JEAN LAKE LAKE MANAGEMENT PLAN



ADOPTED JANUARY 2006

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 Jean Lake 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*

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**

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.

^{*} These options may be recommended on a daily time share basis.

^{**}These options *must* be on a daily time share basis.

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 taxing 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 lake configuration, lake depth, or other considerations through the adoption of individual lake management plans.

According to MSB GIS information, Jean Lake is approximately 51 surface acres in size, and therefore, falls within the guidelines for lakes less than 75 surface 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 collect background information on the lake and encourage 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 borough Planning Commission. The Commission considers all oral and written comments received in a public hearing and either recommends to the 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

Most of the lake property owners and residents in attendance at the meetings expressed a preference for enforceable restrictions on:

- Quiet hours 10 p.m. to 8 a.m.
- Electric motors only
- Personal watercraft restriction

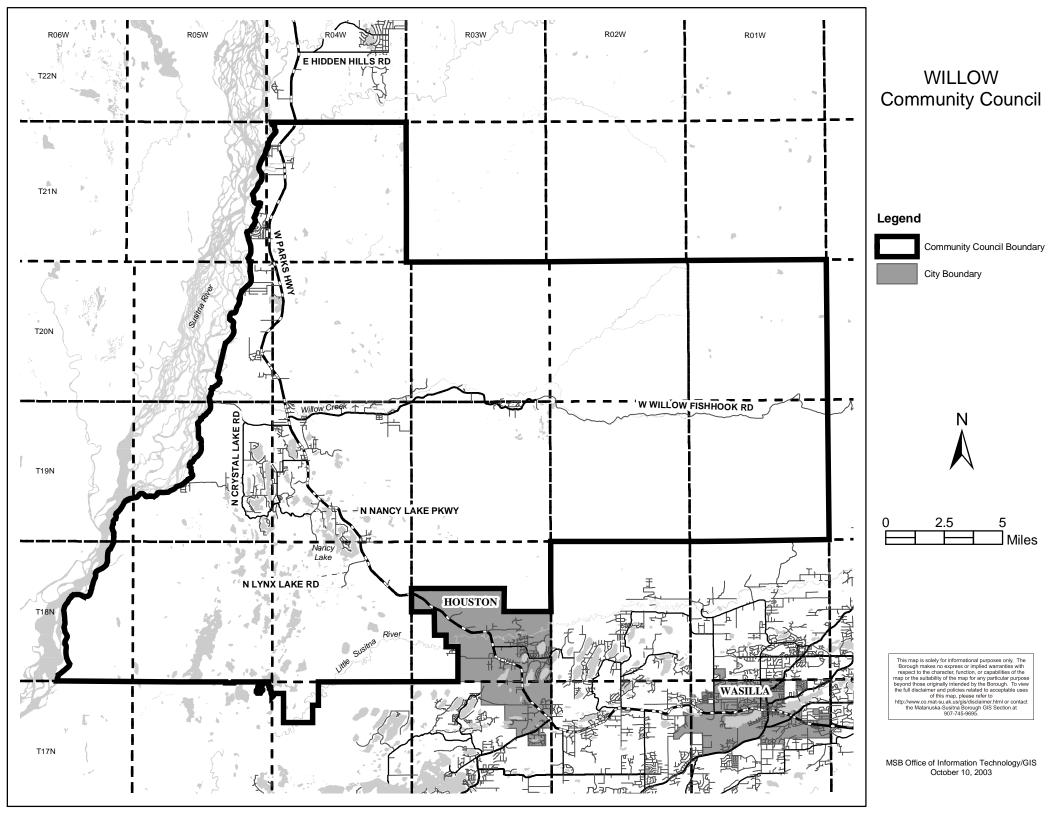
These restrictions will protect the quiet enjoyment of the properties and allow continued use of the lake by residents and visitors in keeping with traditional practices. The plan will also help future lake users to fish, boat or recreate in a manner that protects neighborhood values.

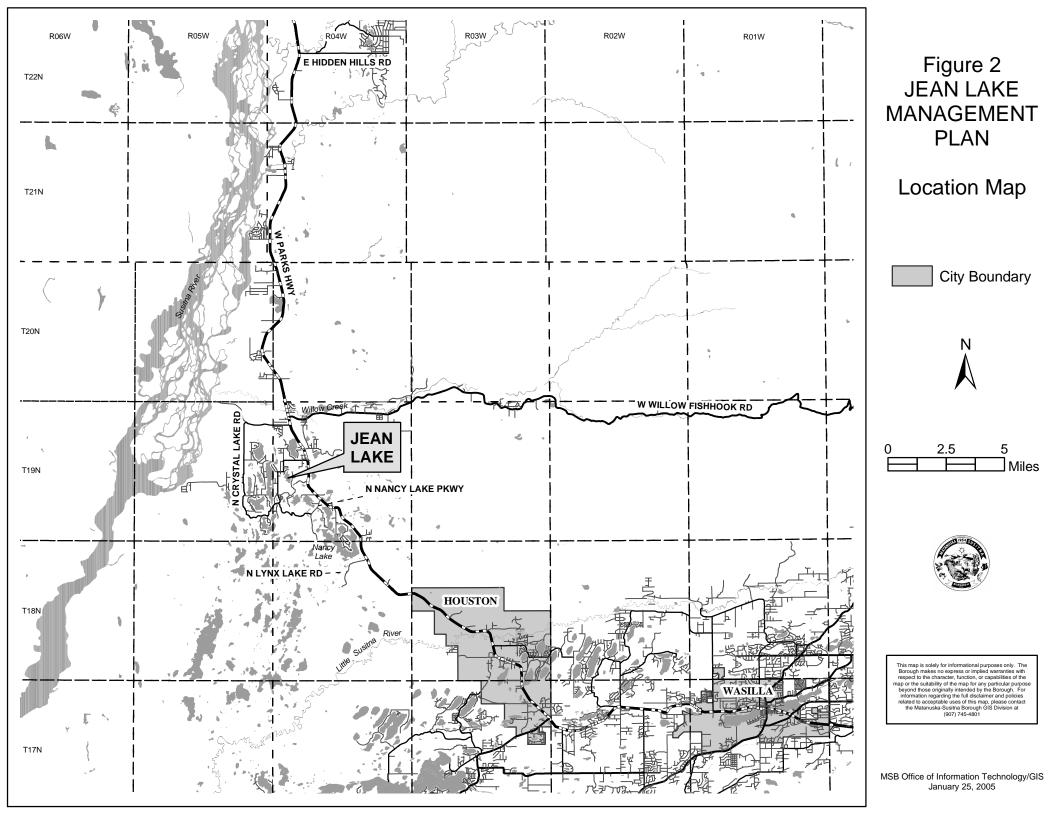
2. Inventory of Existing Conditions

2.1 Location

Jean Lake is located in the Willow community council area, approximately one mile west of mile 68 of the Parks Highway. It is within the boundaries of the Willow Area Community Organization (WACO, see figures 1 and 2).

The residential lots on Jean Lake are primarily accessed from W. Long Lake Road or N. Hagion Shores Drive. There is no developed public access point to the lake; however, a state owned parcel and adjacent section line intersect at the northern tip of the lake. W. Long Lake Road and W. Causey Street are constructed within this section line, and this route is occasionally used by the public to access the lake, however, not regularly.





2.2 Physical Characteristics of the Lake

Jean Lake is typical of glacial moraine formed lakes in the area. These lakes are situated in mixed gravels and sands with well defined shorelines in mixed spruce/birch forest habitats. The lake hydrology is dominated by subsurface flows of groundwater. Surface creek flows are a minor component in relation to the size of the lake. The surrounding topography is relatively flat, with most properties having about 2-3 feet elevation from the lake surface.

Overall, the lake is relatively shallow near the shoreline (3-5 feet), with the center of the lake only reaching a maximum depth of approximately 30 feet (based on input from local residents and property owners). There is no inlet or outlet creek serving Jean Lake, but marshy areas are found near the southwestern and northeastern shores. According to the borough's GIS map information, it is approximately ½ mile wide (although the shoreline is not symmetrical) and approximately ½ mile in length. Property owners and residents also indicate there is a small island near the center of the southern portion of the lake, which does not show on borough tax maps, but is visible on aerial photos.

The lake substrate is mixed cobble and gravels with fine sands and silts. Shorelines are mixed with established vegetation stabilizing undeveloped waterfronts. Much of the shoreline is in its natural condition.

Jean Lake is not currently stocked by the Alaska Department of Fish and Game. The lake 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 established marshes, aquatic plants and organic lake bottoms. Jean Lake can be placed toward the low nutrient end of the successional scale.

Water quality problems have not been reported and casual observations by borough staff report no problems.

Table 1: Jean Lake Physical Characteristics

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Surface Acres	51
Volume	Unknown
Maximum Depth	30 feet
Approximate width	¼ mile
Approximate length	½ mile

Source: MSB GIS Information, and local knowledge

2.3 Land Use and Land Ownership

The property around the lake is almost entirely in private ownership. There is one state owned parcel at the north end of the lake, but no borough owned property. Generally, three subdivisions, Mt. Gilead Subdivision, Hagion Shores and Hagion Shores 1st Addition border a majority of the lake at the northwest and eastern shores, all of which have recorded covenants, limiting the type of development to recreational or residential. A large un-subdivided, privately owned vacant parcel borders the southwest shore. ASLS 96-19 Tract 2 has a 50 foot "to" and "along" easement along the shoreline (See figure 3).

Approximately half of the lots immediately adjacent to the lake are developed for residential or recreational use.

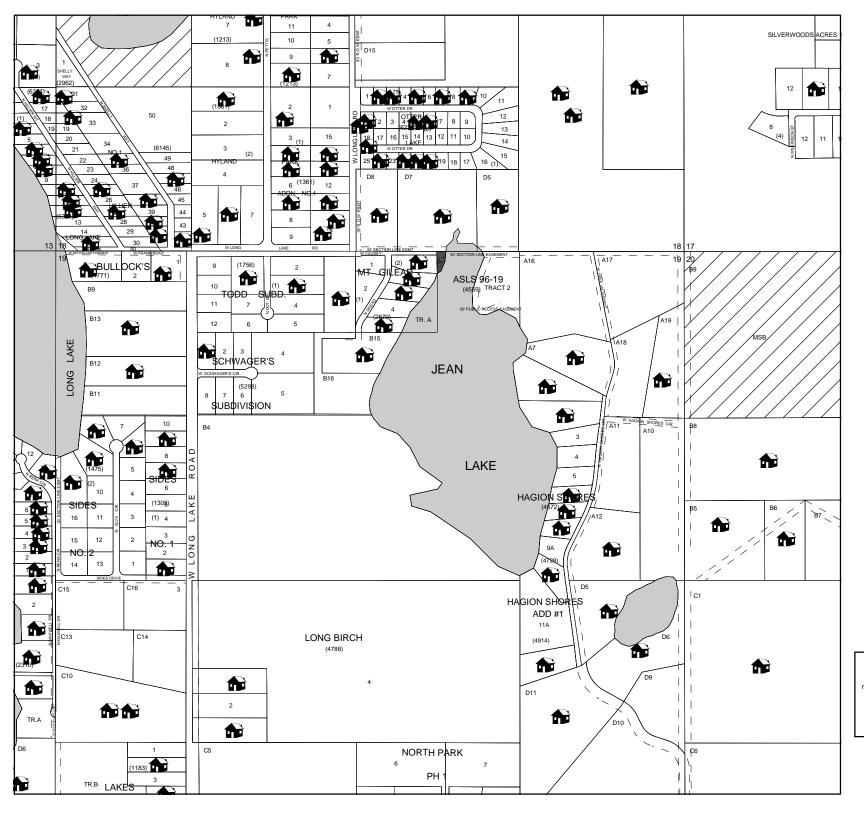


Figure 3 JEAN LAKE MANAGEMENT PLAN

Legend

Land Use



Residential Structure

Ownership

// Borough

Private

State



0 250 500 1,000 Feet



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at (907) 745-4801

MSB Office of Information Technology/GIS January 25, 2005

2.4 Social/Demographic – Usage

The present human use of Jean Lake may be characterized as being primarily quiet, recreational and residential. Recorded covenants, issued on the property by the developer prior to sale to private owners, limit development to residential/recreational only. In order to effectively manage lake usage and protect water quality, future residential plans need to be identified. It is possible that the large, private parcel on the southwest shore may be later subdivided into lots, but at the time of this plan, no subdivision plans have been identified.

Public access to the lake can be obtained via the section line and state parcel at the north end of the lake, which, according to local property owners, is only used occasionally by the public. Another access point has been identified on the plat for Lot 11A for the plat for Hagion Shores 1st Addition; however it is recorded as a "50 foot private access easement...reserved for all property owners within certain portions of Section 19, T19N R04W". Local residents state that the easement is used by some people to access the lake in the summer, but mostly during the winter as snow machine access. The use of the access by the general public as a "pass through" snow machine route is of concern to some property owners, as the users tend to exit the lake through the large un-subdivided private parcel on the west shore. Trespass onto the private property is of much concern, as is the noise generated at all hours of the night.

Those in attendance at the meetings prefer to keep the existing access in its current condition. As the lake is not stocked, it is not anticipated that the public interest to use the lake will increase, as there are other more readily accessible and larger lakes in the vicinity.

While the concern about the private access is valid, this plan can only make recommendations about public education about the private property surrounding the lake, and any quiet hours, and by not encouraging winter trails to be routed through the private property.

2.5 Existing Plans and Lake Monitoring Programs

State

The State plan affecting the Jean Lake area is the Willow Sub-Basin Area Plan. The Willow Sub-Basin Area Plan, adopted in October 1982, contains management intent for State and Borough lands within the Willow Sub-Basin, an area of approximately 970,000 acres. Jean Lake is within the Willow Management Unit, which recommends the following land uses:

- Community Land Needs
- Parks Hwy. Scenic Areas

The map in the plan indicates that a portion of the northern tip of the lake is appropriate for a recreation site, which is likely the reason that the one small parcel of state land has remained in public ownership.

Jean Lake 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 examples, a variance application to build a habitable structure or garage closer than 75 feet from the ordinary high water mark of Jean Lake would be reviewed to determine whether or not it is consistent with the Coastal Management Plan. Construction within waterbodies 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.

Borough

Borough plans that address Jean Lake in some manner include the Borough-wide Comprehensive Plan, adopted in 1971, the Borough-wide Long Range Transportation Plan, Public Facilities Plan, and the MSB Recreational Trails Plan. It lies within the boundaries of the Willow Area Community Organization, which does not have a comprehensive plan.

The Borough-wide comprehensive plan does not make specific recommendations for Jean Lake. Rather, the 1971 plan makes a series of general recommendations for the Willow area, which do not reflect the current social, economic or development realities.

The Borough Public Facilities Plan makes recommendations on a regional basis for the provisions of public services including the development of public facilities necessary to the provision of those services. Services included in the plan are public safety (fire protection, emergency medical services, and emergency preparedness); library; historical preservation; governmental administration; education; parks, recreation and open space; trails; and utilities. All of these elements affect the Jean Lake area in some way, but the Parks, Recreation, and Open Space; and Trails elements have the most potential impact.

The 1997 Long Range Transportation Plan (LRTP) recommends Future Road Improvements for a road network that will meet the stated goal and objective for the year 2015. The plan talks about further development of the port, and identifies Point MacKenzie Road to Burma Road to South Big Lake road as the mid term access from the port to the Parks Highway. The LRTP is currently being updated. More recently, a study by Tryck, Nyman and Hayes recommends that route as the preferred road corridor between the port and Parks Highway, with an alternate route to the east

as the preferred rail corridor. Should the road corridor be developed, the potential for a shorter route between Anchorage and the recreational opportunities in the Willow area could have an effect on Jean Lake residential development and public recreation activities.

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 of natural or man-made origin. Residents showed interest in participating in the Lake Monitoring Program.

2.6 Existing Regulations

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

Federal

Any work which results in the dredging or placing of structures or fills 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 (DEC) provides regulations for wastewater disposal. DEC wastewater/septic regulations [18 AAC 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 higher 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 require a Title 41 permit from the Alaska Department of Natural Resources (DNR). Since 1994, the Habitat and Restoration Division of the Alaska Department of Fish & Game issued a one-year general permit, renewed annually, and currently DNR issues such permits allowing vehicle movement on frozen water surfaces in south-central Alaska without a special permit (Appendix A). Finally, the general ADF&G fishing regulations apply to Jean Lake.

A navigable or public waterbody includes water suitable for commercial navigation, floating of logs, landing and take-off of aircraft, and public boating, trapping, hunting of waterfowl and aquatic animals, fishing, or other public recreational purposes. Jean Lake 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 the surface waters of navigable and public waterways, typically through a "to" easement. Additionally, land adjacent to navigable or public waters may be subject to an "along" easement, which provides a 50-foot public use easement along the waterway adjacent to the ordinary high-water mark. These easements are created when the State or Borough obtains patents to their lands and stay with the property when the land is disposed of. State and Borough lands transferred prior to the adoption of AS 38.05.127 are not usually subject to the "to" and "along" easements. Also, lands patented by the federal government are not usually subject to the "to" and "along" easements.

There is a "to" and "along" easement on Tract 2 of ASLS 96-19.

Borough

Several Borough-wide ordinances address the development and use of land adjacent to Jean Lake. The regulations are contained within the Borough's planning (Title 15), subdivision (Title 16), zoning (Title 17), and real property management (Title 23) ordinances.

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 Jean Lake, Lake Management Plan will become an instrument of Borough policy similar to the other plans adopted by the Borough Assembly.

Title 16 provides the subdivision development standards within the Borough and establishes the Platting Board. Two of Title 16's requirements that are of special note to the development at Jean Lake include a minimum lot size of 40,000 square feet, and a minimum lot width when measured at the lake's water line of one hundred twenty-five feet (Figure 4). If community septic system is provided, then the minimum lot size is 20,000 square feet and minimum width may be eighty-five feet.

Zoning regulations (Title 17) that are of special note to development activities at Jean Lake include setback requirements and a petition process to limit or eliminate motorized use of lakes 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 waterbed or water course (Figure 4). The Borough also requires that any development which seeks to establish or operate a

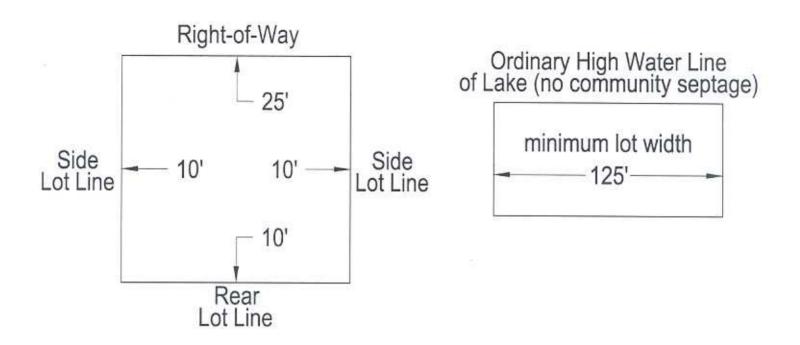
mobile home park, junkyard, refuse area or landfill, or dispense alcohol, must first obtain a conditional use permit.

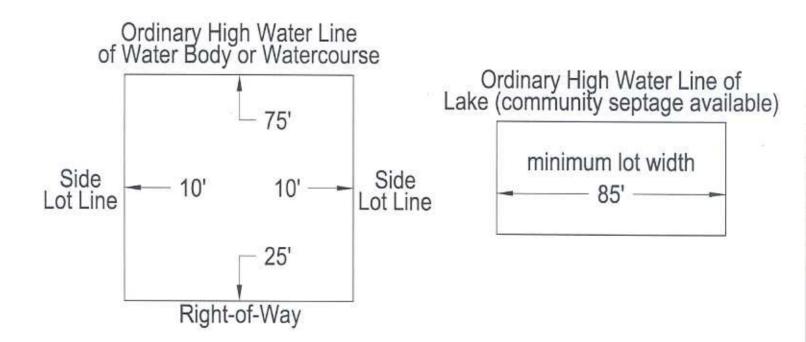
Private

Private regulations which exist in the Jean Lake area would be in the form of subdivision covenants. The borough files contain copies of recorded covenants for Mt. Gilead Subdivision, Hagion Shores and Hagion Shores Addn. 1. For current information about covenants, the reader is referred to the State of Alaska Recorders Office.

Jean Lake is within the Willow Area Community Organization (WACO) area. Willow does not have a community comprehensive plan. Borough code requires that the Jean Lake draft lake management plan be submitted to WACO for review and comment prior to consideration by the planning commission.

General Setback Requirements and Lot Size* Requirements





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

3. Issues and Concerns

The issues and concerns identified by residents include:

- Protection of wetlands, nesting waterfowl (nesting on island), and wildlife habitat
- ➤ Protection of quiet recreational nature of the lake
- Reduce conflicts between motorized and non-motorized uses (safety)
- Lake configuration is not conducive to accommodating multiple uses
- ➤ Public access is point is not developed nor advertised, and not used frequently want to keep it that way. Private access point is used occasionally in summer and in winter by snow machines.
- ➤ Noise (can hear jet-ski noise from Long Lake, don't want same noise on Jean Lake)
- ➤ Winter use by snow machines and trails leading through private parcels onto the lake, concern with noise and trespass
- > Maintain water quality

A majority of those attending the meetings said that the quiet, residential character of the lake should be protected. The present state of the lake may be characterized as a residential development having a quiet quality. The historical use of Jean Lake has generally not included high powered motorized or personal watercraft. 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, the plan can make recommendations about winter trails leading to the lake, posting public information, and enforcement of quiet hours. Subdivision of the large parcel of undeveloped land and homebuilding on vacant lots may also result in greater impacts of noise and wakes degrading the shoreline, increasing the potential for damage to wildlife and/or waterfowl on the island, and impacting the quiet recreational residential quality of the lake.

4.0 Goals

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

4.1 Water Quality and Wildlife Protection

Jean Lake is a significant natural resource. It is the desire of property owners, residents, and users of Jean Lake 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 lack of an inlet or outlet on the lake increases the desire 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 Jean Lake to preserve the quiet and peaceful residential character of the lake, while allowing some recreational uses for both residents and visitors.

4.3 Maintenance of Public Access

It is the desire of property owners and residents of Jean Lake to maintain the public access in its current state. Should the state wish to improve the access through the state owned parcel at the north shore of the lake, 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 Jean Lake 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 wakes 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 large motors may also disturb waterfowl. Those in attendance at the meeting agreed that personal watercraft should be prohibited on Jean Lake to reduce wakes and manage noise. Most of those in attendance at the meeting were in agreement with the recommendation of electric motors only.

Most individuals will not disturb wildlife or nesting fowl when or if they are informed of its location and the proper behavior when near it. A number of techniques can be employed to provide the public with information about nesting loons and grebes, including providing signage at lake access points. Information about informational/educational signage to inform the public about proper "loon or grebe etiquette" is included as Appendix B.

Maintaining a natural shoreline habitat 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.

In order to determine baseline water quality conditions on Jean Lake, 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 residential 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 Jean Lake.

The use of personal watercraft, a.k.a. jetskis, is not a traditional use of Jean Lake. It is incompatible with the quiet recreational and residential uses of the lake. Furthermore, personal watercraft pose a safety hazard for swimmers and boaters. Most residents and property owners who have attended the public meetings support a ban of personal watercraft. It is recommended that personal watercraft be prohibited on Jean Lake.

The establishment of quiet hours, between 10 p.m. and 8 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

Public access to the lake is limited. Those in attendance at the meetings prefer to maintain the current access as it exists and not to provide improvements to the access. It is recommended that public access remain and be maintained in its current condition.

The private access point could be identified by signage as indicated on the plat, and direct winter snow machine traffic to an alternate legal route around the lake.

5.4 Educate Residents and Visitors

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

Post and maintain signs at the public access point that inform the public about code restrictions and non-code recommendations.

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 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 Jean Lake, Lake 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.

Personal Watercraft Ban

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

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 10 p.m. and 8 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.

Electric motors only

Nesting loons and grebes and other migratory waterfowl are at an increased risk of disturbance from wakes caused by watercraft with large horsepower engines. Large wakes also contribute to shoreline erosion. Use of the lake by large horsepower boats may also endanger public safety and create hazards to swimmers and sports fishers. A restriction for use of electric motors only is established for Jean Lake.

Maintain Current Access

The public access point to Jean Lake should be maintained in its current condition and not improved. The private access point could be identified by signage as indicated on the plat.

Commercial Aircraft Operations

Local residents point out that Jean Lake occasionally sees float plane usage. However, the lake is not conducive to accommodating airplane traffic, due to its size. Therefore, it is recommended that commercial floatplane operations be discouraged from operating at Jean Lake.

Public Information

Signs should be posted at the public access point of Jean Lake informing lake users of the regulations on the lake. Mail or deliver notices to inform property owners and residents about code restrictions, and enclose information about non-code recommendations. Inform residents about the process for reporting violations to the Borough Code Compliance Division.

Vehicle Movement on Frozen	Appendix A: Water Surfaces	s within South Central A	Maska
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DEPARTMENT OF NATURAL RESOURCES

Office of Habitat Management and Permitting

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FISH HABITAT PERMIT FH-04-IV-0007-GP Revised

ISSUED: February 6, 2004 EXPIRES: December 31, 2004

General Public:

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

Pursuant to AS 41.14.870(b), the Department of Natural Resources, Office of Habitat Management and Permitting (OHMP) 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 any motorized vehicles on frozen waters of various specified rivers, lakes, and streams within the Matanuska-Susitna Borough.

Categories of motorized vehicles covered by the GP include: any wheeled, tracked, or other ground effect motorized vehicles less than 12,000 pounds gross vehicle weight (GVW).

This GP does not authorize cross-country movement of equipment on state land or other activities not generally authorized by the Alaska Department of Natural Resources.

Various rivers, lakes, or streams within the described area have been specified as being important for the spawning, rearing, or migration of anadromous fish pursuant to AS 41.14.870(a). The rivers. lakes, and streams are utilized by salmon and other anadromous fish for spawning, rearing, or migration, and by resident fish species.

In accordance with AS 41.14.870(d), access to, use and crossings of, or egress from any specified waters, as described above, is hereby authorized provided the stipulations contained herein are adhered to:

- 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 water of any specified lake, river, or stream under this GP.
- 3. The use of snow or ice bridges, access ramps, or cribbing to cross any specified river or stream is prohibited unless specifically approved, in writing, by the Department of Natural Resources, Office of Habitat Management and Permitting (OHMP) .

- 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.
- The bed or banks of any specified lake, river, or stream 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 on the frozen surface of below the ordinary high water line (vegetation line) of any specified lake, river, or stream. No vehicles leaking fuels, oils, hydraulic or cooling fluids shall be operated on the frozen surface or below the ordinary high water line of any specified lake, river, or stream.

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 OHMP and obtain written approval in the form of an individual permit before beginning the activity. Any action taken which increases the scope of the approved activity or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved activity. The final determination as to the significance of any deviation and the need for an individual permit is the responsibility of OHMP. Therefore, it is recommended that OHMP be consulted immediately when a deviation from the approved activity is being considered.

This letter constitutes a permit issued under the authority of AS 41.14.870. Please be advised that this approval does not relieve you of the responsibility for securing other permits: state, federal, or local.

Pursuant to 6 AAC 80.010(b), the conditions of this general permit are consistent with the Alaska Coastal Management Program and the Matanuska-Susitna Borough.

The operation of wheeled or tracked equipment of frozen waters has been found consistent with the Alaska Coastal Management Program (ACMP) under the standard conditions contained in General Concurrence-5 (attached).

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The OHMP reserves the right to require mitigation measures to correct disruptions to fish and game created by the project that were a direct result of the failure to comply with this permit or any applicable law.

The recipient of this permit (the responsible party or permittee) shall indemnify, save harmless, and defend the OHMP, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or the permittee's performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the OHMP's negligence.

This permit decision may be appealed in accordance with the provisions of AS 44.62.330-44.62.630.

Sincerely,

Dick LeFebvre, Deputy Commissioner

By: Jeffrey C. Davis, Habitat Biologist Office of Habitat Management and Permitting

Enclosure: General Concurrence GC-5

cc: M. Agnew, ABWE

S. Duncan, EPA

K. Hudson, MSB

J. Jones, ATS

S. Joy, USCOE

K. Kruse, DNR/DML&W

B. Lance, NMFS

T. Oleck, ABWE

A. Rappoport, USFWS

T. Rumfelt, ADEC

D. Rutz, ADF&G

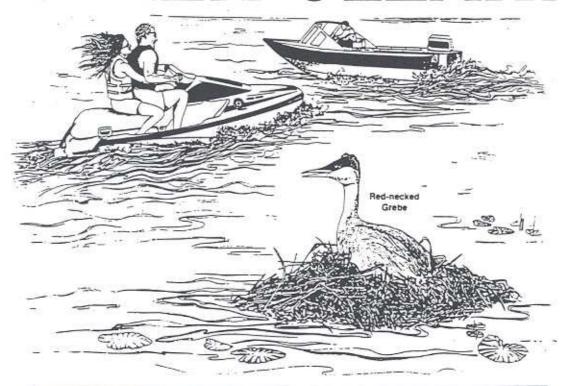
R. Thompson, DNR

C. Yoder, ABWE

C. Zuelow-Osborne, OPMP

Appendix B:
Bird Nesting Area Buoys, "Loon Alert!" and "Steer Clear!" Signs

STEER CLEAR!



BOATERS – Stay at least 100 feet away from nesting Red-necked Grebes.

Grebes are duck-sized birds that nest on floating vegetation and debris in shallow water.

Wakes from watercraft will destroy their nests and kill their eggs and chicks.

Go slowly along shorelines and avoid nesting areas.

- HELP PROTECT ALASKA'S WILDLIFE -

Wildlife harassment is illegal. Report violations to Fish and Wildlife Protection (State Troopers) or call (800) 478-3377.

This sign was produced by a grant to the Alaska Watchable Wildlife Trust Fund, c/o Alaska Conservation Foundation, 430 W. 7th Avenue #215, Anchorage AK 99501 (907) 276-1917.

POSTED BY ALASKA DEPT. FISH AND GAME



LOON ALERT



Help keep this lake safe for loons and other wildlife:

- 1. Watch loons from a distance.
- Pick up fishing line and other litter that may entangle loons.
- Keep your dog on a leash.

Breeding loons have declined or disappeared from other U.S. states due to human disturbance and habitat loss. Wildlife harassment is illegal.

Please report violations to Fish and Wildlife Protection (State Troopers) or call (800) 478-3377.

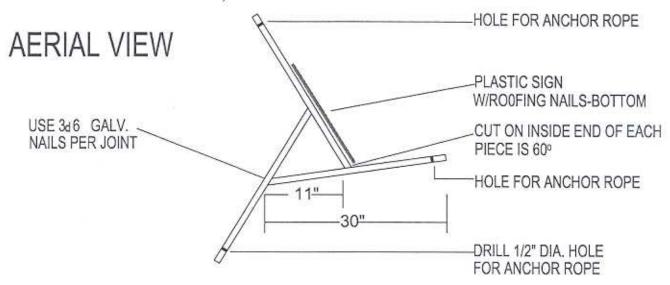
For loon information write: Alaska Department of Fish and Game,

Division of Wildlife Conservation, 333 Raspberry Road, Anchorage, AK 99518.

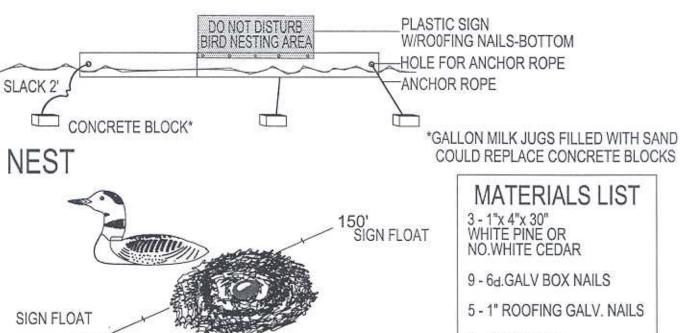


SIGN FLOAT FOR LOON NESTS

(NOT LIKELY TO TURN OVER IN THE STRONGEST WIND)



VIEW FROM WATER



The platforms should be attached with two anchors a minimum of 150 feet from the nest (more, if needed to avoid disturbing the loons) and be clearly visible, yet not be a boating hazard. Signs should be removed after nesting is completed (usually by mid-July) each year to preserve their use. Signs should be stored over the winter in a dry area.

150

- 5 1" ROOFING GALV, NAILS
- 1 LOON SIGN
- 2 3 CONCRETE BLOCK * FOR ANCHORS

ENOUGH 1/4" NYLON ROPE TO REACH BOTTOM OF LAKE FOR ANCHOR

DESIGNED BY. HERB CILLEY, PO BOX 348 TUPELO POINT, BOWLAKE, NORTWOOD, N.H. 83251

WATANUSKA-SUSITNA BORDUGH SUPPORT SERVICE 1995

Appendix C: Voluntary Best Management Practices



HOW CAN YOU HELP PROTECT WATER QUALITY?

Voluntary Best Management Practices For Development around Waterbodies

Best Management Practice	Rationale		
Maintain the natural shoreline or riparian habitat. Preserve a minimum 75 foot wide buffer of continuous, undisturbed native vegetation along at least 50% of the parcel's shoreline or stream bank. Along remaining 50% of shoreline, limit vegetation removal to what is necessary to accommodate paths, docks, or other limited development.	Protects water quality by reducing nutrient loading in lakes and minimizing temperature changes to stream environments. Provides flood control and reduces erosion and sedimentation. Protects fish and wildlife habitat by providing cover, nest sites and spawning areas.		
 Minimize impervious surfaces on shoreline lots. Limit to maximum of 25% of lot area. Minimize as much as possible within 75 feet of the water's edge. 	Impervious surfaces such as pavement, roof tops, and compacted soil allow runoff to enter waterbodies more readily. Runoff in residential or commercial areas may contain phosphorus and other nutrients that lead to oxygen deficits and algal blooms.		
Avoid adding sand beaches or adding fill material to lakeshore, stream banks or wetland areas.	Sand or fill reduces water clarity, is harmful to aquatic life and may contain phosphorus that enriches waterbodies.		
Adhere to the state of Alaska's 100 foot waterbody separation for septic systems and outhouses, and keep septic systems in good working order.	Bacterial contamination from poorly maintained or leaking septic systems or outhouses is a human health concern. Nutrients from poorly functioning septic systems or outhouses are waterbody pollutants.		
Use landscaping practices that will reduce degradation of waterbodies, including: • Test soils to see if fertilizers are needed and use sparingly. • Design a smaller lawn to reduce fertilizer use. • Use native species that grow well without fertilizer. • Avoid fertilizer use completely within 50 feet of the water's edge.	Lawns are often over-fertilized, which leads to harmful levels of nutrients in the water. Lawns are not as effective as natural vegetation for pollution filtration. Lawns do not provide protective cover for fish and wildlife populations that are part of the waterbody system.		
 Maintain at least a 75 foot distance from the water's edge for: Additional permanent or accessory buildings. Driveways, roads and other impervious surfaces. Livestock or dog quarters or yards. Manure or compost piles. Long-term vehicle or equipment storage. Exceptions may include boathouses, floatplane hangers, marinas, piers and docks that need to be closer than 75 feet to serve their purposes. 	Protects human health and water quality by reducing contamination from animal waste, compost, fuels, sediment and other substances that pollute waterbodies.		

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.