

Review of 2007 Municipal Pool Management Plan, Staffing Practices, and Adjusted Budget

May 15, 2007

The adopted 2007 budget requires the creation of a comprehensive business and management plan for the Municipal Pool. This document summarizes a review of the Pool's adjusted operating budget, staffing practices and management plans for the 2007 season.

To incorporate the most current budget projections into the City's accounting system, an adjusted budget must be adopted by Common Council resolution (see attached). Without an adjusted budget based on 2006 actuals and more current revenue and expenditure assumptions, it would be significantly harder to manage the Pool's operations and finances.

Staffing Practices

Lifeguards. During 2006, lifeguards at the Pool were staffed for maximum capacity during all hours it was open for general swim. This resulted in 18 guards being at the facility all day regardless of attendance. Fourteen guards were stationed poolside, three additional guards were used to facilitate rotations, and one head guard provided supervision. Coverage for all guard shifts started and ended at the same time.

For 2007, the Pool plans to implement staggered shifts, provide lifeguards with the opportunity to leave early if attendance is low, and will attempt to predict the number of guards needed to accommodate the likely number of patrons based on weather conditions and other considerations. State administrative rule, zones of coverage and rotation through breaks define the parameters used in determining staff levels.

Staffing matrix. Wisconsin Administrative Rule HFS 172 prescribes the minimum number of lifeguards needed to provide adequate coverage at a swimming pool. Staffing levels are primarily based on pool surface area and the number of patrons in the pool.

The full surface area of the Goodman Pool is 16,400 square feet. Its maximum allowable capacity is 1,000 bathers. While HFS rule defines "actual patron load" as the number of patrons in the water, it is advisable to base staffing levels on the number of persons present at the facility.

HFS 172 requires an additional lifeguard for every two waterslide flumes. Because the Pool has two flumes, it is required to have one additional guard and an attendant at the top when the slide is open.

The following matrix summarizes the interaction of these factors:

Actual patron load (up to)*	Surface area of pool (square feet)			Add one for waterslides	Maximum capacity is 1,000
	2,000 to 4,999	5,000 to 9,999	10,000 or more		
1,000	11	12	13	14	
936	10	11	12	13	
836	9	10	11	12	
736	8	9	10	11	
636	7	8	9	10	
536	6	7	8	9	
436	5	6	7	8	
336	4	5	6	7	
236	3	4	5	6	
136	2	3	4	5	
60	1	2	3	4	

* When the patron load exceeds 336 patrons, one lifeguard shall be provided for each additional 100 patrons or fraction thereof.

Number of patrons. At maximum capacity, the Pool is required to have 14 lifeguards deployed poolside and to cover the waterslides. The staffing matrix allows for substantially fewer guards based on the number of patrons present. This interpretation is supported by the state Department of Health and Family Services (DHFS) interim director of Food Safety and Recreational Licensing and the Madison-Dane County Department of Public Health, which serves as DHFS's agent for licensing, inspection and monthly water sampling.

The Pool manager is developing several staffing plans that reflect likely attendance scenarios and implements staggered start and end times. Each of these scenarios takes into account daily temperature and weather conditions, the number of patrons present, and likely attendance numbers. Staffing schedules also consider the ease of letting guards go early compared to calling them in if attendance increases.

Pool surface area and zones of coverage. The intent of HFS 172 in adjusting guard staffing based on pool surface area is to ensure overlapping zones of coverage. These zones ensure optimal fields of view and reflect the need to have a guard a reasonable distance from any potential drowning victim. A smaller area needs fewer guards.

Reducing the number of guards based on attendance is permitted, but it is critical that zones of coverage be maintained. These zones and their resulting stations were developed in conjunction with the Red Cross. As a function of zones of coverage, the Pool needs a minimum of 11 guards stationed poolside regardless of patron load. This staffing level meets or exceeds the standard for 736 or fewer bathers. As patron load increases, additional guards are staffed at three additional stations. (See attached.)

Closing sections of the pool adjusts its surface area and would result in fewer needed zones of control, which enables the pool to take better advantage of lower permitted staffing levels.

However, the two most likely areas or features to be closed would be the waterslides or the lane area, which includes deep water, the diving boards and basketball hoops. All of these features are heavily used, and closing them may be unpopular with patrons. As a result, it may be hard to keep patrons out of closed sections. Potential savings related to closing sections of the pool are not part of the adjusted budget.

Coverage during rotations. The standard rotation of lifeguard staff is 100 minutes observing the swimming area followed by 20 minutes of break time to ensure guards remain mentally and physically alert. These rotations effectively cost 17% of the time available for each shift. This rule of thumb requires three guards to be at the facility to facilitate rotations.

The head guard is a *lifeguard 3* and provides supervision, deals with operational situations as they arise, and helps facilitate rotations during breaks. While technically a lifeguard position, its function and versatility suggest it should not be considered an active contributor to minimum staffing.

Adding guards for rotations and supervision to the HFS 172 staffing matrix result in the following structure:

Patron load (up to)	Active lifeguards	Additional guards to cover rotations	Total number of guards present at pool	Add one for head guard	
1,000	14	3	17	18	Maximum capacity is 1,000
936	13	3	16	17	
836	12	3	15	16	
736	11	3	14	15	
636	10	3	13	14	
536	9	3	12	13	If fewer than 11 guards, sections must be closed to ensure zones of control.
436	8	3	11	12	
336	7	3	10	11	
236	6	3	9	10	
136	5	3	8	9	
60	4	3	7	8	

Assuming no sections of the pool are closed, the minimum number of guards stationed poolside to ensure zones of coverage is 11. The need for supervision and coverage during rotations brings this number to a minimum of 15 guards at the Pool during core hours of general swim. Staggered start times and ending times could bring this number down to 12 during early and late hours with 11 guards actively watching the water plus one head guard.

Attendants. Attendants work in the concession area and admission windows. The management plan states that one of four admissions windows and one of three concessions windows would be closed to save hourly wage costs. The cost of wages and benefits for two attendant shifts at these windows is about \$15,700 for the 2007 season.

As discussed with the Pool manager, it is possible to shift attendants from one area to another based on volume. For example, during the first half hour of general swim the admissions window is busy letting in patrons who have been waiting. During that time, the concession windows are relatively slow and four admission windows could be staffed. When admissions

slow after 3:00 p.m., staff could be shifted to concessions to accommodate an increase in transactions there. If sales are low late in the day, attendant staff could be sent home early.

Due to weather and its impact on attendance, it is hard to predict daily staffing levels for attendants. However, every effort should be made to provide adequate coverage because closing windows could result in unnecessarily long lines and discouragement of patrons which could hamper the Pool's ability to generate concession and admission revenue.

During 2006, attendants were present for walk-up business for primarily lap swimming during early morning hours. This year, given the relatively low number of patrons during early hours, attendants will start shifts at noon. Walk-ins will be handled by other staff present during early hours. Wages and benefits for an attendant working from 6:00 a.m. to noon during 2007 would cost about \$4,200.

Salary savings. Varying weather conditions and resulting attendance levels make predicting lifeguard and attendant staffing on a day-to-day or seasonal basis a challenge. Data from 2006 shows that high attendance can occur at any day of the week. On average, total daily attendance can fluctuate 390 patrons from one day to the next. High attendance one day can be followed by lows and vice versa. The greatest increase went from 106 admission transactions on a Thursday to 1,846 on a Friday. The greatest decline went from 1,585 on a Saturday to 338 on a Sunday. (See attached.) Because of such variability, basic schedules assume maximum staffing is needed for each day and reductions are made as weather conditions and attendance levels are known or can be better gauged.

Reflecting the impact of weather on attendance and required staffing, the beach program in the Parks Division assumes 95% of maximum possible wage payments are needed for any given season. With flexible staffing levels and the ability to close due to inclement weather, management indicates a reduction of wage costs of 5% for the Pool is a reasonable assumption. Applying the beach program's 5% weather-related salary and benefit savings results in a reduction of \$12,400 from the total maximum possible cost of about \$248,500.

Staggered shifts. Beginning with 2007, management will staff based on projected and actual attendance. For example, guards will be sent home late in the day if attendance is low. Occasionally, guards from beaches that are dual staffed can be called in if attendance climbs, which provides some flexibility. Attendants may be sent home if transactions are low.

Of the Pool's 5% salary savings for 2007, it is estimated that staggered start and end times, sending staff home, and predicting staffing levels based on projected attendance account for about 3%.

Closing due to inclement weather. Beginning in 2007, the Pool will adopt a policy allowing it to close early, open late or not at all depending on weather conditions and predicted attendance. Management states that other municipalities have and use similar policies that reflect the impact of weather on an outdoor operation.

The Pool manager will be the person responsible for carrying out early closing policies. The written policy states that the Pool will close under the following circumstances:

- If the air temperature is below 69 degrees at opening or attendance is less than 50 paid admissions;
- If rain prevents the lifeguards from seeing the bottom of the pool;
- If there has been rain, lightning or thunder for a period of one hour and the storm is projected to continue; or
- Mechanical breakdown.

When there is lightning, all patrons must leave the pool and pool deck and seek shelter in the locker rooms. If the tornado siren sounds, all patrons will be requested to remain at the Pool and seek shelter in the locker rooms.

In the event of an early closing, the new policy gives remaining patrons a voucher to return again once free of charge during the 2007.

Hourly wages cost the Pool about \$270 to \$305 per hour. This includes wages for 11 to 14 guards stationed poolside, three guards to facilitate rotations, one head guard, one aquatic supervisor, five concession and admission attendants, and one concessions manager. With hourly fringe benefits at rate of 11.4%, these costs are about \$300 to \$340 per hour.

It is generally assumed that a pool in this climate will lose five or six days a season to inclement weather. The 2006 season provides additional insight on how often this new policy will be followed. During 2006, there were six days that had fewer than 50 visitors all day. These are the number of admission transactions processed all day long, and the number of patrons at the Pool at any given time was likely substantially less. Five of these days had high temperatures below 80 degrees. Because attendance was not always low on days with temperatures less than 80 degrees, it can be assumed that those days also featured rain or air temperatures below 69 degrees at some point. These conditions approximate the new policy for closing early, and it can be assumed the Pool will use its new policy about five days during the 2007 season.

If the Pool closes for an average of three hours during these five days (for example closing at 5:00 p.m. rather than 8:00 p.m.), it would save \$4,500 to \$5,100 in wages and benefits. Based on actual transactions during 2006, revenue loss would have reduced this savings by about \$150. Of the Pool's 5% salary savings for 2007, these savings represent about 2%.

Daily maintenance and cleaning. During 2006, the equivalent of two full lifeguard shifts were assigned to maintenance duties in and around the facility. During 2007, two lifeguards are scheduled to work every day from 7:00 a.m. to 10:00 a.m. to perform basic pool maintenance. Maintenance outside the facility will be primarily the responsibility of Parks maintenance staff. Management estimates this change is worth ten hours of labor per day or about \$10,200 for the 2007 season.

Overtime. The amount spent on overtime during 2006 was \$10,134. Of this amount, about half was spent on additional hours of management and half was spent on lifeguards and attendants. During 2007, the Pool manager will take compensatory time during the off season rather than be paid in cash. Management also intends to hire at least 90 individuals for its full roster of lifeguards, which could reduce the frequency of individual guards being called on to work overtime.

Recommendation: Accept the above policies, practices and fiscal assumptions, which are reflected in the adjusted budget. Total maximum hours for each shift are outlined in a skeleton schedule which serves as the basis for full wage and fringe calculations (see attached). Weekend hours before school recess begins on June 15 are included in total wage costs. Employee orientation, in-service training, and pre- and post-season maintenance are included in adjusted hourly wage projections. Salary savings related to staggered shifts, weather conditions and low attendance have been incorporated into the adjusted budget.

Fee Schedules and Fiscal Assumptions

Summaries from the State Climatology Office of data from 1971 to 2000 indicate that Madison averages 11 days of high temperatures over 90 degrees during June, July and August. The same period of 2006 had only eight days over 90 degrees. Based on this, 2006 was not hotter than a typical summer, and it can be assumed that the number of daily admissions sold during 2007 will not decrease precipitously from the levels of 2006. Revenue projections assume the same number of transactions by category for 2007 with additional season passes sold due to increased marketing. (See attached).

Daily admissions. During the 2006 season, the Pool conducted about 55,100 daily admission transactions. The 2007 adopted budget allows for rate increases of 25¢ for children's daily admissions and 50¢ for adult daily admissions. Based on 2006 sales volume and increased rates, daily admissions are projected to earn about \$151,500 during 2007.

Season passes and coupon books. The 2007 adopted budget requires the Pool to engage in marketing efforts to increase the sale of season passes. Marketing for the upcoming season included radio ads and paid advertising in Wisconsin State Journal and activity supplements. Parks paid to participate in the two day KIDS EXPO at the Alliant Center where it distributed Pool information and registration booklets. Pool brochures were distributed to all branches of public libraries, community centers, Boys and Girls Clubs, Warner Park Community and Recreation Center and Olbrich Gardens. Registration materials were also prepared for Lincoln, Franklin and Glendale Elementary Schools. One page flyers were distributed through Madison Metropolitan School District for school backpacks. The Pool admissions window will be open for several few late afternoons and weekend dates before the 2007 season to encourage the sale of season passes and coupons. These extensive marketing efforts are expected to enhance revenue by 10% over 2006 levels.

During 2006, the Pool sold about 2,560 season passes and coupon books. The 2007 adopted budget allows for rate increases of \$10 for season passes. Based on 2006 sales volume, increased rates and marketing efforts, season passes and coupons are projected to earn about \$96,400 during 2007.

Special use. In addition to facility rentals for birthday parties and other functions, the Pool will engage in special revenue generating activities beginning in 2007.

Swim lessons. During 2006, Madison School and Community Recreation (MSCR) administered the swim lesson program and retained registration revenue. For 2007, the Pool will administer the program and retain the revenue. Swim lessons cost \$36 for eight sessions which are staggered from June 18 through August 23. Revenue projections for 2007 swim lessons are based on 2006 lesson enrollment adjusted for 2007 rates. As of May 1, the program already had 550 students enrolled, which staff feel indicate success in marketing efforts. Enrollments

are expected to reach maximum capacity. Additional scholarship funding will help bolster enrollment. Revenue is projected at \$32,227.

Master swim. Masters swimming is an organized, coached workout program promoting fitness for adults through the sport of swimming. The enrollment cost is \$50 per month. Sessions run from June 11 through August 31. Revenue is projected to be \$5,000 during the 2007 based on about 33 individuals participating during each month of the 2007 season.

Preschool/daycare sessions. These are a combination of water safety and swim lessons written for younger children using the Red Cross programs of Longfellows WHALE Tales (Water Habits Are Learned Early) and AQUATIC Safety. This program develops the skills and knowledge that contribute safety in, on and around the water. Projected 2007 income is \$1,400.

Based on wage and benefit costs attributable to lifeguard staff during lessons, these programs will likely result in a modest profit. Management states that Pool staff were frequently used for swim lessons during 2006 and returning the program and its revenue to MSCR would not result in a net gain for the Pool.

Scholarships. Scholarships are administered by the Madison Parks Foundation to assist qualified individuals, families and social service agencies with the costs of daily admissions, season passes and lessons. Management projects \$64,000 to be available during 2007 for scholarships. It is assumed that half of the swim lesson revenue will come from scholarship funding with the balance going to increased admissions through youth coupon books provided to community centers. Because scholarships are intended to aid income qualified individuals, it is assumed that each recipient would not have engaged in that activity if it had not been for the scholarship. Total effective funding of scholarship grants are reduced by 5.5% to reflect sales tax. The resulting estimate is \$60,663.

Concessions. The adopted 2007 budget allows for increases in concession prices to reflect market pricing. The 2006 and 2007 concession fee schedules and revenue projections are attached. Prices were administratively increased between 25¢ and \$1 for the 2007 season. According to management, patrons frequently stated that 2006 concession prices were too low. Based on this, it is assumed that concession sales will be at the same volume as 2006. Several slow selling items will be discontinued for 2007. This will likely help move concession lines faster and result in less loss due to expiration. It is assumed that the same amount of money spent by patrons on those items in 2006 will be spent on other items that remain on the menu.

Non-wage expenditures. The Pool's adjusted budget makes several assumptions for expenditures that are not associated with staff costs. For example, costs for natural gas and electricity are higher due to 12 months of cost compared to five or six last year. Some items are significantly reduced from the 2006 expenditure level due to removal of one-time funding. Examples include signage, lifeguard umbrellas, medicine cabinet, backboards, automated external defibrillator, power washer and office equipment. Spending on supplies for the concessions area are expected to be lower than 2006 due to closer supervision by management, use of inventory software in RecTrac, less experimentation with menu items, and tighter control over keep-fill vendor contracts. A new line is created for pool chemicals using expenditure authority from several lines used during 2006. Some minor line items are increased 3% for inflation.

Recommendation: Accept these assumptions and resulting revenue and expenditure projections that are incorporated into the adjusted budget.

Attachments:

Adjusted 2007 Pool budget resolution
Pool map and lifeguard stations
Skeleton schedule for lifeguard and attendant shifts
History of 2006 admission transactions
Breakout of projected admission revenue
Breakout of projected concession revenue