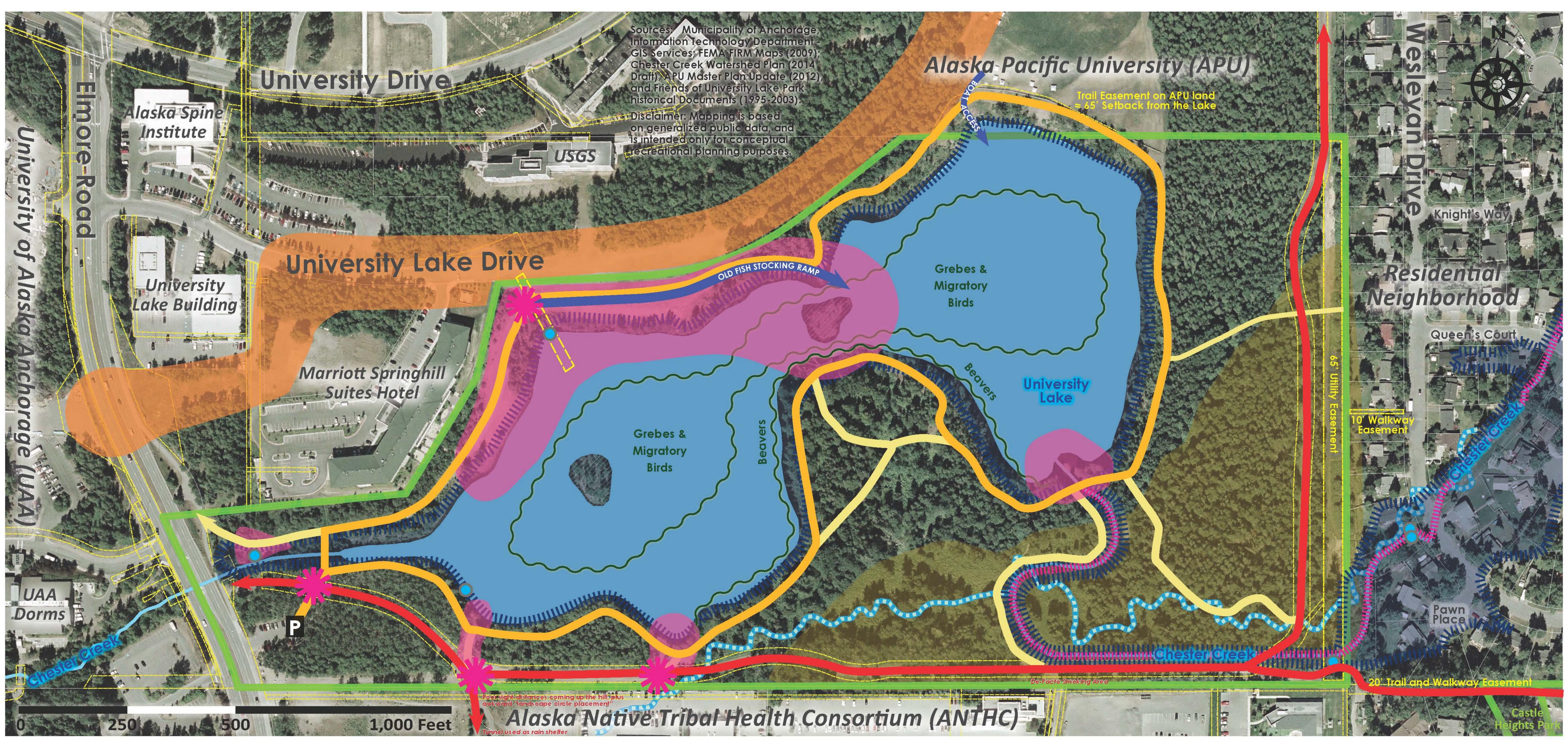
# University Lake Park



## LEGEND

Site Context	Nati	
Municipal Parkland		
Parcel Boundaries (Private, Institutional)	-	
University Lake Drive (planned corridor)		
Platted Easement		



### tural Characteristics



University Lake (Historical gravel pit, formerly "Behm Lake") Pre-1980 Chester Creek Channel

Current Chester Creek Channel Chester Creek was diverted to flow into an old gravel pit and create University Lake.

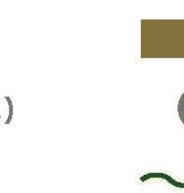
11	111	111	1	
	111	///	1	
11	////	////	12	
	111	///	1	

Wetlands

IIIIIIIIII 100-Year Flood Zone (2009 FEMA)

Unstable Channel, Poor Habitat No riffle/pool complex suitable for fish, along with bank erosion, sloughing, and lake sediment deposits.

# Site Inventory and Analysis Map



Silty Soils Storm Drain (Stormwater Outfall) Wildlife Concerns

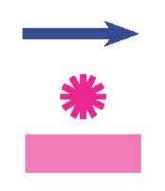
# Infrastructure & Circulation

Ρ 

Parking/Trailhead Multi-Use Path (Leash Required) Soft-Tread Trails (Off-Leash Allowed)



DRAFT 9/8/15



**Boat Access Point Circulation Bottlenecks** Dog "Play Zones" - High Erosion Areas (major dog socialization, toy throwing, and water access areas)

**MUNICIPALITY OF** ANCHORAGE Feature





### **University Lake Park Site Inventory and Analysis**

#### Park Overview

University Lake Park is a 64-acre community-use park located in the U-MED District. The park is a well-used recreational attraction year-round, offering a convenient green space in central Anchorage that is easily accessible by road, bus, sidewalk, and trail. It features a natural setting with a variety of looping trail experiences around University Lake.

Users typically enjoy the park for its paved and soft-tread trails, scenic views of the lake and Chugach Range, and to spend time outdoors in a natural setting. During the winter, portions of trail at University Lake Park are groomed and dedicated for cross-country skiing. In conjunction with APU's Jim Mahaffey Trail System, this supports the Nordic Skiing Association's annual Tour of Anchorage event.

In 2003, the park was designated as one of 6 authorized off-leash dog parks in the Anchorage Bowl, and many users regularly use University Lake park to exercise, socialize, and play with their dogs. Due to the limited off-leash opportunities serving Anchorage's ≈65,000<sup>1</sup> resident dogs and their owners, and given University Lake's easy access, demand for this park is high. Dog and non-dog owners believe that this regular hum of activity makes University Lake Park more safe, vibrant, and fun for socializing than some of the community's more remote, or less-used parks.

#### Site History

In 1985, a former gravel pit property was acquired through a Heritage Land Bank trade for the purpose of parks and recreation. Although some subsequent grading occurred, the bulk of the restoration was led by the Friends of University Lake and performed by volunteers (Anchorage Waterways Council, scouting units, and local residents). Improvements followed a 1995 site plan concept that envisioned the park as a "Native Plant and Animal Preserve," and focused mainly on planting to stabilize the shoreline, adding benches and trash cans around the lake to serve users, and allowing disturbed portions of the site to naturally re-vegetate.

#### Adjoining Uses.

Primarily surrounded by private property, the park is adjacent to residential neighborhoods on the east, university and medical campuses on the north and south, and a hotel and Elmore Road on the west. The extension of University

<sup>1</sup> Estimate based on population: www.avma.org/KB/Resources/ Statistics/Pages/Market-research-statistics-US-pet-ownership.aspx



Lake Drive along the park's northern edge (see map) will create a clearer division between the park and APU lands, and help APU implement its endowment development priorities.

#### Infrastructure

The park is minimally developed to include almost 2 miles of soft-tread trail (where off-leash dogs are allowed), and 3/4 of a mile of multi-use paved trail (where leashes are required), 3 creek crossings/bridges, several benches and garbage cans, a picnic table, informational signs, and kiosks/stations with dog waste bag supplies. Although much of the infrastructure is in good or fair condition, a number of the lake perimeter benches were installed when water levels were lower, and are now partially in the water.

A small parking area (≈22 cars) was recently constructed on Elmore Road, which does not adequately serve park demand. This compounds the larger issue of individuals mis-using dedicated parking in the U-MED district (this includes park users, but also students and arena users trying to avoid paying for parking). Some park users trespass in parking lots owned by APU, ANTHC, UAA, or nearby offices and businesses—although increased signage and towing are helping to discourage this practice. Others park improperly at the end of University Lake Drive, including access-challenged individuals seeking to exercise their dog without walking much themselves. Demand is very high for additional park parking, especially at peak use times (sunny weekends).

#### Circulation

The park has a high-volume of through-traffic, including bicycle commuters, on its paved multi-use trails that link with the Chester Creek Trail and the Campbell Creek Trail. This through movement is often hindered by foot traffic and off-leash dog activity, especially at circulation bottlenecks at the junction of the trailhead path and multi-use trail off of Elmore, and along the northwestern lake shore (see map).

Foot traffic within the park often follows a softtread trail loop around the lake; users typically circle the 1.1 mile loop one or more times. Neighborhood connector stubs and small usercreated social trails lead off from the main loop.

There are also several larger open areas where dogs and people tend to gather for toy throwing. retrieval, and socialization. These tend to focus on the northern edge of the lake and spill over onto APU land. This "dog play" activity also can create circulation bottlenecks with throughtraffic, and has contributed to severe erosion along the lake shore-line, especially in focused areas where the play extends into the water (see map). Additional water activity includes the use of small non-motorized boats in the lake (much

to the concern of nesting grebes), mainly during summer day camps. Boat access into the lake is awkward and requires hand carrying vessels from APU's field (where the boats are stored) down a rough, steep bank. An alternate boat access, formerly used to stock University Lake for fishing, is also a favorite location for kids, dogs and people to access the water (see map).

#### Utilities

The site does not presently have utilities (e.g., lighting, water) to support park uses; however, it is bordered by a number of utility easements (see map). The site also supports underground stormdrain systems running into the lake from off-site neighborhoods, roads, and parking lots.

#### Soils

As a former gravel pit site, University Lake Park has generally suitable soils for trail and park improvement purposes (loam, sand, and gravel). The southeastern corner of the site features a higher concentration of silts, a legacy from Chester Creek's meandering channel over time and historical flooding.

#### Elevation

The site is moderate in elevation and generally level, with the exception of some undulating berms marking Chester Creek's former channel, and steep banks along both the creek and the lake. These steep slopes limit recreational access to the water, an important attraction for both people and dogs. Where banks are heavily trafficked and denuded of vegetation, significant degradation occurs, and tree roots are exposed due to erosion of the surface soil. Bank erosion is further exacerbated by the downing of trees along the water's edge by resident beavers.

Portions of soft-tread trail are also fairly steep near Chester Creek's outflow into the lake. When soils are frozen, humid air from the creek and wet dogs cause ice and glaciation, making the steep trails treacherous. This shifts many users onto the nearby multi-use trail (including some who do not observe the on-leash requirements).

#### Waterways

The Park's 22-acre scenic lake is the defining feature of the park, with attractive views of forest and the Chugach Mountains to the east. University Lake (formerly Behm Lake), was a gravel pit used in the 1960s to develop lands in the area. By the 1970s operations ceased when the pits were deepened and groundwater slowly filled them to water table elevations.

In 1984, to create fresh water flow, the South Fork of Chester Creek was diverted from its historical channel (see map) and extensively channelized, including through the College Gate



Subdivision. The loss of meanders, and abrupt creek elevation lowering by about 5 feet, has created unstable channels and stream bank slumping, with greater flood potential in the upstream neighborhoods, and homogeneous habitat (no riffle/pool complexes suitable for fish).

#### Water Quality

As a former gravel pit, University Lake functions much like a stormwater retention basin, helping to settle incoming sediments and pollutants from storm drains and the creek upstream, creating cleaner water at the lake's outflow into Chester Creek. Water guality, stream habitat, and fish passage are growing concerns in the Anchorage bowl. A recently adopted Chester Creek Watershed Plan proposes actions, including at University Lake Park, to help address these issues (and comply with a municipal permit for reducing stormwater pollution into waterways).

From a water quality standpoint, there are concerns about a locating a busy dog park near waterways, as pet waste that enters outdoor soil and water can harbor round and hook worms, giardia, leptospirosis, and ecoli. These bacteria can affect wildlife, as well as pet and human health. Dog owner education (Scoop the Poop), annual dog waste clean-ups, and dog waste bag kiosks are all efforts to help address these ongoing concerns. Some users also advocate adding more garbage cans spaced around the lake as dog owners prefer not to carry bagged waste very far. Despite these concerns—and the visible evidence of dog waste at the park at any given time-waterborne fecal matter levels are "both higher and more varied" where Chester Creek enters University Lake than at the lake outlet.<sup>2</sup> In fact, all of Anchorage's streams except Rabbit Creek harbor fecal bacteria from pets, wildlife, and human sources (e.g., homeless camps near waterways and failed septic systems).

#### Wildlife

As a former gravel pit, with re-forestation well underway, University Lake is a preferred beaver home, especially along the southern banks (see map). Beaver's preferred food—young poplar/ cottonwood/aspen—is abundant on site.

<sup>2</sup> www.researchgate.net/publication/239388725\_Variability\_ Seasonality\_and\_Persistence\_of\_Fecal\_Coliform\_Bacteria\_in\_a\_ Cold-Region\_Urban\_Stream

University Lake (photo courtesy James Sipman)

Evidence of beaver is visible all around the lake, including downed trees, floating woody debris, and wire cages installed around tree trunks by park maintenance to discourage beaver activity. Signage in the park also warns dog owners of the very real hazard of beavers harming dogs who come too close if they feel threatened.

A variety of other wildlife, including a number of bird species also inhabit the park, or use it seasonally. Grebes have traditionally nested on the lake by creating floating platforms of aquatic vegetation at various locations. Other waterfowl typically nest on two small wetlands in the middle of the lake. The nests can be unintentionally disrupted by people on shore (e.g., skipping rocks, throwing toys), dogs (swimming, playing, and predatory behaviors), and recreational boaters.

Signs in the park warn users that federal and state laws protect most birds, including the Migratory Bird Treaty Act, and that it is illegal to interfere with nests when active or to injure, capture, or kill migratory birds.

#### **Off-Leash Dogs**

Even with the high volume of users and dogs, official Animal Control reports of dog-related incidents at University Lake Park are limited to a few per year, and are typically reports of stray animals. Anchorage Municipal Code's Title 17 "Animals" has clear guidelines to protect public safety and governs "off-leash dog park spaces." At the same time, enforcement at specific parks is limited to call-in reporting, and some dog owners do not fully comply with the adopted rules and regulations (or "Pettiquete").

Anchorage Unleashed, an organization of off-leash dog park advocates, has organized volunteers to help educate off-leash park users, address concerns, and create adequate signage working in partnership with the Municipal Parks Department and Animal Control Advisory Board, which advises the Mayor and Assembly on all matters pertaining to animal control in the Municipality of Anchorage.

