

EDMONTON

Outdoor Aquatic Strategy

2008 - 2017



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Outdoor Aquatic Strategy, 2008-2017

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Section 1: Introduction

1.1. An Outdoor Aquatic Strategy for the City of Edmonton

Life's great outside – with water! Water is an important aspect of quality of life in cities around the world, including many northern cities, which have moved beyond the traditional model of single tank outdoor pools and wading pools, and have embraced the aspect of having more fun with water. There's a world of experiences out there, and not just for children. Adults of every age can also benefit from a variety of opportunities, too. From rest and relaxation, to activities that improve health, the range of aquatic experiences is boundless.



Imagine the opportunities for:

Calm Reflection – Experience water features that serve as a backdrop for quiet contemplation or enhance the park setting. Enjoy gently falling droplets or soothing bubbling water.

Cool Refreshment – Dip your toes in serene, cool water. Feel the mist on your face. Cool off while passing by or take a mini-break from the busy world.

Carefree Recreation – Jump in! Head-to-toe fun awaits with a range of active water experiences. Perfect your swim stroke, swoosh down a slide, splash with family and friends, or get creative with water toys.

The Outdoor Aquatic Strategy seeks to achieve several positive outcomes for all Edmontonians. The Strategy provides a new style of deliverables and a range of urban design options that are suitable for neighbourhood, district and city level amenities and facilities. It balances choice and opportunity, and builds a network of services to meet a range of interests and age groups. Opportunities abound to develop new outdoor aquatic facilities, enhance or refurbish existing outdoor facilities, and to increase the spectrum of services and programs available to Edmontonians.



1.2. Goal of the Outdoor Aquatic Strategy

The goal of the Outdoor Aquatic Strategy is to guide the City's involvement in providing, developing and managing outdoor aquatic amenities and facilities in Edmonton over the next ten years. The Strategy brings a fresh and creative perspective to the future of outdoor aquatics opportunities for all residents to enjoy. The provision of active recreation opportunities, access to the outdoors, and greater use of existing infrastructure supports the health and wellbeing of individuals and families.



Examples of outdoor aquatic amenities and facilities include:

- spray decks
- wading pools
- interactive play structures
- water walls and water curtains
- swimming lakes
- large scale interactive water parks
- spray parks
- outdoor pools
- fountains and water art
- urban beaches
- recreation centres with indoor and outdoor components

For the purposes of the Strategy, facilities and amenities related to the North Saskatchewan River, natural areas and stormwater lakes are out of scope. River elements are addressed in existing planning documents, namely the Urban Parks Management Plan, the Ribbon of Green and the work of the River Valley Alliance. The Urban Parks Management Plan prohibits water play parks in natural areas.

1.3. Strategy Development Process

In August 2005, City Council moved:

That the development of multipurpose community/recreational facilities identified in the Recreation Facility Master Plan consider the incorporation of outdoor aquatic elements in the planning process.

That Administration develop an outdoor aquatic facility strategy in consultation with the outdoor pool advisory group and the community.

A project team from the Asset Management and Public Works Department (Parks Branch) and the Community Services Department (Recreation Facility Services Branch and Neighbourhood and Community Development Branch) guided the development of the Outdoor Aquatic Strategy. The process included:

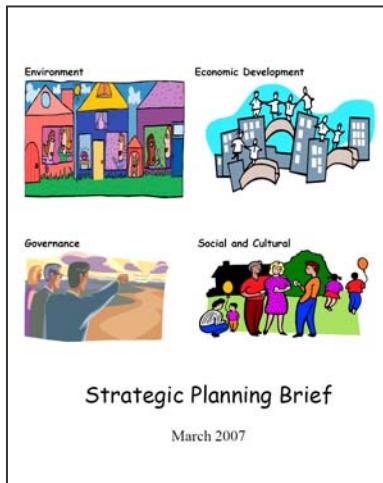
- A review of the City's plans and programs, and related legislation impacting outdoor aquatics.
- An inventory and assessment of Edmonton's outdoor aquatic amenities.
- Demographic analysis and population forecasts.
- A review of aquatic trends shaping service delivery.
- A review of best in class practices for innovative design.
- Consultation with stakeholders, citizens and internal City staff.

Section 2: The Planning Context

2.1. Council Direction and Related Legislation Impacting Outdoor Aquatics

Council's interest in building a city with "quality of place" includes desirable amenities, lifestyle and an environment that includes outdoor aquatic opportunities. Council considers outdoor recreation to be a core activity that significantly contributes to the well-being of City residents. Recent Council endorsed plans and changes to provincial legislation guide the development of the Outdoor Aquatic Strategy. The directions set out in the Strategy will be aligned and integrated with other City planning initiatives such as envisionEdmonton, Focus Edmonton, the Transportation Master Plan Update, and the 10-year Capital Agenda.

2.1.1. City Council's Strategic Planning Brief, 2007



City Council established four directional focus areas to guide the City's strategic planning efforts. There are clear links between service delivery through outdoor aquatic facilities and the four focus areas identified by Council:

Environment: Edmonton provides a quality environment through a healthy ecosystem, diverse communities, and balanced infrastructure management.

Social and Cultural: Edmonton promotes vibrant, inclusive and safe communities.

Economic Development: Edmonton secures a prosperous future through the development and maintenance of its economic vitality, diversity and sustainability.

Governance: Edmonton promotes effective governance structures and processes to achieve its economic, social, cultural and environmental success.

2.1.2. Medium Term Recreation Facility and Sports Field Plan, 2007

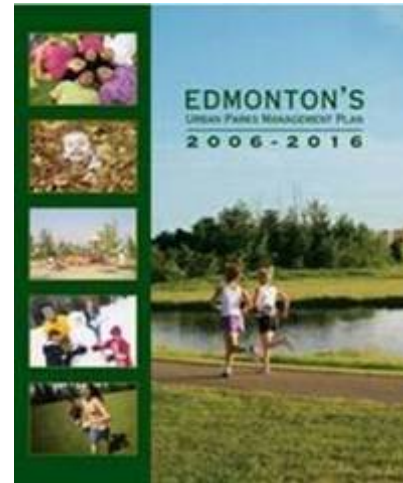
The Medium Term Recreation Facility and Sports Field Plan identifies the City's priorities and community needs in accordance with the Recreation Facility Master Plan and the Urban Parks Management Plan. The Plan integrates a wide variety of recreation interests and skill levels to respond to the needs of all ages and abilities and is intended to contribute to a sense of community. The planned facilities and activity parks incorporate multiple indoor and outdoor components and support both structured/organized and informal/unstructured activities. District Activity Parks emphasize active spaces that accommodate high schools, major recreation centres and a massing of sports fields that create a balance between open space requirements and facility land requirements. The Plan recommends a range of program elements, such as spray features, multi-purpose components, social gathering areas or "social hearts" and balance between indoor and outdoor activities.



The Plan identifies priorities for specific geographic areas of the city, including the Clareview District Activity Park, the Meadows District Activity Park, and District Activity Parks in the west end, namely, Lewis Farms, the Grange, Callingwood, Johnny Bright Sports Park, Coronation Park and Fred Broadstock Outdoor Pool.

2.1.3. *Urban Parks Management Plan, 2006-2016*

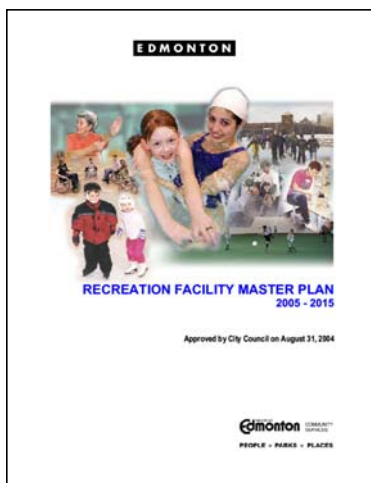
The Urban Parks Management Plan sets a vision for the City to ensure parks are integrated into the daily lives of Edmontonians. Principles address active living, urban wellness, natural capital, creative urban design, safe parks, maintained parks, integrated parks, community partners, and the effective and efficient management of parks. A parkland classification system guides the City and its community development partners in managing a variety of recreational needs and opportunities. The Plan identifies individual site development and operation guidelines that outline expectations for each type of park. Guidelines for animation/use address community need/programming and landscape considerations. Outdoor aquatic opportunities such as spray decks, decorative fountains, constructed water features and major water play parks are identified as shared-level development with community partners.



2.1.4. *Pool Standards, 2006*

Alberta Health and Wellness established Pool Standards, 2006 for the Swimming Pool, Wading Pool and Water Spray Park Regulation. 'The primary objective of the Regulation and the Standards is to set out permit, operating and maintenance requirements for swimming pools, wading pools, water spray parks, whirlpools and any fountain or artificial pond that falls within the definition of "pool" in the regulation. ... Important information regarding disinfection, chlorine resistant pathogens, filtration and recirculation is included. The goal is to enhance filtration, circulation and monitoring while maintaining a minimum but effective concentration of disinfection to provide a safe swimming environment. The Regulation and Standards set minimum standards for safe water quality and a safe and sanitary pool environment. ... It is the responsibility of each pool owner to ensure optimum water quality and pool safety.' The 2006 Standards introduced new requirements for recirculation, filtration and disinfection of wading pools. The City of Edmonton will continue to develop responsive site management practices, record keeping and operational practices that meet the Regulation and Standards.

2.1.5. *Recreation Facility Master Plan, 2005-2015*



The Recreation Facility Master Plan sets out a comprehensive long range strategy for public recreation facilities. Recreation facilities serve as community hubs, bringing people together in welcoming, inclusive and vibrant settings. The Master Plan establishes priorities for new and redeveloped multi-purpose recreation facilities. Recognizing that city facilities are aging and were originally built to serve a smaller population, the Master Plan focuses on the principles of developing community hubs, creating integrated facilities, grouping of facilities, physical linkages and access, ensuring neighbourhood integrity, focused funding and shared development. A facility model provides direction for the number and distribution of facilities at neighbourhood, district, and citywide scales. The principles and the facility model will be considered as new recreation facilities are being planned and built.

2.1.6. Future Use of Outdoor Pools, 2005

The Future Use of Outdoor Pools report was prepared by the Community Services and Asset Management and Public Works Departments, with the assistance of a Stakeholder Committee. Council requested the report to provide direction and recommendations on options for the future of outdoor pools in Edmonton. The project included public consultation, infrastructure evaluation, trends analysis, and environmental scan. Citizen feedback supporting the need and desire for outdoor pools, and the poor infrastructure condition of the sites were considered in the recommendations. Council approved the redevelopment of three of the five outdoor pools (Queen Elizabeth, Fred Broadstock, Mill Creek) subject to the availability of funding. Council also directed that the park revitalization plans for Borden Park and Oliver Park include a review of outdoor aquatic elements that would be most appropriate at each location and to meet local community needs.

2.2. Inventory of Outdoor Aquatic Amenities

A range of indoor and outdoor aquatic facilities are provided by the City or through partner-operated facilities. Indoor aquatic facilities are provided at 11 Community Leisure Centres and the Kinsmen Sports Centre. The YMCA operates five facilities with indoor aquatic components.

Edmonton's current outdoor aquatic inventory includes 22 spray decks, 3 spray parks, 33 wading pools and 5 outdoor pools. Most are located in the central areas of the city. Maps 1, 2 and 3 provide specific sites.

Several City amenities also provide unique opportunities for citizens.

The combination reflective pool / wading pool / fountains at City Hall Plaza are a summer highlight in the downtown that accommodates ice skating in the winter.



Fountains, waterfalls, water features and ornamental pools include: Alexander Circle/Glenora fountain, Beaver Hill Park waterfall, Borden Park fountain, Giovanni Caboto Park ornamental pool, Hawrelak Park's floating fountains, Oglilvie Ridge Park ornamental pond with shooter, Paul Kane Park with 2 shooters, Rundle Park Lakes, Victoria Promenade fountain, Westwood Park Pond with 2 shooters, Churchill Square waterfall art.

The High Level Bridge Waterfall operates during City celebrations.



Edmonton's major attractions such as the Valley Zoo, Fort Edmonton Park and the Muttart Conservatory incorporate water amenities or are including water features in future development plans.

Though out of scope in the Strategy, the North Saskatchewan River and Ravine System, natural areas and stormwater lakes contribute to more passive opportunities with landscaping, walkways and benches. Some sites accommodate more active pursuits such as paddling and ice skating.



The Alberta Legislature site includes a popular reflective pool, wading pool and fountains.



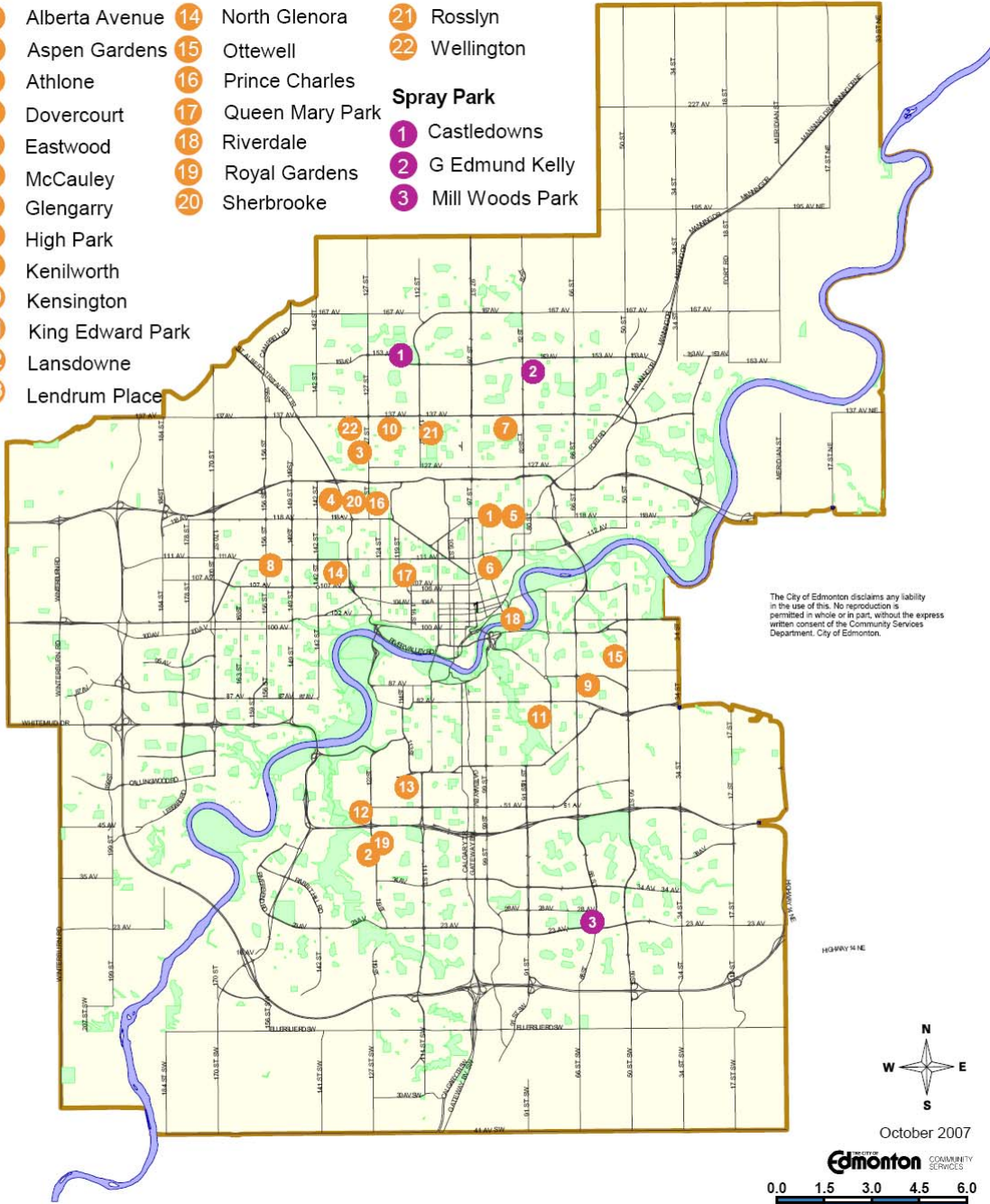
The constructed 13 ha (32 acres) lake in the residential community of Lake Summerside is privately owned. Several steps are taken to keep the lake viable for swimming, canoeing, kayaking, fishing and skating, and for events like triathlons. The site includes a beach area and the lake is stocked with trout.

Distribution of Spray Decks and Parks

Map 1:

Spray Deck

- | | | |
|---------------------|--------------------|-------------------|
| 1 Alberta Avenue | 14 North Glenora | 21 Rosslyn |
| 2 Aspen Gardens | 15 Ottewell | 22 Wellington |
| 3 Athlone | 16 Prince Charles | |
| 4 Dovercourt | 17 Queen Mary Park | Spray Park |
| 5 Eastwood | 18 Riverdale | 1 Castledowns |
| 6 McCauley | 19 Royal Gardens | 2 G Edmund Kelly |
| 7 Glengarry | 20 Sherbrooke | 3 Mill Woods Park |
| 8 High Park | | |
| 9 Kenilworth | | |
| 10 Kensington | | |
| 11 King Edward Park | | |
| 12 Lansdowne | | |
| 13 Lendrum Place | | |



Distribution of Wading Pools

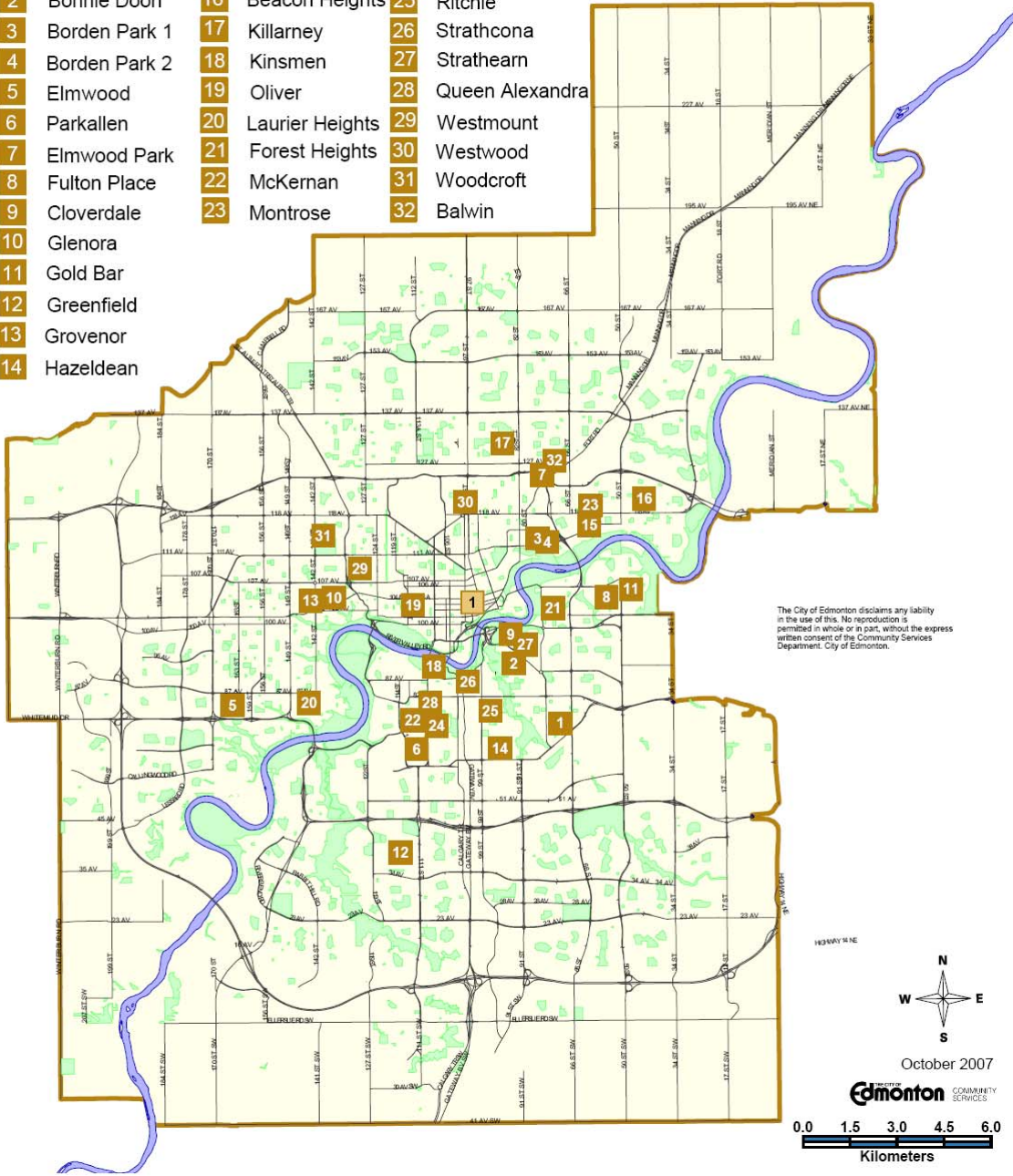
Map 2:

Wading Pools

- | | | |
|-----------------|--------------------|--------------------|
| 1 Avonmore | 15 Highlands | 24 Queen Alexandra |
| 2 Bonnie Doon | 16 Beacon Heights | 25 Ritchie |
| 3 Borden Park 1 | 17 Killarney | 26 Strathcona |
| 4 Borden Park 2 | 18 Kinsmen | 27 Strathearn |
| 5 Elmwood | 19 Oliver | 28 Queen Alexandra |
| 6 Parkallen | 20 Laurier Heights | 29 Westmount |
| 7 Elmwood Park | 21 Forest Heights | 30 Westwood |
| 8 Fulton Place | 22 McKernan | 31 Woodcroft |
| 9 Cloverdale | 23 Montrose | 32 Balwin |
| 10 Glenora | | |
| 11 Gold Bar | | |
| 12 Greenfield | | |
| 13 Grovenor | | |
| 14 Hazeldean | | |

Fountain

- | |
|-------------------|
| 1 City Hall Plaza |
|-------------------|



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October 2007

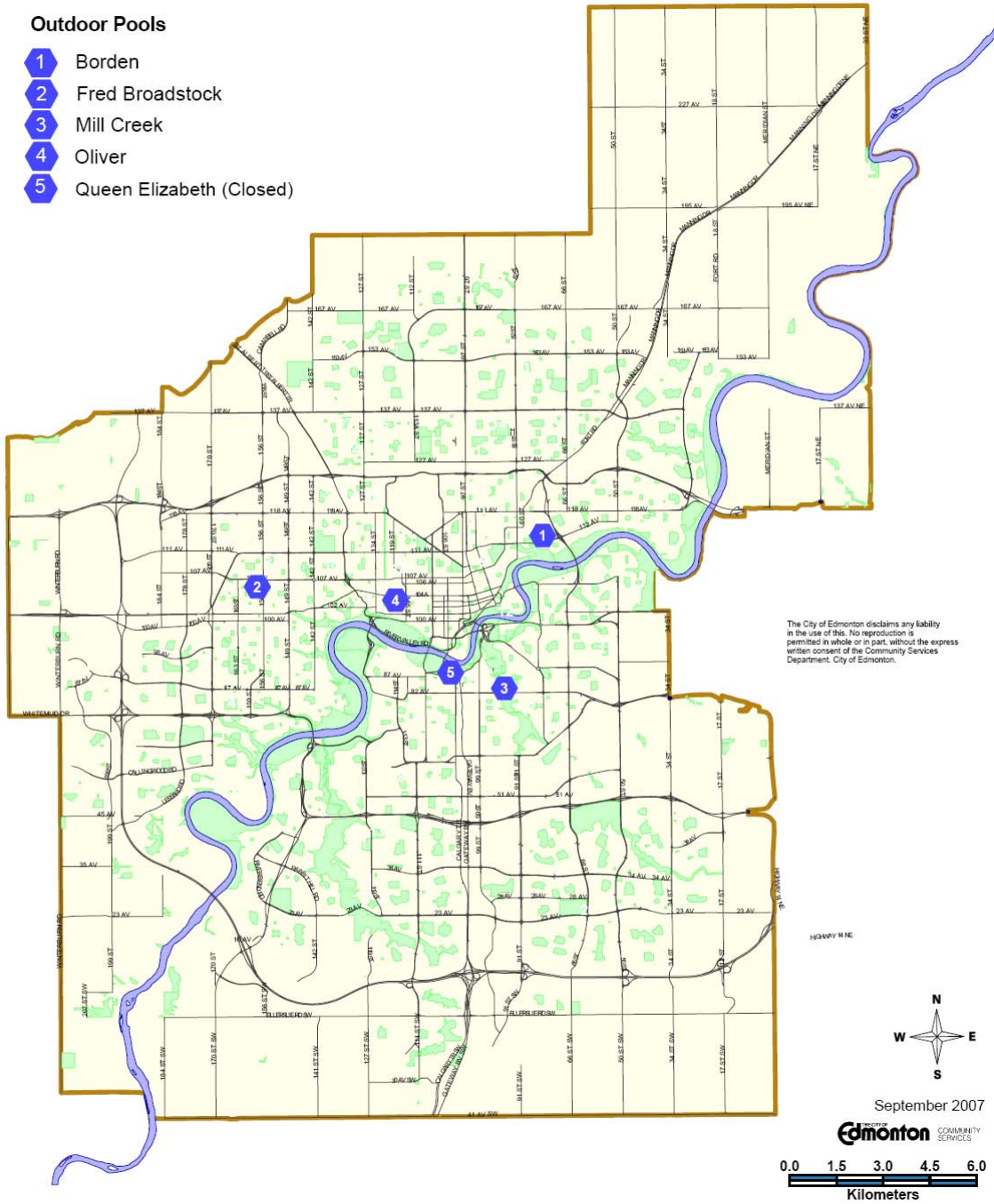


Distribution of Outdoor Pools

Map 3:

Outdoor Pools

- 1 Borden
- 2 Fred Broadstock
- 3 Mill Creek
- 4 Oliver
- 5 Queen Elizabeth (Closed)



2.3. Age and Operation of Existing Outdoor Aquatic Amenities

The City has a long association with spray decks, spray parks, wading pools and outdoor pools. Aging infrastructure, lack of significant investment, and changing health regulations have spurred interest in re-examining opportunities for new outdoor aquatic investment. The current inventory has not kept pace with Edmonton's rapid population and residential growth. A general consensus in reviewing the City's inventory of outdoor aquatic facilities is the recognition that "we can do better". The limitations of our current sites are largely reflective of an aging infrastructure with outdated designs and few amenities. The research on service trends and design innovation provide direction for more interactive opportunities and updated amenities that appeal to all age groups.

2.3.1. Spray Parks and Spray Decks

Edmonton's three existing spray parks are in suburban locations at Castledowns Park (Dunluce), Mill Woods Park, and G. Edmund Kelly Park (Kilkenny). Two community groups have plans underway for new spray parks in Jackie Parker Park in Mill Woods and Callingwood District Park in West Edmonton. Compared to neighbourhood level amenities, spray parks are generally larger and have more amenities that meet district level needs. These spray parks are more than 10 years old and have had minimal or no significant repairs to the larger aquatic decks or pads, spray jets and related water features.



Edmonton's spray decks are generally located in the more mature areas of the city. More spray decks will be created over the next few years as a result of conversions from neighbourhood level wading pools. With many of these water amenities aging and requiring rehabilitation, and the need to meet mandated provincial health and safety standards, the City began a program in 2005 to convert wading pools to spray decks. Communities work with the City in the needs assessment and design phases, and contribute to the cost of enhanced amenities. Spray decks offer shallow water experiences for young children and have been embraced in Edmonton's communities. Aquatic play opportunities can be varied considerably with the number and location of water jets. Compared to wading pools, spray decks are operated by timing and electronic start up/shut down systems and do not require site supervision or chlorination. Numerous community leagues have partnered with the City to support the operation of neighbourhood level spray decks.

2.3.2. Wading Pools

Most of Edmonton's wading pools are more than 35 years old and have had minimal or no significant repairs. The current inventory of 33 wading pools is clustered in the mature areas of the city. Many of the City's older wading pools have been closed for years due to the condition of the infrastructure and in response to staffing shortages, rising water costs, lack of community partners and more stringent public health regulations that limit the use of standing water.

Until some wading pools can be converted to spray parks, some communities have opted to retain their pools temporarily through a manual chlorination process. Generally, all neighbourhood wading pools will need to be evaluated to determine how they can meet the new health standards and respond to community needs. Communities interested in retaining their wading pool will require a feasibility study of the site.



The City's Capital Budget provides funds to convert wading pools to spray decks over 2005 to 2011. Current costs are \$185,000 per site. The program provides for about 4-5 sites to be converted per year with spray heads placed over the water sources to develop new water play features. However, with cost escalations, there is a shortfall in funding the conversion of the remaining sites within the original budgeted amount. Costs will be higher for communities wishing to retain and rehabilitate a neighbourhood wading pool and there are operating considerations.

2.3.3. Outdoor Pools

Edmonton's outdoor pools are clustered in the mature areas of the city. The first generation of pools include Queen Elizabeth, built in 1922; Oliver, built in 1923; and Borden Park, built in 1925. Mill Creek Pool was built in 1952. Fred Broadstock Pool, built in 1968, is the City's newest at 39 years old. Queen Elizabeth Pool is currently closed due to a major infrastructure failure, a crack in the pool basin.

Pool designs are typical of their day, with rectangular tanks and few amenities. Edmonton's outdoor pools are at the end of their life expectancy in terms of buildings and system integrity. Major system failures are experienced at all outdoor pool facilities. The City's four operating outdoor pools offer public swim times and a variety of water-based activities, including preschool aquatics, Red Cross Water Safety and Royal Life Saving Society Programs. Hours of operation vary by location and are established in a private operator contract. All outdoor pools are identified in the Long Range Financial Plan for funded and unfunded rehabilitation. Master Plan processes are underway for the Oliver Park and Borden Park sites that will consider the full range of park and recreation opportunities.



2.4. Demographic Analysis and Population Forecasts

The City of Edmonton is one of the fastest growing urban municipalities in the nation and is experiencing a much higher rate of growth than was projected in the Recreation Facility Master Plan, adopted in 2004. Edmonton's current population is over 722,000 people.

In the coming years, the City forecasts that suburban areas will experience the greatest amount of population growth, including the southeast (The Meadows, Ellerslie, Ellerslie East), west (Lewis Farms, The Grange, Cameron Heights) and northeast (Clareview, Pilot Sound). A modest increase in the population of north central Edmonton is forecast over the next 25 years, linked to expected increases in the residential population of the downtown core and higher density



infill redevelopment. The most significant demographic change to occur over the next two decades is the aging of Edmonton's population. Factors contributing to this are the aging baby-boom generation, increasing life expectancy, and lower fertility rates. The average age of Edmontonians is estimated to increase from 36 years to over 42 years by 2030. While the total population of the city is projected to increase 19% by 2030, the number of people between the ages of 65 and 84 is projected to increase by up to 129%.



2.5. Aquatic Trends Shaping Service Delivery

The analysis of trends is a critical factor in parks and recreation planning. Much has changed since the 1960s when the City of Edmonton built its last outdoor pool. Landscape designers and environmental psychologists studying human response to outdoor environments have noted that, on average, people prefer landscapes with water, over those without it. Getting outdoors to watch reflections on the water, to splash at the spray deck, or to take a dip in a pool, reflects the need to experience a variety of elements. The natural environment keeps spirits and bodies healthy, and the innovative thinking that is captured in the Strategy bears this in mind.



An understanding of the practices of other municipalities and new aquatic designs help anticipate user needs and changing expectations for outdoor aquatic amenities and facilities. To supplement the information presented here, Appendix 1 contains a summary of key trends shaping outdoor aquatic service delivery. Appendix 2 summarizes several benefits of outdoor aquatics and Appendix 3 matches outdoor aquatic amenities to the age of user groups.

2.5.1. Awareness and Attendance

According to a City of Edmonton 2006 survey, people who visit outdoor pools do so frequently and the level of awareness about outdoor pools is high. The vast majority (95%) of visitors to outdoor pools do not live close to the facility but are aware of at least one outdoor pool, wading pool or spray deck in Edmonton. Half of the wading pool respondents live close to the facility, whereas 63% of spray deck respondents live in the same postal code zone.

The profile of demographics and other characteristics of visitors to outdoor aquatic facilities vary according to the type of facility. Spray deck visitors were predominately female and 81% were 25-44 years of age. The average party size at spray decks was 3.3 people. Wading pool visitors were also mainly female (87%), with 44% of them in the 35-44 age group. The average party size for wading pools was 6.5 people and almost all (96%) had children in their party. Most visitors to outdoor pools were females, with the vast majority (85%) under 45 years of age, with a large proportion in the 18-24 age range (41%). The average party size was 2.5 people at outdoor pools. Most visitors to the City Hall Plaza Pool lived in the city (98%) but did not live close to the facility. Most visitors were female (76%) and the majority (87%) had children in their party. The average party size was 5.1 people.

2.5.2. Importance of Outdoor Amenities

Those who participated in the onsite user survey perceive spray decks, spray parks and outdoor pools as basic community amenities, rather than a luxury. Outdoor aquatic pools, the City Hall Plaza Pool, neighbourhood wading pools and spray parks create their own community, where people interact and meet on a regular basis.

2.5.3. Quality of Facilities

The quality of facilities is one of the most important factors for motivating users to participate in outdoor aquatics. Increasing attendance is impacted by improved quality of pools and water playgrounds, a broader range of services at facilities, an increased mix and number of outdoor aquatic experiences, and improved advertising.



2.5.4. Location Planning

Users identified the location of outdoor pools, wading pools and spray parks as the key factor in choosing which site they visit. Many users, particularly casual leisure users, view swimming in a similar way to shopping or entertainment. This means outdoor aquatic facilities are best located as a part of, or close to, major destinations within the City, such as a mall, recreation facility or major transportation hub.

2.5.5. Changing Profile of Users

Requirements to upgrade aging infrastructure in mature inner city neighbourhoods will continue to increase. User profiles will include a more culturally diverse population, a growing urban Aboriginal population and an aging baby-boom generation. User profiles for outdoor aquatics in the newer suburbs will continue to see the dominance of children and families. Affordability and equity remain barriers for many citizens and is a city wide issue. Intergenerational needs will require a balance of passive and active outdoor aquatic opportunities



2.5.6. Urban Life and Use of Public Spaces

Increasing residential density, shifting demographics (increasing urban homelessness, increasing number of empty nesters, the independence of many young adults, higher divorce and separation rates) and the need for urban refuge will place greater demands and expectations on the physical footprint of public, recreation and institutional spaces. City Hall Plaza Pool, a highly popular outdoor aquatic space, helps to demonstrate the need for redevelopment of other public facilities for more contemporary aquatic experiences meeting expectations for more outdoor entertainment, fitness, play and enriched urban life at City facilities.

2.5.7. Neighbourhood Service Gaps

Currently there are 31 developing suburban neighbourhoods in the City of Edmonton which are attracting 79% of new residential development. For these residents, distances to centrally located outdoor pools and wading pools are becoming longer. The number of new neighbourhoods under development makes it challenging to determine optimal site locations and to provide suitable outdoor aquatic sites in a timely fashion. By 2010 suburban areas will have larger populations than mature areas. It is expected that demand for outdoor aquatic opportunities will intensify over the next 10 years as suburban areas grow.

2.5.8. Best in Class Experience

The best in class municipal outdoor aquatic amenities and facilities have moved away from single function outdoor lap pools to achieve the following objectives.

- Reducing operating deficits by providing a mixture of services (e.g. sharing space with other municipal facilities, adding entertainment features).
- Providing easy access deck space; elevated areas for lounging, eating, and meeting; and adequate spectator spaces.
- Enhancing programming and services to serve a broad range of user needs.
- Operating within the context of multi-level partnerships that involve users, owners/municipalities and sport organizations.
- Moving away from wading pools to alternative low water designs that feature shallow water experiences and interactive play.
- Designing play sites with no standing water to address public health risks associated with untreated water.
- Moving towards the integration of indoor and outdoor aquatic facilities to support enhanced fitness and healthy lifestyles.
- Allocating more space for social and community gatherings and including concessions, change rooms and expanded shade areas.

Entrances to outdoor aquatic facilities are designed in a very open style to allow the public to see into the pools as soon as they arrive. Basic design for change rooms meet participant needs. Demand is high for family change room use. Party space is a key feature in many facilities and is provided inexpensively with a tent like cabana or a large umbrella or roof structure. Lazy rivers dominate many outdoor aquatic facilities. They give both young and old a place to play, to float, or to exercise. One or two water slides dominate at each facility with the childrens' play area having the largest demand.



2.5.9. Wise Use of Water Resources

Water is essential to life: basic for health, central to our economy and enjoyed for recreation and aesthetics. Water plays an important role in maintaining quality of life for Edmontonians. While competing demand for water resources is already high (e.g., drinking water, water used in fire services and pools), the shrinking supply, continued economic growth and increased population growth will impact our natural environment and quality of life.



Environmentally friendly practices encourage water conservation, including the filtration and recirculation of water. Spray parks include child activated water jets, sprays and cannons so that water is not continuously flowing.

The City has responded well to these and other issues, developing initiatives aimed at ensuring green design options for future outdoor aquatic recreation and park facilities. The City has developed initiatives to conserve or re-use water for various purposes. For example, water from Gold Bar Water Treatment

Plant will be used to irrigate parks and fill water features in Gold Bar Park and ponds in Rundle Park. As well, procedures are in place to redirect drained water from indoor swimming pools to tree-watering.

2.6. Innovation in Outdoor Aquatic Design

A review of the practices of other municipalities incorporating new aquatic designs provides a glimpse of what is possible. Many cities are creating special amenities to meet the diverse needs of citizens. Aquatic design innovation is growing and people are seeking unique experiences. Many of the following images incorporate these key themes: making water accessible to people; interactivity; using water in new and different ways; providing water features as destinations or rallying areas for events and public stages; and rethinking the way water is conserved and reused.

2.6.1. Interactive Water Playgrounds

Geysers, fountains and gadgets help define water playgrounds for children up to the age of eight. Depending on the type and number of features, the user age range is greatly increased. Interactive features appeal to older children while simple spray, bubbling, misting and dumping water features appeal to the very young. Children and their families are able to play together with interactive toys that shoot and spray water. Even the smallest child can pull levers and push buttons to control the direction and amount of water. Specially designed safety surfaces help keep children safe.

Water playgrounds have been successful throughout North America and Europe. Many water playgrounds operate without staff or volunteers. The primary weaknesses in site and landscape designs are often the shortage of supervision seating, lack of shade and scarcity of eco-friendly materials and designs. Operating costs for water playgrounds are lower than traditional wading pools with standing water.

Interactive Water Play: Appearing Rooms

- London, England
- Designer: Jeppe Hein
- The space is segmented into smaller 'rooms' by randomly rising and falling walls of water, forcing interaction between viewers and the fountain in order to escape dry.



Interactive Play: Waiiau Waterworks

- Waiiau, South Island, New Zealand
- Designer: Waiiau Waterworks in-house designers
- An interactive water park that uses water pumps and water powered machinery to create opportunities for direct and indirect interaction with water.



Water and the Senses: Sonar

- Toronto, Ontario
- Designer: S.U.R.G.E. Ingrid Bachmann, Lorainne Oades and Ana Rewakowicz
- Described by the designers as a “performance using sound, light, and water...” the temporary installation sprays a cloud of mist that creates theatrical soundscape when activated by the participants.



Water and Play: Aquarena

- Bristol, England
- Designer: William Pye
- Wading pools draw people into the spray and tiered levels add variety.



2.6.2. Family-Oriented Interactive Parks

The family-oriented water park concept continues to grow in acceptance. People like the idea of interactive aquatic activities and programs in a park-like setting that features grass, shade structures, sand play areas and natural landscapes. Family-oriented interactive water parks have become identifiable centres for communities and have helped to promote family recreation values. The keys to success revolve around the concept of intergenerational opportunities for varied abilities and activity levels.

Large Scale Interactive Park: Princess Diana Memorial Fountain in Hyde Park

- London, England
- Landscape Artist: Kathryn Gustafson
- The fountain is supplied with water from a borehole in London's rising water table.



Large Scale Interactive Park: Hydraulphone at the Ontario Science Centre

- Toronto, Ontario
- Placed in the Exploration Plaza open to the public, the hydraulphone is a hybridization of a pipe organ and fountain. The hydraulphone is 'played' by blocking the flow of one of the 57 water jets that shoot water to a matching organ pipe – thereby creating a sound.



Large Scale Interactive Park: Dundas Square Splash Fountain

- Toronto, Ontario
- Solar energy collected from special dark colored nonskid granite slabs is used to heat the water.



Large Scale Interactive Park: The International Fountain

- Seattle, Washington
- Landscape Architect: Kenichi Nakano & Associates
- Designed with interactivity with the public in mind.



Interactive Urban Places and Spaces: Gummersbach Town Square

- Gummersbach, Germany
- Landscape Architect: Atelier Dreiseitl
- The sculptural stone pieces integrated into the natural spring create a popular gathering area for the community.



Large Scale Interactive Park: Jamieson Square

- Portland, Oregon
- Landscape Architect: Peter Walker and Partners
- The fountain is a focal point of the square on hot summer days, simulating a shallow tidal pool. Water cascades from stone joints into low pools. The fountain continuously recirculates treated water and energy efficient pumps and motors keep the water flowing.



Interactive Park: Designed for Special Needs

- Toronto, Ontario
- Landscape Architect: PMA Landscape Architects
- Designed to allow accessibility for children with mobility impairment.



2.6.3. *Urban Beaches*

The sights, scents, sounds and sand from a day at the beach are packed with stress relief and overall rejuvenation. Temporary urban beaches can be developed within local park settings. View of the water is preferred but access is not always necessary.

Low Scale Interventions: Artificial Beach for Paris Plage

- Paris, France
- Each year the City of Paris temporarily transforms a 3,000 metre stretch of the Seine River into a beach-like park. It is a popular summer attraction, with over 3.8 million visitors enjoying the imported palm trees, blue lounge chairs and parasols. The sand does not reach the water's edge. It is less than 20 metres wide and the road along the edge is full of strollers, rollerbladers and cyclists. Cars are banned. This idea has inspired Berlin, Rome, Amsterdam, Copenhagen and Budapest to open similar urban beaches with great local success.



2.6.4. *Water as Urban Art*

Public art is considered to be a key component to the attractiveness and identity of a City. It demonstrates the character of communities. Municipalities are creating experiences with water that touch our senses and beautify public gathering spaces.

Water as Urban Art: The Crown Fountain at Millennium Park

- Chicago, Illinois
- Designer: Jaume Plensa
- The towers project video images from a broad social spectrum of Chicago citizens.



Interactive Fountain: Sight and Sound

- Luitpold Square, Germany
- Designer: Ulrich Westerfolke
- When the 35 glowing blue sensor stones placed across the square are set off, the water spray graphics created by the fountain's nozzles can produce a near unique water image for each visitor.



Water as Urban Art: Derby Cascade

- Marketplace in Derby, England
- Designer: William Pye
- Reproduces the feeling of walking behind a waterfall.



2.6.5. Therapy and Wellness Pools

It is anticipated that with population growth, aging residents and aging existing infrastructure, the need for pools of all types and sizes, as well as for therapeutic and rehabilitation use, will increase. European designs for outdoor therapy and wellness pools have led the way. Physical and aquatic therapists help design pools that meet the needs of recreational and institutional users. Wellness pools are often smaller than conventional pools and design options include warmer water, wall jets for hydrotherapy, floors of different depths, benches and steps for flexion exercises, and pool edges that are friendly for patients and staff. European designs extend use into the four seasons and are often attached to existing municipal recreation/leisure facilities.

2.6.6. Hybrid Outdoor Aquatic Facilities

The idea of incorporating slides, current channels, spray features, zero-depth entry and other water and non-water features into a pool's design has proven extremely popular for the recreational user. Leisure pools appeal to younger children and families.

These facilities attract larger crowds and people tend to come from a greater distance and stay longer. The popularity is increasing for a range of amenities, including municipal adventure water parks, water parks with splash/plunge pools, zero-depth entry and the co-location of indoor and outdoor aquatic opportunities, such as lazy rivers, hot tubs, splash decks, water slides and fitness pools.

2.6.7. All Season Opportunities

Edmonton's climate is not a barrier to all season outdoor aquatic opportunities. Studies of other cities, in warm or cold climates, indicate very similar patterns of use for outdoor water amenities. Basically, use is high from May to September, and then drops significantly from October to April. Some outdoor aquatic facilities can be adapted for the winter season, incorporating ice skating, ice climbing, icicle curtains, ice mazes or ice sculptures.

Water as All Season Urban Art: Village of Yorkville Park

- Toronto, Ontario
- Landscape Architects: Martha Schwartz / Ken Smith / David Meyer
- A rain curtain transforms into an icicle curtain in the winter.



Winter Wonderland: Ice Silos

- Cedar Falls, Iowa
- Designer: Don Briggs
- The ice silos are created by hosing down grain silos in order to create frozen walls of ice that are then safe enough for ice climbers to scale.



2.6.8. Sustainable Water Management Strategies

Opportunities to be more efficient abound. Harvesting rain water is as easy as putting a rain barrel under downspouts and using the water for interactive water play or site irrigation. Gray water harvested from sinks, showers and swimming pools can be recycled or used for site irrigation. Solar driven water pumps, water fountains and water features, like water curtains, can offer new dimensions in eco-friendly play. Alternative water playground designs allow children to pump water from collected rainwater and self-direct play opportunities in a low cost, environmentally friendly way.

Sustainable Strategies: Floating Piscine Josephine Baker

- The River Seine in Paris, France
- The Josephine Baker, a sports complex floating on the Seine in Paris, houses a lap pool with retractable roof. The pool recycles and filters water from the Seine, and the water is treated once more before being returned to the river.



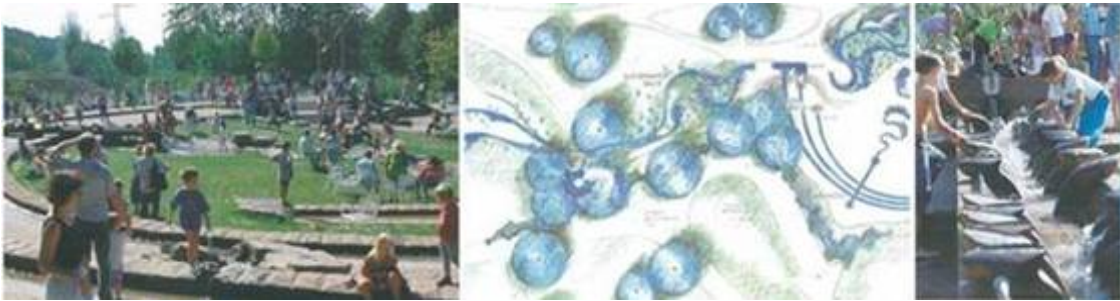
Sustainable Strategies: Heiner-Metzger Plaza

- Neu-ulm, Germany
- Landscape Architect: Atelier Dreiseitl
- A highly successful inner city renovation project, largely due to the inclusion of local high school students in the design process. The stormwater runoff collected from the plaza is used to supplement the circulation systems of the water features.



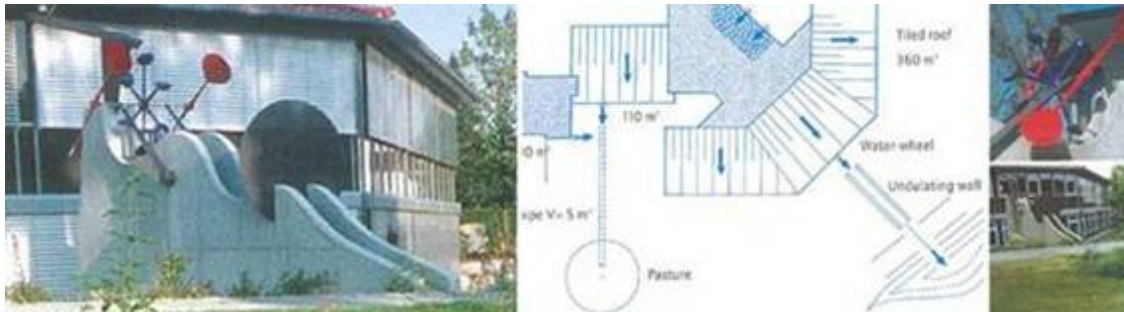
Sustainable Strategies: Educational Interactive Park

- Pforzheim, Germany
- Designer: Atelier Dreiseitl
- Intended to serve as a hands-on educational water playground, several ancient water devices are incorporated into the design. Examples include medieval well shafts and rotary pumps. The element of sustainability is introduced to the playground through the use of river-water in the water filtration cycle.



Sustainable Strategies: Wind and Water Wheel

- Owingen, Germany
- Designer: Huber and Bohler
- Rainwater falling on the roof of the school is directed to the wheel, which rotates with the wind and draining water. The water is then directed down an undulating wall to swales in the field.



2.6.9. Outdoor Furniture, Showers and Shade Structures

Architects and landscape architects have made an effort to create objects with material integrity that improve over time, respond to the human form and add to architectural space. Outdoor living furniture now reflects a joy for experimentation and versatility and provides greater options for seating, relaxing and enjoying contemplative moments. New portable, low volume and solar energy designs for outdoor showers help lower costs, and provide additional amenities to urban spaces. Showers allow for a dip in the lake or pool and the opportunity to wash away salt, silt or chlorine. Shade sails are versatile, cost effective, low maintenance and attractive while covering pools, spas and water play areas and offering shade relief. New designs can be customized for individualized sites, with potential for sails to be portable and collapsible.

2.7. Public Support for Outdoor Aquatic Amenities

The purpose of the public consultation was to identify and incorporate key conditions required to ensure future outdoor aquatic amenities and facilities are attractive and accessible and function to meet the diverse needs of the population. The scope included a community design charrette to develop innovations for the future. Focus groups with citizens and stakeholder representatives confirmed support for the key concepts presented in the Strategy.

2.7.1. Review of Strategy Direction

Banister Research and Consulting Inc. was commissioned by the City to facilitate focus groups with the general public and community stakeholders to gather feedback regarding the proposed Outdoor Aquatic Strategy. The specific objectives of the focus groups were to:

- Review the existing opportunities for outdoor aquatics in the city;
- Present the concepts and opportunities available for outdoor aquatics;
- Gauge reactions to the latest trends for aquatic service delivery;
- Gather feedback regarding the key implementation concepts presented in the strategy;
- Gauge reactions to the proposed funding options; and
- Determine overall levels of support for the strategy.

In addition, the project team held an internal session with City staff to gather their feedback on the strategy. Results from the focus groups and staff session are as follows:

Reactions to Goal of the Outdoor Aquatic Strategy

The general public respondents reacted favourably towards the goal of the Outdoor Aquatic Strategy, and believed that it was a positive step given the pressure on current City outdoor aquatic facilities. Community stakeholder respondents also reacted positively, but many inquired about the possibility of incorporating the river valley into the strategy.

Concepts and Opportunities

Carefree Recreation

Respondents from the general public, community stakeholder, and staff groups appreciated the need for “carefree recreation”. General public and community stakeholder groups did, however, comment that it would be difficult to combine this concept with “calm reflection”, and there are challenges to make opportunities appealing to all age groups. Staff respondents believed this concept was good for families, that it mirrored the demographics of the city and would appeal to a large cross-section of the public.

Calm Reflection

The majority of general public and community stakeholder respondents supported the concept of “calm reflection”. Respondents from the general public group commented that “calm reflection” could be experienced through a simple waterfall or wading pool, and that these amenities could help to fulfill the important need for public art in the City. Staff respondents, however, rated this concept least important, and some felt the concept was impractical since overall use of these amenities would be minimal compared to “carefree recreation”.

Cool Refreshment

“Cool refreshment” was viewed as being least important by the general public group, with some respondents commenting that the concept overlapped with “calm reflection”. Community stakeholder and staff respondents, however, viewed “cool refreshment” as being more important than “calm reflection”.

Existing Facilities and Opportunities

Both the general public and community stakeholder groups agreed that existing facilities do not meet Edmonton's current demand for aquatic amenities. General public respondents commented that it would be difficult to create aquatic opportunities that would simultaneously appeal to adults and children. Respondents from the community stakeholder groups perceived a lack of maintenance at existing aquatic sites, and indicated a need for updating these amenities.

Aquatic Trends

When presented with imagery and examples of different aquatic opportunities existing throughout North America and Europe, both general public and community stakeholder respondents supported interactive, year-round, and energy efficient or sustainable concepts, as well as opportunities that appealed to all age groups. Community stakeholder respondents also found the urban art concepts appealing when combined with sufficient green spaces.



Proposed Outdoor Aquatic Strategy

Respondents were then presented with the City of Edmonton's Outdoor Aquatic Strategy, which outlined key recommendations, social heart opportunities, and opportunities at the neighbourhood, district, and city-wide levels. The general public group supported the strategy, favouring the rehabilitation and retrofit of existing facilities as a low-cost approach for offering aquatic amenities, as well as additional developments of Hawrelak Park and Rundle Park.



Community stakeholder respondents believed that the Outdoor Aquatic Strategy was comprehensive, as it reflected the growth of the city and supported development at the neighbourhood level. Respondents strongly supported investment in maintaining existing facilities, including outdoor aquatic amenities in the "social heart" of communities, and the signature outdoor water venue concepts. Some respondents did, however, comment that the aquatic strategy requires a more detailed plan for support of operations and maintenance of these aquatic amenities.

Staff respondents most frequently agreed that district opportunities should include indoor/outdoor co-locations at Clareview and Meadows sites. The development of two signature water venues also received strong support, although respondents commented that operations and staffing would need to be considered.

Funding

Respondents from the general public group were neutral towards the funding concepts. They most frequently agreed that outdoor aquatics should be funded by a dedicated budget, followed by increased Neighbourhood Parks Development Program (NPDP) funding. Stakeholder groups and staff respondents demonstrated the strongest support for increases in NPDP funding, use of the existing retrofit budget and cost sharing with partners and government to fund outdoor aquatics. Some community league representatives, however, expressed concern that they would be forced to work outside their mandate and spend funds on aquatic facilities, rather than activity-based programming.

Level of Support

There was an overwhelming (95%) support for the Outdoor Aquatic Strategy, with 23% endorsing it, 25% endorsing with a minor point of contention, and 36% agreeing with reservations. Three percent, or 2 respondents, abstained, while 2 respondents disagreed with or would block the strategy.

2.7.2. On-site Surveys with Adults

Research consultants conducted a random, on-site survey of 596 visitors in the summer of 2006 at four outdoor pools, nine wading pools, three spray parks, ten spray decks, William Hawrelak Park lakeside, City Hall Plaza pool and 100 visitors to the Alberta Legislature pool. The results indicate a notable consistency across demographics:

- Only 66% of visitors to outdoor pools, 62% of visitor to wading pools and 60% to spray decks agree that City of Edmonton operates above average quality outdoor aquatic facilities and amenities.
- In comparing city quadrants, respondents at facilities or amenities in the northwest (64%) and southwest (60%) quadrants are more likely than residents in the northeast (45%) or southeast (42%) to say that their “better experience” is due to the higher prominence of spray parks or wading pools in their respective areas.
- Most visitors drive to the outdoor aquatic site.
- Main reasons for visiting outdoor aquatic facilities are enjoyment of outdoors and play and fun opportunities for children. Overall satisfaction with visits to aquatic sites is over 92%, regardless of the type of facility or amenity visited.
- Outdoor pools, the lakeside at Hawrelak Park, and the City Hall Plaza pool have a large segment of adult visitors. Their motivations for visiting are relaxation and scenery, taking a break while participating in leisure activities such as biking and running, and special events.
- Adult visitors to wading pools, spray decks and spray parks are largely 25 to 44 years of age.
- Visitors to the spray parks (47%) and wading pools (40%) are less likely to rate their experience as satisfied; the main concerns are adequacy and condition of equipment and facilities.

2.7.3. On-site Surveys with Children

An on-site survey of children at park sites throughout the city took place in August 2007. The survey was a colourful handout with images representing water playgrounds, larger water playgrounds, park water features, park lakes and ponds, rain curtain and water wall, outdoor pools/water parks, and urban beaches. At each park, the playground leader reviewed the survey with the children, ages 6-12 years old and asked them to select their favourite water amenities they would like to see in their neighbourhood park. The children also had the opportunity to draw a picture of a water activity they would like to see in their park. Over 500 children participated in the survey. The favourite choices were large water playgrounds, and outdoor pools and water parks.

Favourite Water Activities

Larger Water Playgrounds	35%
Outdoor Pools and Water Parks	31%
Rain Curtain and Water Walls	11%
Neighbourhood Water Playgrounds	8%
Beaches	8%
Park Water Features	5%
Park Lakes and Ponds	3%
Total Surveys	523

Drawings from children participating in the surveys:



2.7.4. Design Charrette

In February 2007, the project team and consultants hosted a weekend design charrette, with participants representing the public and stakeholder groups. The intent was to understand existing problems, needs and wants, and to identify issues and design opportunities around outdoor aquatics. Out of this design charrette, issues were identified so that subsequent steps in the study could describe a choice of responses to those issues. The Charrette consultants asked a number of questions about the need for improvements in Edmonton's outdoor aquatic facilities and amenities.



The following points summarize the input:

- When asked "for which categories are improvements most needed", charrette participants were clear that the highest priority were for more water fun, activities and amenity options at local outdoor aquatic facilities.
- About 70% of the participants supported more shallow water experiences in local parks and 30% preferred larger centralized facilities. Those that preferred the smaller decentralized model did so primarily because they thought outdoor pools would be more accessible.
- Participants provided a wealth of good ideas about what kinds of improvements might be considered in each of the categories of neighbourhood, district or city level park sites. Participants stressed continued need for community involvement in the planning and design process and a continued emphasis on safety, children and families. There was interest in facilities that can be used by all age groups. Design ideas surfaced that included emphasis on water parks, therapy and health, natural areas, swimming lakes and other water based recreational opportunities.
- Participants also expressed concern about the fees to use outdoor pools and the need for more specialized outdoor facilities, instead of most outdoor pools trying to be "all things to all people". They felt that outdoor aquatic pools, wading pools and splash/spray parks should try to feature one or more unique design aspects and thereby help build a network of different kinds of outdoor aquatic experiences that fit with city growth.

2.7.5. Urban Parks Management Plan Stakeholder Consultation

During development of the Urban Parks Management Plan, the needs assessment phase consulted with stakeholders regarding the future of Edmonton's parks. Stakeholders supported neighbourhood parks as community focal points for both recreational and social interaction between residents of all ages, not simply play space for young children. Stakeholders supported a variety of park experiences defined by and reflecting the unique priorities of the local neighbourhood. A wide selection of amenities were envisioned, including community gardens, natural preserves, space for social interaction, adult games areas for chess or checkers, picnic areas, formal flower gardens, and water features. Groups showed a strong bias toward more attractively designed parks that are visually stimulating and offer future Edmontonians a safe environment to enjoy a more diverse, year round outdoor experience. Specifically, future parks should consider designs that include more water features, from formal fountains to splash parks. Creating unique outdoor destinations was an underlying theme with all target stakeholders.

Through a prioritization exercise, stakeholders identified by park type the kinds of amenities that their preferred future park system would include. Not all parks were seen to need the same amenities; however, a more diverse mix was preferred. More amenities offer users more reasons to visit different parks. Overall, the priority amenities reflected a higher level of basic services in neighbourhood parks and more diverse and specialized amenities in district and city level parks. This did not preclude special and unique features in a neighbourhood park, as long as the infrastructure can effectively support the incremental traffic that some of these features might attract.

Higher priority amenities for neighbourhood parks included, among a number of elements:

- water features - natural and play space
- multi-purpose community or recreation facilities as focal points for social gatherings
- playgrounds for various ages including more creative play spaces and/or water parks

Lower priority amenities for neighbourhood parks included, among a number of elements:

- art - functional and aesthetic

When participants looked to the future, they saw more people involved in winter activities. They pictured a city that embraced winter rather than hid from it. Stakeholders challenged designers to create features that could serve two seasons such as water features that are ponds or creeks in summer and could be interesting and unique skating, skiing or walking opportunities in winter.

Section 3: An Outdoor Aquatic Strategy for Edmonton

3.1. Strategy Framework

The goal of the Outdoor Aquatic Strategy is to guide the City's involvement in providing, developing and managing outdoor aquatic amenities and facilities in Edmonton over the next ten years. The City has addressed outdoor aquatics in many reports and studies over the years. This strategy combines this past information with current directions and plans, and builds in a new way of looking at outdoor aquatics. The result is one comprehensive guiding plan.



There are several key issues that contributed to the need for an outdoor aquatic strategy. The City of Edmonton has experienced, and will continue to experience, significant population growth over the next 10 to 15 years. Recreational and community facilities will be key infrastructure requirements to meet quality of life expectations of a vibrant urban centre. Spray parks, wading pools and outdoor pools, designed to meet the swimming and leisure needs of their day, are attracting fewer attendees, are costing more to maintain and, in many cases, are deteriorating. Many require significant reinvestment. The need for initiatives to

renew aged and failing outdoor community infrastructure is evident. Edmonton's provision of outdoor aquatic opportunities has not kept pace with the residential and geographic growth of the city. Newer neighbourhoods do not have local outdoor aquatic amenities or alternative options for outdoor water recreation. The existing outdoor pools are located in the city centre and wading pools and spray decks are located predominately in mature neighbourhoods.

The time is right to find fresh, creative ways to have fun with water, and provide outdoor aquatic opportunities across the city for everyone to share. Outdoor aquatics encompass a range of possibilities from passive to active participation. Lessons, programs, fitness, play, and opportunities for improved health and wellness are found at today's outdoor aquatic facilities. Many communities are creating specific amenities to meet the diverse needs of citizens. Innovation is growing and people are seeking more unique experiences. The Outdoor Aquatic Strategy has been created in this context.



The Outdoor Aquatic Strategy seeks a balance between building, maintaining, redeveloping and replacing existing outdoor aquatic facilities to ensure sustainability and long-term viability. The Strategy builds on the existing work and reinvestment by the City of Edmonton. It pulls existing and new amenities and opportunities into a single coordinated plan to create a comprehensive road map for the future. The Strategy considers current and projected growth, integrates current recreation facility planning efforts, seeks out new partners and a new image, and builds on the City's energy of stepping forward and executing future-building change. The Strategy is based on information and research from public surveys, a design charrette and an assessment of key trends affecting future outdoor aquatic service delivery and design driven innovation.

3.2. Community Outcomes

Community outcomes are those things Edmontonians believe are important for the community's well-being. There are six desired outcomes of the Outdoor Aquatic Strategy.

Increased Choices

Edmonton will be a great place to enjoy outdoor aquatic recreation infrastructure and physical activity through a range of outdoor leisure and recreation options for increasingly diverse communities. Outdoor environments will be revitalized with opportunities to be near water, touch water and enjoy water.



Popular Destinations

Edmonton's water features will be popular destinations for residents and visitors that contribute to Council's vision of economic prosperity and Edmonton's identity. Community park and recreation hubs are vibrant community places that provide a focal point for more activity-friendly outdoor aquatic opportunities.

Engaged Communities

Residents will be actively engaged in identifying outdoor aquatic recreation and leisure opportunities suitable for their communities. The City will address barriers to participation through appropriate services and programs and develop greater participation and involvement through existing community relationships (e.g., Community Leagues, sport clubs, and cultural groups).

Connecting People

The City will build a diverse and comprehensive outdoor recreation infrastructure that supports strong communities and social networks. The system of outdoor aquatic recreation facilities and opportunities will feel distinctly Edmonton. Outdoor aquatic opportunities will be available to all Edmontonians, regardless of age, ability, discretionary income, ethnicity, gender, special needs or physical location. Strong connections will increase social cohesion and people's sense of belonging through community building and partnerships.

Healthy Lifestyles

Parks and recreation facilities increase participation in outdoor recreation and leisure activities and promote healthy lifestyles and well-being. Changing demographics means increased focus on the implications of an aging population and the consequent changes in demand for outdoor aquatic activities that support healthy lifestyles.



Environmental Considerations

Edmonton will offer outdoor aquatic facilities within accessible and safe environments. The City will encourage people to experience, appreciate and protect the natural and built environment through sustainable water management practices and balanced with sufficient green spaces.

Section 4: Recommendations for Implementing the Strategy

4.1. Building a Network of Outdoor Aquatic Amenities and Facilities

The Outdoor Aquatic Strategy provides direction for proposed new and expanded outdoor aquatic amenities and facilities. The Strategy outlines a new style of deliverables and a range of urban design options that are suitable for new sites, for redevelopment of existing sites and for co-location with multi-purpose recreation facilities. The Outdoor Aquatic Strategy balances location and choice across the city, through neighbourhood, district and city amenities and facilities. The Strategy recognizes the need to offer a level of experience most suitable to each site, such as calm reflection, cool refreshment and carefree recreation. A mix of lower and higher cost options will be considered in order to spread the opportunities within the funding available. Together these elements provide a network of services to meet a range of interests and to increase the spectrum of services and programs available to Edmontonians.



- Recommendation 1:** That the City implement a network of outdoor aquatic amenities and facilities based on a balanced range of neighbourhood, district and city level opportunities throughout the City.
- Recommendation 2:** Outdoor aquatic amenities and facilities will consider appropriate passive or active experiences suitable for each site.
- Recommendation 3:** Outdoor aquatic amenities and facilities will reflect a sustainable balance of lower and higher cost options.

4.2. Incorporating Elements of Good Design

The Outdoor Aquatic Strategy offers choices in recreation and lifestyle amenities. The new range of water amenities expands the choices available to Edmontonians and visitors. The many park, recreation and community facilities throughout the city provide focal points to bring people together for interaction, leisure, sports and entertainment – they contribute to vibrant and inclusive communities. The Outdoor Aquatic Strategy implements a new way to think, plan and build.



Design excellence is the foundation of successful, healthy communities. The following guidelines for good urban and outdoor aquatic design can offer significant benefits to the community.

- **Design on a human scale.** Compact, pedestrian-friendly spaces that allow people to walk to outdoor aquatic opportunities, services and cultural resources benefit people's health and reduce traffic congestion. Consider spaces that add humour, enjoyment and pleasure to everyday life, facilities with good visible profile and designs that incorporate simple clues to entry and component locations.
- **Encourage local character.** Distinctive identity results from the interaction of many factors, including built form, people, activity, history and a sense of place.
- **Seek connectivity with other leisure opportunities.** Physical conditions facilitate access within city, district, neighbourhood and recreational user areas as well as opportunities to attract large numbers of people.
- **Utilize density.** Consider concentration of population, recreational users, facilities and amenities in an urban area.
- **Provide choices.** Encourage mixed use developments where a variety of different play, outdoor living and wellness activities are in close proximity. Consider designs that include winter opportunities including ice skating, ice climbing, icicle walls and ice art.
- **Be adaptable.** Take into account the capacity of urban buildings, neighbourhoods and spaces to adapt to changing needs.
- **Build vibrant public places.** People need welcoming, well-defined public spaces to stimulate face-to-face interaction and collectively celebrate the joys of summer.
- **Involve participants.** Apply the public consultation process and other forms of involvement, such as a participatory design process, community surveys and workshops.
- **Protect environmental resources.** Conduct business in a way that protects and enhances the environment through reduced energy, waste and use of water resources at urban buildings, outdoor living spaces and landscapes. Use natural and/or local materials, craftsmanship and community resources. A well-designed balance of nature and development preserves natural systems, protects waterways, reduces air pollution and protects property values.

Recommendation 4: Outdoor aquatic amenities and facilities will incorporate elements of good design and wise use of water resources.

4.3. Alignment with City Plans, Policies and Practices

Several City policies and practices provide direction in the design and development of outdoor aquatic amenities and facilities. Examples include: envisionEdmonton, Focus Edmonton, the Urban Parks Management Plan, the Recreation Facility Master Plan, the Medium Term Recreation and Sports Field Plan, Edmonton's Infrastructure Strategy, Universal Design, Crime Prevention through Environmental Design, Child Friendly Edmonton, Senior Friendly Edmonton, the Neighbourhood Park Development Program, the 10-year Capital Agenda, and budget processes.

Recommendation 5: Outdoor aquatic amenities and facilities will incorporate guiding direction from Council approved plans, policies and practices.

The Urban Parks Management Plan's parkland classification system guides the City and its community development partners as they provide spaces for more focused programming for outdoor areas, as follows.

Neighbourhood Level Parks:

- **Pocket Parks:** small, dispersed sites that accommodate passive and unstructured recreation activities.
Size: 0.5 ha.
Shared-Level Development opportunities: small spray deck, public art and statuary
- **Urban Village Parks:** a park and community league site located in the approximate centre of each neighbourhood. Program will accommodate fewer sports fields but more diverse landscapes and accommodate a blend of passive and active recreation activities.
Size: 5 ha.
Shared-Level Development opportunities: spray deck, public art and statuary, sand volleyball courts, decorative fountain (requires Maintenance Agreement) constructed water feature (requires Maintenance Agreement)
- **School and Community Parks:** a school and park site located in the approximate centre of the population it serves (4,500 people). Primarily active, with some passive recreation activities.
Size: 5 ha or more.
Shared-Level Development opportunities: spray deck, public art and statuary, sand volleyball courts, decorative fountain (requires Maintenance Agreement) constructed water feature (requires Maintenance Agreement)

District Level Park:

- **District Activity Parks:** A single, large park site that accommodates high schools, major recreation centres and a massing of sports fields located in the approximate centre of an Area Structure Plan. Primarily an active indoor and outdoor recreation site.
Size: 33-35 ha.
Shared-Level Development: major water play park, public art and statuary, sand volleyball courts.

City Level Parks:

- **River Valley and Ravine Parks:** Parks located in, or adjacent to, the river valley that accommodate active and passive recreation in a natural setting. These parks draw people from across the city (e.g. Hawrelak Park, Rundle Park).
- **City Level Parks:** Unique "one-of-a-kind" parks that attract people from across the city. Parks may provide active or passive recreation opportunities.

Recommendation 6: Outdoor aquatic amenities and facilities will reflect the parkland classification system set out in the Urban Parks Management Plan.

4.4. Parkland Development/Redevelopment with Partners

Community-based, not-for-profit organizations often play an integral role in park development, construction and funding. These organizations provide amenities and programs much more quickly than the City would otherwise be able to. Communities also have access to funding sources that the City cannot access. At the neighbourhood level, one outcome of the Neighbourhood Parks Development Program (NPDP) is that it allows each community to develop the program that meets their specific needs. The program is not just about playgrounds, but can incorporate passive opportunities, small scale outdoor aquatic amenities, and visual components that appeal to the needs of the broader community. Universal designs and senior based park designs have intergenerational aspects that can support the lifecycle of neighbourhoods.

- **Base Level Construction** including grading, levelling, seeding, trees, sports fixtures and park signs is funded by taxpayers. The timeframe for base level park construction depends on the availability of funding from City Council and subdivision assembly. Park funding by developers occurs on a voluntary basis and only by exception.
- **Shared Level Construction** of playgrounds, some walkways, lighting, park furniture, etc. is cost-shared by the City and the community through the NPDP. The City contributes a total of \$100,000 per neighbourhood (\$70,000 for Phase I and \$30,000 for Phase II). The remainder is raised by the community through fundraisers, provincial grants and philanthropic organizations. The City is currently reviewing NPDP, including impacts of increasing construction costs.
- **Enhanced Level Construction** of community league facilities (e.g. community halls, ice rinks, etc.) is funded entirely by the community. The timeframe for shared and enhanced level park development depends primarily on community fundraising efforts.

Recommendation 7: Outdoor aquatic amenities and facilities will follow construction costing guidelines as set out in the Urban Parks Management Plan.

The Strategy embraces a collaborative approach with communities and organizations to ensure optimal delivery of, and access to, outdoor aquatic opportunities and services. The guiding directions set out in the Strategy will help maximize use of City amenities and resources to ensure a sound network of outdoor aquatic recreation opportunities and a high level of proactive design and facility solutions important to community well-being and the health of the community.

After neighbourhood and park sites are constructed and in use, redevelopment of parks can occur to meet evolving community needs. The City works with the community to make these changes. The process requires a community needs assessment to be conducted by the community and supported by Community Recreation Coordinators (CRCs). Based on the assessment, a program statement is developed that specifies proposed changes. The cost of the project is calculated and funding is acquired. The City provides design and project management assistance for the project. Major facility construction (e.g. arenas, pools, etc.) on District and City Parks is provided by the City or its community partners (e.g. YMCA). Facility operation can be by either party.

Recommendation 8: The development of outdoor aquatic amenities and facilities will follow the community needs assessment and other processes established in the Urban Parks Management Plan and City Administration to incorporate the needs and preferences of community stakeholders.

Innovative communication tools, such as the "H₂O-Ya!" campaign used in the development phases of this Strategy, may be applied to mobilize community stakeholders and invigorate interest in the Strategy and its goals.

Recommendation 9: The City will develop resources, such as a communication strategy and tools, to identify common issues and site opportunities for outdoor aquatic amenities and facilities.

Section 5: Recommendations for Neighbourhood Level Opportunities

5.1. Neighbourhood Level Scale

Neighbourhood level outdoor aquatic amenities will incorporate designs that use lower volumes of water, are water efficient, are less manpower intensive to supervise, and result in significant operational savings over time. The focus will be unstructured and interactive opportunities.

Recommendation 10: Development or redevelopment of neighbourhood level parks will consider directions set out in the Outdoor Aquatic Strategy, including opportunities as follows:

- water playgrounds
- spray decks
- wading pools
- water curtains and water walls
- small decorative fountains
- water art



5.2. Eligibility for NPDP Funding

The Neighbourhood Park Development Program (NPDP) is a cost-shared program that assists community leagues in developing parkland, based on defined roles and responsibilities. The Strategy recognizes the need for communities to choose those playground and outdoor aquatic elements most appropriate to their local needs.

Recommendation 11: Outdoor aquatic amenities and facilities will be eligible for Neighbourhood Park Development Program funding.

5.3. Wading Pool Rehabilitation and Conversions to Spray Decks

Alberta Health and Wellness introduced revised Swimming Pool Regulations in 2006 that have impacted wading pool operations in Edmonton. As a result of these new regulations, communities have been provided with the option of having their neighbourhood wading pool operate as either a manually chlorinated wading pool, or solely as a spray deck. In addition to the changes brought on by provincial regulations, many of Edmonton's aging wading pools have had minimal or no significant repairs. Funding for wading pool conversions has provided only a basic level of service, with an average of three wading pools retrofitted to spray decks each year. The cost of this level of retrofit is approximately \$185,000 per site, cost shared with the community. Changing expectations around water play areas for children and families need to be considered in any future water playground. The Outdoor Aquatic Strategy supports spray decks that offer shallow water experiences for young children and their families at the local neighbourhood level.

Recommendation 12: The renewal of existing spray decks and the conversion of existing wading pools to spray decks will consider directions set out in the Outdoor Aquatic Strategy for neighbourhood level outdoor aquatic opportunities, on a site by site basis.

The Outdoor Aquatic Strategy supports the value of existing neighbourhood wading pools and the opportunity for communities to choose those water features that will meet their specific needs.

Recommendation 13: Communities wishing to retain their neighbourhood wading pool will require a feasibility study of the site. Wading pools identified for retrofit will consider directions set out in the Outdoor Aquatic Strategy for neighbourhood level outdoor aquatic opportunities, on a site by site basis, and be designed to meet health regulations.

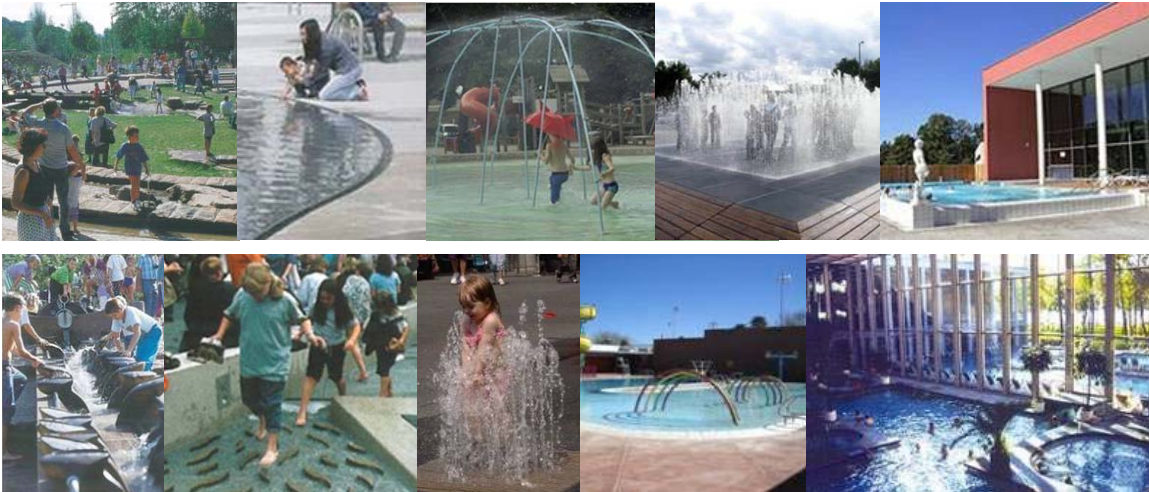
Section 6: Recommendations for District Level Opportunities

6.1. District Level Scale

There are five elements to the recommendations for outdoor aquatics at the district level: social hearts, rehabilitation of existing spray parks, new spray parks, co-location opportunities, and rehabilitation of outdoor pools. The designs in other cities provide examples of the interactive opportunities that would complement a district level facility.

Recommendation 14: Development or redevelopment of district level parks and recreation facilities will consider directions set out in the Outdoor Aquatic Strategy, including opportunities as follows:

- water playgrounds
- spray decks
- spray parks
- wading pools
- water curtains and water walls
- decorative fountains
- water art
- outdoor pools



6.2. Embracing the Social Heart of Communities

The Recreation Facility Master Plan and Urban Parks Management Plan (UPMP) recognize the value of creating vibrant places and community hubs in parks and recreation facilities. Stakeholders involved in the development of the UPMP supported more social zones and confirmed the value of parks and recreation sites as focal points for social gatherings or as opportunities for sitting, visiting or playing quiet games. This concept was further defined in the Medium Term Recreation Facility and Sports Field Plan which speaks to an urban plaza, outdoor social gathering area, or “social heart”, as a component to multi-purpose recreation facilities and district activity parks.

The “social heart” of a site could be designed for formal or informal gatherings or celebrations; events like art displays, outdoor markets or outdoor performances; or incorporated into tournament proceedings. Social Hearts provide opportunities for water art or sculpture as passive backdrops to the proceedings, or more active opportunities with interactive features. For example, Social Heart locations may result in a district level spray park, or an outdoor aquatic amenity connected to a multi-purpose recreation centre (see Sections 6.4 and 6.5). The choice of amenity will be unique and appropriate for each site and the community it serves. These features of the Social Heart support the community hub concept and create a balance between indoor and outdoor activities.



Recommendation 15: During the design and development of the following projects, the City will evaluate the feasibility of incorporating outdoor aquatic amenities as a component of a social gathering area, urban plaza, or “social heart”:

- Southwest Community Recreation Centre
- North Central Community Recreation Centre
- Coronation District Park
- Clareview District Activity Park
- Meadows Multi-purpose Facility and District Activity Park
- Grange District Activity Park
- Johnny Bright Sports Park
- Lewis Farms Multi-purpose Facility and District Activity Park

Recommendation 16: During the design and development of the following longer term multi-purpose recreation facilities identified in the Recreation Facility Master Plan, the City will evaluate the feasibility of incorporating outdoor aquatic amenities as a component of a social gathering area, urban plaza or Social Heart:

- Windermere Area Structure Plan
- Heritage Valley Area Structure Plan
- Ellerslie Area Structure Plan
- North Edmonton (Lake District/Pilot Sound)

6.3. Rehabilitation of Existing Spray Parks

Edmonton's three spray parks at Castledowns Park, Mill Woods Park and G. Edmund Kelly Park need renewal and reinvestment. Changing expectations around water play areas for children and families need to be considered in any future spray park rehabilitation.

Recommendation 17: The following district level spray parks are designated for rehabilitation opportunities:

- G. Edmund Kelly Spray Park
- Castledowns Spray Park
- Mill Woods Spray Park

6.4. New Spray Parks

For new water playgrounds, the Outdoor Aquatic Strategy supports district level spray parks to address gaps in service opportunities across the city. These spray parks may be located on Social Heart sites. Two community groups have plans underway for new spray parks in Jackie Parker Park in Mill Woods and Callingwood District Park in West Edmonton.

Recommendation 18: Five new spray parks will be developed that consider directions set out in the Outdoor Aquatic Strategy for district level outdoor aquatic opportunities, on a site by site basis.

6.5. Co-Locations with Multi-purpose Recreation Facilities

Council directed that the development of multi-purpose recreation facilities identified in the Recreation Facility Master Plan consider the incorporation of outdoor aquatic element in the planning process. The Medium Term Recreation Facility and Sports Field Plan provides direction for outdoor spray features/spray parks adjacent to the leisure pools at the future Clareview and Meadows multi-purpose recreation facilities. The Strategy also recognizes that existing multi-purpose recreation centres, such as Kinsmen Sports Centre, be considered for outdoor aquatic opportunities. This concept blends indoor and outdoor components at the same facility, expanding the program opportunities and benefiting from economies of scale with shared infrastructure and amenities. Access to outdoor opportunities would be available to patrons during warm-weather days. Design options would complement the indoor components at each site, and could include outdoor fitness pools, outdoor therapy or wellness pools, lazy rivers, hot tubs, splash decks, and water slides.

Recommendation 19: The development process for new and redeveloped multi-purpose facilities will include a feasibility assessment of including outdoor aquatic components appropriate to the site and the community it serves.

6.6. Rehabilitation of Existing Outdoor Pools

Council provided direction in 2005 regarding the redevelopment of all outdoor pools. Funding strategies are in place and planning underway for Fred Broadstock Outdoor Pool. The Borden Park Master Plan process currently underway will include a review of outdoor aquatic elements most appropriate at that location. An Oliver Park Master Plan process currently underway will consider future recreation uses of the parkland to meet local community needs.

Recommendation 20: The following projects are designated for rehabilitation opportunities:

- **Fred Broadstock Outdoor Pool**
Funding of \$5.4M in place for redevelopment in 2008.
- **Borden Park Outdoor Pool**
Consider an alternate development scenario that includes outdoor aquatic opportunities as part of the Master Plan process for the park site.
- **Oliver Outdoor Pool**
Consider an alternate development scenario that includes outdoor aquatic opportunities as part of the Master Plan process for the park site.
- **Mill Creek Outdoor Pool**
\$4.9M identified (unfunded) for 2010.
- **Queen Elizabeth Outdoor Pool (currently closed)**
Funding of \$4.1M in place for redevelopment.

Section 7: Recommendations for City Level Opportunities

7.1. City Level Scale

There are three elements to the recommendations for outdoor aquatics at the city level: rehabilitation of city level wading pools, feature amenities in river valley parks, and signature outdoor water venues. The designs in other cities provide examples of the interactive opportunities that would complement a city level facility.

Recommendation 21: Development or redevelopment of city level parks and recreation facilities will consider directions set out in the Outdoor Aquatic Strategy, including opportunities as follows:

- water playgrounds
- spray decks
- spray parks
- wading pools
- water curtains and water walls
- decorative fountains
- water art
- outdoor pools
- large scale interactive water parks
- urban beaches
- swimming lakes



7.2. Rehabilitation of City Level Wading Pools

City level wading pools require a filtration system (similar to the City Hall Plaza Pool) that will meet new provincial health regulations. The Outdoor Aquatic Strategy supports the redevelopment of the Borden Park and Kinsmen Park wading pools as they are destination sites that provide children with shallow water experiences. These sites are part of Edmonton's "priceless fun" which operates over the summer months with onsite wading pool attendants. The Borden Park wading pools will be evaluated in the context of the Master Plan process for the entire park site.

Recommendation 22: The following city-level wading pools are designated for rehabilitation opportunities:

- Borden Park Wading Pools
- Kinsmen Park Wading Pool

7.3. Feature Amenities in River Valley Parks

The Outdoor Aquatic Strategy recommends small scale "feature" outdoor aquatic amenities at Hawrelak Park and Rundle Park. Potential opportunities such as sand volleyball courts, spray decks and water playgrounds require a feasibility study to ensure they complement the existing park setting and amenities, and respect each site's aesthetics. The capacity or limitations generated by current high volume use experienced during hot summer days and during festivals and other special events should also be considered.

Development of a swimming lake at Hawrelak Park or Rundle Park is not recommended in the Strategy. Signature outdoor water venues, described in Section 7.4, are better candidates for swimming lakes opportunities in Edmonton through constructed lakes. Several directions in the Outdoor Aquatic Strategy support this recommendation. Swimming lakes require significant investment and the environmental and health considerations may be better designed and managed through a constructed lake at a new site. The central area of the city is already well serviced with the current cluster of outdoor aquatic amenities and facilities. Within the Strategy, new facilities are directed to suburban locations to address existing service gaps in new and developing communities.

Recommendation 23: That the City evaluate the feasibility of providing small scale feature outdoor aquatic amenities at Hawrelak Park and Rundle Park, respecting each site's aesthetics and capacity limitations.

7.4. Signature Outdoor Water Venues

The Outdoor Aquatic Strategy proposes the development of two signature outdoor water venues to address service gaps in new areas of south and north Edmonton. These sites may contain constructed swimming lakes, outdoor pools, water slides and whitewater paddling facilities. Water parks have become identifiable attractions for communities and have helped to promote family recreation values. These facilities attract larger crowds and people tend to come from a greater distance and stay longer. Trends indicate that popularity is increasing for a range of amenities, including municipal adventure water parks, water parks with splash/plunge pools, zero-depth entry and the co-location of indoor and outdoor aquatic opportunities, such as lazy rivers, hot tubs, splash decks, water slides, urban beaches and fitness pools. The keys to success revolve around the concept of intergenerational opportunities for varied abilities and activity levels.

An evaluation of this recommendation will include a review of potential sites, capital and operating cost information, and a community needs assessment. Facilities at this level would require viable partners, possibly with the private sector or adjacent municipalities in the region.

A constructed swimming lake could be a component of a signature outdoor water venue but would require a thorough evaluation and assessment and Council support to proceed. The experiences of the privately-owned, constructed lake in Edmonton's Summerside community would be part of this evaluation. Several issues would need to be addressed, including land and construction costs; water use and water quality; mitigating measures necessary regarding plant growth and bird controls; and staffing needs for operational elements, management, lifeguards and programming.

Recommendation 24: That the City evaluate the feasibility of developing two signature outdoor water venues with a viable partner.

Map 4 provides a summary of the key concepts and specific initiatives set out in the Outdoor Aquatic Strategy.

Key Concepts

Map 4:

Social Hearts

- 1 SW Recreation Centre
- 2 NC Recreation Centre
- 3 Coronation Park
- 4 Clareview Park
- 5 Meadows Park
- 6 The Grange Park
- 7 Johnny Bright Sports Park
- 8 Lewis Farms Park
- Future Sites

Wading Pools

- 1 Kinsmen
- 2 Borden Park
- Neighbourhood

Spray Parks

- 1 Castledowns
- 2 G Edmund Kelly
- 3 Mill Woods Park
- In Development:
- 4 Jackie Parker
- 5 Callingwood Park

Feature Amenities

- 1 Hawrelak Park
- 2 Rundle Park

Outdoor Pools

- 1 Borden
- 2 Fred Broadstock
- 3 Mill Creek
- 4 Oliver
- 5 Queen Elizabeth

Signature Venues

* Two Sites to be Determined



Section 8: Recommendations for Funding the Strategy

8.1. Capital and Operating Costs

The Outdoor Aquatic Strategy is a high-level planning document that recommends a network of outdoor aquatic amenities and facilities based on a balanced range of neighbourhood, district and city level opportunities throughout Edmonton. The Strategy sets direction over the next 10 years. Each of the recommendations will be reviewed in greater detail through planning and design studies that will confirm site specific facility components. The more detailed planning stage will provide specific projections of capital costs and operating implications. All projects within the Outdoor Aquatic Strategy are identified in the 10-year Capital Agenda. Further capital and operating impacts will be submitted through the capital and operating budget planning processes as projects are identified.

The costs noted in Table 1, High Level Capital Cost Projections, are order-of-magnitude costs of a facility if it were built in 2007 dollars. The preliminary implementation schedule supports priorities set out in the Medium Term Recreation Facility and Sports Field Plan, Council direction, and site specific development projects currently underway or scheduled to ensure coordination and sequencing with planned multi-purpose facilities and park development.

The costs of implementing the neighbourhood, district and city level recommendations in the Outdoor Aquatic Strategy are in the order of \$84 million to \$130 million. The capital costs reflect current overall costs, in 2007 dollars, not necessarily the cost to the City. In some cases, costs will be shared with partners or leveraged with other funding sources.

8.2. Funding the Outdoor Aquatic Strategy

The following recommendations provide funding strategies to implement the range of outdoor aquatic opportunities identified in the Strategy.

8.2.1. Explore a Range of Funding Sources

Public parks and recreation facilities have historically been funded by leveraging tax levy dollars with other funding sources and/or with funding from partners. The Recreation Facility Master Plan's principle of *Focused Funding* guides the City to focus municipal tax dollars and other tax based resources on basic recreation opportunities for all residents. The principle of *Shared Development* is a guideline that facility development with enhanced or specialty components will be developed through funding partnerships. The Urban Parks Management Plan sets out Individual Site Development and Operation Guidelines. For each classification of park, the guidelines set out Base-Level Development that will be funded by the City or developer, and Shared-Level Development, which is cost shared by the City and the community.

Funding

Recommendation 1: That Council direct Administration to explore the range of funding sources for outdoor aquatic amenities and facilities. Possible funding sources may include but are not limited to:

- provincial or federal grant programs;
- partnerships with not-for-profit organizations;
- partnerships with neighbouring municipalities;
- partnerships with the private sector (e.g. development levies, capital construction);
- development levies;
- tax supported debt.

8.2.2. Increased Funding for Current Wading Pool Rehabilitation Program

Current conversion of wading pools is ongoing, but costs of the mechanical and hard-surfacing are increasing at a fast pace at 15-25% per season. As well, the program is experiencing challenges with securing contractors to perform the design and construction work. The current program averages three wading pool conversions to spray decks per year, at an average cost of \$185,000 per site. Current budget projections indicate that the program requires additional funding and an extension to the timeframe to complete the needed conversions.

Funding

Recommendation 2: That Council direct Administration to bring forward a budget adjustment to the current Wading Pool Rehabilitation Program, as part of the 2009 budget process, that is sufficient to convert four wading pools per year and extends the program timeframe to 2015.

8.2.3. Increased NPDP Funding

There are opportunities for cost sharing of neighbourhood level outdoor aquatic amenities and facilities with community partners through the existing Neighbourhood Park Development Program (NPDP). The review of NPDP that is currently underway includes an assessment of funding levels. It is recommended that funding levels be increased in order to address cost escalations and provide for more innovative options at neighbourhood level water playgrounds.

Funding

Recommendation 3: That Council direct Administration to bring forward opportunities for project sharing of outdoor aquatic amenities and facilities with community partners through increased funding of the Neighbourhood Park Development Program (NPDP).

8.2.4. New Outdoor Aquatic Development Program

The creation of a new Outdoor Aquatic Development Program (OADP) is recommended as a dedicated source of funds for neighbourhood, district and city level outdoor aquatic opportunities. This program would provide secured base funding to develop additional low cost and low water volume options at neighbourhood and district park sites that would not qualify for NPDP funding or for projects that are initiated by the City to support implementation of the Outdoor Aquatic Strategy. The approach will build in flexibility as the funds can be distributed among many priorities. Access to this fund could be based on a cost shared formula with community partners or other funding sources such as provincial grants. Needs identified in the Outdoor Aquatic Strategy require \$3 million of dedicated annual funding over 10 years, for an overall cost of \$30 million.

Funding

Recommendation 4: That Council direct Administration to bring forward an Outdoor Aquatic Development Program to provided dedicated funding of \$3 million annually for outdoor aquatic amenities and facilities at neighbourhood, district and city levels. The 10-year Program will be brought forward as part of the 2009 budget process.

8.2.5. Stand Alone Project Based Funding

Several recommendations in the Outdoor Aquatic Strategy are linked to existing or proposed multi-purpose recreation centres and district activity parks. Multi-activity community hubs generate economies of scale, present opportunities for cross-programming and are inclusive to all ages, genders, interests and abilities. These and other large outdoor aquatic facilities, such as the City level signature outdoor water venues, will be brought forward through the capital budget process as stand alone projects. Partnership opportunities and obtaining other sources of funding will be a key requirement for all projects.

Funding

Recommendation 5: Stand alone project profiles for major district and city level outdoor aquatic facilities will be brought forward as stand alone project profiles through the annual capital budget process.

8.2.6. Operational Funding for Water Play Opportunities

Many of the leisure and recreation opportunities provided at Edmonton's neighbourhood spray decks, spray parks and wading pools are provided to citizens free of charge. Playground leaders are onsite to deliver summer playground and wading pool drop-in programs that are open to any child wishing to participate. The City places a high value on the benefits of unstructured and interactive outdoor play. The following funding recommendations address the need for new operating dollars to implement the program and service opportunities provided by the new and rehabilitated outdoor aquatic amenities and facilities outlined in the Outdoor Aquatic Strategy.

Funding

Recommendation 6: That Council direct Administration to bring forward a new Service Package for a dedicated position to champion the directions set out in the Outdoor Aquatic Strategy, with funding proposed at \$120,000, to be brought forward as part of the 2009 budget process.

Funding

Recommendation 7: That Council direct Administration to conduct a cost benefit analysis of providing outdoor aquatic opportunities at outdoor pools free of charge to citizens and return to Council with recommendations prior to the 2009 budget review.

Edmonton's existing outdoor aquatic infrastructure provides water fun predominately within central and older neighbourhoods. To create the opportunity for water play in newer and emerging neighbourhoods, where more children and families are found, a funding strategy is proposed to develop low-cost, mobile outdoor aquatic opportunities through use of water toys and games, portable water slides, fun with a fire truck or hydrant. These could also be available for community special events throughout the City.

Funding

Recommendation 8: That Council direct Administration to bring forward a new Service Package for Mobile Outdoor Water Play Opportunities, with funding proposed at \$100,000, to be brought forward as part of the 2009 budget process.

Table 1 – High Level Capital Cost Projections					
Capital	Rehab or New	Potential Sites	Cost per Site \$millions 2007 Dollars	Total Cost \$millions 2007 Dollars	Funding Strategy
Neighbourhood Level					
New Water Playgrounds	New	15	Part of current review of NPDP		Increase NPDP funding
Wading Pool Upgrades or Conversions to Spray Parks	Rehab	30	\$0.2	\$6.0	Increase Wading Pool Rehabilitation funding
District Level					
Social Hearts	New	9	\$1.0 - \$2.0	\$9.0 - \$18.0	OADP*
Rehabilitation of Existing Spray Parks	Rehab	3	\$0.5 - \$1.2	\$1.5 - \$3.6	General Financing with Partners
New Spray Parks	New	5	\$1.2	\$6.0	OADP* with Partners
Co-locations with Multi-purpose Recreation Facilities	New	3	\$0.5	\$1.5	OADP* for Outdoor Elements
Rehabilitation of Existing Outdoor Pools Enhancements to Existing Outdoor Pools	Rehab	5	\$5.0 \$2.0 - \$3.0	\$25.0 - \$40.0	General Financing with Partners
City Level					
Rehabilitation of Kinsmen Park and Borden Park Wading Pools	Rehab	2	\$0.75 - \$1.0	\$1.5 - \$2.0	Wading Pool Rehabilitation
Feature Amenities at Hawrelak Park and Rundle Park	New	2	\$1.5	\$3.0	OADP*
Signature Outdoor Water Venues	New	2	\$15.0 - \$25.0	\$30.0 - \$50.0	General Financing with Partners
Total Range of Capital Cost				\$84 - \$130	

Assumption: Order of Magnitude Costs - +/- 50%

***OADP: Proposed new Outdoor Aquatic Development Program**

Breakout of Costs for Rehabilitation:	\$34 - \$52	40%
Breakout of Cost for New Growth:	\$50 - \$78	60%

Section 9: Appendices

Appendix 1 - Key Trends Shaping Outdoor Aquatic Service Delivery

Appendix 2 - Benefits of Outdoor Aquatics

Appendix 3 - Matching Outdoor Aquatic Amenities to Age of User Groups

9.1. Appendix 1 - Key Trends Shaping Outdoor Aquatic Service Delivery

Category	Trend / Subject Area	Description / Implications
Socio-demographic	Aging Population	<ul style="list-style-type: none"> Increased demand for seniors programming and spaces to accommodate their needs. An aging population in Edmonton - almost 100,000 by 2011, increase of almost 27%.
	Social Change	<ul style="list-style-type: none"> Recreation has become a tool for social change, for example: reduce crime, break down ethnic divisions, creating a sense of community, etc.
	Ethnicity	<ul style="list-style-type: none"> Growing, diverse population may lead to a demand for new sports/activities and the need for increased sensitivity to how current facilities are used.
	Economic Disparity	<ul style="list-style-type: none"> Income is a significant barrier to participation.
	Population Growth	<ul style="list-style-type: none"> Population of Edmonton continues to increase, putting pressure on existing facilities and increasing demand. There is an increase in net migration.
	Tourism	<ul style="list-style-type: none"> Balancing and /or prioritizing local needs with regional needs and impact on economy.
Playgrounds, Splashgrounds Design Trends	Low Volume Water Experiences	<ul style="list-style-type: none"> Outdoor leisure facilities using more sustainable materials and eco friendly designs. Newer park designs include water canals, water curtains and splash parks within urban plazas.
Family Pool Design Trends	Youth and Family Friendly Designs	<ul style="list-style-type: none"> Families are looking for more interactive play and splashing opportunities for the whole family.
Therapy and Wellness Design Trends	New Additions	<ul style="list-style-type: none"> Aging population will look for more therapy and wellness programming at local facilities. Adults looking for more aquatic environments for walking, reflecting, interacting with others.
Hybrid Outdoor Aquatic Facilities Design Trends	Multi Use Facilities	<ul style="list-style-type: none"> There are opportunities to balance leisure oriented aquatics and possible integration with arts, urban plazas, and water landscapes and other non-exercise related activities.
Urban Beaches, Outdoor Design and Living Space Trends	New Features and Amenities	<ul style="list-style-type: none"> Increased demands for wading, swimming and beach play. Younger people are looking for more summer fun locations.
Participation	Importance of Being Healthy	<ul style="list-style-type: none"> More importance is being placed on recreation and physical activity as part of a healthy lifestyle. Lap swimming may increase in popularity as the population ages and becomes more aware of health benefits of physical activity. Obesity is a problem of epidemic proportions in the developed world.
	Adult Activity Patterns	<ul style="list-style-type: none"> Adults are more active than they were 10 to 20 years ago; as they age, active adults will become active seniors.
	Popularity of Physical Recreation Activities	<ul style="list-style-type: none"> Increased demand for unstructured and individual activities in Edmonton. Swimming and walking are the most popular activity for Edmontonians. Paddling sports are growing in popularity.
	Children and Youth	<ul style="list-style-type: none"> Younger people will look for more extreme aquatic recreation activities. Young people will represent more diverse ethnic cultures.
	Declining Sport Participation	<ul style="list-style-type: none"> Cost of admission fees, equipment, material and supplies are factors. Recreational facilities or areas are overcrowded or poorly kept/maintained.

Category	Trend / Subject Area	Description / Implications
Delivery System	Volunteerism	<ul style="list-style-type: none"> ▪ Volunteers continue to be important. ▪ Increased support for voluntary organizations is needed.
	Access	<ul style="list-style-type: none"> ▪ Some population groups will actively seek more equitable access: women, people with disabilities, etc. ▪ Safe and convenient facilities will be important.
	Facilities Planning	<ul style="list-style-type: none"> ▪ Emphasis on market-driven standards. ▪ Emphasis on one-stop multi-purpose and multi-generational facilities. ▪ Increased activity among females and seniors has implications on facility design.
	Programming	<ul style="list-style-type: none"> ▪ Low cost, spontaneous, individual and less structured activities are becoming more popular.
	Role of Government	<ul style="list-style-type: none"> ▪ Government policies will promote more physical activity.
	User Fees	<ul style="list-style-type: none"> ▪ Subsidy should be based on ability to pay.
	Aging Infrastructure	<ul style="list-style-type: none"> ▪ Many aquatic facilities are more than 40 years old, needing regular maintenance or significant renovation and are not as energy efficient or flexible as today's designs.
	Partnerships	<ul style="list-style-type: none"> ▪ Greater need for creative arrangements with other providers. ▪ Essential to develop partnerships with many facets of the community including immigrant groups, community leagues, etc.

9.2. Appendix 2 - Benefits of Outdoor Aquatics

The following chart illustrates the many benefits of outdoor aquatic facilities and programs.

Individual Physical Benefits	Community Benefits of Aquatic Facilities
<ul style="list-style-type: none"> • improves flexibility, muscular endurance, strength and balance • stimulates circulation • creates muscle tone • rehabilitates under-used or healing muscles (e.g., aquatic therapy) • improves ability to control and maintain a healthy weight • helps combat the aging process • enables workouts to be tailored to fit the needs of the individual • provides low impact environment...the water makes the body almost weightless, greatly diminishing impact on joints • enables a great cardiovascular workout • uses almost all the major muscle groups and places a vigorous demand on the heart and lungs 	<ul style="list-style-type: none"> • wholesome, affordable family entertainment • family get-togethers • instructional classes • place for recreation • joy of playing • place to relax • venue to watch organized sport • revenue • tourism booster
Individual Social Benefits	Community Benefits of Aquatic Programs
<ul style="list-style-type: none"> • getting to know people, group participation • interaction between adults and kids • community awareness • lots of laughs and fun • a great workout • friendships created through regular visits or programs • enjoyable, even when working hard • safe for all ages, at all fitness levels 	<ul style="list-style-type: none"> • Swimming is a skill for life! • Swimming lessons teach safety awareness, which may prevent the loss of life. Supervision is still required but being proficient in the water by teaching skills and safety is a primary benefit of quality swim lessons. • For some disabled and elderly persons, swimming gives a sense of freedom as they can freely move around in the water and be upright in a standing position.
Individual Psychological Benefits	Community Benefits of Outdoor Aquatic Facilities
<ul style="list-style-type: none"> • positive attitude, since one notices oneself feeling good after workouts • heightened sense of well-being, increased energy level • reduced stress, soothes the mind and body 	<ul style="list-style-type: none"> • wonderful entertainment for summer outdoor activities • affordable summertime fun • visitors from across the City and other communities
Benefits to Youth	Benefits Identified by Non-users
<ul style="list-style-type: none"> • increased self-esteem through the development of aquatic skills • development of healthy lifestyle choices • participation in competitive aquatic programs that help youth set high expectations for achievement • hours of constructive use of time 	<ul style="list-style-type: none"> • availability • children are occupied • community awareness • provides kids a place to go • feeling good because of being there • exercise, fitness and conditioning • good for kids • kids' enjoyment

9.3. Appendix 3 - Matching Outdoor Aquatic Amenities to Age of User Groups

The following chart illustrates the importance of disaggregating Active Aquatic Users and Guests in future facility planning and redesign efforts.

Age	Activity	Typical Outdoor Components
0-3 years	<ul style="list-style-type: none"> free play - unstructured water fun and play 	<ul style="list-style-type: none"> water spray pads shallow water
4-7 years	<ul style="list-style-type: none"> free play and interactive play aquatic entertainment learning-teaching pool 	<ul style="list-style-type: none"> water spray grounds shallow water interactive play structures sand play outdoor pools
8-11 years	<ul style="list-style-type: none"> learning-teaching pool aquatic entertainment interactive water play 	<ul style="list-style-type: none"> lily pads significant play structures full-size water slides, hydro slides open water lazy river wave pools
12-16 years	<ul style="list-style-type: none"> interactive water play aquatic entertainment beach activities/sports 	<ul style="list-style-type: none"> larger waterslides open water diving lazy rivers gathering places sand volleyball
17-22 years	<ul style="list-style-type: none"> aquatic adventure/entertainment beach activities group activities/team sports 	<ul style="list-style-type: none"> own space place to be seen extreme thrill flow rider climbing walls sand volleyball urban beaches
23-40 years	<ul style="list-style-type: none"> individual and family fitness and health beach activities/sports 	<ul style="list-style-type: none"> play pools with children, outdoor pools open water (parents with children) spa lap pools, lazy rivers urban beaches
40+ years	<ul style="list-style-type: none"> individual and family fitness pursuits and health beach activities/sports rehabilitation and wellness 	<ul style="list-style-type: none"> aquatic environments for walking, reflecting, interacting with others open water lap pools, lazy rivers play pool (parents with children) urban beach
65+ years	<ul style="list-style-type: none"> individual fitness pursuits and health rehabilitation and wellness 	<ul style="list-style-type: none"> aquatic environments for walking, reflecting, interacting with others open water lap pools, lazy rivers

