SITE ANALYSIS – ISSUES AND OPPORTUNITIES
Overview — Master Plan Approach to Site Analysis

A series of site analyses were produced and refined that depict existing site features and influences in the Lakeshore Nature Preserve. The information used to produce these diagrams was derived from a combination of field visits and information collected from other sources, such as the 2005 Cultural Landscape Resources Report and the Report of the Biology Subcommittee of the Campus Natural Areas Committee, May 2005. The analytical diagrams are presented here as individual elements within in a larger frame; in the pages that follow, they are filtered and layered in a variety of ways to produce the master plan recommendations.

Existing Vegetation

The principal natural communities that have survived substantially intact after 160 years of post-European human actions are small patches of forest such as Eagle Heights Woods and Big Woods, and wetlands such as Picnic Point Marsh and University Bay Marsh. These pockets of relatively undisturbed vegetation harbor seed banks that, if given the right conditions, can help restore native plant communities. The degradation of many habitats within the Lakeshore Nature Preserve can be attributed to a variety of sources, including historic land use and management, runoff from surrounding urban developments, and the proliferation of invasive species.

The map of existing vegetation depicts a diversity of plant communities within the Lakeshore Nature Preserve. Several are worth noting in particular: the area of prairie being restored through efforts by the Biocore program; areas deemed as remnant lakeshore woods; the restored Class of 1918 Marsh; and the few mature open-grown oak trees that are scattered throughout the Preserve. These open-grown oaks are of special interest, and this plan proposes that they can become the core of a restored oak savanna.

Invasive species have become a serious concern throughout the Preserve as well as on adjacent lands. Invasive plants—including honeysuckle, buckthorn, garlic mustard, and black locust—are prevalent in many parts of the Preserve. The impact of these invasives on native plant and animal communities is far-reaching and includes the following.

Invasive plants:
• Compete with native vegetation for sunlight and water;
• Interfere with regeneration of native plants;
• Compete for pollinators;
• Proliferate shallow root systems that exacerbate soil erosion;
• Displace rare plant species;
• Replace diverse plant communities with monocultures;
• Encourage dense thickets that obstruct prime views; and
• Increase soil exposure and further encourage erosion.
**Existing Vegetation**

**Lake Mendota**

- Woodland Ephemerals
- Restored Savanna
- Restored Prairie

*Photo courtesy of Glenda Denniston*

The information contained within this map was compiled by the Biology Subcommittee of the Lakeshore Nature Preserve Committee.
Hydrologic Characteristics and Impacts

Hydrology and hydrologic process within and around the Preserve greatly influence the quality and health of its diverse biotic communities. A significant ridgeline runs east-west through the northern portion of the Preserve, bisecting Eagle Heights Woods, Bills Woods, and the base of Picnic Point. Areas north of the ridgeline drain north while areas south drain toward University Bay Drive, where grassy swales infiltrate and conduct water to the lake near University Bay Marsh.

Gullies, rivulets, and outwash flows, with their attendant erosion, are the result of changes in the vegetation and built environment of the Preserve. Large areas under roof and asphalt in the surrounding area convey excessive storm water downhill rather than infiltrating it at the source. A lack of ground layer vegetation in many of the wooded areas throughout the Preserve allows surface water to erode organic material in the soil. Concentrated areas of storm water runoff from culverts and pipes create point-source erosion problems. The physical impacts of these several processes can be seen throughout the Preserve.

Additionally, the Willow Creek Watershed—which is much larger than most people realize—has a substantial impact on the quality of water in Willow Creek and University Bay. The physical boundaries of this watershed extend well beyond the UW-Madison campus and include much of west-central Madison. Storm water from this large urban area conveys with it pollutants from city streets, waste from yards and parking lots, and sediment from construction sites. The hydrologic graph of the Willow Creek Corridor shows sharp peaks and valleys, indicative of major drainage events during which millions of gallons of storm water enter the Willow Creek system and ultimately end up in University Bay. Aerial photographs illustrate the gradual enlargement of the silt plume that has formed in University Bay, a problem that cannot be addressed in this plan but that certainly requires attention in the future.
Existing Hydrology and Areas of Concern

Drainage

Micro-watersheds are based on topography and hydrology. Colored polygons represent the individual micro-watersheds within the Lakeshore Nature Preserve.

Ravine at Raymer's Cove — Deteriorating Outfall Due to Excessive Volume and Velocity of Storm Runoff
Cultural Resources Inventory

Native American Mounds and Habitation Sites

Human beings have influenced the lands of the Lakeshore Nature Preserve for millennia. Native American cultural resources within the Preserve range from archaeological sites dating back 12,000 years to present-day sites that continue to be important places of spiritual practice.

Ancient Native American burial mound sites are scattered across the campus but are primarily located within the boundaries of the Lakeshore Nature Preserve. This collection of sacred sites includes several unique effigy-type burial mounds. Indeed, UW-Madison has management responsibility for more effigy mounds than any other university in the world.

Cultural resource field surveys, conducted as part of the 2005 Cultural Landscape Project, have identified several ancient habitation sites within the Preserve that had been previously unknown to archaeologists. While these studies examined approximately 100 acres of campus lands, not all areas within the Preserve have been systematically surveyed. There is good reason to expect that additional field research would identify more archaeological sites. Any physical developments within the Preserve should be preceded by an examination of the archaeological record to determine if additional field survey work would be appropriate.

A few notable burial mound sites are located immediately adjacent to existing trail systems, and the gradual widening of trails from heavy use threatens to encroach upon and damage these mounds. Lack of signage and interpretive materials identifying the mounds as archaeological sites means that Preserve visitors are often unaware that they are sitting, standing, or walking on these ancient features. The mounds should be interpreted more thoughtfully for visitors, and access should be managed to avoid damage.
Cultural Resources

Stone Entry Wall with Catalpas

Tent Colony
Raymer Drive Segment of MPPDA Routes
Raymer Farm Property
Raymer's Cove

Horticultural Remnants
Community Gardens
Art and Anthropology Kilns
Picnic Point Farm
Horticultural Remnants
Beach House

Picnic Point

Stone Entry Wall

University Bay

Bay Road Segment of MPPDA Routes

Ancient Campsite/Village
* Boundaries as Established for the Archaeological Site Inventory (ASI), by the Wisconsin Historical Society
Burial Mounds
Cultural Resource
Paved Roads Controlled by the Madison Park and Pleasure Drive Association (MPPDA)
Other Main MPPDA Routes
Location of Former Structures
1. Blackhawk Lodge
2. Raymer Farm Buildings
3. Tent Colony Superintendent's Cottage (Coffin House)
4. Sea Plane Hanger
5. Boathouse
6. Jackson Cottage
7. Amelie Stevens House
8. Caretaker's House
9. Edward Young House
10. Anna Jensen Log Cabin

Lake Mendota

Native Vegetation at Eagle Heights Mound
Effigy Mound Protection within the Preserve

University of Wisconsin-Madison Lakeshore Nature Preserve 2006 Master Plan
Euro-American Sites and Historic Remnants

Euro-American settlement and land use has significantly shaped the current landscape of the Preserve. Grazing and cropping replaced native plant species and encouraged drastically altered patterns of vegetation. Because the Preserve was comprised of many different parcels, each with a unique history of ownership and management, it is difficult to generalize about their overall use or remnant character. The Final Report and Recommendations from the Campus Natural Areas (CNA) Planning Task Force (October, 1999) provides snapshot histories of the following parcels:

- Muir Woods: This area, named for naturalist John Muir, who once gathered firewood beneath the forest canopy, is a remnant of a wooded area that once occupied all of Bascom Hill. A ski jump at one time existed on Muir Knoll; other structures include the Carillon (erected in 1935) and the Social Sciences Building, the controversial construction of which in 1962 led to some of the earliest efforts to protect the easternmost lands of what is now the Lakeshore Nature Preserve.

- Howard Temin Lakeshore Path: This path of fine limestone gravel began as a route for the Madison Parks and Pleasure Drive Association (MPPDA), and has since become one of the defining symbols of the UW-Madison campus.

- Willow Creek: The original bridge that crosses this corridor near Lake Mendota was built by the MPPDA in 1892-94, linking it to additional routes along the current Lake Mendota Drive. The creek was channelized from a meandering stream in the early twentieth century.

- Eagle Heights Woods: This site was part of the George Raymer farmstead starting in 1887. Much of the farm was eventually used by the College of Agriculture for research, though Eagle Heights Woods was never farmed.

- Wally Bauman Woods and Tent Colony Woods: A relatively undisturbed woodland, this area also contained the Blackhawk Lodge and Tent Colony. The Tent Colony served as a summer residence for students and operated until 1962. Blackhawk Lodge was constructed by the Women's Athletic Association, and was available for recreational use by boaters, hikers, and winter sports enthusiasts.

- Frautschi Point: Originally known as "Second Point," this was the site of the Jackson Cottage—a name that doesn't do justice to the scale of the building and associated estate—and the Amelia Stevens House. The land was recently purchased by John and Jerry Frautschi, and given to the University in 1990 in honor of their father, Walter A. Frautschi. It includes the last remaining portion of the Lake Mendota shore that was not already protected as part of the Preserve.
• Caretaker’s Woods and the Base of Picnic Point: This area of the Preserve was part of the Breese Stevens family property, which was sold to Edward Young in 1925. Young built many of the trails on Picnic Point as well as the stone wall at the entryway to this area.

• Class of 1918 Marsh: Originally a wetland, the marsh became part of UW-Madison’s agricultural research enterprise. Tile drains were installed and the wetland was converted to farmland. The marsh draining project was initially quite successful. After many years, however, the drain tiles rose to the surface, making plowing difficult. The Class of 1918 donated money in the late 1960s to reflood the wetland, and the restored marsh was dedicated in 1972.

Community Gardens

The Eagle Heights Community Gardens were created east of the Eagle Heights Apartments in the early 1960s. They are among the oldest community gardens in the United States, and are remarkable for the diversity of horticultures practiced there. Gardeners from around the world, mainly residents of the Eagle Heights Apartments, rent plots and tend gardens, many using traditional methods brought from their countries of origin. The gardens of Eagle Heights Apartments and University Houses look like a patchwork quilt from above; at ground level, they symbolize the diverse ways human beings connect to and care for the earth.
Educational Resources and Uses

Interface with the UW-Madison Curriculum

There are many university programs that use the Preserve as an important part of their curricula, treating it as an extension of the classroom and research laboratory. Courses in many departments—Botany, Forestry, Geography, Landscape Architecture, Limnology, the Nelson Institute, Zoology, and others—use the Lakeshore Nature Preserve to study a wide variety of plant and animal communities. No natural area is closer to campus, or more fully integrated into the UW-Madison curriculum.

Biocore Prairie

As described on the Biocore website, “Students and staff from Biocore's Evolution, Ecology, and Genetics courses are restoring an old field near Picnic Point to tall grass prairie and monitoring its progress. Each new class of students is learning ecological principles and methods by contributing to multi-year research projects at the Biocore site.” This prairie can serve as a model for other restorations in the Preserve, and the use of fire in its management can be extended to other Preserve ecosystems that will also benefit from controlled burns.

F.H. King Gardens

F.H. King Students of Sustainable Agriculture is a UW-Madison organization dedicated to promoting sustainable agriculture. It operates a garden plot situated north and west of the Eagle Heights Community Gardens. The garden contains fruits, vegetables, flowers, rotation crops, a composting area, and a small meeting/gathering space.

CALS Plots

The College of Agricultural and Life Sciences (CALS) operates research plots in the field north of the Eagle Heights Community Gardens and the F.H. King Gardens.

Soil Pits

The soil pits, located in Bill’s Woods, are part of the Soils and Geography curricula. In particular, introductory physical geography lab courses use these areas to demonstrate various soil horizons and soil types as a supplement to classroom and laboratory activities.

Art and Anthropology Kilns

These kilns are located at the south end of the old orchard field. The art kilns are used by students and faculty to study traditional wood-fired methods of firing and glazing ceramics. The Anthropology department uses another kiln at this site to fire ceramics which are then buried in an adjacent soil pit for subsequent excavation and analysis.
**Class of 1918 Marsh Studies**

The Class of 1918 Marsh serves students and faculty in the Biocore, Landscape Architecture, and other departments as an example of a restored wetland. It is also an important birding area.

**ROTC Training**

Naval ROTC uses Picnic Point and its trail connections for training runs and navigation exercises. Army ROTC uses the Preserve for infrequent off-trail navigation exercises in the shrubby understory of Picnic Point Base and Frautschi Point. ROTC students also make significant contributions to restoration work in the Preserve as community service projects.

**Muir Woods**

Muir Woods has been used by students at Chadbourne Residential College to do environmental community service work with Madison area school-children led by a Land Resources graduate student.

**Indirect educational benefits**

Finally, it is worth noting that many UW-Madison courses whose curricula may not seem to be directly related to the physical resources of the Preserve significantly benefit from its amenities. For instance, English 100 classes, Geography 120, sections of introductory courses in the Nelson Institute, and environmental history discussion sections of History/Geography/Environmental Studies 460 each year make use of the Preserve at one time or another.

**Community Educational Outreach Opportunities**

The Friends of the Lakeshore Nature Preserve organization sponsors many field trips and group activities, including:

- **Spring Ephemerals Walk**: Conducted when spring wildflowers are at their peak, this trip uses the Preserve trail system to visit concentrations of blooming flowers, and also introduces participants to various ecological restoration projects.
- **Bird Walks**: Birding opportunities abound throughout the Preserve. Guided trips by members of the Madison Audubon Society and the Friends of the Lakeshore Nature Preserve teach visitors how to identify songbirds while also learning the migratory patterns of bird species that frequent the Preserve.
- **Other Guided Walks**: The Friends of the Lakeshore Nature Preserve have also sponsored many other walking tours designed to introduce visitors to Native American burial mounds, geology, trees, butterflies, mammals, general ecology, and human history.
Aesthetic Experience of the Preserve

Scenic views and view sheds are among the most precious and irreplaceable features that the Lakeshore Nature Preserve protects for the campus and the surrounding city. The historic development of Madison and the University of Wisconsin campus took advantage of the scenic opportunities of the isthmus between Lakes Mendota and Monona by situating the State Capitol and the main university buildings on two high hills connected by a corridor offering iconic views of the lakes. Among the most remarkable of these is from Observatory Hill, which looks north across the Lakeshore Nature Preserve toward one of the best-known views anywhere in the State of Wisconsin. Stretching more than four miles along the Lake Mendota shore-line, with a land area encompassing more one-third of the UW-Madison campus, the Lakeshore Nature Preserve is the most extensive protected green space in the downtown heart of Wisconsin's capital city. It makes a unique contribution to the distinctive beauty of city and campus alike.

Views abound throughout the Lakeshore Nature Preserve, though many have not been well managed or cared for in recent years. Some are still visible today, while others have become overgrown with invasive shrubs and will require restoration to be fully appreciated. The spine of Picnic Point, like other shoreline trail systems throughout the Preserve, potentially offers filtered views across Lake Mendota to University Bay, the UW-Madison campus, and the State Capitol. Thick understory vegetation, often composed of invasive shrubs, blocks many of the Preserve's most iconic views, most notably the view from the tip of Picnic Point back toward the Capitol and the Madison skyline. With careful vegetation management and selective removal of invasive plants, existing views can be maintained and former views that have disappeared behind invasive vegetation can be restored.

Views toward the Lakeshore Nature Preserve are just as important as views from the Preserve to the surrounding cityscape. These include the view from Memorial Union Terrace across the waters of Lake Mendota toward Picnic Point; the view to the north from interior spaces of the UW Hospital and Clinics toward the Class of 1918 Marsh and the hills of the Preserve; and the famed view, already noted, from the overlook on Observatory Hill toward Lake Mendota and Picnic Point. Furthermore, boaters in canoes, sailboats, powerboats, and other watercraft regularly visit this undeveloped shoreline to enjoy its natural beauty. These views toward the Preserve are just as important to protect and maintain as the stunning views of Madison that people visit the Preserve to experience.
Existing Views

Lake Mendota

Priority View: Observatory Hill Overlook

Existing Views
Existing Filtered Views from Pathway
Priority View
Social Activities within the Preserve

Visitor Experiences

In addition to protecting some of the most cherished views of the university and Madison, the Preserve also protects a wide variety of human experiences with the natural world that would otherwise be much less accessible in a city like Madison. There are as many such experiences as there are individuals who come to the Preserve.

Visitor experiences range from early morning bird walks to plant-naming sessions to late-night stargazing. People come at all seasons of the year, seeking the leaf-filtered lake views of midsummer as well as the bare branches and cold light of winter, the exuberant wildflowers of early spring and the golden earth tones of fall. Undergraduates gather in large groups when their residence halls bring them to the tip of Picnic Point for bonfires and storytelling; families bring small children for weekend picnics; students and commuters walk and bike the Lakeshore Path to reach classes and jobs at the eastern end of campus and in downtown Madison. Students visit for coursework that ranges from ecological field studies to soil science excavations to archaeological investigations of ceramic weathering to athletic practices to ROTC training. Perhaps most importantly, people come in large social groups, and they also come all by themselves.

The design and management of the Preserve must respect all these kinds and scales of human experience, so that some visitors will be able to immerse themselves in nature and community with many dozens of companions, while others can come alone in search of solitude, with each type of visitor respecting the other.

Existing Use and Circulation

In an effort to characterize the use and circulation within the Preserve, use zones and circulation systems were divided into three categories:

• High Intensity:
  • Eagle Heights Community Gardens
  • CALS Plots
  • F. H. King Gardens
  • Trail system and fire pits on the spine of Picnic Point
  • Class of 1918 Marsh trail
  • Howard Temin Lakeshore Path
  • Physical Plant Staging Area

• Moderate Intensity:
  • University Houses Gardens
  • Biocore Prairie
  • Muir Woods
  • Art and Anthropology Kilns
  • Main trails through Eagle Heights Woods
  • Main trail along Lake Mendota through Tent Colony Woods
  • Main trails through Second Point Woods and Caretaker’s Woods along Lake Mendota
  • Frautschi Point
  • Trail adjacent to Picnic Point Marsh

• Low Intensity:
  • Secondary Paths in Eagle Heights Woods
  • Secondary Paths on Frautschi Point and in Second Point Woods
  • Secondary Paths at the Base of Picnic Point
  • Secondary Paths at Muir Woods

Key elements and features of these areas, such as site amenities, structures, and parking lots have been located and designated on the accompanying map.
Existing Use

Lake Mendota

- Frautschi Point
- Second Point Woods
- Gardens
- Biocore Prairie
- Base Orchards & Fields
- Caretaker's Woods
- Old Orchard
- Picnic Point
- Picnic Point Marsh
- Class of 1918 Marsh
- University Bay
- Triangle Marsh
- Willow Creek
- Willow Beach - Special Use Area

- Parking
  - Picnic Point Parking, 23 Stalls
  - Lot 120 Parking, 83 Stalls
  - Lot 130 Parking, 23 Stalls

- Tent Colony
- Woods
- Raymer's Cove
- Parking Lot, Entrance, 6 Stalls
- Restoration Project

- Wally Bauman Woods
- Eagle Heights Woods
- Big Woods
- University Houses Gardens
- Wood Lane Parking, 2 Stalls

- Key Facilities and Elements, Numeric Designation
  1. Water Utility Building
  2. Anthropology and Art Kilns
  3. Beach House
  4. Toilets
  5. Sandy Beach
  6. Fire Pits
  7. Boat Launch
  8. Mooring Field
  9. Observation Platforms
  10. Native Plant Gardens
Existing Trail System

The trail system of the Preserve has evolved over the past century and a half. Trails have been planned and added, some have been decommissioned, and still others have been created informally by users without an official planning effort by the university. Pathways range in composition from bare ground to bark mulch to limestone gravel to asphalt. Access roads are, in part, a product of the earlier farmstead history of the Preserve. While some routes are managed, others are not. This leads to a number of issues including:

- Degradation of pathways
- Lateral spreading of pathways
- Increased storm water runoff from compacted and impermeable trails
- Erosion
- Transport of invasive species
- Damage to vegetation and cultural resources

Trails are mainly limited to pedestrian footpaths. Exceptions that currently permit bicycling include the Howard Temin Lakeshore Path, Willow Drive, the bike trail to Eagle Heights Apartments, and the spine of Picnic Point. Off-road biking is not allowed anywhere in the Preserve because it exacerbates erosion, increases soil compaction, spreads invasives, and damages vegetation. Service vehicles occasionally use the asphalt and limestone paths for maintenance tasks. Emergency and service vehicle access is maintained to some areas of the Preserve, in particular at the Physical Plant Staging Area east of the Eagle Heights Community Garden.

Existing Facilities and Features

Entry Points/Gateways: Because the university has only recently recognized the Lakeshore Nature Preserve as an integral unit, the Preserve’s entrances and gateways have never been given a unified design to help visitors understand what and where the place is, and what special resources and qualities it protects. A key recommendation of this master plan is to apply to these gateways the careful design and implementation they deserve so as to give the Preserve as a whole the coherent identity it has never had.

Primary entry points include:
- Howard Temin Lakeshore Path by the Limnology Building
- Base of Picnic Point
- Class of 1918 Marsh (from parking lot)
- Frautschi Point

Secondary entry points include:
- Muir Knoll
- Willow Creek corridor
- Eagle Heights Community Gardens
- Raymer’s Cove

Tertiary entry points include:
- Access from Wood Lane, Shorewood Hills
- Nielsen Tennis Stadium
- Observatory Hill
- Class of 1918 Marsh (from south)

Access to the Lakeshore Nature Preserve also occurs without a defined entry point in some areas. For example, along the Howard Temin Lakeshore Path near the Lakeshore Residence Halls, large open lawns abut the path, blurring the transition between the two and creating multiple informal entry points.

Few entry points to the Preserve are currently signed. At Picnic Point, Frautschi Point, and Raymer’s Cove, parking lots signal major entrances to the Preserve, as do the stone walls at the base of Picnic Point and Frautschi Point. With proper signage, we can enhance all these gateways and create a well-ordered system of entrances to the Preserve.
Fire pits: There are seven fire pits on the spine and tip of Picnic Point which may be reserved for use. They serve as formal gathering spaces for groups both large and small. Surrounding vegetation often blocks views to the lake and people then make informal paths to the edge of the lake, adding to erosion problems. All of the existing fire pits are in significant need of maintenance and reconstruction.

Gathering Spaces: Very few large group gathering spaces exist in the Lakeshore Nature Preserve. Muir Knoll contains an open seating area that is in significant need of maintenance or reconstruction. Willow Beach offers an informal gathering space that has been little used in recent years. And although the tip of Picnic Point is frequently used for large group gatherings, it has never been properly designed to accommodate the volume of use it receives. Lack of appropriate spaces designed for large group gatherings has led to:

- Soil compaction
- Soil erosion
- Damage to vegetation
- Unauthorized informal trails

Benches and Overlooks: Scattered benches have been installed at various places in the Preserve. The greatest concentration is on Picnic Point, and there is a need for a small number of additional benches in the western portion of the Preserve to accommodate visitors for whom the distance between Eagle Heights Woods and Picnic Point is difficult to cover without rest stops.

Current benches are an inconsistent mixture of wood, aggregate, and concrete. Vandalism is an ongoing problem, suggesting the need to adopt appropriate designs for any new benches.

Few constructed overlooks exist in the Preserve, but there are opportunities to create additional overlooks and outlooks as views are opened up through vegetation management. For example, along the Howard Temin Lakeshore Path small wooden platforms and lakeside benches offer overlook opportunities, as do grassy clearings near Willow Creek Beach.

Picnic Point Beach House: Adjacent to Picnic Point marsh along the shoreline of Lake Mendota, the lannon-stone Beach House was constructed in 1968 but never used as such because of past concerns about the water quality of the beach. It stands as a historic remnant of a time when sailboats and beach parties more frequently drew crowds to the Picnic Point shoreline, but it has since fallen into disrepair and is now only used for storage. Although this plan does not make specific recommendations concerning the Beach House, a decision about its future needs to be made, and might appropriately be addressed once new storage has been created at the Physical Plant Staging Area.

Pit Toilets: Pit toilets are located at the Picnic Point beach where the peninsula narrows.
**Signage:** Visitors need carefully designed signage to help them know when they are entering the Preserve, to help them navigate the trail system, and to help them better understand the natural and cultural resources that the Preserve protects. Too much signage, though, can detract from the natural beauty of the place, so a careful balance must be struck to make sure visitors have just the right amount of information to enhance their experience and understanding. The current signage of the Lakeshore Nature Preserve varies widely in type, material, and location. It has no consistent design vocabulary, and a key goal of this master plan is to offer recommendations for more cohesive signage.

**Community Gardens – Eagle Heights and University Houses:** Although some might question their presence within the boundaries of a nature preserve, in fact the Eagle Heights Community Gardens and University Houses Gardens represent one of the most important ways that human beings relate to the natural world: by tending the soil and growing food through careful stewardship to express community, cultural heritage, and ecological sustainability—values that echo throughout the Preserve, which is itself a kind of wild natural garden for the campus and the city of Madison. As noted earlier, Eagle Heights Community Gardens are among the oldest, largest, and most culturally diverse such gardens in the United States, bringing together people of all ages, nationalities, and backgrounds to share the gifts of family, community, and well-tended land while enjoying natural habitat, birds, soil, sun, water, and wind. Helping other non-gardening visitors understand the diversity of horticultural practices here, and appreciate the values and democratic practice of these community gardens, should be an important goal of the Lakeshore Nature Preserve.
Special Uses within the Preserve

Physical Plant Staging Functions

The University of Wisconsin-Madison Facilities Planning and Management department uses part of the Preserve as a staging area for campus building and landscape maintenance. Designated the “Physical Plant Staging Area,” it is sited southwest of the Picnic Point Base Orchard and Fields, and adjacent to the Eagle Heights Community Gardens and Art/Anthropology Kilns. This master plan recommends that this facility be bermed and upgraded with water infiltration technology and native plantings to minimize its ecological impacts on other areas of the Preserve. Covered storage can be added at the same time, to be shared by Physical Plant, Biocore Prairie, and the community gardens.

Access to Lake Mendota for Fishing

Open Water Shoreline Fishing: Raymer’s Cove has historically been an area where shoreline anglers congregate. Access to the water’s edge down steep slopes has encouraged erosion, which is exacerbated both by upland drainage and by frequent human use. Recently, a DNR water-quality improvement grant enabled Preserve managers to address serious erosion problems in this area. A wooden staircase has been built to facilitate access to the lakeshore; the parking lot has been redesigned with a smaller number of better marked stalls; and native plant communities were restored in the area adjacent to the parking lot. Further bank protection will protect fragile soils. Users of the Preserve are already seeing the physical results of this project through enhanced access and views. The project can serve as a model for high-traffic areas where shoreline access is impeded by steep, erosion-prone slopes.

Ice Fishing: In the winter, people seeking to fish and place fishing huts on frozen Lake Mendota do so in three areas of the Preserve: Raymer’s Cove, Frautschi Point at the fireplace, and through the University Bay Marsh and the boat launch pier. Ice fishing access needs to be managed so as to minimize deleterious impacts from erosion and damage to vegetation.
Access to Lake Mendota for Boating

Mooring Fields & Canoe Posts: Mooring fields owned and operated by the Wisconsin Union are popular boat storage facilities in University Bay. There are 65 individual mooring buoys available for rent, and the waiting list for access to these indicates high demand. The buoys line the shore of Lake Mendota and are designated by area:

- Area One - Off of the Memorial Union Terrace (43 mooring buoys)
- Area Two - To East of Willow Beach (16 mooring buoys)
- Area Three - (proposed but never created)
- Area Four - Near Willow Creek outfall (6 mooring buoys)

The Wisconsin Union also rents small boat hitching posts, which are physically placed on the shoreline along University Bay. There are 32 of these posts strung out along the shoreline; unlike the moorings, they can be rented without university or Wisconsin Union affiliation. Planned elimination of the posts and consolidation of storage into racks at Willow Beach and the boat launch area will reduce shading damage and erosion along this fragile shoreline; eliminate shoreline clutter; and open unobstructed views along University Bay. There are seven posts (all to the east of Willow Beach) used exclusively by the people in Area #2 to reach their moored boats. There are an additional four (on the point just to the west of Willow Beach) which are used by a combination of Area #2 and Area #4 boaters, along with several non-mooring people.

Boat Launch and Pier: One designated boat ramp exists in the Preserve on University Bay near Marsh Lane. This concrete structure, located near Parking Lot 60, permits watercraft to be lowered from trailers into Lake Mendota. The boat ramp poses no serious threats to views, user access, or bank stability, and serves many stakeholders. This master plan does not propose to alter its present location, but redesign of transport routes and parking facilities in the west campus area may eventually require a small amount of additional parking for users of the ramp.