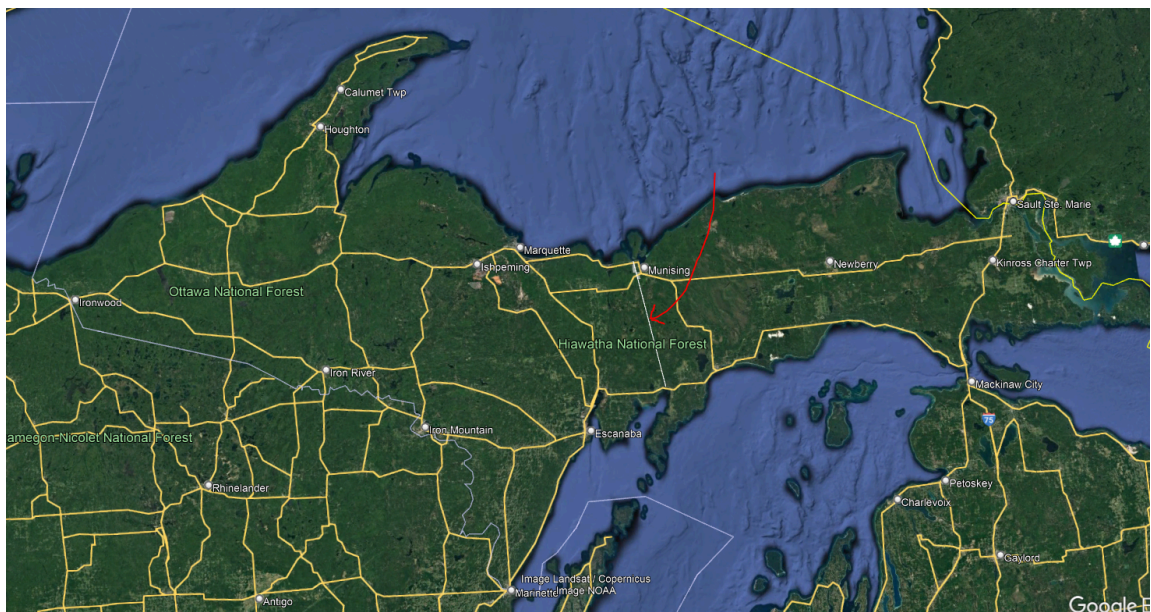


Introduction & Why Michigan?

- Straight lining in America presents certain unique difficulties to other locations such as distances, wildlife, American gun ownership, and climatic/geographic issues. In other words the USA and its states are huge, full of things that could hurt you, and have some very large natural barriers to crossing.
- That being said, there are a few places in the USA that could be suitable for straight lining and I believe that the most promising is the upper peninsula of Michigan.
 - It has a winter that creates opportunities for crossing without insane plant life unlike the american south. Its mountains are very mild and concentrated on the western half of the peninsula, unlike most western states or appalachia. It is remote enough that there aren't many people but it is still accessible enough that a support crew could regularly get to you via back roads. The wildlife is not nearly as dangerous as some other states as there are no venomous animals present and the largest carnivores (like grizzly bears) are not found here.
- Additionally the peninsula has a few features unique to it that help it out more, that being lake cabins and the Hiawatha national forest.
 - A large number of buildings up there (especially on lakes) are not inhabited year round but are rather summer lake cabins. That means a crossing in fall, winter, or spring will likely mean that they are uninhabited.
 - The Hiawatha national forest cuts the peninsula in two from north to south in two separate places. This greatly limits the amount of housing present and means that the vast majority of the line is **public land** than anyone can be on.



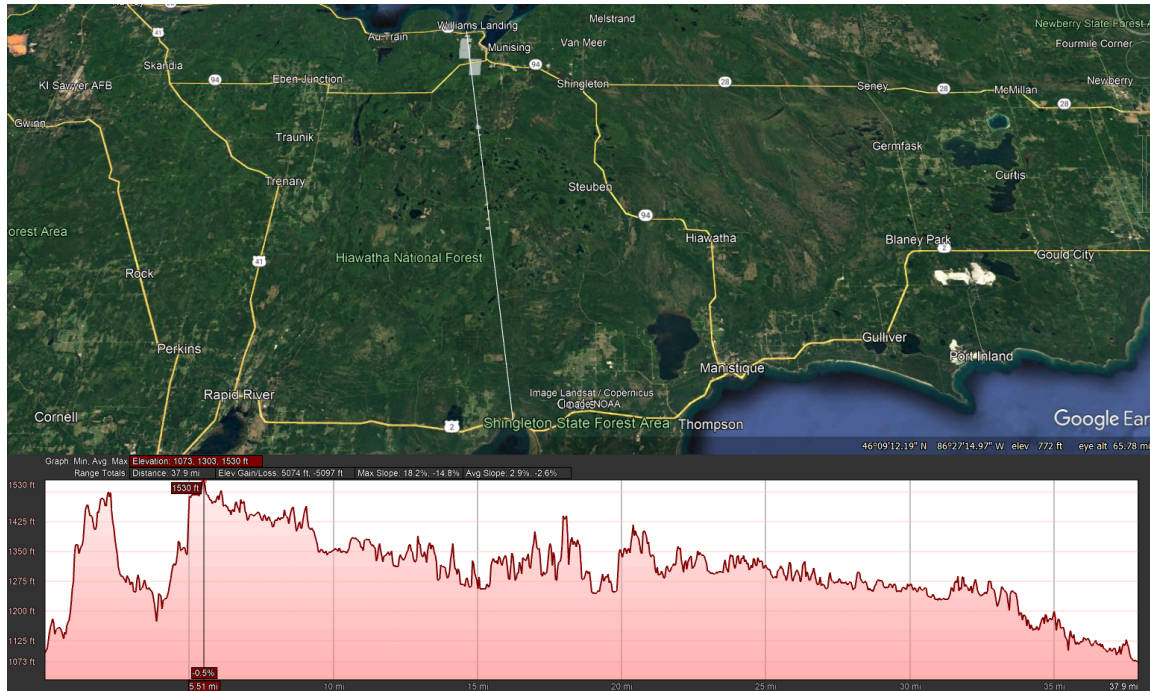
General Overview of the Line



- As shown in the above image, here is my proposed line through the upper peninsula. I started my search by looking for large areas of public land and the Hiawatha national forest immediately jumped out as the most favorable considering it completely bisects the peninsula in two spots.
- Once I decided on that I discounted the eastern bisecting piece because it was not centered enough on the peninsula for my taste. I wanted a clean line that would be widely accepted and did not want to run the risk of it being a technicality.
- Then I started looking for short lines that avoided as much housing as possible. As you can probably guess by looking at the map, housing is concentrated on the northern and southern shores of the great lakes. The interior is largely public campgrounds and wilderness. Luckily I was able to find two locations on the shores of the lakes that were public land and drew and tweaked the line using those as my anchor points.
- The final result is a line that is 37.8 miles (60.8 kilometers) long of which around 7.5 miles (12 kilometers) is privately owned, coming in at around 20% of the total length. That is also not quite accurate to the risks on the ground though. A sizable portion of that is owned by lumber companies and land consortiums and have no houses or recent logging activity. Remove those and you are looking at approximately 2 miles (3.1 kilometers) of land that actually has a house or cabin on it, so about 5% of the total line length. I go over these in detail in the section "People/Property of the Line". The rest of the land is owned by the US Government, State of Michigan, City of Munising, or US Coast Guard and is public land.

Geography of the Line

- If we consider the line from north to south along the intended travel route the climbing is front loaded. In the first two miles there is a ridge that goes up 300 feet (90 meters) which then descends into the Anna river valley 300 feet below and then climbs 350 feet (105 meters) again. This point is at the 5.5 mile (9 kilometer) mark and represents the highest spot on the line, from here the terrain gradually slopes downwards over the rest of the line with small hills and valleys the whole way. So elevation and hills are not going to be an issue and none of these rapid changes in elevation have cliff faces or other dangerous slopes.



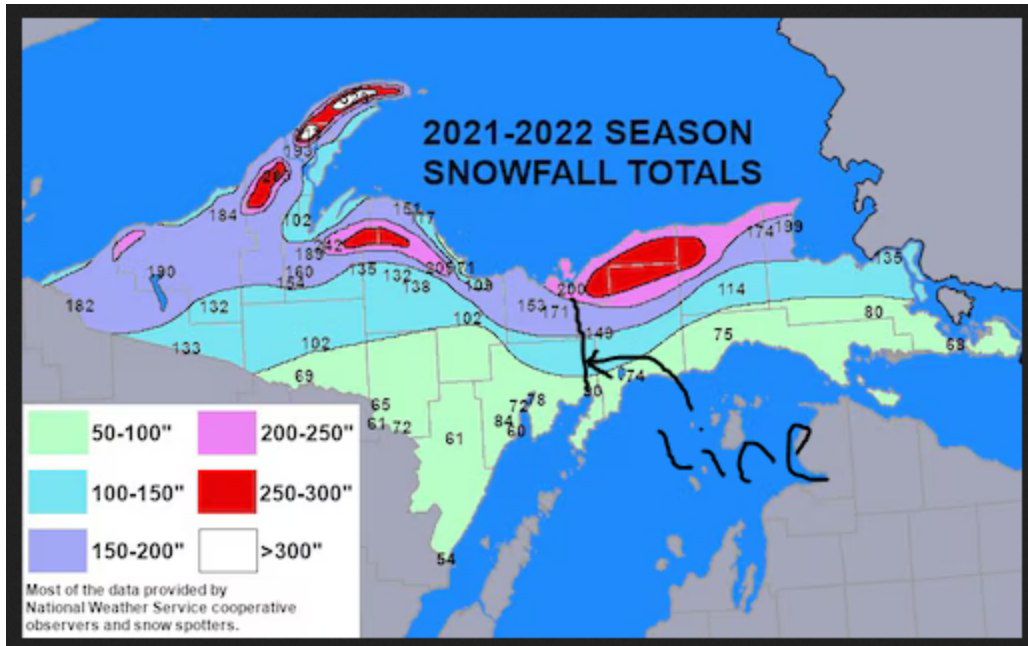
- Continuing with land this area is almost completely covered in forests which are mixed deciduous and pine. There are very few visible pine plantations on satellite view and the local logging practices are to let the land grow a forest naturally and then cut the oak and pine down every 20 years or so. Dense scrub brush is to be expected near rivers, lakes, and muskegs. It will also be in the logging sections if they were cut in the last 5 years. Brambles will also be present throughout but are unlikely to have colonized major portions of the forest due to the amount of large mammals native to the area eating/trampling it. Finally [poison ivy](#) is present throughout the UP so watch out for that.
- For water crossings the line has many different lake and river crossings. Starting with rivers the line has 4 major river crossings, three in the south and one in the north. All other minor creeks and streams should be easily crossed by hopping.
 - The one in the north is the Anna river which flows north into Lake Superior. Its width and depth will vary widely depending on the time of year (small & shallow in fall, opposite in spring). It should be ok to cross without assistance in the fall but will need scouting for spring as the rivers tend to flood with meltwater then.
 - The three in the south are the Fishdam rivers. The first (from north to south) is the southwestern branch of the Fishdam river which is a small tributary. This should be able to be hopped in fall but possibly not in spring. The second and third are the Fishdam and Little Fishdam rivers respectively. These rivers will require assistance crossing as they are over 20 feet wide and are deep as they empty into Lake Michigan very nearby. Additionally the line avoids a very busy

road crossing in the south by using the bridge over the Little Fishdam river so you can simply float under it into a public boat launch.

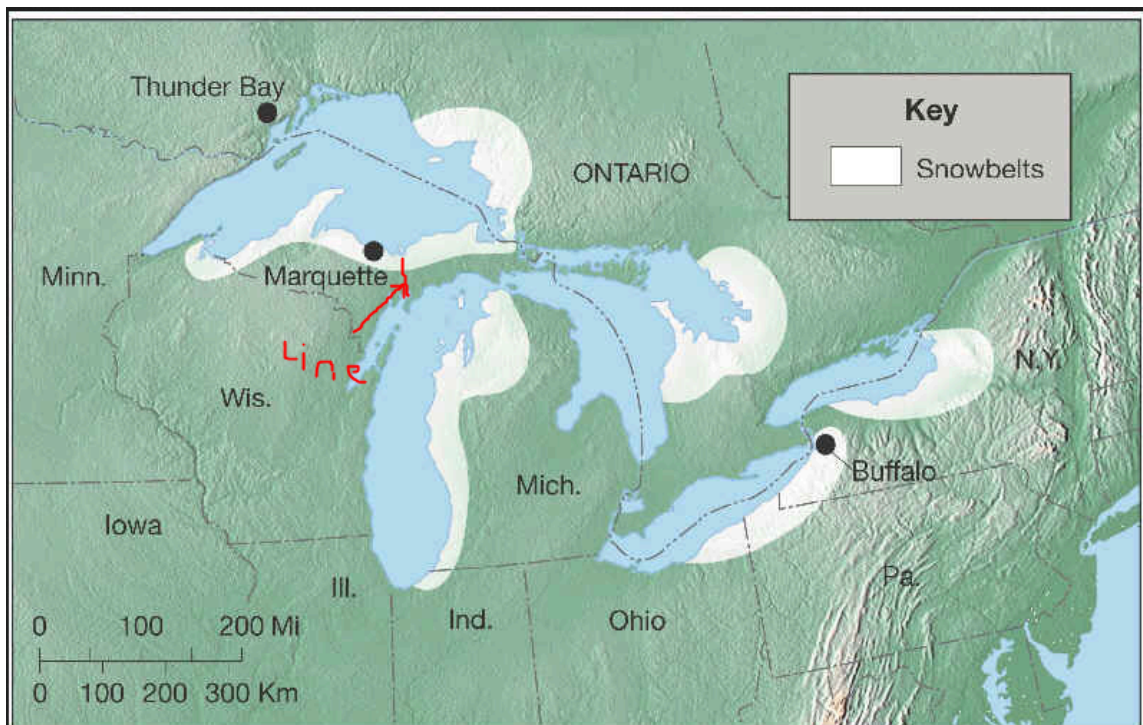
- As for lakes there are 9 on the route that will need to be crossed. This is one of the only disadvantages of the upper peninsula as the laurentide ice sheet created tens of thousands of little lakes across the whole state during the last ice age. Either way these lakes are rather small and a few also have islands or peninsulas that the line cuts through. A portable inflatable kayak could be a solution especially considering that most of the lakes are clustered in the middle of the peninsula. It could be given or stashed at the camp 1 marker for use. Only lost lake is before that marker and I would recommend a real kayak for that crossing as well as the river crossings in the south.
 - One lake that I want to focus on is the first lake crossing of the bunch, Lost Lake. It has a series of summer lake cabins with some even up for rent. I think that a support crew could rent a cabin on the lake for a day to provide the person crossing with access to a real 2 seat kayak or canoe to assist in crossing. It will probably even be cheap considering it's off season. It will also greatly assist the navigation of several peninsulas in that location. I have a potential rental cabin listed in the Google Earth data that is approximately 20 meters off line.
- The last major geographical features are the muskegs. They are also known as bogs or marshes and are similar to swamps. Lots of dead built up plant matter turns into saturated dirt with grass clumps. These can range from benign to dangerous and there are several possible locations on the line that traverse these. Since they are difficult to spot on satellite I marked down every wetland area (even though some of them won't be muskegs) just to be certain.
 - The line appears to catch most of the 11 suspected muskegs on their edge so some diverting should be within 25 meters. There is only one wetland area that is large enough to warrant extensive scouting and on the google earth data I listed it as "The Great Muskeg". This appears to be a true muskeg and will need to be scouted beforehand for safety. It is for this reason that I recommend an early spring (before melt) or fall crossing as water levels will be low and the ground will be firm/frozen.

Climate of the Line

- The Upper peninsula as a whole is all listed as a Humid Continental Climate by the Köppen climate classification system. This generally means warm summers and cold winters with fairly regular and consistent precipitation. The great lakes control the weather to a huge degree here and the northern side of the upper peninsula in particular is controlled by Lake Superior. In the winter this causes huge snowstorms and blizzards that blanket the area in incredible amounts of snow.



- The above image is the snow totals for the winter of 2021 into 2022 in inches. Snow generally starts around late October to early November and continues until about April. In addition to normal winter weather systems the great lakes produce lake effect snow as shown below.



- This snowbelt comprises approximately the teal to purple area in the precipitation image and shows where the lakes most strongly affect the weather. After a storm system moves through here anytime from early fall to late spring the lake will be unsettled and will begin sending up water vapor. This turns into a conveyor belt of sorts which dumps precipitation in the white areas over the course of several days. This can be snow, sleet, rain, or some combination thereof. It can also change as it happens which is how we get freezing rain storms where a light rain falls and freezes to everything coating all surfaces in ice.
- When you plan an expedition you will want to avoid the dead of winter because the snow from multiple storms and lake effect systems will have piled up too deep to walk through and it will hide/ice over the water crossings leading to potential danger. You will want to go either early enough that no snow or a bit of snow has fallen or after it has been melting for a while.
- On the other hand you will also want to avoid summer due to the rampant growth of plant life during the growing season. Also the sheer amount of biting insects (flies, ticks, mosquitos, etc..) will make your crossing a living hell. The plant life starts to die off for the season in late September to early October as the frosts set in and starts growing again in late May after the frosts have gone.
- Combining the snowfall and plant life dates gives us the two open windows for a crossing that are most likely to be successful, which are approximately September 29th to November 15th and April 1st to May 5th.

Wildlife of the Line

- There is a variety of wildlife in the upper peninsula and some of these species will need to be prepared for. What follows is a list of these species as well as information about their hibernation & hunting season as that may overlap an attempt. If you are attempting a crossing in the fall **wear hunter's orange gear**, not only will it make you safer it will also provide a reason for why you are going through the woods at that time of year. Hunting on public land is allowed but no one can lay claim to an area, however people can build temporary blinds so if you see any just move past.
- As a general safety note yelling, clapping, and making yourself look bigger or more threatening than you are will work to scare off most predators. As an emergency backup carry bear spray as a last resort item for any close encounters. Keep said bear spray within easy reach at all times and practice deploying it at least once.
- As for hunting seasons the week around opening day is usually the busiest and then it tapers off as the season goes on.

- **Black Bears**

- This is the only bear species in the upper peninsula and are relatively common though it is still unlikely that one will be encountered. The DNR estimates their upper peninsula population to be around 10,000 individuals so a little under 1 per square mile. Most black bears will keep a distance if they can hear you coming so be loud or wear a bell or something else that makes noise. Volume should be about speaking voice for any noise device if you choose to have one. Keep well away from any that you see and if you see a cub (which are born in spring) back away slowly until you are quite far away. They can also climb trees and run much faster than you so don't climb trees or run.
- For camping out on the line a vehicle will be much safer than camping in the open. Keep any food or garbage inside the vehicle. In the very unlikely event that a bear approaches your vehicle, turn it on and/or honk the horn to startle it away.
- In the fall season black bears will be looking for high calorie foods to help prepare for hibernation which usually begins in late november or early december depending on temperature and food availability. They typically come out of hibernation in late March to early April and the mothers will have cubs. After waking up they will typically turn to eating the incoming plant life. Mild winters mean later hibernation and earlier wake up.
- The black bear hunting season is from early September to late October though the exact dates change yearly. There is a tag lottery put on by the DNR for any hunts so there will not be a huge number of people hunting them at any one time. These hunts are usually conducted using bait sites to draw in bears, avoid any such sites that are near the line and move swiftly past and no one will mind.

- **Gray Wolves**

- This endangered species does reside in the upper peninsula with an estimated population of 762 individuals. It is very unlikely that you will encounter one though you may hear them or coyotes howling at dusk/night.
- These animals are very elusive and will likely keep away if they can hear or smell you. Aggression or attacks towards people are exceedingly rare. In the very unlikely event that you have a close encounter keep your bear spray in hand and walk slowly away from the animal. Do not run.

- **Canadian Lynx**

- This is a rare and very reclusive animal that wants nothing to do with people, you will not see one unless it wants to be seen. They are also not a threat to people.

- **Coyote**

- These are smaller predators that are quite common and you are much more likely to [hear](#) them rather than see them. They are very rarely aggressive and will likely stay out of your way, they are not considered to be very dangerous to people.
- Coyote hunting season is from July 16th to April 15th and is usually done with blinds and calls. The calls are usually either coyote calls or injured animal calls to lure them in. There will not be many hunters going after coyotes at any one given time or place.
- **Moose**
 - These are rare large herbivores that are found in some parts of the upper peninsula. They are mostly found near the far western border with Wisconsin or in the porcupine mountains though a few may reside in the Hiawatha national forest. The DNR puts their population between 400 to 500 individuals so you are very unlikely to encounter one.
 - These animals are mostly active at night or in the morning which further lowers the chances of seeing one.
 - These animals are usually unconcerned with people unless it is a cow with calves or a bull moose during the rut season. The rut season is from early September until early November. Keep a wide distance from any moose you spot either way. If you have an encounter, back away slowly and hide behind a tree or other large object so they don't see you.
- **White Tailed Deer**
 - These medium sized herbivores are extremely common across the upper peninsula and pose no real danger to people outside of car accidents. They will flee when you approach. The most important thing is actually their hunting season as that is very popular among the local hunters.
 - There are several different hunts that kickoff starting September 14th through January though the general opening week for archery and firearms are the busiest. Archery opening day is October 1st and firearm opening day is November 15th. Avoid crossing on the 6 days following those two dates.
- **Snakes**
 - Michigan's only venomous snake is the endangered massasauga rattlesnake. However it is not found in the upper peninsula.
 - There are northern water snakes that are aggressive if you get close however they are not venomous. They usually go into hibernation between October and

November and come out in March or April depending on the temperature. A better way to track that would be when the first frost or freeze comes around.

People/Property of the Line

- Starting from north to south I will cover every piece of private property located on the line and give some information and speculation on it.



- The line starts in Lake Superior with a Coast Guard owned public lighthouse and this first batch of properties is all right at the edge of the Hiawatha National forest and the Munising City boundary. All the properties that are colored white are logging properties, land consortiums, or privately owned woodland. They have no structures present and should not be an issue. The 4 properties colored green have the line clip through a small section of their woods far from any homes. Going one by one from north to south property 1 appears to be a permanently inhabited home approximately 820 feet (250 meters) east of the line. Property 2 appears to be a permanently inhabited home approximately 620 feet (190 meters) east of the line. Property 3 appears to be a permanently inhabited home approximately 720 feet (220 meters) southwest of the line. Property 4 appears to be a permanently inhabited home approximately 1,550 feet (470 meters) east of the line.

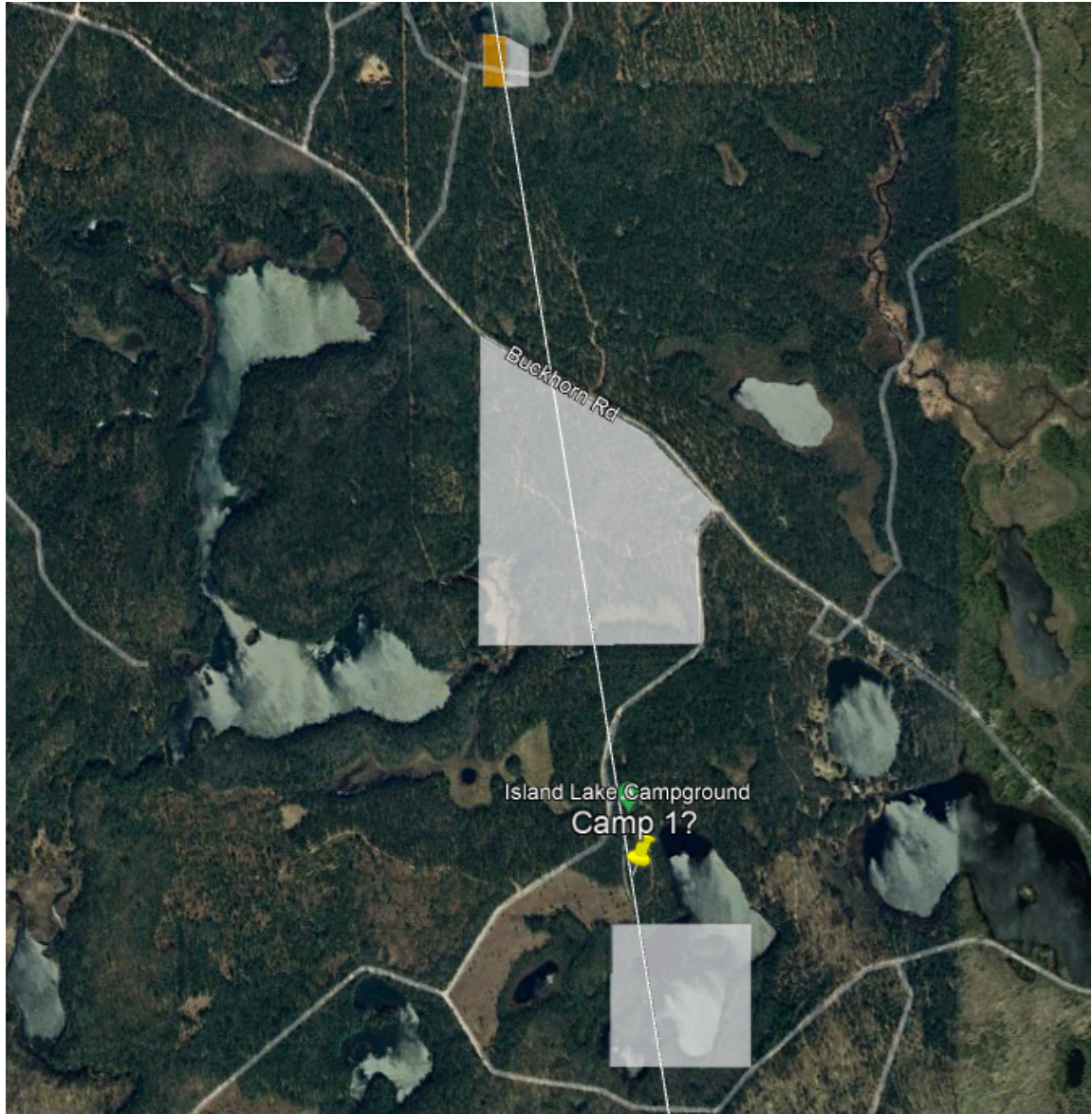
- There are also two railroad crossings in this section
- For the next 4 miles it is all public land until you reach Lost Lake.



- From north to south along Lost Lake there are 5 properties that the line passes directly through and two adjoining properties that are of interest. Property 1, in green, is essentially an island that does not have any detectable structures on it. Property 2, in red, is a lake cabin that is likely inhabited in the summer only whose building is located just west of the line on the south side of the peninsula. This location can be scouted by renting Property 3 next door (in white) from Robertson Rentals. This should provide both a scouting location and a place for support crew to launch a kayak or canoe for assistance across the lake. It is also a place to deviate if the land owner is unhappy or possibly used as an alternate campsite for the first night.
 - Property 4 is a summer lake cabin on the peninsula in green and the line just barely scrapes the beach there, it may be possible to remain in the kayak or

canoe without any significant deviation or issue. It is not likely to be inhabited during the crossing attempt.

- Property 5 in yellow appears to be a permanent residence with the house located 425 feet (130 meters) east of the line. The crossing section is on a long peninsula and is likely not in eyeshot of the residence. It should be scouted to be sure though.
- Property 6, in orange, appears to be owned by someone who does not live in Michigan suggesting that this is a lake cabin only inhabited in the summer. Its main building is located 25 meters to the west of the line and is on a small peninsula though the property line extends across the swampy section to the south. Property 7, in white, is really close to the line and I placed it there for reference, it is also likely a summer lake cabin.
- In conclusion for this section I recommend renting the cabin from Robertson rentals next to the line if you can or another on the lake and use it to have support crew assist with scouting and crossing. Properties 1, 4, & 5 need scouting as well as the swampy section in property 6.
- For the next half mile there are no more properties until you near the proposed first night campsite.

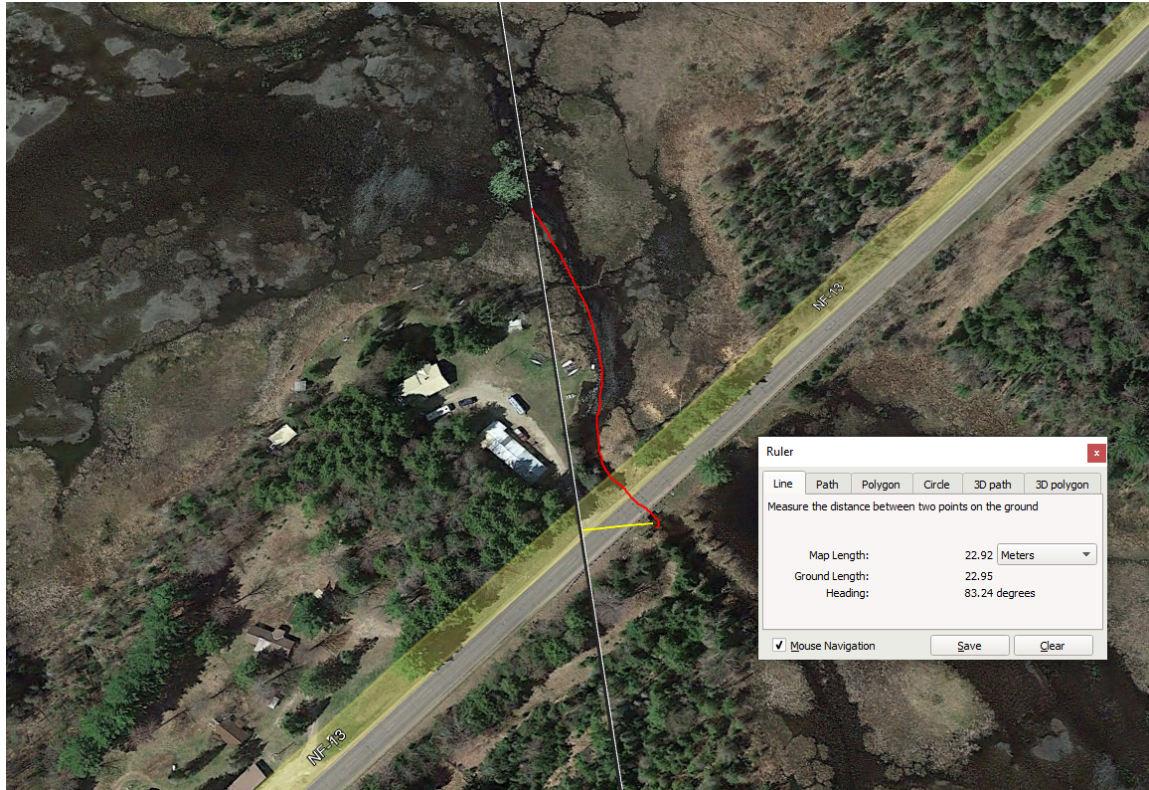


- The proposed first night's campsite has two properties bracketing it on the line that are owned by a company called Munising Lands Inc. I believe it is logging because of the tree density here versus nearby but there are no structures and they shouldn't be an issue.
- The proposed camp is at a public campground called the Island Lake Campground. I picked it for its location and land status as it's all public land here where a vehicle can be parked for the night right on the line. This is preferable to open camping due to the wildlife of the area.

- On the start of day 2 after the campground there is another small section owned by Munising Lands that shouldn't be an issue. After that is around 7 miles of public land and lake crossings until you reach blue lake.

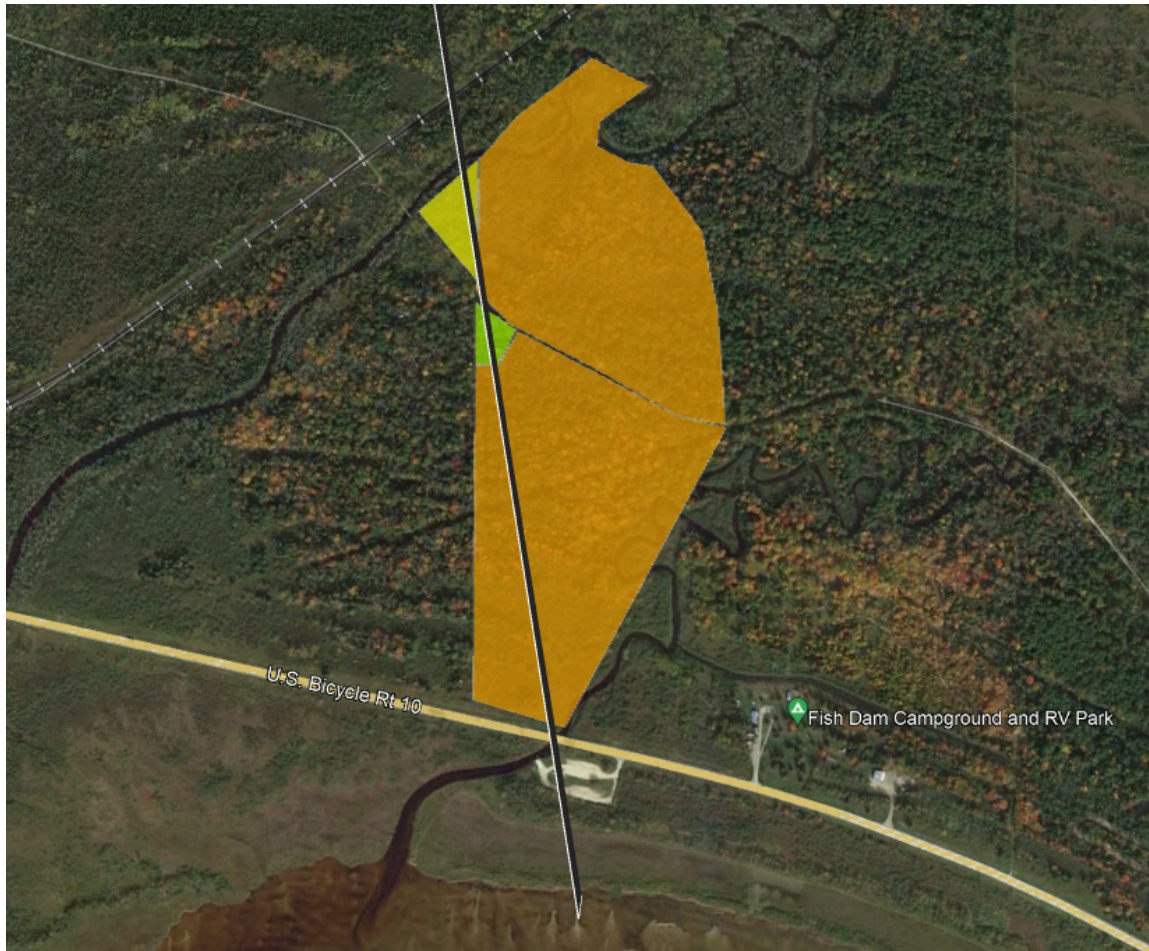


- The first property (colored red) is the only permanently inhabited property that the line passes directly through. However there is good news, either permission can be given ahead of time or an alternate route will mitigate any issues. It is likely that a kayak will be needed for the crossing of blue lake and the property only extends to the south shoreline. This means the crosser could follow the water under a culvert and come up on the other side of the embankment without touching the property and still maintain a deviation of under 25 meters as shown below in red.



- Property 2 on the list (yellow) is just across the street from the red property but should be less of an issue as it appears the owner lives out of state so it is either a hunting or lake cabin. The line at its closest passes about 250 feet (75 meters) to the building which is southwest of the line. The disembarking point for the alternate route around Property 1 is on the property but is a safe 600 feet (185 meters) or so away through the woods.
- Once past that it is public land again until you reach Skeels Lake. There on the other side of the crossing is a summer lake cabin (orange) that should be uninhabited. The line crosses directly through the cabin itself which is located right on the shore. Beyond that the property extends into the woods but there are no more buildings. The line also clips into the neighboring property (green) deep in the woods for a brief moment.
- After that it is back to public land for about half a mile (800 meters) and then you reach the last property in this section (yellow). It appears to be a permanently inhabited homestead with partial tree clearing. Although the line clips the eastern wooded edge of the property and the homestead is approximately 620 feet (190 meters) away at closest a line of sight may still exist because it is partially cleared. Caution advised.
- After that the line is all public land for the rest of day 2, the line passes near a few properties but stays on public land. There is a secluded dirt two track that crosses the line near Chicago Lake and its associated campground which I have marked on google earth as the proposed camp for Night 2.

- The first 10 miles (15.75 kilometers) or so on day 3 is all public land until you near the shore of Lake Michigan. Then there will be a railroad and river crossing in quick succession. There are three properties here of concern all of which are in between the last 2 river crossings.



- Once you cross the Fishdam river there is a scrap of property (yellow) that belongs to a cabin across the road to the southwest. It appears to be a summer cabin or a hunting cabin. The next property (orange) that crosses the line twice appears to have been recently purchased by someone out of state who built a house that hasn't yet shown up on satellite. I have included a picture below of where the house was built on the new imaging.



- This updated image shows the house approximately 400 feet (120 meters) to the northeast of the line. The only real concern is the river and road crossing and both should be out of sight.
- The final property (green) is a little piece of woodland owned by a house much further down the road and should not be an issue at all. Furthermore when you cross back into the orange property the house will be quite far away and on the other side of the road making detection unlikely. From here it is free and clear public land to the end.

Conclusion

I think a straight line mission across the upper peninsula is not only possible but also very doable. The climate, geography, land ownership, and length of the crossing all work out well. There are a few hurdles mainly the amount of water crossings, hunting season, bear proofing, and possible muskegs but these are all quite surmountable with the appropriate preparations. Private ownership of land on the line is so minimal that an outreach attempt could be quickly conducted and the line could be adjusted as needed. The fact that most of the properties are summer cabins only helps this endeavor. I firmly believe that this line is viable and welcome any suitable prepared individual or team to attempt it.