

Caswell Lake

LAKE MANAGEMENT PLAN

Assembly Adopted: 6 / 17 / 2014



**Matanuska Susitna Borough
Department of Planning and Land Use**

CODE ORDINANCE

Sponsored by: Borough Manager
Introduced: 06/03/14
Public Hearing: 06/17/14
Adopted: 06/17/14

**MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 14-082**

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ADOPTING MSB 15.24.030(C)(41) THE CASWELL LAKE, LAKE MANAGEMENT PLAN AND AMENDING MSB 17.59, LAKE MANAGEMENT PLAN IMPLEMENTATION.

BE IT ENACTED:

Section 1. Classification. Section 1, 2, and 7 of this ordinance are non-code, Sections 3, 4, 5, and 6 are of a general and permanent nature and shall become a part of the borough code.

Section 2. Adoption of plan. The Matanuska-Susitna Borough Assembly does hereby adopt the Caswell Lake, Lake Management Plan.

Section 3. Amendment of paragraph. MSB 15.24.030(C) is hereby amended to read as follows:

(41) Caswell Lake, Lake Management Plan, adopted

2014.

Section 4. Amendment of paragraph. MSB 17.59.060(B)(2) is hereby amended to read as follows:

(2) The hours of 10 p.m. to 8 a.m., Sunday through Saturday, are designated as quiet hours for the following lakes:

(a) Crystal Lake.

(b) John Lake.
(c) Lake Five.
(d) Little Question Lake.
(e) Memory Lake.
(f) Question Lake.
(g) Rainbow Lake.
(h) Unnamed lake located within T25N,
R4W, Section 30, S.M., AK between Question Lake and
the Talkeetna Spur Road.

(i) Unnamed lake located within T25N,
R4W, Section 31, S.M., AK between Question Lake and
the Talkeetna Spur Road.

(j) Walby Lake.
(k) Diamond Lake.
(l) Christiansen Lake.
(m) Neklasen and Lower Neklasen Lakes.
(n) Marion Lake.
(o) Long Lake (Houston).
(p) Three Mile Lake.
(q) Wolverine Lake.
(r) Little Lonely Lake.
(s) Jean Lake.
(t) Liten Lake.
(u) Shirley Lake.

- (v) Florence Lake.
- (w) Carpenter Lake.
- (x) Stevens Lake.
- (y) Sunbeam and Suncrest Lakes.
- (z) Little Beaver Lake.

(aa) Caswell Lake.

Section 5. Amendment of paragraph. MSB 17.59.060(C)(2) -
No-Wake Zone is hereby adopted to read as follows:

(2) 100 feet from the shoreline.

- (a) West Papoose Lake.
- (b) Diamond Lake.
- (c) Marion Lake.
- (d) Long Lake (Houston).
- (e) Shirley Lake.
- (f) Florence Lake.
- (g) Carpenter Lake.
- (h) Stevens Lake.
- (i) Morvro Lake.
- (j) Jacobsen Lake.
- (k) Suncrest Lake.

(l) Caswell Lake.

Section 6. Amendment of paragraph. MSB 17.59.060(D)(2) -
Motorized Watercraft Use is hereby amended to read as follows:

(2) Personal watercraft are prohibited on:

- (a) Blodgett Lake.
- (b) Bonnie Lake.
- (c) Doubloon Lake.
- (d) Island Lake.
- (e) Ravine Lake.
- (f) Upper Bonnie Lake.
- (g) West Papoose Lake.
- (h) Diamond Lake.
- (i) Christiansen Lake.
- (j) Marion Lake.
- (k) Long Lake (Houston).
- (l) Three Mile Lake.
- (m) Wolverine Lake.
- (n) Whiskey Lake.
- (o) Little Lonely Lake.
- (p) Jean Lake.
- (q) Liten Lake.
- (r) Shirley Lake.
- (s) Florence Lake.
- (t) Carpenter Lake.
- (u) Stevens Lake.
- (v) Paradise Lake.
- (w) Jacobsen Lake.

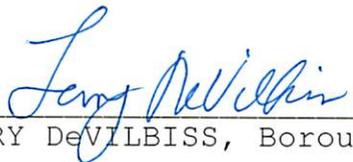
(x) Sunbeam and Suncrest Lakes.

(y) Lake of the Woods.

(z) Caswell Lake.

Section 7. Effective date. This ordinance shall take effect upon adoption.

ADOPTED by the Matanuska-Susitna Borough Assembly this 17 day of June, 2014.



LARRY DEVILBISS, Borough Mayor

ATTEST:



LONNIE R. McKECHNIE, CMC, Borough Clerk
(SEAL)

PASSED UNANIMOUSLY: Sykes, Beck, Arvin, Colligan, Salmon,
and Colver

TABLE OF CONTENTS

APPENDICES.....2

1 INTRODUCTION1

1.1 PURPOSE 1

1.2 SCOPE 1

1.3 PROCESS..... 2

1.4 ENFORCEABLE CODE RESTRICTION..... 3

2. INVENTORY OF EXISTING CONDITIONS3

2.1 LOCATION 3

2.2 PHYSICAL CHARACTERISTICS OF THE LAKE 4

2.4 SOCIAL/DEMOGRAPHIC – USAGE 5

2.5 EXISTING PLANS AND LAKE MONITORING PROGRAMS 6

2.6 EXISTING REGULATIONS 7

3. ISSUES AND CONCERNS.....9

4.0 GOALS10

4.1 WATER QUALITY AND WILDLIFE HABITAT PROTECTION..... 10

4.2 PRESERVATION OF QUIET RECREATIONAL AND RESIDENTIAL CHARACTER 10

4.3 MAINTENANCE OF PUBLIC ACCESS 10

4.4 EDUCATE RESIDENTS AND VISITORS..... 10

5.0 RECOMMENDATIONS11

5.1 MAINTAIN WATER QUALITY AND PROTECT WILDLIFE 11

5.2 PRESERVE QUIET RECREATIONAL AND RESIDENTIAL CHARACTER..... 11

5.3 MAINTAIN CURRENT **LIMITED** ACCESS 11

5.4 EDUCATE RESIDENTS AND VISITORS..... 12

6.0 IMPLEMENTATION12

6.1 NO WAKE ZONE 100 FEET FROM SHORE - **MSB 17.59.060(C)(2)** 12

6.2 QUIET HOURS - **MSB 17.59.060(B)(2)** 12

6.3 PERSONAL WATERCRAFT BAN - **MSB 17.59.060(D)(2)** 13

FIGURES

- FIGURE 1 VICINITY MAP
- FIGURE 2 LAND USE & OWNERSHIP
- FIGURE 3 GENERAL SETBACK REQUIREMENTS AND LOT SIZE REQUIREMENTS

APPENDICES

- APPENDIX A: GENERALLY ALLOWED USES ON STATE LAND
- APPENDIX B: VOLUNTARY BEST MANAGEMENT PRACTICES FOR DEVELOPMENT AROUND WATERBODIES

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 Caswell 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*

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

Caswell Lake is about 157 surface acres in size, and therefore, falls within the guidelines for lakes between 75 and 200 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 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 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 June 23rd, 2008 and August 4, 2010 with 6-10 people signing the attendance sheet. Most of those lake property owners, residents and lake users in attendance expressed a preference for enforceable restrictions on:

- No wake zone – 100 feet from the shoreline
- Quiet hours – 10 p.m. to 8 a.m.
- 10-horsepower limitation(weekdays)
- 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 boat or recreate in a manner that protects the rural residential character of the lake.

2. Inventory of Existing Conditions

2.1 Location

Caswell Lake is located in the Susitna Community Council area. The lake lies nearest the town of Talkeetna (See Figure 1). There is one developed public access point to the lake.

2.2 Physical Characteristics of the Lake

The surrounding topography of Caswell Lake is relatively flat, with most properties on the east side of the lake gaining about 20-30 feet in elevation from the lake surface and a more gradual raise of 10 feet on the West side. Much of the shore line is in its natural condition. The lake's surrounding environment is brimming with wildlife including moose, beaver and water fowl.

Caswell Lake is an abstract shape with numerous shallow bays skirting the lake's edge.

According to local residents, Caswell Lake is fairly shallow with average depths ranging from 27' to 40' in the deepest parts. The lake's numerous shallow bays on average extend out about 100'. The lake is mainly spring fed with additional drainage from Caswell Creek. One bay in particular on the east side of the lake is boggy and has a great deal of vegetation growing within the water. Moose are commonly seen in this area of the lake.

Caswell Lake has only three seasonal cabins in uses on the lake at this time. The remaining property is owned by private individuals, University of Alaska and the State of Alaska. Therefore the lake and its surrounding environment maintain a fairly natural feel due to the lack of development and full time residents.

Caswell Lake is not currently stocked by the Alaska Department of Fish and Game (ADF&G). Water quality problems have not been reported.

Table 1: Caswell Lake Physical Characteristics

Surface Acres	157
Volume	Unknown
Maximum Depth	28 feet
Mean Depth	10 feet
Average width	.75 of a mile
Approximate length	1 mile

Source: MSB GIS Information, and local knowledge

2.3 Land Ownership and Land Use

Land around the lake is comprised predominately of recreational cabins and vacant land. 12 lots are situated directly on the lake.

- 3 large tracts owned by the university
- 2 large tracts owned by the state
- 2 large parcels owned by a private party
- 1 smaller parcel owned by the Borough (a park)
- 4 smaller parcels owned by private parties

There are currently no major subdivisions on the lake but the potential for future subdivisions is great.

The Amundsen Estates subdivision lies on the Northwest shore of Caswell Lake. The subdivision is a three phase project with work already being completed in phase three. Phase one and phase three of the project are nearest to the lake. The borough does not have copies of recorded covenants for this Subdivision. At this time there are no proposed subdivisions for the shores of Caswell Lake.

2.4 Social/Demographic – Usage

The present human use of Caswell Lake may be characterized as being primarily quiet and recreational. 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 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 wildlife. In order to effectively manage lake usage and protect water quality, future residential plans need to be identified.

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 only has public access through a section line easement. The section line is located on the Southwest side of the lake along a piece of property owned by the University of Alaska. Locals are concerned that this area is frequently used by individuals who are not residents of the area. The shore line is habitually littered with shot gun shells, garbage, and bonfire remnants. It is anticipated that public interest to use the lake will increase, as there are still parcels in the area to develop. This lake is not stocked by the ADF&G.

2.5 Existing Plans and Lake Monitoring Programs

State

The state plan affecting the Caswell Lake area is the South East Susitna Area Plan. The South East Susitna Area Plan was adopted in April 2008. The plan establishes land use designations, management intent and management guidelines for more than 250,000 acres of uplands, shorelands and tidelands in the lower Susitna Valley. This plan supersedes the 1982 Willow Sub-Basin Area Plan; a portion of the South Parks Highway Subregion of the Susitna Area Plan (1985); the Deception Creek Land Use Plan (1989); and the Kashwitna Management Plan (1991). According to the plan, Caswell Lake is within the Kashwitna Region.

Matanuska-Susitna Borough

Matanuska-Susitna Borough (MSB) plans that address Caswell Lake in some manner include the borough-wide 2005 comprehensive plan update and the Coastal 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 Caswell Lake. 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. The waters of Caswell Lake are publicly owned.

Caswell 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 example, a variance application to build a habitable structure or garage closer than 75 feet from the ordinary high water mark of Caswell 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.

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. There is no scheduled monitoring of this lake. As of December 2010 the lake is in need of volunteers to monitor. Contact the borough at, 907-745-9833 if you would like to volunteer.

2.6 Existing Regulations

This section describes the principle regulations affecting use and development in the Caswell Lake 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). Caswell Lake is listed in the catalog. Finally, the general ADF&G fishing regulations apply to Caswell Lake..

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. Caswell 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 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.

Borough

Several borough-wide ordinances address the development and use of land adjacent Caswell Lake. The regulations are contained within the borough's planning (Title 15), zoning (Title 17), real property management (Title 23), and subdivision (Title 43) 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 Caswell Lake 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 Caswell Lake 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 43. Title 43 provides the subdivision development standards within the

borough and establishes the platting board. Some Title 43 requirements that are of special note to the development at Caswell Lake 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 Caswell Lake area would be in the form of subdivision covenants. The borough files do not contain copies of any recorded covenants for Amundsen Estates subdivision. 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.state.ak.us/ssd/recoff/search.cfm>.

3. Issues and Concerns

The issues and concerns identified by residents include:

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

A majority of those attending the meeting said that the quiet, rural residential 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 Caswell Lake has included some high-powered motorized watercraft use for recreational water sports.

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.

Concern was expressed over potential future floatplane usage of the lake. Property owners and residents wanted to ensure that reasonable hours of operation were conducted by floatplane operations on the lake and that a significant increase in these activities did not occur. Additional aircraft noise and potential disturbance to the local and migrating waterfowl, and conflicts between lake users and taxiing floatplanes was a concern to the property owners and residents.

4.0 Goals

Goals describe the future expectations of residents, property owners, and users of a lake. These goals will be used to help guide the decisions and interactions of those who use and help manage the lake. As a way of executing these goals, this plan includes a recommendation and implementation section. The following goals reflect the aspirations of Caswell Lake residents, property owners, and users: quality of experience, recreational 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

Caswell Lake is a significant natural resource. It is the desire of property owners, residents, and users of Caswell 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 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 Caswell Lake 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 public access point to the southwest shore of Caswell Lake. 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 Caswell 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

These recommendations are actions that can be done by those using the plan to help apply the plan and work to meet the plan's goals as outlined in Section 4.0. These recommendations are simply suggestions. These items are not enforceable by borough code nor do they recommend changes to borough code.

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 motors may also disturb waterfowl. Those in attendance at the meeting agreed that personal watercraft should be minimized on Caswell Lake to reduce wakes and manage noise. Most of those in attendance at the meeting were in agreement that smaller engines of 10 horsepower or less are most appropriate for daily use on the lake with the exception of weekends and holidays.

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).

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.

The use of personal watercraft, a.k.a. jet skis, is not a traditional use of Caswell Lake. It is incompatible with the quiet residential uses of the lake. Furthermore, personal watercraft pose a safety hazard for swimmers and boaters. It is recommended that personal watercraft be prohibited on Caswell 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 Limited Access

There is currently a primitive trail that allows walk-in only public access to Caswell Lake. Residents agree that the existing access should remain walk-in only. Residents and property owners desire that no additional access points be

developed.

However, those in attendance at the meeting recognize that a future subdivision may provide public or private access. It is recommended that if additional public or private access is constructed, it be designated walk-in only.

5.4 Educate Residents and Visitors

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

- Mail, e-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**

The implementation section of this plan is used to help execute the goals as outlined in Section 4.0. Unlike Section 5.0 - Recommendations, the items within this section can be implemented through code.

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 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 Caswell Lake - Lake Management Plan is adopted, the Assembly will also consider an ordinance modifying MSB 17.59. The modifications to MSB 17.59 will include all or some of the implementation methods identified in this section. Once adopted by ordinance these implementation methods are part of borough code and are enforceable.

Any portion of this section the Assembly does not incorporate into MSB 17.59 can be implemented through public information and/or best management practices.

Recommended Code Changes - MSB 17.59

6.1 **No Wake Zone 100 feet from Shore - MSB 17.59.060(C)(2)**

Motorized watercrafts are restricted to a no wake zone at all times within 100-feet of the shoreline of Caswell Lake.

6.2 **Quiet Hours - MSB 17.59.060(B)(2)**

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.

6.3 Personal Watercraft Ban - MSB 17.59.060(D)(2)

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

FIGURES

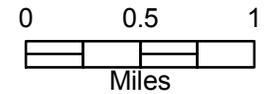
- Figure 1** Vicinity Map
- Figure 2** Land Use & Ownership
- Figure 3** General Setback Requirements and Lot Size Requirements

CASWELL LAKE Vicinity Map

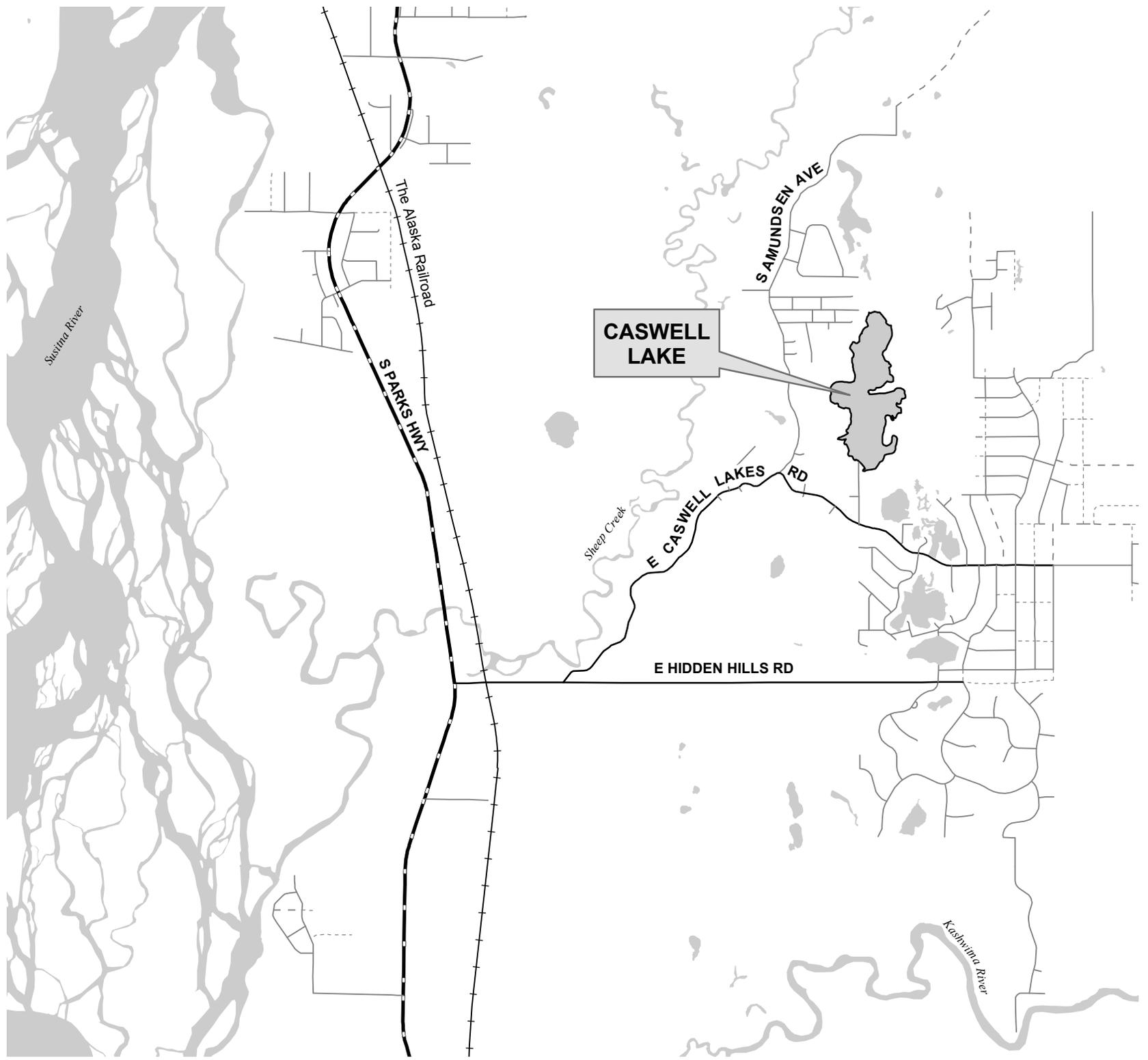
Legend

Road Classifications

-  HIGHWAY
-  MAJOR
-  MEDIUM
-  MINOR
-  NOT CONST'D
-  PRIMITIVE



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.



CASWELL LAKE Land Use/Ownership



Legend

Land Use

○ RESIDENTIAL

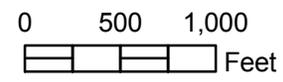
Land Ownership

■ PRIVATE

▨ BOROUGH

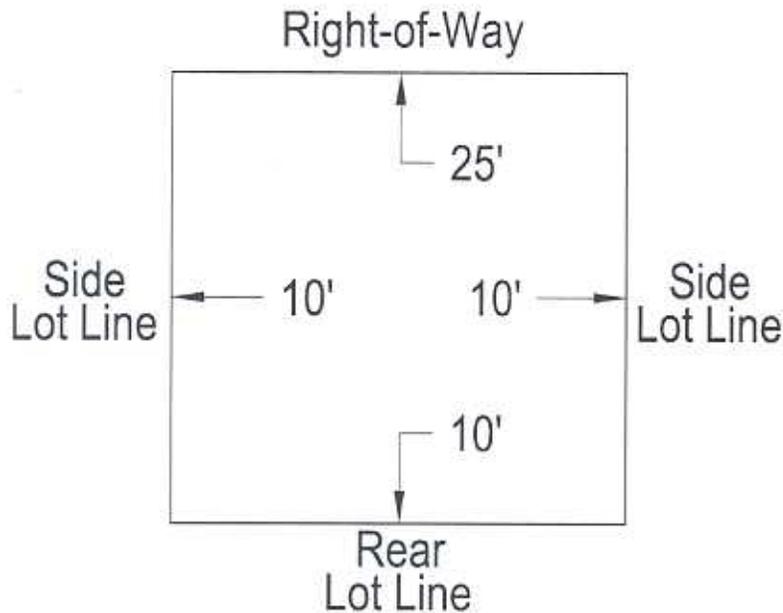
□ STATE

▨ UNIVERSITY

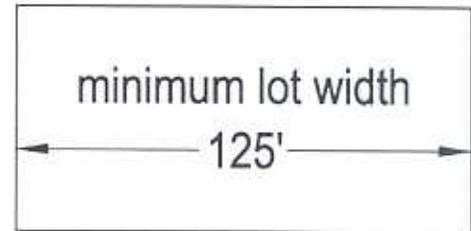


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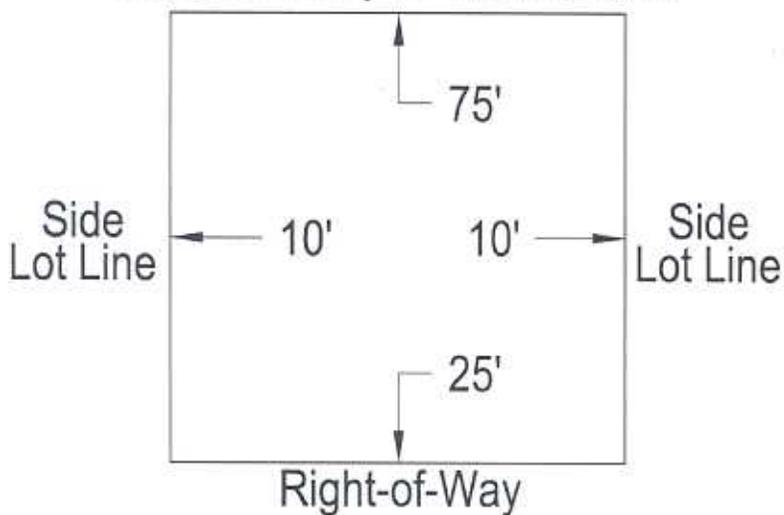
General Setback Requirements and Lot Size* Requirements



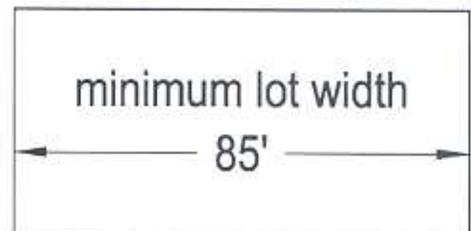
Ordinary High Water Line
of Lake (no community septage)



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.

APENDICES

Appendix A: Generally Allowed Uses on State Land

Appendix B: Voluntary Best Management Practices for
Development Around Waterbodies

Fact sheet:



Alaska Department of Natural Resources

Division of Mining, Land and Water • August 2011

GENERALLY ALLOWED USES ON STATE LAND

As provided in 11 AAC 96.020, the following **uses and activities are generally allowed on state land** managed by the **Division of Mining, Land and Water** (these uses and activities may be restricted in legislatively designated areas, or special management category or status as listed in 11 AAC 96.014¹). Uses listed as “Generally allowed” do not require a permit from the Division of Mining, Land and Water. Note that this list does not apply to state parks, nor to land owned or managed by other state agencies such as the University of Alaska, Alaska Mental Health Trust, Department of Transportation and Public Facilities, or the Alaska Railroad. **You may need other state, federal or borough permits for these uses or activities.** Permits can be required from the Army Corps of Engineers, Department of Environmental Conservation, the Environmental Protection Agency, Alaska Department of Fish and Game Habitat Division (ADF&G-Habitat). Before beginning an activity on state land, the user should check to be sure it is generally allowed in that particular area.

TRAVEL ACROSS STATE LAND:

Hiking, backpacking, skiing, climbing, and other foot travel; bicycling; traveling by horse or dogsled or with pack animals.

Using a highway vehicle with a curb weight of up to 10,000 pounds, including a four-wheel-drive vehicle and a pickup truck, **or using a recreational-type vehicle** off-road or all-terrain vehicle with a curb weight of up to 1,500 pounds, including a snowmobile (or other tracked vehicle), motorcycle or ATV, on or off an established road easement, if use off the road easement does not cause or contribute to water quality degradation, alteration of drainage systems, significant rutting, ground disturbance, or thermal erosion. (Curb weight means the weight of a vehicle with a full tank of fuel and all fluids topped off, but with no one sitting inside or on the vehicle and no cargo loaded. Most highway rated sport utility vehicles are within the weight limit as are most small ATVs, including a basic Argo.) Use of larger off-road vehicles over 1,500 pounds curb weight, and the off-road travel of construction and mining equipment requires a permit from DNR. An authorization is required from the ADF&G-Habitat for any motorized travel in fish bearing streams.

Landing an aircraft (such as a single-engine airplane or a helicopter), or using watercraft (such as a boat, jet-ski, raft, or canoe), without damaging the land, including shoreland, tideland, and submerged land.

Driving livestock, including any number of reindeer or up to 100 horses, cattle, or other domesticated animals.

ACCESS IMPROVEMENTS ON STATE LAND:

Brushing or **cutting a trail** less than five feet wide using only hand-held tools such as a chainsaw (making a trail does not create a property right or interest in the trail).

Anchoring a mooring buoy in a lake, river, or marine waters, or placing a **float, dock, boat haulout, floating breakwater, or boathouse** in a lake, river, or in marine waters, for the personal, noncommercial use of the upland owner, if the use does not interfere with public access or another public use, and if the improvement is placed within the projected sidelines of the contiguous upland owner's parcel or otherwise has the consent of the affected upland owner. A float or dock means an open structure without walls or roof that is designed and used for access to and from the water rather than for storage, residential use, or other purposes. A boat haulout means either a rail system (at ground level or elevated with pilings) or a line attached from the uplands to an anchor or mooring buoy. A floating breakwater means a structure, such as a log bundle, designed to dissipate wave or swell action. A boathouse means a structure designed and used to protect a boat from the weather rather than for other storage, residential use or other purposes.

¹ These special use areas are listed in 11 AAC 96.014 and on the last page of this fact sheet. Maps of the areas are available online at: www.dnr.state.ak.us/mlw/sua/

REMOVING OR USING STATE RESOURCES:

Hunting, fishing, or trapping, or placement of a crab pot, shrimp pot, herring pound or fishwheel, that complies with applicable state and federal statutes and regulations on the taking of fish and game.

Harvesting a small number of **wild plants, mushrooms, berries, and other plant material** for personal, noncommercial use. The cutting of trees is not a generally allowed use except as it relates to brushing or cutting a trail as provided above. Commercial harvest of non-timber forest products requires a permit (11 AAC 96.035) and harvest practices must conform to the Alaska Non-Timber Forest Products Harvest Manual for Commercial Harvest on state-owned Lands. <http://dnr.alaska.gov/ag/NTFPRreports.htm>

Using dead and down wood for a cooking or warming fire, unless the department has closed the area to fires during the fire season.

Grazing no more than five domesticated animals.

Recreational gold panning; hard-rock mineral prospecting or mining using light portable field equipment, such as a hand-operated pick, shovel, pan, earth auger, or a backpack power drill or auger; or **suction dredging** using a suction dredge with a nozzle intake of six inches or less, powered by an engine of 18 horsepower or less, and pumping no more than 30,000 gallons of water per day. An authorization is required from ADF&G-Habitat prior to dredging in fish bearing streams.

OTHER IMPROVEMENTS AND STRUCTURES ON STATE LAND:

Setting up and using a camp for personal, noncommercial recreational purposes, or for any non-recreational purpose (such as a support camp during mineral exploration), for no more than 14 days at one site, using a tent platform or other temporary structure that can readily be dismantled and removed, or a floathouse that can readily be moved. Moving the entire camp at least two miles starts a new 14-day period. Cabins or other permanent improvements are not allowed, even if they are on skids or another non-permanent foundation. The camp must be removed immediately if the department determines that it interferes with public access or other public uses or interests.

Brushing or cutting a survey line less than five feet wide using only hand-held tools (such as a chainsaw), or **setting a survey marker** (setting a survey monument—a permanent, official marker—requires written survey instructions issued by the Division of Mining, Land and Water under 11 AAC 53).

Placing a residential **sewer outfall** into marine waters from a contiguous privately owned upland parcel, with the consent of the affected parcel owners, if the outfall is within the projected sidelines of the contiguous upland parcel and is buried to the extent possible or, where it crosses bedrock, is secured and covered with rocks to prevent damage. Any placement of a sewer outfall line must comply with state and federal statutes and regulations applicable to residential sewer outfalls.

Placing riprap or other suitable bank stabilization material to prevent erosion of a contiguous privately owned upland parcel if no more than one cubic yard of material per running foot is placed onto state shoreland and the project is otherwise within the scope of the U.S. Army Corps of Engineers nationwide permit on bank stabilization.

MISCELLANEOUS USES OF STATE LAND:

An event or assembly of 50 people or less, including events sponsored by non-profit organizations or a commercial event.

Entry for **commercial recreation** purposes **on a day-use basis** with no overnight camps or unoccupied facilities that remain overnight, as long as the use has been registered as required by 11 AAC 96.018.

Recreational or other use not listed above may occur on state land as long as that use

- * is not a commercial recreational camp or facility, (whether occupied or unoccupied) that remains overnight;
- * does not involve explosives or explosive devices (except firearms);

- * is not prospecting or mining using hydraulic equipment methods (i.e. the use of pumped or flowing water to remove overburden or move gravels);
- * does not include drilling in excess of 300 feet deep (including exploratory drilling or stratigraphic test wells on state land not under oil or gas lease);
- * is not for geophysical exploration for minerals subject to lease or an oil and gas exploration license or for seismic surveys involving the use of explosives;
- * does not cause or contribute to significant disturbance of vegetation, drainage, or soil stability;
- * does not interfere with public access or other public uses or interests; and
- * does not continue for more than 14 consecutive days at any site. Moving the use to another site at least two miles away starts a new 14-day period.
- * does not include exploration for coal (a notice of intent to conduct exploration for coal must be filed with the DNR)

Check for special conditions and exceptions!

All activities on state land must be conducted in a responsible manner that will minimize or prevent disturbance to land and water resources, and must comply with all applicable federal, state, and local laws and regulations. **By acting under the authority of this list, the user agrees to the conditions set out in 11 AAC 96.025** (a copy of these conditions are attached to this fact sheet). A person who violates these conditions is subject to any action available to the department for enforcement and remedies, including civil action for forcible entry and detainer, ejectment, trespass, damages, and associated costs, or arrest and prosecution for criminal trespass in the second degree. The department may seek damages available under a civil action, including restoration damages, compensatory damages, and treble damages under AS 09.45.730 or AS 09.45.735 for violations involving injuring or removing trees or shrubs, gathering technical data, or taking mineral resources. (11 AAC 96.145)

Remember that this list does not apply to state parks, University of Alaska lands, or Alaska Mental Health Trust lands. In addition, some other areas managed by the Division of Mining, Land and Water are not subject to the full list of generally allowed uses. Exceptions may occur because of special conditions in a state land use plan or management plan for example, a management plan may reduce the number of days that people can camp at a specific site), or by a “special use land” designation (for instance, a special use land designation for the North Slope requires a permit for off-road vehicle use). Special Use Areas are listed in 11 AAC 96.014; more information is available on the department’s website at <http://dnr.alaska.gov/mlw/sua/>. GAU’s have also been modified for the Knik River Public Use Area.

Also, be aware that this list does not exempt users from the permit requirements of other state, federal, or local agencies. For example, the ADF&G - Habitat may require a permit for a stream crossing or if the use will take place in a state game refuge.

Finally, this list does not authorize a use if another person has already acquired an exclusive property right for that use. For instance, it does not give people permission to graze livestock on someone else’s state grazing lease, to build a trail on a private right-of-way that the Division of Mining, Land and Water has granted to another person, or to pan for gold on somebody else’s state mining location.

Department staff can help users determine the land status of state-owned land and whether it is subject to any special exceptions or to private property rights.

For additional information, contact the Department of Natural Resources:

PUBLIC INFORMATION CENTER 550 W. 7 th Avenue, Suite 1260 Anchorage, AK 99501-3557 (907) 269-8400 TDD: (907) 269-8411	DIVISION OF MINING, LAND & WATER PUBLIC INFORMATION OFFICE 400 Willoughby Ave., Suite 400 P.O. Box 111020 Juneau, AK 99801-1021 (907) 465-3400 TDD: (907) 465-3888	PUBLIC INFORMATION CENTER 3700 Airport Way Fairbanks, AK 99709-4699 (907) 451-2705 TDD: (907) 451-2770
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CONDITIONS FOR GENERALLY ALLOWED USES
(11 AAC 96.025²)

A generally allowed use listed in 11 AAC 96.020 is subject to the following conditions:

- (1) activities employing wheeled or tracked vehicles must be conducted in a manner that minimizes surface damage;
- (2) vehicles must use existing roads and trails whenever possible;
- (3) activities must be conducted in a manner that minimizes
 - (A) disturbance of vegetation, soil stability, or drainage systems;
 - (B) changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, water holes, seeps, and marshes; and
 - (C) disturbance of fish and wildlife resources;
- (4) cuts, fills, and other activities causing a disturbance listed in (3)(A)–(C) must be repaired immediately, and corrective action must be undertaken as may be required by the department;
- (5) trails and campsites must be kept clean; garbage and foreign debris must be removed; combustibles may be burned on site unless the department has closed the area to fires during the fire season;
- (6) survey monuments, witness corners, reference monuments, mining location posts, homestead entry corner posts, and bearing trees must be protected against destruction, obliteration, and damage; any damaged or obliterated markers must be reestablished as required by the department under AS 34.65.020 and AS 34.65.040;
- (7) every reasonable effort must be made to prevent, control, and suppress any fire in the operating area; uncontrolled fires must be immediately reported;
- (8) holes, pits, and excavations must be repaired as soon as possible; holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, or mining leasehold locations may be left open but must be maintained in a manner that protects public safety;
- (9) on lands subject to a mineral or land estate property interest, entry by a person other than the holder of a property interest, or the holder's authorized representative, must be made in a manner that prevents unnecessary or unreasonable interference with the rights of the holder of the property interest.

List of Special Use Land Designations Excluded from Generally Allowed Uses

- Alyeska Ski Resort
- Baranof Lake Trail
- Caribou Hills
- Exit Glacier Road
- Glacier/Winner Creek
- Hatcher Pass Special Use Area
- Haines State Forest
- Indian Cove
- Kamishak Special Use Area
- Kenai Fjords Coastline
- Kenai River Special Management Area Proposed Additions
- Lake Clark Coastline
- Lower Goodnews River
- Lower Talarik Creek
- Marmot Island Special Use Area
- Nenana River Gorge and McKinley Village Subd.
- North Slope Area
- Northern Southeast Area, Tidelands
- Nushagak
- Poker Flat North
- Poker Flat South
- Resurrection Bay
- Tangle Lakes Archaeological District
- Thompson Pass
- Togiak National Wildlife Refuge
- Knik River Special Use Area

² Register 164, January 2003



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"> • 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. 	<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"> • Limit to maximum of 25% of lot area. • Minimize as much as possible within 75 feet of the water's edge. 	<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"> • 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. 	<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"> • 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. <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.