

TRAVERSE LAKE ROAD – SLEEPING BEAR HERITAGE TRAIL ROUTE

SUMMARY OF ISSUES, CONCERNS AND PROPOSED SOLUTION

Little Traverse Lake Property Owners Association

INTRODUCTION

The National Park Service currently plans to route the Sleeping Bear Heritage Trail down Traverse Lake Road. Plans include routing the trail onto the road itself, paving five foot wide shoulders along the road, or paving a separate ten foot wide trail offset somewhere between ten feet from the road edge or up to 100' feet from centerline.

Property owners along Traverse Lake Road are opposed to the Sleeping Bear Heritage Trail using any of these proposed construction options along Traverse Lake Road. Over 200 written petitions from people who live, own or use private property along this road have been submitted to the Park Service and to the Leelanau County Road Commission . These written petitions also represent 70% of the properties along the Traverse Lake Road.

Unfortunately, the public comment process on routing the trail along Traverse Lake Road has been limited and not very well publicized. Traverse Lake Road was not publicized as under consideration in the initial public notices as those notices indicated the trail was being routed along M-22. The trail routes keep changing without much effort to gain public comment on new routes and plans, especially from affected private property owners. We are disappointed to learn that the Trail Committees have been disbanded by the Lakeshore.

We believe there are serious traffic and safety issues, significant environmental concerns, and consequential impacts to private property owners with these proposed alternatives to routing the trail down Traverse Lake Road. None of these issues or concerns have been addressed by the National Park Service and there are clear inadequacies and shortcomings (documented in a review by an independent engineering and environmental firm) in the environmental assessment report that was conducted, questioning the basis for using this as a qualified justification in stating that “there is no environmental impact” when publicly promoting trail routes.

We are supportive of the concept of the Heritage Trail but believe there are alternative route options that would completely avoid all of these concerns while creating a superior trail experience for the end user. We believe there is a win-win option but utilizing Traverse Lake Road is not acceptable to the numerous private property owners who have to deal with the impacts of the trail and its traffic on a daily and constant basis.

RECREATIONAL TRAIL TRAFFIC AND ITS IMPACT

The Sleeping Bear Heritage Trail is proposed to be a multi-use recreational trail. The American Association of State Highway and Transportation Officials (AASHTO) identifies users as being non-motorized and may include but are not limited to: bicyclists, in-line skaters, roller skaters, wheelchair users (both non-motorized and motorized) and pedestrians, including walkers, runners, people with baby strollers, people walking dogs, etc.¹

The Sleeping Bear Trail is also being marketed as a significant recreational opportunity that will be very popular and used to the greatest extent in “America’s Most Beautiful Place.” The Trailway Plan states: “Recreation visitation to the Lakeshore is highly seasonal. Peak monthly visitation, averaging 388,200 visits over the past 17 years (33% of annual average) occurs in July, followed by August (338,100 visits or 28%). The lowest use occurs during the winter with average monthly visitor use of 4,600 in January and 5,600 in December. The Trailway will result in more off season use in the Lakeshore and trail use projections are estimated to be approximately 350,000 to 400,000 visits per year. ”“The vast majority of use at the Lakeshore is day use; an estimated 91%.”²

1 AASHTO Guide for the Development of Bicycle Facilities p33.

2 Leelanau Scenic Heritage Route Trailway Plan and Environmental Assessment p2-67

Using these projections, the months of July and August account for 61% of the total visitation and of this number, 91% are day use. That means these two months will see 194,000 – 222,000 trail visitors or 3,180 – 3,640 per day on the Trailway.

Now, admittedly, we do not know how trail use will be distributed and it's anybody's guess. The ultimate number will depend on the Trailway facilities offered along the route. Even if only one-tenth of the users traverse the TLR segment, it would represent a sizable amount of foot/bike traffic on the residential road. If these users were equally spaced over the course of a 12-hour day, you would expect to see one every 2 minutes or so. More likely will be a "bunching" of users during the late morning and early afternoon hours. As a result, Trailway traffic will have a significant impact on local residents.

Vehicular traffic volume will be a concern. The Heritage Trail will be highly publicized on every available tourism map and will be included in the Lakeshore information given to the 1.2 million or more annual visitors. TLR will now be part of an inviting major scenic route for cars and motorcycles to drive along M22 and TLR while paralleling the touted Heritage Trail. Add the recreational users and TLR will see a significant increase in both recreational and vehicular traffic.

TRAIL OPTIONS ON TRAVERSE LAKE RD

Traverse Lake Road (TLR) is a quiet scenic winding residential county road 2.7 miles long from end to end. Both ends of this road connect with M22. The paved surface is 22' wide; the shoulders are unpaved. The road right-of-way is the standard 66' width. Initially, the road heads north from its western terminus with M22; private property – some with wetlands -- bounds both sides and Shalda Creek is crossed. The road turns east and maintains this heading until it reaches its eastern terminus with M22. The north side of this segment is bounded by NPS property except for a 200' private property gap. The south side of the same segment is bounded entirely by private property except for the Cleveland Township park that provides access to Little Traverse Lake. Over 100 parcels, many with driveways, make up these private holdings. The legislated speed limit on the road is 40 mph and there is little traffic since it offers no shortcut to M22 traffic.

Trees abound on both side of the road and form an overarching ever-changing canopy of color through the seasons. Cedar wetland border the road on the east and west end as it crosses Shalda Creek. Private property owners have either landscaped their frontage unobtrusively or left it in its natural state. The NPS frontage is natural. Wildflowers – including the protected lady slippers – provide brilliant shots of color on the shoulders. Near the eastern end of the road, a series of sand dunes – some exceeding 60' in height – come down to the shoulder of the road adding a dramatic touch to the scenery.

The revised Management Plan (2010) describes Segment 9 as follows:

The Trailway would be a 10' off-road asphalt section on the north side of M-22 up to Traverse Lake Road. The Trailway turns north on the west side of Traverse Lake Road onto an off road boardwalk within the county road right of way. It continues as a separate 10' off road asphalt path on the north side of Traverse Lake Road either within the county road right-of-way or on Lakeshore property south of proposed wilderness. The Trailway would then follow an old two track road that runs from the northeast end of Little Traverse Lake becoming a crushed limestone path behind the Bufka Farmstead.

After the farm, the Trailway becomes an asphalt surface and would stay below the M-22 right-of-way, to the extent possible, using the glacial ridges and valleys below the M-22 corridor. The steep embankment and narrow right-of-way with guardrails on both sides would be avoided with this routing; however, the lowland areas present some challenge for Trailway construction. The Trailway ends at Good Harbor Trail (CR 651) and Lake Michigan.³

Over the course of time, the Trailway Management Plan has undergone several revisions. For example, the excerpt above appeared after the public comment period in the fall of 2008. The Plan is still the subject of

3 Leelanau Scenic Heritage Route Trailway Plan and Environmental Assessment p2-32

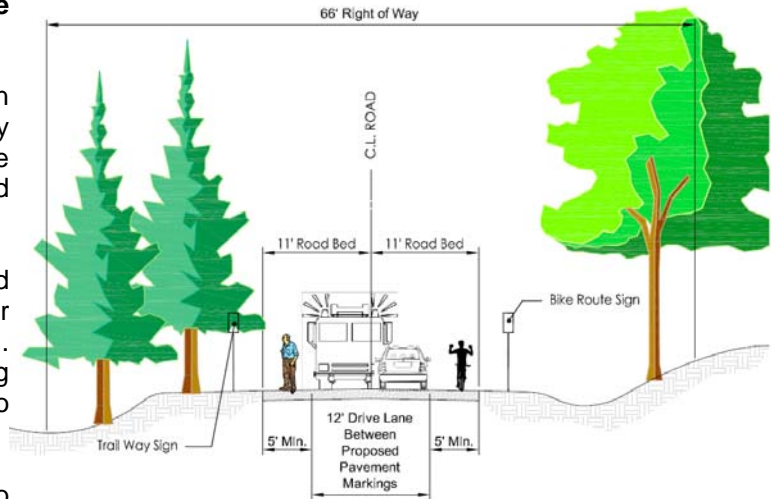
ongoing discussion. What follows is a display of the various options that have been or are currently under consideration in the routing of the Trailway.

Option 1: Route the Trailway onto the existing roadway

The initial Management Plan as presented in October, 2008 calls for routing the Trailway onto the existing roadway. It would run the entire length of the road from its eastern and western junctions with M22.

The land to the north of TLR was designated as “wilderness” starting at the road’s shoulder and extending to the beach at Lake Michigan. Environmental impact on the surrounding natural features here is negligible since no disturbance of the terrain is anticipated.

The Trailway itself would be delineated by two painted stripes 5-feet in from each of the paved roadway edges. As the paved portion of the roadway is 22 feet wide, the vehicular traffic lane is cut down to only 12 feet.



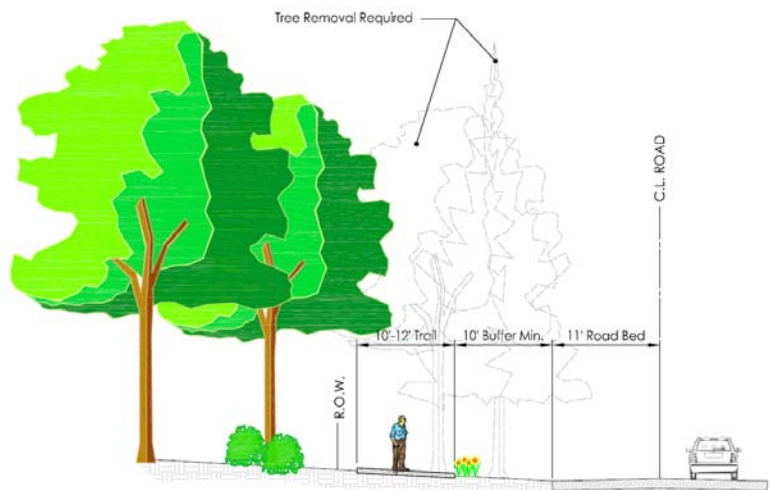
Recall that the Trailway is proposed as a shared facility for recreation – bikers, runners, joggers, walkers, in-line skaters, skateboarders, wheelchair users, stroller pushers, and, in the winter, cross-country skiers – and these in large numbers, some overtaking and passing others. Use of the road would require driving down the center of the roadway. In the event opposing traffic was met, each Trailway lane would, of necessity, be occupied by the two vehicles. Emergency response would be hindered.

This arrangement poses a serious safety issue. In addition, the liability concerns with litigants suing Leelanau County – and not the National Park Service – as a result of injuries sustained while on the roadway made this option unfeasible. The Leelanau County Road Commission (LCRC) could not agree to its implementation. Nor could the public.

Option 2: Route the Trailway onto a 10' wide path removed from the roadway by 10'

As a result of public outcry against the proposed Trailway routing on the roadway, the Management Plan was revised. The new plan called for the Trailway to turn north off M22 to the west side of Traverse Lake Road onto an off-road boardwalk within the county road right of way. The boardwalk carries the Trailway over privately owned wetlands and Shalda Creek. It travels across the front yards of private residences. It then continues as a separate 10' off-road path on the north side of Traverse Lake Road either within the county road right-of-way or on Lakeshore property south of proposed wilderness.

Instead of reaching the eastern end of TLR at M22, the Trailway would follow an old two-track road that runs from the northeast end of TLR to behind the Bufka Farmstead. To accommodate this changed routing, the “wilderness” designation was altered: a corridor of non-wilderness now penetrated the former all “wilderness” area.



Implicit in this routing was the requirement that the Trailway must be separated from the paved portion of the roadway by 10'. This condition is based on the need to clearly separate the Trailway from the road to establish it as a separate entity. The NPS has endorsed the recommendations of the AASHTO which provides for this restriction. Federal funding also mandates this specification. Even with the 10-foot separation, the Trailway is still on the shoulder of the road because the shoulders extend 22-feet from the edge of the paved portion.

The environmental impact of this option is of some consequence.

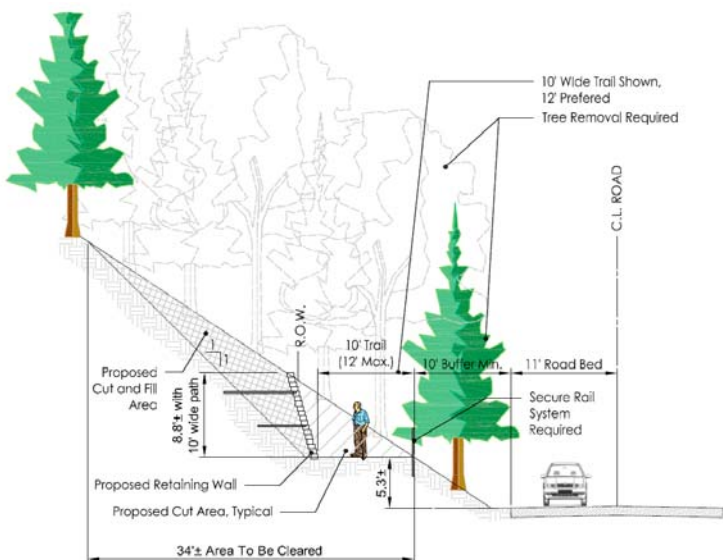
Even though the Trailway is on the road right-of-way, over 300 trees would be removed leaving a denuded expanse extending 20' - 25' in from the edge of the paving.

A more serious concern is the excavation required for this proposed path. To maintain a 5% grade for ADA access, excavation of dune material must start well before the Bufka trailhead is reached. A series of dunes topping 60' in height lie along this route.

Approximately 200 feet east of the Bufka trailhead, there is a dune at least 60'-high that abuts the paved roadway – there is no usable shoulder. If the junction is to be maintained at grade level, this dune must be cut into for a distance of 20 feet to re-establish a usable shoulder. Dune sand extending to more than 20' – 25' in height must be cleared away and suitable retaining walls to stabilize the dune must be erected. If, on the other hand, an elevated junction is permitted, a large fill must be built on the Bufka farm trail. In either instance, large swatches of vegetation are removed and the character of the dune is significantly altered.

Option 3: Route the Trailway in the non-wilderness area adjacent to the roadway

As a result of the perceived need to move the Trailway off the roadway, the “wilderness” designation of land north of TLR was substantially altered. Proposed Congressional legislation now defines “wilderness” as starting 100' from the centerline of a county road and 300' from the centerline of a state highway. This definition provides for a trail right-of-way that can be separated by up to 67' from the county road right-of-way and up to 79' if shoulder use is allowed while maintaining the required 10' separation from the paved surface.



This plan still calls for the Trailway to turn north off M22 to the west side of Traverse Lake Road onto an off-road boardwalk within the county road right of way. The boardwalk carries the Trailway over privately owned wetlands and Shalda Creek. It travels across the front yards of private residences. But now, the broad avenue through the woods would allow the Trailway to “meander” and, in so doing, avoid the more mature trees. Still the Trailway would have to use the road shoulder when it’s path encountered private property abutting the roadway and extending back more than 100' from the road centerline. In fact, there is one residence on the north side of TLR where this condition exists.

Environmental consequences for this option are similar to those for Option 2. Because of the path through the woods, more trees might be lost but the more mature trees spared, especially with current trail construction west of Glen Arbor clearing a path 22'-30' feet wide. A 10'-wide path with 2' shoulders clears a swath containing over 1000 trees. Current construction of the Trailway utilizes a swath 22' wide to permit operation of construction equipment; over 1500 trees would be lost in this case.

Excavation problems described in Option 2 and depicted in the above figure still persist. There is no way to route the Trailway to the Bufka farm trail within the permitted 79' avenue without encountering significant dunes.

The NPS states it will follow Americans with Disabilities Act (ADA) guidelines “where feasible.”⁴ Here, those guidelines would be abandoned.

Option 4: Route the Trailway on the roadway with a 5' shoulder extension

There is a current proposal to route the Trailway on a 5' shoulder extension abutting the paved portion of the roadway on the north side. This extension would have to carry the two-way traffic expected on the Trailway. As before, this plan still calls for the Trailway to turn north off M22 to the west side of Traverse Lake Road onto an off-road boardwalk within the county road right of way. The boardwalk carries the Trailway over privately owned wetlands and Shalda Creek. It travels across the front yards of private residences. The route continues on the north side of TLR on the 5' extension to a junction at the Bufka farm trailhead.

The environmental concerns here are somewhat mitigated by the Trailway being positioned on an existing graded surface. Fewer trees need to be removed. Still, the 60' dune that abuts the paved roadway is a major problem and its solution is as outlined in Option 2.

The AASHTO notes many safety concerns with this configuration. For example, the two-way flow of trail traffic requires one direction of traffic to move against the flow of roadway traffic. This situation is not normal and will encourage the users – especially the faster moving contingent – to go out onto the roadway instead.

As noted previously, the AASHTO also recommends that there be a physical separation between the path and the roadway to establish a separate identity for the path. If this separation is not possible – as is proposed -- then a guard rail is recommended. To protect bicyclists from toppling over, it should be a minimum of 42” high – in other words, a fence between the Trailway and the roadway the whole length of TLR under discussion here.

One other consideration: If here a 5'-wide trail suffices to carry the Trailway traffic, why is a 10'-wide trail planned everywhere else throughout the Park? In fact, the smaller trail will likely be inadequate to handle the user traffic. It is likely there will be a future effort to either expand the width of the trail to 10' or to pave a 5' extension to the roadway on the south side of the road.

The 10'-wide Trailway on the north side will result in the cutting down of the trees located in the newly widened corridor creating an unappealing zone of de-forestation; the problem with the 60' dune will be exacerbated; and the fence will still be needed.

A second 5' extension on the south side of TLR encounters private property as noted previously. Mailboxes line the whole route; natural gas connections, telephone connections lie beneath the surface; electrical and cable television utility poles line the route. There may be a need to relocate these facilities in order to lay down the paved strip. The resulting destruction and disturbance of this established environment will be detrimental.

Neither alternative presents as an appealing solution because the essential nature of TLR is changed from a quiet scenic country road to a 32'-wide highway with destruction of its natural beauty.

INADEQUATE ENVIRONMENTAL ASSESSMENT

The original Trailway Plan was analyzed to determine if there was a need to conduct an environmental impact study as required by NEPA. The result of this analysis: Finding of No Significant Impact (FONSI). The NPS has relied on this Statement since – even though there have been significant changes in the trail route that may invalidate its conclusion. Another examination of the current Plan should be carried out to answer this question.

The independent environmental and engineering firm, Mansfield and Associates, has completed a review of the environmental assessment completed for the National Park Service and has found significant errors and inadequacies that question the validity of the NPS's assessment of the trail's environmental impacts.

As was required, the Plan examined many aspects of the Trailway and its impact on the natural environment as

4 Leelanau Scenic Heritage Route Trailway Plan and Environmental Assessment p1-4

well as on the local population. Factors included in this study were divided into two categories: Impact to the Environment and Impact to Feasibility. A numerical score was given to each of the subtopics in these two and a cumulative score extracted with which to compare each Trailway option relative to the others. Based on these results, preferred Trailway routings were determined. However, these scores were not re-evaluated as the Plan was amended. The entire assessment was completed assuming that the trail would use the existing Traverse Lake road as is. Moving the trail off the road and into the woods results in significant changes in these scores and in the cumulative score, but the assessment never looked at a trail constructed off the existing roadway as proposed in the trail report. In some instances, the scores are simply incorrect.

The review by Mansfield & Associates highlights some inconsistencies when determining the actual impact of a trail 10 feet offset from the road (as proposed in the text) as compared to the impact of the trail on the road itself (as was assessed in the appendix):

Table 17 – Segment 9 Impact to the Environment

Option 9.2

To list the impacts individually with the concept of a separate off road asphalt path the impact to environment, on a score of 1-3 (three being the most impact) the table should read:

Element	Proposed multiplier	As shown in Plan
- Topography	3 (steep slopes on north side of road)	0
- Wetlands	3 (boardwalk req'd west end of Traverse Lake Rd)	0
- Streams and Creeks	1 (Creek Crossing)	0
- Soils	3 (wetland/slopes)	0
- Wildlife	1 (wetland)	0
- Vegetation	1 (wetland)	0
- Land Use	3 (Twp. Park/Lake access/Priv.Land)	2
- Cultural Resource	2 (borders wilderness area)	2
- Viewshed	3 (clearing road r.o.w.)	0
Total	20 (the highest in the entire route)	4

Table 18 – Segment 9 Impact to Feasibility

Option 9.2

To list the impacts individually with the concept of a separate off-road asphalt path, the impact to feasibility, on a score of 1-3 (three being the most impact) would read:

Element	Proposed multiplier	As shown in Plan
- Recreational Experience	0	0
- SLBE Visitor Experience	0	0
- Safety	0	1
- Cost	3 (boardwalk and retaining wall required)	0
- Operation and Maintenance	3 (overburdening of Township Park)	0
Total Impact to Feasibility	6 (highest on table)	1
Total Combined Impact	26 (highest in entire Trailway route)	5

Should the narrative descriptions for methods and materials be correct, the Impact to the Feasibility would combine with the Impact to the Environment to make this segment one of the highest scoring segments along the entire route.

If the intended plan is to run the trail down the road, the proposed score for feasibility alone should be closer to 15, not 5, as determined by Mansfield & Associates. Nevertheless, there are substantial inconsistencies and inadequacies in the environmental assessment completed for the National Park Service, which questions the basis for the Park's justification for findings of no significant impact.

THE SAND DUNES PROGRAM OF THE STATE OF MICHIGAN

The final item is one that was not addressed in the Management Plan. That plan did not “intrude” on this area. Its reformulation, however, brings it into the domain of the “critical sand dunes” and the State of Michigan legislation that applies.

The State of Michigan's Sand Dunes program regulates development on areas identified as “critical dunes.” Much of the land encompassed by the Sleeping Bear Dunes National Lakeshore (SBDNL) has this identification. In particular, all of the land north of Little Traverse Lake road and toward it's eastern terminus falls into this category.

Why is consideration of this issue important? One might think that federal ownership of the land trumps any regulations that the State of Michigan may have regarding its use and development. But here is the most important excerpt from the Act governing the critical dunes :

Federally owned land, to the extent allowable by law, and state owned land within critical dune areas shall be managed by the federal or state government, respectively, in a manner that is consistent with the model zoning plan.

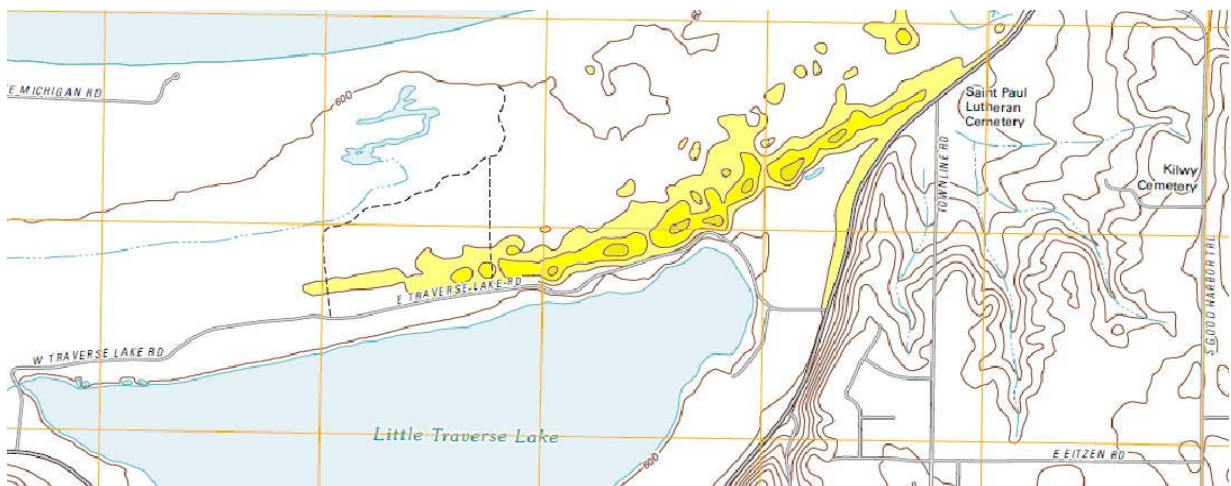
This statute firmly establishes the State of Michigan's right to enforce the provisions of the Act.

Here is a link to the Act:

[http://www.legislature.mi.gov/\(S\(x0ezii55ccbq5qmkarh4yp55\)\)/mileg.aspx?page=getobject&objectname=mcl-451-1994-iii-1-land-habitats-353⁵](http://www.legislature.mi.gov/(S(x0ezii55ccbq5qmkarh4yp55))/mileg.aspx?page=getobject&objectname=mcl-451-1994-iii-1-land-habitats-353⁵)

The Act sets specific restrictions on what is not allowed in the critical dunes area. Some of these are:

- a. A use on a slope within a critical dune area that has a slope steeper than a 1-foot vertical rise in a 3-foot horizontal plane, i.e. a 33% grade.
- b. A use involving a contour change that is likely to increase erosion, decrease stability,
- c. Multicultural practices.... that are likely to increase erosion, decrease stability
- d. A use that involves vegetation removal that is likely to increase erosion, decrease stability.
- e. A use that is not in the public interest. In determining whether a proposed use is in the public interest, the local unit of government shall consider both of the following:
 - (i) The availability of feasible and prudent alternative locations or methods, or both.
 - (ii) The impact that is expected to occur to the critical dune area, and the extent to which the impact may be minimized.
- f. The use will not destabilize the critical dune area.
- g. The crest of the dune is not reduced in elevation.



Location of critical dunes adjoining Traverse Lake road

⁵ This link is to the entire section of the referenced Act that relates to sand dune protection and management. There are links within this reference to the twenty-six sections incorporated in the Act. Sections 35312 to 35324 inclusive define the zoning plan.

One sees that there is the need for a considerable study relating to the planned route of the Trailway through the critical dune area. In particular, note the following statement:

Activities on slopes greater than 33% are regulated as special exceptions in order to minimize development on steep slopes that would compromise stability of critical dunes. Special exceptions are reviewed by a MDNRE panel and determinations made on whether a practical difficulty exists and compliance would unreasonably prevent use of the property or render conformity unnecessarily burdensome.⁶

The question arises: Had the NPS applied for the necessary permits for trail construction at its west end of the Trailway? Yes, the necessary permit was granted. However, there are some severe restrictions spelled out that limits the NPS activities. These are (among others):

All earth moving and contour change must occur within the path footprint. All slopes steeper than one on three must not be disturbed – a 33% slope.

All machinery and the transport of materials/excavated sand and access to and from the site shall be via the existing two track and new path. A driveway or temporary access road is not permitted.

Machinery is not permitted to be driven or used on any slope steeper than one on four. Machinery, soil, or other materials are not permitted to be stored or placed on any slopes steeper than one on four.

If these same restrictions are applied to the proposed routing along TLR, the contour map supplied shows that slopes encountered in the off-road environment exceed these specifications many times over. A walk along the road will verify this observation. It simply is not possible to construct the trail without encountering sand dunes protected by the Sand Dunes Act. For example, at one point a sand dune exceeding 60' in height abuts the paved portion of the roadway; there is no shoulder.

Applying these criteria to the Trailway options along TLR lead to but one conclusion: it is not possible to route the Trailway along TLR.

COST IMPACTS

There are significant costs impacts that have not been fully taken into account or estimated very accurately. The report completed by the National Park Service estimated the cost for the Dune Climb to Glen Arbor portion at \$897,799. Actual construction costs for this section are \$1,350,000.

The trailway report completely underestimates the costs for any of the options currently considered along Traverse Lake road since the report does not take into account the need for: construction of extensive boardwalk construction over wetlands, significant bridging over Shalda Creek, extensive tree removal, possible relocation of utilities, significant dune excavation, and extensive construction solutions required for extreme contour changes north of Bufka Farm along M-22. These expensive construction costs can be avoided with an alternative route.

SOLUTION: THE ALONG-THE-SHORE OPTION

The routing of the Heritage Trail along the shore of Good Harbor Bay is the best option for the following reasons.

Desirability

On the eastern shore of Michigan, a 10-foot wide paved non-motorized trail starts in the day-use area of Hoeft

6 General Guidance for Regulated Activities in Michigan's Critical Dunes Areas
http://macd.org/assets/downloads/Critical-Dunes/Dune%20Act%20Brochure_12.31.2010.pdf

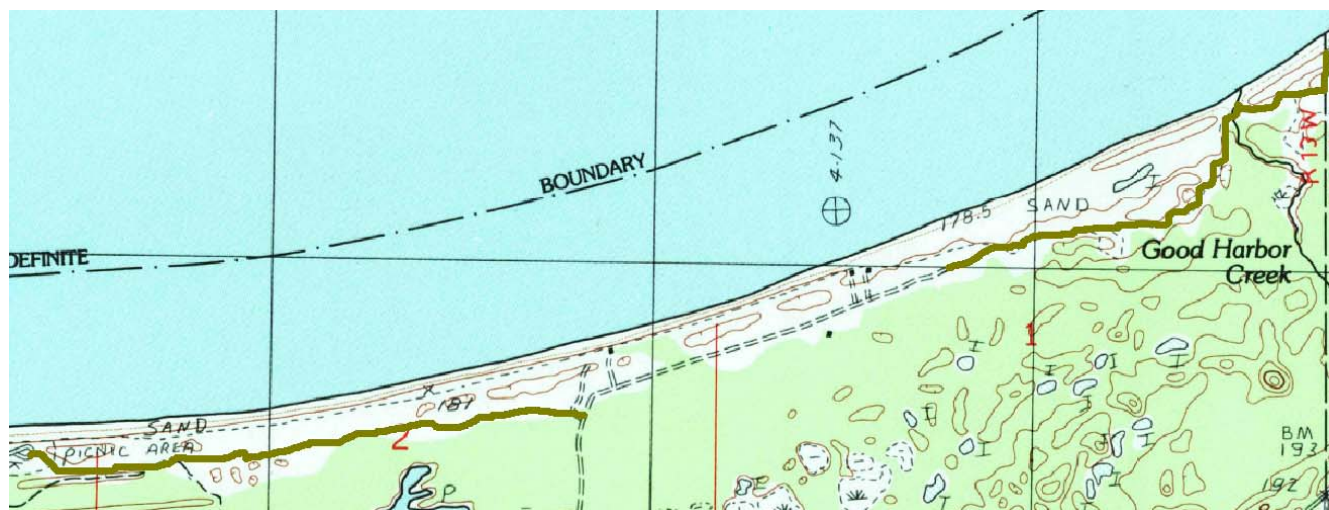
State Park and connects at the park entrance to the Huron Sunrise Trail. From there, it stretches to Rogers City 4 miles distant riding along the beach next to Lake Huron. It is regarded as one of northern Michigan's most beautiful trails.⁷

At a recent meeting of the Heritage Route Committee, Dave Langhorst from MDOT described Huron Sunrise Trail use patterns. He said the segment that runs along the shore is the most popular and very busy. It appeals to families who bike along it, play in the water, have a shore picnic, then resume biking and playing. For them, it is a very enjoyable all-day experience.

It would seem then that such a trail in the SBDNL might enjoy a similar popularity. It is ironic that the Park bears the word "Lakeshore" in its name, yet nowhere does the proposed route of the Trail go along the lakeshore.

Routing the Trail along the shore of Good Harbor Bay would provide an opportunity for all users to enjoy the beautiful scenery and especially the water. Big Blue is a mighty sight that changes its face hour-to-hour. If for no other reason, simply to experience the joy of it all makes this a desirable option.

Feasibility



Good Harbor Bay along-the-shore route

The map above shows a portion of the proposed routing along the shore of Good Harbor Bay. (The single dashed-line on the map indicates a trail that once existed.)

The Trail route would be as follows:

- a) From M22 and CR669, proceed north on 669 to the Lake Michigan road. The 100-foot buffer between the road and the "wilderness" designated area allows the Trail to be routed here. Shalda Creek must be crossed. This segment ends at the beachhead where the NPS has provided personal comfort facilities – parking, water and rest rooms.
- b) Proceed east 4500 feet on Lake Michigan Road to its end. Again, the 100-foot buffer between the road and the "wilderness" designated area allows the Trail to be routed here on the south side of the road.
- c) Construct a trail east another 4500 feet paralleling the shoreline to a connection with the existing Juniper Lane (as the map shows). This proposed routing passes through a picnic area and generally parallels the shore in the transition zone between dunes and forest. Some years

⁷ <http://www.michigantrails.us/presque-isle-county-michigan/huron-sunrise-trail-rogers-city-to-40-mile-point.html>

ago, an old logging road followed this route. There would be no significant tree clearing necessary and the terrain is level and stabilized.

d) Proceed east using the existing portion of Juniper Lane which runs approximately 4300 feet. Juniper Lane is a gravel two track road which has been graded after work last summer. No tree clearing is necessary.

e) At the end of Juniper Lane, construct a trail eastward approximately 3400 feet following the old beach trail to the terminus of CR651 at the shore. Again, this portion of the trail parallels the shore in the transitional zone. The NPS has provided facilities and parking at this beachhead also.

The trail would be located in the stabilized transition areas between the beach and the forested areas, thus minimizing the impact on forests and vegetation. It provides lakeshore ends at two county road sites where NPS parking lots and other amenities are available. The use of the existing segment of Juniper Lane minimizes the need for new construction except for paving.

The Good Harbor portion of the Trail is completely isolated from any signs of civilization. *As such, it provides for an enhanced and unique user experience with the sights and sounds of Lake Michigan while, at the same time, it is completely removed from competing vehicular traffic.*

Comparison of Impacts

The environmental and engineering firm, Mansfield and Associates, has done a preliminary comparison of the benefits of considering an alternative route along the shore. Here are some of their findings:

- a) "It provides an enhanced natural experience to the trail user, including the sights and sounds of Lake Michigan. This route creates a far superior trail experience for recreational users (walkers, bikers, roller bladders, wheel chairs, cross country skiers) than a trail along Traverse Lake Road.
- b) It avoids the wetland areas near Shalda Creek and the Bufka Farm and eliminates the need for constructing a bridge over Shalda Creek.
- c) It avoids the need to excavate significant critical dune hills along Traverse Lake Road and along M-22 north of the Bufka Farm. The route along the Lake is relatively flat, requiring no cutting and filling.
- d) There are few trees required to be cut and removed due to the sparse tree population along this route, avoiding clearing a major swath through mature forests along Traverse Lake Road. This route would be very similar to the Dune Climb to Glen Haven portion of the trail currently under construction.
- e) It utilizes facilities and parking in existence at the end of two county roads. This is a huge advantage to the routing the trail along the Lake.
- f) It utilizes an existing gravel road (Juniper Lane) which requires minimal preparation for trail construction.
- g) Construction costs are significantly less than the construction required along M-22 and Traverse Lake road. Trail construction costs would be similar to those currently experienced from the Dune Climb to Glen Haven. The current Traverse Lake road route will accrue substantial construction costs with wetland crossings, creek crossing, forest clearing, major dune excavation, and cutting and filling of hills and valleys north of Bufka farm.
- h) The trail route still maintains the contiguous undisturbed habitat within the proposed wilderness area, with the trail being located on the peripheral edge of the core area. It leaves intact one of the most significant wildlife habitats and travel corridors which includes the cedar wetlands south of Bufka farm and north of Traverse Lake road and also includes the hills to the west. This is one of the prime hunting areas in the Lakeshore, which will be dissected by the current trail route from Traverse Lake road to the Bufka Farm.

- i) It maintains the natural beauty of M-22 and Traverse Lake road. It also avoids the negative impact of trail traffic on private property owners and local residents. It also avoids any potential safety concerns of running a trail along Traverse Lake road.
- j) Since the route along the Lake would be similar to the Dune Climb to Glen Haven portion, the assessment of environmental impact would be similar to those identified in constructing the current trail for that portion. The assessment scoring would certainly be significantly less than an accurate assessment being done for the proposed Traverse Lake Road route. It would be aesthetically more appealing, avoiding significant public opposition to the impacts of the proposed Traverse Lake Road route."

If a detailed environmental assessment was done for the proposed route, we believe the scoring would be one of the most attractive options along the entire trail route from Empire to Good Harbor Bay.

Impact to Environment

Element	Likely Score	Comments
- Topography	0	Flat topography, within grade requirements
- Wetlands	0	None
- Streams and Creeks	1	Only small seasonal stream on east end
- Soils	0	Sand, existing gravel road bed for most of trail
- Wildlife	0	On the outer boundary of wilderness area
- Vegetation	0	Transitional area, some ground junipers, existing roads
- Land Use	0	No residential impacts or burden to township
- Cultural Resource	2	Borders wilderness area similar to Traverse Lake Road
- Viewshed	1	Minimal impact
Total Impact to Environment	4	One of the lowest among the route segments

Impact to Feasibility

Element	Likely Score	Comments
- Recreational Experience	0	Far superior to use along a road – including skiing
- SLBE Visitor Experience	1	Minimal exposure to other park visitors
- Safety	0	No residential traffic impacts
- Cost	0	Flat topography, no tree clearing, no wetlands, roads
- Operation and Maintenance	0	Uses existing park facilities at CR 669 and CR 651
Total Impact to Feasibility	1	Exceptionally feasible

Total Combined Impact 5 One of the lowest in the entire 27-mile route!

Objections

The Park Service may object to the segment in the transition zone stating that that area is “wilderness.” It is important to realize that “wilderness” is not a physical entity. Currently, “wilderness” is a concept applied to a physical entity. Pending legislation at the national level awaits its implementation. So, for now, “wilderness” is nothing but lines on a paper.

The Park Service has previously conveniently changed these lines as needed as the following shows.

First, the exception such as a wilderness exclusion for the Cottonwood Trail:

"(4) Central area of the mainland - Sleeping Bear Plateau - with a wilderness exclusion for the Cottonwood Trail to provide an opportunity for large groups to experience the namesake Sleeping Bear Dunes."⁸

Second, the establishment of the 100' county road and 300' state highway buffer zones in the “wilderness”

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designation. This exception was not in evidence prior to the public comment period in October, 2008.

Third, the proposed use of the path at the northeastern end of Little Traverse Lake Road to access the Bufka farm. Here the original (2008) Plan stated:⁹

Trail Segment 9 - Option 9.3 was identified initially as a potential link from Traverse Lake Road to the Bufka Farm. Review by NPS staff determined that the trail route option would fall in proposed wilderness and would not be allowed.

But, now, conveniently, this trail route through the wilderness to the Bufka Farm is the chosen one since the wilderness definition has been changed to accommodate the trail. There has also been fine tuning in the wilderness map to accommodate the trail running north from the Dune Climb.

Conclusion

Routing the Trail along the lakeshore is the best possible solution. It's implementation will take some flexibility on the part of the Park Service but the approach makes sense and overcomes all the objections to the current proposed options. There is no impact to the private property owners, no destruction of natural beauty of Traverse Lake road, no crossing of wetlands, no cutting of mature trees and forests, no massive excavation of critical dune hills, no destruction of prime wildlife and hunting areas (area south of Bufka Farm and north of Traverse Lake road) and no expensive construction techniques required. The alternative route uses existing and historical roadbeds, takes advantages of existing facilities, maintains the integrity of the heart of the wilderness areas and requires little removal of vegetation. Most importantly, the alternative route along the Lake provides a far superior experience for the trail user, allowing them to fully enjoy the sights, sounds and smells of Lake Michigan.

Based on the precedent established by the NPS in amending the concept of "wilderness," the general management plan and wilderness proposal could be amended at this time to provide for "a wilderness exclusion for the Sleeping Bear Heritage Trail to provide a unique educational and recreational opportunity for families and visitors to experience the diverse, varied, and protected landscapes that make up the natural beauty of the Sleeping Bear Dunes National Lakeshore."

The vision of creating an incredible trail experience and the legacy for future generations to truly enjoy would make this solution easily possible. The National Park Service would receive huge commendations for creating one of the best trail experiences in the nation that give people an unmatched opportunity and true exposure to the namesake of the Park.

Coda

What is extremely interesting about along-the-shore route is that an 1873 map of Good Harbor Bay shows a road paralleling the shore! This map is used as the masthead in the Leelanau Scenic Heritage Route Management Plan Update 2006. Following the old and existing roadbeds shown here would make the Heritage Trail truly a "heritage trail."



⁹ 2.3.5 ALTERNATIVES AND/OR OPTIONS THAT WERE ELIMINATED (Appendix – Optional Trail Route Maps)

CREDITS:

TEXT

CONRAD MASON, PhD
DAVID SKJAERLUND, PhD

GRAPHICS

TRAIL CROSS SECTIONS
MANSFIELD & ASSOCIATES

CRITICAL DUNES MAP
U. S. GEOLOGICAL SURVEY 2011

ALONG-THE-SHORE MAP
U. S. GEOLOGICAL SURVEY 1983

1873 MAP
SOURCE UNKNOWN

TABLES/CHARTS
MANSFIELD & ASSOCIATES

SUPPORT

LITTLE TRAVERSE LAKE PROPERTY
OWNERS ASSOCIATION BOARD

LTLPOA HERITAGE TRAIL SUBCOMMITTEE

LITTLE TRAVERSE LAKE PROPERTY OWNERS

For more information, visit www.AlongTheShore.info