
Brice Prairie Capacity Analyses

BACKGROUND

The Brice Prairie Capacity Report considers the capacity of Brice Prairie to accommodate additional development. The report assesses three measures of capacity – environmental, emergency service response time, and transportation. The Capacity Analysis Report is the basis for and will be included as part of the Brice Prairie Master Plan.

Each of the three capacity reports were drafted as stand-alone documents and are included in this report. This introductory section summarizes the recommendations made in each of the three reports. Although the details differ for each of the three categories, Brice Prairie is nearing its capacity in all three areas. Overall, the limited capacity appears to be available for additional development on the Prairie, as long as it is done in an environmentally responsible manner, investments in emergency service staff and equipment are made and intersections and connections are improved.

SUMMARY OF EACH REPORT

The Environmental Capacity report describes the many environmental features located on the Prairie. Additional residential and non-residential development further strains the characteristic environmental features of the Prairie. In particular, groundwater is likely the primary limiting resource on the Prairie because of the dependence of Prairie residents and businesses on groundwater, the permeable Prairie soils that are particularly susceptible to contamination and the contamination that has already occurred.

The Emergency Services Response Times Capacity report notes that emergency service providers from the Village of Holmen and La Crosse County can only use two access points to the Prairie and that railroad traffic occasionally blocks that access. Despite these obstacles, response times to the Prairie are currently acceptable. However, given additional residential and non-residential on the Prairie, additional investment in fire and EMS staff and equipment is needed and a reconsideration of police services is necessary.

The Transportation Capacity report concludes that the Prairie's current roadway network can accommodate a moderate amount of additional development. Key intersections are expected to exhibit additional congestion that may meet minimal transportation standards but may not be acceptable to Prairie residents, business owners and emergency service providers. Neither a third roadway connection to STH 35 nor a widening of CTH Z and CTH ZN are necessary. Additional roadway segments and connections on the Prairie can ease congestion along the shoreline.

CONSOLIDATED RECOMMENDATIONS

The following is a listing of recommendations made in each of the capacity reports. These recommendations are taken out of context; see each capacity report for full support of each recommendation.

Environmental Capacity

- As developments are proposed on the Prairie, it is important for the Town to understand existing and future plans and reports referencing Brice Prairie and implement the recommendations.

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- The boat ramps are important locations for recreational activities and should be well connected to the Prairie's park and recreation system.
 - It is extremely important to connect the pedestrian access points to the Prairie and Refuge to a network of bicycle and pedestrian facilities on the Prairie.
 - The viewsheds of the observation and interpretive areas of Brice Prairie should be protected.
 - As development occurs and new parks are developed, it will be important to link the parks through the neighborhoods and to one another via pedestrian, bicycle and greenway networks.
 - It is important to provide bicycle and pedestrian connections across the rail line and between the Great River State Trail and local pedestrian and bicycle networks on Brice Prairie.
 - Prohibit new development between the railroad tracks and CTH XX.
 - Maintain and enhance the scenic Great River State Trail to provide a rustic, rural trail experience and connect trail networks from this corridor onto Brice Prairie.
 - Protect the water quality and wildlife habitat of Halfway Creek and Sand Lake Creek and their associated creek beds and riparian areas by encouraging best management practices. A minimum 100-foot buffer with native vegetation should be required on both sides of the creeks. This buffer recommendation does not preclude existing uses from continuing; however, any redevelopment of parcels adjacent to the creeks should adhere to these standards.
 - Protect low-lying groundwater recharge areas from development by requiring that they be used as locations for detention ponds or other recharge areas. The Brice Prairie Watershed Stormwater Management Plan provides additional recommendations for the design of these areas.
 - Buffer areas surrounding low-lying groundwater recharge areas should be designated as greenway corridors that may allow trail access and wildlife habitat connection points.
 - In order to maintain important fish and wildlife habitat, landowners adjacent to the Refuge should implement best management practices to prevent negative effects to the Refuge.
 - Encourage a 300-foot buffer between the Refuge and development on the Prairie. A 300-foot buffer is a generally accepted buffer width to protect wildlife habitat.
 - Support the USFWS in acquiring land from willing sellers.
 - Limit or prohibit road access across lands identified by the USFWS for purchase from willing sellers.
 - The Town of Onalaska and La Crosse County should strictly enforce existing state and federal regulations that prohibit development in floodplains and wetlands to help protect these areas.
 - Best management practices that protect the Prairie's wetlands, floodplains and wet soils should be encouraged.
 - Provide educational materials to landowners along Lake Onalaska through the Town newsletter, website or other means to inform them of best management practices to limit the amount of erosion and resulting sedimentation that occurs on their property.
 - Do not allow commercial or residential development on or around the former Onalaska Municipal Landfill, a Superfund site. A 10-20 acre park and/or natural area conservancy or open space recreational area compatible with the nearby and adjacent Refuge land and potentially contiguous with Town-owned lands could be created.
 - Implement the Groundwater Management Program that is described beginning on page 27 of the Brice Prairie Watershed Stormwater Management Plan.
 - Implement the best management practices on pages 118-135 of the Brice Prairie Watershed Stormwater Management Plan including creating a stormwater management ordinance, a wellhead protection ordinance and a groundwater protection overlay district.

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- All wells should be checked at least annually for nitrate and other contaminants, such as bacteria (per La Crosse County Health Department). As of 2005, a well test kit is available from the County Health Department for \$42. The kit can be used to measure both nitrate and coliform bacteria. Other potential contaminants that should be measured periodically include arsenic, lead, radon gas, atrazine and other pesticides, radium and volatile organic compounds (VOCs).
 - Implement a groundwater/well monitoring program. Wells are currently monitored by individuals, DNR and La Crosse County but no consistent, organized records are kept. The existing test wells at the Superfund site and in Midway could be monitored as part of this program. Criteria to address include:
 - Identify who will conduct the monitoring
 - Identify who will maintain the groundwater database
 - Identify how often the monitoring will be conducted
 - Identify what contaminants needs to be monitored
 - The Town should consider working with the USGS, USFWS and others to determine where groundwater contamination, such as fecal coliform and phosphorus, is entering Lake Onalaska, and ultimately where it originates so it can be managed. This can be accomplished using thermal infrared imagery to identify groundwater seeping into the lake.
 - Encourage community-based septic systems in new developments.
 - Use covenants to require community wells in new developments. Test these wells as part of the recommended well monitoring program and potentially use homeowner fees to pay for the testing.
 - Map groundwater recharge zones for community wells and any new high capacity wells and protect these areas as well as a buffer around the recharge area. Development and any practices that could cause groundwater contamination, such as application of manure or pesticides, should be controlled in these areas.
 - The Town of Onalaska should inform and educate their residents about proper maintenance of septic systems and other measures to reduce groundwater contamination.
 - The Town should encourage homeowners to apply lawn fertilizers and other chemicals minimally and responsibly throughout the Prairie.
 - The Town should use public education to reduce discharges of motor oil, household wastes, litter, anti-freeze, deicing chemicals, yard fertilizers, agricultural herbicides, pesticides and fertilizers. The Town should provide educational materials about La Crosse County's hazardous waste recycling facility.
 - The Town should promote Low Impact Development including raingardens throughout Brice Prairie to direct runoff into the ground and to minimize the effects of increased runoff.
 - The Town could encourage the use of raingardens through covenants and subdivision ordinances.
 - The Town should implement a raingarden when a new Town Hall is built to educate residents. The Town should work with the La Crosse County Department of Land Conservation to get their assistance to design and build the demonstration raingarden.
 - Continue to monitor effective impervious surface and attempt to keep it below 10 percent.
 - Cooperate with the USFWS to promote land use planning efforts that ensure that water quality impacts to the Refuge are considered. The USFWS's Draft Environmental Impact Statement and Comprehensive Conservation Plan recommends working with others through an aggressive Refuge program to seek a continuous improvement in the quality of water flowing through and into the Refuge, including measuring dissolved oxygen, major plant nutrients, suspended material, turbidity, sedimentation and contaminants.

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- Work with the U.S. Army Corps of Engineers, the Lake Onalaska Protection and Rehabilitation District and property owners to encourage better land management practices along the Lake Onalaska and Black River shoreline.
 - Provide educational materials to shoreland property owners through the Town newsletter, website or other means to inform them of best management practices for living along the waterfront.
 - Protect and buffer wildlife habitat areas from development.
 - Maintain large, intact areas of native vegetation needed to support wildlife by preventing fragmentation through development.
 - Set priorities for species and habitats to support and improve the numbers and diverse locations of those species.
 - Protect critical landscapes and regulate the use of vegetation in new developments to minimize the invasion of exotic plants.
 - Identify and protect wildlife corridors to connect habitats and provide uninterrupted movement.
 - Protect rare species habitats and ecological processes in those habitats.
 - Balance the opportunity for recreation by the public with the habitat needs of wildlife.
 - The lands at the far western end of Brice Prairie should be protected, and should be considered a priority area for the Purchase of Development Rights program. A 10-20 acre park and/or natural area conservancy or open space recreational area compatible with the nearby and adjacent Refuge land and potentially contiguous with Town owned lands (old landfill) could also be created.
 - Work with the USFWS and others to implement their goal of maintaining and enhancing grassland habitat on the Refuge. The Town should encourage 300-foot buffers between development and the Refuge to help achieve this goal. In general, it is accepted that 300 feet is the minimum accepted width needed to provide adequate habitat and movement corridors for most wildlife species.
 - Work with the DNR and the Audubon Society to promote Brice Prairie as part of the Great Wisconsin Birding and Nature Trail.
 - Recognize that any land on Brice Prairie that can be restored back to sand prairie will harbor wildlife and will help provide wildlife corridors and connections to the Refuge.
 - Promote rotational grazing on Brice Prairie.
 - Require a 300-foot buffer around the existing dairy operation and fields to ensure that sufficient land is available for this farm to continue its operations. Explore the use of PDR to acquire this buffer.
 - Explore and encourage the use of PDR to help preserve family farming on Brice Prairie.
 - Utilize PDR to ensure that higher standards for agricultural practices are required on land that is enrolled in a PDR program. This could include best management practices for agriculture, prohibition of the use of certain chemicals, etc.
 - Work with the La Crosse County Department of Land Conservation to ensure farmers are meeting agricultural best management practices.
 - Work with La Crosse County to ensure the Prairie is zoned to exclude facilities over 200 animal units.
 - The Great River State Trail is an excellent resource that should be linked to the Prairie through a local trail system.
 - Work with surrounding municipalities and landowners to implement the Halfway Creek Trail and connection to the Great River Trail.
 - Create a new multi-use trail, parallel to the Great River State Trail, from the intersection of CTH Z/ZN to the Black River, with connections to the Great River State Trail and CTH Z.

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- Develop a second bike trail through Brice Prairie that runs along major subdivisions and connects to the Great River State Trail.
 - The Drainage Buffer Areas on the Environmental Features Map provide an excellent opportunity to provide greenways and trails, which should be dedicated through any developer agreements.
 - La Crosse County updates their Comprehensive Outdoor Recreation Plan every 5 years. The Town should work with La Crosse County to target and protect sensitive environmental areas and parkland on the Prairie.
 - Create a cultural resource node west of the junction of CTH Z and CTH ZN with the archaeological district, a proposed USFWS facility and a proposed Town Hall facility.
 - Promote area tourism by enhancing Brice Prairie's status as a gateway to Lake Onalaska and the Refuge.
 - Work to increase and enhance public access to Lake Onalaska and the Black River.
 - A trail network should connect from a possible Town Hall/USFWS site to other neighborhoods, community destinations, the Great River State Trail and other trails on the Prairie.
 - The Town should work with the Lake Onalaska Protection and Rehabilitation District, the U.S. Army Corps of Engineers and the USFWS to create a demonstration area at the Upper Brice Prairie Landing or similar site for no-mow programs, best management practices for pesticide and fertilizer application, raingardens and other similar initiatives.
 - The Town should promote native vegetation landscaping to restore the sand prairie and educate residents about this initiative.
 - Because the Prairie is adjacent to the Refuge, the Town should coordinate with the USFWS to provide public information including media, brochures, signage and programs to increase awareness of the invasive species threat and what residents can do to minimize the introduction or spread of invasive species.
 - As it considers constructing a new Town Hall, the Town should consider implementing construction and/or landscaping practices that showcase these best management practices. Education topics include:
 - Well and septic maintenance
 - Use of fertilizers/pesticides
 - Lakescaping/shoreland development
 - Best farming practices
 - Low impact development
 - Stormwater management.
 - The Town should adopt an Official Map for Brice Prairie that identifies all environmental areas to be protected as well as trail systems and other land uses.
 - The Town should create a set of standards or strategies to promote environmentally sound development on Brice Prairie. The Town should adopted design guidelines to encourage environmentally sensitive development, including:
 - Cluster development with native prairie restoration and trails
 - Reduced impervious surfaces
 - Low impact development practices (LID)
 - Best farming practices
 - Well and septic maintenance
 - Stormwater management
 - The Town should encourage cluster development on Brice Prairie, with open space protected and enhanced for prairie habitat, and biking and hiking trails connecting throughout.

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- The Town should create and use a PDR Program to buy development rights for properties in environmentally sensitive and archaeologically sensitive areas and agricultural preservation areas on Brice Prairie.

Emergency Services Response Times Capacity Report

- Include the Holmen Fire Department as a reviewing agency for development and redevelopment plans in the Town.
- Coordinate with the Holmen Fire Department on the planned staff and equipment for Brice Prairie in relation to current and projected needs. Determine fiscal impacts of residential and non-residential development on the Prairie.
- Support the volunteers of the Brice Prairie First Responders and ensure continued EMS training.
- Include the La Crosse County Sheriff's Department as a reviewing agency for development and redevelopment plans in the Town.
- The Town should continue to participate in Onalaska Joint Cooperative Commission meetings to ensure future adequate police capacity and level of service for the Town and the Prairie.
- The Town should continue to assess the response level for fire, emergency medical and police services, and communicate concerns to service providers.

Transportation Capacity Report

- To improve traffic flow at the Midway intersection, all approaches should be under stop-sign control, forcing motorists at all approaches to stop before proceeding through the intersection.
- To promote traffic flow through the Midway intersection, consideration should be given to provide an eastbound-to-southbound flared right-turn lane on CTH ZN, allowing right-turning vehicles to exit the through traffic stream.
- To improve the safety of the Great River Trail crossing of CTH ZN, proper signage should be placed on CTH ZN in the vicinity and at the location of the trail crossing to alert motorists of potential pedestrians crossing the roadway.
- Physical improvements to CTH ZN should be considered to force motorists to slow down approaching the Great River Trail crossing such as roadway narrowing, physical delineation of the crossing or median installation.
- To improve the safety of the Great River Trail crossing of CTH Z near CTH ZM, proper signage should be installed near the trail crossing as well as physical improvements to the crossing to make motorists slow down and alert them of potential trail users.
- To reduce or limit access along the external roadways, combined access between adjoining parcels should be implemented whenever possible and should be strongly promoted by the Town of Onalaska.
- New full access driveways should be aligned opposite an existing full access driveway to eliminate the creation of offset intersections.
- As parcels are redeveloped along CTH ZN, CTH Z and CTH OT, consideration should be given to consolidate and/or limit the existing access drives serving these parcels, reducing the number of access points to these roadways.
- Adequate spacing of access points along CTH ZN, CTH Z and CTH OT should be promoted to reduce the amount of conflict points over a short section of roadway, improving traffic flow and safety.