

# LAKE OF THE WOODS LAKE MANAGEMENT PLAN



ADOPTED  
April 2010

Matanuska-Susitna Borough  
Department of Planning and Land Use



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# 1 Introduction

## 1.1 Purpose

This lake management plan presents goals and objectives to balance the physical and social demands of those that live or recreate on Lake of the Woods with the need to maintain a healthy and productive lake ecosystem. The lake management plan process was established by the Matanuska-Susitna Borough to provide a means to reduce user conflicts, balance various environmental and recreational demands placed upon a lake, and protect the health, safety and welfare of its residents and lake users.

## 1.2 Scope

Lake management plans provide guidance for how the surface of the lake is used and makes recommendations concerning public access and education of lake users to meet the goals of the plan. Certain aspects of the plan can be implemented as enforceable regulations through MSB Title 17.59. The borough assembly adopted guidelines for appropriate regulations for different sizes of lakes as follows:

### LAKES HAVING A SURFACE OF 75 ACRES OR LESS

May recommend the following guidelines:

- ✓ No wake zone - 100 feet from shoreline
- ✓ Quiet hours - 10 p.m. to 8 a.m.
- ✓ Personal watercraft restriction
- ✓ 10 horse power limit\*
- ✓ No wake speed zone on lake\*

\* These options *may* be recommended on a daily time share basis.

### LAKES MORE THAN 75 SURFACE ACRES TO 200 SURFACE ACRES

May recommend the following guidelines:

- ✓ No wake zone - 100 feet from shoreline
- ✓ Quiet hours - 10 p.m. to 8 a.m.
- ✓ Personal watercraft restriction
- ✓ 10 horse power limit\*\*
- ✓ No wake speed zone on lake\*\*

\*\*These options *must* be on a daily time share basis.

### LAKES MORE THAN 200 SURFACE ACRES

May recommend the following options:

- ✓ No wake zone - 150 feet from shoreline
- ✓ Quiet hours - 11 p.m. to 8 a.m.

## FOR ALL LAKES

- ✓ Access recommendations will be consistent with traditional use and current level of access development.
- ✓ Quiet hours apply to repetitive recreational activities such as water skiing and racing or high speed activities NOT to moderate speed point to point transportation.
- ✓ No wake is defined as the slowest speed a boat or personal water craft can go and still maintain safe operation and maneuverability.
- ✓ Time share means restrictions do not apply on Thursday, Friday, Saturday, and all three day weekends mandated by federal holiday (Memorial Day, Fourth of July, and Labor Day).
- ✓ Ice house means a structure utilized for ice fishing and left on the frozen surface of a lake for more than 24 hours.
- ✓ Motor vehicles means automotive vehicles with rubber tires for use on highways.
- ✓ Motorized watercraft use means the operation of watercraft powered or propelled by a force other than human muscle power, gravity, or wind. This definition does not include airplanes as motorized watercraft when landing, taking off, or taxiing on a water body.
- ✓ Personal watercraft includes vehicles such as jet skis, wave runners, and similar acrobatic or stunt equipment.
- ✓ A wake is the track in the water left after the passage of watercraft or other vehicle.
- ✓ A special permit is a permit approved by the planning director for a special purpose and is limited to a specific time to conduct an event that would otherwise involve activities in violation of MSB 17.59.

These guidelines may be varied due to the lake configuration, lake depth, or other considerations through the adoption of individual lake management plans.

Lake of the Woods is about 4.1 surface acres in size, and therefore, falls within the guidelines for lakes less than 75-acres.

### 1.3 Process

Lake management plans are initiated by local residents or property owners. The initiators circulate a petition to get the required number of signatures on the petition required by code.

Once a valid petition has been filed with the department, a ballot is mailed to all property owners within 600 upland feet of the affected lake. This ballot serves as notice of the receipt of a valid petition and requests a vote to begin the lake

management process. The borough begins a lake management plan if the majority of property owners responding to the mailed ballot vote in favor of developing a lake management plan.

Borough planning staff gathers background information on the lake and encourages adjacent property owners and users to participate in the planning process. Borough staff, lake users, lake residents, and property owners identify issues and concerns and establish goals and objectives that are incorporated into the draft plan.

The draft plan is reviewed by the public and community council and by the Matanuska-Susitna Borough Planning Commission. The planning commission considers all oral and written comments received in a public hearing and either recommends to the Matanuska-Susitna Borough Assembly adoption of the plan as is, or with modifications, or recommends assembly disapproval of the plan. The assembly either adopts the plan as is or with modifications, or votes down the plan.

#### 1.4 Enforceable Code Restriction

The lake management plan meeting was held on May 19, 2009 with two people signing the attendance sheet. Property owners, residents and lake users in attendance expressed a consensual preference for the following enforceable restrictions:

- Quiet hours – 7 p.m. to 9 a.m.
- Personal watercraft restriction
- Electric motors only
- Public access to the lake should not be created or developed

These restrictions will protect the quiet enjoyment of the properties and allow continued use of the lake by residents and visitors in keeping with traditional practices. The plan will also help future lake users to boat or recreate in a manner that protects the rural residential character of the lake.

## 2. **Inventory of Existing Conditions**

### 2.1 Location

Lake of the Woods is located in the Willow Area Community Organization, approximately 1½ miles west of the Parks Highway. Lake of the Woods is primarily accessed by traveling southwest on Nancy Lake Parkway, veering west onto Long Lake Road and continuing to Long Lake Shores Drive. Access to Lake of the Woods is provided by a recorded 30 foot, non-motorized public use easement. This easement is located on the western portion of Lot 1 of Lakes O' the Su Subdivision and ends at the property line of Tract D, which surrounds a majority of Lake of the Woods. Based on information from local residents, entry to the Lake of the Woods shoreline is accessed through Tract D.

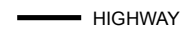
# Figure 1 LAKE OF THE WOODS LAKE MANAGEMENT PLAN

## Vicinity Map

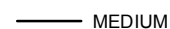
### Legend

 CITY BOUNDARY

### Road Classifications

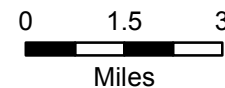
 HIGHWAY

 MAJOR

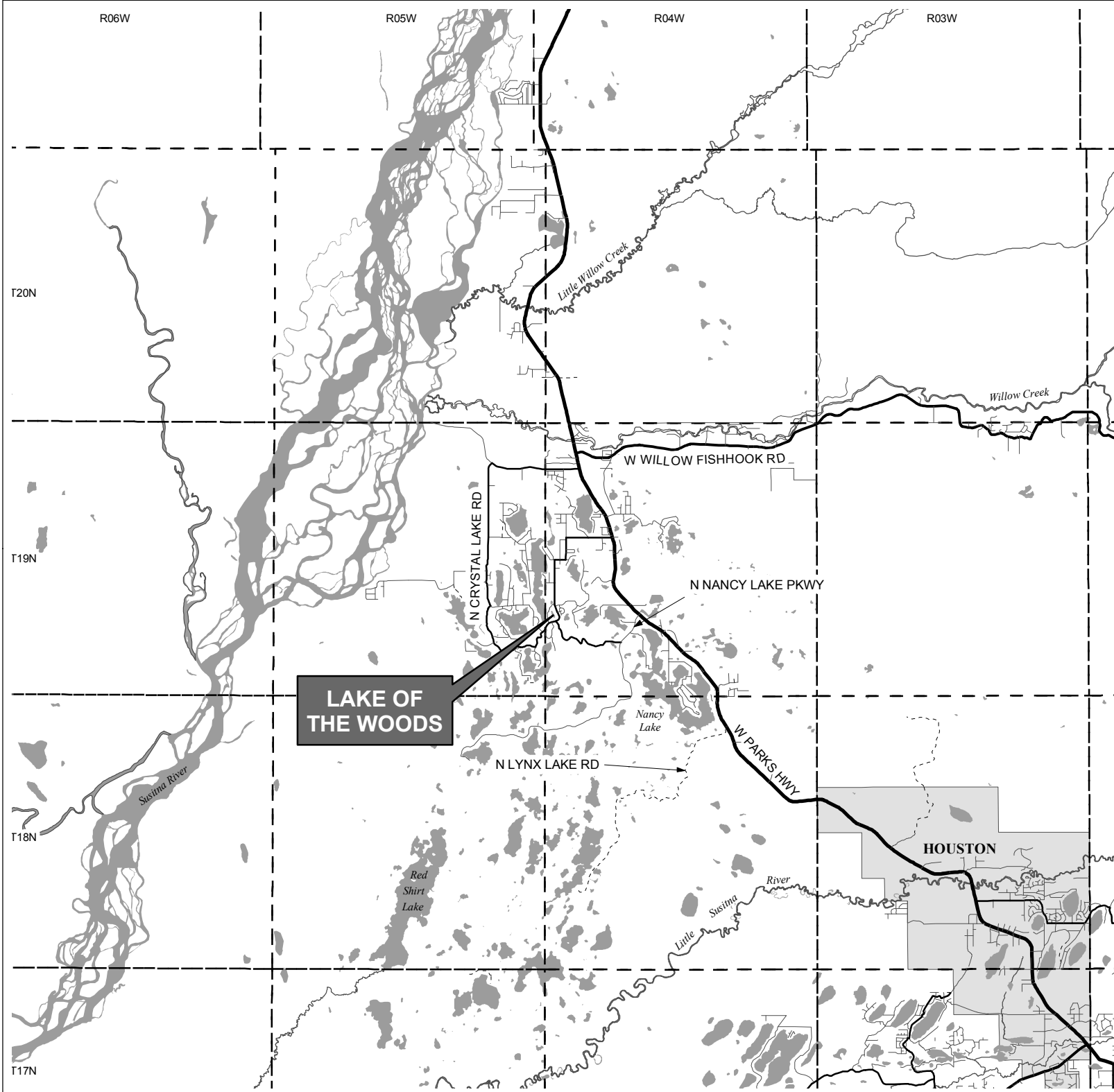
 MEDIUM

 MINOR

 PRIMITIVE



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## 2.2 Physical Characteristics of the Lake

Lake of the Woods is elliptical in shape, containing 4.1 surface acres with approximately one-half mile of shoreline. According to the Borough's GIS information, the lake is approximately 300 feet in width and 970 feet in length (although the shoreline is not symmetrical). Local knowledge by property owners and residents indicate that the lake is rather shallow with a maximum depth of 20-30 feet and a mean depth of approximately 10-12 feet. The lake is spring fed and dominated by subsurface flows of groundwater. Surface water flows are a minor component of Lake of the Woods. There is a small seasonal stream most evident during periods of rainfall located at the north end of the lake. This stream drains from the lake and leads to a smaller pond approximately one-quarter mile away.

Lake of the Woods is typical of the glacial moraine lakes formed in the area. The lake substrate is mixture of cobble and gravel material with fine sands and silt substances. The well-defined shorelines contain a combination of spruce and birch forest habitats. Much of the shoreline is in its natural condition, and marshy areas are predominant near the northern shore. Lake of the Woods appears typical of glacial moraine lakes that are in successional stages from low nutrient (oligotrophic) from their formation as glaciers receded to high nutrient (eutrophic) systems with well established marshes, aquatic plants and organic lake bottoms. Lake of the Woods can be placed toward the high nutrient end of the successional scale.

The surrounding topography is relatively flat, with most properties gaining about 2-3 feet in elevation from the lake surface. Shorelines exhibit mixed vegetation stabilizing undeveloped waterfronts. Lake of the Woods provides a calm and inviting habitat for nesting loons and grebes. The limited surface area and shallow depths of the lake, especially near the shoreline, presents difficulties in accommodating any number of high speed recreational activities.

Lake of the Woods is not currently stocked by the Alaska Department of Fish and Game (ADF&G). It is not anticipated that public interest to use the lake will increase, as there are other more readily accessible and larger lakes in the vicinity. Future stocking by ADF&G could draw visitors for fishing, but limited public land and access will likely keep the visitors at a smaller number. Subsequently, no bathymetric mapping has been recorded. Water quality problems have not been reported, however, the trophic status of Lake of the Woods has not yet been identified.



Table 1: Lake of the Woods Physical Characteristics

Surface Acres	4.1
Volume	Unknown
Maximum Depth	20-30 feet
Mean Depth	10-12 feet
Average width	300 feet
Approximate length	970 feet

Source: MSB GIS Information, and local knowledge

### 2.3 Land Ownership and Land Use




Land around Lake of the Woods is comprised entirely of private ownership and is located within Lakes O' the Su Subdivision (Plat # 76-44). The borough has copies of recorded subdivision restrictions for Lakes O' the Su Subdivision. Most of the lots are vacant, however, there is a small number of full time residents and other developed seasonal/recreational homes sites. The largest area, Tract D, surrounds most of the lake (north, east and west shorelines of Lake of the Woods). A recorded 30 foot, non-motorized public use easement is located on the western portion of lot 1, as indicated on the Lakes O' the Su Subdivision plat. This easement provides access to Tract D, which is a privately owned parcel surrounding most of the lake. Tract D has been classified as undevelopable property because the soil composition is mostly wetlands. The owner of the parcel has unofficially allowed adjacent property owners to access the lake through the parcel, but has indicated that he does not wish to allow lake access to the general public. As such, there is currently no legal public access to Lake of the Woods. Should the surrounding lot configuration change, property owners have indicated that no public access to the lake be developed.

Figure 2  
LAKE OF THE WOODS  
LAKE MANAGEMENT  
PLAN

Land Use and  
Ownership

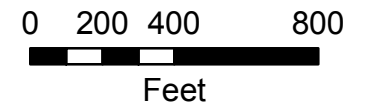
Legend

Land Use

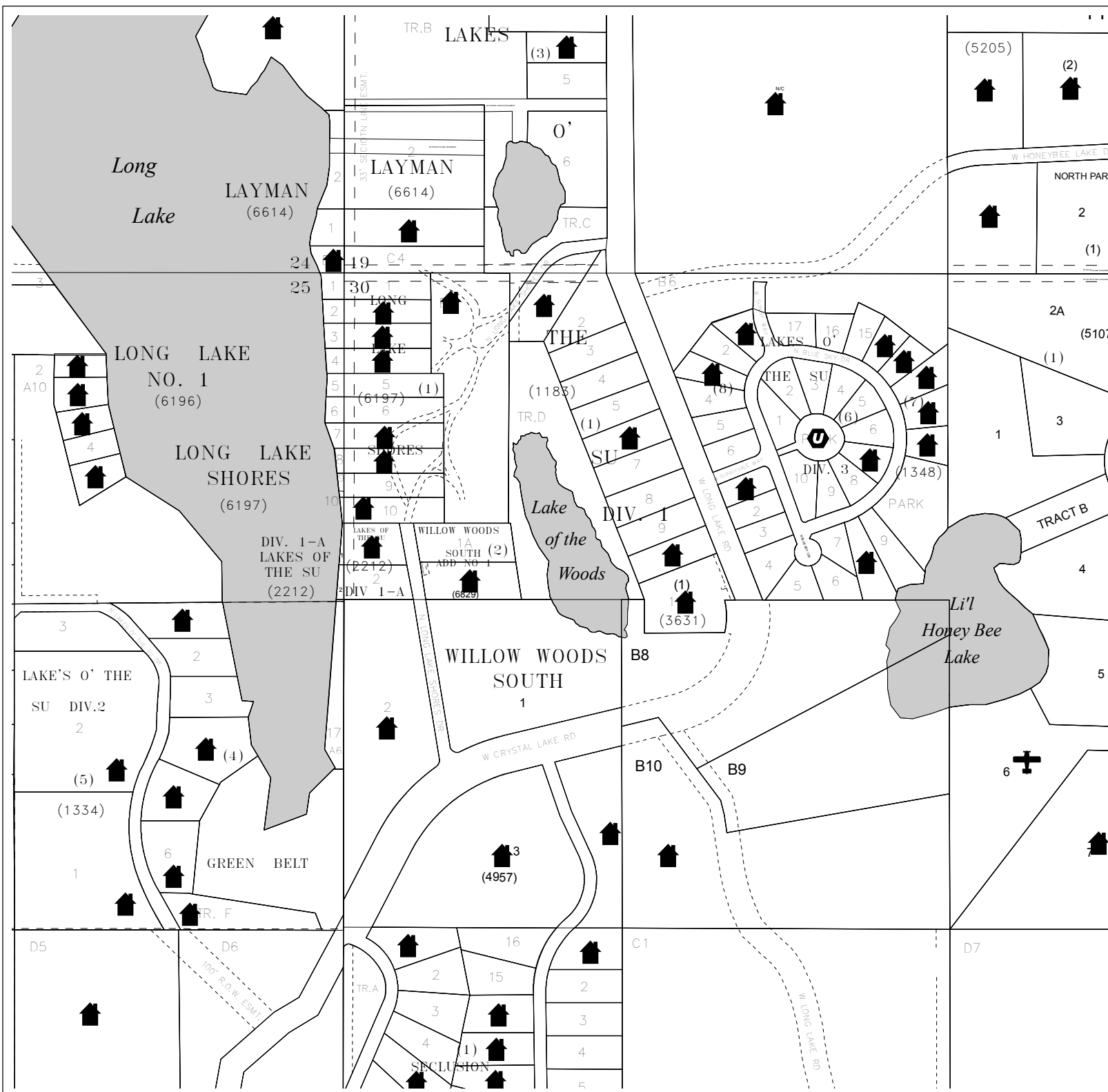
-  RESIDENTIAL STRUCTURE
-  RESIDENTIAL HANGAR
-  WATER UTILITIES & STORAGE

Ownership

-  PRIVATE



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## 2.4 Social/Demographic – Usage

The present human use of Lake of the Woods may be characterized as being primarily quiet and residential. The lots are large, and the potential for increased residential density and lake usage is of concern to property owners and residents. The lake management plan was initiated by lake front property owners and residents as a result of the desire to protect the quiet residential atmosphere of the lake, and ensure protection of water quality and nesting birds. The borough files contain copies of recorded subdivision restrictions, designating residential/recreational development for Lakes O' the Su Subdivision. In order to effectively manage lake usage and protect water quality, future residential plans need to be identified.

Lake residents, property owners, and users enjoy the quiet, natural aspects of the lake and are interested in protecting the water quality. If subdivision requests are made and finalized, this lake management plan could provide the guidance necessary to ensure the increased lake usage occurs in a manner that protects the lake and the quality of life that current users enjoy.

The lake is not designated as a "Private Seaplane Base" by the FAA. According to those who attended the meeting, there are no small planes on the lake and no commercial aircraft operations.

The lake is not stocked by the ADF&G. It is not anticipated that public interest to use the lake will increase, as there are other more readily accessible and larger lakes in the vicinity. Future stocking by ADF&G could draw visitors for fishing, but lack of public land and limited access will likely keep the visitors at a smaller number.

## 2.5 Existing Plans and Lake Monitoring Programs

### State

The state plan affecting the Lake of the Woods area is the Southeast Susitna Area Plan. The Southeast Susitna Area Plan, adopted in April, 2008, contains management intent for state and borough lands within the lower Susitna Valley, an area of approximately 250,000 acres. Lake of the Woods is within the Willow Management Region, which recommends the following uses on public lands:

- Maintain public land as a recreational corridor
- Protect anadromous lake and streams

### Matanuska-Susitna Borough

Matanuska-Susitna Borough (MSB) plans that address Lake of the Woods in some manner include the borough-wide 2005 comprehensive plan update and the Costal Management Plan.

The MSB Comprehensive Plan provides a broad set of goals and policies for natural resources, but the plan does not make an explicit reference to Lake of the Woods. The plan recommends that borough land use policies should, “Protect and enhance the borough’s natural resources including watershed, groundwater supplies and air quality” (Goal LU-4, page 10). To accomplish this goal, a policy was established in the comprehensive plan which supports identifying, monitoring, protecting, and enhancing the quantity and quality of the borough’s watersheds, groundwater aquifers, and clean air resources. Additionally, the Willow Area Community Organization has requested a comprehensive plan, currently in draft form, to further promote the goals and policies aimed at preserving and protecting natural resources. The waters of Lake of the Woods are publicly owned.

Lake of the Woods is within the boundaries of the Matanuska-Susitna Borough Coastal District (District), as defined within the Matanuska-Susitna Borough Coastal Management Plan. The coastal management plan seeks to direct the course of local, state or federal development within the District in a manner that protects the important land and water resources of the District. The adopted policies of the plan are used to evaluate development proposals vis-à-vis resource values in an effort to ensure that the proposals are consistent with the plan’s goals and objectives. Local development includes actions that trigger a borough subdivision, planning or zoning action. For example, a variance application to build a habitable structure or garage closer than 75 feet from the ordinary high water mark of Lake of the Woods would be reviewed to determine whether or not it is consistent with the Coastal Management Plan. Construction within water bodies is also reviewed for consistency with the plan. Uncovered floating or pile supported docks which do not extend more than 40 feet beyond the ordinary high water line and do not exceed 400 square feet in size may obtain a general concurrence. Metal drums, however, may not be used as flotation devices.

#### Lake Monitoring Program

The borough coordinates a lake monitoring program to monitor water quality, identify problems that degrade water quality, monitor the biological and hydraulic functions of the lake, and establish baseline trends to assist planning. The program depends on local volunteers to gather information and take samples for further testing. In addition, lake monitors identify fish and wildlife habitat and report environmental impacts. Lake monitoring has not been conducted, and there is currently no future plans to begin monitoring Lake of the Woods.

#### 2.6 Existing Regulations

This section describes the principle regulations affecting use and development in the Lake of the Woods area.

### Federal

Any work which results in the dredging or placing of structures or fill in tidal (ocean) waters, streams, lakes or wetlands requires a 404 permit from the U.S. Army Corps of Engineers.

Migratory birds, which include loons and grebes, are protected by the Migratory Bird Treaty Act. The Act, among other things, prohibits the “taking” of migratory birds. Destruction of nest sites, eggs, or the birds themselves are a violation of the act.

Operation of aircraft, both private and commercial, is regulated by the Federal Aviation Administration.

### State

The Alaska Department of Environmental Conservation (ADEC) provides regulations for wastewater disposal. ADEC wastewater/septic regulations [Title 18 Alaska Administrative Code 72.015(f)] state that no holding tank, septic tank, soil absorption system, seepage pit, privy, or other waste water collection, treatment, or disposal system may be within 100 feet, measured horizontally, of the mean annual high water level of a lake, stream, spring, slough, or the mean high water level of coastal waters.

In addition to the U.S. Army Corps of Engineers 404 permit requirements; any activity within streams and certain work within lakes specified as waters important for the spawning, rearing, or migration of anadromous fishes require a Title 41 permit from the Alaska Department of Natural Resources (ADNR), Office of Habitat Management and Permitting (OHMP). Since 1994, the Alaska Department of Fish & Game, Habitat and Restoration Division has issued a general permit, renewed annually, allowing vehicle movement on frozen water surfaces in south-central Alaska. ADNR, OHMP currently issues these permits (Appendix B). Lake of the Woods is not listed in the catalog. Finally, the general ADF&G fishing regulations apply to Lake of the Woods. Electronic copies of the catalog of waters important for the spawning, rearing, or migration of anadromous fishes and associated maps can be found at: [http://www.sf.adfg.state.ak.us/sarr/fishdistrib/fdd\\_catalogs.cfm](http://www.sf.adfg.state.ak.us/sarr/fishdistrib/fdd_catalogs.cfm) and [http://www.sf.adfg.state.ak.us/sarr/fishdistrib/fdd\\_maps.cfm](http://www.sf.adfg.state.ak.us/sarr/fishdistrib/fdd_maps.cfm)

A navigable or public waterbody includes water suitable for public use and utility including boating, landing and take-off of aircraft, hunting, fishing, and trapping, or other public recreational purposes. Lake of the Woods meets the definition of public waterbody.

Land that has been or is currently owned by the State of Alaska, and is adjacent to a navigable or public waterbody has special access requirements. Alaska Statute (AS 38.05.127) requires access to and along the surface waters of navigable and public waterways. An "along" easement, is generally reserved as a 50-foot wide

public use easement along the ordinary high-water mark. These easements are created when the state conveys land to a borough or a private individual and the easement stays with the property in perpetuity unless vacated through a public review process. State lands conveyed prior to the passage of AS 38.05.127 may not be subject to the "to" and "along" easements. A review of the conveyance document and in some cases, court documents is required to determine the presence or absence of these easements. Lands patented by the federal government are not usually subject to "to and along" easements. There are no records of "to and along" easements around Lake of the Woods.

### Borough

Several borough-wide ordinances address the development and use of land adjacent to Lake of the Woods. The regulations are contained within the borough's planning (Title 15), zoning (Title 17), real property management (Title 23), and subdivision (Title 27) ordinances.

*Title 15.* Title 15 establishes and describes the general functions of the planning commission (both planning and zoning functions) and the board of adjustment and appeals. Title 15 also describes the comprehensive plan and purposes. Once adopted, the Lake of the Woods Management Plan will become an instrument of borough policy similar to the other plans adopted by the borough assembly.

*Title 17.* Zoning regulations that are of special note to development activities at Lake of the Woods include setback requirements and a petition process to limit or eliminate motorized use of lake and conditional use permits. Presently, all structures must be a minimum of twenty-five feet from the right-of-way and ten feet from side and rear lot lines. In addition, the voters of the borough approved, by initiative, a requirement that all habitable structures and garages must be located at least seventy-five feet from the ordinary high water mark of any waterbody or water course (Figure 3).

Also, all septic systems must be located 100 feet from the ordinary high water mark. The borough also requires that any development which seeks to establish or operate certain uses that may impact surrounding properties must first obtain a conditional use permit (MSB 17.60). Also, MSB 17.55.020 Setbacks for Shorelands, does not apply to structures where construction was completed prior to November 16, 1982.

*Title 27.* Title 27 provides the subdivision development standards within the borough and establishes the platting board. Some Title 27 requirements that are of special note to the development at Lake of the Woods includes a minimum lot size of 40,000 square feet with at least 10,000 square feet of useable building area and 10,000 square feet of contiguous useable septic area. Lots having 20,000 square feet or less of the total useable building area and useable septic area shall have 10,000 square feet of contiguous useable septic area surrounded by a well exclusion area extending 100 feet from the perimeter.

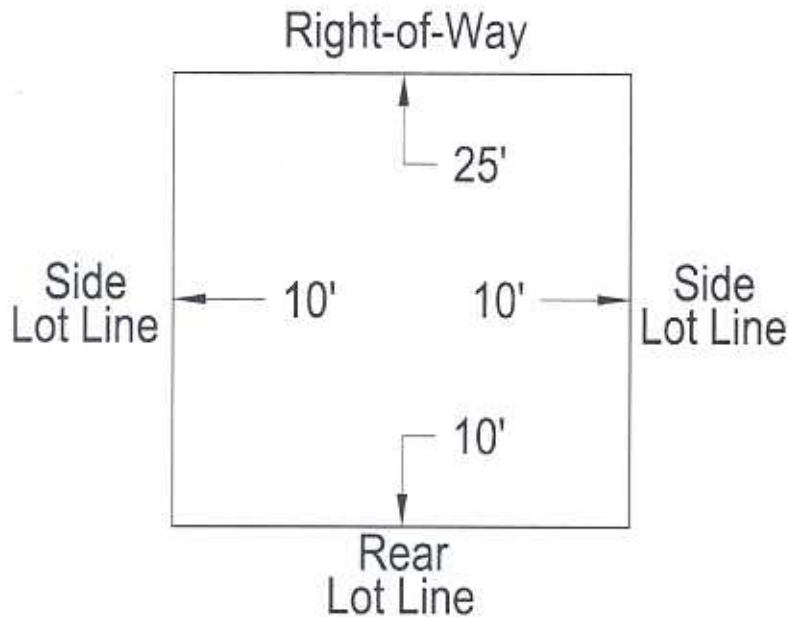
Lots containing at least 20,000 square feet but less than 40,000 square feet must be serviced by an approved community water or septic system. A community wastewater disposal system shall include a common wastewater disposal site on separate lot(s) that serves the entire subdivision. Lots may be approved that have less than 20,000 square feet but at least 8,400 square feet if served by a community or municipal water system or municipal sewage disposal facilities. For those areas not served by municipal sewer and water, lots less than 20,000 square feet must be approved as a Planned Unit Development as authorized by MSB 17.36.

Lots adjacent to a watercourse or body of water shall have a minimum of 125 feet of frontage as measured directly between property corners at the waterline, or a minimum of 85 feet as measured directly between property corners at the waterline if community sewerage is provided to the lot (Figure 3).

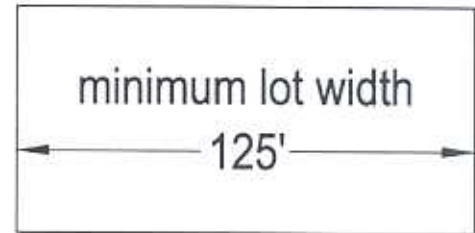
#### Private

Private regulations in the Lake of the Woods area would be in the form of subdivision covenants. The borough files contain copies of recorded covenants for Lakes O' the Su Subdivision. These covenants describe a Homeowners Association and Architectural Control Committee to approve the design and location of future structures, regulate nuisances (including inoperable vehicles, animals, refuse, and commercial enterprises), and the use of common areas and parks. For current information about covenants, the reader is referred to the State of Alaska Records Office. The Records Office can be found on the internet at <http://www.dnr.alaska.gov/ssd/recoff/search.cfm>

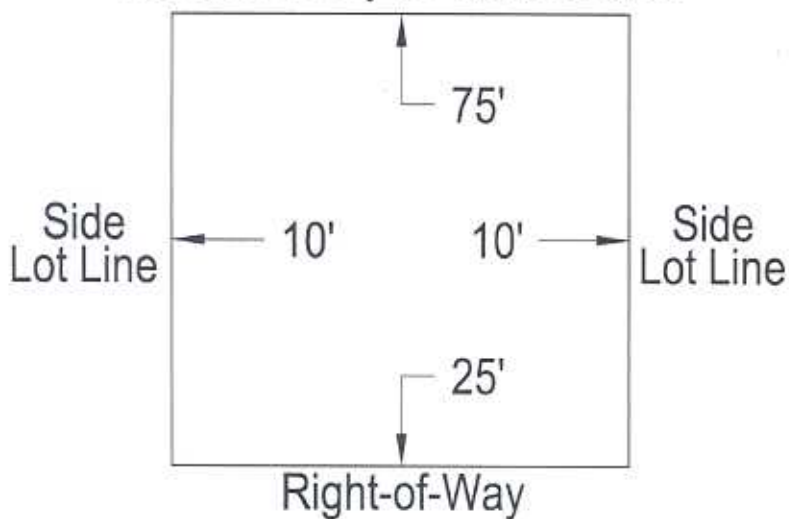
# General Setback Requirements and Lot Size\* Requirements



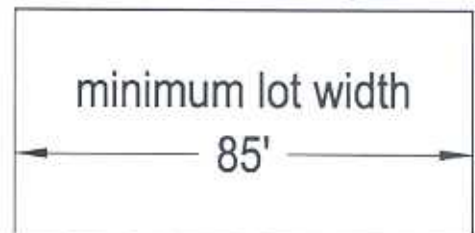
Ordinary High Water Line  
of Lake (no community septage)



Ordinary High Water Line  
of Water Body or Watercourse



Ordinary High Water Line of  
Lake (community septage available)



\*All lots must be a minimum of 40,000 sq. ft.



### **3. Issues and Concerns**

The issues and concerns identified by residents include:

- Maintaining and preserving the water quality of the lake;
- Protecting of wetlands, nesting waterfowl and wildlife habitat;
- Protecting of the quiet rural residential nature of the lake;
- Limiting horsepower;
- The creation of noise, especially in the evening and early morning hours;
- The potential for erosion caused by wakes.

A majority of those attending the meeting said that the quiet and rural character of the lake should be protected. The present state of the lake is characterized as rural residential development having a quiet quality. The historical use of Lake of the Woods has not included high-powered motorized watercraft.

Subdivision of undeveloped land and homebuilding on vacant lots may also result in greater impacts of noise and wake degrading the shoreline and water quality, increasing the potential for damage to wildlife and/or waterfowl, and impacting the quiet residential quality of the lake. Some property owners are concerned about winter snowmachine usage and the associated noise and trespass issues. While snow machines are a generally allowed use on all state land (including frozen waterbodies), the plan can make recommendations about winter trails leading to the lake, posting public information, and enforcement of quiet hours.

### **4.0 Goals**

Goals describe the future expectations of residents, property owners, and users of a lake. The following goals reflect the aspirations of Lake of the Woods residents, property owners, and users: quality of experience, rural character of the area, wildlife habitat and water quality. The goals are not shown in priority order as they are interdependent.

#### **4.1 Water Quality and Wildlife Habitat Protection**

Lake of the Woods is a significant natural resource. It is the desire of property owners, residents, and users of Lake of the Woods to maintain or improve the lake's water quality and to ensure that recreational uses of the lake are compatible with wildlife and habitat. The property owners and residents want to ensure responsible use and good water quality.

#### **4.2 Preservation of Quiet Recreational and Residential Character**

It is the desire of property owners, residents, and users of Lake of the Woods to preserve the quiet and peaceful rural residential character of the lake, while allowing some low impact recreational uses for residents.

4.3 Maintenance of Public Access

There is a walk in only public access point on the north shore of Lake of the Woods. Residents and property owners do not feel that the current public access point needs to be improved or that additional public access points are required. If a public or private access is developed as a result of a future subdivision, it is recommended that it be designated as walk-in only.

4.4 Educate Residents and Visitors

It is the desire of property owners and residents of Lake of the Woods to utilize public education as a means by which to accomplish many of the other goals of the lake management plan, and to encourage responsible development on properties surrounding the lake.

## 5.0 Recommendations

5.1 Maintain Water Quality and Protect Wildlife

Certain uses, such as high powered motorized watercraft and personal watercraft (a.k.a. jet skis), can create wake that contribute to shoreline erosion and disturb nesting waterfowl. Wake action may cause loon and grebe mortality by swamping nests or by separating parents from chicks. Noise caused by motors may also disturb waterfowl. Those in attendance at the meeting agreed that personal watercraft should be prohibited on Lake of the Woods to minimize wake and manage noise. All of those in attendance at the meeting were in agreement with the recommendation of allowing electric motors only at all times on Lake of the Woods.

Maintaining natural shoreline vegetation is one of the best ways to protect water quality. Natural shoreline vegetation provides erosion control, filtering of surface runoff, and habitat for fish and wildlife. It is recommended that lakeshore property owners follow Matanuska-Susitna Borough “*Voluntary Best Management Practices for Development Around Waterbodies*” (Appendix B).

In order to determine baseline water quality conditions on Lake of the Woods, volunteers are encouraged to participate in the borough’s Lake Monitoring Program.

5.2 Preserve Quiet Recreational and Residential Character

Residents and property owners of the area initiated the lake management planning process to protect the quiet recreational and leisure use of the lake. The majority of those attending the meetings support limitations for watercraft motors as a means of reducing noise and promoting safety. It is recommended that electric motors only be allowed on Lake of the Woods.

The use of personal watercraft, a.k.a. jetskis, is not a traditional use of Lake of the Woods. It is incompatible with the quiet residential uses of the lake. Furthermore, personal watercrafts pose a safety hazard for swimmers and boaters. All property

owners who attended the public meeting support a ban of personal watercraft. It is recommended that personal watercraft be prohibited on Lake of the Woods.

The establishment of quiet hours, between 7 p.m. and 9 a.m., Sunday through Saturday, is recommended to maintain the existing quiet nature and residential quality of the lake during all seasons.

### 5.3 Maintain Current Access

There is currently a primitive trail that allows public access to Lake of the Woods. Those in attendance at the meeting recognize that a future subdivision could provide public or private access. It is recommended that if additional public or private access is identified, it be designated as walk-in only.

### 5.4 Educate Residents and Visitors

It is recommended that the following methods be used to educate residents and visitors to Lake of the Woods about use restrictions and best management practices:

- Mail or deliver notices to inform property owners and residents about code restrictions, and enclose information about non-code recommendations.
- Post lake restrictions along with any “Property for Sale” signs to inform potential buyers that lake restrictions are in place.
- Inform residents about the process for reporting violations to the Matanuska-Susitna Borough Code Compliance Division.

## **6.0 Implementation**

Lake management plans are implemented through a combination of regulations, public information, and best management practices. MSB 17.59 Lake Management Plan Implementation, implements adopted lake management plans, using the borough’s citation authority. Specific recommendations of the lake management plans that are implemented through MSB 17.59 are: quiet hours, no wake zones, motorized water craft use, special permits, winter motor vehicles, and ice house registration. When the Lake of the Woods Management Plan is adopted, MSB 17.59 will be amended to include the recommendations of the plan. Those recommendations of the plan that are not included in MSB 17.59 will be implemented through public information and best management practices.

### **Quiet Hours**

To maintain the existing quiet nature, residential quality, and low impact use of the lake, quiet hours are established between the hours of 7 p.m. and 9 a.m. Sunday through Saturday. Quiet hours apply to repetitive recreational activities such as water skiing and racing or high speed activities (both in winter and summer) and NOT to moderate speed point to point transportation.

### **Personal Watercraft Ban**

To preserve the quiet character and recreational uses of the lake, prevent shoreline disturbance, and protect nesting waterfowl, personal watercraft are prohibited from Lake of the Woods. Personal watercraft includes vehicles such as jet skis, wave runners, and similar acrobatic or stunt equipment.

### **Electric Motors Only**

To preserve the quiet residential character of Lake of the Woods and protect wildlife habitat, electric motors only are allowed for any motorized watercraft usage. The shallow, narrow nature of Lake of the Woods makes it susceptible to shoreline damage by watercraft wake.

### **Maintain Current Limited Access**

There is currently limited public access to Lake of the Woods. Residents and property owners desire that no additional public access point be developed, however, if it is, it should be maintained as walk-in only.

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF HABITAT

SEAN PARNELL, GOVERNOR

1800 Glenn Highway, Suite 12  
Palmer, AK 99645-6736  
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#### FISH HABITAT PERMIT FH-10-IV-0008-GP

**ISSUED:** January 1, 2010  
**EXPIRES:** December 31, 2010

General Public:

***Re: Vehicle Movement on Frozen Water Surfaces within the Matanuska-Susitna Borough***

Pursuant to AS 16.05.871(b), the Department of Fish and Game, Division of Habitat has determined that both the public interest and the proper protection of fish and game would be served through the issuance of a general permit (GP) authorizing the use of motorized vehicles on frozen waters bodies within the Matanuska-Susitna Borough.

Categories of motorized vehicles covered by the GP include any wheeled, tracked, or other ground affect motorized vehicle that is less than 12,000 pounds gross vehicle weight (GVW). This GP does not authorize cross-country movement of equipment on state lands or other activities not allowed under 11 AAC 96.020 (Generally Allowed Uses on State Lands).

The operation of wheeled or tracked equipment on frozen water bodies has been found consistent with the Alaska Coastal Management Program (ACMP) and the Matanuska-Susitna Coastal District Program, provided this activity is conducted in accordance with all Standard Alternative Measures set forth in Generally Consistent Determination-5 (GCD-5 attached).

Various water bodies within the Matanuska Susitna Borough are specified important for spawning, rearing and/or migration of anadromous fish pursuant to AS 16.05.871(a). These water bodies also support a variety of resident fish species.

Pursuant to AS 16.05.871(d), access to, crossings of, and/or egress from any frozen specified anadromous fish bearing water body within the Matanuska-Susitna Borough is authorized provided such activities are conducted in strict accordance with the following stipulations:

- 1) The ice cover shall be of sufficient thickness to support the weight-bearing load of the authorized vehicles(s).
- 2) There shall be no vehicles or equipment operated in the open (un-frozen) waters of any specified water body, under this authorization.
- 3) The use of snow or ice bridges, access ramps, or cribbing to cross any specified water body is prohibited unless approved, in writing, by the Department of Fish and Game, Division of Habitat.
- 4) Access to or egress from frozen waters shall occur only at locations with gently or gradually sloping banks. There shall be no access to or egress from frozen waters at locations with sheer or cut banks.
- 5) The bed or banks of any specified water body shall not be altered or disturbed in any way to facilitate access to, use of, or egress from their frozen surfaces.
- 6) No fuel shall be stored, nor vehicles fueled or serviced while located on the frozen surface or below the ordinary high water line (vegetation line) of any specified water body.

The vehicle owner and the operator, or the legal guardian of minor dependents is responsible for the actions of contractors, agents, or other persons who participate in the approved activity. For any activity that deviates from this approval, the responsible party shall notify the Division of Habitat and obtain written



## HOW CAN YOU HELP PROTECT WATER QUALITY?

### Voluntary Best Management Practices For Development around Waterbodies

Best Management Practice	Rationale
<p>Maintain the natural shoreline or riparian habitat.</p> <ul style="list-style-type: none"> <li>• Preserve a minimum 75 foot wide buffer of continuous, undisturbed native vegetation along at least 50% of the parcel's shoreline or stream bank.</li> <li>• Along remaining 50% of shoreline, limit vegetation removal to what is necessary to accommodate paths, docks, or other limited development.</li> </ul>	<p>Protects water quality by reducing nutrient loading in lakes and minimizing temperature changes to stream environments.</p> <p>Provides flood control and reduces erosion and sedimentation.</p> <p>Protects fish and wildlife habitat by providing cover, nest sites and spawning areas.</p>
<p>Minimize impervious surfaces on shoreline lots.</p> <ul style="list-style-type: none"> <li>• Limit to maximum of 25% of lot area.</li> <li>• Minimize as much as possible within 75 feet of the water's edge.</li> </ul>	<p>Impervious surfaces such as pavement, roof tops, and compacted soil allow runoff to enter waterbodies more readily.</p> <p>Runoff in residential or commercial areas may contain phosphorus and other nutrients that lead to oxygen deficits and algal blooms.</p>
<p>Avoid adding sand beaches or adding fill material to lakeshore, stream banks or wetland areas.</p>	<p>Sand or fill reduces water clarity, is harmful to aquatic life and may contain phosphorus that enriches waterbodies.</p>
<p>Adhere to the state of Alaska's 100 foot waterbody separation for septic systems and outhouses, and keep septic systems in good working order.</p>	<p>Bacterial contamination from poorly maintained or leaking septic systems or outhouses is a human health concern.</p> <p>Nutrients from poorly functioning septic systems or outhouses are waterbody pollutants.</p>
<p>Use landscaping practices that will reduce degradation of waterbodies, including:</p> <ul style="list-style-type: none"> <li>• Test soils to see if fertilizers are needed and use sparingly.</li> <li>• Design a smaller lawn to reduce fertilizer use.</li> <li>• Use native species that grow well without fertilizer.</li> <li>• Avoid fertilizer use completely within 50 feet of the water's edge.</li> </ul>	<p>Lawns are often over-fertilized, which leads to harmful levels of nutrients in the water.</p> <p>Lawns are not as effective as natural vegetation for pollution filtration.</p> <p>Lawns do not provide protective cover for fish and wildlife populations that are part of the waterbody system.</p>
<p>Maintain at least a 75 foot distance from the water's edge for:</p> <ul style="list-style-type: none"> <li>• Additional permanent or accessory buildings.</li> <li>• Driveways, roads and other impervious surfaces.</li> <li>• Livestock or dog quarters or yards.</li> <li>• Manure or compost piles.</li> <li>• Long-term vehicle or equipment storage.</li> </ul> <p>Exceptions may include boathouses, floatplane hangers, marinas, piers and docks that need to be closer than 75 feet to serve their purposes.</p>	<p>Protects human health and water quality by reducing contamination from animal waste, compost, fuels, sediment and other substances that pollute waterbodies.</p>

Mat-Su Borough Ordinance 05-023 established voluntary measures that property owners can use to protect the quality of our lakes, streams and wetlands. For more information, contact the Matanuska-Susitna Borough, Department of Planning and Land Use at 745-9851.

## GENERALLY CONSISTENT DETERMINATION GCD-5

### EQUIPMENT CROSSING OF STREAMS

The following activity is consistent with the Alaska Coastal Management Program per 11 AAC 110.730 when conducted according to the standard alternative measures listed below. This approval does not relieve the applicant from obtaining required permits and approvals from local, State, and federal individual agencies.

### ACTIVITY DESCRIPTION

Winter ice crossings of resident fish streams in the North Slope Borough, Northwest Arctic Borough, and Bering Straits CRSA, and short term or transitory crossings of anadromous fish streams by wheeled or tracked vehicles or equipment statewide.

<i>Authority:</i>	AS 41.14.840 AS 41.14.870 AS 16.20 AS 38.05.850 5 AAC 95
<i>Permits:</i>	Fish Habitat Permit (OHMP) Special Area Permit (DFG) Land Use Permit (DNR)
<i>Region:</i>	Statewide for crossing of anadromous fish streams; winter ice crossings of resident fish streams in the North Slope Borough, Northwest Arctic Borough, and Bering Straits CRSA.

### PROCEDURE

For activities subject to GCD-5, the applicant is not automatically required to complete a coastal project questionnaire (CPQ). For example, a CPQ may not be required for short-term or transitory crossings associated with timber harvest activities on state and federal lands. DFG may require a CPQ for project proposals where it is uncertain whether other state or federal authorizations are required. In all cases, a CPQ is not required for the activities described below on private lands and non-navigable waters reviewed in accordance with AS 41.17, the Alaska Forest Resources and Practices Act.

Prior to crossing any stream, river or lake specified as being important for the spawning,

rearing or migration of anadromous fish, the applicant shall obtain a Fish Habitat Permit pursuant to AS 41.14.840 and AS 41.14.870. In addition, construction of an ice bridge across such water bodies in the North Slope Borough, Northwest Arctic Borough, or Bering Straits CRSA coastal districts requires a Fish Habitat Permit pursuant to AS 41.14.840. OHMP will determine in advance of permit issuance if the activity can be accomplished in a manner that ensures protection of fish habitat.

The standard alternative measures listed under DNR Land Use Permits apply only when a DNR Land Use Permit is issued under this generally consistent determination. All other conditions apply when a OHMP Fish Habitat or DFG Special Areas Permit is issued.

## **STANDARD ALTERNATIVE MEASURES**

### **Summer In-water Crossings**

1. Stream crossings shall be made from bank to bank in a direction substantially perpendicular to the direction of stream flow.
2. Stream crossings shall be made only at locations with gradually sloping banks. There shall be no crossings at locations with sheer or cut banks.
3. Stream crossing activities shall be sited and timed to avoid spawning areas and sensitive fish life stages and habitats. OHMP may restrict or prohibit activities during certain sensitive time periods as necessary.
4. Streambanks and streambeds shall not be altered or disturbed in any way to facilitate crossings. DFG and DNR, or the applicable land manager, shall be notified within three working days of any disturbances. Corrective action may be stipulated as applicable and necessary.
5. Movement of equipment through willow (*Salix*) stands shall be avoided to the extent possible. (North Slope Borough, Northwest Arctic Borough, and Bering Straits CRSA)

### **Ice Bridge Construction or Crossing Frozen Waterbodies**

6. Equipment, other than vessels, must not enter open water areas of a watercourse during winter. Ice or snow bridges and approach ramps constructed at stream crossings must be substantially free of extraneous material (i.e., soil, rock, wood, or vegetation) and, if requested by OHMP, must be removed or breached before spring breakup. Alterations of the banks of a watercourse are prohibited.
7. To avoid additional freeze-down of deep-water pools harboring overwintering fish, watercourses shall be crossed at shallow riffle areas from point bar to point bar.



Compaction or removal of the insulating snowcover from the deep-water pool areas of rivers must be avoided. Exceptions to this stipulation may be authorized by OHMP on a case-by-case basis if it determines the pool is deep enough to prevent complete freeze-down.

### **DNR Land Use Permits**

8. Vehicle maintenance, refueling of equipment, campsites, or storage and stockpiling of hazardous substances on the surface ice of lakes, ponds, or rivers is prohibited. The storage of non-hazardous material on the surface ice of lakes, ponds, or rivers is allowed with consent from DNR or the applicable land manager.
9. Snow ramps or other mitigating measures will be used to avoid unsafe obstacles to snow machiners or others using the riverway for travel.
10. Equipment shall not operate in flowing water without written authorization from DNR, Division of Land.

### **Wildlife Avoidance**

11. Operations must avoid grizzly bear dens by one-half mile. Known bear den locations shall be obtained from OHMP at (907) 459-7289 prior to starting operations. Occupied dens encountered in the field must be reported to the above, and subsequently avoided. (North Slope Borough, Bering Straits CRSA, and Northwest Arctic Borough)
12. Operations shall avoid known polar bear dens by one mile. Known den locations shall be obtained from the U.S. Geological Survey at (907) 786-3424 prior to starting operations. New dens encountered in the field must be reported to the above, and subsequently avoided by one mile. (North Slope Borough, Bering Straits CRSA, and Northwest Arctic Borough)

### **Spill Notification**

13. The lessee or permittee shall immediately notify DEC by telephone, and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail, informing DEC of: any unauthorized discharges of oil to water; any discharge of hazardous substances other than oil; and any discharge or cumulative discharge of oil greater than 55 gallons solely to land and outside an impermeable containment area. If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, the lessee or permittee shall report the discharge within 48 hours and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail. Any discharge of oil, including a cumulative discharge, solely to land greater than one gallon up to 10 gallons must be reported in writing on a monthly basis.

The posting of information requirements of 18 AAC 75.305 shall be met. The provisions of 18 AAC 75.310 (Scope and Duration of Initial Response Actions) and other reporting requirements of 18 AAC 75.300 - 18 AAC 75.396 also apply. The lessee or permittee shall supply DEC with all follow-up incident reports. Notification of a discharge must be made to the nearest DEC Area Response Team during working hours: Anchorage (907) 269-7500, fax (907) 269-7648; Fairbanks (907) 451-2121, fax (907) 451-2362; Juneau (907) 465-5340, fax (907) 465-2237. The DEC oil spill report number outside normal business hours is (800) 478-9300.

## **ADVISORIES**

1. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any state-owned historic, prehistoric, or archeological site without a permit from the commissioner. Should any sites be discovered during the course of field operations, activities that may damage the site shall cease and the Office of History and Archaeology in the DNR, Division of Parks and Outdoor Recreation at (907) 269-8721 and the appropriate coastal district shall be notified immediately.