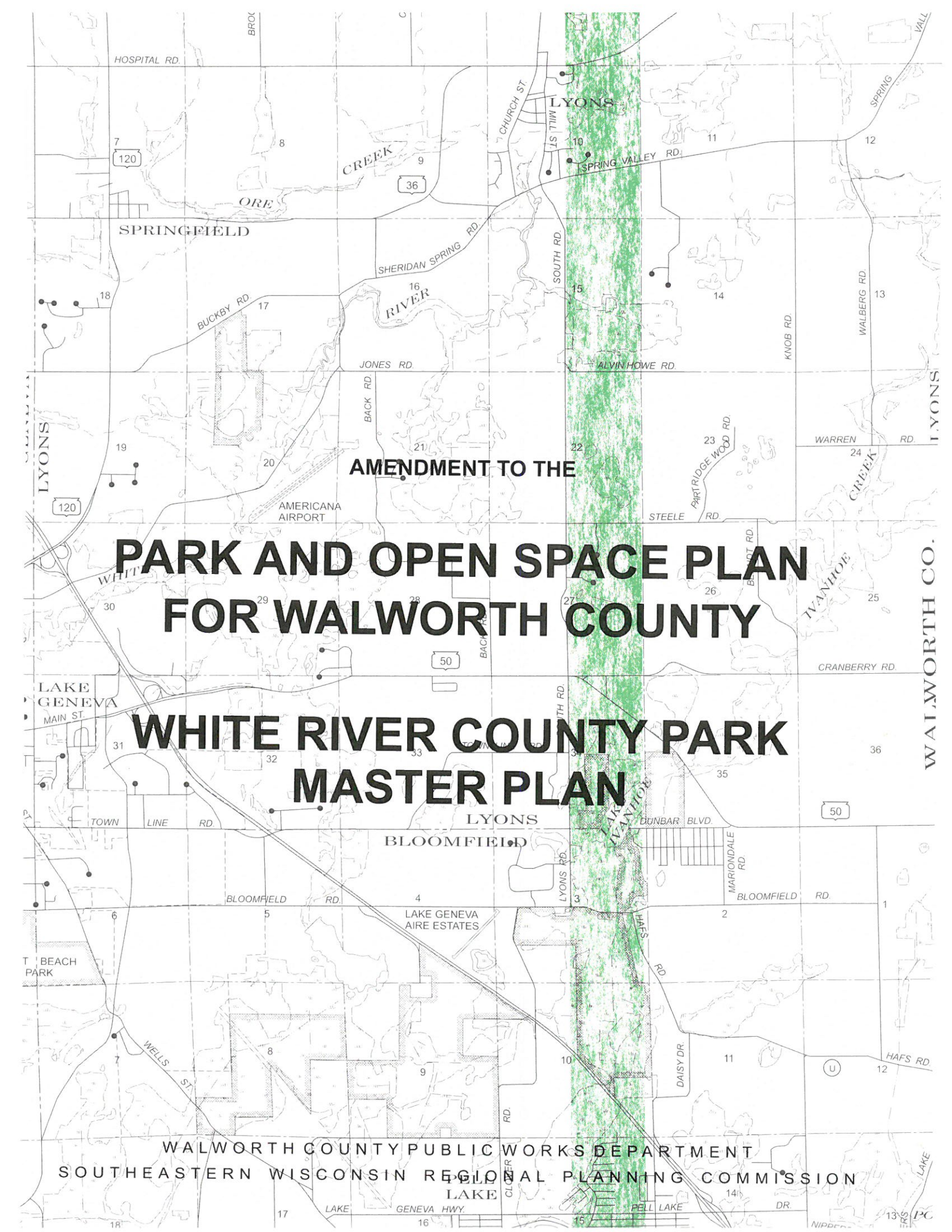

AMENDMENT TO THE

PARK AND OPEN SPACE PLAN FOR WALWORTH COUNTY

WHITE RIVER COUNTY PARK MASTER PLAN

WALWORTH COUNTY PUBLIC WORKS DEPARTMENT

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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Special acknowledgment is due Dr. Daniel L. Carter, SEWRPC Senior Specialist, for his contribution to this report.

AMENDMENT TO THE

PARK AND OPEN SPACE PLAN FOR WALWORTH COUNTY

WHITE RIVER COUNTY PARK MASTER PLAN

Prepared by the

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Adopted by the Walworth County Board of Supervisors on April 21, 2015

June 2015

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Chapter I

INTRODUCTION

INTRODUCTION

Walworth County has a long history of park and open space planning, going back to the 1970s. This includes the periodic updating of the County park and open space plan, the current version of which was adopted by the Walworth County Board in 2014.[1] Following adoption of the current County park and open space plan, Walworth County requested that the Southeastern Wisconsin Regional Planning Commission assist the County in the development of a master plan for a newly acquired park site now known as White River County Park. This report documents that planning process and presents the resulting master plan for White River County Park.

PLAN CONTEXT

The White River County Park site was acquired by the County in March 2014 as the County park and open space plan was being completed. This 195-acre site is located in the Town of Lyons, Walworth County (see Map 1). The acquisition of this site implemented the long-standing recommendation for the development of a new County park to serve the southeastern portion of the County. The park and open space plan for Walworth County includes specific recommendations for White River County Park with respect to recreational development and natural resource enhancement. The purpose of the master plan is to refine and detail those recommendations. This includes the identification of trail types and location, bridge crossing, picnic facilities, adaptive reuse of the existing barn, and the management and enhancement of natural resources on the site. The master plan for White River County Park will be adopted by the County Board of Supervisors as an amendment to the County park and open space plan.

WALWORTH COUNTY PARK COMMITTEE

The master plan for White River County Park was prepared under the guidance of the Walworth County Park Sub-Committee, specifically assembled for the master planning effort, and the Walworth County Park Committee as established by the Walworth County Board of Supervisors. A complete membership list of these committees is provided on the inside front cover of this report. The Walworth County Park Committee recommendations were forwarded to the County Board of Supervisors for their consideration.

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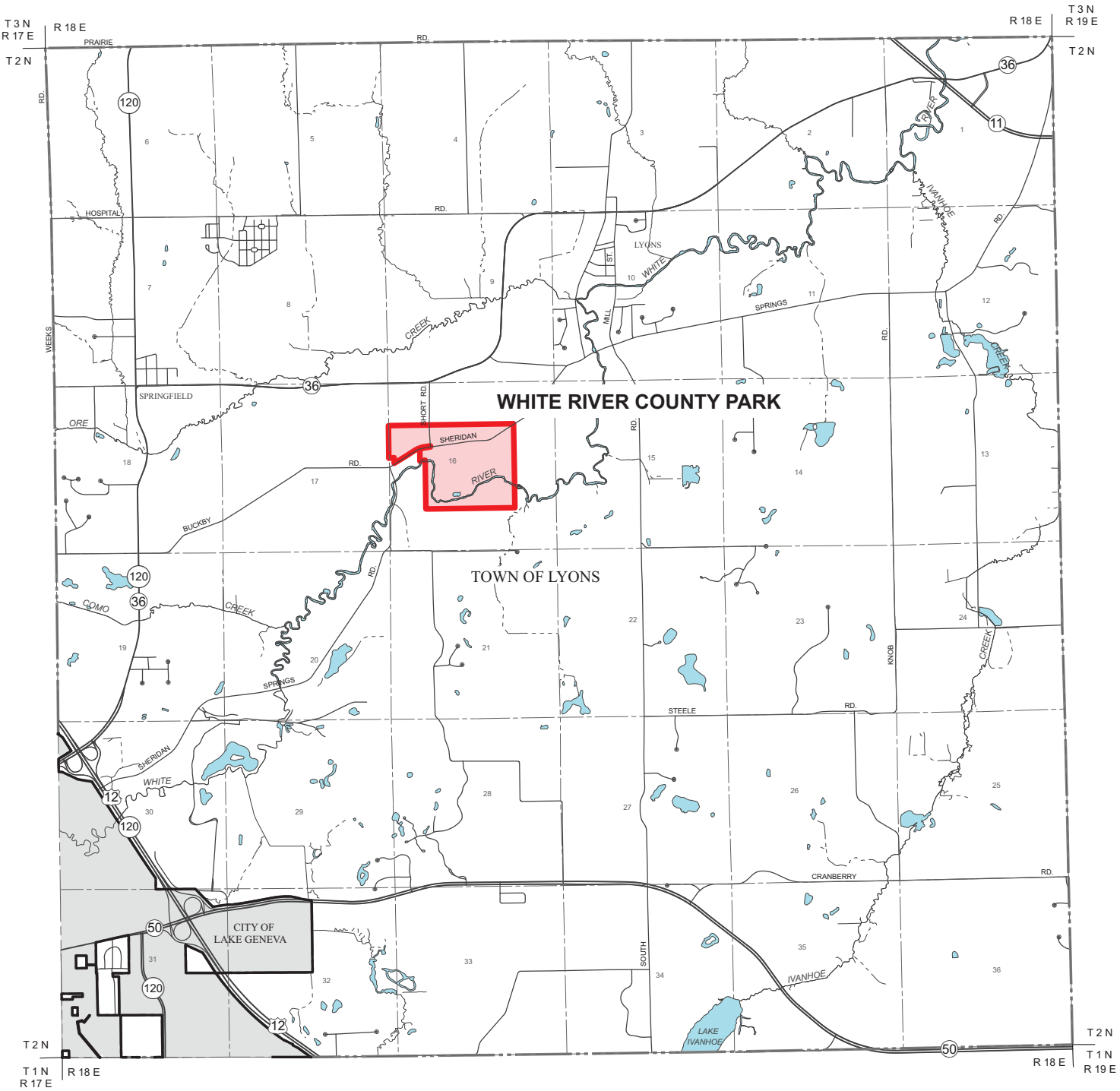
[1]*Documented in SEWRPC Community Assistance Planning Report No. 135 (3rd Edition),* A Park and Open Space Plan for Walworth County, *March 2014*.

Map 1

LOCATION OF WHITE RIVER COUNTY PARK IN THE TOWN OF LYONS



Source: SEWRPC.

REPORT FORMAT

The findings and recommendations of the master plan are set forth in this report. Following this introductory chapter, Chapter II of this report presents information about the White River County Park site pertinent to the planning effort, including information on the existing natural resource features of the site. Chapter III sets forth the recommended master plan for the park site and identifies the actions required to carry out the recommended plan. A summary of the plan is presented in Chapter IV.

Chapter II

EXISTING CONDITIONS

INTRODUCTION

The development of the master plan for White River County Park requires the evaluation of data relating to existing land uses and natural resources on the site. Such data provide an important basis for determining the location and types of active and passive recreational uses appropriate for the park. The inventory findings for the park site are presented in this chapter.

NATURAL RESOURCES

Surface Water Resources

Surface water resources within the park site include the White River and a small pond (see Map 2). The White River flows from the City of Lake Geneva to the confluence with the Fox River in the City of Burlington in Racine County. The park site contains a 4,500-foot segment of the river. The small pond on the site was created as a result of past quarrying activity. The surface water resources on the site provide recreational opportunities for fishing, canoeing, and kayaking, and habitat for wildlife, and enhance the site's aesthetic quality.

Floodplains

As shown on Map 2, the park site contains about 34 acres within the 100-year floodplain associated with the White River. This is the flood that may be expected to be reached or exceeded in severity once every 100 years (there is a 1 percent chance of this event being reached or exceeded in severity in any given year). Every effort should be made to ensure that future trail improvements, including river crossings, are compatible with the existing floodplains on the site.

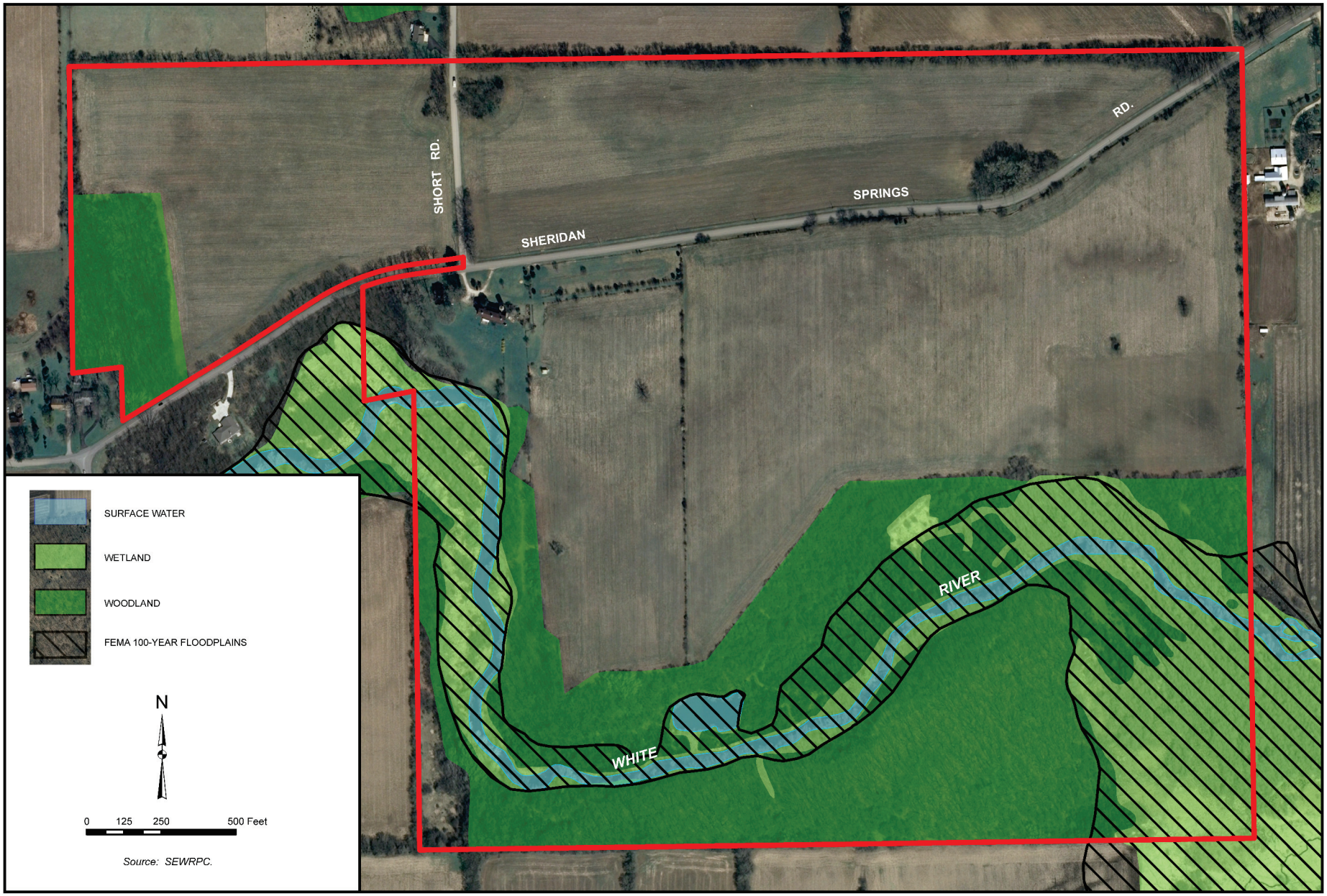
Wetlands

The location and extent of wetlands within the park site as field-verified and -delineated by Regional Planning Commission staff are shown on Map 2. As shown, wetlands cover about 21 acres, or about 11 percent of the site. The wetland complex on this site consists of a number of types of wetlands, including shallow marsh, fresh (wet) meadow, sedge meadow, and second-growth, Southern wet to wet-mesic lowland hardwoods.

Wetlands are important resources for the ecological health and diversity of the site. They provide essential breeding, nesting, resting, feeding grounds, and escape cover for many forms of fish and wildlife. Wetlands also contribute to flood control, because such areas naturally serve to store excess runoff temporarily, thereby tending to reduce peak flows. Wetlands may also serve as groundwater recharge and discharge areas. In addition,

Map 2

SURFACE WATER, WETLANDS, WOODLANDS, AND FLOODPLAINS IN AND ADJACENT TO WHITE RIVER COUNTY PARK: 2010



wetlands help to protect downstream water resources from siltation and pollution by trapping sediments, nutrients, and other water pollutants. Every effort should be made to ensure that future trail improvements, including river crossings, have minimal impacts on wetlands, consistent with existing wetland regulations.

Woodlands
As shown on Map 2, the park site contains about 49 acres (25 percent of the site) of woodlands. Woodlands are defined as those upland areas one acre or more in size having 17 or more deciduous trees per acre, each measuring at least four inches in diameter at breast height, and having 50 percent or more tree canopy coverage. The woodlands on the site consists of second growth, Southern dry to dry-mesic hardwoods dominated by Bur, Red, and White Oaks.

Woodlands provide an attractive natural resource of immeasurable value. Under proper management, woodlands can serve a variety of beneficial functions. In addition to contributing to clean air and water and regulating surface water runoff, the maintenance of woodlands within the site can contribute to sustaining a diversity of plant and animal life. These woodlands should be maintained and managed for their scenic, wildlife habitat, recreational, and air and water quality protection values.

Wildlife Habitat
The natural resources described above combine to form an area that provides significant wildlife habitat. The area provides habitat for both game and nongame species such as rabbit and squirrel; predators such as mink, fox, and raccoon; game birds including waterfowl and turkey; whitetail deer; and songbirds. Proper preservation, management, and enhancement of the natural resources involved will serve to ensure that the area continues to support a wide range of wildlife.

Soils
Soil properties exert a strong influence on the manner in which land is used. The detailed soil surveys prepared by the U.S. Natural Resources Conservation Service (NRCS) provide definitive data on the physical, chemical, and biologic properties of specific soil types, along with interpretations of the soil properties for planning, engineering, agricultural, and resource conservation purposes. Given the potential for restoring portions of the park site to native vegetation, it is important to consider the suitability of the soils for such efforts. Included in the NRCS data are soil suitability groups for wildlife habitat. The soil suitability groups for wildlife habitat within the park site are shown on Map 3 and are described below:

- Group 1 – This group consists of well-drained upland soils. The specific soils included in this group within the park site are Fox Silt Loam, McHenry Silt Loam, Miami Loam, and Miami Silt Loam.

- Group 3 – This group consists of nearly level to sloping, deep, well-drained soils. The soil included in this group within the site is St. Charles Silt Loam.

- Group 5 – This group consists of shallow, loamy, sloping to steep, upland soils. The soils included in this group within the site are Casco Loam, Casco-Rodman Complex, and Rodman-Casco Complex.

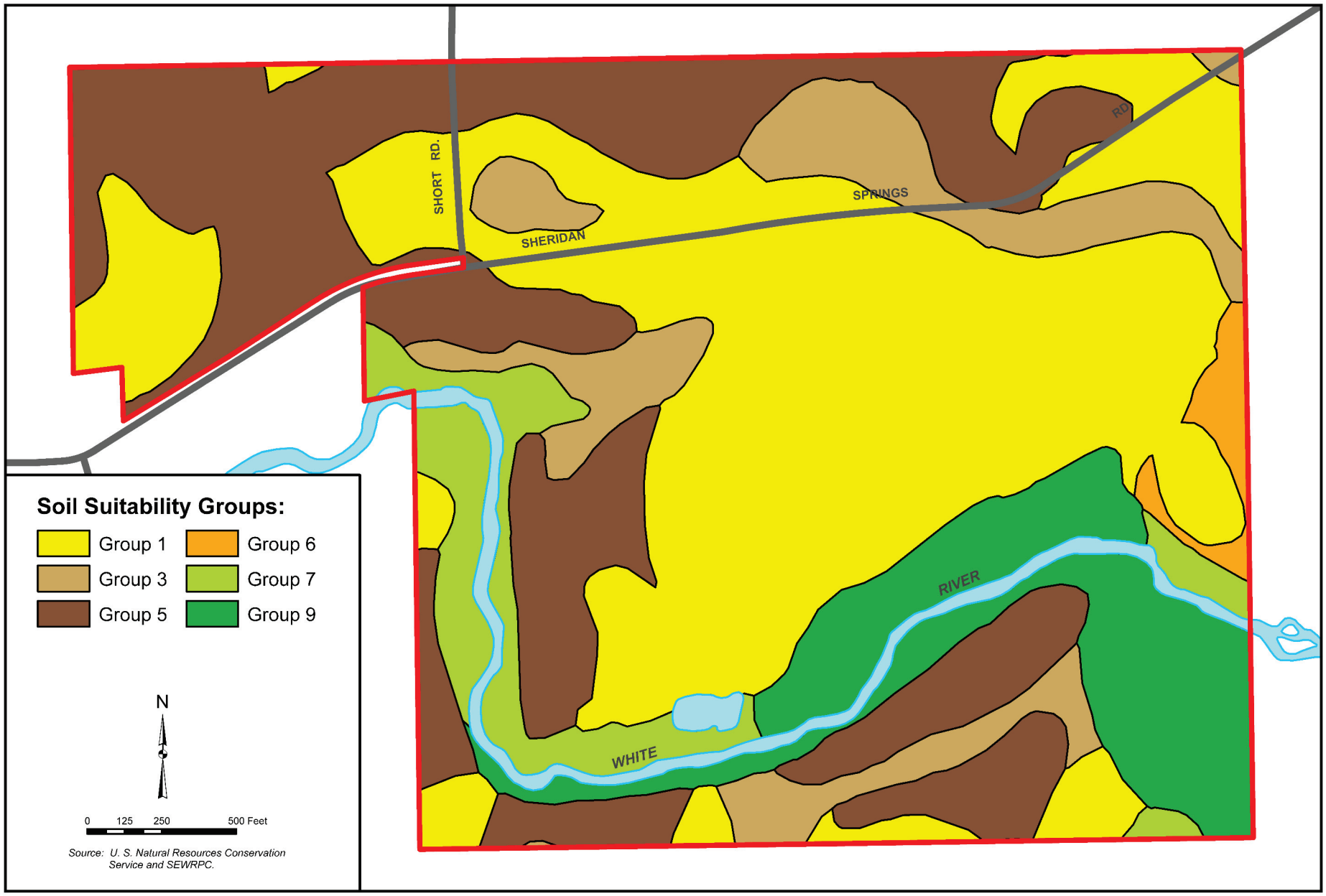
- Group 6 – This group consists of somewhat poorly drained soils. The soils included in this group within the site are Elburn Silt Loam and Matherton Silt Loam.

- Group 7 – This group consists of poorly drained soils. The soils included in this group within the site are Navan Silt Loam and Wet Alluvial Land.

- Group 9 – This group consists of organic soils in depressions and nearly level areas. The soils included within the site are Adrian Muck and Houghton Muck.

Map 3

SOIL SUITABILITY GROUPS FOR WILDLIFE HABITAT WITHIN WHITE RIVER COUNTY PARK



The soils in Groups 1, 3, and 5 are generally well suited to support a wide range of grassland and woodland vegetation that provides food and cover to a variety of wildlife. Care should be taken to avoid excessive erosion on steeper slopes. The soils in Group 6 are not as well suited to support grassland and woodland vegetation as in Groups 1, 3, and 5. Such soils are only located in the eastern portion of the site. Consequently, efforts to restore native vegetation in this area may be more difficult. The soils in Groups 7 and 9 are well suited to support wetland vegetation. Within the park site, these soils are largely located within the existing wetland areas that provide food and cover for a variety of wildlife.

Topography

The topography of the park site, shown in two-foot interval contours, is shown on Map 4. As shown, the topography ranges from nearly level along the river course to very steep near the southern shore of the river. The areas of steep to rolling topography provide for numerous scenic viewpoints. The design of the trail system in the park site should be appropriately aligned with the existing topography to incorporate the scenic viewpoints into the proposed trail routes.

Primary Environmental Corridors

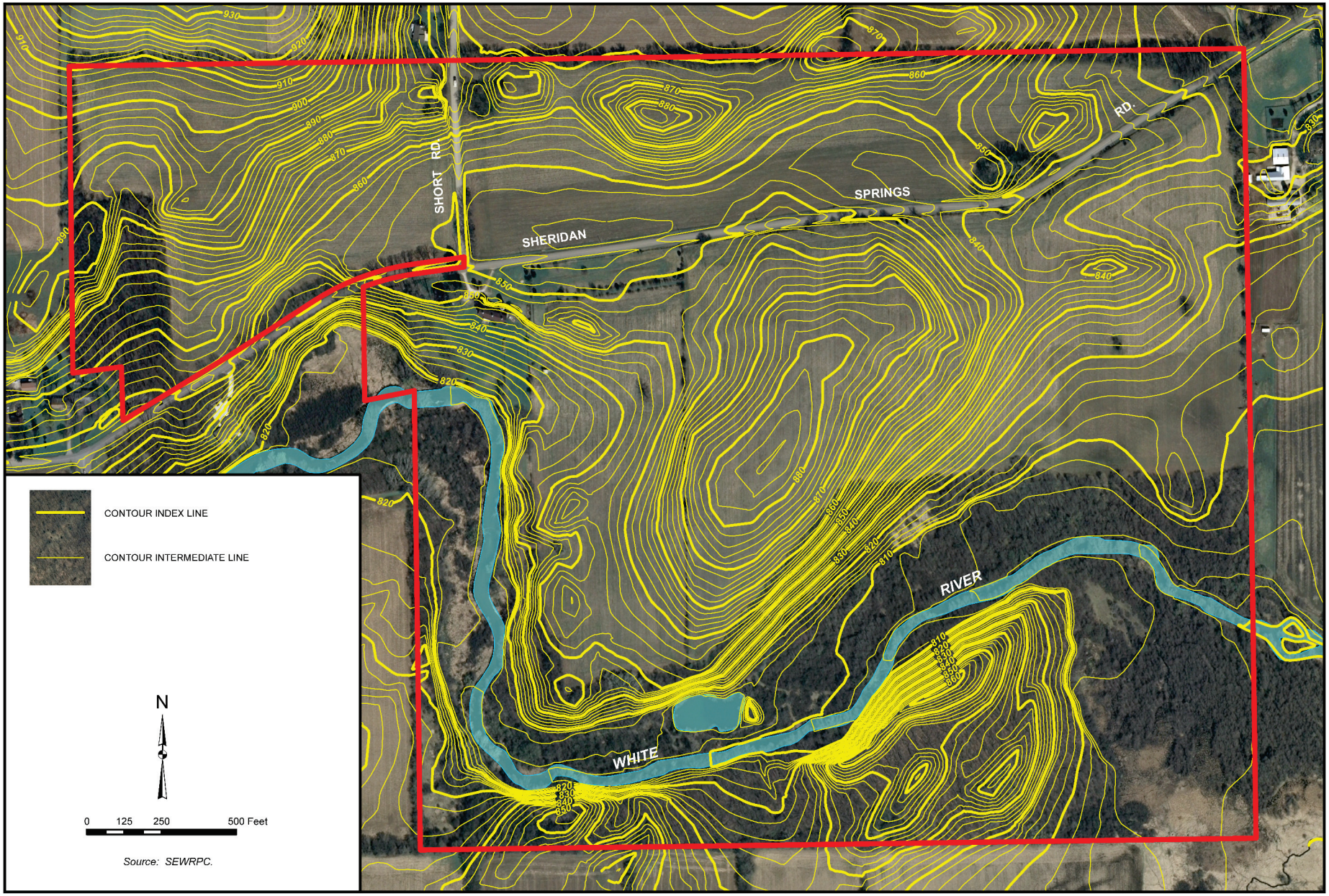
As shown on Map 5, the park site contains a portion of a larger primary environmental corridor associated with the White River. In 2010, about 75 acres, comprising about 38 percent of the total site area, were encompassed within the primary environmental corridor. The primary environmental corridor within the park site includes the various natural resources described earlier in this chapter, namely, wetlands, upland woods, significant wildlife habitat, areas of steep slopes, floodplains, and the White River. Adopted regional and County plans recommend that primary environmental corridor areas be preserved in natural, open use. The implementation of the master plan for this park will ensure the long-term preservation, management, and expansion of the natural resources involved.

AGRICULTURAL LAND

In 2010, approximately 115 acres, or 59 percent of the park site, were in agricultural use. The County currently leases the existing farmland to an individual who will continue to actively farm the area for the next several years. Over time, it is anticipated that areas will be phased out of active farming as portions of the property are restored to native vegetation.

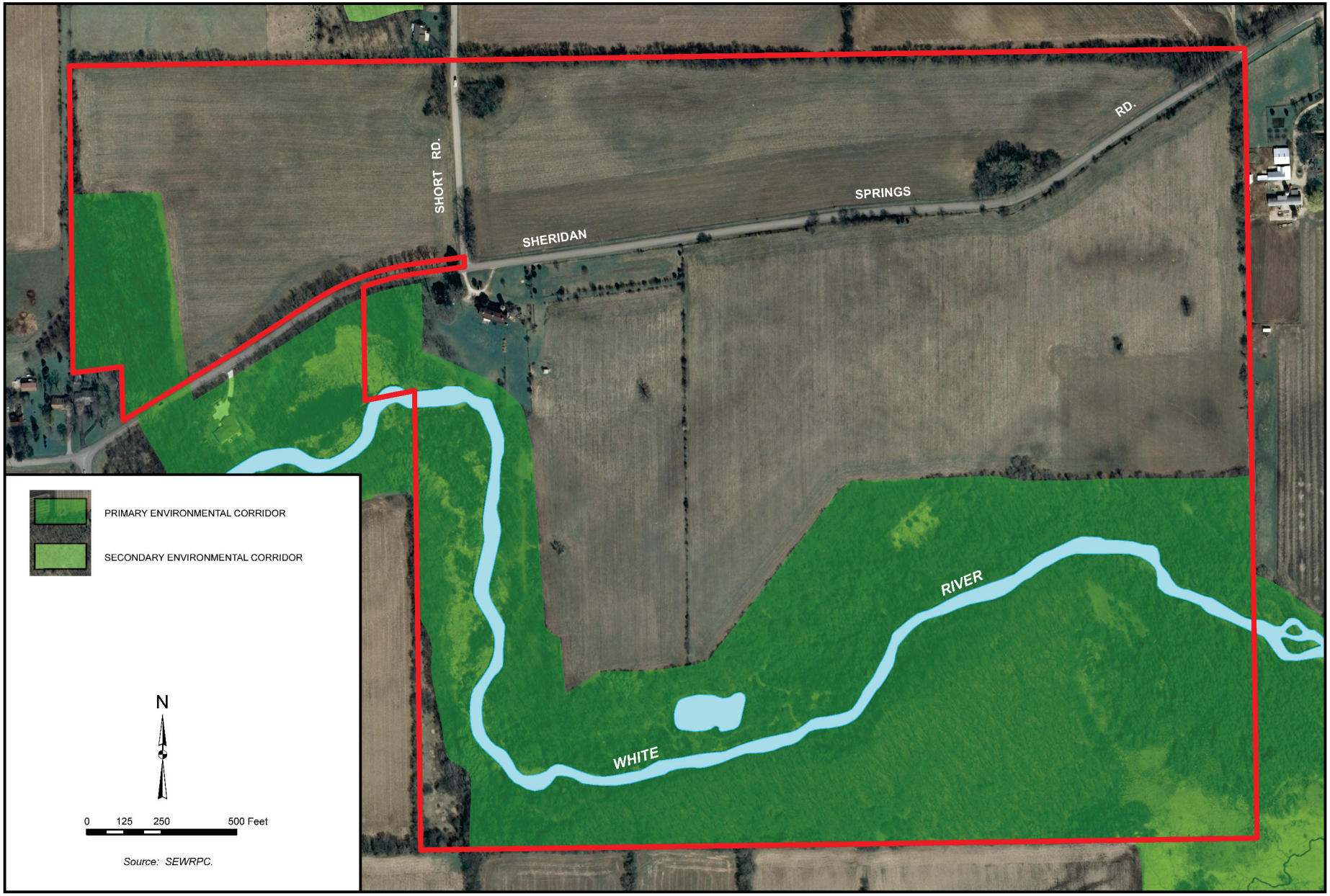
Map 4

TOPOGRAPHY IN AND ADJACENT TO WHITE RIVER COUNTY PARK



Map 5

ENVIRONMENTAL CORRIDORS IN AND ADJACENT TO WHITE RIVER COUNTY PARK: 2010



Chapter III

RECOMMENDED PARK MASTER PLAN

INTRODUCTION

This park master plan for White River County Park consists of three major elements. The first is the recreation element, which sets forth recommendations for park facilities, river access, and trails. The second element is the natural resource element, which includes recommendations related to natural resource enhancement. The third element outlines the steps required to implement the recommended plan.

PRELIMINARY DRAFT MASTER PLAN

Working under the guidance of the Walworth County Park Sub-Committee and the Walworth County Park Committee, Southeastern Wisconsin Regional Planning Commission and County staff members prepared a preliminary draft map of the master plan for White River County Park (see Map 6). The map identified the type and location of recommended recreational facilities as well as areas proposed for natural resource restoration.

The preliminary draft map of the master plan for White River County Park was presented at a public informational meeting held on March 5, 2015, at the Lyons Town Hall. The purpose of the meeting was to acquaint public officials, interested citizens, and landowners with the recommendations of the plan and to receive comments on and answer questions pertaining to the plan. Public comment on the master space plan generally included positive feedback on recommendations of the preliminary plan regarding hiking trails, park facilities, and preservation of natural resources. Two specific issues were raised at the meeting, both relating to bicycle trail facilities. One issue related to the desirability to provide a bicycle trail link to the White River State Trail. The staff noted that such a link is recommended in the master plan, as well as in the Walworth County park and open space plan. The second issue related to the potential to accommodate mountain biking within the park. It was noted that mountain biking would not be compatible with the trails proposed in the plan.

On the basis of a review of the comments received at the public informational meeting, it was determined that no changes to the draft master plan were necessary and that the master plan (Map 6) as presented at the public informational meeting would be the final recommended plan for White River County Park.

RECREATION ELEMENT

The master plan for the development of recreational facilities within White River County Park is shown on Map 6. The anticipated schedule and estimated cost for the development of the park is shown in Table 1. The specific recommendations for facility development are described below.

Map 6

MASTER PLAN FOR WHITE RIVER COUNTY PARK

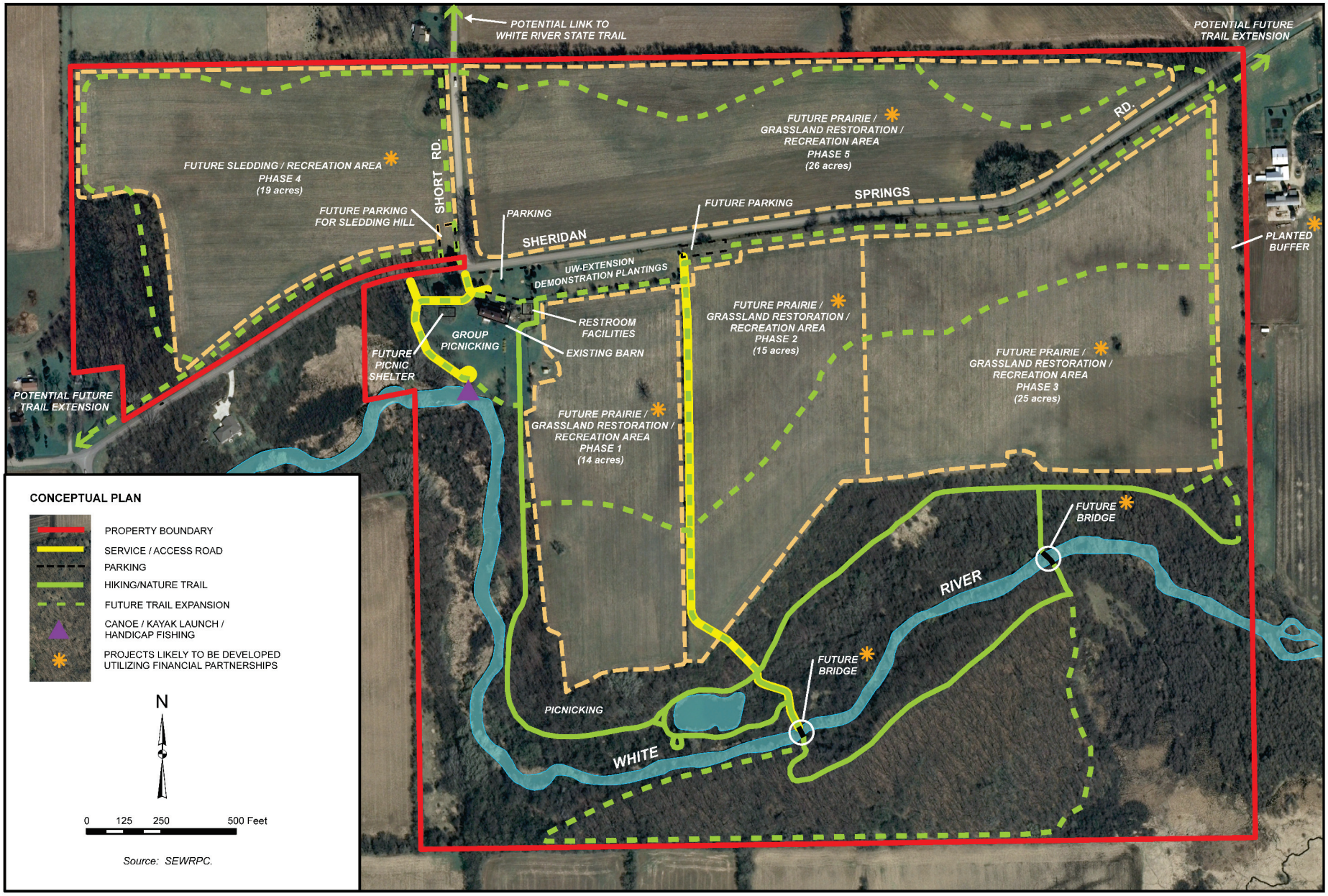


Table 1

PROPOSED DEVELOPMENT FOR WHITE RIVER COUNTY PARK

Proposed Facility Development	Length/Area	Development Schedule	Development Cost
Prairie/Grassland Restoration Phase I	14 acres	January 2016	$14,000[a]
Prairie/Grassland Restoration Phase II	15 acres	January 2017	$15,000[a]
Prairie/Grassland Restoration Phase III	25 acres	January 2018	$25,000[a]
Prairie/Grassland Restoration Phase IV	19 acres	January 2019	$19,000[a]
Prairie/Grassland Restoration Phase V	26 acres	January 2020	$26,000[a]
Additional Parking/Sledding Area	- -	2019	$50,000
Asphalt Paving for Existing Parking Lot	- -	2017	$30,000
Picnic Shelter	- -	2016	$32,000
Buffer Plantings	3 acres	2016	$3,000
UW-Extension Demonstration Plantings	1 acre	2015	- -
Bridge #1 (west)	- -	2015	$70,000
Bridge #2 (east)	- -	TBD	$75,000
Canoe Launch/Picnic Shelter Access Road	500 feet	TBD	$7,500[b]
Canoe Launch	- -	TBD	$2,000
Bridge Access Road	1,760 feet	2015	$28,500
Trails (excluding access roads)	5.3 miles	Developed with phases of prairie/grassland restorations	- -[c]
Barn Renovation – Initial Improvements, roof, windows	- -	TBD	$150,000
Barn Renovation – Future phases	- -	TBD	$125,000
Total	- -	- -	$672,000

NOTE: Cost estimates are expressed in 2015 dollars.

[a]*$1,000 per acre*
[b]*$15 per foot*
[c]*Cost of hard surface trails included in cost of access roads. All other trails to be mowed with no cost for materials.*

Source: SEWRPC.

Trail Facilities

Under the plan, about six miles of trails would be provided within the park to enable participation in such activities as hiking, nature study, and ski touring. The existing and proposed trails are shown on Map 6. The trails will be a combination of mowed soft trails, hard surface trails (gravel/crushed stone), and boardwalks (if necessary). The trails will be hard surface in situations where the trail is located on the proposed service roads. The precise route of the trails is to be determined by County staff. Nature study signage also may be included along trails as appropriate. A pond overlook area should also be incorporated into the trail route. As shown on Map 6, the plan identifies a potential trail link that would connect the park to the White River State Trail, consistent with the Walworth County park and open space plan. The plan also identifies potential trail extensions to the east and west as part of the proposed White River/Delavan Recreation Corridor Trail, as recommended in the County park and open space plan.

Bridges

As shown on Map 6, the plan recommends that two bridges be provided to allow for trails to be developed on both sides of the White River. The bridges will need to be constructed at a sufficient height to facilitate the passage of canoe/kayak users.

Service Roads

A portion of the trail system will accommodate vehicular access to the proposed canoe/kayak launch, picnic shelter, and the westernmost bridge (see Map 6) and consist of a hard base (gravel/crushed stone). Because of poor sight lines, the westernmost service road should be used only for park entrance.

Picnicking
As shown on Map 6, the plan recommends both informal and group picnic areas. As part of the group picnic area, the plan also recommends the construction of a picnic shelter near the location of the former farmhouse. The shelter should include electric and water service.

Parking Areas
In addition to the existing parking lot at the park entrance, the plan proposes two additional parking areas. As shown on Map 6, the proposed parking lots would be located along Sheridan Springs Road, adjacent to the longer service road and adjacent to Short Road. The parking lot adjacent to Short Road is intended to provide parking for the sledding hill.

Canoe/Kayak Launch
The plan recommends the development of a canoe/kayak launch to provide easy and safe access to the White River. This will implement County park plan recommendations for providing public access with parking to the White River. It is proposed that the construction of the canoe/kayak launch will also accommodate fishing for persons with disabilities.

Barn – Nature/Multi-Use Center
The barn located in the White River County Park was constructed in 1936 and is a bank type (built into the side of a hill that provides access to both first and second floors) with a gambrel roof (double slopes on both sides of the roof with the lower slope having a steeper pitch than the upper slope). A study of the barn conducted in June 2014 by The Peter Scherrer Group of Burlington identified a number of basic improvements and repairs needed to keep the barn structurally sound, protect it from further deterioration, and address safety and security deficiencies. The primary recommendations with respect to the barn are as follows:

- **The barn should be preserved and improved for future use by park visitors.** Like any building structure, the barn will require ongoing maintenance funding; however, both the short- and long-term benefits of keeping the barn as an asset to both the County and the park outweigh those costs.

- **The barn should be for seasonal use only and not be considered for year-round use.** Heating just the lower level of the barn structure would be very costly and it is likely that most of the potential public use would come during the spring, summer, and fall. Conversion of part or all of the barn to year-round use would be considered only if significant private donor contributions became available. Even then, the winter utility costs would have to be weighed against the benefits of having the barn open through the winter months.

- **The lower level of the barn is recommended to be renovated to accommodate a nature center that would include several small conference rooms, display areas, an office, and storage**. The key to this recommendation is that this space would need to be multi-functional so that it could be used for a wide variety of activities and events. This area of the barn could also be used for the rental of recreational equipment such as canoes, kayaks, and snowshoes, preferably through a third-party vendor.

- **The upper level of the barn is recommended to be used as a community gathering space that could be rented for special events such as weddings, reunions, and family gatherings.** Other counties and municipalities that operate such facilities indicate that there is significant public demand for such rental space, particularly when located in or affiliated with a public park such as White River County Park. This recommendation is made with the understanding that the upper level would need to be substantially renovated to include a small kitchen that could accommodate outside catering (not food preparation), as well as restroom facilities. While outdoor "pit" toilets are located outside the barn, it is unlikely barn users would exit the building and use those outdoor facilities.

- **The current lean-to structure located on the barn's south side should be maintained in the short term for storage purposes only; the County should not spend any funds on maintaining it**. As plans for the renovation/improvement of the barn proceed, a final decision should be made to either raze the lean-to or retain it with necessary repairs and maintenance. The concrete pad adjacent to the lean-to (former dog kennel) should be retained as an outdoor patio with picnic tables or benches.

- **In order to fully realize the potential future use of the barn, the County should continue to develop the partnerships that have been initiated with the Geneva Lake Conservancy and Friends of White River County Park.** In addition, the University of Wisconsin-Extension (UWEX) should be engaged for potential park and barn facility programming. This could be a useful outdoor classroom for some of the work that UWEX performs in the County. Public-private partnerships have led to the successful use of public park facilities in other Wisconsin counties which include uses similar to the above recommended uses of the barn. How best to fund necessary barn improvements; what features/amenities are key to the future successful use of the barn; and what is the best organizational/governance structure for the future operation and maintenance of this facility are among the many questions that should be discussed with these County partners.

Preservation and restoration of the White River County Park barn presents an opportunity for Walworth County. With careful and diligent planning and with support from the County's partners and stakeholders in this new park effort, the barn could become an important facility that will serve many generations to come.

UWEX Demonstration Plantings
As shown on Map 6, the plan proposes the development of a demonstration planting area. The area is proposed to be established through a partnership between the County and UWEX. The area will include plantings of the types of prairie/grassland species that are to be included in the larger prairie/grassland restoration areas. A system of walking paths will allow visitors to get a close look at the plants.

Sledding Hill
The northwest portion of the park site is identified on Map 6 as a potential sledding hill with associated parking. A sledding hill can be "installed" by simply mowing the prairie grasses at the end of fall each year to clear the slope. The mowed area should be close to the parking area to allow easy access.

Other Recreation
Because the site was purchased utilizing State Stewardship funds, the park must allow the nature-based outdoor activities of hunting, fishing, trapping, hiking, and cross country skiing. The accommodation of fishing, hiking, and skiing has been discussed earlier in the chapter. Hunting is allowed anywhere within the park, but is likely to occur only in the wooded areas. The County has identified a limited trapping area (see Map 7) to minimize potential conflicts between trapping activities and other park users.

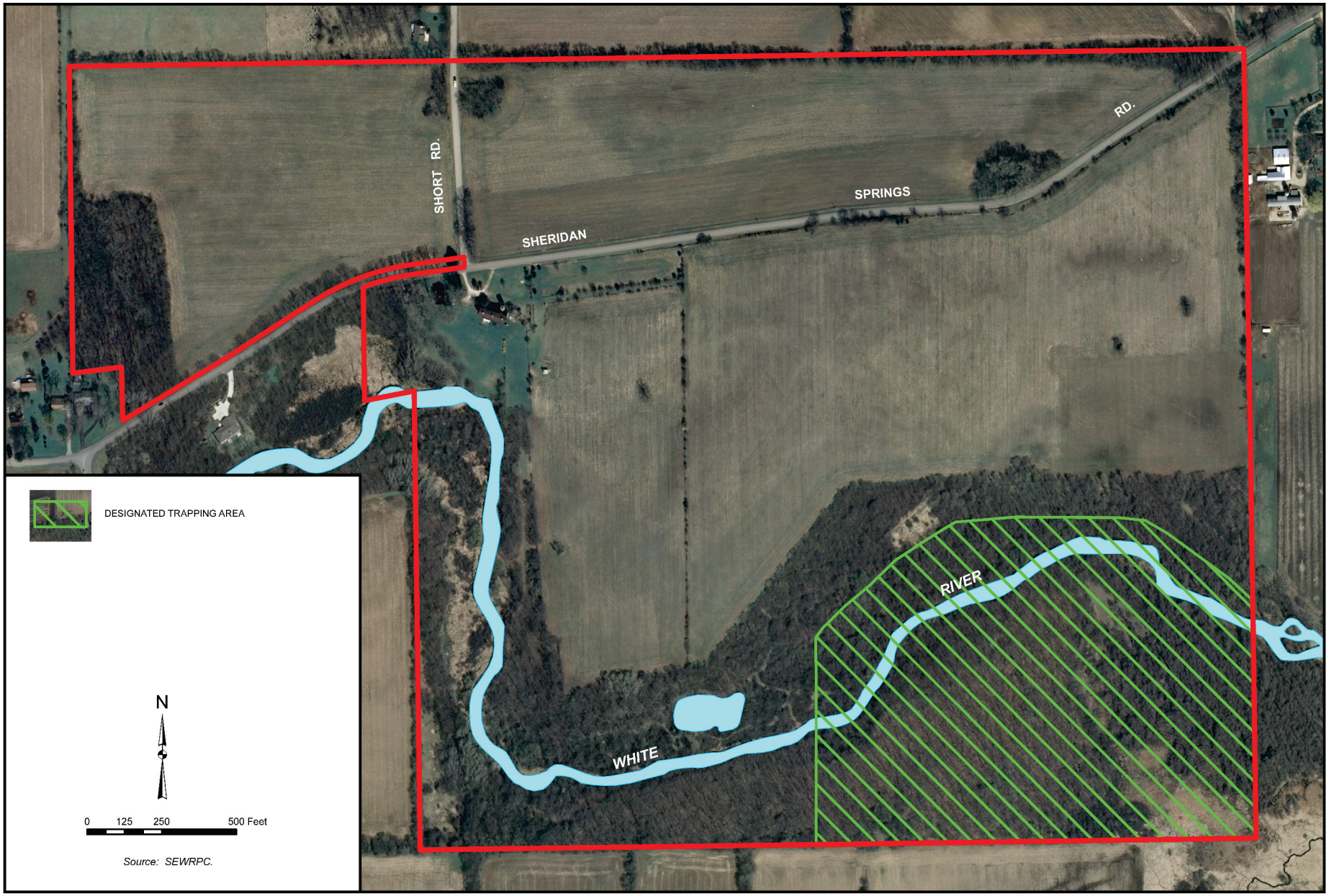
In addition, the County could consider the development of other recreational uses not specifically identified in the plan if a demand existed in the future. For example, the Walworth County park and open space plan identifies dog parks and disc golf as activities that have become increasingly popular. The development of such facilities could be considered if there were no conflict with other plan recommendations and if a public-private partnership were to be established to fund the development.

EXISTING NATURAL RESOURCE MANAGEMENT

As described in Chapter II of this report, the White River County Park contains significant natural resources including wetlands, woodlands, and surface water. Proper management of these resources is a key component of the long-term health of the park. With this goal in mind, the Geneva Lake Conservancy, in cooperation with Walworth County, prepared a document entitled *Existing Natural Areas Management Plan: White River County Park,* February 2015. That plan includes specific recommendations for the management of the resources within the park site. Recommendations for the park are summarized as follows:

Map 7

DESIGNATED TRAPPING AREA WITHIN WHITE RIVER COUNTY PARK



- Remove and control undesirable species such as honeysuckle, boxelder, and buckthorn to improve the regeneration of more valuable species such as oak and hickory.

- Harvest selected smaller trees to improve tree growth rates and the overall health of the remaining trees.

- Install additional fire breaks to ensure safe and effective controlled burns.

- Perform prescribed burns to control invasive species and to encourage the regeneration of oak trees and native grasses and flowers.

- In areas not suitable for burning, perform mechanical brush removal, using a forest mower where possible.

- Remove all unnecessary fences to improve travel corridors for wildlife.

- Utilize volunteers in coordination with the Friends of White River County Park to do as much of the work as possible in order to minimize costs.

PRAIRIE/GRASSLAND RESTORATION

Prairies once covered large portions of Walworth County, but these have been reduced to small, often degraded fragments. The restoration of prairie on presently row-cropped areas of White River County Park will directly increase the number of plant species and habitat types present, greatly increasing the site's value for wildlife and associated recreational activities such as birding and hunting. Prairie restoration will also stabilize soils on formerly cultivated areas. Below are some general guidelines for prairie reconstruction in southeastern Wisconsin.

Prior to Seeding
The existing agricultural fields should be utilized for crop production through the growing season that precedes seeding. This prevents the establishment of weeds. Herbicides with residual activity (e.g. atrazine) should be avoided for at least one (ideally two) growing seasons prior to seeding, because they will inhibit the establishment of some native species. If tillage has left an excessively uneven surface, the field should be harrowed and rolled with a cultipacker in preparation for seeding. However, cultivation and other soil disturbance prior to seeding should be minimized where possible, because it will bring weed seeds to the surface and promote erosion. Crop residue should be left behind, because it reduces erosion and creates sites favorable for seed germination.

Seeding
The desired seed mix may either be broadcast on the soil surface or planted at a depth of no more than one-half inch with a specialized seed drill, such as those made by Truax®. Broadcast seeding is preferred, because many prairie species require very shallow seeding depths in order to successfully germinate and emerge. Fertilizer spreaders work well for mechanically broadcasting seed on sites too large to sow by hand. In order to ensure even seeding, filler (e.g. coarse vermiculite, peat moss, or lightly moistened sawdust) should be mixed with seed prior to spreading (six to eight bushels of filler per acre). Seeding should occur between late October and early February, because many prairie wildflowers require a moist, cold period known as "stratification" in order to germinate. After broadcast seeding, freeze-thaw cycles that occur in the fall, winter, and early spring will serve to work seed into the soil. Seeding over snow offers the advantage of easily seeing where seeds have been broadcast, and the sun warms the seeds, causing them to drop through the snow. However, if crop residue is sparse and soils are light (if walking leaves footprints more than one-half-inch deep in dry soil), the site should be rolled before the ground freezes with a cultipacker after seeding to protect against erosion.

It is recommended that between 10 and 12 pounds of certified pure live seed (PLS) be sown per acre. Uncertified seed, hand collected or otherwise, should be broadcast at a somewhat higher rate—about 15 pounds per acre. Generally, seed mixes should contain about twice as much forb (wildflower) and sedge seed together as grass

seed by weight in order to prevent over dominance by warm season grasses. However, mixtures containing up to 50 percent native grasses can have good results if the grass portion of the mix is predominately composed of relatively short grasses like little bluestem, side-oats grama, and/or prairie dropseed.

Seed sourced from southern Wisconsin, northern Illinois, or other areas within 200 miles of the park that were either historically tallgrass prairie or prairie-forest transition should be reasonably well adapted to the White River County Park site. Most of the future prairie restoration area consists of loamy soils classified as well drained on slight to moderate slopes. Consequently, species tolerant of dry periods should be used. A small, relatively low and level area in the far southeast corner of the project area is likely somewhat wetter, but its soils are also classified as well drained. Generally, seed mixes consisting of species that prefer dry-mesic or mesic conditions should suffice for all phases of prairie restoration.

Table 2 contains two lists for potential seed mixes to be used in prairie seedings at White River County Park. The diverse mix in the table is an example of a relatively species-rich mix that could be used for the Phase 1 prairie restoration. Such a mix is desirable for Phase 1, because the seeding will have high visibility to the public and may serve as a seed source for future seedings. The second list is for a general, lower-cost seed mix that might be used in Phases 2-5. The species listed and seed amounts in the table are only meant as examples and were chosen based on the following: 1) the species being native to southeast Wisconsin and suitable for the well-drained soils at the site; 2) commercial availability of seeds; 3) inclusion of plant species with a diversity of flowering times, ecological functions, and physical forms; 4) ease of establishing species from seed; and 5) inclusion of showy species, because of public use. Seed mixes available through prairie seed vendors generally range in cost from $500 to $2,500 per acre (assuming 10-12 pounds of seed/acre), with the lowest cost mixtures containing fewer species and high proportions of grasses. The prices and availability of individual species vary, and the exact identities of species used generally matter less than proper site preparation, proportions of grasses and forbs sown, and early management. However, the use of milkweed species is encouraged, as they are host plants for monarch butterflies. Milkweeds have declined markedly in the Midwest in recent years, and so have monarch butterfly numbers. Monarch butterflies are presently under review for potential listing under the Endangered Species Act by the US Fish and Wildlife Service.

Early Management

Maintenance mowing during the first growing will prevent native seedlings from being shaded out by fast-growing weeds. While some sites may not require any mowing, most will benefit from two to four cuttings during their first year. Mowing should occur when weed growth reaches about 10 inches, cutting to a height of four to five inches. Mowing weeds before they get exceedingly tall also reduces cutting debris, which can clump and smother native seedlings. Sickle mowers are ideal because they lay down cut vegetation evenly. Rotary mowers, which are often more readily available, are also effective before weed growth is too tall or too thick. Mowing may be considered only in areas where weed canopies are closed or nearly so, as sparse weed cover will not harm the seeding. If dense and vigorous weeds are still present in the second season, one or two cuttings to a height of eight to 10 inches is beneficial. Monitoring should be done for perennial invasive species, and they should be eliminated with as little disturbance as possible.

Long-Term Management

Burning of prairie seedings should occur as soon as the plants will carry fire. This may be as early as the fall after the second growing season, or it may take several years. Weeds will be conspicuously reduced the year following the first burn. Thereafter, burning annually for five years will hasten the development of a mature prairie community with fewer invasive species problems. Research suggests that mature and remnant tallgrass prairies in nearby northeast Illinois are most diverse and stable when burned at least every other year. Burning may occur in fall, spring, or any time the vegetation is dry and there is no snow on the ground. Burning at different times in different years will promote diversity. Where habitat or direct impacts to wildlife are concerns, different portions of a prairie restoration site may be burned in alternating years. Restoration areas should be monitored for the presence of invasive species. If exotic cool season grasses are a problem, burning in late April or early May will reduce their vigor over time.

Table 2

POTENTIAL SEED MIXES FOR USE AT WHITE RIVER COUNTY PARK

Forbs and Sedges			
Common Name	**Scientific Name**	**Ounces per Acre Diverse Mix**	**Ounces per Acre General Mix**
Yarrow	*Achillea millefolium*	0.1	0.1
Nodding Onion	*Allium cernuum*	4	4
Lead Plant	*Amorpha canescens*	1	- -
Common Milkweed	*Asclepias syriaca*	0.7	1
Butterfly Milkweed	*Asclepias tuberosa*	2	1
Whorled Milkweed	*Asclepias verticillata*	0.5	- -
Heath Aster	*Aster ericoides*	0.5	- -
Smooth Blue Aster	*Aster laevis*	8	5
Sky Blue Aster	*Aster oolentangiensis*	0.4	- -
Canada Milk Vetch	*Astragalus canadensis*	0.5	4
White Wild Indigo	*Baptisia alba*	1	0.2
Cream Wild Indigo	*Baptisia bracteata*	0.1	- -
Plains Oval Sedge	*Carex brevior*	16	4
Troublesome Sedge	*Carex molesta*	4	- -
Prairie Coreopsis	*Coreopsis palmata*	0.2	- -
White Prairie Clover	*Dalea candida*	6	10
Purple Prairie Clover	*Dalea purpurea*	12	16
Showy Tick-Trefoil	*Desmodium canadense*	0.7	- -
Illinois Tick-Trefoil	*Desmodium illinoense*	1	2
Midland Shooting Star	*Dodecatheon meadia*	0.4	- -
Pale Purple Coneflower	*Echinacea pallida*	3	9
Rattlesnake Master	*Eryngium yuccifolium*	4	8
Flowering Spurge	*Euphorbia corollata*	0.1	- -
Biennial Gaura	*Gaura biennis*	3	6
Cream Gentian	*Gentiana flavida*	2	- -
Showy Sunflower	*Helianthus pauciflorus*	0.1	0.1
False Sunflower	*Heliopsis helianthoides*	2	6
Prairie Alumroot	*Heuchera richardsonii*	0.1	- -
False Boneset	*Kuhnia eupatorioides*	0.7	- -
Round-Headed Bush Clover	*Lespedeza capitata*	1	- -
Rough Blazing Star	*Liatris aspera*	4	- -
Prairie Blazing Star	*Liatris pycnostachya*	1	1
Spiked Lobelia	*Lobelia spicata*	0.1	- -
Wild Bergamot	*Monarda Fistulosa*	1	2
Wild Quinine	*Parthenium integrifolium*	1	0.6
Foxglove Beardtongue	*Penstemon digitalis*	2	1
Prairie Cinquefoil	*Potentilla arguta*	4	6
Prairie Phlox	*Phlox pilosa*	0.2	- -
Yellow Coneflower	*Ratibida pinnata**	1	1
Black-eyed Susan	*Rudbeckia hirta**	2	2
Starry Campion	*Silene stellata*	0.1	- -

Table 2 (continued)

Forbs and Sedges			
Common Name	**Scientific Name**	**Ounces per Acre Diverse Mix**	**Ounces per Acre General Mix**
Rosinweed	*Silphium integrifolium*	8	8
Compass Plant	*Silphium laciniatum*	7	7
Old Field Goldenrod	*Solidago nemoralis*	2	- -
Stiff Goldenrod	*Solidago rigida*	7	12
Ohio Spiderwort	*Tradescantia ohiensis*	1	1
Hoary Vervain	*Verbena stricta*	0.5	2
Heart-leaf Alexanders	*Zizia aptera*	2	- -
Golden Alexanders	*Zizia aurea*	9	8
	Total Ounces	**128**	**128**
	Total Pounds	**8**	**8**
	Approximate Cost/Acre	**$1,245**	**$890**
Grasses			
Common Name	**Scientific Name**	**Ounces per Acre Diverse Mix**	**Ounces per Acre General Mix**
Big Bluestem	*Andropogon gerardii**	2	2
Side-oats Grama	*Bouteloua curtipendula*	12	6
Prairie Brome	*Bromus kalmii*	2	- -
Canada Wild Rye	*Elymus canadensis*	12	12
Little Bluestem	*Schizachyrium scoparium*	16	36
Indiangrass	*Sorghastrum nutans**	4	4
Prairie Wedge Grass	*Sphenopholis obtusata*	2	- -
Prairie Dropseed	*Sporobolus heterolepus*	12	4
Porcupine Grass	*Stipa spartea*	2	- -
	Total Ounces	**64**	**64**
	Total Pounds	**4**	**4**
	Approximate Cost/Acre	**$175**	**$95**
Forbs, Sedges, and Grasses			
	Total Ounces	**192**	**192**
Total	**Total Pounds**	**12**	**12**
	Approximate Cost/Acre	**$1,420**	**$985**
	Total Ounces	**128**	**128**
	Total Pounds	**8**	**8**
	Approximate Cost/Acre	**$1,245**	**$890**

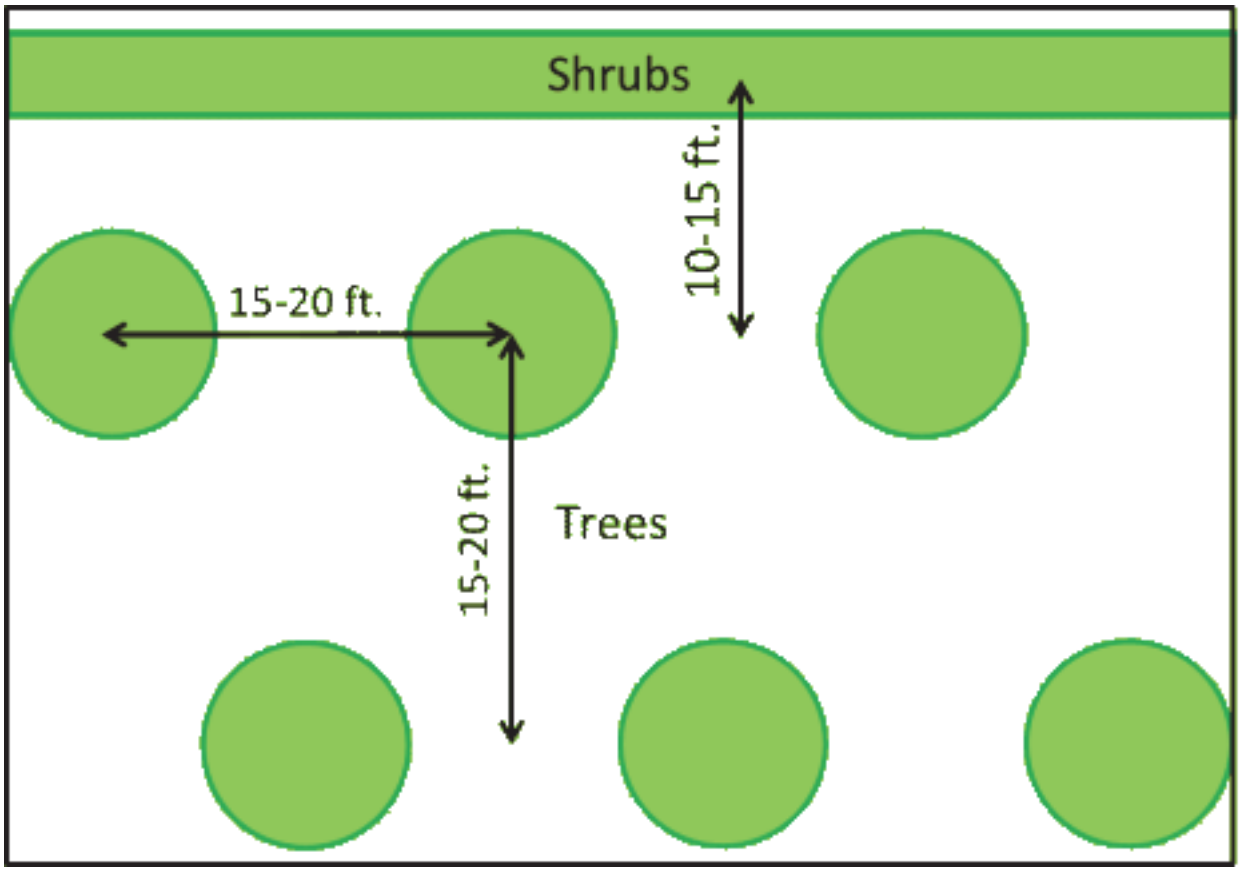
Source: SEWRPC.

TREE/ SHRUB BUFFER

It is recommended that woody vegetation suitable for well-drained soils and tolerant of full sun should be used for the planted buffer on the east side of the park between the Phase 3 prairie restoration area and neighboring property (see Map 6). The "Savannah Packet" available through the Wisconsin State Nursery would achieve the goals of screening for the neighboring property and enhancing wildlife habitat. Each packet contains 200 bare-root hardwoods and 100 bare-root shrubs at a cost of less than $300. A uniform buffer with two rows of trees and one row of shrubs along the entire eastern edge of the Phase 3 prairie restoration area would require about 250 hardwoods and 250 shrubs. It may be possible to develop a custom tree planting plan with the assistance of the Southeast Region Forester of the Wisconsin Department of Natural Resources.

Figure 1

POTENTIAL ARRANGEMENT OF TWO ROWS OF TREES AND ONE ROW OF SHRUBS



Source: SEWRPC.

A suitable tree and shrub buffer for the site could be composed of one or two rows of bur oaks (*Quercus macrocarpa*) with lesser amounts of white oak (*Quercus alba*) and shagbark hickory (*Carya ovata*). Eastern red-cedar (*Juniperus virginiana*) and/or white cedar (*Thuja occidentalis*) could be used where a four-season visual barrier is required; the former is less appealing to deer and more resistant to winter wind burn. Trees and rows of trees should be spaced 15-20 feet apart (see Figure 1). In anticipation of some attrition, an initial spacing of eight to 10 feet is recommended if small (one to two feet), bare-root trees are used. When trees have become well established, they may be thinned to the appropriate 15-20-foot spacing.

A row of native shrubs placed on either side of the rows of trees would provide additional screening and wildlife habitat. American hazelnut (*Corylus americana*) and juneberry species (*Amelanchier arborea*, *A. interi*or, *A. laevis*, *A. sanguinea*, and/or *A. spicata*) perform well in full or part sun in well-drained, sometimes dry, soils. Prairie ninebark (*Physocarpus opulifolius*) could also be used, particularly in the more level areas at the southern end of the potential buffer. Prairie ninebark is tolerant of drought, but it will perform better where soil moisture is more regular. Both prairie ninebark and American hazelnut grow to a maximum height of about eight feet and should be spaced about five feet apart. Juneberry species are either multi-stemmed shrubs or small trees six to 25 feet tall and should be spaced about five to 10 feet apart, depending on the ultimate height and spread of the species used. Native hawthorns (*Crataegus sp.*), prairie crabapple (*Malus ioensis*), and wild plum (*Prunus americana*) are additional small trees/large shrubs that would be appropriate (spacing 10-15 feet).

Tree and shrub planting should occur in early spring as soon as plants are available and soil can be worked. Smaller transplants will establish more quickly than larger nursery stock. Consideration should be given to providing supplementary water during summer dry periods in the first year to ensure greater survival of plantings. In addition, tree tubes are recommended to prevent rabbit damage, and individual trees and shrubs may require protection from deer. Weed barriers should be used to limit the growth of weeds until trees and shrubs are well-established, at which point barriers may be removed. Mowing between rows in fall will reduce hiding places for rabbits and other rodents that may cause damage to young trees and shrubs during the winter.

PLAN IMPLEMENTATION

The estimated costs associated with the implementation of the master plan for White River County Park are presented in Table 1. As indicated in Table 1, such costs are estimated at about $672,000. As noted on Map 6, it is anticipated that most of the projects proposed in the master plan are likely to be completed utilizing financial partnerships between the County and other public and private agencies and groups. This will result in a significant reduction in the County's cost of plan implementation.

Walworth County
The adoption and implementation of the master plan for White River County Park rests with the Walworth County Board of Supervisors. Any expenditures toward plan implementation, as outlined in Table 1, must also be approved by the County Board through inclusion of funds in the County annual capital improvement plan.

The Walworth County staff will be responsible for coordination of the various components of the plan, including the approval of all work performed by contractors, friends groups, and other agencies and organizations. The County will also be responsible for the administration of hunting, trapping, picnicking, and any other permits related to park use.

Wisconsin Department of Natural Resources (WDNR)
The WDNR has authority and responsibility for park development, natural resource protection, water quality control, and water use regulations. The WDNR also has the authority to administer Federal grant programs known as the Land and Water Conservation (LAWCON) Fund Program and the Recreation Trails Program within the State, and administers the State Stewardship Fund, which provides funding for county and local park and open space land acquisition and development.

It is important that the WDNR: 1) approve and certify this plan as an amendment to the Walworth County park and open space plan in order to maintain the eligibility of the County to receive available State and Federal outdoor recreation grants in support of plan implementation; and, 2) use available regulatory authority to guide park development in a way that protects important natural resources.

Friends of the White River County Park
Friends of the White River County Park is a new nonprofit organization that works to support the park by providing volunteers, fundraising and helping to coordinate park events and activities. In partnership with Walworth County, the Friends Group will assist with special projects and plan implementation by raising funds and supporting and promoting the park through interpretive, scientific, historical, educational, and related visitor services.

Geneva Lake Conservancy
As noted earlier in this chapter, Walworth County entered into an agreement with the Geneva Lake Conservancy with respect to the preparation of a resource management plan for the park site. The main goal of the plan is to control the invasive species within the site. The Conservancy will help implement the management plan by coordinating volunteers and a number of volunteer work days. The timeline of the work recommended in the management plan is dependent on the number of volunteers as well as available funding.

UWEX
UWEX staff will be responsible for the establishment of the demonstration planting area. This will include site preparation and planting of key species that are anticipated to be used in the prairie/grassland restoration areas. UWEX will coordinate volunteers to do the work and solicit donations of the necessary plants. Informational signage for various plant species will be included.

Plan Priorities
As indicated in Table 1, it is anticipated that the master plan will be implemented over the next five years, dependent on available funds. In order to provide access to the entire park site as soon as possible, the highest priority should be given to the westernmost bridge and associated access road. Construction of a park shelter near the site of the former farmhouse should also be given a high priority. In addition, work should be initiated on the development of the UWEX planting area and Phase I of the prairie/grassland restoration.

Chapter IV

SUMMARY AND CONCLUSIONS

INTRODUCTION

Walworth County has a long history of park and open space planning, going back to the 1970s. This includes the periodic updating of the County park and open space plan, the current version of which was adopted by the Walworth County Board of Supervisors in 2014. Following adoption of the current County park and open space plan, Walworth County requested that the Southeastern Wisconsin Regional Planning Commission assist the County in the development of a master plan for a newly acquired park site now known as White River County Park. This report documents that planning process and presents the resulting master plan for White River County Park.

County Board adoption of the master plan as an amendment to the County park and open space plan ensures. County eligibility to apply for and receive Federal and State aids in partial support of the development of White River County Park.

EXISTING CONDITIONS

A description of the land use and natural resources within White River County Park is presented in Chapter II. A summary of existing conditions within the site follows.

- **Surface water resources:** The park site contains a 4,500-foot segment of the White River and a small pond.

- **Floodplains:** The park site contains about 34 acres within the 100-year floodplain associated with the White River.

- **Wetlands:** Wetlands cover about 21 acres, or about 11 percent of the park site.

- **Woodlands:** The park site contains about 49 acres of woodlands, or about 25 percent of the site.

- **Wildlife habitat:** The combined surface water, wetlands, and woodlands resources provide significant wildlife habitat. The area provides habitat for game and nongame species, predators, game birds, whitetail deer, and songbirds.

- **Soils:** The park site includes a number of different soil groups ranging from well-drained upland soils to very poorly drained organic soils. Most of the soils are well suited to support a wide range of grassland and woodland vegetation.

- **Topography:** The topography on the site ranges from nearly level along the river to very steep near the southern shore of the river.

- **Primary environmental corridor:** The park site contains a portion of a larger primary environmental corridor associated with the White River. About 75 acres, comprising about 38 percent of the total site area, are encompassed within the primary environmental corridor.

- **Agricultural land:** In 2010, approximately 115 acres, or 59 percent of the park site, were in agricultural use.

RECOMMENDED PARK MASTER PLAN

The recommended park master plan for White River County Park consists of three major elements: a recreation element, a natural resources element, and an implementation element.

Recreation Element
Under the recreation element of the master plan, a number of recreational facilities would be developed within the park. The recommendations for facility development are summarized below.

- **Trails:** Under the plan, a six-mile system of trails would be provided to enable participation in such activities as hiking, nature study, and ski touring. As part of the trail system, two bridge crossings would be developed to provide to access to both sides of the river.

- **Service roads:** A portion of the trail system will accommodate vehicular access to the canoe/kayak launch, picnic shelter, and the westernmost bridge.

- **Picnicking:** The plan recommends both informal and group picnic areas.

- **Park shelter:** The plan proposes that the group picnic area include a picnic shelter.

- **Parking areas:** The plan recommends that three parking lots be provided: at the entrance, adjacent to the long service road to the bridge, and near the sledding hill.

- **Canoe/kayak launch:** The development of a canoe/kayak launch to provide access to the White River is recommended in the plan. It is proposed that the construction of the canoe/kayak launch will also accommodate fishing for persons with disabilities.

- **Barn – Nature/multi-use center:** The plan recommends the adaptive repurposing of the existing barn on the site. This will include a number of basic repairs and improvements to keep the barn structurally sound, prevent further deterioration, and to improve current safety and security deficiencies. It is anticipated that the lower level of the barn will be used for nature study, display areas, meeting rooms, and storage. The upper level is proposed to be substantially renovated to include a small kitchen and restroom facilities to enable it to be used as a community gathering space that could be rented for special events (e.g. weddings, reunions).

- **UWEX demonstration plantings:** Under the plan, UWEX, in cooperation with Walworth County, would develop a demonstration planting area with the types of prairie/grassland species that will be used in the larger restoration areas.

- **Sledding hill:** The plan recommends the northwestern portion of the park site be utilized as a sledding hill as conditions permit.

- **Other recreation:** The plan recognizes that hunting and trapping are allowed on the site and that care should be taken to minimize conflicts with other recreational uses.

NATURAL RESOURCES ELEMENT

The master plan contains recommendations for the management of existing natural resources within the park site and recommendations for the restoration of natural resources on lands currently used for agricultural purposes.

Existing Natural Resource Management
In a cooperative effort between the Geneva Lake Conservancy and Walworth County, the Geneva Lake Conservancy prepared a document entitled *Existing Natural Areas Management Plan: White River County Park,* February 2015. That plan includes specific recommendations for the management of the resources within the park site, including invasive species removal and prescribed burns.

Natural Resource Restoration
The master plan includes recommendations for the restoration of prairie/grassland areas within the park, as well as a native tree/shrub buffer area. The prairie/grassland restoration is proposed to be completed in five phases and include prairie and grassland species native to the area. The plan also includes guidelines for seeding and early and long-term management of the restoration areas. Similarly, the plan includes specific recommendations for a buffer area on the east side of the park, including tree/shrub species to be planted and the management actions necessary to ensure the long-term survival of the trees/shrubs planted.

PLAN IMPLEMENTATION

The estimated costs associated with the implementation of the master plan for White River County Park are about $672,000. The costs associated with implementation of the County park plan may be offset through State and Federal grants available to partially fund recreation and open space projects. The cost of plan implementation may also be offset by donations and through work with groups/organizations, namely the Friends of the White River County Park, Geneva Lake Conservancy, and UWEX, in cooperative efforts to raise funds and coordinate volunteers. Such efforts will result in a significant reduction in the County's cost of plan implementation.

CONCLUDING REMARKS

The Walworth County park and open space plan identified a need for a new County park site in area of White River County Park to meet the existing and probable future recreation needs of County residents. The primary purpose of the master plan for White River County Park is to refine and detail specific recommendations with respect to recreational development and natural resource enhancement within the park site. Adoption of the master plan as an amendment to the Walworth County park and open space plan makes the County eligible to receive available State and Federal outdoor recreation grants in support of plan implementation.

Appendix A

COUNTY BOARD ADOPTION OF THE AMENDMENT TO THE PARK AND OPEN SPACE PLAN FOR WALWORTH COUNTY

WHITE RIVER COUNTY PARK MASTER PLAN

Resolution No. 02-04/15

Approving an Amendment to the Walworth County Park and Open Space Plan – White River County Park Master Plan

Moved/Sponsored by: Park Committee

WHEREAS, Walworth County Board of Supervisors adopted the Walworth County Park and Open Space Plan 2035 on March 11, 2014; and,

WHEREAS, the Walworth County Park Committee recommended an amendment to the original plan on March 16, 2015 to specifically address the future improvement and land management of White River County Park which was purchased by the County in March 2014; and,

WHEREAS, the Walworth County Park Committee has prepared, with the assistance of the Southeast Wisconsin Regional Planning Commission (SEWRPC), an amendment to the Walworth County Park and Open Space Plan 2035, said plan being embodied in SEWRPC Community Assistance Planning Report No. 135 (3rd Edition); and,

WHEREAS, a summary of the amendment is attached hereto and a complete copy of the amendment entitled Amendment to the Park and Open Space Plan for Walworth County dated April 2015 is on file in the Office of the County Clerk; and,

NOW, THEREFORE, BE IT RESOLVED that the Walworth County Board of Supervisors hereby approves the White River County Master Plan amendment of the SEWRPC Community Assistance Planning Report No. 135 (3rd Edition), A Park and Open Space Plan for Walworth County.

Nancy Russell
County Board Chair

Kimberly S. Bushey
County Clerk

This (Resolution) Ordinance was:
Adopted: Roll Call/U.C./(Voice)
Rejected/Referred/Laid Over
Ayes: Noes: Absent:
Date April 21, 2015

County Board Meeting Date: April 21, 2015

Action Required: Majority Vote X Two-thirds Vote _____ Other _____

Policy and Fiscal Note is attached.
Reviewed and approved pursuant to Section 2-91 of the Walworth County Code of Ordinances:

4/14/15
David A. Bretl Date
County Administrator/Corporation Counsel

4/14/15
Nicole Andersen Date
Deputy County Administrator - Finance

If unsigned, exceptions shall be so noted by the County Administrator.