





Existing Facilities

There are currently seven beach restroom facilities; five of which were constructed at the same time and two that were constructed separately and serve multiple purposes. The five similar facilities are at Lighthouse Beach, Clark Street Beach, Dawes Park (Greenwood Street Beach), Eliot Park (Lee Street Beach) and South Boulevard Beach. The additional two are the Lagoon Building and Dempster Street Boathouse (Burnham Shores Park).

The five similar facilities constructed in 1978 were designed with the same plan. The buildings consist of toilet rooms and a small storage room for staff and lifeguards. An exterior shower and drinking fountain are mounted on the exterior wall. The buildings are of concrete block construction clad with random coursed lannon stone at the corners and wood wide board siding. The roof structure is concrete. Variations to the exterior were designed to accommodate two dissimilar site conditions. At Lighthouse Beach, the facility is tucked into the grade with an observation deck on the roof. While the building's appearance is simple concrete, the siting limits its impact on the adjacent Landmark Art Center Building. The South Boulevard facility sited below the grade of Sheridan Road has a hipped roof. The other three facilities have a flat roof design.

All of these facilities are accessible if the exterior doors to the restrooms are kept open. While this works during summer months, the required clearances for accessibility are not met if the buildings are operated in colder months with the doors closed. Additionally, these facilities were not designed for extended season use or year round use and do not have heating. Consequently the systems need to be drained each year.

Because the buildings are located outside the beach area, beach patrons are required to leave the beach to use the restrooms and then to re-enter. This congests beach admission areas. Also, several of the facilities are not located at planned beach entrances and as a result lifeguards and staff do not have convenient storage or support facilities.



Given the age and deficiencies of the buildings, it is recommended that they be renovated or replaced. Renovation is appropriate for those facilities where the location and design is appropriate, including Lighthouse Beach, Lagoon Building and Boathouse Building. New facilities should be constructed to replace those that are not in ideal locations, including Clark Street Beach, Dawes Park (Greenwood Street Beach), Eliot Park (Lee Street Beach), and South Boulevard Beach. This provides the opportunity to enhance these beach locations with facilities designed to meet the goals developed in this master plan.

Lighthouse Beach will require renovation to provide adequate storage for staff and lifeguards, and minor concessions. This expansion can be located to provide a controlled entry and a new separate building for token collection and storage. The roof deck with a new guard rail should remain.

The Lagoon Building is an Evanston Landmark and has been recently renovated and restored. It is in good condition and the toilet facilities are accessible. The exterior paths, however, are not accessible.

The Boathouse Building has an addition that includes toilet facilities. These are similar to other existing facilities in that they were designed to be open during the summer months with the primary doors held open. However, modifications to provide required clearances for accessibility will be required if the facility is to operate during colder months when the exterior doors are closed. The facility was found to be in fair to good condition and renovation is recommended.

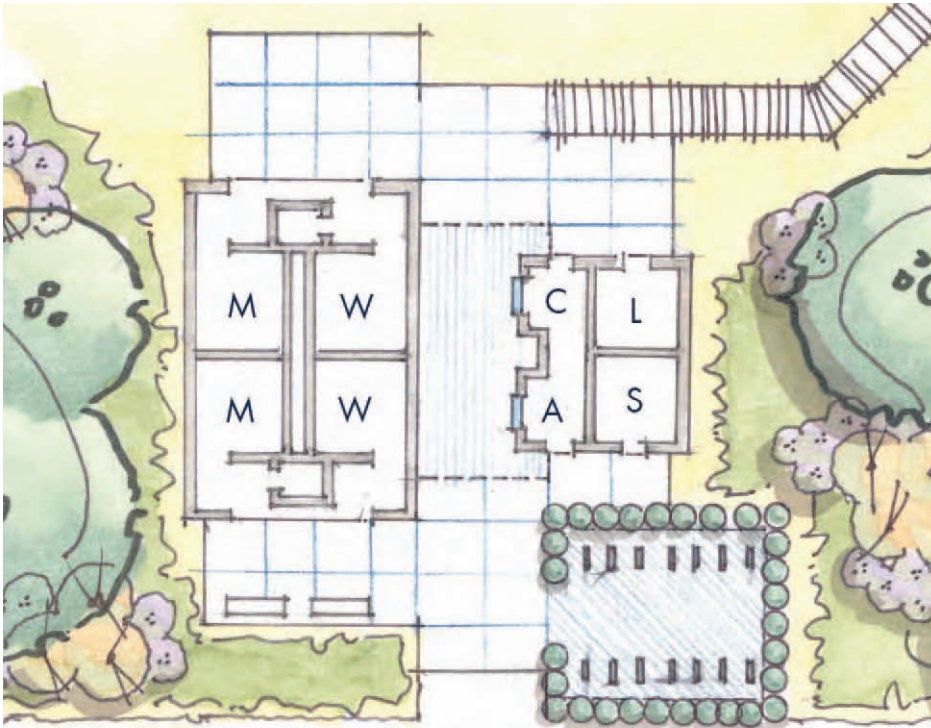


Image 1: conceptual plan view of new beach house facility

Concept Facility Prototype

A conceptual prototype for a new lakefront facility has been developed in this master plan to replace four of the existing facilities discussed above. The other three existing facilities would be renovated on an individual basis.

Facility Program

The facility is to provide toilet facilities to both beach users and park users with toilet rooms and drinking fountains available to both sides of each beach entry point. A shower facility is to be provided for beach users, located so as not to interfere with toilet room access. Additionally each facility is to provide space for staff to check in beach patrons, lifeguard storage and locker space, general storage space, space for one vending machine and a small concession.

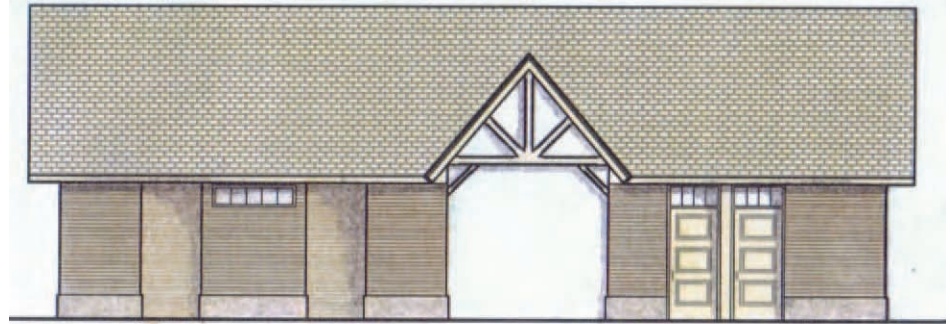
The toilet facilities are to be heated and not require a system shut down, which will allow the option of extending the restroom hours to all seasons. The facilities are to be well illuminated, with a lighting design sensitive to both dark sky and security concerns.

The facilities are to be universally accessible, with toilet rooms, service counters, drinking fountains, and path access designed to meet the requirements of ADA and local codes.

The facilities, new or renovated, are to meet all applicable city building codes, including the Evanston energy code, as well as state and federal requirements including accessibility requirements.

Design Approach

Each lakefront facility is to serve as a beach entry point and is to architecturally signify a gateway to the beach. The architectural design of the facility is to be appropriate to the lakefront aesthetic relying on the natural setting and historic park architecture for inspiration. Exterior materials are to be sustainable and



appropriate to the character of the lakefront, such as stone, brick masonry, and wood. Materials will be selected for their durability and ease of maintenance and as part of the overall cohesive, design scheme for the lakefront furnishings. The facility design should result in buildings that enhance the lakefront experience without overwhelming it.

This master plan has considered two options for the architectural style of the lakefront facility. One prototype takes cues from the existing style of the Lagoon facility with its pitched roof, wood decorative features and brick decoratively laid in the Tudor revival style. The second option is distinctly contemporary, responding to the park and lakefront with a restrained prototype including natural materials and a vegetated roof system that minimizes stormwater impacts and allows for a building of reduced height and less visual mass.

Sustainable Design

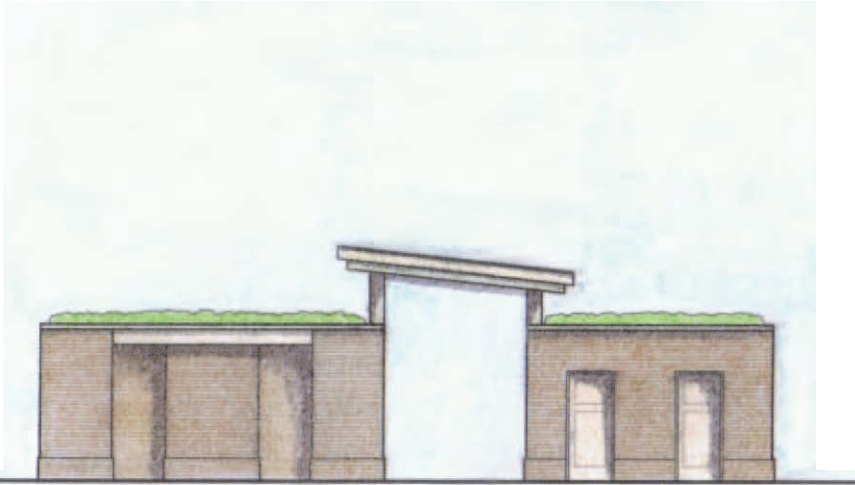
New and renovated facilities are to incorporate sustainable design strategies, and be constructed and operated utilizing techniques that further reduce their environmental impact. In addition to meeting the requirements of the Evanston Energy Code, facilities will be designed to meet established 'green' criteria. The US Green Building Council has established LEED criteria for certifying and rating sustainable buildings. The master plan goal is for the new and renovated buildings to achieve LEED Silver Certification.

A Preliminary LEED Checklist showing possible options or "points" that could be implemented to produce a LEED Prototype Facility is included. Some of these points or strategies are required and others are options from which the required points can be achieved. Some are achieved simply by their location as Evanston is an urban community providing access to public transportation and to construction materials locally (within 500 miles) produced.

Other strategies that can be incorporated to achieve a LEED Silver Certification include:

Sustainable Sites:

- Control of erosion and sedimentation during construction,
- Access to alternative transportation: public transportation, bicycle parking and no additional vehicular parking.
- Restoration of the former building sites to natural habitat.
- Retention of storm water via green roofs (also reduce heat island effect)



and bioswales near adjacent parking to reduce storm water surge created by impervious surfaces and

- Limiting light pollution.

Water Efficiency:

- Reduction of water use through the use of water efficient landscaping and plumbing fixtures selected for their reduced water needs i.e. dual flush toilets, waterless urinals, possibly composting toilets, and automatic faucet controls.

Energy & Atmosphere:

- Reduction of energy use with buildings and building systems designed to meet stricter energy performance criteria calibrated and verified via system commissioning.
- Limited use and appropriate selection of refrigerants based on limiting environmental impact.

Materials & Resources

- Reuse of materials from the demolition of the existing buildings. Any materials that can be reused will be identified and reclaimed such as the lannon stone. Reuse of salvaged materials from other sources may include clay tile or slate shingles.
- Materials will be appropriately classified for removal.
- Construction materials will be managed to reduce construction waste entering landfill.
- Use of new regional materials, within a 500 mile radius, and materials with a recycled content will be specified. These materials include concrete, brick, and structural glazed tile.
- Use of materials with a high recycled material content such as metal shutters at transaction windows, metal doors and frames.
- Wood from sources using environmentally responsible forest management.

Indoor Environmental Quality:

- Provide dual mode ventilation: active and passive
- Prohibit smoking,
- Use low (VOCs) emitting paints and sealants
- Use low energy light fixtures on sensors.

Innovation & Design:

- The project to be overseen by a LEED Accredited Professional and innovative in design for additional sustainable attributes will be encouraged.

LEED for New Construction v2.2 Registered Project Checklist:



LEED for New Construction v2.2 Registered Project Checklist

Project Name: Evanston Lakefront Prototype Facility
 Project Address: Evanston Lakefront

Yes	?	No		
12			Sustainable Sites	14 Points

Y							
1					Prereq 1	Construction Activity Pollution Prevention	Required
1					Credit 1	Site Selection	1
1					Credit 2	Development Density & Community Connectivity	1
					Credit 3	Brownfield Redevelopment	1
1					Credit 4.1	Alternative Transportation, Public Transportation Access	1
1					Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
					Credit 4.3	Alternative Transportation, Low-Emitting & Fuel-Efficient Vehicles	1
1					Credit 4.4	Alternative Transportation, Parking Capacity	1
1					Credit 5.1	Site Development, Protect or Restore Habitat	1
1					Credit 5.2	Site Development, Maximize Open Space	1
1					Credit 6.1	Stormwater Design, Quantity Control	1
1					Credit 6.2	Stormwater Design, Quality Control	1
1					Credit 7.1	Heat Island Effect, Non-Roof	1
1					Credit 7.2	Heat Island Effect, Roof	1
1					Credit 8	Light Pollution Reduction	1

Yes	?	No		
4			Water Efficiency	5 Points

1							
1					Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
1					Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
					Credit 2	Innovative Wastewater Technologies	1
1					Credit 3.1	Water Use Reduction, 20% Reduction	1
1					Credit 3.2	Water Use Reduction, 30% Reduction	1

7				
			Energy & Atmosphere	17 Points

Y							
Y					Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
Y					Prereq 2	Minimum Energy Performance	Required
Y					Prereq 3	Fundamental Refrigerant Management	Required

***Note for EAc1:** All LEED for New Construction projects registered after June 26th, 2007 are required to achieve at least two (2) points under EAc1.

5							
5					Credit 1	Optimize Energy Performance	1 to 10
						10.5% New Buildings or 3.5% Existing Building Renovations	1
						14% New Buildings or 7% Existing Building Renovations	2
						17.5% New Buildings or 10.5% Existing Building Renovations	3
						21% New Buildings or 14% Existing Building Renovations	4
5						24.5% New Buildings or 17.5% Existing Building Renovations	5
						28% New Buildings or 21% Existing Building Renovations	6
						31.5% New Buildings or 24.5% Existing Building Renovations	7
						35% New Buildings or 28% Existing Building Renovations	8
						38.5% New Buildings or 31.5% Existing Building Renovations	9
						42% New Buildings or 35% Existing Building Renovations	10
					Credit 2	On-Site Renewable Energy	1 to 3
						2.5% Renewable Energy	1
						7.5% Renewable Energy	2
						12.5% Renewable Energy	3
1					Credit 3	Enhanced Commissioning	1
1					Credit 4	Enhanced Refrigerant Management	1
					Credit 5	Measurement & Verification	1
					Credit 6	Green Power	1

continued...

Yes ? No

8 **Materials & Resources** **13 Points**

Y								
			Prereq 1	Storage & Collection of Recyclables	Required			
			Credit 1.1	Building Reuse , Maintain 75% of Existing Walls, Floors & Roof	1			
			Credit 1.2	Building Reuse , Maintain 95% of Existing Walls, Floors & Roof	1			
			Credit 1.3	Building Reuse , Maintain 50% of Interior Non-Structural Elements	1			
			Credit 2.1	Construction Waste Management , Divert 50% from Disposal	1			
			Credit 2.2	Construction Waste Management , Divert 75% from Disposal	1			
			Credit 3.1	Materials Reuse , 5%	1			
			Credit 3.2	Materials Reuse , 10%	1			
			Credit 4.1	Recycled Content , 10% (post-consumer + ½ pre-consumer)	1			
			Credit 4.2	Recycled Content , 20% (post-consumer + ½ pre-consumer)	1			
			Credit 5.1	Regional Materials , 10% Extracted, Processed & Manufactured Regional	1			
			Credit 5.2	Regional Materials , 20% Extracted, Processed & Manufactured Regional	1			
			Credit 6	Rapidly Renewable Materials	1			
			Credit 7	Certified Wood	1			

Yes ? No

7 **Indoor Environmental Quality** **15 Points**

Y								
			Prereq 1	Minimum IAQ Performance	Required			
			Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required			
			Credit 1	Outdoor Air Delivery Monitoring	1			
			Credit 2	Increased Ventilation	1			
			Credit 3.1	Construction IAQ Management Plan , During Construction	1			
			Credit 3.2	Construction IAQ Management Plan , Before Occupancy	1			
			Credit 4.1	Low-Emitting Materials , Adhesives & Sealants	1			
			Credit 4.2	Low-Emitting Materials , Paints & Coatings	1			
			Credit 4.3	Low-Emitting Materials , Carpet Systems	1			
			Credit 4.4	Low-Emitting Materials , Composite Wood & Agrifiber Products	1			
			Credit 5	Indoor Chemical & Pollutant Source Control	1			
			Credit 6.1	Controllability of Systems , Lighting	1			
			Credit 6.2	Controllability of Systems , Thermal Comfort	1			
			Credit 7.1	Thermal Comfort , Design	1			
			Credit 7.2	Thermal Comfort , Verification	1			
			Credit 8.1	Daylight & Views , Daylight 75% of Spaces	1			
			Credit 8.2	Daylight & Views , Views for 90% of Spaces	1			

Yes ? No

1 **Innovation & Design Process** **5 Points**

			Credit 1.1	Innovation in Design : Provide Specific Title	1			
			Credit 1.2	Innovation in Design : Provide Specific Title	1			
			Credit 1.3	Innovation in Design : Provide Specific Title	1			
			Credit 1.4	Innovation in Design : Provide Specific Title	1			
			Credit 2	LEED® Accredited Professional	1			

Yes ? No

39 **Project Totals (pre-certification estimates)** **69 Points**

Certified: 26-32 points, **Silver:** 33-38 points, **Gold:** 39-51 points, **Platinum:** 52-69 points

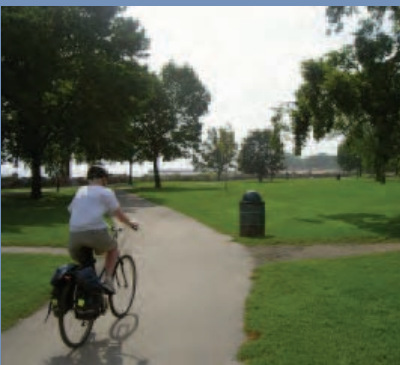
Proposed Site Furnishings

Site furnishings include elements such as benches, trash receptacles, recycling receptacles, picnic tables, drinking fountains, tables, chairs, grills, and bicycle racks. Along with signage and lighting, these elements can be combined to present a cohesive aesthetic that presents a finished and high quality park environment. While it is not necessary that every element match exactly, the goal is to create a family of furnishings that can be applied appropriately throughout the lakefront.

Within the approach of creating a cohesive family of elements is establishing some elements that are used universally throughout the lakefront, such as the picnic tables, grills, and bicycle racks. Within this family of elements for seating should be a “standard” bench and an “enhanced” bench, as well as coordinating standard and enhanced trash and recycling receptacles. The goal here is to provide standard furnishings for use throughout the park that are durable, comfortable, and reasonably priced. Enhanced furnishings are reserved for occasional use in key locations such as the Lagoon area, where the architectural character and significance of the space requires a more distinctive set of furnishings.

The quality of site furnishings selected should be carefully considered, and an analysis of full life-cycle costs may show that purchasing a higher quality furnishing with a higher initial cost may be the appropriate decision. Low cost furnishings may seem like a bargain, but if they require constant repairs and replacement, they may not be cost effective at all – not to mention the quality of experience for the park user and other potential liability concerns from damaged furnishings.

A wide range of materials is available in site furnishings, including steel, aluminum, wood, concrete, and recycled materials. The master plan proposes use of high quality steel furnishings, constructed with solid bar stock or cast iron frames. Factory applied powdercoat finishes are attractive and durable. Lighter colors absorb less heat, and are more comfortable during hot summer afternoons. Bench slat materials can be obtained in metal, wood, or recycled materials. The master plan proposes use of a high quality recycled material of sufficient thickness and rigidity to withstand heavy park use without sagging. Another appropriate selection would be wood slats obtained from sources that comply with Forest Stewardship Council (FSC) standards. FSC Certified, and associated chain-of-custody documentation, ensures that the wood used will not contribute to non-sustainable forestry practices. Dense hardwoods such as ipe are beautiful and extremely hard and durable.



Bench Name:

Plainwell

Manufacturer:

landscapeforms



Trash Receptacle Name:

Plainwell

Manufacturer:

landscapeforms



Recycle Bin Name:

Chase Park, Petosky, Scarborough

Manufacturer:

landscapeforms



Table & Chair Name:

Parc Centre

Manufacturer:

landscapeforms



Picnic Table Name:

Gretchen

Manufacturer:

landscapeforms





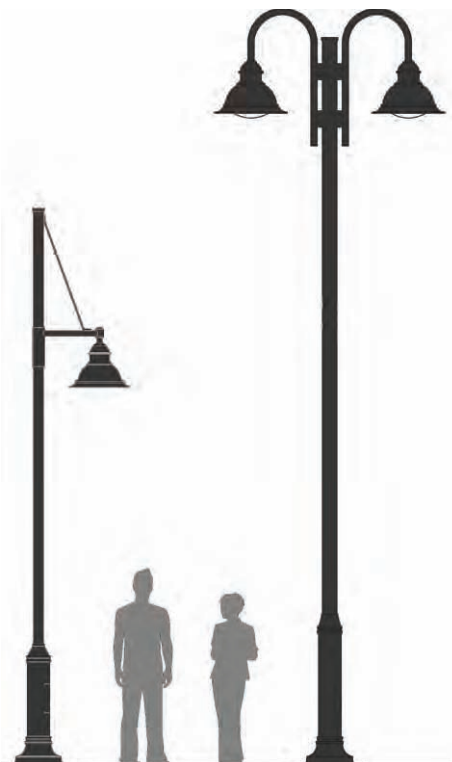
Fountain Name:
Model 440SS
Manufacturer:
Most Dependable Fountains, Inc.



Bike Rack Name:
Model 2213
Manufacturer:
Saris



BBQ Grill Name:
Model C2-36/SS B2
Manufacturer:
Pilot Rock



Light Name:
Domus
Manufacturer:
Lumec

Lighting

The selection of an appropriate lighting fixture for the lakefront parks should consider a number of factors, including lamp source, energy efficiency, maintenance, durability, light distribution, and aesthetics. The master plan proposes use of Light Emitting Diodes (LED) lamps for use in the pedestrian scale lighting throughout the lakefront parks. LED lighting is now available, and is currently one of the most energy efficient options. In addition, LED lamps are extremely long lasting, and may last up to twenty years before they need to be replaced, which significantly reduces maintenance and lifecycle costs. The light quality from LED fixtures is similar to induction or metal halide.

The fixture housing itself should be constructed of heavy gauge steel, with a factory applied powdercoat finish. Fixture seals must be similarly durable, and must last as long as the lamp life. Pedestrian scale light fixtures should be installed at a height of twelve to fifteen feet, which provides an acceptable balance of light distribution while keeping the fixture out of reach of vandals.

The light distribution characteristics most important on the lakefront will be eliminating glare, light pollution, and negative impacts to dark sky considerations outlined earlier. The lakefront parks fall into the “Lighting Zone I (LZI) – Dark” category of the lighting section ASHRAE/IESNA 90.1 standard. In order to comply with this standard for consideration of earning LEED credits for energy efficiency and control of light pollution, light fixtures within the park must not allow any light to escape above a horizontal plane at the source of the light. This will eliminate point source glare, and will ensure that all energy used to create light will result in usable light oriented towards the ground.

The proposed light fixture and pole should coordinate aesthetically with the family of site furnishings, and come in a number of sizes to allow use in different applications, such as parking lot lighting.



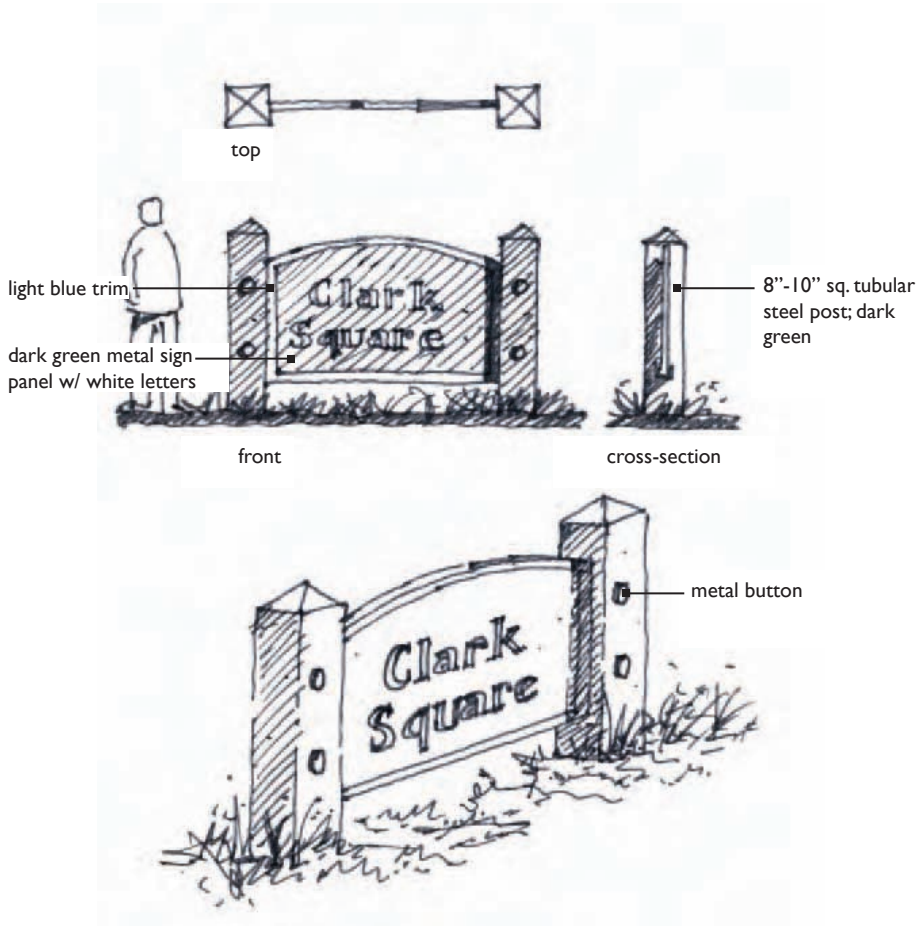
Signage

Existing Conditions

The existing signage within the lakefront parks include standard park identification signs, monument / information signs, bicycle and pedestrian path signs, and a very wide range of regulatory signs. There are several types of park identification signs, including both the older standard brown signs with yellow text and newer signs with green text and graphics on a beige panel, as well as a number of variations on the standard brown panel with more ornate fonts near the Grosse Pointe Lighthouse and a more contemporary sign at the Evanston Arts Center.

The bicycle and pedestrian path signs are small and are intended to designate paths as dedicated for bicycles versus pedestrians. Due to the lack of comprehensive dedicated paths that accommodate bicycles and pedestrians separately, these signs are generally ignored.

The most common sign type within the lakefront parks are the regulatory signs, which include general rules and regulations, warnings, site specific rules, and codes. There is no consistency of approach to this signage, and the sheer number of signs and the variety of styles and messages indicates a system of signs implemented over a long period of time, apparently as a reaction to specific incidents. The quality and condition of the existing signs varies from nearly unreadable to nearly new.



Park Identification Signage

Concept Signage

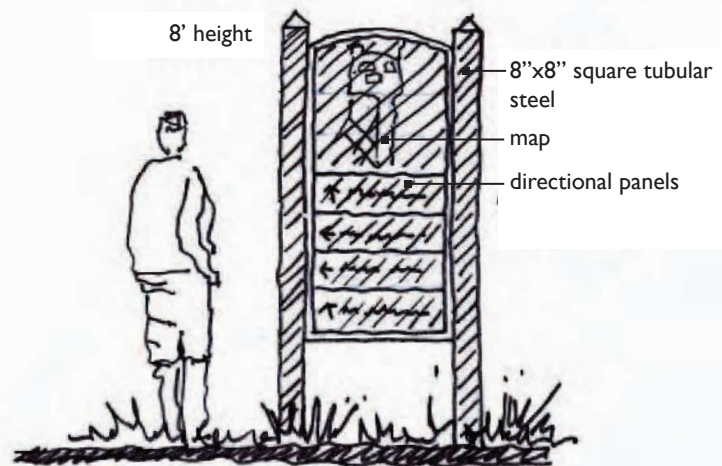
The master plan proposes a cohesive system of signs intended to provide graphic and visual consistency; clear communication of rules and regulations in a consistent, easy to read format; and directional and interpretive signage that help visitors understand the lakefront parks and their relationship to the surrounding community. The design of the signs is inspired by existing elements found along the lakefront, and materials have been selected for durability, flexibility, and cost effectiveness.

Park Identification Signs

The proposed Park Identification sign is approximately five feet high and seven feet wide, with 10" square tubular steel posts with a powder coated finish. The sign panel is made of powder coated steel held in a stiff steel frame. Signage text and graphics could be applied vinyl or silk screened. These signs would be installed to designate individual parks within the larger lakefront, which may appear to the first time visitor as a single large park. Designation of individual parks helps improve wayfinding, and increases the park users understanding of the history of the parks.



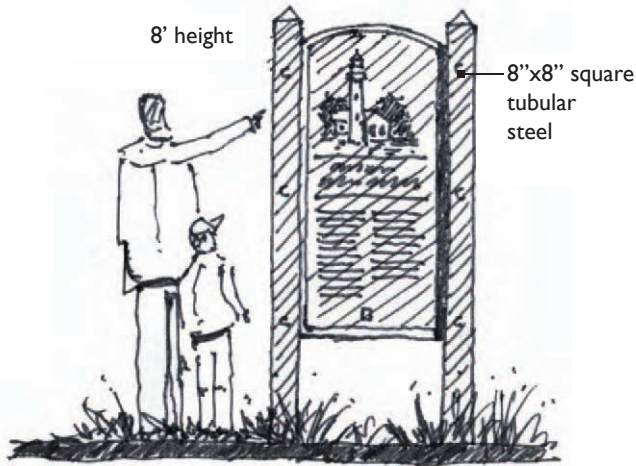
Park Directional Signage - Small



Park Directional Signage - Large

Park Directional Signs

The plan proposes two park directional signs. The larger sign includes a map of the lakefront and a number of interchangeable panels directing visitors to various destinations either within the park or the adjacent neighborhoods. These would be installed at key locations near vehicular drop-offs and places such as the Lagoon Building. Supplementing the larger signs would be smaller directional pylons located throughout the parks, along the bicycle and pedestrian paths. These would be more cost effective than the larger signs, and create less visual clutter in the landscape. These signs use similar materials as outlined above.



Park Interpretative Sign

Park Interpretive Signs

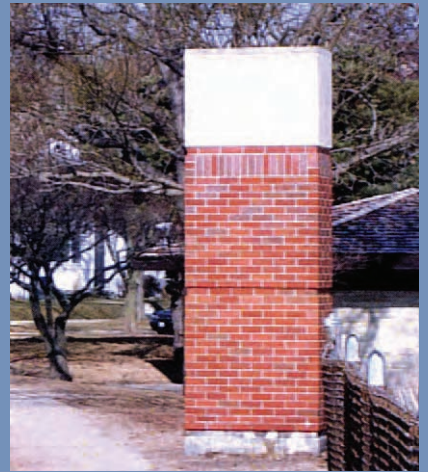
The plan proposes Park Interpretive signage to tell the story of the lakefront and Evanston’s rich history. These sign panels are intended to increase appreciation of the lakefront by telling the stories of key events, individuals, and historic land uses that may otherwise be lost.



Color Palette

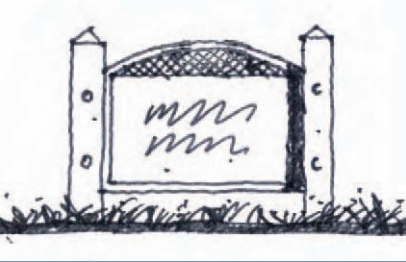
Color Palette

The color palette is drawn from the primary elements of Evanston’s lakefront - the myriad shades of green in the vegetation that make up the trees, shrubs and perennials and the blues that make up Lake Michigan.



Inspiration

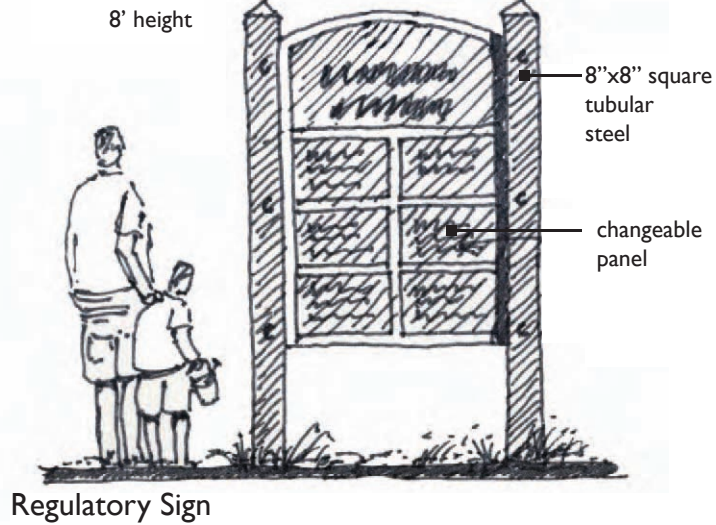
steel mesh panel



flat top



Design Alternatives



Park Regulatory Signs

The park regulatory signs are intended to gather the relevant rules, regulations, and warnings for each particular park space, and present these messages near locations where they will be prominent but create much less visual clutter. For example, one of these signs should be located near the entry to each beach, so every visitor to the beach has the opportunity to see the latest information. In addition, these signs are proposed to be provided near vehicular drop-offs, as well as at key intersections where visitors enter the park.

The most important aspect of this signage is the development of a clear, consistent message throughout the parks. The sheer number and variety of existing rules, regulations, and warning signage can be overwhelming and chaotic, resulting in visual clutter that is ignored rather than read and understood. A comprehensive evaluation of the existing signs should be undertaken, and a clear, proactive approach should be taken. The Regulatory signage panels are interchangeable, so should the need arise, new messages can be installed within the same framework, hopefully preventing the re-emergence of individual signs scattered throughout the parks.

Preliminary Cost Estimates

A number of assumptions have been made in the preparation of these preliminary cost estimates, which are based on current construction methods, best construction practices, and the combined project experience in the design and construction of similar projects in Evanston and the surrounding region. These preliminary cost estimates are to be considered as order-of-magnitude costs only, with the intended purpose of providing guidance on planning and funding future improvements to the lakefront park system.

1. Land purchase will be minimal. All of the plans prepared in the master plan are for properties either currently owned by the City of Evanston, are within existing roadway rights of way either owned by the City of Evanston or soon to be transferred to the City of Evanston.
2. A design contingency of 25% is included in the estimates, which is a typical contingency for concept level design estimates. The contingency should be viewed as part of the construction costs, and is intended to account for unknown conditions and additional design requirements as the program is refined.
3. Construction estimates for new restroom facilities include allowances for typical utilities.
4. The cost of modifying the existing shoreline protection system is dependant upon the design of a qualified coastal engineer, and could vary significantly from the unit price shown.
5. Soft costs, including architectural, engineering, financing, legal fees are excluded from this estimate.
6. The unit prices are based on 2008 construction dollars. Given the need to approach the implementation of the master plan in phases, escalation costs should be factored into the estimates at approximately 2-4% per year.

The cost estimates are organized into three sections by geographic location, including the north section, which is everything north of Northwestern University; the central section, which is everything south of Northwestern University down to Lee Street; and the south section, which are the parks from Clark Square south. Where clear boundaries exist, such as at Lighthouse Beach, Lincoln Street Overlook, and Clark Square, separate costs for individual parks are provided. The cost estimate for the central and southernmost sections are provided as single numbers due to the difficulty of separating overlapping projects. In all cases, the cost estimates are divided by construction activity.

In summary, the total construction estimate in 2008 dollars for the entire plan is approximately \$46.3 million. The cost of the northern section is estimated to be \$5.0 million, the central section is estimated to be \$29.2 million, and the southern section is estimated to be \$12.1 million. Detailed cost estimates are found in the technical appendices to this report.

Funding Strategy

Implementation of the Evanston Lakefront Master plan will necessarily harness a wide variety of funding mechanisms. The master plan will be implemented over a number of years, and the structure of future funding opportunities can not be known. Therefore, this section of the master plan documents a variety of funding sources applicable to financing public parks. Funding types summarized here include government sources, private foundations and organizations, and donations.

Government Sources

A variety of governmental funding sources may be available, including local, state, and federal funding programs. At the local level, the City of Evanston has both capital improvement and ongoing maintenance and operations budgets. One of the key benefits of having a master plan is the ability of the City of Evanston to make the most of these budgets by using the master plan as a roadmap to guide the investment of these funds towards a clear goal. Without a clear plan, it is more difficult to take advantage of smaller sources of funds to achieve small pieces of a larger goal. For example, a few small but significant areas of dune restoration have been created along the lakefront within existing operations and maintenance budgets. If these efforts can be guided by the master plan in the future, they will contribute to a larger goal.

At the state level, a variety of funding and grant sources are available through the Illinois Department of Transportation (IDOT), including the Illinois Transportation Enhancement Program (ITEP). Additional programs in support of stormwater best management practices, bicycle trails, habitat expansion, and naturalized shoreline protection are available from the Illinois Department of Natural Resources. Additional state agencies that provide a range of programs for community based conservation include Illinois Clean Energy Community Foundation Grants, Illinois Environmental Protection Agency, and the Illinois Historical Preservation Agency.

At the federal level, a range of programs are available, including The Transportation Equity Act for the 21st Century, known as Tea-21, which is the primary source of federal funding for greenways. The United States Fish and Wildlife Service provides Boating Infrastructure Grants (BIG Grants) which may be applicable to the renovation of the existing boat launch.

Private Foundations

The Illinois Association of Park Districts provides an extensive list of grant sources, including private corporations and foundations. The list includes dozens of private and corporate foundations that focus on funding a wide variety of public recreational programs and infrastructure.

Private Donations

Given the prominence of the lakefront parks within the Evanston park system, consideration should be given to creating a special donation program based on the existing City of Evanston Donations Opportunities program available from Parks / Forestry and Recreation Department.

Technical Implementation Strategies

Historic Preservation

Many areas within the Evanston lakefront are also in Evanston Historic Districts, Federal Historic Districts or both. In general, both of the reviewing bodies will be considering the appropriateness of the new construction to the character of the historic districts.

Plans for new construction within Evanston Historic Districts will be reviewed (advisory review) by the Evanston Preservation Commission for adherence to the Evanston Preservation Ordinance. Plans for new construction within National Historic Districts will be reviewed by the Illinois Historic Preservation Agency for adherence to The Secretary of the Interior's Standards for Rehabilitation.

Areas of Evanston Lakefront which are Evanston and Federal Historic Districts:

- The area from Keeney Street north to Northwestern University is both an Evanston and Federal Historic District.
- The areas from Milburn Street north to Sheridan Road is a National Register District containing Evanston Landmarks.
- The Evanston Arts Center and the Grosse Point Lighthouse are Evanston Landmarks. (The lighthouse site is also a National Historic Landmark.)
- There are also two monuments in the parks that are Local Landmarks: Patriots Flagpole Monument and the Horse Trough (Yerkes Fountain).

Universal Design

New construction will be based on the principles of universal design, which strives to provide access solutions that benefit everyone going beyond the minimum requirements stipulated by the applicable accessibility codes. Universal design includes access to the facilities and to the beaches and shoreline.

Sustainable Design

The new facilities will be designed and built to last and to be easily maintained. In addition to meeting the requirements of the Evanston Energy Code, facilities can be designed to be sustainable. The U.S. Green Building Council has established LEED (Leadership in Energy and Environmental Design) criteria for certifying sustainable buildings. It is anticipated that the new buildings will be LEED Silver rated or better. A Preliminary LEED Checklist showing possible options or "points" that could be implemented to produce a LEED Prototype Facility is included.

Permits and Approvals

New beach facilities are required to meet the city code requirements for construction:

Applicable Evanston Codes:

2003 International Building Code (IBC)

2003 International Plumbing Code

2003 International Mechanical Code

2005 National Electric Code (NFPA 70)

2003 NFPA Life Safety Code 101

2003 International Fire Code
 2003 International Energy Conservation Code
 Additional State of Illinois codes enforced by the City of Evanston:
 State of Illinois Plumbing Code
 State of Illinois Accessibility Code
 Illinois Energy Conservation Code
 Federal Accessibility Code:
 Americans with Disabilities Act 1990

Federal, State and Local Shoreline Regulations

The Coastal Zone Management Program Act (CZMA) of 1972, administered by National Oceanic and Atmospheric Administration (NOAA), provides for management of the nations coastal resources, including the Great Lakes and balances economic development with environmental conservation. The Coastal Zone Management (CZM) Program developed from the Act is a voluntary partnership with the States to protect and enhance our shores. Regulation of policies developed under the CZM are administered through existing and proposed legislation, by Federal agencies that deal with the environment and ecology such as the Environmental Protection Agency (EPA), Corps of Engineers, and United States Fish and Wildlife Service.

Illinois, under the CZMA is developing their own Coastal Management Program (ICMP). The ICMP administered by the Illinois Department of Natural Resources (IDNR), is a proposed 13 chapter document outlining everything from coastal geology, to mapped coastal zone boundaries, program implementation, erosion mitigation, to grants and Federal coordination. Programs outlined in the ICMP will be implemented through existing State land and water resource authorities, within state and federal rules and regulations. The IDNR and Illinois EPA will provide the basic jurisdictional framework that will ensure proper implementation of the ICMP policies.

The City, at this point, has no specific waterfront or shoreline regulations beyond regulations dealing with construction in flood prone areas and standard zoning codes.

Models For Lakefront Development Regulations

The Cities of Chicago and Waukegan, as well as other large municipalities on the Great Lakes such as Buffalo, New York and Toronto, Canada have addressed the problem of regulation of their own properties as well as private landholders with specific goals and policies for implementation that are aimed at the preservation and enhancement of their precious resource. Lake County, Illinois and smaller stakeholders have aimed their policies at the private landholder, as publicly held properties along the vast majority of their urban and suburban shorelines are in the minority. In some cases such as in Michigan, the State has led the way in developing tough legislation to minimize the impact of development on shoreline resources. These regulations though are aimed at specific and definable natural systems, i.e. beach, fore-dunes and sand dunes, and don't address urban or suburban shorelines except where the aforementioned are present.

Enactment of local codes and zoning laws will have the most affect on the regulation and protection of urban and suburban shoreline resources. Policies and goals should be developed by local stakeholders to define the type of language to be included in a local management plan. Topics for discussion could include:

community character, economic development, waterfront natural resources, environmental protection, and recreation and cultural resources.

Zoning / Special Use Overlay Opportunities

The use of the overlay district is a set of special development considerations adopted by a local planning commission. It does not alter the underlying zoning. The overlay simply sits on top of the existing ordinance's land use requirements, and only applies in a legally defined zone.

A shoreline protection overlay does two things:

- It maps out sensitive coastal resources.
- It requires all currently allowable land uses to take shoreline protection precautions.

The overlay uses four main tools to do this:

- A legally defined overlay zone boundary.
- Site plan review, a system that is already in place in most cases.
- Building setback, distances determined to best protect the resource.
- Vegetative buffer zones, the natural way to protect against erosion and pollution.

In Evanston, this method could easily be adapted, as a shoreline 'zone' has already been mapped by the State and is included in its Coastal Management Program. Model language templates for the creation of a district are available, as well as ordinances from other municipalities to use as a guide.

Permits and Approvals

Federal Permits

Any structure or work waterward of the Ordinary High Water Mark (OHWM) of a navigable water of the United States and/or discharge of fill or dredged material in those waters or their adjacent wetlands requires a Department of the Army Permit from the U.S. Army Corps of Engineers (USACE) under authority of Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Also, under Section 10, work landward of the OHWM of a navigable waterway requires Corps authorization if the work is expected to impact the navigable capacity of the waterway.

Under Section 10, work includes, without limitation, any dredging or disposal of dredged material, filling or other modification of a navigable water of the United States. Typical structures requiring Section 10 permits include: piers, bulkheads, marinas, ramps, intake structures, pipeline crossings, revetments, mooring structures. Typical activities requiring Section 404 permits include: Depositing of fill or dredged material in waters of the U.S. or adjacent wetlands (often referred to as grading sand or other materials from higher elevations into water-filled depressions); site development fill for residential, commercial, or recreational developments; construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs; and placement of riprap and road fills. Vegetation control methods that involve the redeposit of bottom materials incidental to mechanized land clearing and land leveling on Great Lakes bottomlands--such as plowing, discing, grading, raking, and/or dragging--constitute discharges of dredged material under the Corps Section 404 jurisdiction and as work under Section 10 jurisdiction. A Corps permit is required for any activity involving discharges of dredged material or work as described above.

The USACE Chicago District, has created a Regional Permit Program (RPP) to authorize discharges of dredged and fill material into jurisdictional waters of the United States in the Chicago area. The RPP was designed to replace the use of many of the Department of the Army Nationwide Permits (NWPs) in the six-county Chicago region, incorporating Cook, DuPage, Kane, Lake, McHenry and Will Counties. The purpose of the RPP is to provide an efficient and predictable program to evaluate projects requiring authorization under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

State Permits

Although there are five government agencies in Illinois with primary wetland regulatory authority, the USACE is considered the lead agency. The Army Corps of Engineers, Chicago District is in charge of permitting for the Evanston area.

While the USACE regulates only those activities resulting in a discharge of dredge or fill material into a wetland, the Illinois Environmental Protection Agency (IEPA) has the authority to regulate activities resulting in a discharge of any pollutant into a wetland. This authority is limited, however, to only those activities requiring a federal permit or license. Section 401 of the CWA requires all permits or licenses issued by the federal government for activities affecting waters of the United States be certified by the state in which the discharge is to occur and that the activity will comply with the water quality standards of that state. These water quality standards must be equal to or more stringent than those established in Section 303 of the CWA. The IEPA is the state agency that sets water quality standards in Illinois and therefore has the authority to certify such federal permits and licenses.

Interagency Wetlands Policy Act of 1989

IDNR is the state agency with the most direct regulatory authority over wetlands in Illinois. The primary authority of this agency is established in the Interagency Wetlands Policy Act of 1989. This Act provides the Department with regulatory authority over State activities that affect wetlands. Peripheral authority is provided in the Rivers, Lakes, and Streams Act which provides the Department with regulatory authority over activities in floodplains.

The Interagency Wetlands Policy Act of 1989 (IWPA) established the state goal that there be, “no overall net loss of the state’s existing wetland acres or their functional values due to state supported activities”.

To accomplish this goal, the Act established a review process for all projects being pursued by a state agency or otherwise being accomplished with state funds, that have the potential to adversely affect a wetland. This review consists of a two-part process. Projects must first be reviewed by the Division of Natural Resources Review & Coordination to confirm if a wetland impact will occur. If it is determined there will not be an impact, the project will be approved and funds may be released. If it is determined an impact is going to occur, the entity requesting approval must prepare a plan, which details how it will compensate for the impact before the project may move forward.

Rivers, Lakes, and Streams Act

In the state of Illinois’ Rivers, Lakes, and Streams Act (RLSA), IDNR’s Office of Water Resources (IDNR/OWR) is granted, among other responsibilities, the authority to regulate construction activities in floodplains. According to the RLSA,

persons proposing such activities must first secure a permit from IDNR/OWR. The RLSA is focused on preserving the hydrological integrity of the state's public waters. It is not focused on protecting biological or ecological integrity, but because a large number of Illinois' wetlands are located in the floodplains of rivers and streams, it is very likely a construction activity in a floodplain will also affect a wetland. It is, therefore, beneficial to discuss this peripheral regulatory authority.

IDNR/OWR has two separate but similar floodplain regulatory programs established in the RLSA. One is for the six metropolitan "collar" counties in north-eastern Illinois: Cook, DuPage, Kane, Lake, McHenry, and Will. The second program is for the rest of "downstate" Illinois.

The Northeastern Illinois Program requires permits be issued for construction in any regulated floodway.

In addition to the floodplain management program, IDNR/OWR administers regulatory authority over activities in the state's public bodies of water and the construction, operation, and maintenance of dams. Many activities regulated by IDNR/OWR are also regulated by different government agencies, under different authorities, for different purposes (i.e., Section 404, Section 401, and IVPA). In an effort to improve coordination and communication between the regulatory agencies, IDNR/OWR uses a joint application form entitled Protecting Illinois Waters for its floodplain, public waters, and dam safety permits. Projects meeting the terms and conditions of a general permit, require no further authorization by IDNR.

Local Permits

Local permitting requires due process through the applicable zoning requirements.



