

## Heritage Trail – Segment 9 Considerations

### 1. Overall Goal and Objectives

After construction of the first 22 miles of the Heritage Trail, it is important to evaluate the purpose, goals and objectives specifically for Segment 9. As part of that evaluation, it is important to understand the true demand/need and usage for Segment 9, in comparison with other trail segments such as those around Glen Arbor and Empire. It is also important to take into account an objective cost-benefit analysis. Lastly, consideration could be given to construction phasing, with the priority of funds being used for local infrastructure improvements that benefit local residents as well.

### 2. CR 669 – Bohemian Road

In designing a trail for maximum trail usage in Segment 9 area, extending a trail along CR 669 – Bohemian Road between M-22 and Good Harbor Bay merits consideration for the following reasons:

- Provides access to existing parking at Good Harbor Bay (people are now parking along road at the M-22 intersection),
- Provides access to restroom and picnic facilities (there are no restroom facilities between CR 669 and Glen Arbor, including through the Port Oneida section),
- It makes for a natural trail head location situated at the beautiful Good Harbor Bay beach and non-resident trail users will commonly head west to use off-road trail section through Port Oneida,
- Requires no tree clearing, no dune excavation and no wetland board walking (except at Shalda Creek crossing) and would have a lower construction cost as a result,
- Construction could take place in the road right of way along with needed CR 669 improvements,
- This area is designated as a recreational zone in the NPS master plan and crosses no private property,
- This area has been identified by Cleveland Township as the area with the greatest potential for recreational improvements (the “crown jewel” of the township),
- Provides access to superior user opportunities in the designated recreational zone (not in Wilderness Area) along Lake Michigan Road with the sights and sounds of Lake Michigan, showcasing the National Lakeshore.

### 3. The Bufka M-22 Alternative

Routing the trail parallel and closely to M-22 from Bufka Farm to the east end intersection of Traverse Lake Road, avoiding the “Bufka Cut” (proposed trail running from farmstead to Tim Stein house on TLR), would:

- Avoid dissecting a sensitive wildlife habitat, associated cedar wetlands and popular hunting area,
- Avoid an area once included in the proposed Wilderness Area,
- Route the trail within a recreational zone designated in the NPS master plan,
- Showcase the Bufka Farm homestead and farm meadows,
- Provide better M-22 connector access to people coming from Sugarloaf area, Lime Lake, Maple City or M-22 side of Little Traverse Lake (avoiding usage of Traverse Lake Road to order to access trail to 651).

#### **4. Safety Considerations**

There are potential road safety concerns, which have been previously raised by residents and Leelanau County Road Commission in October 2008, of recreational users using Traverse Lake Road due to the nature of the winding curves of the narrower roadbed and the existing 40 mph speed limit. These safety concerns exist presently along Traverse Lake Road and would be magnified with any potential trail hopping on/off or using Traverse Lake Road as a shared roadway. Considerations to improve road safety could be explored, including:

- reducing the speed limit to 25 mph on Traverse Lake Road,
- installing additional road signage (both roadside and on the road surface),
- incorporating rumble strips to alert vehicular drivers before significant curves,
- widening Traverse Lake Road four feet with up to 2 feet shoulders on each side where feasible (avoiding relocation of utilities and mailboxes, clearing of roadside trees or dune excavation along road),
- help users make informed decisions in their recreational planning in using off-road segments versus shared road sections by altering Heritage Trail map to indicated shared road sections with a dashed line instead of a solid line as well as indicating on the map parking areas (avoid people parking along roadside), restrooms and picnic facilities along trail,
- including a separate trail along CR 669 from M-22 north to Lake Michigan that will help facilitate natural user flow by using existing parking and facilities at Good Harbor Bay as a natural trail head and destination, providing 22 miles of off-road trail heading west towards Port Oneida, Glen Arbor and Empire – thus minimizing the natural flow and volume of trail users along any shared road connection around Little Traverse Lake.

#### **5. Wilderness Area Setback Limitations**

Trail construction cannot extend more than about 30 paces from centerline of Traverse Lake Road or CR 669 (leaving room for tree clearing to accommodate trail construction) and 300 feet from M-22 due to the established Wilderness Area. Typical construction patterns have included a tree clearing path of up to 25 feet through forested areas to remove stumps, roots and bushes that might impact future trail maintenance and to make room for construction equipment (which can require extensive tree removal).

Sleeping Bear Dunes National Lakeshore Conservation and Recreation Act

Sec 3. Sleeping bear dunes wilderness

(c) Road Setbacks

The wilderness boundary shall be—

- (1) 100 feet from the centerline of adjacent county roads; and
- (2) 300 feet from the centerline of adjacent State highways.

#### **6. Designated Wetlands**

There are significant wetlands on the west end of Traverse Lake Road that would require elevated board walking across private property within the road right of way, negatively impacting usage of private property. These wetland soils go down very deep (25 feet). There are also wetland soils along the critical dunes through the proposed “Bufka Cut” (proposed trail from farmstead to Tim Stein’s house on TLR) that would require elevated board walking. Other trail routing options could be considered to avoid these areas and avoid the cost of constructing extensive board walks over significant wetland sections.

## 7. Michigan Critical Dunes Protection Act

There are significant critical dunes with slopes greater than 1:3 that extend down to the road surface on the east end of Traverse Lake Road and other critical dune areas along TLR (see Cleveland Township Critical Dune Map) which are protected under Michigan law and require extensive permitting and public input in the permitting process. Significant concerns exist about altering the natural character of Traverse Lake neighborhood with the construction of large retaining walls required for an off-road trail along the east end of Traverse Lake Road.

### NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT) Act 451 of 1994 PART 353 SAND DUNES PROTECTION AND MANAGEMENT

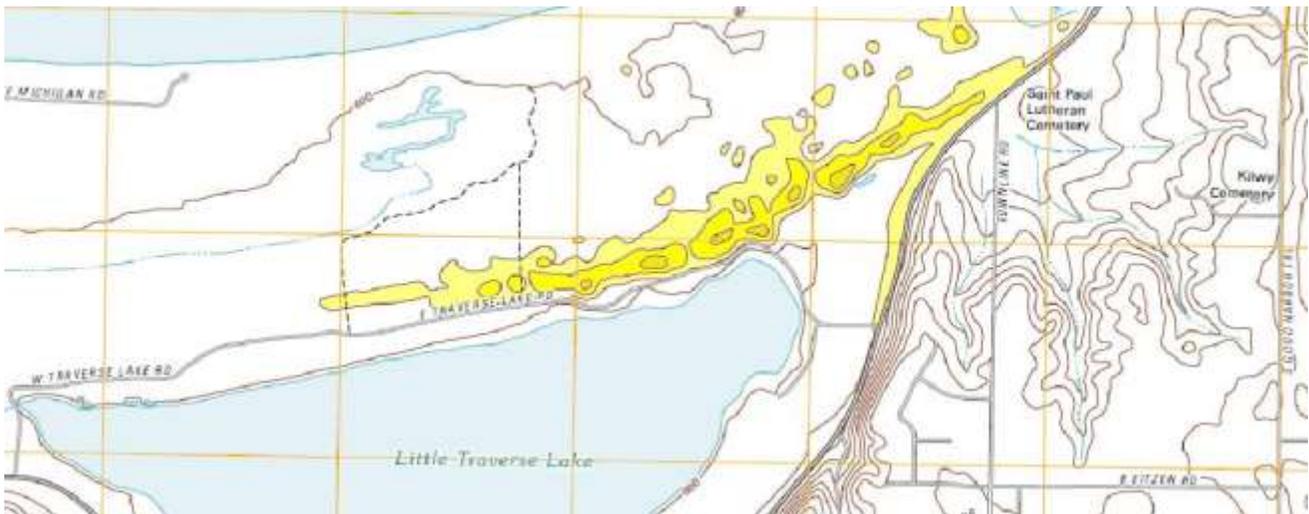
324.35316 Zoning ordinances; **additional prohibited uses in critical dune area**; variance; contour maps; guidelines; restoration.

Sec. 35316. (1) Unless a variance is granted pursuant to section 35317, a zoning ordinance shall not permit the following uses in a critical dune area:

(a) A structure and access to the structure on a slope within a critical dune area that has a slope that measures from a 1-foot vertical rise in a 4-foot horizontal plane to less than a 1-foot vertical rise in a 3-foot horizontal plane, unless the structure and access to the structure are in accordance with a site plan prepared for the site by a registered professional architect or a licensed professional engineer and the site plan provides for the disposal of storm waters without serious soil erosion and without sedimentation of any stream or other body of water.

**(b) 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.**

Map of protected critical dunes with steep slopes

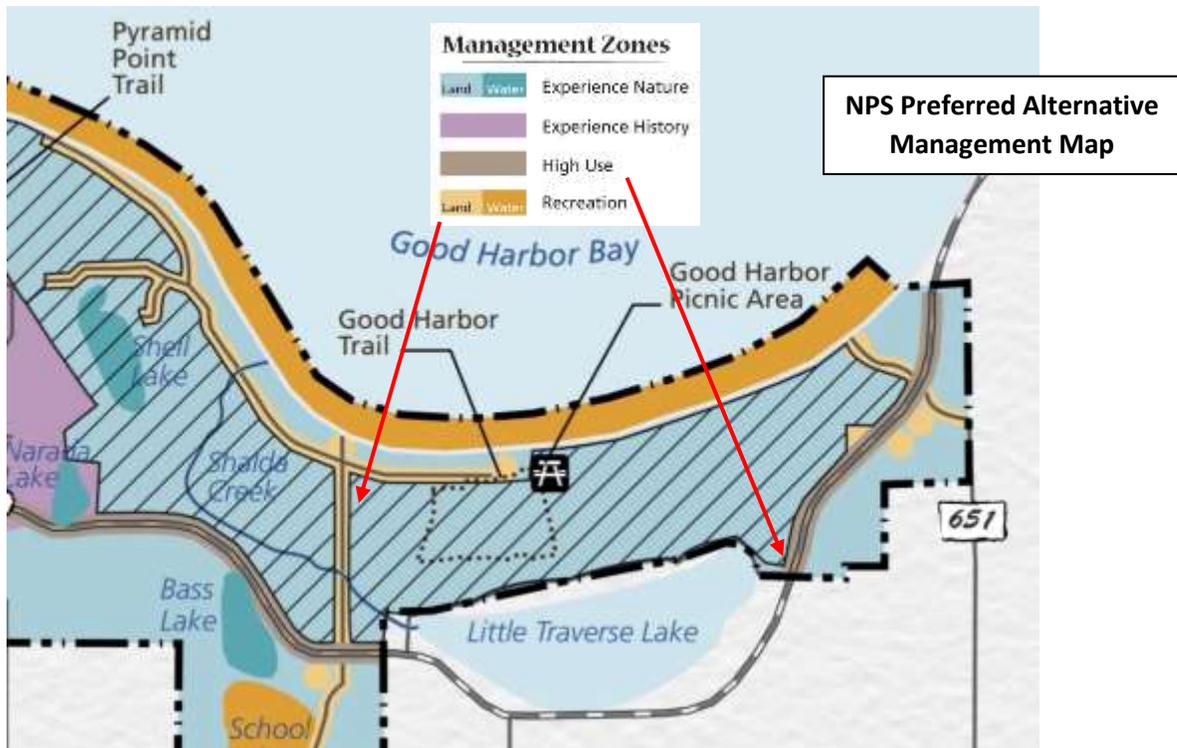


## 8. Township Park Maintenance

There still has been no plan put forth to address the impact of trail users upon the Cleveland Township Park at Little Traverse Lake, including parking, use of the facilities and their maintenance.

## 9. National Park Service Master Plan & Management Map

NPS established planned recreational zones in the adopted master plan. These recreational zones include the area along CR 669, Lake Michigan Road and M-22. The recreational zones do NOT include the area along Traverse Lake Road or through the proposed "Bufka Cut" (trail cutting through wildlife area from Bufka Farm to TLR curve at Tim Stein's house) that are adjacent to the Wilderness Area. In fact, the proposed "Bufka Cut" area was initially included in the proposed Wilderness Area map due to its wildlife habitat and extensive cedar wetlands. Any proposed trail design and routing should be consistent with NPS and Township master planning.



## 10. Private Property Impacts & Federal Law

The proposed off-road trail has significant negative impacts on safety of driveway access, parking ability, five feet proximity to a residential structure, elevated boardwalks restricting property usage, and intrusion of trail traffic into front yards along with additional clearing of vegetative buffers. Options could be considered to minimize impacts to private residents. For example, the shoulders could be extended to 8' along M-22 between CR 669 and west end of Traverse Lake Road as an alternative to an off-road trail. Under federal law, the NPS is required to avoid negative impacts to private property owners and consider alternative solutions:

"[i]n developing the lakeshore, full recognition shall be given to protecting the private properties for the enjoyment of the owners," and "[i]n developing the lakeshore the Secretary shall provide public use areas in such places and manner as he determines will not diminish the value or enjoyment for the owner or occupant of any improved property located thereon." (16 U.S.C. §§ 460x(b) and 460x-5(d), 1970);

It would be helpful to keep in mind Golden Rule by putting oneself in the shoes of local residents: Do as one would wish were done unto one's self if in that situation living there as a private property owner.

## 11. Scenic Qualities of Traverse Lake Road

A petition with over 200 signatures was previously submitted in 2012 to NPS and Cleveland Township raising concerns about the potential impact on landscape changes and natural character along Traverse Lake Road. These concerns include critical dune excavation, construction through wetlands, clearing of trees and the required relocation of public utilities and mailboxes if 5' shoulders were included on both sides. The concerns of the proposed trail along Traverse Lake Road were also previously raised by a unanimous Cleveland Township Board resolution (July 2012). The Cleveland Township Board also unanimously supported routing the trail down CR 669 and along Lake Michigan Road and the shore. Because of the negative impacts of an off-road trail, consideration could be given to stopping the off-road trail at CR 669 and east end of Traverse Lake Road.

## 12. Cost & Timing

The proposed off-road trail for Segment 9 would be the most expensive trail segment to date with extensive elevated board walks over wetlands, creek crossing, and critical dune excavation with significant retainer walls. Perhaps it would be more prudent spending dollars improving local infrastructure needs as part of the cost-benefit analysis. Consideration could be given to constructing priority connector trails first (along CR 669 and Bufka Farm M-22 section) and then evaluating true demand/usage and the real need for further trail improvements. Trail construction is permanent and not easily reversible – as well as the impacts upon the neighborhood environment for local residents.

## 13. Consideration of an Alternative Proposal

The currently proposed off-road trail raises significant concerns about impact on environmental features and private property. Another comprehensive option could be considered and is detailed on the following pages. Because of legitimate safety concerns with shared roadway sections, transportation planning aspects should include road and safety improvements along shared roadways as well as broader recreational planning to provide more continuous user flow along off-road trails, such as including an off-road trail along CR 669 that serves both as a starting trail head or a Good Harbor destination for 22 miles of off-road trail headed west through Port Oneida towards Glen Arbor and Empire. In comparison of the two options, impacts of the alternative proposal, with safety improvements, are significantly less, as well as lowering costs for Segment 9.

Neither option is without concerns or unanimous support – thus a third option could be considered to create a superior user experience that would have no safety concerns and no impacts upon significant environmental features while avoiding private property and a residential neighborhood. The preferred third option would not be expanding the trail eastward, but instead could include an off-road trail along CR 669 and then expand the trail in the designated recreational zone along the four miles of Lake Michigan Road paralleling Lake Michigan. This third option lies outside of the Wilderness Area and does not have huge critical dune hills or extensive wetlands. There are also several picnic facilities and restrooms along the way. This preferred third option would provide users with a beautiful experience of enjoying the sights and sound of Lake Michigan, the very crown jewel of the Sleeping Bear Dunes National Lakeshore. It would be the most beautiful trail section in America.



## Alternative Proposal for Segment 9 of the Heritage Trail

1. Avoid negative impacts of trail construction on critical dunes, wetlands, scenic character, natural wildlife areas, non-recreational zones and private property associated with the proposed off-road trail;
2. Extend an off-road trail along CR669 to utilize existing restrooms, picnic facilities and parking at Good Harbor Bay and to facilitate natural trail usage from a Good Harbor Bay trail head towards Port Oneida;
3. Stop off-road Heritage Trail at CR669 and at east end of Traverse Lake Road;
4. Avoid “Bufka Cut”(proposed routing through the cedar wetland wildlife area from farmstead to Tim Stein’s house on TLR) by instead continuing trail closely along M-22 from Bufka Farm until east M22/TLR intersection.
5. Road safety is an existing concern. Make desirable road infrastructure improvements to increase road safety, including:
  - a. widening shoulders up to 8’ along M-22 between CR 669 and Traverse Lake Road,
  - b. widening Traverse Lake Road four feet by including up to 2’ shoulders where feasible (avoid relocation of utilities & mailboxes, removal of trees or dune excavation along roadside),
  - c. reducing speed limit to 25 mph on Traverse Lake Road,
  - d. installing additional road safety signage (roadside as well as on-road markings),
  - e. incorporating rumble strips alerting drivers before significant curves,
  - f. helping users make an informed recreational planning decision about using off-road trail segments and shared road sections by modifying the Heritage Trail map to clearly identifying shared road sections (e.g. Northwood Drive by Glen Lake) with a dashed line while also highlighting parking areas (help trail users avoid parking along roadside), restrooms and picnic facilities.
6. All of the above aspects should be considered together and completed in the same time frame in developing a comprehensive plan for Segment 9 of the Heritage Trail.



## Comparison of Three Options for Segment 9 of the Heritage Trail



- Extensive wetland crossings (creek)
- Extensive critical dune excavation
- Dissection of natural wildlife area
- Additional tree clearing required
- Diversion from NPS recreational zones
- Negative private property impacts
- Significant construction costs
- Remote access to parking & facilities
- No road improvements needed



- No wetland crossings (creek crossings)
- No critical dune excavation
- No dissection of natural wildlife area
- Minimal tree clearing (only Bufka)
- Located 100% in NPS recreational zones
- No private property impacts
- Lower construction costs
- Direct access to parking & facilities
- Road improvements needed to address road safety concerns



- Superior user experience
- No wetland crossings (creek crossings)
- No large critical dune hills
- No dissection of natural wildlife area
- Minimal tree clearing (low density forest)
- Located 100% in NPS recreational zones
- Outside of Wilderness Area
- No private property impacts
- Lower construction costs
- Direct access to parking & facilities
- No road safety concerns