

Memorandum

To: Jerry Cooper, County Manager
From: Bryan Reynolds, CRPA Director
Date: 10/13/2011
Re: Follow Up to Cherokee County Aquatic Center Business Plan

As requested, CRPA and Capital Projects staff has worked with Cooper Carry and their design team as well as Bob McCallister, our aquatics consultant, to answer the questions raised about the Cherokee County Aquatic Center Business Plan as presented to the Board of Commissioners. The questions as stated below have been addressed in the attached documentation.

1. The demographics used to ascertain the model for user fees to insure the completed project can sustain O&M without creating a property tax increase.
 2. The details used by the consultant and the design firm to establish the O&M utility costs. Specifically of concern is the cost of natural gas and electricity with usage and projected PSC rate increases.
 3. The details from the consultant and design firm supporting major O&M costs outside of the utility model. Staffing and minor O&M considerations are not part of our request.
 4. The plan to accumulate funding to accomplish major replacement costs such as roofing, heaters, asphalt, etc. Again, the request is for major items only.
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1. The attached documentation using 2010 US Census data and compares the proposed Cherokee County Aquatic Center to the public aquatic centers in other metro and north Georgia counties.
 2. Details for electricity, natural gas and water are provided.
 3. A detailed budget for operations and supplies is attached.
 4. The replacement costs and life spans of major building, pool and mechanical systems are listed. We did not identify a funding source for these costs. Typically, these costs would be absorbed through capital funding such as SPLOST, bonds or other sources.

Enclosure: Demographics Involving Area Aquatic Centers
Utility Costs Details for CCAC Business Plan
Detailed Operations & Supplies Budget
Life Spans & Replacement Costs for Major Items

Demographics Involving Area Aquatic Centers

Table 1. Public Aquatic Centers in Local Counties					
	Gwinnett	Cobb	Hall	Forsyth	Cherokee
2010 Population	805,321	688,078	179,684	175,511	214,346
2010 Population (5-18 yr olds)	172,339	127,294	35,577	38,086	42,655
Households	254,515	250,395	56,272	54,161	71,826
Median Household Income	\$ 58,732	\$ 62,893	\$ 49,334	\$ 84,567	\$ 66,972
Number of Aquatic Centers	5	4	1	1	1
2010 Total Daily Admissions	264,386	198,647	74,594 ³	TBD ¹	63,000 ²
Residents per Aquatic Center	161,064	172,020	179,684	175,511	214,346
Children 5-18 per Aquatic Center	34,468	31,824	35,577	38,086	42,655
Households per Aquatic Center	50,903	62,599	56,272	54,161	71,826
Daily Admissions / 1,000 Residents	328	289	415	-	294
Daily Admissions / 100 Children	153	156	210	-	148
Daily Admissions / 100 Households	104	79	133	-	88

¹ Attendance for Forsyth is TBD. Facility opened June 20, 2011.

² Attendance shown for Cherokee is based on year 3 projections. Year 1 projections: 39,690. Year 2 projections: 56,700.

³ Attendance for Hall County is based on the 2009 Annual Report.

Table 1 above shows the 2010 U.S. Census numbers from each locale as well as the number of aquatic centers and the number of aquatic center visits in each county. The average number of residents per aquatic center for all four counties is 172,085 and the average number of school-aged children per aquatic center is 34,989. **With a current population of approximately 215,000 and school-aged children numbering more than 42,000, Cherokee County exceeds these numbers and appears to have sufficient population to support a similar facility.** Additionally, the median household income for Cherokee County compares favorably with that of the other counties; \$66,972 versus an average of \$63,882.

Finally, the actual per capita visits for residents, children and households seen in the other locales is consistent with the attendance necessary to achieve the projected break-even point. Note that these numbers are not available for the City of Cumming (Forsyth County) because this facility has only been open for 3 months. However, initial reports indicate they will exceed their projected attendance for year one.

In order to achieve the desired cost recovery, Cherokee County has planned for higher daily admissions, season passes and annual passes. We believe that other locales will likely be reviewing their fees and charges as well. For example, as of October 1, 2011 Cobb County has instituted a 33% increase to their fees in order to recover more of their operating costs.

Utility Costs Details for CCAC Business Plan

Electricity

Based on the review of similar facilities we anticipate an annual consumption of approximately 2.1 million kWh. Because the aquatic center will have a connected load of more than 900kW, we qualify to competitively bid the electrical service. We anticipate rates between 5 and 6.5 cents per kWh. The anticipated range of electricity costs for the aquatic center is shown in the chart below.

	Consumption	@ 5 Cents / kWh	@ 6.5 Cents / kWh	Budgeted
Year 1	1,152,000 kWh	\$57,600	\$74,880	\$90,000
Year 2	2,068,000 kWh	\$103,400	\$134,420	\$150,000
Year 3	2,068,000 kWh	\$103,400	\$134,420	\$157,500

Note: Year 1 represents an anticipated opening in April of 2013 through September 31 (End of Fiscal Year).

Also, none of these facilities are utilizing the Defender filtration system by Neptune-Benson. By using this more efficient system we expect an annual savings of approximately 112,000 kWh. In order to remain conservative, these savings are not currently reflected in the annual consumption but could produce additional savings.

Natural Gas

Based on consumption in similar facilities of approximately 16,000 therms each year and a current average per therm rate paid by Cherokee County at other county facilities of 46 cents per therm, we estimate an annual cost of \$7,360. However, we also saw evidence from Francis Meadows of gas bills totaling \$26,000 for one year. So, to remain conservative we have budgeted \$31,000 in our first full year although we anticipate much lower costs.

Water

Based on the size of our pools, number of fixtures and anticipated use, we expect to consume approximately 2 million gallons of water annually. Based on discussions with the CCWSA, a 3 inch meter is currently planned for the CCAC. A 3 inch meter allows for 46,000 gallons per month at a flat rate of \$231 per month. The remaining water is billed at \$6.00 per thousand gallons. Additionally, we have planned to measure waste water discharged into the sewer system (charged at \$6.60 per thousand). This will allow us to avoid paying sewer fees on water that evaporates or is carried off by swimmers.

	Consumption (Gallons)	Flat Fee	Additional Fee	Gallons to Sewer	Sewer Fee	Total	Budgeted
Year 1	1,000,644	\$1,386	\$4,348	523,410	\$3,455	\$9,189	\$12,000
Year 2	2,001,288	\$2,772	\$8,696	954,468	\$6,909	\$18,377	\$20,000
Year 3	2,001,288	\$2,772	\$8,696	954,468	\$6,909	\$18,377	\$21,000

Note: Year 1 represents an anticipated opening in April of 2013 through September 31 (End of Fiscal Year).

Detailed Operations & Supplies Budget

Operations & Supplies

Liability Insurance ¹		10,500
Marketing ²		5,000

Office Supplies

Copy paper	16 cases @ \$40	640	
Printer paper	10 cases @ \$50	500	
Note pads	6 @ \$8	48	
File folders	2 boxes @ \$20	40	
Pens 12 pack	10 @ \$12	120	
Pencils 75 pack	2 @ \$10	20	
Printer cartridges/toner	12 @ aver. \$50 ea.	600	
Register tape	1 @ \$200	200	
Envelopes	1 case @\$25	25	
Post-it Pads	2 pack @\$20	40	
Staples/paper clips/ rubbers bands		50	
Labels	1 box @ \$22	22	
Laminating sheets/ID cards		100	
Batteries varied		50	
Hand calculator		20	
Pencil sharpener		10	
Paper cutter		30	
Stapler		10	
Laminator		100	
	Subtotal		2,625

Computer Supplies

Hy-Tek Meet Manager program license		250	
General program upgrades		150	
Zip drives, discs, cords, miscellaneous		125	
	Subtotal		525

Janitorial Supplies

Toilet paper	100 @ \$28	2,800	
Paper towels	30 @ \$60	1,800	
General cleaners/disinfectants		800	
Stainless steel cleaners		200	
Mops/squeegees/brooms		400	
Hoses & nozzles		300	
	Subtotal		6,300

Recreation Supplies

Lifejackets	36 @ \$25	900	
Kick boards	36 @ \$14	504	
Pull buoys	36 @ \$12	432	
Swim fins	24 @ \$30	720	
Lane lines	3 @ \$400	1,200	
Preschool toys (<i>variety</i>)		200	
Lifeguard umbrellas	4 @ \$100	400	
Water exercise belts	30 @ \$60	1,800	
Water exercise hand buoys	40 @ \$30	1,200	
Water exercise noodles	40 @ \$14	560	
Outdoor Furniture Replacement		2,500	
Water tubes	30 @ \$30	900	

Touch pads	3 @ \$1200	3,600	
Timing system replace/upgrades		1,534	
Pace clock		350	
			Subtotal
			16,800
Program Materials and Supplies			
<i>Red Cross Materials & Certifications</i>			
1st Aid/CPR Kits	50 @ \$40	2,000	
Lifeguard Training Kits	50 @ \$35	1,750	
Water Safety Instructor Kits	43 @ \$35	1,505	
			Subtotal
			5,255
Uniforms			
Lifeguard t-shirts	120 @ \$9	1,080	
Female lifeguard short	40 @ \$15	600	
Male lifeguard suit	40 @ \$25	1,000	
Female lifeguard swim suit	40 @ \$30	1,200	
Lifeguard sweat pant	40 @ \$15	600	
Lifeguard sweat top	40 @ \$20	800	
Manager / Supervisor Logo shirt	30 @ \$25	750	
PT supervisor Logo shirt	15 @ \$20	300	
Lifeguard tank tops (seasonal)	30 @ \$10	300	
Lifeguard long sleeve	40 @ \$12	480	
Lifeguard all weather jacket	12 @ \$50	600	
Concession staff logo t-shirts	15 @ \$11	165	
			Subtotal
			7,875
Safety Supplies			
Rescue tubes	8 @ \$80	640	
Whistles & lanyards	40 @ \$11	440	
Lifeguard radios	6 @ \$150	900	
1st Aid supplies (varied)		400	
Spinal board		245	
			Subtotal
			2,625
Chemicals			
CO2 - Indoor pools	300#/wk x 52 @ .30/#	4,680	
Cl2 - Indoor pools	136#/wk x 52 @ \$2.30	16,266	
CO2 - Outdoor	200#/wk x 16 @ .30/#	960	
Cl2 - Outdoor	75#/wk x 16 wks. @ \$2.30	2,760	
Muriatic Acid	1-4 gal/case x 50 @ \$10.50	525	
Calcium Hypo Chloride	6 @ \$75	450	
Sodium Thiosulfate		100	
Cyanuric Acid		100	
Soda Ash		100	
Testing Reagents		309	
			Subtotal
			26,250
Small Equipment			
Pool vacuum head		100	
Pool vacuum hose		350	
AED trainer	2 @ \$300	600	
Chemical booster pump		450	
UV replacement bulbs	3 @ \$550	1,650	
UV bulb washer kits	3 @ \$350	1,050	
			Subtotal
			4,200
Concessions Inventory³			60,000
Contracted Services⁴			42,000

Travel/Training

Manager AFO/CPO training		250
Asst. Mgr. AFO/CPO training		250
Pool Mechanic AFO/CPO training		250
County business mileage	1000 @ \$.55	550
Mgr./Assistant Manager GRPA	3 nights ea.@ \$100	600
Mgr./Assistant Red Cross IT training		200

Subtotal 2,100

General Printing

1,050

Repairs / Maintenance (Outside Warranty)

15,750

Total

208,855

Additional Notes:

¹ *Liability Insurance is based on a quote from the Cherokee County insurance agent.*

² *CCAC staff will work within the allotted budget to appropriately market the facility including print and electronic media as well as promotional items, etc.*

³ *Concessions Inventory costs will increase or decrease according to concession sales.*

⁴ *Contracted Services covers the cost of contracted instructors for programs such as learn-to-swim and aqua aerobics and will increase or decrease in relation to the number of program registrants.*

Replacement Costs & Life Spans for Major Items

Major Building Items	2012 Value	Quantity	Extended Value	Life in Years
ROOFING – Metal	\$219,000	1	<u>\$219,000</u>	20 Years
Subtotal			\$219,000	

Major Pool Items	2012 Value	Quantity	Extended Value	Life in Years
Pool Interior Surface	\$275,000	1	\$275,000	10 - 15 Years
Pool Pumps	\$32,000	1	\$32,000	12 - 15 Years
Pool Filters	\$300,000	1	\$300,000	15 - 20 Years
Pool UV Units	\$73,000	1	\$73,000	10 - 12 Years
Pool Slides	\$326,000	1	\$326,000	10 - 12 Years
Pool Vortex	\$270,000	1	<u>\$270,000</u>	10 - 15 Years
Subtotal			\$1,276,000	

Major Mechanical Items	2012 Value	Quantity	Extended Value	Life in Years
Pool Dehumidification Units (50 M Pool)	\$180,000	1	\$180,000	30 Years
Pool Dehumidification Unit (25 Y Pool)	\$135,000	1	\$135,000	30 Years
Packaged HVAC Rooftop Units	\$24,650	6	\$147,900	15 Years
Unit Heaters	\$1,750	10	\$17,500	13 Years
Gas Fired Boilers	\$26,500	2	\$53,000	24 Years
Split System Air Conditioner	\$16,250	1	\$16,250	15 Years
Plate and Frame Heat Exchangers	\$7,450	2	\$14,900	24 Years
Fans	\$1,410	11	\$15,510	20 Years
Duct Socks	\$57,680	1	\$57,680	15 Years
Domestic Water Heaters	\$8,250	1	\$8,250	10 Years
Domestic Hot Water Circ. Pumps	\$1,900	1	\$1,900	10 Years
Pool Equipment Room Sump Pumps	\$3,600	1	\$3,600	8 Years
Main Switchgear	\$90,000	1	\$90,000	20 Years
Light Fixtures over Pool	\$34,200	1	\$34,200	20 Years
PA System	\$15,000	1	<u>\$15,000</u>	10 Years
Subtotal			\$790,690	

Grand Total **\$2,285,690**

Through proper routine and preventative maintenance, life expectancies can increase.