

Eklutna Watershed

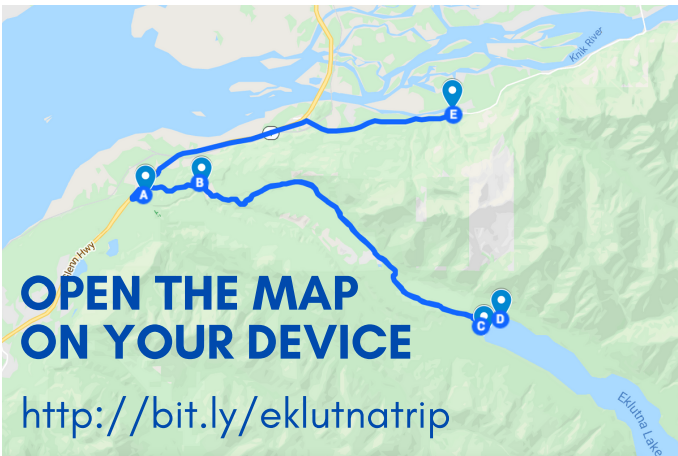
Family Field Trip & Scavenger Hunt

Fall colors and plump berries are here.

As we adjust to new school routines and chillier weather, we still want to prioritize time outside before the snow flies. We would like to encourage you to consider trip to the Eklutna River valley for a fall family outing. It's a prime spot for blueberries and all the autumnal hues, as well as location of a salmon renaissance in the making.

In this packet you'll see a family field trip for the Eklutna River watershed put together by Trout Unlimited so that your family can learn while exploring the area.

Take a look at the overview map we have created to see where Trout Unlimited's Eklutna River Watershed Family Field Trip will take you. Then, put on your outside shoes and a hoodie, grab the dog and some snacks, and head toward Eklutna! As you move through the day, you'll learn the rich history of the area,



how the water is used, and you'll experience one of the gems of Chugach State Park.

*Are you ready to
explore the Eklutna?
Let's go!*

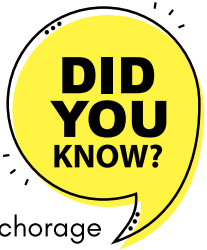
WHAT TO BRING

- Lunch or snacks & water
- Appropriate layers and footwear for seasonal weather
- Pen, coloring pencils or markers
- Bear spray
- Anything you need to keep your family safe and happy on your trip.
- Optional: hiking and/or fishing gear
- This field guide!

PRESENTED BY:



For more about the restoration of the Eklutna, visit our website: tu.org/projects/eklutna



The Eklutna, like the rest of the Anchorage bowl is the homeland of the Dena'ina people. Please visit these places with respect for the Alaska native peoples that have stewarded the land since time imemorial. We are grateful the Dena'ina peoples allow us to access their traditional homelands.

Let's see your photos!

The Eklutna River valley is special and we want to share it!. Help us spread the word by sharing your favorite photo from your Eklutna adventure in our photo contest!

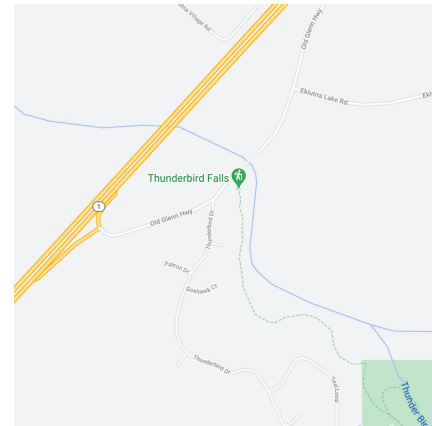
When you get home, send your favorite pictures to:
Eric at ebooton@tu.org
Or, post them on social media and make sure to tag:
@troutunlimitedalaska
on Instagram or
/TUALaska on Facebook

HOW DO WE BRING SALMON BACK TO THE EKLUTNA RIVER?

WHAT TO EXPECT ON THE TRIP

Learn about Anchorage's drinking water, energy, and what salmon need to thrive.

On this field trip you will explore the land and water that is the source of Anchorage's drinking water and how we can have water AND salmon. Through 5 stops, you'll learn about how Eklutna River salmon have been impacted by the growth of Anchorage, and what we can do to make the river a better home. You can do this in 3 hours (travelling from Anchorage) or pack a picnic and make it a longer activity and enjoy some of the hikes!



STOP 1

Lower Eklutna River, Thunderbird Falls

WHERE & WHAT TO DO

Park at Thunderbird Falls Trailhead

Scavenger hunt mission:

take a selfie of your group on the bridge with the Eklutna River in the background, OR take a picture of your group at the falls!

- **Brief stop:** For a quick view of the lower Eklutna River, carefully follow the sidewalk to the bridge just north of the Thunderbird Falls trailhead where the Old Glenn Highway crosses.
- **Extended visit:** If you have time, enjoy the one mile hike to Thunderbird Falls. It is semi-steep out of the parking lot before flattening out. The trail ends at the spectacular 200-foot tall Thunderbird Falls. Along the way you can catch views of the lower stretch of the Eklutna River, Thunderbird Creek, and if you have a sharp eye, you can see where the two meet.

FUN FACTS & TRIVIA

Have you heard of the Eklutna Dena'ina? You're on their traditional homelands now!

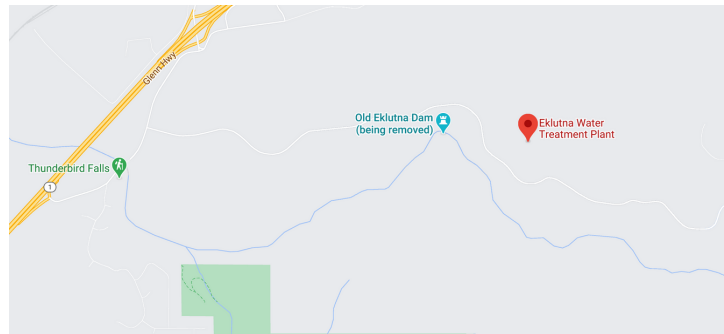
- Just downstream from this location is the modern home of the Native Village of Eklutna. The salmon from the river fed the Eklutna peoples for thousands of years. However few salmon are in the river now and Alaskans are working hard to bring more back!
- Two hydroelectric dams were built on the Eklutna River that weren't fish friendly. The first dam, not far upstream from here, blocked salmon from swimming upstream to spawn. It's important to know that nearly all of the water you see here comes from Thunderbird Creek.
- The Eklutna River historically was similar in size to the nearby Eagle River, but upstream from here it is dry or just a mere trickle because a second dam doesn't release any water.

STOP 2

Imagining a salmon filled river: former lower Eklutna dam site

Special tip for the driver:

On your way to this stop, make sure you note your mileage when you turn off the Old Glenn Highway and onto Eklutna Lake Road. Approximately 1.5 miles up the road, there is a pull out on your right. Deep in the canyon below is where the old Eklutna dam used to stand.



WHERE TO LOOK?

On the southside of Eklutna Lake Road, across from the Eklutna Water Treatment Plant (1.5 miles up Eklutna Lake Road from Old Glenn Highway) is a considerably sized dirt pull out. For stop 2 we recommend you stay in the car or use the time on the drive to stop 3 for a quick discussion and trivia. The canyon is exceptional, but there are private land and safety concerns so we suggest a simple discussion. With the dam removed, there is no need to explore this area, however it as an important piece of the story of the Eklutna River.

The photo below shows the Eklutna River before and after the lower dam removal.



A short film was created to tell the story of the removal of the lower Eklutna dam. It is not yet publicly available, but you can email Eric at ebooton@tu.org to get a link to the film.

Scavenger hunt mission:

draw a river filled with salmon or a dam being blown up. OR in your own words write what a fish would think if they were blocked from traveling home by a wall of concrete.

DID YOU KNOW?

All 5 species of Pacific salmon live in the Eklutna River – can you name all 5 species of salmon?

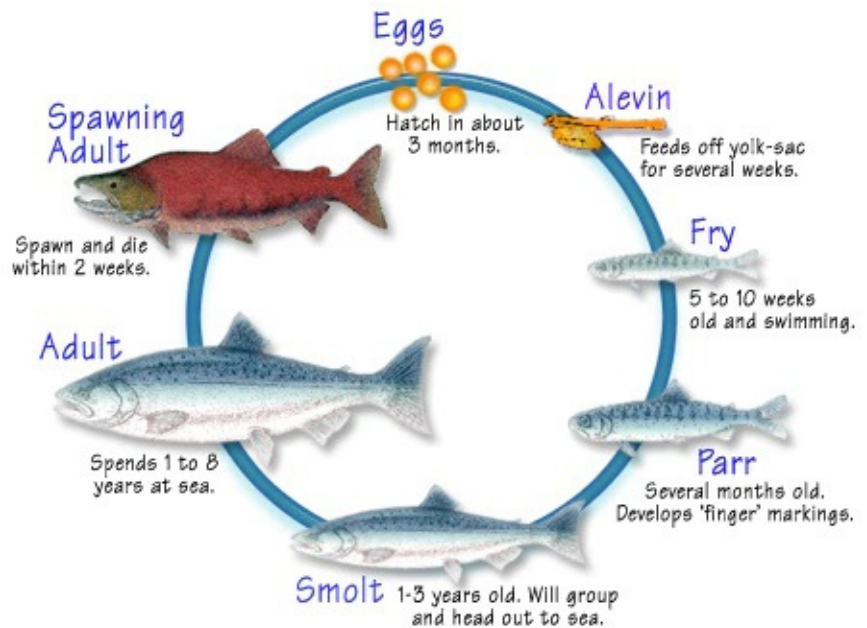
WHY IS THIS SPOT SIGNIFICANT?

- The lower Eklutna Dam was a 61 foot (that's as tall as 10 bull moose!) hydroelectric dam built in 1929. With no fish passage, the dam blocked salmon from finishing their journey upstream to spawn and continued to do so for an additional 62 years after being abandoned.
- The lower Eklutna Dam was removed in 2018 thanks to the leadership of the Eklutna, INC., Native Village of Eklutna & The Conservation Fund. For the first time in nearly a century, salmon can access the 8 miles of habitat up to the Eklutna Lake. Take a moment to celebrate! But there's still one main problem: there's not enough water to do so.

TRIVIA TIME!

What does the life of a salmon look like?

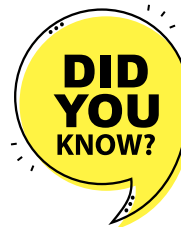
Salmon hatch from eggs buried in the gravel by their mother. Baby salmon spend 5 months to 2 years in freshwater streams. When the young salmon are ready, they swim downstream and into the ocean. In the ocean, salmon will spend as few as 1.5 years and as many as 8 years, depending on species. Once the salmon are fully grown adults, they swim - often thousands of miles - to return to the exact stream they were born in. When the adult salmon reach their home stream, they swim up it until they find a good spot to dig a new nest and lay eggs. Shortly after salmon



have laid their eggs they die and become food for bears, birds and other animals and provide important nutrients for trees and plants. This cycle of life is known as the “salmon cycle.”

How does blocking a river impact salmon?

If you build something in a river that doesn't allow fish to swim past it, adult salmon cannot get upstream to get to the areas where they lay eggs and “spawn” baby salmon. Also, young salmon will not be able to swim out the ocean and grow into healthy adults.



The Eklutna River is traditionally known as Ildlughetnu (Id-lug-het-nu) - can you try calling the river by its traditional name?

STOP 3

The dry river, Upper Eklutna Dam



WHERE

Park in the Day Use lot at Eklutna Lake Campground and visit the upper Eklutna dam at the outflow of Eklutna Lake. It is a flat walk that is less than 1/2 mile to view the dam. To access the dam either follow the well-developed trail headed south from the day use area as it parallels the edge of the lake on its way to the outflow, or walk up to the lake and walk the shoreline to the right until you hit the diversion dam. **See next page for Stop 3 activities.**

WHAT TO DO

The Upper Dam is basically the 'shut-off' valve for water to the river.

Scavenger hunt mission:
Strike your favorite pose and take a photo on top of the dam!

- Brief stop: Follow the well-developed trail mentioned above straight to the dam.
- Extended visit: Follow the shore of Eklutna Lake in a counter-clockwise direction until you run into the dam. Where Eklutna Lake narrows, you spot some metal debris from dams that pre-date the current one. Once you reach the dam, take a look at the spillway and carefully explore downstream as far as you wish.

Quick history:

The dam that you are standing on right now was built in 1955 and rebuilt in 1964 after the historic earthquake. The dam was built so that the naturally occurring lake stored even more water for electricity production.

If you are looking at the lake, look behind you - what is missing?

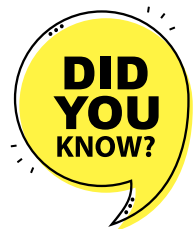
Standing on the top of the dam you can look into the spillway (the concrete structure where water would be released) and see that no water is being let out of the lake. Looking downstream you can see the clear path of the Eklutna River and that the river runs dry. This is a problem for fish!

The good news!

The owners of the dam have begun the required process to fix the dam's impact to fish and wildlife. Our goal is that several years from now when you return to this spot in the fall you will see spawning salmon, water flowing, and a more healthy river.

PARENTS: DID YOU KNOW?

Anchorage Utilities have a role to play in the future of Eklutna salmon.



The Eklutna Hydropower Project is owned by Chugach Electric Association, Municipal Light & Power and Matanuska Electric Association. The owners are legally obligated to make up for the project's impact to fish and wildlife. This process began in 2019 and over the coming years, studies will be done to best understand what needs to be accomplished. However it is clear that to make up for the project's impacts to fish, an

appropriate amount of water needs to be released from the upper dam to allow salmon to access habitat, and for a full recovery, salmon need passage around the upper dam to access the lake and habitat beyond.

STOP 4

Water for everything but salmon – Eklutna Lake



WHERE

Eklutna Lake Scenic Trail

From the Day Use parking lot, follow the established trail to the North, the shore of the lake to the left, or simply find a comfortable spot along the lake to relax. There are countless recreation options here! Boating, hiking, biking, hunting, fishing, ATV and snowmachine riding and more.

WHAT TO DO

- Brief stop: walk to the shore of the lake, find a nice spot to sit. Relax for a moment and enjoy the scenery of this special place.
- Extended visit: Visit the trail map and pick a path! For an easy hike or bike ride with the family we recommend the Lakeside Trail. For a more adventurous hike, and a chance at finding blueberries if they are in season, consider Twin Peaks.

How many miles do long do you think Eklutna Lake is? 7 miles! That's a lot of water.

Water is needed...

1. to create electricity for Anchorage,
2. for drinking water for Anchorage,
3. to flow down the river so salmon can be healthy.

Scavenger hunt mission:
with so much beauty surrounding you, share with us your favorite scenic photo.

You can't see the end of the lake – what do you think is at the other side? A glacier! The water in Eklutna Lake mostly comes from Eklutna Glacier.

DID YOU KNOW?

WATER USE ACTIVITY

Hold all ten fingers up. Pretend your 10 fingers represent all of the water that is in the lake in front of you. How many fingers (or water) would you put down to give for drinking water for Anchorage? How many for electricity? Now how many for fish to be able to thrive? Discuss.

You may be surprised to learn that a very small amount of this water provides nearly ALL of Anchorage's drinking water. The majority of the water you see is dedicated to generating a very small amount of electricity, while none of the water is dedicated to salmon.

Here's a fun way to explain this to a younger audience: Drop 1 finger down – that finger represents the water that people in Anchorage drink and that comes from our taps. How many fingers remain? Those 9 fingers represent the water that is pumped out of the lake and used to create a small amount of electricity (3-6% of Southcentral's energy). Drop 9 fingers – how many fingers are left? Zero! That's how much water in the lake is returned to the river to help salmon survive – zero.

There is enough water in Eklutna Lake to meet our drinking water needs, generate electricity, and share water with salmon. Releasing some of this water downstream is important to bring salmon back.

STOP 5

The artificial fishery - Eklutna Tailrace & power plant



WHERE

Eklutna Tailrace Parking Lot

Drive down Eklutna Lake Road and turn right on Old Glenn Highway. Merge onto New Seward Highway North and exit onto the Old Glenn Highway. In approximately 3 miles, look for the Eklutna Tailrace parking lot on your left.

WHAT TO DO

Cross the foot bridge over the Eklutna Tailrace and walk upstream to view the Eklutna Hydroelectric Plant. Look for salmon in spawning colors along the way and do some fishing if you have time.

1. Many salmon anglers are familiar with this place! This is the Eklutna Tailrace sportfishery and it is stocked every year by Alaska Department of Fish & Game with Coho & Chinook.
2. Where do you think this water comes from? This water is released from the power plant and is the same water you saw at the lake. So, rather than allowing this water to support wild salmon in the Eklutna River, it is released here where it supports a man-made fishery.

Scavenger hunt mission:
Take a selfie on the wooden bridge that crosses the Eklutna River or catch a fish!

WHAT WE LEARNED ABOUT THE EKLUTNA

- Salmon need to be able to access their spawning areas to survive
- Dams like the one at Eklutna Lake can be troublesome because they block salmon migration
- Eklutna salmon have been heavily impacted by the series of dams built on the Eklutna River
- The first dam that blocked Eklutna salmon for almost 100 years has been removed! Salmon can now swim upstream
- No water is released from the upper dam, so even though fish no longer have a dam blocking their path, they don't have the water needed to access their spawning area
- An effort is underway to help bring the river back to life and return salmon to it!

PARENTS: 2021 WILL BE A BIG YEAR FOR THE EKLUTNA RIVER.

Utilities companies will submit study plans to the Governor, which will guide the outcome of mitigation and restoration of the river. Trout Unlimited, local anglers and the Native Village of Eklutna want to see water returned to the river and fish passage restored at the lake. There is more than enough water to meet our drinking needs, provide for fish, and allow for restoring historic salmon runs while maintaining the Eklutna Tailrace fishery and electric needs.

You can help support a healthy & fully functioning future for the Eklutna River! All you need to do is send a note to local utility companies. You can do so at: tu.org/projects/eklutna