

Site Development and Management Plan



Kishwaukee Bend Conservation Area Boone County Conservation District

Site Location: 9416 U.S. Highway 20, Garden Prairie, Illinois 61038
Site Acreage: 40 acres
Existing Site Facilities: Entry Drive; One Story Ranch Style Building; 26' by 40' Utility Building; Two Story, 40' by 60' Pole Barn

Plan Approved by BCCD Board on March 18th, 2009

Site Name: Kishwaukee Bend Conservation Area – Holland Site

Date Approved by
BCCD Board: Wednesday, March 18, 2009

Attachments:

- USDA – NRCS Customized Soil Report
- GIS Aerial Photo: Floodplain & Wetlands
- Aerial Photo: “Proposed Management Zones”
- Relevant Excerpts from BCCD Master Plan

1) Purpose:

- a) This plan outlines anticipated uses, establishes management zones to preserve and protect sensitive natural areas, and identifies and prioritizes site improvements needed for public access and safe use.
- b) The plan follows guidelines provided in the Boone County Conservation District’s (BCCD) Master Plan, including aspects incorporated from the Illinois Department of Natural Resources State Wildlife Management Plan and the Kishwaukee River Ecosystem Partnership’s Strategic Plan.
- c) The plan inventories existing site facilities, describes how these facilities might be utilized, and provides an initial timeline for implementation.

2) General Provisions:

- a) **Management Zones.** The 40-acre site is divided into five basic management zones. Each of these zones can be further subdivided for specific management purposes. These five zones are shown on the aerial photograph labeled “*Site Management Zones.*”
- b) **Inventories and Assessments.** The five management zones (A through E) help define areas for further investigation, planning, and analysis. Each of these zones has been established to distinguish areas and facilities that may be utilized or managed effectively within the scope of the District’s mission and purpose. This site features existing facilities including a one story ranch style building currently used for office space; a 26 by 40 foot one story building that is being considered for renovation as a recreation hall; and a two story pole barn that is being used for equipment storage and may also be used to shelter livestock involved in habitat restoration and control of invasive plant materials. These facilities will require additional assessment and evaluation to determine the appropriate use, renovation, removal, or type of management given the unique character and circumstances of the site.

- i) Zones C, D, and E require additional assessment of plants, topography, and floodplain boundaries, to better define and plan restoration and preservation needs. The Kishwaukee River and the aquatic habitat contained within zone E will also need additional evaluation and assessment. Access to the river at this location is anticipated to support several recreation and education functions in addition to the natural functions of this aquatic resource.
- ii) BCCD staff and volunteers, along with technical support from the Illinois Department of Natural Resources Nature Preserves Commission biologists and other natural resource agencies will plan and coordinate these assessments. No specific time frame has been set to implement these projects. Funding and technical support will determine how and when the implementation occurs.

3) Five Year Management Plan:

- a) **Recognition of floodplain and its natural functions:** A significant portion of this 40-acre property is located within the floodplain of the Kishwaukee River (see aerial photo with wetlands and floodplain overlay). This natural function of the property needs to be strongly considered relative to any future improvements. It is recognized that this natural function is an essential and critical aspect of this site. Any and all future activities will be designed to not adversely affect this natural function.
- b) **Soil Limitations – Custom USDA – NRCS Soils Report:** A customized USDA – NRCS Soils Report is included with this plan to document the various soil limitations that are known to exist at this site. The data is useful in evaluating a wide variety of anticipated site improvements relative to site placement. This soils data provides the initial assessment for the proper location of access roads, parking areas, on-site wastewater treatment systems, trail development, and much more. Additional refinement of this data may still be needed as specific project work is started or planned in greater detail.
- c) **Proposed Management by Zone:** Establishing a new conservation area poses a number of challenges to the BCCD. The initial challenge is meeting public expectations for access and recreational use without causing ill effect to the unique natural resources that enticed the District to acquire the land. Specific district programming is likely to occur at this site prior to the establishment of many improvements, but these will be limited and controlled activities. The priority of this management plan is to concurrently implement basic provisions for access and use while collecting the data needed to preserve, restore and enhance ecological features. District staff divided the 40-acre site into five management zones to facilitate this process.

d) Management Zones: The zones are labeled **A** through **E** and include the Kishwaukee River as a separate management zone. The following description is offered for each zone.

i) Zone A features the open field areas. This zone is anticipated to provide a location for public access and parking; provide area for a nursery of native plant materials; potentially provide an area for alternative energy systems (wind, solar, etc.); will initially continue in agricultural production; and is likely to be utilized for various recreational and educational functions.

(1) Access and Parking: Current access is a one lane, gravel, driveway off of U.S. Highway 20. The access was in existence at the time of purchase and has not been evaluated to determine if any improvements are needed for the new use.

(2) An area has been delineated for parking. This area is a mowed grass lot capable of parking 10 to 15 cars. The area could be expanded if needed.

(3) There is interest in evaluating the site for demonstrating various alternative energy systems. Zone A is the probable location for the installation of most alternative energy projects. Wind and solar power options are the primary systems under consideration, but other options may be explored as well. Examples of other alternatives might include small scale hydro-power (Kishwaukee River); geothermal heating & cooling; and the use of bio-fuels.

(4) Portions of this zone will be transitioned from the existing agricultural production to a nursery of native plant materials. The nursery may need to be fenced off to prevent damage from deer and other wildlife. A variety of native grasses, forbs, trees and shrubs will be grown for seed and re-distribution to other sites.

(5) Recreational uses may include a wide range of potential activities. Future uses might include: camping, picnicking, wildlife observation, dog training, hunting, archery qualifications, hiking paths, and other similar uses.

(6) Existing agricultural productions will continue in the short term (3-5 years). Zone A has been in traditional row crop production and will remain in production until the district's resources allow the transition to the other uses outlined in this plan.

(7) Although this zone is planned for a range of specific uses, the district reserves the right to utilize this zone and/or property as the district board of trustees determines to be the best use at that point in time.

ii) Zone B includes the area around the buildings.

(1) Improvements planned to occur in Zone One include:

(a) An improved roadway for public access;

- (b)** A public parking area with a capacity for fifteen to twenty vehicles, an environmental alternative to traditional hard surfaces need to be explored for suitability at this site;
- (c)** A service road for maintenance;
- (d)** A Boone County Health Department approved small scale wastewater treatment system, there is strong interest in exploring environmental alternatives to the conventional septic system; also may want to install a pre-cast concrete restroom for patrons using rental or picnic facilities;
- (e)** The buildings and mowed, cool season grass area around the buildings, will be managed for passive recreational activities and educational purposes including, but not limited to: picnicking, family or small group gatherings, meetings, programs and events. These areas are anticipated to have the most activity and use relative to the site as a whole.
- (f)** The three buildings each have several potential uses. The long term use or maintenance of the buildings is contingent on the potential for flood related damages.



- (i)** The pole barn is currently being planned to provide cold storage for district equipment. The barn may also be used to process and store native grass pellets, native seed, or similar materials. The pole barn has livestock stalls that may be used to house goats or other animals involved with habitat restoration projects.



- (ii)** The one story ranch style building is currently used for office space. This building is not protected from flooding and the basement requires sump pumps to keep groundwater out when the river rises. Long term use of this building will be contingent on the likelihood and frequency of flood related damages. The current use recognizes the fact that the basement is prone flooding. The basement will not be used to store any items that would be damaged by water. Renovations to provide ADA compliant access and restroom facilities are being planned. This building may be used for special uses, small group meetings, educational programming, recreational activities, or other similar functions.
1. Additional items planned for this building include a bio-fuel heating system, back-up electrical power supply (propane powered generator), and an improved sump-pump discharge system.
 2. Renovate the kitchen so it can be “certified” by the Boone County Health Department and used for food preparation for public programs and events
 3. The attached garage may be renovated for use by the Boone County Sheriff’s Department as a police sub-station. Any and all renovations would be planned and implemented by the Sheriff’s Department. Basic services such as electric, phone, and internet access would be available pending the establishment of an

intergovernmental agreement between Boone County and the District.



- (iii) The 24 by 40 foot building (detached garage) will be renovated to function as an all season recreation hall. The building improvements will make it suitable for family gatherings, meetings, small events, and a range of district programs. Planned renovations include a bio-fuel heating system, radiant heat distribution (subfloor), new insulation, removal of the garage doors, and an energy efficient lighting system.

iii) **Zones C & D** are largely located within the floodplain of the Kishwaukee River. Several wetland types exist here, but the area is dominated by sedge meadow. A preliminary inventory of plants was conducted by Natural Resource Management staff this summer. A copy of this inventory accompanies this plan.

(1) Management priorities for this zone include establishing a more comprehensive & detailed survey / inventory of plant & animal species. Once this is done the district can:

- (a) Target the removal of invasive plants;
- (b) Develop restoration plans to enhance or protect natural areas of higher floristic value;
- (c) Determine the need to protect threatened and/or endangered species;
- (d) Define subzone boundaries for enhanced management or preservation efforts;
- (e) Where appropriate, re-introduce prescribed burning; and

- (f) Enlist volunteer support to implement project work;
 - (g) Assessment of the river bank to inventory sites with excessive streambank erosion and determine appropriate remedies for stabilizing these areas.
- (2) Provide for educational and recreational programming.
- (a) Anticipated features include a primitive path system, fishing opportunities, primitive camping, canoe & kayak access, etc.;
- (3) Access for non-motorized watercraft to the Kishwaukee River. Note: Although the Kishwaukee River is not formally recognized as a navigable water of the State of Illinois, there are several public canoe and boat launch sites established at different locations along the river. The BCCD participated in a collaborative planning effort to create a vision for a water trail on the Kishwaukee River.
- (a) A non-motorized watercraft access is a planned project for this site. The district anticipates preparing and submitting an IDNR Boat Access Grant for financial assistance with this project;



- (4) Establish ADA accessible wildlife observation areas and trail system. The site map shows a potential location for the trail system. With minor modification, the existing deck on the back of the ranch style building could be used as an accessible wildlife observation area. Programming may be developed in collaboration with the Boone County Keen Age Center to provide access and services to those who may not otherwise be able to participate in such programming;



- iv) **Zone E** is the Kishwaukee River. The river itself has some unique attributes and poses its own need for inventory and analysis.
- (1) An inventory of aquatic plants and animals will help determine the need for specific management strategies. The district does not have the technical capabilities to evaluate this system without additional assistance from other resource agencies. This work is contingent on technical and financial assistance from outside sources.
 - (2) The river presents unique opportunities for both conservation and recreational education programming. The river combined with existing and planned site improvements is likely to provide the ideal setting for paddle sport instruction and certification for both canoeing and kayaking.
 - (3) A variety of passive recreational activities may be permitted at this site. These may include, but are not limited to: wading, fishing, tubing, hunting, dog training, wildlife observation, etc.;
- e) **Implementation Strategy.** To summarize, it is the District's objective to implement this plan so as to provide for the conservation and preservation of the natural resources of this site in a manner that is consistent with the District's Mission and Purpose. This will be achieved by assessing the site and its facilities for future uses, preservation & enhancement of unique habitats, and designating appropriate public uses and activities, where & when allowable.