bring distinction to the City. This will require a USA Diving sanctioned club to be found or developed to serve as the hosting organization for bidding and hosting competitions. The City must develop a user base to support and grow this sport, independent of competitions, to help sustain its operation. The City must develop a niche in the diving competition events calendar. The City would compete with established venues in California who have a strong dive club and reputation for hosting successful events. One of the oldest, largest, and



Design Alternatives

most prestigious dive clubs (80 divers) in the country is located in Santa Clara. The Santa Clara International Swim Center has completed preliminary design of a \$120 million aquatics center, diving stadium, and International Swimming Hall of Fame. The University of California, Berkeley dive center is currently under construction. The business plan includes a marketing program to promote the venue and secure events.

If a dive tower is desired, a needs assessment is recommended to quantify the demand. Because of its specialized use, and the high degree of training and practice required to safely dive from the 10-meter platform, there are relatively few divers nationally. USA Diving reports 25 sanctioned dive clubs in California, with the nearest club located in Roseville. The City of Elk Grove is located in USA Diving Region 10, which includes Alaska, Northern and Central California, Idaho, Nevada (excluding Las Vegas), Montana, Oregon and Washington. USA Diving reports the total number divers in Region 10 is 700.

In preparing alternatives for the City's consideration, the dive tower has been exchanged for other amenities that provide broader use, or generate more revenue, with potentially less liability than this fixed structural element.

A newly sanctioned sport that is growing in popularity is synchronized diving. Synchronized diving features two divers on three-meter springboard competing together against pair of divers from another teams. This relatively new competitive diving event could be a replacement for the platform diving and dive tower, and possibly provide a "competitive destination" for this sport.

Pool Sizing

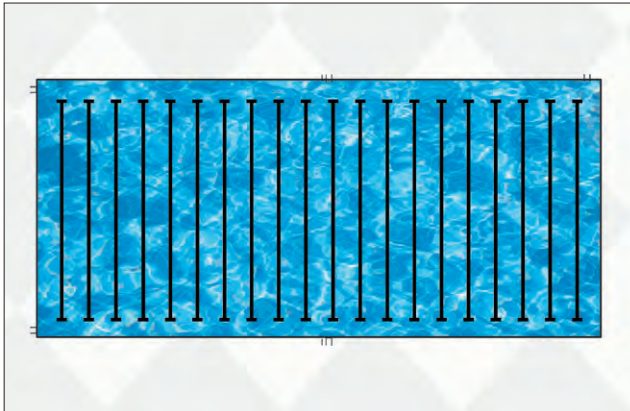
There are many variations in the size of pools. In addition to the lap pools listed below, there are larger pools, such as stretch 50-meter and 65-meter pools, smaller pools, and pools in between. The size, features, and depth of a pool is determined by the program intent, demand, the available funding for capital and operations, and other factors. Determining the number of swimmers to be accommodated every hour is necessary to “right size.” To reduce the cost of any of the options presented, the size of the pools can be reduced, or conversely, increased for greater capacity.

Choice of pool size, features, and depth depends on the programming objectives. Descriptions of four popular pool archetypes are provided, that relate pool size, depth, and temperature to the aquatic programming that can be supported. These are illustrative only, and not intended as design options for the Elk Grove Aquatic Center.

Examples of three regional aquatic facilities that feature a mix of pools to maximize programming, such as a 50-meter pool with a recreation pool or fitness/instruction pool, are included in the Appendix.

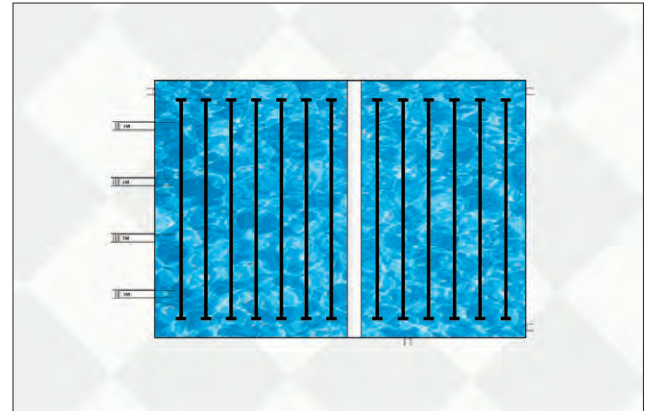
Figure 6 - Lap Pool Sizes

FEATURE	8-LANE	25-METER	30-METER	35-METER	40-METER	50-METER
Length	67'	82'	98'	114'	131'	164'
Surface Area (Sq. Ft.)	5,425	6,150	7,380	8,550	9,840	12,300
Number of 7' Lanes	8	11	14	15	18	21
Max Swimmers 7' Lanes	48	66	84	90	108	126
Number of 8' Lanes	8	10	12	13	16	20
Max Swimmers 8' Lanes	48	60	72	78	96	120
Maximum Occupancy	252	307	369	427	492	615

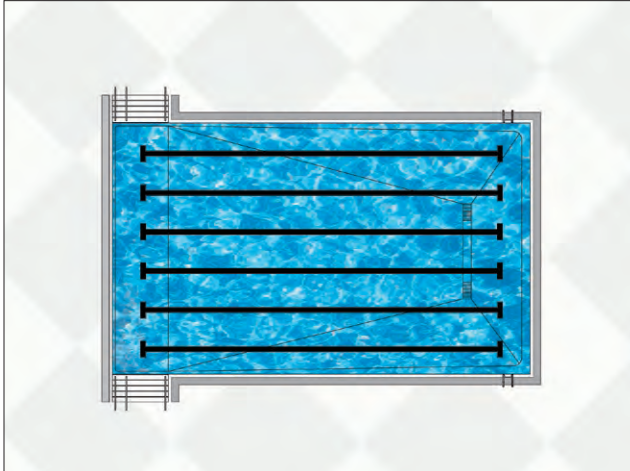


50-METER POOL	
DEPTH	7' - 10' ¹
WATER TEMPERATURE	78° to 81°F
WATER SURFACE AREA	12,300 sf
LANES	20 Short course 8-10 Long course
USES	Coached short-course and long course swimming training and competition, synchronized swimming training and competition, lap swimming, water polo training and competition. Secondary uses include coached clinics, advanced stroke and turn classes, triathlon training, boating safety and skills classes.
DESCRIPTION	Serves high level competitive aquatics

¹ Shallower 50-meter pool depth is not sufficient for training or competition by either synchronized swimming or water polo, and is of insufficient depth for racing starts from platforms for swimming. The depth limits swimming for both training and precludes sanctioned swim meets. Use of shallow 50-meter pool for open recreation, learn-to-swim, and other instructional classes and programs is not well-suited because of temperature or depth.



35-METER X 25-YARD DEEP WATER POOL	
DEPTH	9'-16'
WATER TEMPERATURE	78° to 81°F
WATER SURFACE AREA	8,625 sf
DIVING BOARDS	(2) 1-Meter Springboards and (2) 3-Meter Springboards
LANES	(13) 25-Yard short course lanes
USES	Synchronized swimming training and competition, exhibitions, diving training and competition, lap swimming, coached short-course swimming training and competition, water polo training and competition. Secondary uses include coached clinics, advanced stroke and turn classes, recreational use of the diving boards, and deep-water classes, i.e. SCUBA.
DESCRIPTION	Large, yet versatile deep water pool



25-YARD X 6-LANE POOL	
DEPTH	3'-6" to 5'-0" with teaching stairs from 0'-6" to 3'-6"
WATER TEMPERATURE	83° to 86°F
WATER SURFACE AREA	3,435 sf
LANES	(6) 25-Yard short course lanes
USES	Instructional classes including learn-to-swim, water exercise, lap swimming, open recreation, water games.
DESCRIPTION	Versatile pool with depth and temperature to support young children learning to swim to adults and older adults exercising at a moderate level to team training.

FAMILY RECREATION POOL	
DEPTH	0' beach entry to 3'-6"
WATER TEMPERATURE	85° to 88°F
WATER SURFACE AREA	5,000 sq. ft.
FEATURES	Water sprays, slide, current channel, bubblers, interactive play structure
USES	Family recreation, open recreation, water exercise, instructional classes including learn-to-swim, warm water rehabilitation
DESCRIPTION	Meets the needs and interests of families, children of all ages, and provides warm water for certain therapeutic programs.

Note: Diagram provided for illustration purposes only.

Option 1

Aquatic Center with Diving Tower

PROGRAM INTENT

Maximize all-deep water area for competitive aquatics and diving at the high school and collegiate levels. Water temperature maintained at 78° to 81°. Develop an aquatic center that could host national, regional, and local meets. The dive tower provides a distinguishing feature, as one of 11 in the state.

POPULATION SERVED

Competitive aquatics

PROS

- Maximizes lanes for competitive swimming
- Distinguished facility due to the 50m pool and 10-meter dive tower
- High quality competition venue for local and regional meets

CONS

- Requires a significant operating subsidy
- “Special use pool” designation because of depth that precludes non-competitive uses
- Does not serve aquatic interests other than competitive aquatics
- Limited benefit to Laguna Ridge residents
- Exceeds funding allocation
- Added liability with dive tower

ORDER OF MAGNITUDE: CONSTRUCTION COST	
\$20.3 million	
ORDER OF MAGNITUDE: COST RECOVERY	
23% - 31%	
ORDER OF MAGNITUDE: SUBSIDY	
-\$1,200,000 to -\$967,000	
POOLS & AMENITIES	
50-meter x 25-yard Competition Pool	
32-meter x 30-yard Dive Pool	
10-meter Dive Tower	
Two 3-meter & Two 1-meter Springboards	
10' x 15' Spa	
Covered Spectator Seating for 500	
Bathhouse 13,070sf	
FEATURES	
Surface Area	21,660sf
Long Course Lanes	8
Short Course Lanes	35
Maximum Occupancy	1,083
Maximum Water Polo Play Areas	5
Long Course	Yes
Springboard Diving	Yes
Learn-To-Swim	No
Recreational Play	No
Warm-Water	No

Option 2

Competitive Venue

PROGRAM INTENT

Maximize water area for competitive aquatics: swimming, springboard diving, water polo, and synchronized swimming. All-deep water maintained at a temperature of 78° to 81°. The Aquatic Center could host local and regional meets. This program provides a competitive venue addressing swim and dive competitions up to national level. National level dive competitions are not accommodated due to lack of a dive tower. This program improves cost recovery while remaining viable and attractive to hosting regional and national meets. The dive tower is removed from the program due to limiting competitive requirements and cost.

POPULATION SERVED

Competitive aquatics, master's swim, lap swim

COST RECOVERY

The reduction of water surface area and the elimination of the dive tower decrease expenses over Option 1. The primary cost reduction include utilities, chemicals, and maintenance. The revenue remains approximately the same resulting in slightly reduced operating subsidy.

ORDER OF MAGNITUDE: CONSTRUCTION COST	
\$13.4 Million	
ORDER OF MAGNITUDE: COST RECOVERY	
20% - 28%	
ORDER OF MAGNITUDE: SUBSIDY	
-\$1,100,000 to -\$900,000	
POOLS & AMENITIES	
50-meter x 25-yard Competition Pool 4-Lane Warm-Up Pool (75' x 35') Two 1-meter & Two 3-meter Springboards Covered Spectator Seating for 500 Bathhouse 13,070sf	
FEATURES	
Surface Area	14,775sf
Long Course Lanes	8
Short Course Lanes	25
Maximum Occupancy	738
Maximum Water Polo Play Areas	3
Long Course	Yes
Springboard Diving	Yes
Learn-To-Swim	No
Recreational Play	No
Warm-Water	No

Option 2

Competitive Venue

PROS

- Maximizes lanes for competitive swimming
- Distinguished facility due to the 50m pool
- High quality competition venue for local and regional meets
- Addresses dive needs up to national level

CONS

- Requires a significant operating subsidy
- “Special use pool” designation because of depth
- Does not serve aquatic interests other than competitive aquatics
- Limited benefit to Laguna Ridge residents
- Does not have the dive tower as a distinguishing feature

Option 3

Multi-Use Aquatic Center

PROGRAM INTENT

Option 3 provides a dedicated pool for competitive aquatics and a multi-use pool to supplement training and competition and support instruction, water exercise and limited recreational use. The addition of a sprayground expands use to families and children. The 35-meter pool provides all the features of the 50-meter pool, except long-course swimming. The temperature in each pool varies: the competitive pool is typically 78°-81° and the instructional and fitness pool 83°-86° and could be lowered for use during meets.

POPULATION SERVED

Competitive aquatics, children, families, seniors

COST RECOVERY

Cost recovery is improved with the exchange of a 50-meter pool to a 35-meter pool by reducing operating costs. The addition of a multi-use pool adds program and instructional uses that add revenue.

ORDER OF MAGNITUDE: CONSTRUCTION COST	
\$13.0 Million	
ORDER OF MAGNITUDE: COST RECOVERY	
28% - \$36%	
ORDER OF MAGNITUDE: SUBSIDY	
-\$900,000 to -\$750,000	
POOLS & AMENITIES	
35-Meter Competition Pool 6-Lane Teaching & Fitness Pool Sprayground Two 1-meter & Two 3-meter Springboards Covered Spectator Seating for 500 Bathhouse 13,000sf	
FEATURES	
Surface Area	11,985sf
Long Course Lanes	No
Short Course Lanes	21
Maximum Occupancy	599
Maximum Water Polo Play Areas	2
Long Course	No
Springboard Diving	Yes
Learn-To-Swim	Yes
Recreational Play	Limited
Warm-Water	No

Option 3

Multi-Use Aquatic Center

PROS

- Regulation venue for competition swimming, water polo, synchronized swimming, and springboard diving
- Laguna Ridge residents receive a benefit for their tax support
- Cost recovery is improved by the diversity of uses and the ability to close the second pool if not needed during the winter season
- Adds a sprayground for children and families
- The multi-use 6-lane pool, provides flexibility in programming
- Provides a competition venue for local and regional meets

CONS

- Requires an operating subsidy
- Does not provide long course swimming
- “Special use pool” designation of 35-meter pool precludes other programming

Option 4

Full Service Aquatic Center

PROGRAM INTENT

Option 4 provides a balance of aquatic opportunities with a combination of pools designed to serve competitive aquatics, instruction, water fitness, and family recreation aquatics. There are three bodies of water, each designed to the specific needs of programs it supports. Temperatures in each pool vary: the competitive pool is 78°-81°, Instructional and fitness pool 84°-86°, and the recreation 85°-88°. The bathhouse is minimally sized to meet health code requirements. The priority has been placed on the pools. This option has the highest cost recovery and maximizes competition.

POPULATION SERVED

Competitive aquatics, children, families, seniors

COST RECOVERY

As previously discussed, the addition of swim lessons, family recreation, water fitness, and party rentals contribute significantly to revenue. The operating cost increase due to staffing and lifeguarding of these programs, however, the revenue generated offsets these costs. Additionally, costs are contained and cost recovery maximized by the seasonal operation of the recreation and teaching pools.

ORDER OF MAGNITUDE: CONSTRUCTION COST	
\$16.8 Million	
ORDER OF MAGNITUDE: COST RECOVERY	
52% - 62%	
ORDER OF MAGNITUDE: SUBSIDY	
-\$750,000 to -\$500,000	
POOLS & AMENITIES	
50-meter x 25-yard Competition Pool Two 1-Meter & Two 3-Meter Springboards 6-Lane Warm-up, Teaching and Fitness Pool 6,000sf Recreation Pool with Waterslides, Interactive Play, and Toddler Area Shaded Spectator Seating for 500 Bathhouse 13,300 sf	
FEATURES	
Surface Area	22,300sf
Long Course Lanes	8
Short Course Lanes	27
Maximum Occupancy	1,115
Maximum Water Polo Play Areas	3
Long Course	Yes
Springboard Diving	Yes
Learn-To-Swim	Yes
Recreational Play	Yes
Warm-Water	Yes

Option 4

Full Service Aquatic Center

PROS

- Provides a balance of aquatic offerings and serves competitive aquatics. Provides aquatics for everyone – not a single focus
- Provides a competition venue for local and regional meets
- Training for swimming, water polo, synchronized swimming, and springboard diving
- Regulation competition venue for swimming, water polo, synchronized swimming, and springboard diving
- Recreation swimming, fitness, instruction and water play
- Laguna Ridge residents receive a benefit for their tax support
- Cost recovery is improved by the diversity of uses and users
- Recreation pool and can be closed during the winter to reduce operating costs
- Serves the greatest number of residents
- Water depth and temperature for senior exercise

CONS

- Requires an operating subsidy
- “Special use pool” designation of 50-meter pool because of depth precludes other programming

Design Alternatives

Figure 7 - Comparison of Options

	OPTION 1	OPTION 2	OPTION 3	OPTION 4
<i>Construction Cost</i>	\$20.3 million	\$13.4 million	\$13.0 million	\$16.8 million
<i>Cost Recovery</i>	23% - 31%	20% - 28%	28% - 36%	52% - 62%
<i>Subsidy</i>	-\$1,200,000 to -\$967,000	-\$1,100,000 to -\$900,000	-\$900,000 to -\$750,000	-\$750,000 to -\$500,000
<i>Surface Area</i>	21,660sf	14,775sf	11,985sf	22,300sf
<i>Pools</i>	50-meter pool 32-meter dive pool 10-meter dive tower	50-meter pool 4-lane warm-up pool	35-meter pool 6-lane pool sprayground	50-meter pool 6-lane pool recreation pool
<i>Long Course Lanes</i>	8	8	0	8
<i>Short Course Lanes</i>	35	25	21	27
<i>Occupancy</i>	1,083	738	599	1,115

Appendix

Aquatic Terms and Definitions

Bubbler

A device used for under high diving platforms that creates a thin stream of air bubbles to break the surface of the water to provide a visual target for a diver.

Diving Platform

A rigid structure usually having platform locations at heights of 5, 7.5, and 10 meters above the water surface.

Diving Springboards

Conventional diving boards mounted at 1 and 3 meters above the water surface.

Diving Well

A separate pool which can accommodate springboard and sometimes platform diving. Depth will range from 10' - 17'.

Dry Land Training

Aquatic training in a fitness/weight room setting.

Fast Water

An aquatics term that describes the perceived water conditions based on the pool's depth, chemical balance, clarity, temperature, visibility, gutter system, subsurface and surface turbulence. It is believed that greater water depth correlates to faster water.

FINA

Federation Internationale de Natation Amateur (governs international competition including the Olympic Games)

Floating Goal

A goal used in water polo play that floats on the water surface. Two goals are required for water polo, with a 75' (25 meter) required distance in between for floating goals (goal line to goal line). Floating goals allow pools larger than the area of play to be used for water polo. The minimum distance from goal line to pool wall is recommended to be 1.66 meters. The field of play width for any goal type ranges from 45' to no more than 66', with a recommended depth of 2 meters.

Long Course

Relates to swimming in the 50 meter direction of a pool.

Moveable Bulkhead

Rigid truss, moveable end wall, usually 4'0" to 5'0" wide, generally made of stainless steel or fiberglass which allows a pool to be divided to facilitate varied aquatic activities.

NCAA

National Collegiate Athletic Association (governs Collegiate Competition)

NFSHA

National Federation of State High School Associations (governs High School Competition)

Overflow Systems

A method of recovering pool water and returning it to the pool and skimming the pool surface at the perimeter.

Appendix

Recreation Pool

A non-symmetrical and usually curvilinear pool that varies in size and depth, typically zero to not more than 4'. Incorporates water features, e.g. slides, sprays, play structures, etc.

Short Course

Relates to swimming in the 25 yard direction of a pool.

Sparger

Device that forces a large quantity of air to the surface of the water to cushion the fall of the diver.

Stretch Pool

Extending the length of the pool beyond 25 yards, 25 meters or 50 meters to create an area for other aquatic activities. A bulkhead is required to create a regulation course.

USD

United States Diving (governs competition in open and age group competition for men and women in the United States)

USA Swimming

United States Swimming (governs competition in open and age group competition for men and women in the United States)

USSS

United States Synchronized Swimming (governs competition in open and age group competition for men and women in the United States)

USWP

United States Water Polo (governs competition in open and age group competition for men and women in the United States)

Wall Goal

A goal used in water polo play that attaches to the wall of the pool. With wall goals, the required length of the pool from wall to wall is 75' (25 meters). The field of play width for any goal type ranges from 45' to no more than 66', with a recommended depth of 2 meters.

Warm Water Pool

A pool with water that is 84° or warmer.

Water Features

A wide variety of playground-type amenities such as slides, jungle gyms, sprays, and fountains adapted for water play.

Appendix

Dolores Bengtson Aquatic Center



LOCATION:

4455 Black Avenue
 Pleasanton, CA 94566

DESCRIPTION:

Located in the South Bay, the facility offers a well-rounded program of competitive, recreational, and instructional aquatics in three bodies of water.

AMENITIES:

- Locker rooms, community room
- Temporary bleachers

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	69%
<i>Net Loss:</i>	(\$230,700)

NUMBER OF BODIES OF WATER: 3

Competition Pool

- 50-meter x 25-yard lap pool
- 4' - 6.5' deep
- 10 long course lanes, 22 short course lanes

Recreation Pool

- 25-yard x 60'
- 2.5' - 3.5' deep
- Waterslide
- Walk-out stairs

"L" Shaped 25-Meter Lap Pool & Diving Well

- 25-meter x 60'
- 4.5' - 6.5' deep
- 8 lanes
- 34' x 25' diving well
- Two 1-meter diving boards
- Walk-out stairs

Appendix

Morgan Hill Aquatic Center



LOCATION:

16200 Condit Road
Morgan Hill, CA 95037

DESCRIPTION:

Based in the South Bay, this complex offers a mix of competitive, instructional, and recreational programs.

AMENITIES:

- 8,825gsf building with shower/locker rooms, birthday party rooms
- Permanent bleachers
- Shade structures

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	73%
<i>Net Loss:</i>	(\$142,500)

NUMBER OF BODIES OF WATER: 4

Competition Pool

- 50-meter x 25-yard
- 4' - 13.5' deep
- 8 long course lanes, 18 short course lanes
- 1-meter & 3-meter diving boards
- 30' windscreen
- Walk-out stairs

Warm Water Instructional Pool

- 25-yard x 52'
- 3.5'-7.5' deep, 6 lanes

Recreational Pool

- 5,000sf with beach entry, water play structure, 2 waterslides

Sprayground

- 943sf with misting sprays, cascading fountains, water trays, shooting geysers

Appendix

Clarke Memorial Swim Center



LOCATION:

1750 Heather Drive
 Walnut Creek, CA 94598

DESCRIPTION:

The facility is home to the large and competitive AquaBears swim teams and the Aquanuts synchronized swim team—both of which have produced Olympians. The three-pool complex has been the site of large meets but like the ISC is at the end of its serviceable life.

FINANCIAL PERFORMANCE:

<i>Cost Recovery:</i>	<i>51%</i>
<i>Net Loss:</i>	<i>(\$600,000)</i>

AMENITIES:

- 6,900sf bathhouse with heated locker/shower rooms, classroom, fitness room with cardiovascular and weight equipment
- Temporary bleachers

NUMBER OF BODIES OF WATER: 3

Competition Pool

- 50-meter x 25-yard lap pool
- 20 long course lanes, 8 short course lanes

Wading Pool

- 60' x 30' instructional pool
- 2' - 3.5' deep

Diving Well

- 25-meter x 46' diving well

Elk Grove Aquatic Center

Option 2 Construction Estimate

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>EXTENSIONS</u>
1.0	<u>CONSTRUCTION COSTS</u>				
1.1	Site Preparation/Demolition/Mobilization	1	LS	\$ 1,000,000.00	\$ 1,000,000.00
1.2	Utility Allowance	1	LS	\$ 500,000.00	\$ 500,000.00
1.3	Pool Building	13,070	SF	\$ 350.00	\$ 4,574,500.00
1.4	Pool Decks & Deck Drainage	22,350	SF	\$ 25.00	\$ 558,750.00
1.5	50-Meter Pool	12,300	SF	\$ 185.00	\$ 2,275,500.00
1.6	Warm-Up Pool (75'x35') 4-Lanes	2,475	SF	\$ 145.00	\$ 358,875.00
1.7	Covered Bleachers (500 Spectators)	1	LS	\$ 170,000.00	\$ 170,000.00
1.8	Pool Fence Enclosures	1	LS	\$ 190,000.00	\$ 190,000.00
1.9	Landscape/Site	1	LS	\$ 145,000.00	\$ 145,000.00
1.10	Parking	248	EA	\$ 2,000.00	\$ 496,000.00
1.11	TOTAL CONSTRUCTION COSTS				\$ 10,268,625.00
2.0	<u>EQUIPMENT COSTS (FF&E)</u>				
2.1	Building Equipment	1	LS	\$ 75,000.00	\$ 75,000.00
2.2	Deck Equipment	1	LS	\$ 48,000.00	\$ 48,000.00
2.3	Competitive Equipment	1	LS	\$ 90,000.00	\$ 90,000.00
2.4	TOTAL EQUIPMENT COSTS				\$ 213,000.00
3.0	<u>OVERHEAD & BURDEN SOFT COSTS</u>				
3.1	General Contractor Mark-Up/Overhead	11%			\$ 1,152,978.75
3.2	Design Contingency	15%			\$ 1,572,243.75
3.3	Bonds & Insurance	2.3%			\$ 241,077.38
3.4	Time/Inflation Escalation Index	0%			\$ -
3.5	TOTAL O&B COSTS				\$ 2,966,299.88
4.0	TOTAL ESTIMATED CONSTRUCTION COST				\$ 13,447,924.88

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>EXTENSIONS</u>
1.0	<u>CONSTRUCTION COSTS</u>				
1.1	Site Preparation/Demolition/Mobilization	1	LS	\$ 1,000,000.00	\$ 1,000,000.00
1.2	Utility Allowance	1	LS	\$ 500,000.00	\$ 500,000.00
1.3	Pool Building	12,989	SF	\$ 350.00	\$ 4,546,062.50
1.4	Pool Decks & Deck Drainage	20,000	SF	\$ 25.00	\$ 500,000.00
1.5	35-Meter Pool	8,610	SF	\$ 185.00	\$ 1,592,850.00
1.6	6-Lane Teaching & Fitness Pool	3,375	SF	\$ 145.00	\$ 489,375.00
1.7	Sprayground	1	LS	\$ 350,000.00	\$ 350,000.00
1.8	Covered Bleachers (500 Spectators)	1	LS	\$ 170,000.00	\$ 170,000.00
1.9	Pool Fence Enclosure	1	LS	\$ 180,000.00	\$ 180,000.00
1.10	Landscape/Site	1	LS	\$ 125,000.00	\$ 125,000.00
1.11	Parking	220	EA	\$ 2,000.00	\$ 440,000.00
1.12	TOTAL CONSTRUCTION COSTS				\$ 9,893,287.50
2.0	<u>EQUIPMENT COSTS (FF&E)</u>				
2.1	Building Equipment	1	LS	\$ 75,000.00	\$ 75,000.00
2.2	Deck Equipment	1	LS	\$ 48,000.00	\$ 48,000.00
2.3	Competitive Equipment	1	LS	\$ 90,000.00	\$ 90,000.00
2.4	TOTAL EQUIPMENT COSTS				\$ 213,000.00
3.0	<u>OVERHEAD & BURDEN COSTS</u>				
3.1	General Contractor Mark-Up/Overhead	11%			\$ 1,111,691.63
3.2	Design Contingency	15%			\$ 1,515,943.13
3.3	Bonds & Insurance	2.3%			\$ 232,444.61
3.4	Time/Inflation Escalation Index	0%			\$ -
3.5	TOTAL O&B COSTS				\$ 2,860,079.36
4.0	TOTAL ESTIMATED CONSTRUCTION COST				\$ 12,966,366.86

Elk Grove Aquatic Center

Option 4 Construction Estimate

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>EXTENSIONS</u>
1.0	<u>CONSTRUCTION COSTS</u>				
1.1	Site Preparation/Demolition/Mobilization	1	LS	\$ 1,000,000.00	\$ 1,000,000.00
1.2	Utility Allowance	1	LS	\$ 500,000.00	\$ 500,000.00
1.3	Pool Building	13,308	SF	\$ 350.00	\$ 4,657,800.00
1.4	Pool Decks & Deck Drainage	30,000	SF	\$ 25.00	\$ 750,000.00
1.5	50-Meter Pool	12,300	SF	\$ 185.00	\$ 2,275,500.00
1.6	Teaching Pool	4,000	SF	\$ 165.00	\$ 660,000.00
1.7	Recreation Pool	6,000	SF	\$ 175.00	\$ 1,050,000.00
1.8	Water Slides	1	LS	\$ 300,000.00	\$ 300,000.00
1.9	Interactive Play	1	LS	\$ 150,000.00	\$ 150,000.00
1.10	Covered Bleachers (500 Spectators)	1	LS	\$ 170,000.00	\$ 170,000.00
1.11	Pool Fence Enclosure	1	LS	\$ 210,000.00	\$ 210,000.00
1.12	Landscape/Site	1	LS	\$ 150,000.00	\$ 150,000.00
1.13	Parking	450	EA	\$ 2,000.00	\$ 900,000.00
1.14	TOTAL CONSTRUCTION COSTS				\$ 12,773,300.00
2.0	<u>EQUIPMENT COSTS (FF&E)</u>				
2.1	Building Equipment	1	LS	\$ 75,000.00	\$ 75,000.00
2.2	Deck Equipment	1	LS	\$ 48,000.00	\$ 48,000.00
2.3	Competitive Equipment	1	LS	\$ 160,000.00	\$ 160,000.00
2.4	TOTAL EQUIPMENT COSTS				\$ 283,000.00
3.0	<u>OVERHEAD & BURDEN COSTS</u>				
3.1	General Contractor Mark-Up/Overhead	11%			\$ 1,436,193.00
3.2	Design Contingency	15%			\$ 1,958,445.00
3.3	Bonds & Insurance	2.3%			\$ 300,294.90
3.4	Time/Inflation Escalation Index	0%			\$ -
3.5	TOTAL O&B COSTS				\$ 3,694,932.90
4.0	TOTAL ESTIMATED CONSTRUCTION COST				\$ 16,751,232.90

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