

SAN DIEGUITO UNION HIGH SCHOOL DISTRICT SWIMMING POOLS DEVELOPMENT STUDY:

Carlsbad,
California

August 2020

Submitted By:



2226 Faraday Avenue
Carlsbad, CA 92008
760.438.8400
www.aquaticdesigngroup.com



1021 E. South Boulder Road, Suite N
Louisville, CO 80027
303.439.8369
www.greenplayllc.com

TABLE OF CONTENTS

A.	SCOPE and OBJECTIVE.....	3
B.	PROGRAMMING.....	5
C.	CONSENSUS POOL DATA.....	9
D.	INDUSTRY TRENDS.....	11
E.	SITE AND BUILDING OPTION.....	14
F.	PROFORMA BUDGET.....	19
G.	OPERATIONAL STUDY.....	20
H.	SUMMARY.....	49

A. SCOPE and OBJECTIVE

In June 2019, the San Dieguito Union High School District hired Aquatic Design Group (ADG) and Green Play to conduct a development study for a district aquatic center to be located at La Costa Canyon High School (LCCHS). Aquatic Design Group staff is familiar with the LCCHS campus as we have children that attended and graduated from there. On July 15th and September 26th, ADG visited La Costa Canyon High School to gather information and tour the campus with District and campus staff. Specific scope items for this study include (pasted directly from the formal agreement between ADG and the San Dieguito Union High School District, SDUHSD):

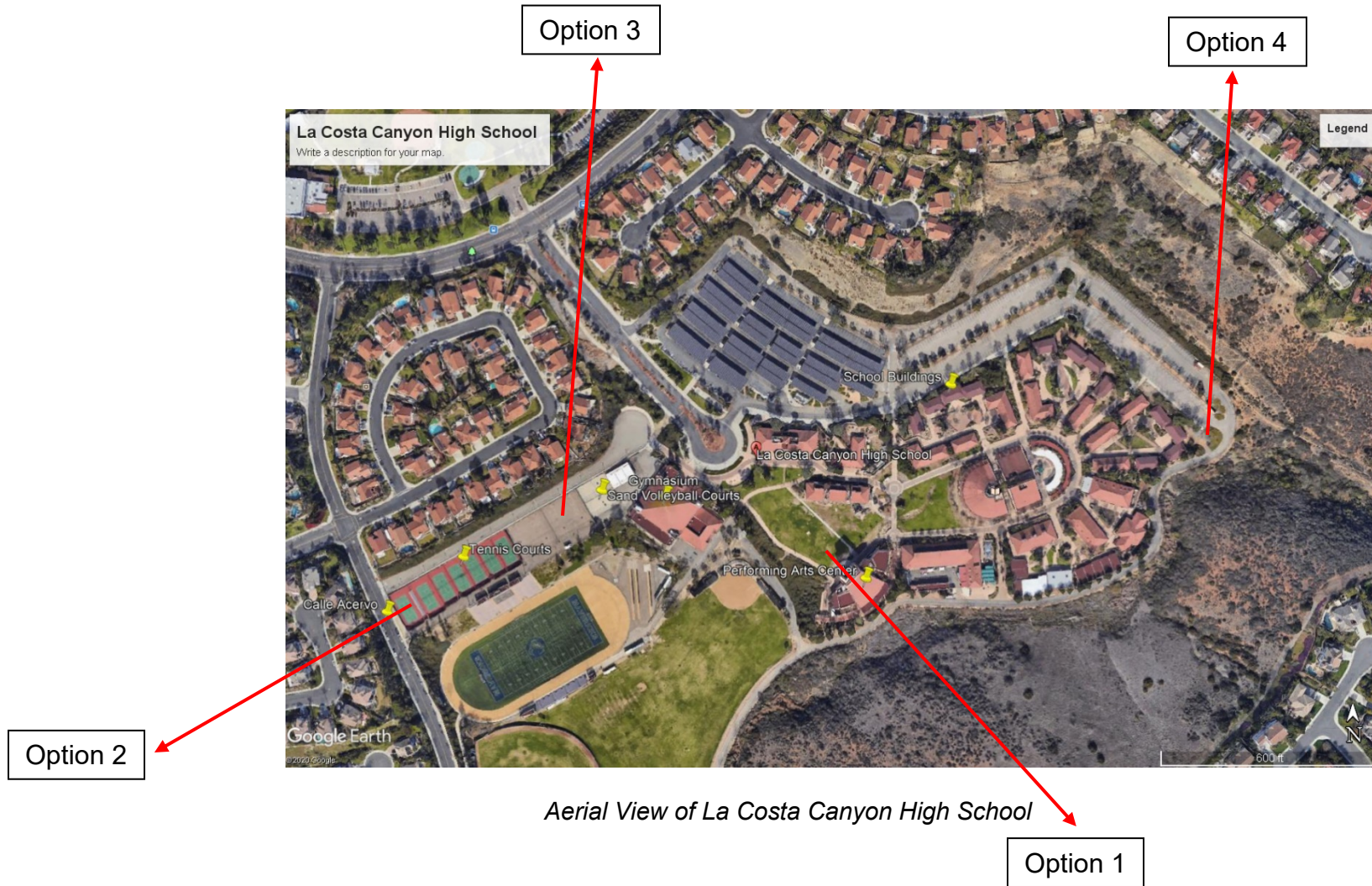
- 💧 Work with CLIENT and Owner to review industry trends, programmatic needs, and establish aquatic center design program priorities.
- 💧 Assist CLIENT in the preparation of a series of conceptual site plans by providing pool templates for CLIENT's use; provide review and comment on CLIENT-generated conceptual site plans. This may include providing baseline infrastructure estimates for pool related components (fixture counts, mechanical room sizes, parking spaces, etc.)
- 💧 Assist in the analysis of aquatic center operation costs and revenue generation program opportunities.
- 💧 Prepare a basis of design document for use by CLIENT that describes the pool characteristics, programmatic capabilities, and design intent for pool systems.
- 💧 Prepare a cost estimate for the potential construction costs of the pool components and an opinion of the cost to operate the pools.

During the first site visit a tour of the La Costa Canyon High School (LCCHS) campus was completed. During the tour potential locations for an aquatic center were identified along with basic programming information for both existing programs and future desired programs. This included the previous volunteer group study and site recommendation adjacent to the theater arts building. The second site visit served to confirm pool size for a potential aquatic center, re-verified both existing programs and future desired programs, and discussed site options in a meeting with LCCHS and District staff. A consensus was determined to be option 3, adjacent to the gym.

Representatives from LCCHS and SDUHSD took part in the on-site meetings including: John Addleman (SDUHSD), Daniel Young (SDUHSD), Reno Medina (LCCHS), and Kari DiGiulio (LCCHS).

The information provided within is based on interviews with LCCHS and SDUHSD staff as well as interviews with neighboring school districts. This report

should be read in full with no excerpts to be fully representative of the findings and has been prepared exclusively for SDUHSD.



Aerial View of La Costa Canyon High School

B. PROGRAMMING

We started the programming phase of this study with a central question; Why should San Dieguito UHSD consider building and operating a swimming pool at La Costa Canyon High School? Some of the reasons noted are listed below:

- 💧 Support existing athletic programs
- 💧 Provides accessibility for more students to participate in sports programming
- 💧 Life skills athletics can provide for students
- 💧 Carlsbad is a beach community
- 💧 Student participation may provide access to Universities
- 💧 Opportunities for students to receive college scholarships
- 💧 Training facilities for other sports' athletes

The National Recreation and Parks Association reports that communities average one outdoor aquatics facility for every 46,439 residents. Based on a population of 170,307 within a 5-mile radius of the La Costa Canyon High School, we can expect 3.6 aquatic facilities. Amassing data from the National Sporting Goods Association and the Sports and Fitness Industry Association, the ESRI Business Analyst estimates that 20.35% of the population in Carlsbad area participate in swimming. This equates to 34,657 participants. If we assume a mean average of 10 to 15 splashes per person per year this can total 346,574 to 519,855 splashes per year at various aquatics facilities in this radius.

As a beach community it is important for our constituents to be water safe with swimming skills. Some school districts, such as the East Side Unified School District in the San Jose area require all students to pass swimming as a prerequisite for graduation. Similarly, Clovis Unified School District has determined that aquatics and learn-to-swim is so important that they have constructed swimming pools at every high school and middle school campus in the district. Locally, both Grossmont Union High School District and Poway Unified School District have built swimming pools at every primary high school campus.

Participation in aquatic sports can benefit students by giving them opportunities to attend colleges through swim and water polo programs that they might not get into otherwise. And for some students the opportunity for scholarships can also be appealing. Men's swimming has 136 Division-1 Universities offering 1,346 scholarships and 67 Division-2 Universities offering 542 scholarships totaling \$275 million dollars in scholarships. Women's swimming has 194 Division-1 Universities offering 2,716 scholarships and 84 Division-2 Universities offering 680 scholarships totaling \$475 million dollars in scholarships. Men's water polo has 22 Division-1 Universities offering 99 scholarships and 6 Division-2 Universities offering 27 scholarships totaling \$43 million dollars in scholarships. Women's water polo has 33 Division-1 Universities offering 264 scholarships and 8 Division-2 Universities offering 64 scholarships totaling \$48 million dollars in scholarships. In summary, the aquatics programs offer 4,053 scholarships totaling over \$842 million in scholarship opportunities.

Aquatic Design Group interviewed LCCHS and SDUHSD staff to determine existing programming and future desired programming. The following programs were identified for service to LCCHS:

- 💧 Men's Water Polo
- 💧 Women's Water Polo
- 💧 Women's Swimming and Diving
- 💧 Men's Swimming and Diving

All other schools in the district have the same aquatic sports teams as LCCHS. Every school, including LCCHS, is renting lanes at a nearby aquatic center for practices and matches or meets. LCCHS rents lanes for water polo and swimming at the Magdalena Ecke Family YMCA in Encinitas. LCCHS rents dive time for their diving athletes at Alga Norte Aquatic Center in Carlsbad. The following aquatic facilities are being rented by other schools in SDUHSD:

- 💧 The Boys and Girls Club of Solana Beach - San Dieguito High School Academy
- 💧 Cathedral Catholic High School - Canyon Crest Academy
- 💧 University of California San Diego - Torrey Pines High School

The following future desired programs and pool configuration needs were identified for service to LCCHS and SDUHSD if the district has its own swimming pool:

- 💧 Men's Water Polo
 - 86-feet of deep water for a 25-meter floating cage course
- 💧 Women's Water Polo
 - 86-feet of deep water for a 25-meter floating cage course
- 💧 Women's Swimming and Diving
 - Swimming - Eight 25-yard lanes for a dual meet
 - Ten 25-yard lanes for a regional meet
 - Twelve to fourteen 25-yard lanes for a state championship meet
 - Diving - 1-meter springboard diving board in a minimum of 12-feet of deep water
- 💧 Men's Swimming and Diving
 - Swimming - Eight 25-yard lanes for a dual meet
 - Ten 25-yard lanes for a regional meet
 - Twelve to fourteen 25-yard lanes for a state championship meet
 - Diving -1-meter springboard diving board in a minimum of 12-feet of deep water
- 💧 Physical Education
 - Shallow water capable of accommodating 25 students
- 💧 Athletic Training
 - Both deep and shallow water for various training techniques

- 💧 Lane Rentals to Local Swimming, Diving and Water Polo Clubs / Teams
 - Swimming Clubs / Teams - Eight to fourteen 25-yard lanes
 - Diving Clubs / Teams - 1-meter springboard diving board
 - Water Polo Clubs / Teams - 79-feet of deep water for a 25-yard floating cage course and 86-feet of deep water for a 25-meter floating cage course
- 💧 Community Programs
 - Both deep and shallow water for various programs

Should several teams desire to practice in the swimming pool simultaneously fourteen 25-yard lanes provides ample space. It is common to have 4-6 swimmers per lane in a team practice setting. Based on that number, fourteen lanes accommodate up to 84 persons. Depending on team size and sport this could mean novice, junior varsity and varsity practice simultaneously or varsity teams from two different SDUHSD schools practice simultaneously. Two different local clubs could practice simultaneously or the shallow water in the swimming pool could be used for learn-to-swim programming while a local club team is using the deep water lanes.

Fourteen 25-yard lanes provide the space to be creative with scheduling and get student-athletes home from practice and games at a reasonable hour of the day, which is difficult to accomplish with the existing rental scenario. LCCHS currently rents lanes until 9:15pm. Based upon both existing and future desired programs, site constraints, and budget considerations the preliminary consensus for SDUHSD is a 35-meter long by 25-yard wide swimming pool.

School districts often wonder if a 50-meter swimming pool would better suit their existing and future desired programs. A table depicting common swimming pool sizes and the programs each pool size can accommodate is on the following page along with a narrative to showcase what a 35-meter swimming pool provides in comparison to a 50-meter swimming pool.

FEATURE	25-Meter	30-Meter	35-Meter	50-Meter
Length	82'	98'	114'	164'
Surface Area (Sq. Ft.)	6,200	7,400	8,600	12,350
Number of 8' Lanes	10	12	14	20
Max Swimmers 8' Lanes	60	72	84	120
Maximum Occupancy	310	370	430	617
Wall Goal H₂O Polo	1	2	2	3
Floating Goal H₂O Polo	NO	25Y, 25M	25Y and 25M	25Y, 25M and 30M

A 50-meter swimming pool is desirable because it has twenty 25-yard lanes and fully supports two (2) wall goal water polo courses or partially supports three (3) wall goal water polo courses as well as supports floating goal water polo courses in 25-yard, 25-meter and 30-meter configurations. Despite being only 15-meters longer than a 35-meter swimming pool, a 50-meter swimming pool is 42% per more expensive to construct and operate and costs 40% more in annual utilities. Utilities increase significantly with a 50-meter swimming pool because the cost of utilities is proportionate to water surface area. The two reasons to proceed with a 50-meter pool is that it provides twenty (20) lanes (if that is a need) and to support 50-meter long course swimming. 50-meter long course swimming is not a high school swimming event. Additionally, a 30-meter floating goal water polo course is not a high school water polo configuration. Since these two programming benefits provided by a 50-meter swimming pool do not directly correlate to high school aquatic sports, school districts typically look at the additional lanes in a 50-meter swimming pool as a benefit for multiple team practices and lane rental revenue. For some districts, the additional lanes are worth the increase in capital expense and increased ongoing operational and utility expenses. For many, a 35-meter swimming pool is the solution to satisfy programmatic needs while being more fiscally conservative both during capital investment and ongoing operational and utility expenses. SDUHSD and LCCHS staff determined that a 35-meter swimming pool satisfies programmatic needs and aligns with district fiscal responsibilities. Furthermore, it was identified that the LCCHS campus cannot support a swimming pool larger than 35-meters on site.

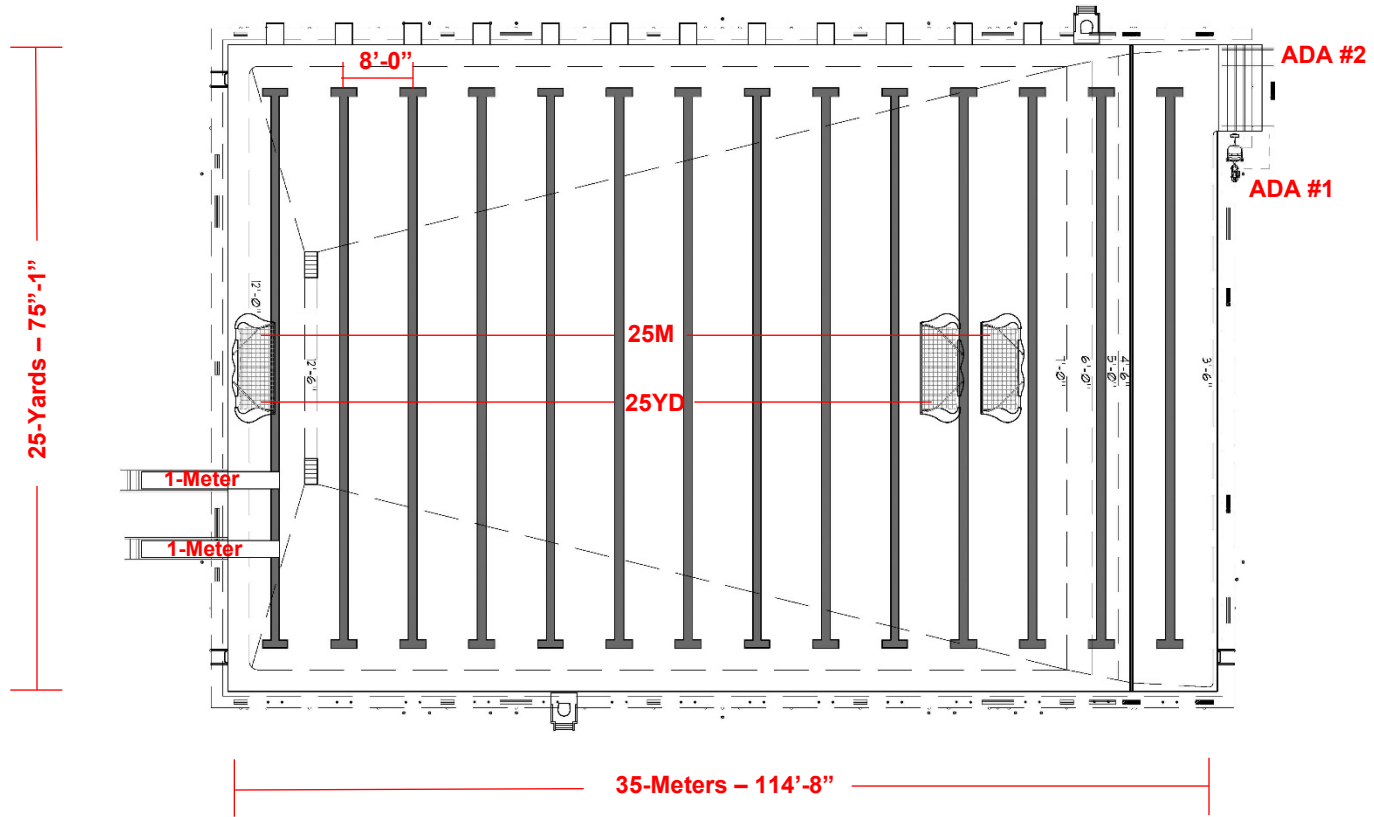
C. CONSENSUS POOL DATA

A 35-meter long by 25-yard wide swimming pool has been identified for a potential district swimming pool located at La Costa Canyon High School. A 35-meter (114'-8") long pool will have a total of fourteen 25-yard lanes, with each lane 8-feet wide to support multiple swimmers and to create a fast pool environment for team use. The pool deep end can be approximately 12-feet deep to support one-meter springboard diving. The main body of the pool can be 7-feet deep to support competitive swim and water polo. The shallow end of the pool can be 3.5-feet to 4.5-feet deep to support physical education and learn-to-swim. This fourteen-lane pool configuration shall include the following:

- 💧 Deep water competitive lanes (minimum 7-feet deep), twelve (12) quantity
- 💧 Transition depth lanes, one (1) quantity
- 💧 Shallow 3.5-feet to 4.5-feet depth, 10-feet x 75-feet, total of 750 square feet

This pool will have twelve (12) deep water lanes that can support a state championship swim meet. The pool can support up to 84 students practicing at one time assuming up to six (6) swimmers per lane. The pool will support both a 25-yard and 25-meter floating goal water polo field of play. The pool can also support two (2) water polo teams practicing simultaneously in the 25-yard direction. With a minimum 12-foot deep end the pool can support 1-meter diving. The 10-feet by 75-feet area of shallow water will support physical education and community learn-to-swim programs.

For the purposes of our site evaluation we have assumed a 20-foot band of concrete decking around the swimming pool. This makes the total pool and pool deck footprint 155-feet by 115-feet for a total area of 17,825 square feet or approximately 0.4 acres excluding support buildings. An example of what a 35-meter long by 25-yard wide swimming pool looks like is on the following page.



Consensus 35-Meter Long by 25-Yard Wide Swimming Pool

D. INDUSTRY TRENDS

Aquatic Design Group interviewed the Grossmont Union High School District to understand how a neighboring school district manages their aquatics program. Schools in the SDUHSD compete against schools in aquatic sports from the Grossmont Union High School District. Of the eighteen (18) high schools in the Grossmont Union High School District, twelve (12) have swimming pools and many of the pools in that district are 35-meters long by 25-yards wide. ADG has designed a new pool or renovated an existing pool at nearly every high school campus in the Grossmont Union High School District.

The majority of the swimming pools in the Grossmont Union High School District offer community programs and rent lanes to clubs and groups to offset operating expenses. The district runs learn-to-swim programs, offers open swim / lap swim, and rents lanes to 40-50 groups. The district employs a full-time aquatics manager, two full-time lifeguards, a full-time maintenance supervisor, and part-time lifeguards and swim instructors. The Poway Unified School District has very similar aquatics operations and also has schools in it that compete against SDUHSD schools in aquatic sports. ADG has designed a new pool or renovated an existing pool at every high school campus in the Poway Unified School District. Most school districts will evaluate the athletic facilities of league competitors in effort to create equal opportunity experiences for their athletes as well as to get an understanding of typical efficient school district facility operations when considering or designing a new pool. ADG is currently working with the Sweetwater Union School District to design a swimming pool. Images of swimming pools at high schools from the Grossmont Union High School District and the Poway Unified School District are on the following page.

As previously noted in the report, LCCHS rents lanes for swimming and water polo from the Magdalena Ecke Family YMCA in Encinitas which has a 25-meter by 25-yard swimming pool. The annual rental cost is \$33,388.40 and increases each year. With three other SDUHSD schools renting lanes for swimming and water polo the overall annual expense for the district is quite significant and increases each year.

Some high schools in California operate their swimming pools exclusively for their school district, which enables them to operate their pools with minimal operating costs. Others, open up their water to their local community which increases their operating costs but also attracts revenue. When used exclusively by the school district a high school swimming pool is designed and operated to minimize costs. For example, a swimming pool used exclusively by schools in a school district will have limited or no lifeguard and aquatics staffing costs. The primary staffing costs will be maintenance and operations staff. When a high school swimming pool is also used by the local community and other groups then the pool, site and staffing are designed to support all parties. In particular, the lifeguard and aquatics staffing costs are significant.

Looking at the aquatics operations of nearby school districts and others in the state of California can serve to help SDUHSD identify the desired operational route for a potential district swimming pool. ADG is currently working with more than two

dozen high schools in the state of California on both new pool designs and pool renovations. A detailed exploration of common operational scenarios for a potential district swimming pool is in section G. Both options were confirmed by district staff to explore for this report. The following images are examples of pools at neighboring school districts.

Granite Hills High School (Grossmont Union High School District)



West View High School (Poway Unified School District)



E. SITE AND BUILDING OPTION

After walking the LCCHS campus and interviewing school and district staff, four site options were identified for consideration of a new 35-meter swimming pool.

Option 1 is the original site identified by the volunteer pool committee that operated before this study.



OPTION 1
1/16" = 1'-0"



Option 2 is located on the perimeter of the campus adjacent to Calle Acervo. This option provided direct access to the swimming pool without entering the campus for public use, but it lacks any parking.



OPTION 2
1/16" = 1'-0"



Option 3 is at the sand volleyball courts adjacent to the gymnasium. This option is closest to the gymnasium locker rooms and provides a reasonable path of travel to the school parking lot.



Option 4 is on the east side of campus in the staff parking lot but was ruled out early by district staff because it was too remote from the rest of the athletic facilities.

After development of campus impacts, construction costs, potential operating costs and revenue projections, a single site option has been deemed most appropriate. Option 3 is the chosen site location, however the image has been updated to reflect a larger support building and a future weight room building. Option 3 does require the removal of two asphalt basketball courts and the relocation of two sand volleyball courts, which staff thought could be relocated to the area adjacent to the theater arts building. The updated image for Option 3 is on the following page.



Option 3

California Building Code requires a public swimming pool have a minimum number of bathroom fixtures to support public use. The formula to determine the minimum number of bathroom fixtures is based upon the surface area of the swimming pool. Therefore, the larger the swimming pool the greater the number of bathroom fixtures. These bathrooms must be located within 300-feet of the swimming pool and DSA requires that any bathrooms used for a swimming pool be ADA compliant. For the purposes of our study we are assuming a fully built-out building offering all desired spaces including coaches offices and program spaces, as well as necessary space for pool mechanical equipment. Based upon the assumptions of this new bathhouse / support building below we estimate the building to approximate 5,965 square feet.

The current bathhouse square footage includes the following amenities to satisfy minimum California Building Code fixture counts and typical aquatic programming needs:

Description	Women's	Men's	Square Footage
Toilets	5	4	180
Lavatories	4	4	80
Urinals	0	4	40
Showers	3	3	90
Lockers / Dressing	50	50	1000
			1,390 SQ FT
	Quantity		
Control Desk	1		200
Inclusive Changing Rooms	2		400
Coach's Offices	2		240
Operator's Office	1		150
Classroom / Team Meeting	1		500
Lifeguard / First Aid / Training	1		500
			1,990 SQ FT
Indoor Pool Storage	1		200
Pool Mechanical Equipment Room	1		1000
Chemical Storage Rooms	2		128
Custodial	1		64
			1,392 SQ FT
Building Space- Gross Square Footage			5,965 SQ FT

*Six showers located on the pool deck to ensure minimum fixture counts for California Building Code.

*Grossing factor for square footage based on 80% efficiency.

Should SDUHSD not desire to open their potential district swimming pool to the community, a pool support building could be a minimum on pool mechanical space, chemical space, indoor equipment storage, and a convenience bathroom, which would approximate 1,500 square feet. The students would then use the gymnasium bathrooms.

F. PROFORMA BUDGET

A proforma budget for an SDUHSD swimming pool located at LCCHS provides estimated capital costs for new construction of a 35-meter by 25-yard swimming pool with bathhouse and mechanical buildings.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>EXTENSIONS</u>
1.0	CONSTRUCTION COSTS				
1.1	Mobilization	1	LS	\$ 60,000.00	\$ 60,000.00
1.2	Site Prep/Demo, Utilities, and Soil Prep	1	LS	\$ 270,000.00	\$ 270,000.00
1.3	Replace 3 Sand Volleyball Courts	1	LS	\$ 100,000.00	\$ 100,000.00
1.4	35-Meter x 25-Yard Pool & Mech. Equip., Surge Tank, Deck and Comp Equipment	1	LS	\$ 2,299,580.00	\$ 2,299,580.00
1.5	Pool Decks (assumes a 20' band)	9,165	SF	\$ 45.00	\$ 412,425.00
1.6	Shade Structures, Pool Area Fencing, and Site Lighting	1	LS	\$ 365,250.00	\$ 365,250.00
1.7	New Bathhouse/Mechanical Building and Landscape/Site (Includes FF&E)	1	LS	\$ 3,579,000.00	\$ 3,579,000.00
1.8	Subtotal				\$ 7,086,255.00
1.9	General Contractor Mark-Up/Overhead	15%			\$ 1,062,938.25
1.10	Construction Contingency Costs	10%			\$ 708,625.50
1.11	TOTAL CONSTRUCTION AND EQUIPMENT COSTS				\$ 8,857,818.75
2.0	SOFT COSTS				
2.1	Architecture and Engineering	10%			\$ 708,625.50
2.2	Design Contingency	5%			\$ 354,312.75
2.3	Time/Inflation Escalation Index (5% Annually)	10%			\$ 708,625.50
2.4	DSA Fees, Testing, & Inspection	1.9%			\$ 134,638.85
2.5	TOTAL SOFT COSTS				\$ 1,906,202.60
3.0	TOTAL ESTIMATED PROJECT COST				\$ 10,764,021.35

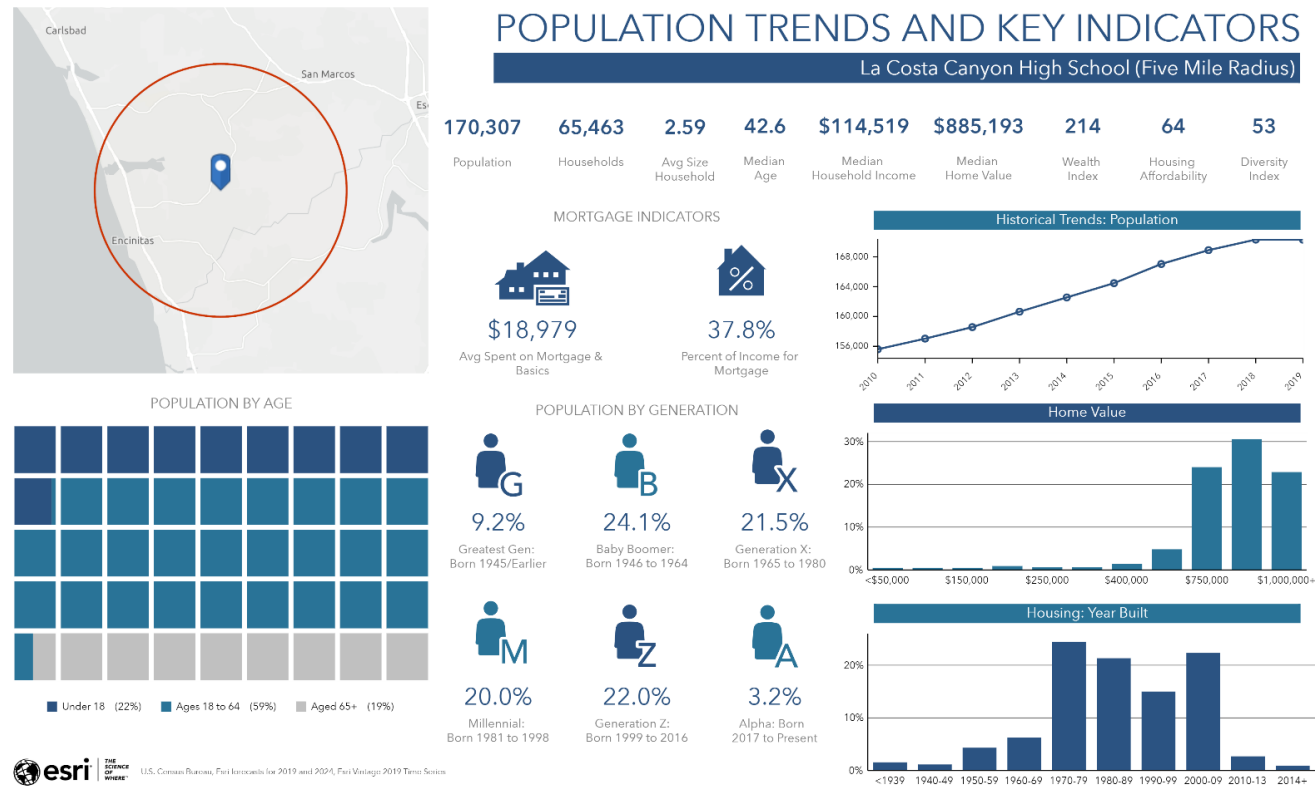
G. OPERATIONAL STUDY

Green Play, LLC. was assigned to complete an operational study for a district swimming pool located at La Costa Canyon High School. Green Play had discussions with ADG and the SDUHSD staff. Several operational options were discussed for a public high school swimming pool. Green Play and SDUHSD staff reached a consensus on two operational options to explore in depth in a study. A third option is provided for comparison, which assumes little if any public use of the swimming pool and thus reduced operating expenses. The operational study provides three (3) potential options for operation of the district swimming pool. Green Play was in communication with local clubs and teams who have expressed interest in renting lanes at a district swimming pool. For reference, scenario #1 is most similar to how the Grossmont Union High School District manages their aquatics program. The operational study begins on the following page.

Demographics

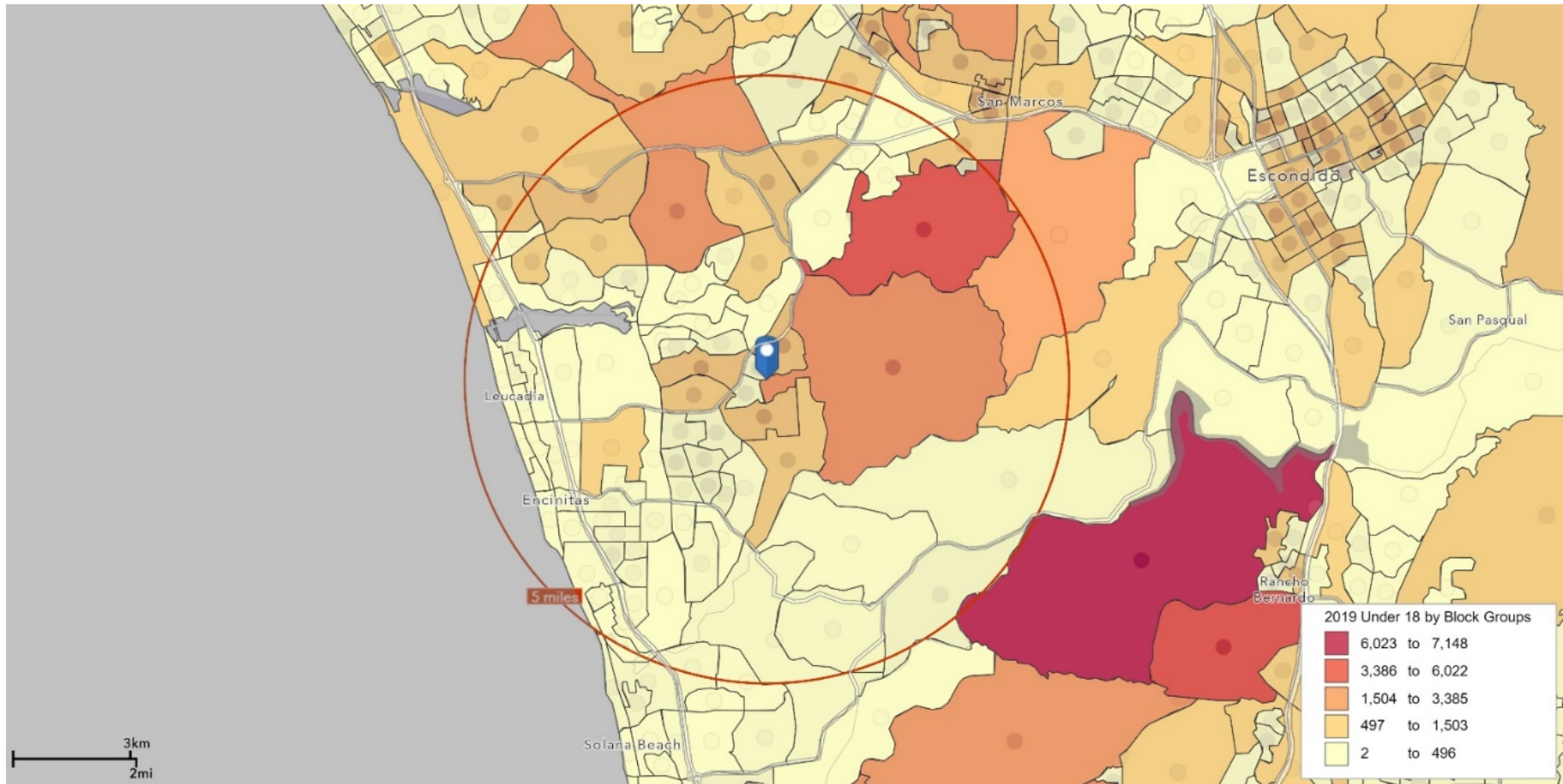
La Costa Canyon is a High School in the San Dieguito Union High School District located in South Carlsbad and bordering Encinitas, California. Approximately 170,000 people live within a five-mile radius of the High School. The largest generational group in the area is the Baby Boomers (Born 1946 – 1964) making up 24 percent of the population, followed by Generation Z (born 1999 – 2016) at 22 percent of the population. Several different demographic key indicators can be seen in Figure X below, including median household income (\$114,519), median home value (\$885,193), and detailed age breakdowns.

Demographic Key Indicators of La Costa Canyon High School (Five Mile Radius)



Approximately 22 percent of the population within a five-mile radius of the High School is under 18 years old. The figure below shows the density of the population in this age group. The darker orange indicates a higher density of children under 18.

2019 Population Under 18 Years Old



Source: ESRI Business Analyst, U.S. Census

Related Aquatic Trends

Within a five mile radius of La Costa Canyon High School, ESRI Business Analyst estimates that approximately 20.35 percent of the population participated in swimming in 2019.

In 2018, the National Sporting Goods Association (NSGA) ranked swimming second nationwide in sports participation.¹ Beyond traditional swimming, a number of different aquatics trends have emerged that offer a new take on the traditional rectangle pool. On a national level, there is an increasing trend towards indoor leisure and therapeutic pools. However, even rectangular pools can be transformed with temporary features that can add additional recreational functions. A few ideas to consider:

- Large inflatables
- Rock climbing walls
- Obstacle elements
- Volleyball nets
- Basketball hoops

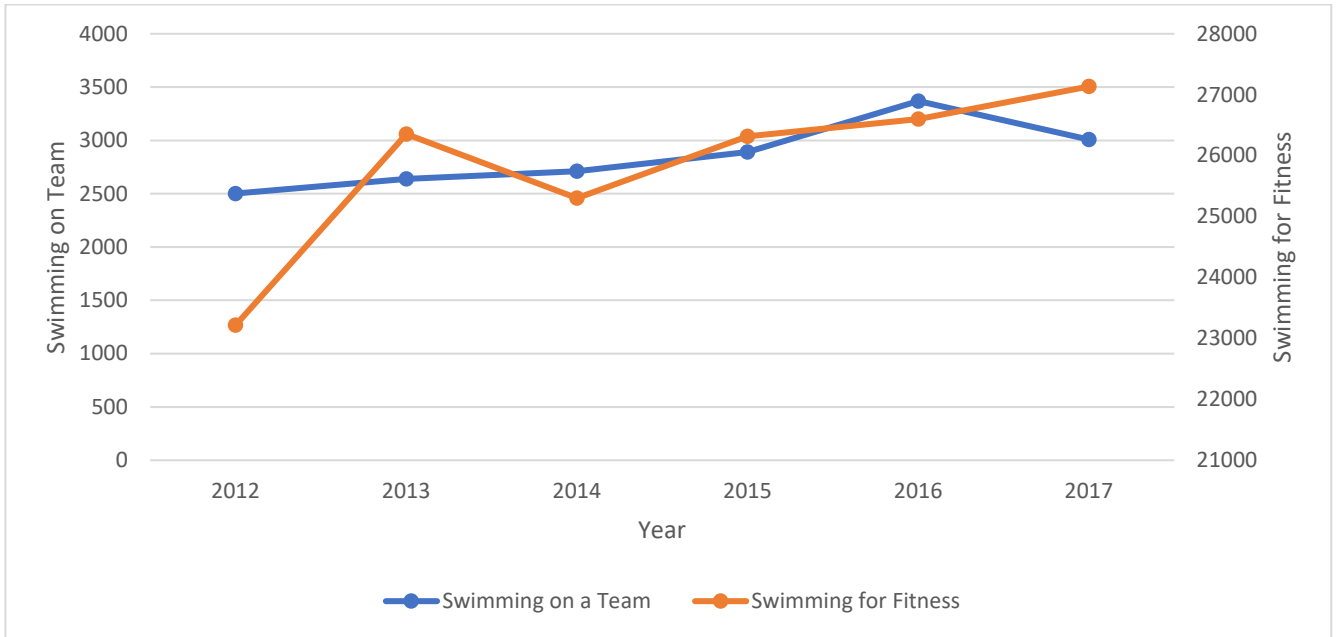
The Sports and Fitness Industry Association Topline Report details participation for swimming for fitness and swimming on a team between 2012 and 2017.

- Since 2014, swimming for fitness has increased in participation
- In the last five years, swimming for fitness has grown an average of 3.3 percent a year.
- Swimming on a team had increasing participation until 2016
- From 2016 to 2017, participation related to swimming on a team declined by 10.7% on average per year



¹ "2018 Sport Participation Snapshot," National Sporting Goods Association, 2018.

Trends in Swimming Participation for Fitness vs. on a Team



All figures are in 000's; Source: Sports and Fitness Industry Association

Programming Assumptions

La Costa Canyon High School will be the home school, holding practices and hosting contests, San Dieguito High School Academy will also practice and host contests at this facility. Maximum anticipated aquatic tournament is a four-team event.

The following programs should be supported with a new swimming pool on campus:

1. Competitive Swimming (main season spring)

- La Costa Canyon High School – Swim and Dive 3 teams Novice, JV, Varsity – start Feb - May M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F
- San Dieguito High School Academy – Swim and Dive 3 teams Novice, JV, Varsity – start Feb - May M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F

2. Competitive Water Polo (main season Boys – fall, Girls – winter)

- La Costa Canyon High School - Boys Water Polo 3 teams Novice, JV, Varsity – start August – Thanksgiving M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F
- San Dieguito High School Academy - Boys Water Polo 3 teams Novice, JV, Varsity – start August – Thanksgiving M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F
- La Costa Canyon High School - Girls Water Polo 3 teams Novice, JV, Varsity – start Thanksgiving – January M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F
- San Dieguito High School Academy - Girls Water Polo 3 teams Novice, JV, Varsity – start Thanksgiving – January M-F 10 matches 5 home, 5 away, also 4-5 tournaments, practices 2.5 hours M-F

3. Physical Education

4. Athletic Training

5. Local Club Swim Team Rental/Use

6. Local Club Water Polo Rental/Use

7. Community Programs

- Summer camps
- Special events

- ❖ La Costa Canyon High School and San Dieguito Union High School would have priority for scheduling and usage.

Potential Community User Groups

The following user groups expressed interest in renting lanes in a proposed aquatic facility:

- Carlsbad Water Polo
- Moonlight Beach Water Polo
- Del Mar Water Polo
- San Dieguito Synchro
- North Coast Aquatics
- RSD / Boy and Girls Club
- Bill Powers - Power Scuba
- San Diego Shores Water Polo
- Carlsbad Masters Water Polo
- Encinitas Junior lifeguard
- Del Mar Junior Lifeguard
- Solana Beach JGs

Opportunities for Revenue Generation

- Membership sales and daily admission sales for informal recreational swim
- Rentals of lanes by teams / clubs for practices and competitions

The following programs are assumed to operate at revenue neutral (fees charged for these programs would cover cost of instructors and administrative staff):

- Structured recreation aquatic programs
- Aquatic group exercise classes
- Health and Wellness programs

Partnership Opportunities

The following organizations were discussed as parties possibly interested in operation for a facility open to the community:

- Boys and Girls Club
- YMCA
- City of Carlsbad

The Boys and Girls Club expressed an interest in managing this proposed facility. This is something the School District could explore further.

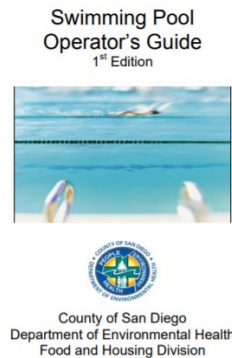
Sponsorship Opportunities

Opportunities for sponsorships and advertising within the facility could exist and help offset a portion of the operation and maintenance costs of the facility similar to other athletic venues.

California and San Diego County Aquatic Standards

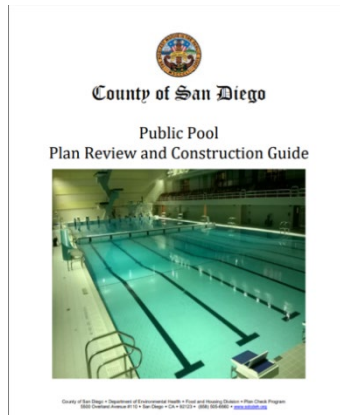
The following research was completed related to California and San Diego County Aquatic Standards. The research indicated that this proposed aquatic facility should be staffed by qualified lifeguards at all times when the facility is opened.

https://www.sandiegocounty.gov/content/dam/sdc/deh/fhd/pool/poolop377_pp.pdf



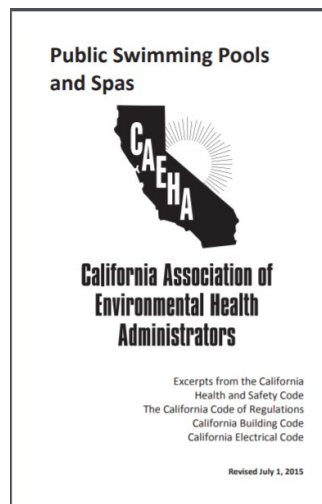
Lifeguard Service DIRECT FEE A facility charging a “direct fee” for the use of a pool (swimming, spa, wader, etc.) to the exclusion of any other service, facility or amenity, must provide lifeguard service. If there is no lifeguard on duty - CLOSE the pool until a lifeguard is placed on duty.

<https://www.sandiegocounty.gov/content/dam/sdc/deh/fhd/pool/poolplancheckguide.pdf>



LIFEGUARDS & REQUIRED EQUIPMENT Lifeguard service shall be provided for any public swimming pool in which a direct fee is charged for use. Lifeguards are typically present when providing swimming lessons, coaching or overseeing water-contact sports.

<https://www.sandiegocounty.gov/content/dam/sdc/deh/fhd/pool/poolcode.pdf>



Based on the above assumptions and research, two Operations & Maintenance budget projections have been developed; the first scenario has the facility being open all day allowing access for high school teams, physical education, rentals and public open swim, the second scenario has the facility open limited hours allowing access only for programs such as high school team usage, physical education and rentals.

Scenario #1 Facility Open Maximum Hours

Preliminary draft operational budget with coverage provided by a combination of full-time staff and permanent part-time staff

Hours of operation:

- 6:00 am – 10:00 pm Monday – Friday
- 8:00 am – 10:00 pm Saturday
- 8:00 am – 8:00 pm Sunday

Closed for 2 weeks

Proposed Aquatics Staff Organizational Structure – Scenario #1

Pool Manager (Full-time) – Scenario #1

Manage and establish standards for:

- Operations of aquatic facility
- Aquatics mechanical systems coordination with contractor
- Aquatics staffing
- Develop and manage aquatics budgets
- Responsibilities to include overseeing all departmental aquatic operations aquatic - training and certifications, in-service, budget, capital projects, supervise Pool Managers, oversee all staff scheduling, training, supervising and maintenance

Assistant Pool Manager (Full-time) – Scenario #1

Provide supervisory coverage during all operating hours:

- Support Head Guards in managing lifeguards and addressing participant activities in aquatics
- Ensure routine responsibilities are completed during operating hours, including chemical checks, facility inspections, and opening and closing activities.
- Support monthly In-Service for current lifeguards

Maintenance Worker (Part-time 20 hours a week) (could also consider contracting out) – Scenario #1

Recommend hiring a part-time maintenance tech with an enhanced and challenging position description to attract and retain qualified staff:

- Responsible for aquatics maintenance. Responsibilities to include regular routine and annual maintenance.

Front Desk (Receptionist - Bilingual (Spanish) – Scenario #1

Recommend hiring part-time:

- Responsible for handling cash and daily deposits, answering phones, overseeing front desk duties

Lifeguards (Part-time, 3 on duty at all times) – Scenario #1

Maintain safety of pool on daily basis, during operating hours:

- Check pool chemistry
- Ensure chores completed
- Ensure lifeguard rotation is properly followed
- Provide first aid, CPR and rescue services

Scenario #1 Facility Open Maximum Hours

Preliminary draft operational budget with coverage provided by a combination of full-time staff and permanent part-time staff

Scenario #1 provides for maximum usage by the High Schools for athletic teams and physical education classes and for the community for rentals and informal aquatic usage.

The anticipated required operations and maintenance subsidy is \$489,581 annually.

San Dieguito Union High School District Aquatic Feasibility Study			
Scenario #1 Facility Open Maximum Hours			
Preliminary Draft Operational Budget With Coverage Provided by a Combination of Full-Time Staff and Permanent Part-Time Staff.			
Budget developed to determine the number of rentals and passes needed to be sold to reach cost recovery target identified by staff.			
No guarantee is being implied by GreenPlay that these totals will be obtained.			
	Estimated Cost	52%	
	Recovery		
STAFFING PROJECTIONS			\$835,480 81.09%
OPERATING EXPENSES			
Contractual Services			\$132,892 12.90%
Commodities			\$61,999 6.02%
	TOTAL EXPENSES		\$1,030,371
REVENUE			
Passes			\$39,290
Special Event Rentals			\$21,500
Lane Rentals			\$480,000
Recreation Programs			\$0
	TOTAL REVENUE		\$540,790
	TOTAL NET		-\$489,581
	COST RECOVERY		52%

These projections would not be anticipated to change significantly over the course of the next five years assuming that the rental rates would be adjusted accordingly as the staffing and operations cost increase.

San Dieguito Union High School District Aquatic Feasibility Study Scenario #1 Facility Open Maximum Hours Five-Year Pro-forma					
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
EXPENSES					
Personnel	\$835,480	\$860,544	\$886,361	\$912,951	\$940,340
Contractual Services	\$132,892	\$135,550	\$139,616	\$143,805	\$148,119
Commodities	\$61,999	\$63,239	\$64,504	\$65,794	\$67,109
TOTAL EXPENSES	\$1,030,371	\$1,059,333	\$1,090,480	\$1,122,550	\$1,155,568
REVENUES					
Passes	\$39,290	\$40,469	\$41,683	\$42,933	\$44,221
Special Event Rentals	\$21,500	\$22,145	\$22,809	\$23,494	\$24,198
Lane Rentals	\$480,000	\$494,400	\$509,232	\$524,509	\$540,244
TOTAL REVENUE	\$540,790	\$557,014	\$573,724	\$590,936	\$608,664
NET	-\$489,581	-\$502,319	-\$516,756	-\$531,614	-\$546,904
COST RECOVERY	52%	53%	53%	53%	53%
Based on 2020 Figures					

The following spreadsheets detail the expenses and the revenues included in these projections.

Expenses – Scenario #1

STAFFING PROJECTIONS					Sub total	\$835,480	81.09%
Full Time Staff		Multiplier	Hours	Hourly Cost	Annual Cost	\$189,796	
	Pool Manager		2080	\$32.23	\$67,038		
	Assistant Pool Manager		2080	\$27.59	\$57,387		
	Benefit Percentage not included in wages		30.91%		\$38,460		
	Health & Welfare Benefit	2			\$26,910		
Permanent Part Time Staff			Hours	Hourly Cost		\$236,203	
	Maintenance Worker II Range 40 (20 hours a week)		1040	\$22.09	\$22,974		
	Custodial Range 32		1040	\$18.13	\$18,855		
	Front Desk (Receptionist - Bilingual (Spanish) Range 33		6350	\$18.59	\$118,047		
	Benefit Percentage not included in wages		30.91%		\$49,417		
	Health & Welfare Benefit	2			\$26,910		
Part Time Staff			Hours	Unit Cost		\$409,482	
	Lifeguards		19050	\$16.00	\$304,800		
	Benefits Percentage		29.93%		\$91,227		
OPERATING EXPENSES		Health & Welfare Benefit	1		\$13,455		
Contractual Services			Multiplier	Unit Cost		\$132,892	12.90%
Confirmed by ADG	Utilities: Electrical, Gas, Water/Sewer (Square Footage Cost)		1	\$94,891.94	\$94,892		
	Telephone / Internet / Cable		12	\$100.00	\$1,200		
	Maintenance Contract		12	\$700.00	\$8,400		
	Equipment Maintenance		12	\$2,000.00	\$24,000		
	Janitorial Contract				\$0		
	Security/Fire Alarm Service		12	\$100.00	\$1,200		
	Bank Fees - Credit Card Charges/Registration				\$2,000		
	Office Equipment		12	\$100.00	\$1,200		
OPERATING EXPENSES continued							
Commodities						\$61,999	6.02%
	Recreational Supplies				\$ -		
	Recreational and Aquatic Programs				\$ -		
	Resale Merchandise				\$ -		
	Concessions Supplies				\$ -		
Confirmed by ADG	Pool Chemicals				\$20,999		
	Pool Supplies				\$6,000		
	Pool Laboratory Supplies				\$1,000		
	First Aid Equipment				\$6,000		
	First Aid Supplies				\$3,000		
	Building Maintenance Supplies				\$6,000		
	Marketing/Printing				\$1,000		
	Office Supplies				\$0		
	Education/Training				\$6,000		
	Uniforms				\$12,000		
	Operating exclusive of staffing					\$194,891	
	TOTAL EXPENSES						\$1,030,371

The table above shows projected expenses for scenario #1. The expenses come from a combination of staffing, utilities, services, and commodities.

Revenue – Scenario #1

Passes	Passes	Projected Head Count	Projected Passes Sold Annually						
projected usage 3x a week for 12 weeks (36 visits per pass) 20% discount	<u>Summer 3 Month Pass</u>		<u>Number</u>	<u>Price</u>				\$9,950	
	Adult 18+	1800	50	\$140.00	\$7,000				
	Senior 55+	900	25	\$80.00	\$2,000				
	Youth 3-17	900	25	\$38.00	\$950				
	Child under 3 free								
projected usage 3x a week per month (12 visits per pass)	<u>Monthly Passes (total sold per year)</u>		<u>Number</u>	<u>Price</u>				\$8,760	
	Adult 18+	1440	120	\$50.00	\$6,000				
	Senior 55+	720	60	\$30.00	\$1,800				
	Youth 3-17	720	60	\$16.00	\$960				
	Child under 3 free								
Punch Passes			<u>Number</u>	<u>Price</u>				\$4,380	
projected usage 10 visits per pass	<u>10 Punch Passes</u>								
	Adult 18+	1200	120	\$25.00	\$3,000				
	Senior 55+	600	60	\$15.00	\$900				
	Youth 3-17	600	60	\$8.00	\$480				
	Child under 3 free								
Daily Admissions	<u>Day Passes</u>		<u>Number</u>	<u>Price</u>				\$16,200	
	Adult 18+	3600	3600	\$3.00	\$10,800				
	Senior 55+	1800	1800	\$2.00	\$3,600				
	Youth 3-17	1800	1800	\$1.00	\$1,800				
	Child under 3 free								
Special Event Rentals			<u>#/Year</u>	<u>Cost</u>	<u>Multiplier</u>			\$21,500	3.98%
	Birthday Parties (\$100 for 2 hrs)		200	\$100.00	70.00%	\$14,000			
			0	\$0.00	100.00%	\$0			
	After Hour Aquatic Center Rental (Friday/Saturday 8 pm - 11 pm \$1,000 (max 300 people)		10	\$1,000.00	75.00%	\$7,500			
			0	\$0.00	100.00%	\$0			
Recreation Programs								\$0	0.00%
	Water Aerobics			\$0.00	100.00%	\$0			
	Swim Lessons			\$0.00	100.00%	\$0			
				\$0.00	100.00%	\$0			
Lane Rentals	<u>Lane Rentals</u>		<u>Hours</u>	<u>Amount</u>	<u>Multiplier</u>			\$480,000	88.76%
	Lane 1 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 2 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 3 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 4 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 5 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 6 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 7 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 8 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 9 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Lane 10 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000			
	Merchandise			\$0.00	200%	\$0			
	TOTAL REVENUE								\$540,790
	TOTAL NET								-\$489,581
	COST RECOVERY								52%

The table above shows projected revenue for scenario #1. The revenue comes from a combination of summer swim passes, monthly swim passes, punch swim passes, day swim passes, party rentals, and lane rentals. After expenses, the potential district swimming pool in scenario #1 would have a 52% cost recovery or a subsidy of \$489,581.

Lifeguard Staffing Hours – Scenario #1

Hours needed for one staff position to cover all day Staff arranged to work 30 minutes before and after opening , with 15 minute overlap								Weekly	Annual Hourly			
								Hourly Sub Total	Sub Total 50	Hourly Rate	Weekly Cost	Annual Cost 50 weeks
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Total	Weeks			
								13	113			
Operating Hours	6 am - 10 pm	6 am - 10 pm	6 am - 10 pm	6 am - 10 pm	6 am - 10 pm	8 am - 10 pm	8 am - 8 pm					
Open Hours	16	16	16	16	16	14	12	106	5300			
Bilingual (Spanish) Range 33	19	19	19	19	19	17	15	127	6350	\$18.59	\$2,360.93	\$118,046.50
	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00
								Weekly	Annual Hourly			Summer Cost
								Hourly Sub Total	Sub Total 50	Hourly Rate	Weekly Cost	12 weeks
Main Pool - Lifeguard on duty at all times, 30 minutes before and after opening , with 15 minute overlap	57	57	57	57	57	51	45	381	19050	\$16.00	\$6,096.00	\$304,800.00
Total												\$422,846.50

The above table shows lifeguard staffing hours for scenario #1.

Annual Utility Expenses – Scenario #1

DESIGN CRITERIA						
Surface Area (square feet):	8,660					
Minimum Depth (feet):	3.5					
Maximum Depth (feet):	7.3					
Volume (gallons):	430,744					
Turnover (gpm):	1,197					
	AVG. DAILY					
CATEGORY	USAGE	UNIT	UNIT PRICE	DAILY COST	ANNUAL COST	
Water	1,742.0	GAL	\$0.01	\$17.42	\$6,097.01	
Sewer	854.7	GAL	\$0.01	\$8.55	\$2,991.28	
Electricity	441.0	KWH	\$0.16	\$70.57	\$24,698.69	
Natural Gas	174.6	THRM	\$1.00	\$174.59	\$61,104.96	
Sodium Hypochlorite	18.5	GAL	\$2.50	\$46.15	\$16,152.90	
Muriatic Acid	4.6	GAL	\$3.00	\$13.85	\$4,845.87	
TOTALS				\$331.12	\$115,890.71	
ASSUMPTIONS:						
1. Annual Cost based upon 350 days of operation.						
2. Analysis does not include maintenance/operations labor costs.						
3. Water usage based upon 60" annual evaporative loss and filter backwash averaging once weekly.						
4. Electrical usage based upon 18 hours per day operation.						
5. Natural gas usage based upon air velocity of 5 ft/second, 82 degree water and 60 degree air temperature.						
6. Chemical usage based upon maintaining 1.0 PPM chlorine and pH of 7.2 - 7.4.						

The above table shows annual utility expenses for scenario #1 for a potential district swimming pool.

Scenario #2 Facility Open Reduced Hours

Preliminary draft operational budget with coverage provided by a combination of full-time staff and permanent part-time staff

Hours of operation:

- Prior to 3:00 pm – facility only opened and staffed for physical education classes
- 3:00 pm – 10:00 pm Monday – Friday
- 8:00 am – 10:00 pm Saturday
- 8:00 am – 8:00 pm Sunday

Closed for 2 weeks

Proposed Aquatics Staff Organizational Structure – Scenario #2

Pool Manager (Full-time) – Scenario #2

Manage and establish standards for:

- Operations of aquatic facility
- Aquatics mechanical systems coordination with contractor
- Aquatics staffing
- Develop and manage aquatics budgets
- Responsibilities to include overseeing all departmental aquatic operations aquatic - training and certifications, in-service, budget, capital projects, supervise Pool Managers, oversee all staff scheduling, training, supervising and maintenance

Maintenance Worker (Part-time 20 hours a week) (could also consider contracting out) – Scenario #2

Recommend hiring a part-time maintenance tech with an enhanced and challenging position description to attract and retain qualified staff:

- Responsible for aquatics maintenance. Responsibilities to include regular routine and annual maintenance.

Front Desk (Receptionist - Bilingual (Spanish) – Scenario #2

Recommend hiring part-time:

- Responsible for handling cash and daily deposits, answering phones, overseeing front desk duties

Lifeguards (Part-time, 3 on duty at all times the facility is open to the public, 2 on duty for physical education classes) – Scenario #2

Maintain safety of pool on daily basis, during operating hours:

- Check pool chemistry
- Ensure chores completed
- Ensure lifeguard rotation is properly followed
- Provide first aid, CPR and rescue services

Scenario #2 Facility Open Reduced Hours

Preliminary draft operational budget with coverage provided by a combination of full-time staff and permanent part-time staff

Scenario #2 provides for maximum usage by the High Schools for athletic teams and community rentals. Two lifeguards are provided for physical education classes. No revenue is projected for community informal swimming as the availability for this activity is so severely limited in this scenario.

The anticipated required operations and maintenance subsidy is \$246,120 annually.

Scenario #2 Facility Open Reduced Hours			
Preliminary Draft Operational Budget With Coverage Provided by a Combination of Full-Time Staff and Permanent Part-Time Staff.			
Budget developed to determine the number of rentals and passes needed to be sold to reach cost recovery target identified by staff.			
No guarantee is being implied by GreenPlay that these totals will be obtained.			
	Estimated Cost		
	Recovery	67%	
STAFFING PROJECTIONS			\$552,730 73.93%
OPERATING EXPENSES			
Contractual Services			\$132,892 17.78%
Commodities			\$61,999 8.29%
	TOTAL EXPENSES		\$747,620
REVENUE			
Passes			\$0
Special Event Rentals			\$21,500
Lane Rentals			\$480,000
Recreation Programs			\$0
	TOTAL REVENUE		\$501,500
	TOTAL NET		-\$246,120
	COST RECOVERY		67%

These projections would not be anticipated to change significantly over the course of the next five years assuming that the rental rates would be adjusted accordingly as the staffing and operations cost increase.

**San Dieguito Union High School District
Aquatic Feasibility Study
Scenario #2 Facility Open Reduced Hours
Five-Year Pro-forma**

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
EXPENSES					
Personnel	\$552,730	\$569,312	\$586,391	\$603,983	\$622,102
Contractual Services	\$132,892	\$135,550	\$139,616	\$143,805	\$148,119
Commodities	\$61,999	\$63,239	\$64,504	\$65,794	\$67,109
TOTAL EXPENSES	\$747,620	\$768,100	\$790,511	\$813,581	\$837,331
REVENUES					
Passes	\$0	\$0	\$0	\$0	\$0
Special Event Rentals	\$21,500	\$22,145	\$22,809	\$23,494	\$24,198
Lane Rentals	\$480,000	\$494,400	\$509,232	\$524,509	\$540,244
TOTAL REVENUE	\$501,500	\$516,545	\$532,041	\$548,003	\$564,443
NET	-\$246,120	-\$251,555	-\$258,469	-\$265,579	-\$272,888
COST RECOVERY	67%	67%	67%	67%	67%
Based on 2020 Figures					

The following spreadsheets detail the expenses and the revenues included in these projections.

Expenses – Scenario #2

STAFFING PROJECTIONS				Sub total	\$547,513	73.75%
Full Time Staff		Multiplier	Hours	Hourly Cost	Annual Cost	\$101,215
	Pool Manager		2080	\$32.23	\$67,038	
	Benefit Percentage not included in wages		30.91%		\$20,722	
	Health & Welfare Benefit	1			\$13,455	
Permanent Part Time Staff		Multiplier	Hours	Hourly Cost		\$181,446
	Maintenance Worker II Range 40 (20 hours a week)		1040	\$22.09	\$22,974	
	Custodial Range 32		1040	\$18.13	\$18,855	
	Front Desk (Receptionist - Bilingual (Spanish) Range 33		4100	\$18.59	\$76,219	
	Benefit Percentage not included in wages		30.91%		\$36,489	
	Health & Welfare Benefit	2			\$26,910	
Part Time Staff			Hours	Unit Cost		\$264,852
	Lifeguards		12500	\$16.00	\$200,000	
	Benefits Percentage		29.93%		\$59,860	
	Physical Education Coverage		312	\$16.00	\$4,992	
OPERATING EXPENSES						
Contractual Services		Multiplier	Unit Cost			\$132,892 17.90%
Confirmed by ADG	Utilities: Electrical, Gas, Water/Sewer (Square Footage Cost)	1	\$94,891.94		\$94,892	
	Telephone / Internet / Cable	12	\$100.00		\$1,200	
	Maintenance Contract	12	\$700.00		\$8,400	
	Equipment Maintenance	12	\$2,000.00		\$24,000	
	Janitorial Contract				\$0	
	Security/Fire Alarm Service	12	\$100.00		\$1,200	
	Bank Fees - Credit Card Charges/Registration				\$2,000	
	Office Equipment	12	\$100.00		\$1,200	
OPERATING EXPENSES continued						
Commodities						\$61,999 8.35%
	Recreational Supplies				\$ -	
	Recreational and Aquatic Programs				\$ -	
	Resale Merchandise				\$ -	
	Concessions Supplies				\$ -	
Confirmed by ADG	Pool Chemicals				\$20,999	
	Pool Supplies				\$6,000	
	Pool Laboratory Supplies				\$1,000	
	First Aid Equipment				\$6,000	
	First Aid Supplies				\$3,000	
	Building Maintenance Supplies				\$6,000	
	Marketing/Printing				\$1,000	
	Office Supplies				\$0	
	Education/Training				\$6,000	
	Uniforms				\$12,000	
	Operating exclusive of staffing					\$194,891
	TOTAL EXPENSES					\$742,404

The table above shows projected expenses for scenario #2. The expenses come from a combination of staffing, utilities, services, and commodities.

Revenue – Scenario #2

Passes	Passes	Projected Head Count	Projected Passes Sold Annually				\$0	0.00%
projected usage 3x a week for 12 weeks (36 visits per pass) 20% discount	<u>Summer 3 Month Pass</u>		<u>Number</u>	<u>Price</u>			\$0	
	Adult 18+	0	0	\$140.00	\$0			
	Senior 55+	0	0	\$80.00	\$0			
	Youth 3-17	0	0	\$38.00	\$0			
	Child under 3 free							
projected usage 3x a week per month (12 visits per pass)	<u>Monthly Passes (total sold per year)</u>		<u>Number</u>	<u>Price</u>			\$0	
	Adult 18+	0	0	\$50.00	\$0			
	Senior 55+	0	0	\$30.00	\$0			
	Youth 3-17	0	0	\$16.00	\$0			
	Child under 3 free							
Punch Passes			<u>Number</u>	<u>Price</u>			\$0	
projected usage 10 visits per pass	<u>10 Punch Passes</u>							
	Adult 18+	0	0	\$25.00	\$0			
	Senior 55+	0	0	\$15.00	\$0			
	Youth 3-17	0	0	\$8.00	\$0			
	Child under 3 free							
Daily Admissions	<u>Day Passes</u>		<u>Number</u>	<u>Price</u>			\$0	
	Adult 18+	0	0	\$3.00	\$0			
	Senior 55+	0	0	\$2.00	\$0			
	Youth 3-17	0	0	\$1.00	\$0			
	Child under 3 free							
Special Event Rentals			<u>#/Year</u>	<u>Cost</u>	<u>Multiplier</u>		\$21,500	4.29%
	Birthday Parties (\$100 for 2 hrs)		200	\$100.00	70.00%	\$14,000		
			0	\$0.00	100.00%	\$0		
	After Hour Aquatic Center Rental (Friday/Saturday 8 pm - 11 pm \$1,000 (max 300 people)		10	\$1,000.00	75.00%	\$7,500		
			0	\$0.00	100.00%	\$0		
Recreation Programs							\$0	0.00%
	Water Aerobics			\$0.00	100.00%	\$0		
	Swim Lessons			\$0.00	100.00%	\$0		
				\$0.00	100.00%	\$0		
Lane Rentals	<u>Lane Rentals</u>		<u>Hours</u>	<u>Amount</u>	<u>Multiplier</u>		\$480,000	95.71%
	Lane 1 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 2 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 3 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 4 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 5 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 6 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 7 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 8 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 9 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Lane 10 (assumes 4 hours of rental Monday - Friday, 40 weeks a year)		3200	\$15.00	100%	\$48,000		
	Merchandise			\$0.00	200%	\$0		
	TOTAL REVENUE							\$501,500
	TOTAL NET							-\$240,904
	COST RECOVERY							68%

The table above shows projected revenue for scenario #2. The revenue comes from a combination of party and lane rentals. After expenses, the potential district swimming pool in scenario #2 would have a 68% cost recovery or a subsidy of \$240,904.

Lifeguard Staffing Hours – Scenario #2

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Weekly Hourly Sub Total	Annual Hourly Sub Total 20Weeks	Hourly Rate	Weekly Cost	Annual Cost 50 weeks
Hours needed for one staff position to cover all day	8	8	8	8	8	15	13	68				
Staff arranged to work 30 minutes before and after opening , with 15 minute overlap												
Physical Education Coverage	4 hours	4 hours	4 hours	4 hours								
Two Lifeguards												
								Weekly Hourly Sub Total	Annual Hourly Sub Total 20 Weeks	Hourly Rate	Weekly Cost	Summer Cost 12 weeks
Main Pool - Lifeguard (3) on duty at all times, 30 minutes before and after opening , with 15 minute overlap	3.9	3.9	3.9	3.9	0	0	0	15.6	312	\$16.00	\$249.60	\$4,992.00
Physical Education Coverage Total												\$4,992.00
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY					
Operating Hours	3 pm - 10 pm	3 pm - 10 pm	3 pm - 10 pm	3 pm - 10 pm	3 pm - 10 pm	8 am - 10 pm	8 am - 8 pm					
Open Hours	7	7	7	7	7	14	12	61	3050			
Front Desk (Receptionist - Bilingual (Spanish) Range 33	10	10	10	10	10	17	15	82	4100	\$18.59	\$1,524.38	\$76,219.00
	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00
								Weekly Hourly Sub Total	Annual Hourly Sub Total 50 Weeks	Hourly Rate	Weekly Cost	Summer Cost 12 weeks
Main Pool - Lifeguard (3) on duty at all times, 30 minutes before and after opening , with 15 minute overlap	30	30	30	30	30	51	49	250	12500	\$16.00	\$4,000.00	\$200,000.00
Operating Hours Total												\$276,219.00
Scenario #2 Aquatics Staffing Total												\$281,211.00

The above table shows lifeguard staffing hours for scenario #2.

Annual Utility Expenses – Scenario #2

DESIGN CRITERIA						
Surface Area (square feet):	8,660					
Minimum Depth (feet):	3.5					
Maximum Depth (feet):	7.3					
Volume (gallons):	430,744					
Turnover (gpm):	1,197					
	AVG. DAILY					
CATEGORY	USAGE	UNIT	UNIT PRICE	DAILY COST	ANNUAL COST	
Water	1,742.0	GAL	\$0.01	\$17.42	\$6,097.01	
Sewer	854.7	GAL	\$0.01	\$8.55	\$2,991.28	
Electricity	441.0	KWH	\$0.16	\$70.57	\$24,698.69	
Natural Gas	174.6	THRM	\$1.00	\$174.59	\$61,104.96	
Sodium Hypochlorite	18.5	GAL	\$2.50	\$46.15	\$16,152.90	
Muriatic Acid	4.6	GAL	\$3.00	\$13.85	\$4,845.87	
TOTALS				\$331.12	\$115,890.71	
ASSUMPTIONS:						
1. Annual Cost based upon 350 days of operation.						
2. Analysis does not include maintenance/operations labor costs.						
3. Water usage based upon 60" annual evaporative loss and filter backwash averaging once weekly.						
4. Electrical usage based upon 18 hours per day operation.						
5. Natural gas usage based upon air velocity of 5 ft/second, 82 degree water and 60 degree air temperature.						
6. Chemical usage based upon maintaining 1.0 PPM chlorine and pH of 7.2 - 7.4.						

The above table shows annual utility expenses for scenario #2 for a potential district swimming pool.

A third alternative in which a potential district swimming pool is used very minimally by the high school is explored financially on the following pages.

Scenario #3

San Dieguito Union High School District Aquatic Feasibility Study Scenario #3 Facility Open For School Usage Only Five-Year Pro-forma					
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
EXPENSES					
Personnel	\$37,470	\$38,594	\$39,752	\$40,945	\$42,173
Contractual Services	\$109,292	\$111,478	\$114,822	\$118,267	\$121,815
Commodities	\$35,299	\$36,005	\$36,725	\$37,459	\$38,209
TOTAL EXPENSES	\$182,061	\$186,077	\$191,299	\$196,671	\$202,196
REVENUES					
Passes	\$0	\$0	\$0	\$0	\$0
Special Event Rentals	\$0	\$0	\$0	\$0	\$0
Lane Rentals	\$0	\$0	\$0	\$0	\$0
TOTAL REVENUE	\$0	\$0	\$0	\$0	\$0
NET	-\$182,061	-\$186,077	-\$191,299	-\$196,671	-\$202,196
COST RECOVERY	0%	0%	0%	0%	0%
Based on 2020 Figures					

In this third scenario there are no revenue sources. Only expenses, none of which include paid lifeguards. During the hours of use, certified staff and coaches would oversee pool activities. In this scenario the potential district swimming pool would require a subsidy of \$182,061. See the following page for projected expenses.

Expenses - Scenario #3

STAFFING PROJECTIONS						Sub total	\$37,470	20.58%
Full Time Staff		Multiplier	Hours	Hourly Cost	Annual Cost	\$0		
			0	\$0.00	\$0			
			0	\$0.00	\$0			
	Benefit Percentage not included in wages		30.91%		\$0			
	Health & Welfare Benefit	0			\$0			
Permanent Part Time Staff		Multiplier	Hours	Hourly Cost		\$37,470		
	Maintenance Worker II Range 40 (10 hours a week)		520	\$22.09	\$11,487			
	Custodial Range 32 (10 hours a week)		520	\$18.13	\$9,428			
	Benefit Percentage not included in wages		30.91%		\$6,465			
	Health & Welfare Benefit	1			\$10,091			
Part Time Staff			Hours	Unit Cost		\$0		
			0	\$0.00	\$0			
			0	\$0.00	\$0			
	Benefits Percentage		29.93%		\$ -			
OPERATING EXPENSES								
Contractual Services		Multiplier	Unit Cost			\$109,292	60.03%	
Confirmed by ADG	Utilities: Electrical, Gas, Water/Sewer (Square Footage Cost)	1	\$94,891.94		\$94,892			
	Telephone / Internet / Cable	12	\$100.00		\$1,200			
	Maintenance Contract	0	\$0.00		\$0			
	Equipment Maintenance	12	\$1,000.00		\$12,000			
	Janitorial Contract	0	\$0.00		\$0			
	Security/Fire Alarm Service	12	\$100.00		\$1,200			
	Bank Fees - Credit Card Charges/Registration	0	\$0.00		\$0			
	Office Equipment	12	\$0.00		\$0			
OPERATING EXPENSES continued								
Commodities						\$35,299	19.39%	
	Recreational Supplies				\$ -			
	Recreational and Aquatic Programs				\$ -			
	Resale Merchandise				\$ -			
	Concessions Supplies				\$ -			
Confirmed by ADG	Pool Chemicals				\$20,999			
	Pool Supplies				\$6,000			
	Pool Laboratory Supplies				\$1,000			
	First Aid Equipment				\$1,000			
	First Aid Supplies				\$300			
	Building Maintenance Supplies				\$6,000			
	Marketing/Printing				\$0			
	Office Supplies				\$0			
	Education/Training				\$0			
	Uniforms				\$0			
	Operating exclusive of staffing					\$144,591		
	TOTAL EXPENSES							\$182,061

The table above shows projected expenses for scenario #3. The expenses come from a combination of staffing, utilities, services, and commodities.

Annual Utility Expenses - Scenario #3

DESIGN CRITERIA					
Surface Area (square feet):	8,660				
Minimum Depth (feet):	3.5				
Maximum Depth (feet):	7.3				
Volume (gallons):	430,744				
Turnover (gpm):	1,197				
	AVG. DAILY				
CATEGORY	USAGE	UNIT	UNIT PRICE	DAILY COST	ANNUAL COST
Water	1,742.0	GAL	\$0.01	\$17.42	\$6,097.01
Sewer	854.7	GAL	\$0.01	\$8.55	\$2,991.28
Electricity	441.0	KWH	\$0.16	\$70.57	\$24,698.69
Natural Gas	174.6	THRM	\$1.00	\$174.59	\$61,104.96
Sodium Hypochlorite	18.5	GAL	\$2.50	\$46.15	\$16,152.90
Muriatic Acid	4.6	GAL	\$3.00	\$13.85	\$4,845.87
TOTALS				\$331.12	\$115,890.71
ASSUMPTIONS:					
1. Annual Cost based upon 350 days of operation.					
2. Analysis does not include maintenance/operations labor costs.					
3. Water usage based upon 60" annual evaporative loss and filter backwash averaging once weekly.					
4. Electrical usage based upon 18 hours per day operation.					
5. Natural gas usage based upon air velocity of 5 ft/second, 82 degree water and 60 degree air temperature.					
6. Chemical usage based upon maintaining 1.0 PPM chlorine and pH of 7.2 - 7.4.					

The above table shows annual utility expenses for scenario #3 for a potential district swimming pool.

Scenario Comparison

San Dieguito Union High School District Aquatic Feasibility Study Year 1 Scenario Comparison			
	Scenario 1	Scenario 2	Scenario 3
EXPENSES			
Personnel	\$835,480	\$552,730	\$37,470
Contractual Services	\$132,892	\$132,892	\$109,292
Commodities	\$61,999	\$61,999	\$35,299
TOTAL EXPENSES	\$1,030,371	\$747,620	\$182,061
REVENUES			
Passes	\$39,290	\$0	\$0
Special Event Rentals	\$21,500	\$21,500	\$0
Lane Rentals	\$480,000	\$480,000	\$0
<i>Public Access</i>	<i>YES</i>	<i>YES</i>	<i>NO</i>
TOTAL REVENUE	\$540,790	\$501,500	\$0
NET OPERATING COST	-\$489,581	-\$246,120	-\$182,061
Based on 2020 Figures			

The information above shows a side-by-side comparison of the expenses, revenues, subsidies and annual operating costs for Year 1 of a new aquatic center for the San Dieguito Union High School District. A key note in this comparison is revenue source by way of public access. Scenario 1 accounts for public access to the facility through swim passes, special event rentals and lane rentals. Scenario 2 accounts for public access to the facility through special event rentals and lane rentals. Scenario 3 does not account for any public access. It should also be highlighted that staffing expenses are also impacted by public access. As the pool program is increased for public use, the staffing requirements and their relative costs increase.

H. SUMMARY

During this study we met with La Costa Canyon High School and SDUHSD staff to get input on the needs and feasibility of a new aquatic center at LCCHS. Together we evaluated four La Costa Canyon High School site options. The consensus option number 3 is adjacent to the gymnasium at the sand volleyball courts. This location keeps the pool in the same area as the rest of the campus sports. It is adjacent to the gymnasium and can be accessible by public from the student drop-off area providing a controlled separation of the public and students. This site was configured to support a future 5,000 square foot wrestling building. The site supports a 35-meter by 25-yard swimming pool and its appurtenances.

Various pool sizes were considered ranging from 30-meters to 50-meters in length. The consensus was that a 35-meter by 25-yard swimming pool best fits the school programming, budgeting, and site opportunities. A 35-meter pool will have fourteen lanes supporting up to 84 swimmers practicing at one time. It supports a 25-meter floating water polo field of play and two simultaneous water polo practice fields of play. It has a shallow area to support physical education classes and can support training for other sports groups. The pool is surrounded by 20-feet of deck on all sides to support participants, spectators, and storage areas. Adjacent to the pool is a 6,000 square foot bathhouse and aquatics building. The pool building includes bathrooms, locker rooms, offices, team meeting room, mechanical rooms, and storage spaces.

For the purposes of this study we assumed a full build-out of the aquatics site and support building. This allows the aquatic center to operate independent from the rest of the campus and does not require support spaces from the adjacent gymnasium, locker rooms or storage areas. With a full build-out of all appurtenances represented in this study the budget ensures that if SDUHSD pursued a project adequate funding would be in place to complete the project. This also means that there is room for value engineering of the project if a lower level of funding is available.

High school pools operate supporting high school or school district programs only or they can operate supporting community programs as well. If a district chooses to operate a swimming pool to support direct school programs only the built environment for the pool area and pool building could be reduced. Staffing to support direct district programs can be kept to a minimum to minimize annual operating expenses. In this study we compared the potential programs and operations for the LCCHS pool with neighboring school districts such as Poway Unified School District and the Grossmont Union High School District. We interviewed staff from these districts to understand their operating approaches. We then compared these local approaches to other districts throughout California and nationally

The consensus of the study team was to provide two operational study scenarios assuming a facility that will operate with community use and revenue.

Scenario 1 assumes a full-time community aquatic center operating from as early as 6 AM to as late as 10 PM seven days a week. This option assumes a full contingent

of operating staff. The annual operating budget for this option shows an approximate \$500,000 deficit, which will require a subsidy to meet expenses.

Scenario 2 assumes reduced hours of operation and staffing, but still provides community use and programming. This option will require an estimated annual subsidy of \$240,000 to \$270,000.

If we were to assume a pool serving direct school and district programming only the estimated annual operating expenses would be \$185,000 to \$205,000. In this scenario the expenses include utilities, equipment maintenance, and staffing for the maintenance and operations of the pool only.

The estimated project cost for a full build-out is \$10,765,000. We feel this is a conservative estimate, but it represents current construction costs and recent school district bids. This estimate assumes the project includes all amenities that a modern high school aquatic center could have. This means that there is room for value engineering or a reduction in scope while still providing a functioning swimming pool if desired.

Operating cost estimates assume SDUHSD is operating this single pool complex. If additional pools are built at other campuses operating economies of scale could occur. For example, the cost of a District Aquatics Director could be assigned to this single pool or deferred over several pools, which is the model that Grossmont UHSD uses.

San Dieguito Union High School District has a strong history of aquatic sports despite not owning and operating swimming pools on its campuses. The ability to rent lanes at various aquatic centers in the region has contributed to strong programs but does come at a high annual cost to the school district. It also adds logistical challenges for students and staff. Although constructing an aquatic facility is a significant investment, the value that a district owned aquatic facility could bring to aquatic athletes, the greater student body, and possibly the whole community is immeasurable.

This document provides an assessment of physical location for a swimming pool on the La Costa Canyon High School campus, confirms the best size facility suited for existing and desired programs, provides options for operational methods and includes capital expense information. Careful evaluation of the information provided in this report is needed by the school district to determine next steps.

On behalf of all of us at Aquatic Design Group we look forward to continuing to help SDUHSD in any way we can to ensure continued success at the district.

Sincerely,

AQUATIC DESIGN GROUP, INC.