

**MARKET FEASIBILITY STUDY  
FOR A PROPOSED  
FAMILY AQUATIC CENTER  
IN  
DENTON, TEXAS**

**CONFIDENTIAL**

**Prepared For:**

**THE CITY OF DENTON, TEXAS**

Prepared by

**WILLIAM L. HARALSON & Assoc., Inc.**  *Economics Consultants*

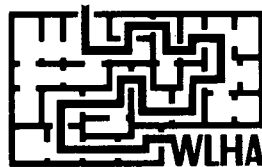
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**Project No. 2400  
February, 1997**

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## TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
I	INTRODUCTION .....	1
II	SUMMARY OF FINDINGS .....	2
	The Family Aquatic Center Concept .....	2
	Site Search Area .....	2
	Available Markets .....	2
	Competition .....	3
	Attendance Potential .....	3
	Impact On Civic Center Pool .....	3
III	THE FAMILY AQUATIC CENTER CONCEPT .....	5
IV	SITE SEARCH AREAS AND MARKET ANALYSIS .....	7
	Site Search Areas .....	7
	Market Area Demographics .....	7
	Competition .....	12
	Weather .....	16
V	ATTENDANCE POTENTIAL AT THE PROPOSED FAMILY AQUATIC CENTER .....	18
	Attendance Potential .....	18
	Projected Attendance Patterns .....	22
	Projected Facility Requirements .....	23
	APPENDIX A: Qualifications of William L. Haralson & Associates, Inc.	

## LIST OF TABLES

<u>Number</u>		<u>Page</u>
Figure 1	SITE SEARCH AREAS .....	8
Figure 2	MARKET AREA .....	10
1	POPULATION BY DISTANCE FROM THE PROPOSED SITE .....	11
2	MARKET AREA PER CAPITA INCOMES (1995) .....	13
3	MARKET AREA AGE DISTRIBUTION: 1995 .....	14
4	CLIMATOLOGICAL DATA FOR THE DALLAS/FORT WORTH AREA .....	17
5	MARKET PENETRATION RATES AT FIVE PUBLIC AQUATIC CENTERS .....	19
6	PROJECTED ATTENDANCE AT THE PROPOSED FAMILY AQUATIC CENTER .....	20
7	PROJECTED ATTENDANCE PATTERNS AT THE PROPOSED FAMILY AQUATIC CENTER .....	24
8	PROJECTED FACILITY REQUIREMENTS AT THE PROPOSED FAMILY AQUATIC CENTER .....	26

## Section I

### INTRODUCTION

The City of Denton, Texas is planning the development of a facility commonly referred to as a "family aquatic center". No specific site has been selected for the proposed project, however, two site search areas are being considered: (1) the area around the intersection of Interstate Highway 35 and U. S. Highway 288, northwest of Denton and (2) the corridor along Interstate Highway 35 West, south of the split with Interstate Highway 35 East.

To assist in the planning and development of the proposed family aquatic center, the City of Denton retained the services of *William L. Haralson & Associates, Inc. (WLHA)*, an economics consulting firm from Richardson, Texas that specializes in recreation planning. WLHA's assignment was to prepare a market and financial feasibility study, with the objectives of assessing attendance potential, deriving a scale and mix of development and testing the project for financial feasibility.

This report, which is presented in five sections, contains the findings of the market study. Following this introduction is a section that summarizes the study's findings. Subsequent sections, then, provide detailed documentation in support of the market study.

This report was prepared by Mr. William L. Haralson, President of WLHA. Assistance was provided by Ms. Marcia Haralson and Ms. Charlene Perkins of the WLHA staff.

## **Section II**

### **SUMMARY OF FINDINGS**

This section of the report presents a summary of the findings of the market study of the proposed family aquatic center in Denton, Texas. Only the highlights of the study are presented in this section, with subsequent sections providing supporting documentation.

#### **THE FAMILY AQUATIC CENTER CONCEPT**

A family aquatic center is a combination of pools and flumes that provide a water-oriented, participatory entertainment experience. Over the past 20 years, more than 400 water attractions have been developed in North America.

#### **SITE SEARCH AREA**

No specific site has been selected for the proposed family aquatic center. WLHA evaluated two areas on the west side of Denton and determined the area near the juncture of Interstate Highways 35 East and West to be the optimum location for the project, based on market area demographics and regional accessibility. The second area under consideration is located at the intersection of Interstate Highway 35 and U. S. Highway 288, northwest of Denton. This area has the advantage of already being served by utilities, while the first area is not. However, the first area is estimated to have 50 percent greater attendance potential than the second area.

#### **AVAILABLE MARKETS**

The one significant source of market support for the proposed water park is the resident market residing within 15 miles of the site search area. This market is estimated to have a population of some 206 thousand persons in 1995 and is projected to reach 239 thousand by the year, 2000.

## **COMPETITION**

There are three water-oriented facilities in the greater Dallas/Fort Worth area that will provide some level of competition for the proposed family aquatic center. These include Wet 'n Wild, a large commercial water park in Arlington, Texas; NRH2O, a large public aquatic facility owned and operated by the community of North Richland Hills; and Surf 'n Swim, a smaller public aquatic facility, which is owned and operated by the community of Garland, Texas. While all three of these facilities will offer competition to the proposed family aquatic center, none is located close to the proposed site search area.

## **ATTENDANCE POTENTIAL**

Based on available market support, weather, competition, and WLHA's knowledge of market penetration of other facilities, attendance at the proposed family aquatic center (assuming the preferred site search area) is projected at 54 thousand in 1998 (the assumed first year of operation of the proposed facility), increasing to 57 thousand by 1999 and 60 thousand by 2000. Further, based on estimated attendance patterns, the facility's capacity requirement is projected at 459 persons in-ground in 1998, increasing to 484 in 1999 and 510 by 2000. Assuming entertainment capacity to be 80 percent of facility capacity, entertainment capacity is projected at 367 persons in 1998, increasing to 387 by 1999 and 408 by 2000. Based on accepted planning standards, the proposed facility will require a minimum of 6,000 square feet of pool area and two water slides to accommodate third year demand. In fact, these should be considered minimum parameters and a somewhat larger complex may be required to achieve the threshold level of critical mass.

## **IMPACT ON CIVIC CENTER POOL**

The development of the proposed family aquatic center is expected to siphon off some of the existing attendance at Civic Center Pool. In a sense, this is a positive prospect, since Civic Center Pool is often over-crowded. On the other hand, care should be taken to insure that attendance at Civic Center Pool is not totally depleted. To obviate this possibility, minor improvements should be considered. For example, a small children's area could be

added to Civic Center Pool for a nominal cost, thereby enhancing the facility's appeal to family's in the surrounding neighborhood. A similar facility at Bolton Park Pool, in Winston Salem, North Carolina increased attendance by 35 percent.



### Section III

#### THE FAMILY AQUATIC CENTER CONCEPT

The family aquatic center is a relatively new concept in public recreation. Up until the past 25 years, public aquatic facilities focused on and were designed for competitive water sports such as swimming and diving. It was generally assumed that such facilities would serve recreational aquatic activities as well. Thus, little thought was given to imbuing aquatic facilities with activities offering participatory entertainment value.

Around 1970, two unrelated developments occurred that were to have a profound impact on the way the public would view aquatic facilities. The first of these was the wave pool, a fan-shaped pool with a sloping bottom and a series of motors that generated waves toward the shallow end. The wave pool proved popular among participants of all ages, while providing greater capacity than most conventional pools. The second development was the water slide, a flume that carried the participant on a stream of water down to a catch pool, making a number of twists and turns along the way. The earliest applications of these two developments were as free-standing attractions; however, in 1977, these they were combined along with other active attractions to create Wet 'n Wild, a commercial water park in Orlando, Florida and the forerunner of the family aquatic center.

Since 1977, some 400 major aquatic facilities have been developed in North America. Many of these have been developed in the private sector and are generally described as water parks. The balance have been developed by the public sector and are generally referred to as family aquatic centers. Aside from ownership, family aquatic centers differ from water parks in certain other ways. For example, family aquatic centers are usually smaller, with fewer attractions and a lower admission rate structure, and are intended to serve the local market rather than a regional one. Further, family

aquatic centers are generally operated as non-profit facilities, which may or may not be expected to cover capital costs.

The modern family aquatic center typically has five or six components, including a family pool, children's pool, continuous river and two or more water slides. Whereas earlier family aquatic centers included a wave pool, experience has shown that this facility is not mandatory for a successful operation. Instead, many family aquatic centers have developed "zero depth" pools, which provide beach-like edges for easy entry and maximum depths of no more than 18 to 36 inches. Moreover, water slides, while still an important feature, have been reduced in length and are generally more user friendly to engender broader market appeal.

In addition to the entertainment components, the well-planned family aquatic center will include certain support facilities that generate additional revenue for the facility and/or provide for greater visitor comfort and enjoyment. These include food service facilities, lockers, shade, deck furniture, parking and restrooms.

## Section IV

### SITE SEARCH AREAS AND MARKET ANALYSIS

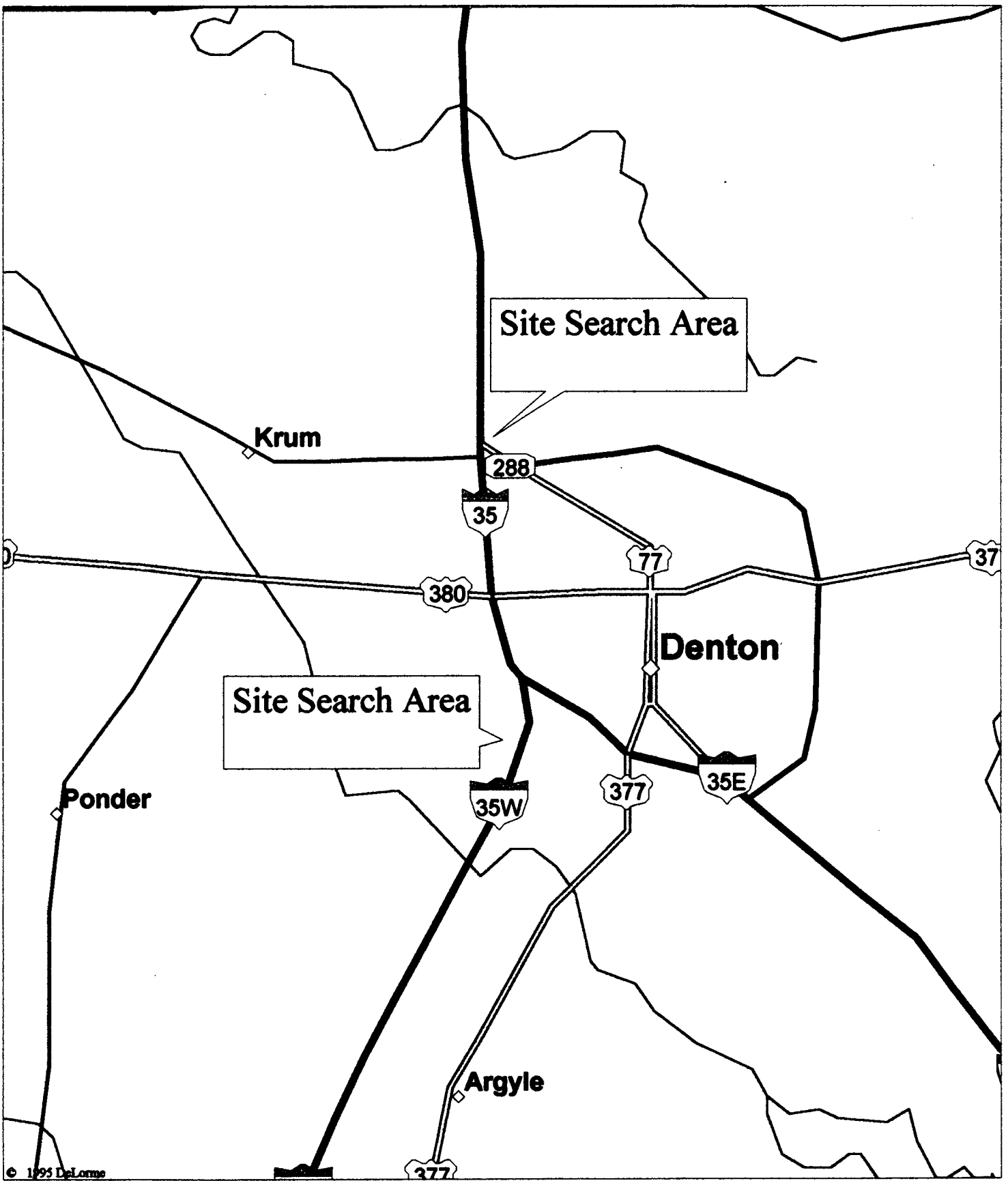
This section of the report presents a discussion of the site search area recommended for the family aquatic center, followed by an analysis of those factors that can be expected to have an impact on the project's attendance potential.

#### SITE SEARCH AREAS

To date, no specific site has been designated for the proposed family aquatic center. Rather, WLHA was requested to consider two general areas on the west side of the City of Denton. One area is around the intersection of Interstate Highway 35 and U. S. Highway 288, northwest of Denton. The second area is the corridor along Interstate Highway 35 West, just south of the split from Interstate Highway 35 East (See Figure 1). WLHA considers both of the areas to be acceptable for the proposed family aquatic center, although the southernmost area has an advantage in terms of proximate population, since it is closer to the urbanized areas around Dallas and Fort Worth. On the other hand, the northernmost site is already served by utilities. For purposes of analysis, the southernmost area is considered the preferred site search area for the family aquatic center, and the split of Interstate 35 is considered the epi-center of the project's market area.

#### MARKET AREA DEMOGRAPHICS

In evaluating the market for the proposed family aquatic center, it is appropriate to take into consideration the phenomenon known as the "distance decay" factor. Simply stated, the distance decay factor means that, as the distance between an attraction and the home of a resident increases, the propensity of that resident to visit the attraction decreases. This relationship is hardly a new revelation; it is also true of virtually all types



**Figure 1: SITE SEARCH AREAS**

of economic activities. For example, shoppers are more likely to patronize stores in their neighborhood or community than stores located across town. In acknowledgment of the distance decay factor, WLHA has divided the market into three zones: (1) a primary zone, extending out five miles from the proposed site; (2) a secondary zone, extending another five miles beyond the primary zone; and a tertiary zone, extending five miles beyond the secondary market zone. As shown in Figure 2, the market area extends south to Roanoke, southeast to Lewisville, east to Little Elm, north beyond Sanger and west beyond Krum and Ponder.

Given the distance involved, the primary zone can be expected to have the highest market penetration rate, while the tertiary zone should have the lowest. However, the level of market support from a given zone is not just a function of market penetration; it also depends on the level of population, other demographic factors and the presence or lack of competition.

### **Population**

Table 1 presents a summary of population data for the three zones of market area. As shown, data is presented for the census year, 1990, with estimates for 1995 and projections for 2000. For the entire market area, the population in 1995 was estimated to be approximately 206 thousand, which is up from 171 thousand in 1990. Moreover, the market area's total population is projected to increase to 239 thousand by the year 2000.

Table 1 also shows the distribution of the market area's population by zone. As shown, the largest segment of the market area's population is in the tertiary zone, which accounts for approximately 45 percent of the total. The second largest segment of the market area is the primary zone, which accounts for 34 percent of the market area's population. Finally, the population within the secondary zone contains accounts for approximately 22 percent of the total market area population.



Table 1

POPULATION BY DISTANCE  
FROM THE PROPOSED SITE

Distance From Site	Average Annual Change									
	1990		1995		2000		1990-1995		1995-2000	
	Number (000)	Percent of Total	Number (000)	Percent of Total	Number (000)	Percent of Total	Number (000)	Percent	Number (000)	Percent
0 to 5 Miles	61.3	35.8%	69.2	33.6%	77.8	32.5%	1.6	2.6%	1.7	2.5%
5 to 10 Miles	36.6	21.4%	44.7	21.7%	52.4	21.9%	1.6	4.4%	1.5	3.4%
10 to 15 Miles	73.2	42.8%	91.9	44.7%	109.2	45.6%	3.8	5.1%	3.5	3.8%
<b>Total</b>	<b>171.1</b>	<b>100.0%</b>	<b>205.8</b>	<b>100.0%</b>	<b>239.4</b>	<b>100.0%</b>	<b>7.0</b>	<b>4.1%</b>	<b>6.7</b>	<b>3.3%</b>

Source: CACI, Inc. - Federal

## **Incomes**

Table 2 presents a summary of per capita incomes in the three market area zones, with U.S. figures included for comparison.

As shown in the table, per capita incomes in the primary zone are approximately 16 percent, below the national average, a fact which is largely explained by the presence of a large student population at the University of North Texas and Texas Women's University. By contrast, per capita incomes in the secondary and tertiary zones are 4 and 17 percent above the national average, respectively.

## **Age Distribution**

The third category of demographics to be considered is the age of the market area population. As shown in Table 3, the population of the market area is somewhat younger than the national average, as evidenced by the percent of the population 15 to 34 years of age, and the much smaller percentage of the population in the 65 years and over category.

## **COMPETITION**

In the strictest sense of the word, any activity that vies for the leisure time of the public is competition for proposed project. However, as a practical matter, only other aquatic facilities with a similar entertainment offering can be considered direct competition to the extent that the project's attendance could be affected. At present, there are three facilities in the region that represent competition for the proposed family aquatic center. These are Wet 'n Wild, located in Arlington, Texas, NRH2O, located in North Richland Hills, Texas and Surf 'n Swim, located in Garland, Texas.



Table 2

MARKET AREA PER  
CAPITA INCOMES  
(1995)

<u>Market Area Zone</u>	<u>Per Capita Incomes</u>	<u>Index(1)</u>
0 to 5 Miles	\$ 13,851	0.84
5 to 10 Miles	\$ 17,038	1.04
10 to 15 Miles	\$ 19,204	1.17
Total U. S.	\$ 16,405	1.00

(1) U. S. = 1.00

Source: CACI, Inc. - Federal

Table 3

MARKET AREA  
AGE DISTRIBUTION: 1995

<u>Age Category</u>	<u>0-5 Miles</u>	<u>5-10 Miles</u>	<u>10-15 Miles</u>	<u>Total U. S.</u>
Under 5	7.1%	7.7%	8.2%	7.6%
5 to 14	<u>11.0%</u>	<u>13.5%</u>	<u>15.4%</u>	<u>14.5%</u>
<b>Subtotal</b>	<b>18.2%</b>	<b>21.2%</b>	<b>23.6%</b>	<b>22.1%</b>
15 to 19	7.8%	7.4%	7.1%	6.8%
19 to 24	14.8%	11.2%	8.9%	7.0%
25 to 34	24.8%	21.4%	19.1%	15.8%
35 to 44	13.5%	15.3%	17.1%	16.0%
45 to 64	13.6%	16.2%	17.9%	19.5%
65 and Over	<u>7.3%</u>	<u>7.3%</u>	<u>6.4%</u>	<u>12.8%</u>
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: CACI, Inc. - Federal

### **Wet 'n Wild**

The largest aquatic attraction in the Dallas-Fort Worth area is Wet 'n Wild, in Arlington. This facility is one of the largest water parks in the country, covering some 35 acres with a wide array of pools and flumes. Wet 'n Wild, which is owned by the Six Flags Corporation, has attendance in the range of 800 thousand per year. Admission rates are currently \$22.75 for adults and \$18.25 for children. Wet 'n Wild is approximately 38 miles south of Denton.

### **NRH2O**

NRH2O is a large aquatic center that would be considered a water park, if it were privately owned. This facility opened in 1995 at a cost of some \$7 million. Attendance at this attraction is in the range of 180 thousand. Admission rates are \$9.95 and \$7.95 for adults and children, respectively. NRH2O is approximately 25 miles south of Denton.

### **Surf 'n Swim**

Surf 'n Swim is the third and smallest aquatic facility in the Dallas-Fort Worth area. Surf 'n Swim's only major attraction is a wave pool. Attendance at Surf 'n Swim totaled 101 thousand in 1996. Admission rates are \$4.50 for adults, 18 and over, and \$3.25 for children, ages 5 to 17. Surf 'n Swim is approximately 40 miles from Denton.

### **Civic Center Pool**

At present, the only aquatic facility in Denton is Civic Center Pool, located in Civic Center park, near downtown Denton. This is an old pool that has undergone some renovation. In 1996, attendance at Civic Center Pool total 49,800.

## **WEATHER**

In addition to competition, another significant factor that can mitigate against attendance at a water park is weather. Table 4 presents a summary of long term weather patterns in the Dallas-Fort Worth area. Shown in the table are data regarding normal high and low temperatures and precipitation on a monthly basis. As shown in Table 4, normal high temperatures in the area range from a low of 54 degrees in January to a high of 97.8 degrees in July. Temperatures of least 80 degrees are needed to be considered warm enough for even the most avid user of recreational aquatics. This range is reached in May and sustained through September. Normal low temperatures range from 33.9 degrees in January to a high of 74.7 degrees in July. However, for sufficiently warm water temperatures to be sustained without being heated, normal low temperatures approaching 60 degrees will be required. This condition appears to be in effect from May through mid-September.

Also shown in Table 4 is a summary of precipitation data for the Dallas-Fort Worth area. It may be noted that the pattern of precipitation in the area is fairly consistent, averaging five to seven days per month throughout the year. Overall, precipitation is not seen as a major deterrent to attendance at the proposed family aquatic center.

Table 4

**CLIMATOLOGICAL DATA FOR  
THE DALLAS/FORT WORTH AREA**

<u>Month</u>	<u>Normal Temperatures</u>		<u>Precipitation(1)</u>	
	<u>Maximum</u>	<u>Minimum</u>	<u>Days</u>	<u>Inches</u>
January	54.0	33.9	6.9	1.65
February	59.1	37.8	6.5	1.93
March	67.2	44.9	7.2	2.42
April	76.8	55.0	7.9	3.63
May	84.4	62.9	8.7	4.27
June	93.2	70.8	6.4	2.59
July	97.8	74.7	4.9	2.00
August	97.3	73.7	4.7	1.76
September	89.7	67.5	6.8	3.31
October	79.5	56.3	6.0	2.47
November	66.2	44.9	5.8	1.76
December	58.1	37.4	6.5	1.67

(1) Days with .01 inches of precipitation or more

Source: National Oceanic and Atmospheric Administration

## Section V

### ATTENDANCE POTENTIAL AT THE PROPOSED FAMILY AQUATIC CENTER

This section of the report presents WLHA's assessment of attendance potential at the proposed family aquatic center. Also, included are estimates of design period attendance levels and implied parameters for recreation and support facilities.

#### ATTENDANCE POTENTIAL

As previously noted, there is the phenomenon known as the distance decay factor, which reflects the pattern of lower market penetration rates with increases in distance from an attraction to the visitor's home. This phenomenon is reflected in the data contained in Table 5. Shown in the table are market penetration rates for five public aquatic facilities with varying levels of attendance. As shown, these facilities all experience the highest rate of market penetration in the 0 to 5 mile zone, and the lowest in the 10 to 15 mile zone. Variations in actual rates among the five facilities are explained by a number of factors, including marketing strategies, weather, competition and accessibility, to name but a few.

Table 6 presents projected attendance at the proposed aquatic facility. As shown, the table is divided into three parts. The top part of the table presents population figures for the three market area zones discussed in Section IV, the middle part of the table presents WLHA's estimates of market penetration rates for each market segment and the lower part of the table shows the level of attendance to be derived from each market segment.

#### Market Population By Segment

As noted, the top portion of Table 6 presents projections of population for each of the three market zones, which WLHA considers potential sources of attendance for the proposed aquatic center. Population figures for these zones are based on the projections presented in Table 1.

Table 5

**MARKET PENETRATION RATES AT  
FIVE PUBLIC AQUATIC CENTERS**

<u>Facility Name</u>	<u>Location</u>	<u>Attendance</u>	<u>Market Penetration</u>		
			<u>0-5 Miles</u>	<u>5-10 Miles</u>	<u>10-15 Miles</u>
The Wave	Vista, California	80,608	28%	15%	7%
Lake Erie Metropark	Rockwood, Michigan	87,597	30%	15%	7%
Crystal Springs	East Brunswick, New Jersey	91,020	48%	2%	1%
Super Splash	Raytown, Missouri	104,727	45%	3%	1%
Water World	Federal Heights, Colorado	405,000	55%	25%	18%

Source: William L. Haralson & Associates, Inc.

Table 6

**PROJECTED ATTENDANCED AT THE  
PROPOSED FAMILY AQUATIC CENTER**

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
<b><u>Market Area Population(000)</u></b>					
Primary Zone	74.3	76.1	77.8	79.5	81.2
Secondary Zone	49.3	50.8	52.4	53.9	55.4
Tertiary Zone	102.3	105.8	109.2	112.7	116.2
<b><u>Market Penetration Rate</u></b>					
Primary Zone	50%	50%	50%	50%	50%
Secondary Zone	18%	19%	20%	20%	20%
Tertiary Zone	8%	9%	10%	10%	10%
<b><u>Projected Attendance(000)</u></b>					
Primary Zone	37.2	38.0	38.9	39.7	40.6
Secondary Zone	8.9	9.7	10.5	10.8	11.1
Tertiary Zone	<u>8.2</u>	<u>9.5</u>	<u>10.9</u>	<u>11.3</u>	<u>11.6</u>
<b>Total</b>	<b>54.2</b>	<b>57.2</b>	<b>60.3</b>	<b>61.8</b>	<b>63.3</b>

Source: William L. Haralson & Associates, Inc.



## Market Penetration Rates

Since attendance projections in this analysis are derived as the product of market population and market penetration rates, it is appropriate to discuss, at some length, the concept of market penetration rate and how such rates are derived in this context.

First, it is appropriate to provide a proper definition of market penetration rate, or "MPR". Market penetration rate can best be described by the equation  $MPR = PR \times FV$ , where **PR** is participation rate and **FV** is the frequency of visits or attendance. Thus, if an attraction has an **MPR** of 50 percent, that rate might be derived by having a **PR** of 1.0 percent and a **FV** of 50, or a **PR** of 5.0 percent and a **FV** of 10. To ascertain what combination of factors is most appropriate, it is necessary to appreciate what factors impact **PR** and **FV**. These are discussed, in turn, below.

First, with regard to **PR**, or participation rate, the dominant factor is *breadth of market appeal*. Swimming has the greatest breadth of market appeal of any form of recreation in which Americans participate. On the other hand, sky-diving, mountain climbing and bungee jumping rank low on most people's list. Thus, on the basis of breadth of market appeal, swimming would have a high **PR**, compared to the other activities cited.

The second factor impacting the market penetration rate, or **MPR**, is frequency of visit, or **FV**. There are two factors that impact **FV**. The first is the consumer's opportunity. As noted earlier, in Section IV, the distance decay factor implies that as distance from an attraction increases, **MPR** decreases. The reason for this is a lower frequency of visit, brought about by decreased opportunity. For example, a person living 50 miles from an attraction has less opportunity to visit an attraction than another person living one mile away. Another reason for lack of opportunity is lack of time. This is particularly applicable to a tourist market: if a tourist's length of stay in an area is one night, a choice must be made among available options, whereas, such a choice is much less critical if the tourist is staying in the area for several days.

Another factor impacting FV is the nature of the entertainment experience. It is a universal axiom that recreation of a *participatory* nature will have a higher FV than one with a *spectative* nature. Thus, consumers will visit a wax museum once but will play golf at every available opportunity.

With regard to the proposed family aquatic center, WLHA is of the opinion that the concept has the potential for relatively broad market appeal among families, younger teens and pre-teens. On the other hand, the concept is not as likely to appeal to older teens, young adults and older adults, without children living at home.

With regard to FV, or frequency of visit, the potential exists for substantial repeat visits, given the multitude of activities envisioned at the proposed aquatic center and their participatory nature.

As shown in Table 6, WLHA estimates a market penetration rate of 50 percent in the primary zone, beginning in the first year. In the secondary zone, a lower stabilized market penetration rate of 20 percent is estimated. Finally, in the tertiary zone, WLHA has estimated an even lower stabilized market penetration rate of 10 percent.

### **Projected Attendance**

The lower part of Table 6 presents WLHA's projections of attendance at the proposed facility, which is the product of market segment population multiplied by the corresponding market penetration rate. As shown in the table, total attendance is projected at 54 thousand in 1998, increasing to 57 thousand in 1999 and 60 thousand by 2000.

### **PROJECTED ATTENDANCE PATTERNS**

The analysis presented in Table 6 has indicated the level of attendance that WLHA estimates is achievable at the proposed family aquatic center on a sustained basis. However,

for the facility to sustain this level of attendance, it must have sufficient capacity to accommodate so-called "design period" attendance levels. This analysis is presented in Table 7.

As shown in the table, annual attendance figures have been carried forward from Table 6. Next, monthly attendance has been estimated to be 30 percent of annual attendance, which reflects the typical pattern of attendance at public aquatic facilities. Next weekly attendance is calculated by dividing monthly attendance by 4.43, the number of weeks in July and August. Next, the peak day of the week is estimated at 25 percent of the week, the typical pattern in a resident market. Finally, design period attendance, or the peak level of on-grounds attendance on the peak day of the week is estimated at 50 percent of daily attendance. This factor was derived based on the estimated length of stay at the attraction coupled with typical hourly arrival and departure patterns. As shown, based on these assumptions, design period attendance level at the proposed aquatic facility is projected at 459 in 1998, increasing to 484 in 1999 and 510 in 2000.

Further, based on the assumption that not every attendee must be entertained at all times, entertainment capacity requirement is estimated at 80 percent of design period attendance, or approximately 367 persons, in 1998, increasing to 387 in 1999 and 408 in 2000.

Finally, at the bottom of Table 7, WLHA has calculated pool and slide capacity requirements on the assumption that 60 percent of entertainment capacity is accounted for by pools and 40 percent by flumes. As shown, for the year, 2000, pool capacity requirements are calculated at 245 and slide capacity at 163.

## **PROJECTED FACILITY REQUIREMENTS**

The projections presented in Table 7 provide guidelines regarding the level of attendance to be accommodated during the proposed facility's busier periods. The final step in this section is to convert those attendance levels into facility requirements.

**Table 7**

**PROJECTED ATTENDANCE PATTERNS  
AT THE PROPOSED FAMILY AQUATIC CENTER**

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Annual Attendance	54,200	57,200	60,300	61,800	63,300
Peak Month's Attendance @ 30% of Year	16,260	17,160	18,090	18,540	18,990
Average Weekly Attendance	3,670	3,874	4,084	4,185	4,287
Peak Day's Attendance @ 25% of Week	918	968	1,021	1,046	1,072
Peak In-Park Attendance @ 50% of Day	459	484	510	523	536
Required Entertainment Capacity @ 80% of Above	367	387	408	419	429
Pool Capacity @ 60% of Entertainment Capacity	220	232	245	251	257
Slide Capacity @ 40% of Entertainment Capacity	147	155	163	167	171

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Source: William L. Haralson & Associates, Inc.

### **Entertainment Components**

Table 8 presents WLHA's projections of requirements for entertainment facilities at the proposed family aquatic facility. The level of entertainment capacity required is carried forward from Table 7. As shown, based on the assumption of 25 square feet per person, pool area required is projected at 5,500 square feet in 1998, increasing to 6,100 in 2000 and 6,430 in 2002. Further, based on slide throughput capacity of 100 persons per hour, slide requirements are estimated at two flumes. The above projections notwithstanding, in the final analysis, pool capacity will be fixed at a certain capacity. Realistically, the fifth year pool capacity should prevail, since it is much easier to affect expansion through the addition of slides.

### **Support Facilities**

In addition to entertainment facilities, to be optimally successful, the proposed aquatic facility should have the appropriate mix of support facilities. Projections of these facilities are shown in Table 8 and are based, for the most part, on the projection shown for design period attendance in Table 7.

**Table 8**

**PROJECTED FACILITY REQUIREMENTS AT  
THE PROPOSED FAMILY AQUATIC CENTER**

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Required Pool Area (Square Feet) (1)	5,506	5,810	6,125	6,278	6,430
Required Number of Flumes (2)	2	2	2	2	2
Food & Beverage Serving capacity (3)	138	145	153	157	161
Number of Serving Outlets (4)	6	6	7	7	7
Number of Deck Chairs (5)	92	97	102	105	107
Number of Lockers (6)	115	121	128	131	134
Shade Area (Square Feet) (7)	4,588	4,842	5,104	5,231	5,358
Number of Parking Spaces (8)	143	151	160	163	167

(1) At 25 square feet per person

(2) At 100 persons per flume

(3) At 30% of peak hour attendance

(4) At 75 servings per hour

(5) At 20% of peak hours attendance

(6) At 25% of peak hour attendance

(7) At 10 square feet of shade per person in-park

(8) At 25% of peak hour attendance plus 25% for employees and peak days

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Source: William L. Haralson & Associates, Inc.

**APPENDIX A: QUALIFICATIONS OF  
WILLIAM L. HARALSON & ASSOCIATES**

## **EXPERIENCE RELATING TO WATER PARK FEASIBILITY STUDIES**

**William L. Haralson & Associates, Inc.**, is particularly well qualified to perform feasibility studies for water parks. The President of WLHA, Bill Haralson, has more than 25 years consulting experience primarily in the field of tourism and recreation planning and economics. His particular specialty in recent years has been conceptual planning and feasibility studies for wave pools and water parks. The following is a list of projects undertaken by Mr. Haralson in recent years.

<b>CLIENT</b>	<b>ASSIGNMENT</b>
<b>City of Sandusky, Ohio</b>	Market study for a wave pool in Battery Park.
<b>City of Springfield, Missouri</b>	Market and financial feasibility study for a water park in Doling Park.
<b>Wynne Enterprises</b>	Market and financial feasibility study for a water park on Galveston Island.
<b>Wet 'n Wild</b>	Market study for a water park in the Dallas/Fort Worth area.
<b>Motel Resorts, Inc.</b>	Expansion study for the aquatic center at the Marriott Inn in the Louisville area.
<b>Paddock Pools of Albany</b>	Market and financial feasibility study for a water park in the Albany, New York area.
<b>New Orleans City Park</b>	Market and financial feasibility study for a water park in New Orleans' City Park.
<b>Stuman and Gafnea</b>	Market and financial feasibility study for a water park in Birmingham, Alabama.
<b>Bryant Morris Development</b>	Market and financial feasibility study for a water park in the San Jose area.
<b>White Water, Inc.</b>	Market and financial feasibility study for a water park and campground near San Antonio, Texas.
<b>City of Fort Wayne, Indiana</b>	Market and financial feasibility study for a water park in Coliseum Park.



<b>White Water, Inc.</b>	<b>Market studies for two water parks in the greater Atlanta area.</b>
<b>Bell's Amusement Park</b>	<b>Consultation on concept planning for a water park in Tulsa, Oklahoma.</b>
<b>Bryant Morris Development</b>	<b>Market and financial feasibility study for a water park in Frank G. Bonelli Regional Park in east Los Angeles County.</b>
<b>City of Carbondale, Illinois</b>	<b>Market and financial feasibility study for a water park in Carbondale.</b>
<b>White Water, Inc.</b>	<b>Market studies for two water parks in the Dallas/Fort Worth area.</b>
<b>Jerson, Inc.</b>	<b>Market and financial feasibility study for a water park in Lake County, Indiana.</b>
<b>Brach Enterprises</b>	<b>Market and financial feasibility study for a water park in Grand Junction, Colorado.</b>
<b>Six Flags Corporation</b>	<b>Consultation on design and operation of Atlantis a water park in Broward County, Florida.</b>
<b>Paddock Pools of Albany</b>	<b>Market and financial feasibility study for a water park on Long Island, New York.</b>
<b>Desert Oceans Corporation</b>	<b>Market and financial feasibility study for a water park in Albuquerque, New Mexico.</b>
<b>Howard Hughes Development Corp.</b>	<b>Market and financial feasibility study for a water park in Las Vegas.</b>
<b>White Water, Inc.</b>	<b>Confidential study.</b>
<b>Purcell Management Company, Ltd.</b>	<b>Market and financial feasibility study for a water park in the Vancouver, British Columbia area.</b>
<b>North Little Rock Ad &amp; Promotion Commission</b>	<b>Market and financial feasibility study for a water park in North Little Rock.</b>
<b>City of College Station, Texas</b>	<b>Market study for a water park in College Station.</b>

<b>Calvin R. Burgess</b>	Market and financial feasibility study for a water park in Austin, Texas.
<b>RMD Associates</b>	Consulting on financial analysis for a water park in the Williamsburg, Virginia area.
<b>Selgfreid, Edwards, Merhar</b>	Consulting on financial analysis for a water park in Rockford, Illinois.
<b>Nall and Gaudet</b>	Site selection for a water park in the Baton Rouge area.
<b>Frederic R. Schatz</b>	Market and financial feasibility study for a water park in the Cincinnati area.
<b>A. Craig Collingwood</b>	Market and financial feasibility study for a water park in Moore, Oklahoma.
<b>The Water Park Developers, Ltd.</b>	Market and financial feasibility study for a water park in Corona, California.
<b>McGraw and Wilson</b>	Market and financial feasibility study for a water park and campground near Port Huron, Michigan.
<b>Valley View Associates and William G. Willis</b>	Market and financial feasibility study for a water park at Valley View Lake Park near Akron, Ohio.
<b>GHS Developers, Inc.</b>	Market and financial feasibility study for a water park in Lubbock, Texas.
<b>Oceans of Fun</b>	General consultation on park planning.
<b>Rapids on the Reservoir</b>	Market study and recommendations for Rapids on the Reservoir near Jackson, Mississippi.
<b>W. O. Courter</b>	Market feasibility analysis for a proposed water park in Boise, Idaho.
<b>The Waterworks Limited Company</b>	Market feasibility analysis for a proposed water park in Portage County, Ohio.
<b>The Leisure Group</b>	Market feasibility analysis for a proposed water park in Augusta, Georgia.

<b>The Waterparks of Illinois Limited Partnership</b>	Market and financial feasibility study for a water park in Oakbrook Terrace, Illinois.
<b>Calvin R. Burgess</b>	Market and financial feasibility study for a water park in San Antonio, Texas.
<b>Bryant Morris Development</b>	Consultation on expansion of water park in Salt Lake City.
<b>W.S. Development</b>	Market and financial feasibility study for a water park in Billings, Montana.
<b>Bunnell Hill Development Co.</b>	Market and financial feasibility study for a water park in Mason, Ohio.
<b>City of Birmingham</b>	Market and financial feasibility study for a water park in Birmingham, Alabama.
<b>Tom Webster</b>	Market and financial feasibility study for a water park in Minneapolis, Minnesota.
<b>Megapolitan Mortgage Company</b>	Market and financial feasibility study for a water park in Denver, Colorado.
<b>Oasis Parks</b>	Market and financial feasibility study for a water park in Albuquerque, New Mexico.
<b>Heritage USA</b>	Market and financial feasibility study for Heritage Island.
<b>Mr. Martin Bearer</b>	Market and financial feasibility study for a proposed water park at Chestnut Hill Resort.
<b>Montgomery County Parks, Recreation &amp; Maintenance Service Department.</b>	Market and financial feasibility study for a water park in Montgomery County, Ohio.
<b>Vanderburgh County, Indiana</b>	Consultation on expansion of existing aquatic center in Burdette Park.
<b>Bassemier's Transportation, Inc.</b>	Market and financial feasibility study for a water park in Evansville, Indiana.
<b>Waves, Inc.</b>	Market and financial feasibility studies for water parks in Baton Rouge, Louisiana and Orange, Texas.

<b>Riley and McEwen</b>	Market study for a water park in Ardmore, Oklahoma.
<b>Waterfun Paradise</b>	Market and financial feasibility study for a water park in Escondido, California.
<b>Forrec Construction Ltd.</b>	Market and financial feasibility study for a water park in Toronto Island Park, Toronto, Ontario.
<b>City of Detroit</b>	Market and financial feasibility study for water park in Detroit, Michigan.
<b>Dr. Edward Torba</b>	Market analysis for a proposed water park near Latrobe, Pennsylvania.
<b>Albertsson, Frick, and Kinsey</b>	Market and financial feasibility study for a proposed water park on Sawnee Mountain.
<b>The Larson Family</b>	Market and financial feasibility study for a water park near Kissimmee, Florida.
<b>Scott Hudgens Companies</b>	Market and financial feasibility study for a hotel and water park at Glynn Place in Brunswick, Georgia.
<b>Michael J. Miller</b>	Market and financial feasibility study for a water park in Canton, Michigan.
<b>Surf's Up U.S.A.</b>	Market and financial feasibility study for a water park in St. Charles County, Missouri.
<b>PACE Productions, Inc.</b>	Market and financial feasibility study for a water park in Nashville, Tennessee.
<b>Town of Avon, Colorado</b>	Market and financial feasibility study for an indoor water park in the Town of Avon.
<b>Creative Waterworks, Inc.</b>	Market and financial feasibility study for a water park in Indianapolis, Indiana.
<b>Greater Huntington Park &amp; Recreation District</b>	Analysis and recommendations for aquatic facilities in the Greater Huntington Park and Recreation District.
<b>Wayne County Parks a Recreation</b>	Market feasibility analysis for a water park in Wayne County, Michigan.

<b>City of Lancaster, Texas</b>	Market and financial feasibility study for a water park in Lancaster, Texas.
<b>Joe A. McDermott, Inc.</b>	Market and financial feasibility study for Splashtown U.S.A. in Spring, Texas.
<b>Splashland Waterparks</b>	Market and financial feasibility study for a water park in Eagan, Minnesota.
<b>Jekyll Island Authority</b>	Market and financial feasibility study for a water park on Jekyll Island.
<b>New Mexico Desert Surf</b>	Market and financial feasibility study for a water park in Albuquerque, New Mexico.
<b>Surf City USA, Inc.</b>	Market and financial feasibility study for a water park in San Bernardino, California.
<b>Aspect Leisure Limited</b>	Consultation on site selection and water park development on the Balearic Islands and the Province of Malaga on the Mediterranean coast of Spain.
<b>Wichita FantaSea Park</b>	Analysis and recommendations for improvements at FantaSea Park in Wichita, Kansas.
<b>Compound Enterprises, Inc.</b>	Market and financial feasibility study for a water park on the Island of Maui.
<b>Vanderburgh County, Indiana</b>	Analysis and recommendations for additional improvements at the aquatic center in Burdette Park.
<b>Water Town, Inc.</b>	Consultation regarding recommendations for future development at Water Town in Shreveport, Louisiana.
<b>The Henson Companies</b>	Market and financial feasibility study for Emerald Pointe, a wet/dry park, in Greensboro, North Carolina.
<b>Arrighi, Smith &amp; Associates</b>	Consultation and evaluation of a water park in Baton Rouge, Louisiana.
<b>Gary B. Bennett</b>	Consultation and evaluation of Waterland USA in Jackson, Mississippi.

<b>The Beach</b>	Market analysis for a water and theme park in Jefferson Parish, Louisiana.
<b>Scot Fritzsche</b>	Market feasibility analysis for a water park/campground in McHenry, Illinois.
<b>Leisure Marine Corp.</b>	Market study of the Oasis Water Park in Phoenix for purposes of acquisition.
<b>City of Denton, Texas</b>	Market feasibility study for alternative aquatic concepts.
<b>Alpamare</b>	Market analysis for a proposed water park near Dusseldorf, West Germany.
<b>Winslow Investments</b>	Recommended improvements program for Funland in Grand Rapids, Michigan.
<b>Leonard Norwich</b>	Market study of the proposed Jordan Point project near Richmond, Virginia.
<b>Pleasure Island</b>	Market study for a water park at the Pleasure Island site in Muskegon, Michigan.
<b>Sam B. Haynes, Jr.</b>	Market feasibility study for the Baton Rouge, Louisiana water park.
<b>Robert E. Garrett</b>	Market feasibility study for a water park in Amarillo, Texas.
<b>City of Hanford</b>	Market feasibility study for a water park in Hanford, California.
<b>Point Cadet Development Corp.</b>	Market feasibility study for a water park at Point Cadet in Biloxi, Mississippi.
<b>Wild Springs Water Park Associates</b>	Market feasibility study for a water park at the Saratoga Raceway in Saratoga Springs, New York.
<b>Sally Industries, Inc.</b>	Market feasibility study for a water park in Jacksonville, Florida.
<b>James John Tovrea</b>	Market feasibility study for a water park in Denver, Colorado.

<b>Charles B. Krumel</b>	Market feasibility study for a water park in Key West, Florida.
<b>Lake County Parks and Recreation Department</b>	Market feasibility study for a water park in Lake County, Indiana.
<b>Horry Land Company, Inc.</b>	Market study for a proposed water park at Myrtle Beach, South Carolina.
<b>Putnam County Parks and Recreation Commission</b>	Analysis and recommendations for improving the Valley Park wave pool complex.
<b>Montbel, Inc.</b>	Market feasibility study for The Beach in Albuquerque.
<b>Heery International, Inc.</b>	Market and financial feasibility study for a family aquatic center in Lake Kennedy Park in Cape Coral, Florida.
<b>City of Raytown, Department Parks and Recreation</b>	Market feasibility study for improvements at of the Raytown Public Pool in Raytown, Mo.
<b>James E. Geddes</b>	Market feasibility study for a proposed water park at Hacienda Taboada in San Miguel de Allende in the State of Guanajuato, Mexico.
<b>City of New Martinsville, Parks and Recreation Commission</b>	Market feasibility study for improvements at Wetzel Pool in New Martinsville, W. Va.
<b>Tidal Wave Development Co.</b>	Market study for a proposed water park located within the Palisades, a 900 acre mixed-use development project near Grafton, Illinois.
<b>Karts West Ltd.</b>	Market feasibility study to evaluate Karts West's facilities and operations, make recommendations for physical and operational changes, and to evaluate those changes in terms of projected financial performance.
<b>Plaza Las Americas, Inc.</b>	Recommendations for improvements at Atlantis, The Water Kingdom in Hollywood, Florida and Plaza Acuatica in San Juan, Puerto Rico.
<b>City of Des Moines, Iowa</b>	Recommended long-term development program for the City of Des Moines' aquatic facilities.

<b>Plaza Las Americas, Inc.</b>	Market and financial feasibility study to determine attendance and income potential as well as physical facility requirements for a new water park at Seaquarium in Miami on Virginia Key.
<b>Ms. Kimberly A. Seeds</b>	Market and financial feasibility study for a proposed water park in Berrien County, Michigan.
<b>Lelsure Partners, Inc.</b>	Market and financial feasibility study for a proposed water park in Auburn, Alabama.
<b>City of Valparaiso, Indiana</b>	Market and financial feasibility study for a proposed aquatic center in Valparaiso.
<b>Wild River Country</b>	Recommendations for Wild River Country in Little Rock, Arkansas.
<b>Bay West Development Corp. Ltd.</b>	Market and financial feasibility study for a proposed water park in the Cable Beach area of Nassau, The Bahamas
<b>Walt Disney Imagineering</b>	Participated in the planning parameters for the EuroDisney water park to be located near Paris, France.
<b>The Southshore Corporation</b>	Market and financial feasibility study for a proposed water park in the Southeast Denver area.
<b>Splashtown USA</b>	Valuation of Splashtown USA in Spring, Texas, a suburb of Houston.
<b>The Cronus Group</b>	Market and financial feasibility study for a proposed water park in Rio de Janeiro, Brazil.
<b>HASEKO (Hawaii), Inc.</b>	Market and financial feasibility study for a proposed water park on the Island of Kauai.
<b>Charleston County Park and Recreation Commission</b>	Market and financial feasibility study for a proposed water park in James Island County Park.
<b>Splashworld Limited Partners</b>	Market feasibility study for a proposed water park in the Chicago area.



<b>HERSHEYPARK</b>	Market study for a proposed water park and fun center.
<b>East Brunswick Township</b>	Market feasibility study for the redevelopment of Community Beach in East Brunswick, New Jersey.
<b>NationsBank</b>	Evaluation of Emerald Pointe water park in Greensboro, North Carolina.
<b>The Peoria Park District</b>	Feasibility analysis Lakeview Pool renovation/ water park development.
<b>Six Flags Over Mid-America</b>	Market study for Six Flags Over Mid-America's water park in Eureka, Missouri.
<b>The City of Vista, California</b>	Market feasibility study for a proposed aquatic center.
<b>Surf City USA, Inc.</b>	Market feasibility study for a proposed water park in the Augusta, Georgia area.
<b>ASCAMIL, S.A.</b>	Economic evaluation of CICI in Acapulco, Mexico.
<b>Mr. Harvey Youngquist</b>	Market feasibility study for a proposed water park in Fort Myers, Florida.
<b>White Water Mountain Resorts, Inc.</b>	Market feasibility study for a proposed water park at Powder Ridge Ski Area in Connecticut.
<b>Michael Swerdlow Companies, Inc.</b>	Market feasibility study for a proposed water park in Hollywood, Florida.
<b>Mr. Alain Baldacci</b>	Market feasibility study for a proposed water park in Ribeirao Preto, Brazil.
<b>Delaware North Companies, Inc.</b>	Market feasibility study for a proposed water park and family fun center in Daytona Beach, Florida.
<b>The Randolph Company</b>	Market Study for a Waterpark North of Austin.
<b>Reston Association</b>	Feasibility Study for updating Aquatic facility at Reston, Virginia.
<b>Promotora De Parquez Aquaticos S.A. DE C.V.</b>	Market Feasibility Study for a Waterpark in Cancun, Mexico.

<b>Westchester County Department of Parks, Recreation &amp; Conservation</b>	<b>Market and Feasibility Study for Expansion of Saxon Woods Aquatic Center.</b>
<b>City of Ocean City, Maryland</b>	<b>Market and Feasibility Study for a proposed Aquatic Center in Ocean City, Maryland.</b>
<b>O'Hana Pa'ani Wai, Inc., Hawaii</b>	<b>Market and Feasibility Study for a proposed water park on the Island of Maui.</b>
<b>Town of Chesapeake Beach, Maryland</b>	<b>Market and Financial Feasibility study for the development of a new Aquatic Center.</b>
<b>Township of Edison, New Jersey</b>	<b>Market and Feasibility Study for a proposed Aquatic Center in Edison, Township, New Jersey.</b>
<b>City of Crossville, Tennessee</b>	<b>Market and financial feasibility study for water park in Crossville.</b>
<b>City of Del Rio, Texas</b>	<b>Market and financial feasibility study for a water park in Del Rio.</b>
<b>Mrs. Loretta Landry</b>	<b>Market and financial feasibility study for a water park in Lafayette, Louisiana.</b>
<b>Froelich Construction</b>	<b>Market and financial feasibility study for a water park in Bakersfield, California</b>
<b>Walker Construction</b>	<b>Market and financial feasibility study for a water park in Lower Lake, California.</b>
<b>Mr. David Jarvis</b>	<b>Market and financial feasibility study for a water park in Wilmington, North Carolina.</b>
<b>City of Danville, Virginia</b>	<b>Market and financial feasibility study for a water park in Danville, Virginia.</b>
<b>Premier Parks</b>	<b>Consulting for a water park in Edmond, Oklahoma.</b>
<b>Mini-Golf International LLC</b>	<b>Consulting for a WP in the People's Republic of China.</b>
<b>City of Fullerton (CA)</b>	<b>Market and financial feasibility study for a water park in Fullerton, California.</b>
<b>City of Long Beach (CA)</b>	<b>Market and financial study for a water park in Long Beach, California.</b>

<b>City of Milwaukee (WI)</b>	Market and financial study for a water park in Milwaukee, Wisconsin.
<b>Wave Loch, Inc.</b>	Market and financial study for a water park in Fullerton, California.
<b>White Water Canyon, Inc.</b>	Consulting for a water park in San Diego county, California.
<b>City of Fullerton</b>	Development of water park in Independence Park, California.
<b>Water Technology</b>	Major expansion and renovation project for Belmont Plaza Olympic Pool, City of Long Beach, California.
<b>Paradise Island</b>	Analysis of attraction called "Flowrider" for "The Gold Coast", Australia.
<b>David Saunders</b>	Water Park project in Cyprus.
<b>Carlington Aquatic Park</b>	Business plan for proposed Aquatic Center in Ottawa, Ontario.
<b>Water Technology Inc.</b>	Expansion potential of an aquatic center in Milwaukee, Wisconsin.
<b>Sapphire Beach Resort &amp; Marina</b>	Development of W.P. on the island of St. Thomas in the Virgin Islands.
<b>Erisa Mortgage Company</b>	A prepared summary of findings & recommendations of "The Beach", Albuquerque, New Mexico.
<b>Tropical Land Development</b>	Feasibility study to assess projects attendance potential, proper scale mix of components & test for financial feasibility.
<b>Habitacional, S.A.</b>	Market & financial feasibility study for a proposed water park in Brazil.
<b>The Ruffin Hotel Group</b>	Market & financial feasibility study for the development of a water park in the Cable Beach area of Nassau.

<b>Mr. Richard Keane</b>	Proposed development of a leisure complex consisting of a water park and a family entertainment center.
<b>The City of Glenn Heights</b>	Market and financial feasibility study for a proposed water park in Glenn Heights, Texas.
<b>HARBRU</b>	Proposed development of combined water park & theme park in Luquillo, Puerto Rico.
<b>Wild Water West Water Park</b>	Consulting services in regard to Wild Water West Water Park & Family Amusement Park in Sioux Falls, South Dakota.
<b>Rockford Park District</b>	Market & financial feasibility study of the existing "Magic Waters" water park in Rockford, Illinois.
<b>Bill Smith</b>	Market & financial feasibility for a water park on Grand Cayman island.
<b>Habitacional Construcoes.S.A. &amp; Diniz S.A.</b>	Market & financial feasibility for a water park in the City of Aracaju, State of Sergipe, Country of Brazil.
<b>Water Park, LTD.</b>	Market & financial feasibility study for a water park in Fountain, Colorado.
<b>Diversified Real Estate Concepts, Inc.</b>	Market & financial study for a water park and an adventure park in Lake Geneva, Wisconsin.
<b>City of Palm Desert, California</b>	Market & financial feasibility study for an aquatic center in Palm Desert, California.
<b>Christoph Memorial YWCA</b>	Market & financial feasibility study for improvement to existing aquatic facility.
<b>City of El Paso</b>	Market & financial feasibility study for an aquatic center.
<b>Wet N'Wild</b>	Market & financial feasibility study for a water park in Broward County, Florida.
<b>Wet N'Wild</b>	Market & financial feasibility study for a water park in Poway, California.
<b>City of Collinsville, Illinois</b>	Market & financial feasibility study for an aquatic center in Collinsville, Illinois.

Mr. R. Dave Brenneman

Market & financial feasibility study for a water park in Cedar Rapids, Iowa.

Huron-Clinton Metro Parks Commission

Market & financial feasibility study for an aquatic center in the Detroit, Michigan area.

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Over the years, Mr. Haralson has maintained a keen interest in the water park concept. For the past ten years, he has served as a lecturer at wave pool seminars sponsored by the University of Alabama at Huntsville, WaveTek and Anheuser Busch, as well as the World Waterpark Association (WWA) and the National Parks and Recreation Association. Mr. Haralson received the 1986 World Waterpark Association Leadership Award and has served as an elected member on the Executive Committee of WWA. Also, as a result of extensive project involvement, Mr. Haralson maintains a complete file of data on wave pools, including operating revenue, expenses, user characteristics, suppliers and other data required to conduct this type of study.

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\*The first five projects discussed were undertaken by Mr. William Haralson prior to forming William L. Haralson & Associates, Inc.

#### PUBLICATIONS

William L. Haralson, "The Economic Feasibility Study," *Private & Commercial Recreation*, ed. Arlin F. Epperson (State College, PA: Venture Publishing, Inc., 1986), pp. 155-198.

World Waterpark Association's Splash, "Two for Tea -- Public-Private Tea Parties Shouldn't End Up in the Drink," May-June, 1986.

International Association of Amusement Parks and Attractions' FUNWORLD, "Patterns and Trends in the U.S. Waterpark Industry," May, 1989.

World Waterpark Association's Splash, "Per Capita Spending at Waterparks -- An Overview," May-June, 1989.

International Association of Amusement Parks and Attractions' FUNWORLD, "Waterpark Report," July, 1989.

International Association of Amusement Parks and Attractions' FUNWORLD, "Perking Up Per Caps at Waterparks," September, 1989.

Aquatics, "Burdette Park Pool -- Expansion Puts Facility In The Plus Column," September-October, 1989.

World Waterpark Association's Splash, "1989 Water Park Per Caps," May-June, 1990.

World Waterpark Association's Splash, "1989 Water Park Attendance," July-August, 1990.

International Association of Amusement Parks and Attractions' FUNWORLD, "Guidelines For Attraction Profitability," August, 1990.

PARK WORLD, "Per Capita Spending -- Evaluation and Some Guidelines for Improvement," September, 1990.

PARK WORLD, "Increasing Attendance to Increase Profitability," March, 1991.

World Waterpark Association's Splash, "Origin of the Species," April, 1991.

International Association of Amusement Parks and Attractions' FUNWORLD, "Guidelines For Waterpark Planning," April, 1991.

World Waterpark Association's Splash, "1990 Per Capita Spending Patterns," May-June, 1991.

World Waterpark Association's Splash, "Pavilion Rental & Day Camp. Pay off for Burdette Park," May-June, 1992.

World Waterpark Association's Splash, "1991 Waterpark Per Capita Spending Patterns," July/August, 1992.

World Waterpark Association's Splash, "1991 Waterpark Operating Expenses and Spending Patterns," September, 1992.

World Waterpark Association's Splash, "1993 Entertainment Value in the Public Sector", May-June, 1994.

World Waterpark Association's Splash, "1994 Attendance for U.S. Public Sector Waterparks", June-July, 1995.

World Waterpark Association's Splash, "1995 Season Per Capita Spending Patterns for 1995", February, 1996.