



# Alaska Lake Database (ALDAT)

*Public User's Guide*

Updated September 2015

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ADF&G, Sport Fish Division, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907)267-2375.

## System Description

The Alaska Lake Database (ALDAT) is a statewide database system designed to consolidate, archive, and improve access to lake data electronically. ALDAT is accessible to Alaska Department of Fish and Game (ADF&G) staff and the public through a map user interface. ADF&G staff and the public can view, search, and export lake data and select ADF&G staff can add and edit records via the web.

Three data types are stored in the ALDAT system: *General Lake Information*, *Stocking Data*, and *Fish Data*. *General Lake Information* includes location and access information (latitude and longitude, directions, and U.S. Geological Survey map references), improvements (boat launches, picnic areas, restrooms, etc...), size, maximum depth, survey notes, photos, contour maps, and historical documents dating back to the 1950s. *Stocking Data* includes automated summaries of species previously stocked (date of release, number, and size of fish) and offers detailed stocking reports based on user specified search criteria. *Fish Data* includes a summary of fish species captured during previous ADF&G sampling projects (minimum, maximum, and average length).

The ALDAT user interface displays water bodies on a map with colored pins. Users can click on a pin to view available data; search locations by name, area, stocking date, or fish species; manually navigate the map and overlay additional layers such as roads and trails; and perform custom data exports across multiple datasets.

ALDAT lake data, documents, and photos are stored in SQL databases located on ADF&G's shared server in Anchorage. Two additional ADF&G website applications and one hatchery Microsoft Access application are also connected to these databases:

Lake Fishing Info: <http://www.adfg.alaska.gov/index.cfm?adfg=fishingSport.region>

Fish Stocking Update: <http://www.adfg.alaska.gov/index.cfm?adfg=SportStockingHatcheriesSearch.main>

Information contained in this system is the best available data for many water bodies throughout Alaska. Records are updated continuously as new data becomes available. Some records are from historical surveys in excess of 50 years old and may be out of date. ADF&G makes no claims as to the accuracy of the information and documents presented.

Questions regarding the function or content of this system can be sent to [april.behr@alaska.gov](mailto:april.behr@alaska.gov).

## Viewing Data

Data viewing in the ALDAT application is available to all ADF&G and public users at:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishingSportStockingHatcheries.lakesdatabase>.

Each time you enter the application a *Terms Agreement* will appear.

## Terms Agreement

The following information is the best available data for many water bodies throughout Alaska. This site is updated continuously as new data becomes available. Some records are from historical surveys in excess of 50 years old. The Alaska Department of Fish and Game makes no claims as to the accuracy of the information and documents presented.

Google Maps is being used for the convenience of our site users and is not an implied endorsement of Google products. The Alaska Department of Fish and Game, in accordance with State of Alaska ethics laws, does not favor one group over another through endorsement or recommendation.

Please be aware that the provided maps and latitude and longitude coordinates are approximations and are not intended for navigational purposes.

See also: [Google Maps Terms of Use](#)

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See also: [Highsoft Highcharts Terms of Use](#)

Agree

Disagree and Exit Site

Click on *Agree* to continue to view the website.

If you select *Disagree and Exit Site* you will be redirected to the Sport Fish Fishing Information webpage.

Standard Google Maps navigation applies to this internet application. For more information on these standard controls visit: <https://developers.google.com/maps/documentation/javascript/controls>.

To view available information click on a colored pin on the Google map. A pop up balloon will appear with tabs. Data categories are *General Lake Information*, *Stocking Data*, and *Fish Data*. If a tab does not appear, there are no data available in that category. Click on a tab to view available records. Resulting displays are shown below.



**Koole Lake** Site Code: U0201

**General Lake Information** | **Fish Data** | **Stocking Data**

**Location**  
Latitude: 64.1  
Longitude: -1  
USGS Map: B  
Elevation (m)  
MTRS: F008S

**Access**  
Latitude: 64.1  
Longitude: -1  
Directions: La  
at 306.2 mile R  
the Tanana Riv

**Lake Charac**  
Surface Area

**Other Species Present**  
Arctic char  
**View Fish Sampling**  
Sampling Events | Mark-R  
Data Origin: ADF&G  
Species Captured: rainbo  
Mean Length (mm): 193  
Minimum Length (mm):  
Maximum Length (mm):  
Number Measured: 84

**General Stocking Information**  
Currently Stocked: Yes Date of First Stocking: 1974  
Management Category: Conservative Management  
Species Previously Stocked: Arctic char, Arctic grayling, Chinook salmon, coho salmon, rainbow trout  
Stocking Access: airplane  
Stocking Notes: Subcatchable AC stockings discontinued in 2006 Stocking Plan due to poor growth and survival observed in 2004. Management category changed form Regional to Conservative in 2007.

**View Stocking Data**  
From: 1974 to: 2013  
Species: All **Export Data**

Date	Species	Length (mm)	Number Stocked
6/14/2013	coho salmon	74	11675
6/13/2013	Chinook salmon	165	3507
6/14/2013	Arctic grayling	66	1005

## Filter Lakes Tab

The *Filter Lakes* tab allows you to filter lake data by stocking records, stocking date, management area, and fish species.

**Filter Lakes** | **Go To Location** | **Options**

**Filters**  
**Export Data** **Refresh Lakes**

Currently Stocked ☒ **Search By Stocking Date**  
Previously Stocked ☐ Start Date: mm/dd/yyyy  
Not Stocked ☐ End Date: mm/dd/yyyy

View Data in Metric Units ☒ View Data in Standard Units ☐

Management Areas   
Stocked Species   
Other Species

Select desired filters and click on the *Refresh Lakes* button to view results on the Google map. Informational pop ups containing additional field descriptions will appear when you hover over select headings. The application will retain the filters you select until they are deselected. To deselect all filters in a category click on the *Select All* box twice and click the *Refresh Lakes* button.

The *Export Data* button allows you to extract lake, fish, and stocking records for the water bodies displayed on the Google map. This functionality is discussed in greater detail in the **Retrieving data** section of this guide.



The *Currently Stocked* checkbox will display lakes that are in the current stocking program (green pins). These water bodies are listed in regulation as “stocked.”



The *Previously Stocked* checkbox will display lakes that have stocking records but are not listed in regulation as “stocked” (yellow pins).



The *Not Stocked* checkbox will display lakes that do not have stocking records and are not listed in regulation as “stocked” (red pins).

The *View Data in Metric Units* and *View Data in Standard Units* radio buttons allow you to view and export data in different units. Metric is the default application setting.

The *Search By Stocking Date* option is only available when the *Currently Stocked* and/or *Previously Stocked* check boxes are selected. These fields allow you to view only locations that have been stocked within the dates you specify. If you leave the date fields blank all available stocking records will appear.

*Management Area*, *Stocked Species*, and *Other Species* are expandable headings. Click on a heading to view additional filter selections. Hold down the control key to make multiple selections from each list. Management areas listed are Sport Fish Management Areas with additional designations for the Tanana River and Kenai Peninsula.

## Go To Location Tab

The *Go To Location* tab allows you to go to a specific water body or latitude and longitude.

The screenshot shows the 'Go To Location' tab selected. It contains a 'Go To Location' label above a text input field. Below this are three input fields: 'Zoom To Lake' (which has a dropdown arrow), 'Latitude', and 'Longitude'. At the bottom of the form are two buttons: 'Go to Lat/Long' and 'Go to Alaska'.

*Zoom To Lake* box allows you to go directly to a specific water body. Begin typing the name of the location you wish to see, a drop down menu will appear, select your water body from the list provided and hit enter. The Google Earth map will zoom to the selected location.

**NOTE:** If you do not see the water body you are looking for, check to make sure that *Currently Stocked*, *Previously Stocked*, and *Not Stocked* are all selected on the **Filter Lakes Tab**. Also make sure there are no filters selected under *Management Category*, *Stocked Species*, or *Other Species*. Don't forget to click on the *Refresh Lakes* button to update the Google map after changing your filter selections.

You can also zoom to a specific *Latitude* and *Longitude* by typing coordinates into the provided boxes and clicking on the *Go to Lat/Long* button. Coordinates must be entered in decimal degrees (dd.dddd, -ddd.dddd) and in WGS84 or NAD83.

The *Go to Alaska* button will adjust the view of the Google map to the Alaska extent.

## Options Tab

The *Options* tab allows you to overlay various shape files, tools, and references. The following is an explanation of each option available for display.

Earth Options	
SF Trails	<input type="checkbox"/>
Pan Control	<input checked="" type="checkbox"/>
Map Type Control	<input checked="" type="checkbox"/>
Street View Control	<input checked="" type="checkbox"/>
SF Management Areas	<input type="checkbox"/>
Zoom Control	<input checked="" type="checkbox"/>
Scale Control	<input type="checkbox"/>
Overview Control	<input type="checkbox"/>

*SF Trails*

Sport Fish access trails.

*Pan Control*

This is a standard Google Maps option.

*Map Type Control*

This is a standard Google Maps option.

*Street View Control*

This is a standard Google Maps option.

*SF Management Areas*

Sport Fish management areas in Alaska.

*Zoom Control*

This is a standard Google Maps option.

*Scale Control*

This is a standard Google Maps option.

*Overview Control*

This is a standard Google Maps option.

## Retrieving data

Data can be exported from the *Fish Data* and *Stocking Data* views discussed in the **Viewing Data** section of this guide and from the **Filter Lakes Tab**. Users can export data in standard or metric units by selecting the corresponding radio button on the *Filter Lakes* tab. Metric is the default setting.

The *Export Data* button on the *Fish Data* view will return data for the *Sampling Event* selected in the drop down box. All fields listed under **Fish Sampling Data** are included in this export. The *Export Data* button on the *Stocking Data* view will return stocking records for the years selected in the drop down

boxes. Fields included in this data export include *Stock Date*, *Species*, *Length*, and *Number Stocked* (described in **Stocking Data**). Resulting files exported from these views will automatically open in Microsoft Excel.

**Koole Lake** Site Code: U0201

General Lake Information Fish Data Stocking Data

**General Stocking Information**

Currently Stocked: Yes Date of First Stocking: 1974

Management Category: Conservative Management

Species Previously Stocked: Arctic char, Arctic grayling, salmon, rainbow trout

Stocking Access: airplane

Stocking Notes: Subcatchable AC stockings continued to poor growth and survival observed in 2004. Management Regional to Conservative in 2007.

**View Stocking Data**

From 1974 to 2013 Species All

Export Data

Date	Species	Length (mm)
6/14/2013	coho salmon	74

**Other Species Present**

Arctic char

**View Fish Sampling Data**

Sampling Events: Mark-Recapture Event 2 - Sep - 2013

Data Origin: ADF&G

Species Captured: rainbow trout

Export Data

Mean Length (mm): 193  
Minimum Length (mm): 92  
Maximum Length (mm): 420  
Number Measured: 845

**Rainbow Trout Length Frequency Distribution**

200  
150  
100  
50  
0

**Filter Lakes** Go To Location Options

Filters

Export Data Refresh Lakes

Currently Stocked ☒ Previously Stocked ☐ Not Stocked ☐

Search By Stocking Date  
Start Date: mm/dd/yyyy  
End Date: mm/dd/yyyy

View Data in Metric Units ☒ View Data in Standard Units ☐

Management Areas

Stocked Species

Other Species

**Alaska Lake Database (ALDAT)**

**Search Lake Data Statewide**

Select the information you would like included in your query

You are exporting data using the following filters: currentlyStocked

Lake Data

Name

Location Information

Access

Lake Survey Data

Attached Documents

Clicking on the *Export Data* button on the **Filter Lakes Tab** will open a new browser tab with advanced data export options.

Each field available for export is described in the following sections. Exported data are in .csv format.

## Lake Data

### Name

<i>Lake Name</i>	Common water body name.
<i>Alternate Lake Name</i>	Other commonly used/local names for a location or previously used names.
<i>Site Code</i>	Site code used in the Statewide Harvest Survey (SWHS) database. This field is not updated automatically. These codes often change over time and may become out of date.

### Location Information

<i>Latitude (WGS84)</i>	
<i>Longitude (WGS84)</i>	Coordinates in decimal degrees (WGS84) for the center of a lake.
<i>MTRS</i>	Meridian, Township, Range, and Section pulled from a geospatial file for the specified latitude and longitude listed above. Meridians in Alaska include: Copper River (C), Kateel River (K), Fairbanks (F), Seward (S), and Umiat (U).
<i>Elevation (m,ft)</i>	Elevation of the water body.
<i>Sport Fish Region</i>	Sport Fish Region pulled from a geospatial file for the specified latitude and longitude listed above.
<i>Management Area</i>	Sport Fish Management Areas (with additional designations for the Upper and Lower Tanana River and Upper and Lower Kenai Peninsula areas) pulled from a geospatial file for the specified latitude and longitude listed above.
<i>Sub Area</i>	Another grouping of water bodies by area or road (ex. Steese Hwy, Parks Hwy, Coal Mine Road, etc...). These areas are designated by local staff.
<i>Drainage</i>	Drainage as specified by staff or historic documents.
<i>USGS Map</i>	United States Geological Survey map name/number pulled from a geospatial file for the specified latitude and longitude listed above.

### Access

When the *export only one access point for each location* radio button is selected the application will return only one access point for each water body. This allows users to export access data with other information such as **Lake Survey Data** by date, **Fish Data**, and **Stocking Data**.

When the *export all access points* radio button is selected the application will return multiple access points for a water body (if available). If this is selected you cannot export access data along with **Lake Survey Data** by date, **Fish Sampling Data**, or **Detailed Stocking Information**.

*Latitude (WGS84)*

<i>Longitude (WGS84)</i>	Coordinates in decimal degrees (dd.dddd, -ddd.dddd WGS84) for an access point.
<i>Directions to Lake</i>	Description of how to access the water body at this location.
<i>Improvements</i>	List of improvements available at the location specified above.
<i>Access Notes</i>	Miscellaneous comments pertaining to the location specified above.
<i>Land Status</i>	Land status as designated by ADF&G staff.

### Lake Survey Data

When the *export most recent survey data* radio button is selected the application will populate fields using the most recent survey information. This allows you to export lake survey data along with **Access data**, **Fish Data**, and/or **Stocking Data**.

When *export data for all lake surveys* is selected you can access individual survey information and the corresponding date. If this is selected you cannot export lake survey data along with **Access data**, **Fish Sampling Data**, or **Detailed Stocking Information**.

### Size and Area

<i>Maximum Depth (m, ft)</i>	Maximum depth observed.
<i>Surface Area (h, ac)</i>	Lake surface area.
<i>Volume (m3, million gal)</i>	Lake volume.
<i>Mean Depth (m, ft)</i>	Mean depth observed.
<i>Shoreline Length (km, miles)</i>	Length of shoreline.
<i>Littoral Volume (%)</i>	Volume of water from the lake surface to 4 meters (~13 feet) divided by the volume of the lake.
<i>Survey Notes</i>	<i>Comments pertaining to a lake survey.</i>

### Inlets and Outlets

Due to the variability of these data, inlet and outlet fields are stored as text and both numbers and text may be present in exported data. Consequently, these fields can only be exported in the units they were entered (cubic feet per second, cfs).

<i>Number of Inlets</i>	The number of inlets observed or identified at the time of sampling or from aerial photos/satellite imagery.
<i>Inlet Discharge (cfs)</i>	Inlet flow measured in cubic feet per second.
<i>Number of Outlets</i>	The number of outlets observed or identified at the time of sampling or from aerial photos/satellite imagery.
<i>Outlet Discharge (cfs)</i>	Outlet flow measured in cubic feet per second.
<i>Lake Category</i>	Landlocked, weired or barriered, intermittent outlet, flood prone, or open outlet.

### Attached Documents

<i>Attached Documents</i>	Returns a column with yes/no indicating if there are documents stored in the database for each location.
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<i>Bathymetric Maps</i>	Returns a column with yes/no indicating if there are bathymetric maps stored in the database for each location.
<i>Number of Photos</i>	The number of photos available for the water body.

## Fish Data

### Species Present

<i>Other Species Present</i>	Returns a concatenated list of fish species found in sampling records that are not found in stocking records.
<i>Projects</i>	Returns a concatenated list of fish sampling <i>Project Titles</i> (defined below) for data entered into the database.

### Fish Sampling Data

The *Date From* and *Date To* fields allow users to retrieve fish sampling data that was collected during a specified timeframe.

<i>Project Title</i>	This field can be used to identify unique sampling events from a large data set. It contains the <i>Project Type</i> (defined below) and date of sampling.
<i>Project Type</i>	Angler report, creel survey, mark recapture event 1, mark recapture event 2, native species on survey, observation, or single sample evaluation.
<i>Project Notes</i>	Fish sampling project notes.
<i>Gear</i>	Fish sampling gear used: angling, backpack electrofisher, boat-mounted electrofisher, fyke net, hoop trap, minnow trap, not recorded, other, seine, tangle net, tangle net floater, tangle net sinker, or unknown.
<i>Set Date</i>	Set date and time for fish sampling gear.
<i>Pull Date</i>	Pull date and time for fish sampling gear.
<i>Soak Time (min)</i>	Duration gear was deployed calculated from the set and pull dates/times.
<i>Latitude (WGS84)</i> <i>Longitude (WGS84)</i>	Coordinates in decimal degrees (WGS84) where fish sampling gear was deployed.
<i>Set Depth Min (m, ft)</i>	Minimum set depth for fish sampling gear.
<i>Set Depth Max (m, ft)</i>	Maximum set depth for fish sampling gear.
<i>Fish Species</i>	Fish species captured.
<i>Fork Length (mm, in)</i>	Length of captured fish.
<i>Weight (g, oz)</i>	Weight of captured fish.
<i>Sampling Sex</i>	Sex of captured fish.
<i>Mark</i>	Mark type observed on captured fish.
<i>Fish Specific Notes</i>	Miscellaneous notes for captured fish.

*Recapture* Returns a column with yes/no indicating if a fish was recaptured from a previous sampling event or gear set.

## Stocking Data

### General Stocking Information

*Stocked by Regulation* Returns a column with yes/no indicating if a water body is listed as stocked in regulation. This field is updated manually by ADF&G staff and may become out of date if it is not maintained.

*Management Category* Regional management, conservative management, or special management as designated by the Stocked Waters Management Plan adopted by the Board of Fisheries (BOF) in 2004 (5 AAC 70.065, 5 AAC 52.065).

*Species Previously Stocked* Returns a concatenated list (generated from stocking records) of fish species previously stocked into a water body.

*Management Subcategory* Large, urban, rural, or remote.

*Stocking Access* Contains stocking specific access information (i.e. aerial transport, bucket, walk in, same as public, etc...)

*Stocking Notes* Contains stocking specific notes.

### Detailed Stocking Information

The *Date From* and *Date To* fields allow you to retrieve stocking records for a specified timeframe.

*Hatchery* Hatchery from which fish were stocked.

*Broodstock* Origin of parent fish.

*Stock Date* Date of stocking.

*Lifestage* Lifestage of fish at stocking (adult, broodstock, catchable, emergent fry, eyed eggs, fed fry, fingerling, fry, smolt, subcatchable, unknown.)

*Stocking Sex* All female or mixed sex.

*Number Stocked* Number of fish released.

*Species* Species of fish released.

*Ploidy* Ploidy of fish released (2N or 3N)

*Average Weight (g, oz)* Average weight of fish released.

*Total Weight (kg, lbs)* Total weight of fish released.

*Length (mm, in)* Approximated length of fish released calculated from the average weight using the following equation:  $\text{length(mm)} = e^{(0.307 * \ln(\text{wt g}) + 3.892)}$ .

*Brood Year* Year of egg take for parent fish.

*Notes* Miscellaneous stocking specific notes.