

WHISKEY LAKE LAKE MANAGEMENT PLAN



ADOPTED
AUGUST 2004

Matanuska-Susitna Borough
Department of Planning and Land Use

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1 Introduction

1.1 Purpose

Lake management plans are developed for a variety of purposes. Most often lake front property owners request management plans because increased development or the provision of new public access brings about increased lake usage and a corresponding increase in user conflicts. As more people use a lake, conflicts among users may occur, bird-nesting sites (especially loons and grebes) may be disturbed, environmental degradation may occur, and the overall quality of the lake use experience may decline. The most often cited complaints are unsafe conditions or practices, noise generated from watercraft during the evening and night hours and inappropriate use of public access points. A lake management plan seeks to present policies and strategies which attempt to balance the various demands placed upon a lake, solve lake related problems, and protect the public health safety and welfare.

The Whiskey Lake, Lake Management Plan provides management guidelines for:

- The protection of the remote recreational quality of Whiskey Lake;
- The continued recreational enjoyment of Whiskey Lake;
- The protection of Whiskey Lake's water quality;
- The continued character and use of Whiskey Lake;
- The protection of fish spawning habitat;
- The protection of the Lake's inlet and outlet;
- The protection and enhancement of fish and wildlife; and
- The protection of the public health, safety and welfare.

1.2 Approaches to Lake Planning

Motorized Use of Water Bodies - There are two approaches that residents and property owners of the Matanuska-Susitna Borough may use to address lake related issues. One approach is to initiate a petition as authorized by 17.58 of the Borough Code. This ordinance, which was adopted by voter initiative in 1994, allows members of the public to seek either a prohibition of all motorized use on a waterbody or to establish quiet hours (11 p.m. to 8 a.m.), to establish a 100 foot no wake zone from the shoreline, to require mufflers on all piston driven engines used by water craft, and to allow special events by permit. Once a petition is filed, a report is drafted by the Department of Planning regarding the suitability of the ordinance for the lake in question and public hearings are then held on the matter by the Planning Commission and Assembly. As of this publication, this ordinance is in effect for Wasilla, Cottonwood, and Finger lakes, while all motorized use is prohibited on Cottonwood Creek.

Lake Management Plan - The other approach that may be utilized for managing a lake is the lake management planning process. A lake management plan is developed with the input of local property owners and residents. The Borough's Department of Planning assists the planning effort by collecting background information, developing maps, etc., but it is the property owners and residents who decide policy issues and develop goals and recommendations within the guidelines adopted by the Assembly with ordinance 99-103(AM). The guidelines established by ordinance 99-103(AM) are as follows:

LAKES 75 SURFACE 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 watercraft 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).
- ✓ Icehouse 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, waverunners, 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.

In addition to these guidelines, residents and property owners of a lake may also recommend other guidelines to address circumstances specific to their lake as well as to address unique lake characteristics.

1.3 Process

Individuals having concerns about a particular lake or who have experienced conflicts between user groups typically initiate lake management plans. The process for developing and amending lake management plans is set out in MSB 15.24. The individuals interested in initiating a lake management plan request the necessary information from Department of Planning (Department) of the Matanuska-Susitna Borough to begin the petition process. The individuals are responsible for obtaining the required number of signatures on the petition. After 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, either in favor or not in favor, of beginning the lake management process. If the majority of property owners responding to the

mailed notice are in favor of developing a lake management plan, a plan will be initiated. The Department then collects the necessary background information on the lake and contacts adjacent property owners and users to participate in the planning process. An informational meeting is held, at which the lake management process and guidelines are explained.

Meetings are held with lake front property owners and users to: 1) identify any problems that may exist, 2) develop a set of recommended alternatives, and 3) consider methods of implementing the recommendations. A draft plan is then developed and a public comment period is held to solicit comments on the draft plan. After the public comment period is closed, comments are reviewed and appropriate modifications are made. A meeting is held with adjacent property owners and users to discuss the comments and proposed modifications. Whether or not this meeting is held, depends on the comments received; if the comments call for minor changes or none at all, a meeting is not likely to occur. On the other hand, if the comments seek major changes to the draft plan, a meeting is arranged to discuss the comments and proposed modifications.

After the draft plan has been reviewed by the public and community council, a public hearing on the plan is scheduled with the Borough Planning Commission. At the public hearing, anyone may comment on the plan. The Commission considers all oral and written comments received and either recommends to the Assembly adoption of the plan as is, or with modifications, or recommends Assembly disapproval of the plan. After Planning Commission action, the plan is scheduled for a public hearing by the Assembly. The Assembly considers all oral and written comments received and either adopts the plan as is, or with modifications, or disapproves the plan.

1.4 Ponds, Lakes, Reservoirs¹

There seem to be no universally accepted scientific definitions of the terms **lake**, **pond**, and **reservoir**. In general, water bodies that have a noticeable flow are termed either rivers or streams. "Ponded waters" have little or no current compared with rivers and streams.

A pond is usually described as a small shallow body of water, with uniform water temperature from top to bottom. There is little wave action and often, an abundance of aquatic plants. Although local definitions may vary, a pond is generally less than ten acres in area and ten feet in maximum depth.

¹ This section is taken from Diet for a Small Lake, prepared by the New York State Department of Environmental Conservation and the Federation of Lake Associations, Inc., 1990

A lake is usually larger than a pond. It may be quite large and deep, with an abundance of cold water at the bottom. It also may exhibit areas of rocky, wave-impacted shoreline as a result of exposure to prevailing winds. The area of land around the lake that contributes water to the lake is the **watershed**. The watershed may be large or small when compared to the area of the lake. Water may enter the lake from the watershed as streams and rivers, or through the ground as groundwater. The term watershed is used interchangeably with **catchment** or **drainage basin**, although the latter term can imply a larger area containing several watersheds or **sub-basins**. The boundaries of a watershed are defined by ridges and hills that divide or separate water movement into one drainage basin or another. The **lake basin** includes the lake bottom as well as the surrounding slopes.

1.5 Lake Life Span²

Lakes fill in, drain themselves, or just evaporate and disappear. They do not last forever. Although lakes seem permanent in our human time perspective, they are sediment traps, and it is natural for them to fill in gradually with sand, silt, and organic matter. Natural lake aging or **eutrophication** moves from a nutrient poor (**oligotrophic**) condition to an intermediate (**mesotrophic**) stage of nutrient availability and biological productivity, and finally to a nutrient rich or highly productive (**eutrophic**) state (figure 1). Eutrophication - the process of nutrient enrichment and basin filling - may take thousands of years, but it can be accelerated greatly by disruptions to the watershed. Human activities that increase nutrient and sediment loading to a lake are termed **cultural eutrophication** and include forest clearing, road building, construction, and wastewater discharges.

Trophic conditions in lakes are relative, not absolute - that is, there is no definitive line between oligotrophic and mesotrophic, or between mesotrophic and eutrophic. However, each trophic state has characteristic conditions. Oligotrophic lakes have a low level of organic productivity, clear water, and low nutrient levels. These lakes often are characterized by deep water and steep basin walls. Water in mesotrophic lakes contains a moderate supply of nutrients and organic production. Eutrophic lakes are characterized by a very high level of nutrients, which causes a significant increase in plant growth. As a result, water clarity is greatly reduced, and oxygen depletion is common during the summer months. Eutrophic lakes tend to be shallow and typically, have elevated water temperatures.

Identification of a lake's trophic status is a useful way to determine its general "health" or biological status, from one-year to the next and in comparison with

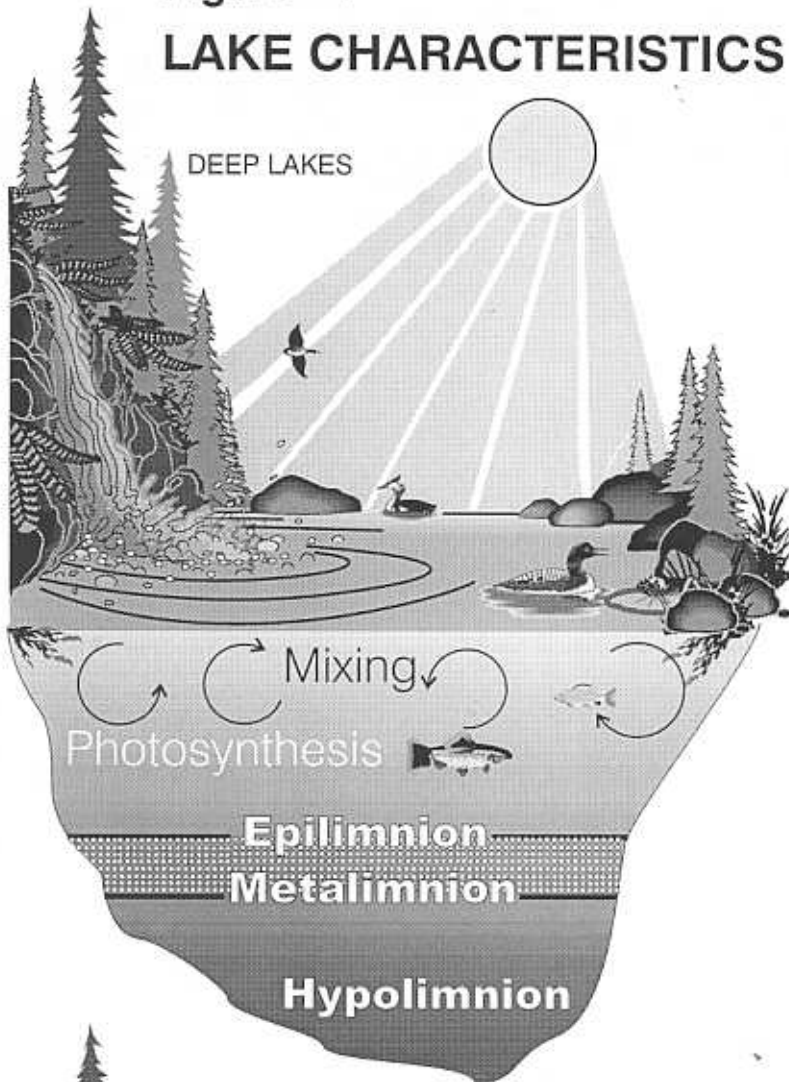
² This section is taken from Diet for a Small Lake, prepared by the New York State Department of Environmental Conservation and the Federation of Lake Associations, Inc., 1990.

other lakes. If a potential problem is identified in a lake, the trophic status can also be used to evaluate management alternatives.

A few lakes are naturally eutrophic. Many lakes and reservoirs are located in naturally fertile watersheds where soil is highly erodible. Unless the soil remains undisturbed, these lakes have little chance of being anything but eutrophic. Users of these lakes need to recognize and accept the fact that manmade systems (such as laws, property, or zoning) may not "correct" the conditions. Residents and visitors should adjust their expectations for the appearance and use of such eutrophic lakes.



Figure 1
LAKE CHARACTERISTICS



Epilimnion

The upper layer of water in a lake that is comprised of uniformly warm water that may be well mixed.

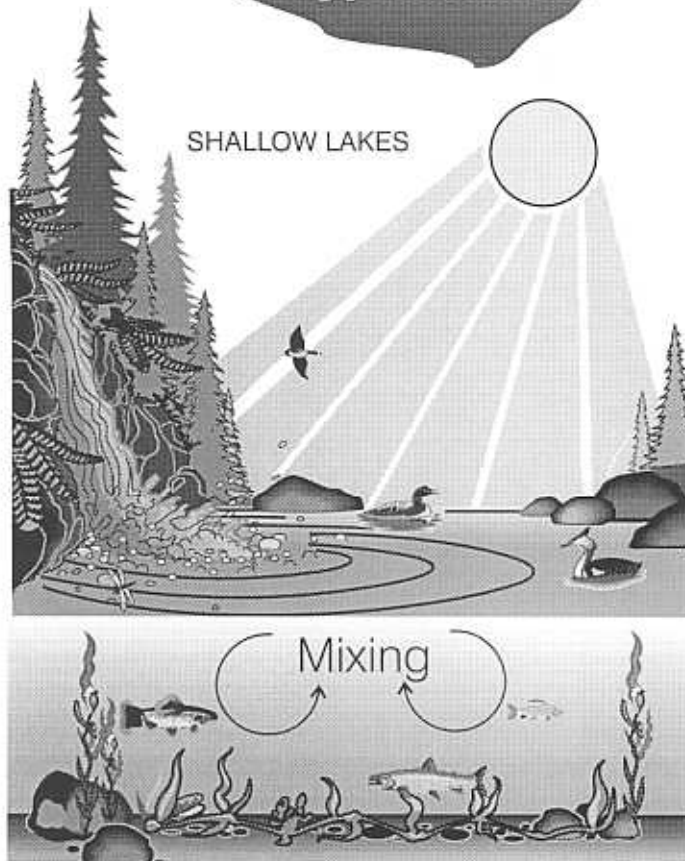
Metalimnion

The middle layer of water in a lake that marks the transition between top and bottom layers, where temperature changes rapidly with depth.

Hypolimnion

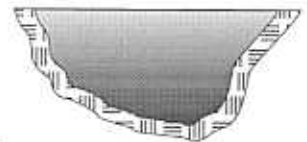
The bottom layer of water in a lake that is comprised of uniformly cold and relatively undisturbed water.

Source: A Citizen's Guide
To Understanding and Monitoring Lakes and Streams
By Joy P. Micha



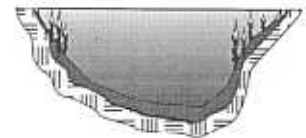
Oligotrophic

Clear water, low productivity
very desirable fishery of large game fish



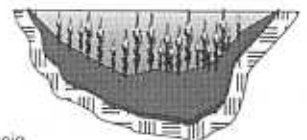
Mesotrophic

Increased production
Accumulated organic matter
Occasional algal bloom
Good fishery



Eutropic

Very productive
May experience oxygen depletion
Rough fish common



Source: A Lake Leaders
Handbook, 1995
UWEX-LAKES PROGRAM
Understanding Lake Data
By Bryon Shaw, Christine
Machenich and Lowell Klessig

2. Inventory of Existing Conditions

2.1 Location

Whiskey Lake is located in the Skewenta area, north of the Skewenta River and west of the Yentna River (figure 2). The Whiskey Lake area is located completely within the boundaries of the Skewenta Community Council (figure 3).

2.2 Physical Characteristics of the Lake

Whiskey Lake contains 270 surface acres and a maximum depth of 35 feet. Detailed information regarding lakes is usually obtained from the Alaska Department of Fish and Game bathymetric maps; however, little research has been done on Whiskey Lake. The lake contains Rainbow Trout and Northern Pike as well as anadromous runs of Salmon. It is home to nesting loons, grebes and trumpeter swans, and serves as a resting point for migrating ducks.

The trophic status of Whiskey Lake has not yet been identified.

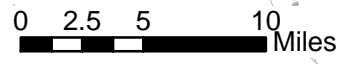
Table 1
Whiskey Lake Characteristics

	Whiskey Lake
Surface Acres	270 Acres
Volume	Unavailable
Mean Depth	Unavailable
Maximum Depth	35 feet
Shoreline Length	Unavailable

Source: Alaska Department of Fish and Game

WHISKEY LAKE
MANAGEMENT PLAN

FIGURE 2



**Whiskey
Lake**

Skwentna River

Kahilna River

Susitna River

Yentna River

W PETERSVILLE RD

W PARKS HWY

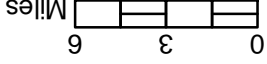
Knik Arm

SKWENTNA Community Council

Legend

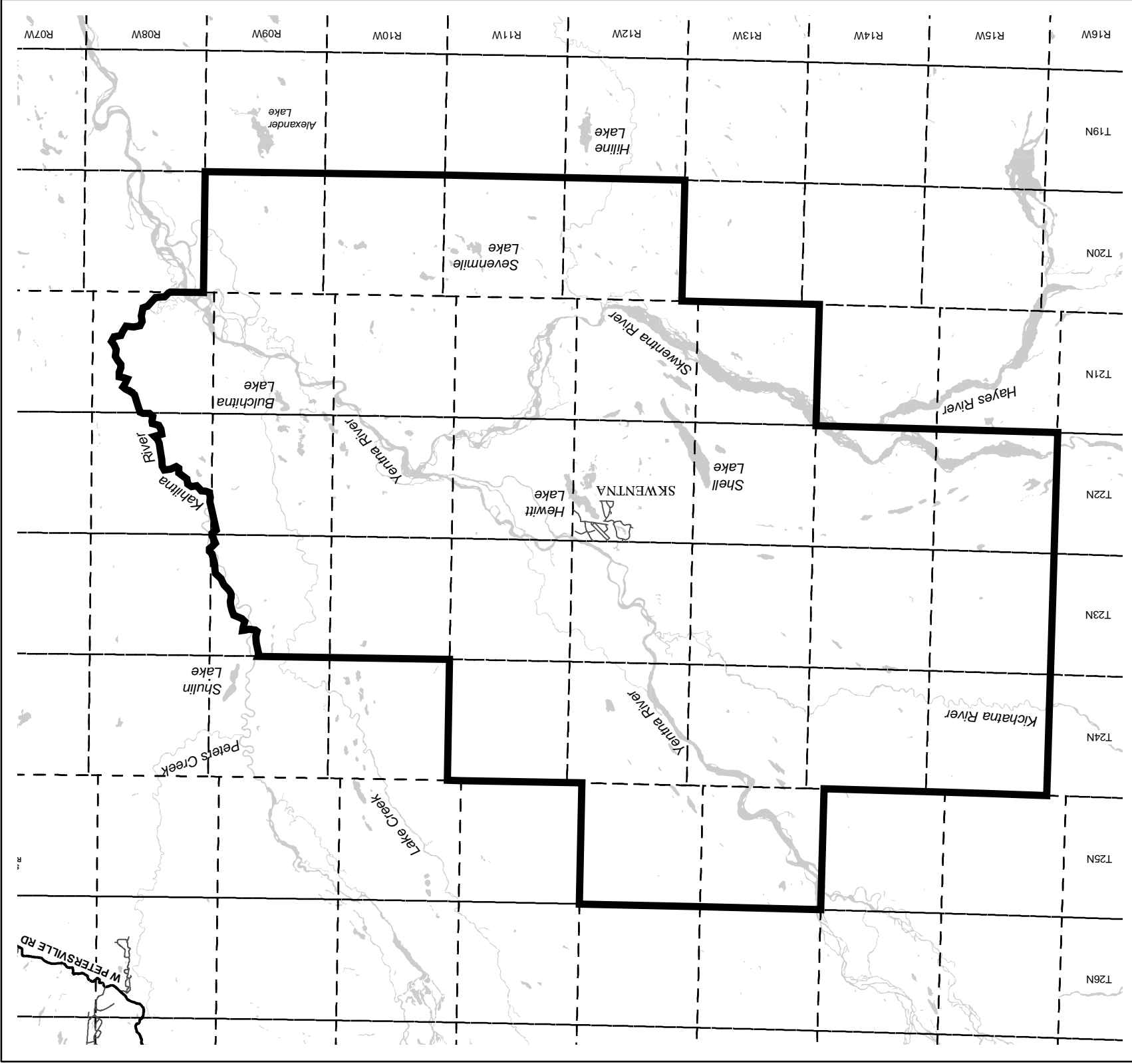


Community Council Boundary



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 of its user. Please refer to the full disclaimer and policies related to acceptable uses of this map, please refer to <http://www.co.nm.us/arcgis/default.html> or contact the Matanuska-Susitna Borough GIS Section at 907-745-9696.

MSB Office of Information Technology/GIS
October 12, 2003



2.3 Land Use and Land Ownership

There are 26 lots with shoreline on Whiskey Lake, which includes the two lots on a central island (figure 4 and table 2). The majority of lots with shoreline on Whiskey Lake are privately owned, with the majority of property owners residing outside of the area. The original Hewitt-Whiskey Lakes subdivision was platted by the State of Alaska in 1966. Lots 6, 9, 51, 52, 57 & 58 are still in State ownership, as are the two parcels on the island. The private property immediately adjacent to the lake consists mostly of residential and recreational development. There is one commercial lodge in operation on the lakeshore. There are a number of undeveloped lots within the area.

Table 2
Whiskey Lake
Land Ownership and Parcel Size
(within 600 upland feet)

	Private	Mat-Su Borough	State of Alaska
Number of Parcels	18	0	8
Total Acreage	399.28	0	366.73
Average Parcel Size	22.18	0	45.84
Smallest Parcel	5.93	0	1.40
Largest Parcel Size	51.60	0	99.8

Source: Matanuska-Susitna Borough

2.4 Social/Demographic Usage

The present human use of Whiskey Lake may be characterized as being primarily quiet and recreational. Traditional year round access to the lake is by aircraft. Other summer access has generally been via the creek at the southern end of the lake, or from Hewitt Lake across state property to Whiskey Lake. Other winter access to the lake has traditionally been via snowmachine.

2.5 Existing Plans

State

The State plan affecting the Whiskey Lake area is the Susitna Area Plan (SAP). The SAP, adopted in 1985, contains management intent for State and Borough lands within the SAP, an area of approximately 15.8 million acres. Whiskey Lake is located within the Susitna Lowlands Subregion, Kachatna/Nakochina Management Unit, subunit 2c. Generally speaking, the plan's intent for public lands within the management unit is to protect important public resources such as critical habitats, wetlands, and prime recreational rivers, and to provide some lands for private ownership near recreational attractions and future development centers.

Borough

Borough plans that address Whiskey Lake in some manner include the Borough-wide Comprehensive Plan, adopted in 1971 and the Matanuska-Susitna Borough Coastal Zone Management Plan, as amended.

The Borough-wide comprehensive plan does not make specific recommendations for Whiskey Lake. Rather, the 1971 plan makes a series of general recommendation for rural areas in the Borough. These recommendations are: *1) develop a variety and choice of residential environments within the Borough, including areas of concentrated settlement with a full range of public utilities and services as well as rural residential areas where only minimal public utilities services are feasible; and 2) Designate locations within the Borough where development of compact communities will be encouraged.*

Whiskey Lake lies within the Matanuska-Susitna Borough Coastal District (District), as defined within the Matanuska-Susitna Borough Coastal Management Plan, as amended. 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 Coastal Management 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 Whiskey Lake would be reviewed to determine whether or not it is consistent with the Coastal Zone Management Plan. Construction within water bodies is also reviewed for consistency with the plan. Uncovered floating or pile-supported docks, which do not extend more than 40 feet beyond the ordinary high water line, and do not exceed more than 400 square feet in size, may obtain a general concurrence. Metal drums, however, may not be used as floatation devices.

2.6 Existing Regulations

This section describes the principle regulations affecting use and development in the Whiskey Lake area. This section is **NOT** meant to provide an all-encompassing description of all activities and uses that require permits or approvals from local, state, or federal agencies. Prior to undertaking any development activity, individuals should contact the appropriate local, state, and federal agencies and obtain the required permits and approvals.

Federal

Any work which results in the dredging, 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.

The Migratory Bird Treaty Act protects migratory birds, which include loons, grebes, and trumpeter swans. The Act, among other things, prohibits the "take" of migratory birds. Destruction of nest sites, eggs, or the birds themselves are a violation of the Act.

State

The Alaska Department of Environmental Conservation (DEC) provides regulations for wastewater disposal. DEC wastewater/septage 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). An activity

which results in the construction of a dam that impounds water or places a weir, culvert, or temporarily blocks a stream requires a Title 41 permit. 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 2). Finally, the general ADF&G fishing regulations apply to Whiskey 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. Whiskey 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.

Borough

Several Borough-wide ordinances address the development and use of land adjacent to Whiskey 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. The adopted Coastal Management Plan described earlier, because of its enforceable criteria, also regulates development activities within and near Whiskey Lake.

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 Whiskey 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 Whiskey 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, unless community septage is provided, then the minimum width may be eighty-five feet (figure 5).

The Borough has a Borough-wide comprehensive plan, which is implemented, in part, through zoning. Presently, the Borough undertakes its comprehensive planning on a community-by-community basis. As most comprehensive plans are implemented through a zoning ordinance, a number of different zoning ordinances exist within the Borough and are identified as Special Use Districts. For example, the cities of Houston, Palmer, and Wasilla all have their own comprehensive plans and all have zoning ordinances unique to their cities. Title 17 contains these various zoning ordinances of the Borough. A list of Title 17's chapters follows.

- 17.01 Acknowledgment of Existing Land Use Regulations
- 17.03 Public Notification
- 17.04 Nancy Lake State Recreation Area Special Land Use District
- 17.08 Hay Flats Recreation Area Special Land Use District
- 17.15 Palmer Special Land Use District
- 17.17 Denali State Park Special Land Use District
- 17.18 Chickaloon Special Land Use District
- 17.19 Glacier View Special Land Use District
- 17.23 Point MacKenzie Port Special Use District
- 17.25 Talkeetna Special Land Use District
- 17.27 Sutton Special Land Use District
- 17.29 Flood Damage Prevention
- 17.36 Residential Planned Unit Development
- 17.41 City of Houston Land Use Regulations
- 17.45 Wasilla Special Land Use District
- 17.48 Mobile Home Park Ordinance
- 17.52 Residential Land Use District
- 17.55 Setbacks and Screening Easements
- 17.56 Violations and Enforcement
- 17.58 Motorized Uses on Lakes and Waterways
- 17.59 Lake Management Plan Implementation
- 17.60 Conditional Uses
- 17.61 Core Area Conditional Use Permit Requirements
- 17.65 Variances
- 17.70 Regulation of Alcoholic Beverage Uses
- 17.75 Single-Family Residential (SFR) Land Use District
- 17.76 Large Lot Single-Family Residential Land Use District
- 17.80 Nonconforming Structures
- 17.90 Regulation of Adult Businesses
- 17.99 Fees

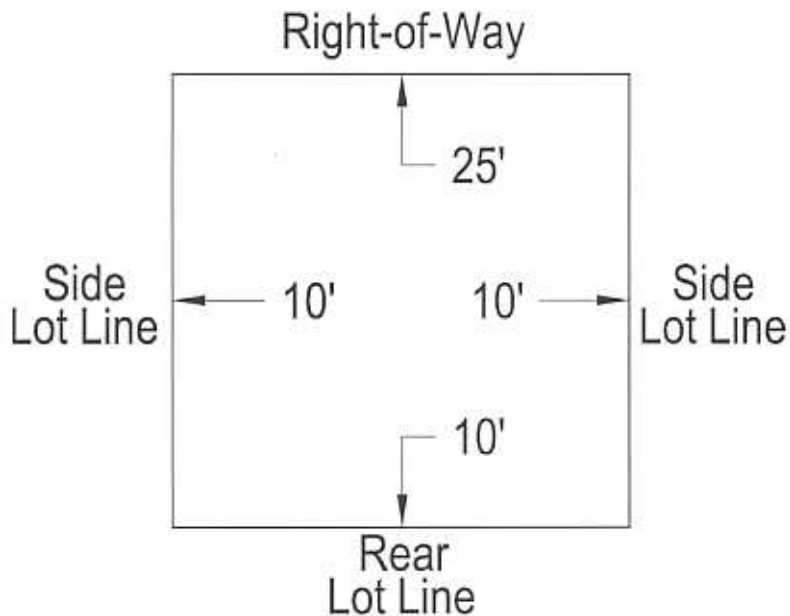
Zoning regulations that are of special note to development activities at Whiskey Lake include setback requirements and a petition process to limit or eliminate motorized use of lakes and conditional use permits. Presently, all structures must be a minimum of twenty-five feet from the right-of-way and 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 5). In 1994, the voters of the borough also adopted, by initiative, an ordinance that allows by petition and subsequent adoption by the Assembly the following restrictions to be placed on lakes and water bodies: 1) limiting or elimination of motorized uses on lakes and waterways, 2) establishment of quiet hours, and 3) establishment of a one hundred foot no wake zone from the ordinary high water mark. 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.

The Borough received approximately 355,000 acres of land through the Municipal Entitlement Program. The Community Development Department of the Borough manages and disposes of these lands through the policies and procedures described within Title 23. To retain borough-owned land in public ownership, it may be classified by the borough assembly. The process of classification of borough owned land is also set out in Title 23. As a part of this classification process, the Borough Division of Land Management is required to prepare a highest and best use analysis and recommend to the Assembly a land classification. The final decision is made by the Assembly.

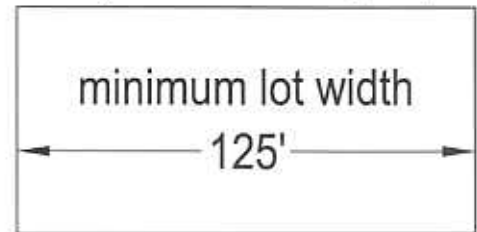
Private

Private regulations which exist in the Whiskey Lake area would be in the form of subdivision covenants. Borough files contain copies of recorded covenants for Hewitt Whiskey Lake Subdivision. Other covenants may exist; for current information about covenants, the reader is referred to the State of Alaska Recorders Office.

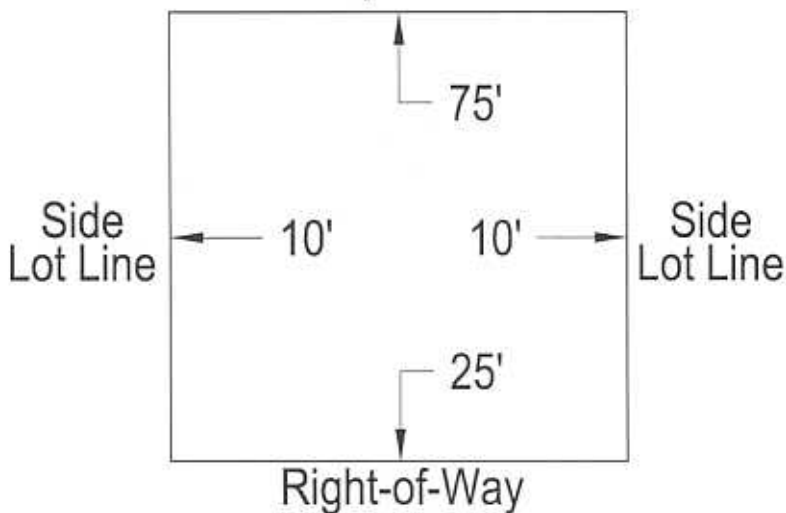
Figure 5
General Setback Requirements
and
Lot Size* Requirements



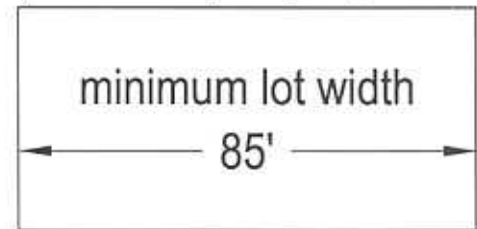
Ordinary High Water Line
of Lake (no community septage)



Ordinary High Water Line
of Water Body or Watercourse



Ordinary High Water Line of
Lake (community septage available)



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

3. Issues and Concerns

3.1 General Lake Issues and Concerns

This section describes some of the most common concerns and issues that have been raised by residents and property owners of the Borough. There are three main categories of lake-related concerns and issues. One category is water quality related. Activities within the shore land area can have a direct impact on lake water quality. Shore land means the land within 500 to 1,000 feet of the normal mean watermark of a lake or pond. The placement of septic systems in unsuitable soils or too close to the lake or the lack of sanitary facilities at public access points can introduce nutrients and pathogens into the lake. Inadequate soil erosion control during upland construction can increase the sediment loading of the lake and thereby create turbid conditions. Removal of vegetation along the shoreline or at unsupervised public access points may also increase erosion of the bank and loss of its ability to filter runoff.

Another category of concerns is related to the surface use of the lake. Some uses may conflict with one another such as fishing and water-skiing because it is difficult for both activities to occur at the same time and in the same location. Other uses may cause conflicts by the nature of how the use occurs such as becoming a nuisance by creating noise during normal sleeping hours. Some uses of the surface water may create shoreline erosion, and hence, increase sediment loading of the lake, and cause the loss of upland property.

The last category of lake issues regards the impact of recreational use on wildlife and wildlife habitat. Unsuccessful nesting or above average mortality may occur during the nesting season of loons, grebes and swans if the nests are harassed, frequented by water craft, or swamped by wave action.

3.2 Whiskey Lake Issues and Concerns

The Whiskey Lake, Lake Management Plan was initiated by a request from lake property owners. Two meetings were held with residents and lake property-owners, one in Anchorage on February 12, 2001, and the other in Skwentna on March 16, 2001. Those in attendance the meeting in Anchorage were recreational property owners who access the lake by aircraft during the weekends. Those that attended the meeting in Skwentna were generally lake users from the surrounding community. Concerns and issues were discussed at these meetings, as well as the proposed lake management guidelines.

The issues identified for Whiskey Lake include:

- ✓ Airboats
- ✓ Access – traditionally fly-in or walk-in only
- ✓ User conflicts – blind turns for canoeists, other non-motorized uses and airboats
- ✓ Wildlife loss/harassment
- ✓ Noise
- ✓ Shoreline erosion
- ✓ Quality of life – future growth of the area, potential for break-ins/vandalism
- ✓ Jet skis/personal watercraft – not yet an issue, but potentially may become an issue

It is the desire of the majority of those attending the meetings to reduce the potential for user conflicts between aircraft and watercraft, and that the quiet remote recreational character of the lake be protected. The present character of the lake may be described as primarily undeveloped, with recreational cabins. Property owners are concerned that with potential additional development of the surrounding uplands and nearby State of Alaska remote subdivision, will come the potential for increased use of the lakes by jetskis/waverunners. Residents of the area believe these uses are incompatible because shoreline erosion is caused by wakes, wildlife is threatened by wakes and noise, and noise generated by the personal watercraft may cause unsafe conditions for floatplane activities, all of which detract from the quality of life and recreational experience at the lake.

Additionally, property owners around the lake identified concerns with motorized watercraft using the lake's shallow outlet (Whiskey Creek at the south end of the lake) to access the lake. The outlet is a shallow, gravel streambed as documented by photographs provided by local habitat biologists. While claims have been made that motorized watercraft have used the outlet in past years, little documentation has been provided to substantiate that such use meets the state's definition of "traditional means of access" as follows:

(A) "traditional means of access" means those types of transportation on, to, or in the state land, water, or land and water, for which a popular pattern of use has developed; the term includes general or commercial aviation, ballooning, motorized and nonmotorized boating, snowmachining, operation of all-terrain vehicles, mushing, use of pack animals, skiing, snowshoeing, and walking; (AS 41.21.020)

4.0 Goals

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

4.1 Safety

Present lake uses may include non-motorized watercraft, motorized watercraft including airboats, and floatplane use. It is the desire of residents, property owners and users of Whiskey Lake to reduce the potential for conflicts between these uses and increase the safety for all users of the lake.

4.2 Water Quality

Whiskey Lake is a significant natural resource and it is the desire of property owners, residents, and users of the lake to maintain or improve the lake's water quality.

4.3 Recreational Character

The recreational opportunities at Whiskey Lake should be maintained and enhanced but suited to the particular characteristics and should not detract from the generally quiet quality of experience at the lake.

Whiskey Lake offers a unique natural setting for recreational use. This quality should be protected and preserved.

Upland development should occur in an appropriate manner to ensure that pollution, noise, or other environmental degradation of the lake, the streams and creeks that make up the inlets and outlets, and adjacent wetlands, does not take place.

Uses of the lake, the inlet and outlet streams and wetlands should be compatible, or of the kind that enhances the present quality of the lake, which is of a low-impact, quiet recreational nature.

4.4 Wildlife

The inlet and outlet of Whiskey Lake and adjacent wetlands should be protected in their natural state and provide salmon spawning and rearing habitat.

The ability of Whiskey Lake and adjoining wetlands to remain a migratory bird-nesting site should be preserved. Recreational use of the lake should be compatible with wildlife nesting.

4.5 Access

Access to the lake has traditionally been via aircraft or walk-in, however, occasionally access by boat has occurred during high-water times.

It is the desire of a majority of the residents and property owners to maintain the traditional access.

5.0 Recommendations

5.1 Safety

To increase the safety of the lake, it is recommended that all pilots planning to take-off or land on the lake use appropriate communications practice and do a fly-over before landing. It is also recommended that all users of the lake exercise caution in areas of limited visibility.

5.2 Water Quality

Certain watercrafts, such as personal watercraft (a.k.a. jetskis) have a tendency to create many wakes, which may contribute to shoreline erosion. Residents and property owners recommend a ban of personal watercraft on Whiskey Lake.

Additionally, residents and property owners are encouraged to identify someone to participate in the borough's volunteer water quality monitoring program.

A shoreline left, or restored, to a natural vegetated state, including wetlands, provides functions such as bank stabilization, erosion control, filtering of surface runoff, and food and habitat for fish, birds and other wildlife.

5.3 Recreational Character

Residents and property owners of the area initiated the lake management planning process to protect the quiet recreational use of the lake and the inlet and outlet streams. Residents and property owners at Whiskey Lake generally agreed to the establishment of a prohibition of jetskis and waverunners on the lake and the inlet and outlet streams.

The majority of those residents and property owners attending the meetings wish to establish regulations which would reduce noise, reduce wakes, and promote safety on the lake and inlet and outlet streams.

5.4 Wildlife

Whiskey Lake's inlet and outlet serve as salmon spawning and rearing habitat. The inlet and outlet are very shallow and do not lend themselves to use by motorized watercraft unless the streams are modified. Use of the inlet and outlet by motorized watercraft could degrade their ability to sustain salmon spawning and rearing; therefore, the inlet and portions of the outlet to Whiskey Lake should be classified as Non-Motorized Use (Figure 6).

Most individuals will not disturb a nest site 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 loons, swans and grebes. First, existing nests where regular waterfowl nests have occurred could be encircled by a number of buoys marked with "Waterfowl Nesting Site - Do Not Approach" placed at least 150 feet (200 feet preferred) from the nest's boundary. Appendix #2 provides an illustration of a low cost, effective buoy. Waterfowl alert notices and general information about loons, swans and grebes should be posted at a weather-protected signboard at the lake's public access point to inform the public about proper "waterfowl etiquette" (Appendix #2). Residents and property owners agreed to not identify individual nests; because they are concerned the buoys may attract unnecessary attention to the nests as well as be unsightly.

5.5 Public Access

Traditional year round access to the lake is by aircraft. Other summer access has generally been via non-motorized watercraft through the creek at the southern end of the lake during times of high water, or from Hewitt Lake across state property to Whiskey Lake. The use of the outlet by motorized watercraft is very recent, and made possible by the alleged recent removal of boulders, beaver dams and other material. This has caused increased stream flow, and motorized watercraft using the outlet could be damaging to fish spawning and rearing habitat. Other winter access to the lake has traditionally been via snowmachine. Residents and property owners recommend that the safety issues and user conflicts on the lake can be addressed by restricting the use of motorized watercraft on portions of the inlet and outlet to the lake, as shown on Figure 6.

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 which can be 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 Whiskey 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.

In addition, those requesting the lake management plan recommended that a personal watercraft ban and restriction of motorized uses within portions of the inlet and outlet to the lake be imposed in the plan. Please note that such restrictions are not consistent with the guidelines established by MSB Ordinance 99-103(AM) for a lake of this size (see page 4). They can be instituted through planning commission action and Assembly approval.

A description of the implementation measures follows:

IMPLEMENTATION MEASURES PER MSB ORDINANCE 99-103(AM)

No Wake Zone. To protect shoreline erosion and waterfowl nesting areas, a no wake zone is established within 150 feet of the shoreline. No wake is defined as the slowest speed a watercraft can go and still maintain safe operation and maneuverability.

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 on Whiskey Lake.

Trash and Fireworks. Fireworks displays are illegal without a special permit issued by the Borough Planning Department; nevertheless, individuals generally display fireworks throughout the borough. Firework displays create two problems, noise from explosions and trash from the fireworks. Fireworks displays may also cause forest fires. The borough does not have the resources to actively police the illegal use of fireworks and such use is a low priority for the Alaska State Troopers. However, the Borough should advise property owners of the law and inform them to be considerate of their neighbors, avoid polluting the lake with debris, and avoid forest fires and disturbance of waterfowl.

ADDITIONAL IMPLEMENTATION MEASURES

Personal Watercraft Ban. It is recommended that personal watercraft (a.k.a. jetskis) be banned from Whiskey Lake. Use of motorized personal watercraft is not a traditional use of Whiskey Lake and is incompatible with the quiet recreational use of the lake. Furthermore, they pose a safety hazard for swimmers, boaters and wildlife. Their wakes contribute to shoreline erosion and disturb nesting birds.

Motorized Watercraft Use Ban on portions of the inlet creek and outlet (Whiskey) creek. It is recommended that motorized watercraft be banned from only

those portions of the inlet creek and tributaries and outlet (Whiskey Creek) of Whiskey Lake as shown on Figure 6. Use of motorized watercraft on these areas of the shallow inlet and outlet stream is not a traditional use of Whiskey Lake. Due to the shallow nature of portions of the inlet and outlet streams, use by motorized watercraft could potentially damage the ability of these streams to support salmon spawning and rearing. In addition, restricting motorized watercraft on portions of the inlet/outlet should reduce the potential for conflicts between motorized and non-motorized watercraft, and between motorized watercraft and floatplanes and should increase the safety for all users of the lake. The use of portions of the inlet and outlet by motorized watercraft could contribute to shoreline erosion, stream bottom disturbance, and increased turbidity.



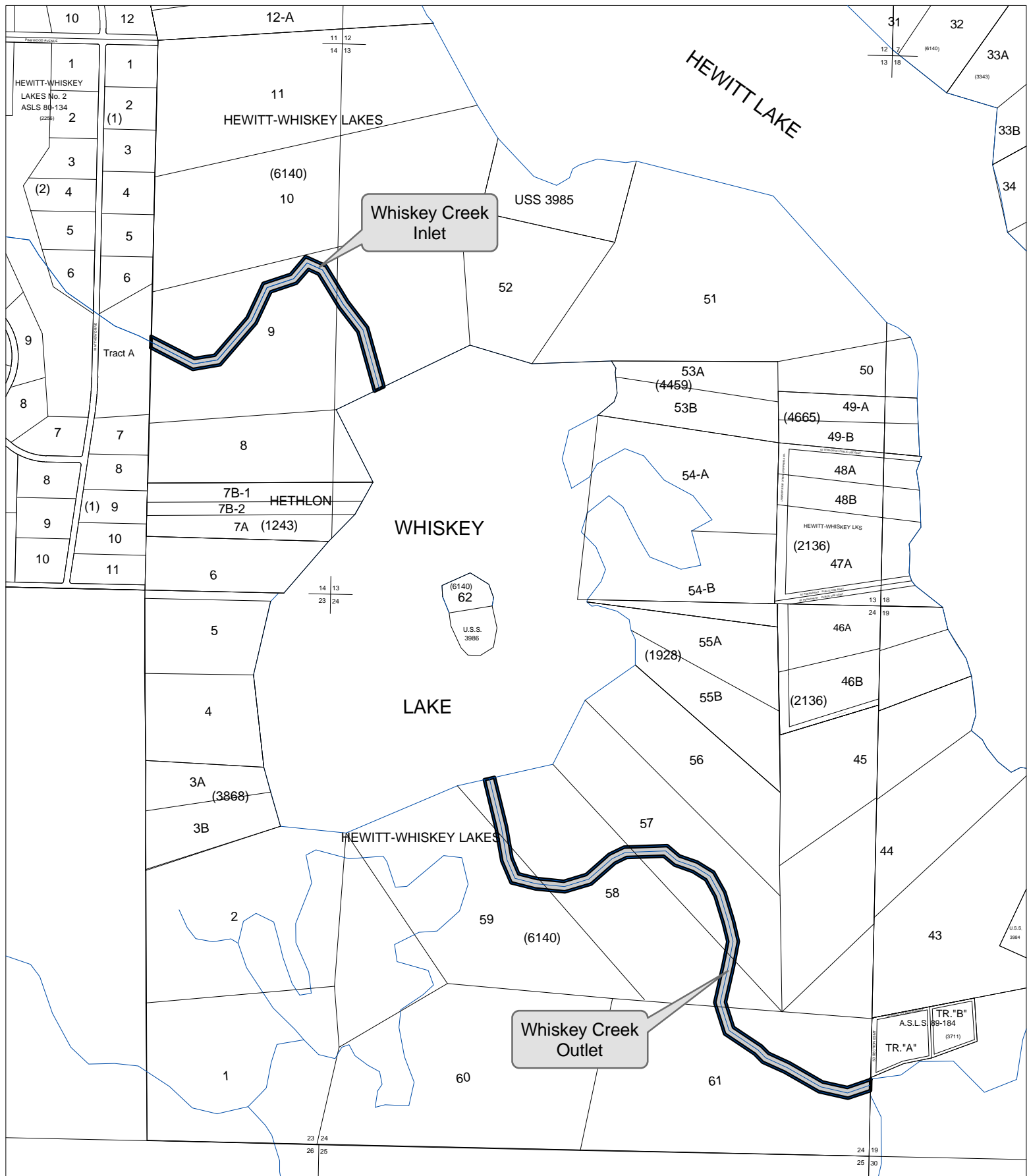


FIGURE 6

Motorized Watercraft Use Banned from these portions of Inlet & Outlet of Whiskey Lake

APPENDIX 1

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF FISH AND GAME

HABITAT AND RESTORATION DIVISION

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE (907) 344-0541
FAX (907) 349-1723

FISH HABITAT PERMIT FG 93-II-0803

ISSUED: February 23, 1994
EXPIRES: December 31, 1994

General Public

Re: Vehicle movement on frozen water surfaces within southcentral Alaska

Pursuant to AS 16.05.870(b), the Alaska Department of Fish and Game (ADF&G) 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 certain categories of motorized wheeled and tracked vehicles on the frozen waters of various specified rivers, lakes, and streams within the southcentral region (see attached map).

Categories of motorized vehicles covered by this GP include: any wheeled, tracked, or other ground effect motorized vehicles less than 2,000 pounds gross vehicle weight (GVW) such as snow machines, 3 and 4 wheelers, coots, etc.; and wheeled vehicles less than 10,000 pounds GVW. The use of any ground effect motorized vehicle on specified frozen waters: (1) with GVWs other than indicated above; (2) within State of Alaska Refuges, Critical Habitat Areas, or Sanctuaries (see attached maps); (3) by Alyeska Pipeline Service Company (APSC) for activities along the pipeline corridor, or (4) outside of the described area is not allowed, except by individual Fish Habitat Permit, other general permit, or Special Area Permit issued by the ADF&G, Habitat and Restoration Division, or by the State Pipeline Coordinator's Office for the APSC.

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 16.05.870(a). They are utilized by salmon and other anadromous fish for spawning, rearing, or migration, and by resident fish species.

In accordance with AS 16.05.870(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 vehicle(s).
2. There shall be no vehicles or equipment operated in the open water of any specified river, lake, or stream under this GP.
3. The use of snow or ice bridges, access ramps, cribbing to cross any specified river or stream is prohibited unless specifically approved, in writing, by the ADF&G, Habitat and Restoration Division.
4. Access to or egress from frozen waters shall occur only at locations with gently or gradually sloping banks. There shall be no access to or egress from frozen waters at locations with sheer or cut banks.
5. The bed or banks of any specified river, lake, or stream shall not be altered or disturbed in any way to facilitate use of, access to, or egress from their frozen surfaces.
6. Vehicles or equipment shall not be left unattended while on the frozen surface of any specified river, lake, or stream.
7. No vehicles shall be fueled or serviced while on the frozen surface or below the ordinary high water line of any specified river, lake, or stream.

The permittee is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved stream crossings. For any activity that significantly deviates from the approved plan, the permittee shall notify the ADF&G, Habitat and Restoration Division, and obtain written approval in the form of an individual permit before beginning the activity. Any action taken by the permittee or an agent of the permittee that increases the scope of the activity or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this general permit will be deemed a significant deviation. The final determination as to the significance of any deviation and the need for an individual permit is the responsibility of the ADF&G, Habitat and Restoration Division. Therefore, it is recommended that the ADF&G, Habitat and Restoration Division, be consulted immediately when a deviation from the approved activity is being considered.

This letter constitutes a general permit issued under the authority of AS 16.05.870. Please be advised that this approval does not relieve you of the responsibility for securing other permits: state, federal, or local.

February 23, 1994

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

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

The recipient of this general permit (the permittee) shall indemnify, save harmless, and defend the department, 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 general permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

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

Sincerely,

McKie Campbell, Deputy Commissioner



By: Dennis G. Gnath
Habitat Biologist
Habitat and Restoration Division
(907) 267-2284

R. Thompson, DNR/DL
A. Samet, DNR/DL
D. Kelley, DNR/DL
S. Dunaway, DNR/DM
P. Pinard, DEC
P. Brna, SPCO
D. Webster, MSB
W. Wrede, City of Cordova
M. Pearsall, KPB
D. Dengel, City of Valdez

APPENDIX 2

LOON ALERT



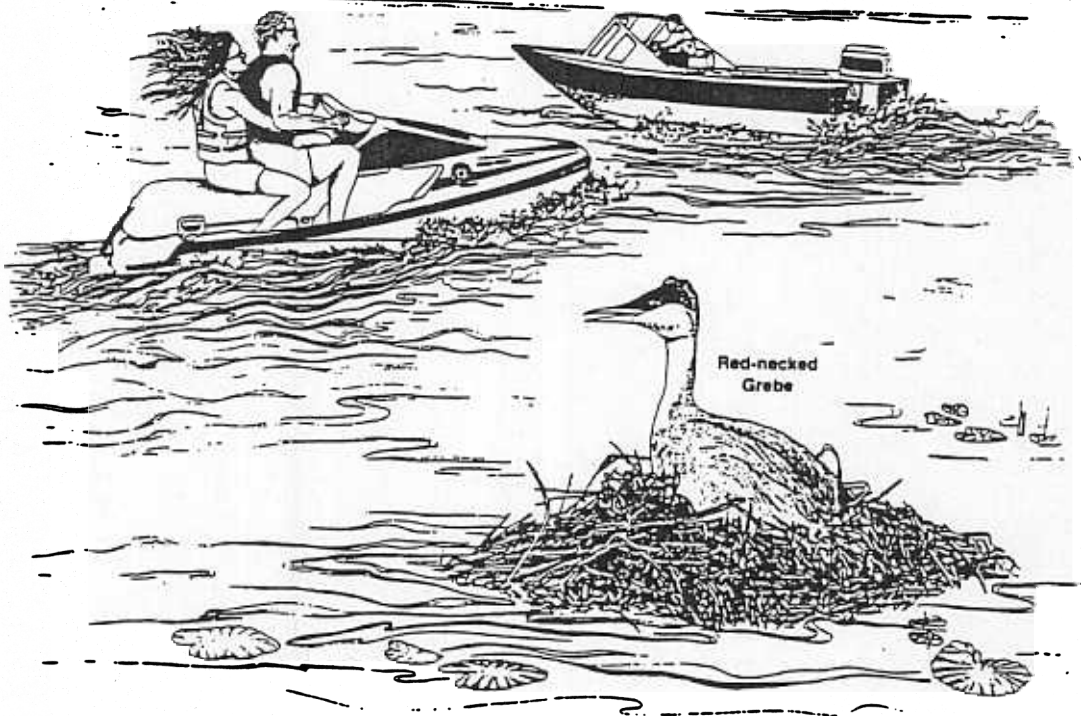
**Help keep this lake safe
for loons and other wildlife:**

1. Watch loons from a distance.
2. Pick up fishing line and other litter that may entangle loons.
3. 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.



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

