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11 August 2017

Dr. Richard Kessler, Chairman Kentucky Heritage Land Conservation Fund Board c/o Tara Littlefield 801 Teton Trail Frankfort, Kentucky 40601

Dear Dr. Richard Kessler,

The Campbell County Conservation District would like to respectfully submit the Final Resource Management Plan for St. Anne Woods and Wetlands. We would like to thank the Kentucky Heritage Land Conservation Fund Board for their patience during this transition period in our District. If we may provide more information, please contact me, or our District Coordinator, Amy Winkler, at the office at 859-635-9587 or e-mail: amy.winkler@campbellkyconservation.org or campbellcd@fuse.net.

Sincerely,

Ron McCormick, Chairman

Ronald W. M. Comik

Campbell County Conservation District

Enclosures – St. Anne Woods and Wetlands Final Resource Management Plan

RWM:amw

FINAL RESOURCE MANAGEMENT PLAN Kentucky Heritage Land Conservation Fund Board (KHLCFB)

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 - A. A location map;
 - B. A boundary map;
 - C. Appropriate photo documentation of the project site;
 - D. Biological inventory completed to KHLCF standards;
 - E. Archeological inventory completed to KHLCF standards;
 - F. Site plans;
 - G. The memorandum of agreement for the project;
 - H. Any other agreements set forth in section 4.3 above;
 - I. The recorded deed(s) for the project site;
 - J. Any conservation easements which pertain to the project site; and
 - K. A copy of the preliminary RMP;
 - L. Copies of all annual management plans submitted to date.
 - M. Any other relevant documents.

1. **General Information.**

1.1. Project name: St. Anne Woods and Wetlands

1.2. Site location: Melbourne, KY

1.3. Property owner: Campbell County Conservation District

1.4. Contact name: Amy Winkler

1.5. Address: 8350 E Main Street Alexandria, KY 41001

1.6. Phone number: 859-635-9587

1.7. E-mail address: amy.winkler@campbellkyconservation.org

1.8. Website: www.campbellkyconservation.org

1.9. Brief description of natural resources:

St. Anne Woods and Wetlands is split into four separate parcels. The Woods are made up of mature old-growth forest. There are approximately 5 acres in front of the Woods that were once mowed for hay. It is now an example of secondary succession and a great habitat for pollinators. The St. Anne Convent and Retreat Center property divides this property to the Wetlands 2 parcel. This area contains a mix of hardwoods, grasses, and wetland flora. Across Route 8 there is approximately 100 acres of wetlands divided by railroad tracks. Wetland 1 South lies within the 100 year flood plain. There are wetlands that are natural as well as caused by man-made disturbances. There are hardwoods, wetland flora, and thick honeysuckle. Wetland 1 North is within the floodway and bordered on the north by the Ohio River. The terrain is relatively level with minor depressions and consists of alluvial soils. This area is mostly wooded with a small clearing/pasture found in the north central portion of the parcel. Hardwoods and wetland flora are found throughout the parcel with some honeysuckle.

1.10. Brief historical information relevant to site management:

From the information in the archaeological report and the deed transfers we can tell there have been few owners of the land. At one time the property was known as the Peter's Farm. In 1908 Mr. O'Shaughnessy purchased the property from a Peter Young and donated it to the Sisters of Divine Providence. The sisters were committed to keeping the land preserved and used the property for spiritual retreats and educational purposes. University of Cincinnati ecologist Dr. E. Lucy Braun initiated research of the woods. During the past several decades, regional colleges and universities have regularly used the St. Anne property to study flora and fauna that are rare in the region

2. Purpose.

The Campbell County Conservation District purchased 146.46 acres of land near Melbourne, Kentucky, in Campbell County for the purpose of permanently protecting approximately 102.24 acres of wetlands along the Ohio River, and approximately 44.22 acres of mature old-growth forest. Acquisition of the land by the Campbell County Conservation District through the Kentucky Heritage Land Conservation Fund Board ensured permanent protection and care of these unique areas, keeping them available into the future for continued research and educational purposes.

3. Management Activities.

3.1. Natural Resource Protection:

The St. Anne Woods and Wetlands include approximately 1000 ft. of frontage along the Ohio River, and 1,370 feet of an unnamed tributary to Four Mile Creek. The property elevations range from 458 ft. above sea level at the Ohio River to 640 feet above sea level in the woodland area.

Wetland 1 – This area includes approximately 87.96 acres between the Ohio River and KY State Road 8. The CSX Railroad divides the wetland into two sections, north and south. The resultant altered drainage from the construction of the railroad contributed to the wetlands as they are known today. This area is classified as forest and meadow wetlands.

The north section is in the floodway for the Ohio River. Common trees documented by the St. Anne Wetlands Committee include silver maple (*Acer saccharinum*), cottonwood (*Populus deltoides*), sycamore (*Platanus occidentalis*), American elm (*Ulmus Americana*), and black willow (*Salix nigra*). This section also includes an old field area that has a small functional wetland.

The south section is in flood zone AE (1% chance of flooding each year). The dominant tree species in this area is pin oak (*Quercus palustris*). Other species documented include red maple (*Acer rubrum*), ash (*Fraxinum Americana and F. pennslvanica*), elms (*Ulmus americana and U. rubra*), tulip poplar (*Liriodendron tuliperifera*), box elder (*Acer negundo*), black cherry (*Prunus serotina*), hackberry (*Celtis occidentalis*), black locust (*Robinia pseudoacacia*), sycamore (*Platanus occidentialis*), swamp white oak (*Quercus bicolor*), sassafras (*Sassafras albidum*), beech (*Fagus grandifolia*), honey locust (*Gleditsia triacanthos*), and hickory (*Carya sp.*).

Animals documented include beaver (*Castor Canadensis*), green frog (*Rana clamitans*), spring peeper (*Pseudacris crucifer*), American toad (*Bufo americanus*), ravine salamander (*Plethodon richmondi*), Jefferson's salamander (*Ambystoma jeffersonianum*), and streamside salamander (*Ambystoma barbouri*).

Newark silt loam comprises about 53% of the soils. Other soils include Rossmoyne silt loam, Wheeling silt loam, Avonburg silt loam with small areas of Aston silt loam, Huntington silt loam, Robertsville silt loam, and alluvial land.

Wetland 2 – Wetland 2 includes 14.28 acres south of KY State Road 8. This acreage represents a significant transitional zone with approximately half of the land in flood zone AE (1% chance of flooding each year, 100-year flood) and the remainder in flood zone X (area of minimal flood hazard, usually referred to as being above the 500-year flood level, or having a 0.2% chance of flooding each year).

This is a unique area due to its position at the edge of the floodplain. Vegetation in this area has not been studied, but casual observation recorded black locust (*Robinia pseudoacacia*), black walnut (*Juglans nigra*), and several varieties of maples. Several species of Bidens were also observed. Predominant soils include Avonburg silt loam, Lakin loamy fine sand, Wheeling silt loam, Robertsville silt loam, Alluvial land, and Wheeling silt loam.

Woods – The St. Anne Woods includes 44.221 acres south of KY State Road 8 and north of Four Mile Road. Most of this area is has a minimal flood hazard with the exception of the field directly south of KY State Road 8. The predominant soils are Alluvial land, Rossmoyne silt loam, Wheeling silt loam, Lakin loamy fine sand, Eden silty clay loam, and smaller areas of Brashear silty clay, Ashton silt loam, and Licking silty clay loam.

The St. Anne Woods was documented by Dr. William S. Bryant in 2003 and classified as a "mixed mesophytic forest dominated by beech and tulip poplar with major associates being sugar maple and yellow buckeye". Although some of this section was logged prior to 1970, much of the forest remained untouched and is characterized by large beech, buckeye and tulip poplar trees.

The field between the woods and KY State Road 8 was once mowed for hay. Since our acquisition of the property we have only mowed where it was absolutely necessary off the road and near a neighbor. The biological inventory has determine the presence of Common Sheep Sorrell which is highly important to the American Copper butterfly. We have since had several groups plant milkweed seed balls to promote a pollinator habitat in this area. Signs were erected to promote the natural habitat and to indicate the no mowing areas.

3.2. Resource Restoration and Enhancement:

The goal of the Conservation District is to enhance and protect a variety of habitats for migratory birds, amphibians, plants, and animals endemic to the area. Continued protection and habitat enhancement may also result in attraction of species that have been extirpated.

Removal and control of invasive species will continue to be addressed in all areas. There has been some work on invasive species control in Wetland 1 by the NKU-CER. Species targeted in this area included bush honeysuckle (mainly *Lonicera maackii*). Invasive species observed in the Woods section include bush honeysuckle, English Ivy (*Hedera helix*), and winged burning bush

(*Euonymus alatus*). It is estimated that about 15 acres of the Woods are affected by invasive species and approximately 45 acres affected in Wetlands 1 and Wetlands 2. Some areas may not be treated for invasive species removal due to ongoing research and educational programs about the effects of invasive species. In Wetland 2, there may be opportunity for reforestation, wetland restoration and native grass establishment.

The St. Anne Wetlands Committee held a wetland construction workshop in September 2012. The workshop was led by Tom Beibighauser, U. S. Forest Service, to construct six (6) small wetland areas in the old field in Wetland 1 near the Ohio River.

The Woods area contains an old field, approximately three (3) acres in size, on the extreme southern portion. This field was formerly cut for hay and could be established and kept in native grasses to develop more habitat diversity. The approximate six (6) acre field south of KY State Route 8 was once mowed for hay, but the field has been allowed to naturally regenerate. The edges of the field are mowed twice a year, once in May and once in October. Since this area is highly visible from the state road, appearance of the area to the public is very important.

The biological inventory identify endangered or threaten species, but noted the importance of Common Sheep Sorrel. If any endangered or threatened species or habitats are discovered through independent on-going research, specific management plans will be developed and implemented to protect those species and areas. Members of the St. Anne Wetlands Research and Education Center may be able to assist with the biological survey.

All protection and enhancement will continue to take into consideration the findings of the biological inventory and archaeological assessment. The Kentucky Division of Forestry developed a Forest Stewardship Plan for the entire property owned by the Sisters of Divine Providence, approximately 220 acres, in 2006. This plan would be updated and focused on the areas acquired through this grant. All work will be conducted in accordance with the Kentucky Heritage Land Conservation Fund Board Habitat Management Guidelines.

3.3. Archaeological and Historical Resource Protection:

An archeological survey of the property was conducted in accordance with the guidelines established by the Kentucky Heritage Land Conservation Fund Board. The survey noted a high probability site in Wetlands 2 where a structure has been indicated. This was determine through communications with the Sisters of Divine Providence who stated that a house stood in the vicinity until the 1950s. Maps from mid-twentieth century also showed a small structure. The rest of the property showed low to moderate indication of archaeological sites.

3.4. Staffing:

Staff will continue to be provided by the Conservation District to oversee the project. Additional staff may be secured by an intern-relationship with Northern Kentucky University or Thomas More College or by volunteers if necessary. Large projects (ex. invasive species removal) will be contracted services.

3.5. Security and Safety:

Wetland 1 is bordered on the north by the Ohio River, on the south by KY State Road 8, on the west by Anderson Road and several private landowners. The CSX railroad divides the wetland and the terrain prevents walking traffic from reaching the tracks. Trails do not pass over the railroad. The east boundary of the north section is fenced and access is permitted by appointment only.

Wetland 2 is bordered by several private residences on the north, Providence Trace subdivision on the east, and the Sisters of Divine Providence on the south and west. This property will not be open to the public besides for special events.

The Woods are bordered by KY State Road 8 on the north, St. Anne Convent on the east and south, and private residences on the west. This property would be open to the public during daylight hours once a parking area has been established.

There are no known safety hazards on the property, but a complete review will be made prior to any additional public access to the property. The borders of the property will be marked with appropriate signage and boundary marking paint. Cautionary language regarding the CSX railroad will be included. Additional signs regarding the rules for proper use of the property and emergency contact information will also be posted at the entrances and parking areas.

3.6. Maintenance:

The Campbell County Conservation District will provide staff to oversee the project, with assistance from other cooperating agencies and organizations. A representative from the Campbell County Conservation District (CCCD) will remain a part of the Northern Kentucky University Research and Education Field Station (NKU REFS).

Boundary markings will be checked annually. Trails will be monitored at least twice a year and repairs or re-alignment made as needed. Maintenance of trails will be completed by District staff and NKU REFS professors and students.

A parking area and information kiosk may be established for access to the Woods. This area would be located off of KY State Road 8 in the open field. Wetland 1 currently has a kiosk with a map and information, including educational stations. The Kentucky Heritage Land Conservation Fund Board and Campbell County Conservation District logos were added to the main kiosk as well as the KOFS logo. A small parking pull-off is located along Anderson Road to provide access to the south section of Wetland 1.

At this time, no permanent restroom facilities are planned. Refurbished portable restrooms may be purchased and cleaned by a local vendor as needed.

The cost of liability and property insurance will be absorbed by the district into their existing policy through the Kentucky All Lines Fund.

3.7. Coordination:

Through projects including the Hawthorne Crossing and St. Anne Woods and Wetlands, the Campbell County Conservation District coordinated with The Campbell Conservancy, Inc. and the Campbell County Fiscal Court to ensure that our goals as a community were being met. The Northern Kentucky University Center for Environmental Restoration has continued to work with the District in restoration, an MOA can be reviewed in Exhibit G. NKU Research and Education Field Station (REFS) started hosting groups and classes in the summer of 2016. They are located right next to Wetland 1 North. From the proximity to the St. Anne Woods and Wetlands, the NKU REFS has put the property to good use for individual research and class education. The District is happy to coordinate with NKU REFS for the best usage and maintenance of the property. The District has also worked with the City of Melbourne to assist with landowner concerns and the need to reconstruct Anderson Lane that border Wetland 1 South. Coordination with adjacent landowners will increase through educational programs scheduled through NKU REFS.

4. Improvements, Access, Agreements, Public Use, and Restrictions.

4.1. **Physical Improvements:**

The Wetlands 1 South are currently open to the public. There is a small pull off parking that's available off of Anderson Lane. Along the trail loop there are educational kiosks that have recently been renovated to explain the different sections of the wetlands. There are several bridges and small boardwalks throughout the trails. Additional boardwalks may be erected for portions of the trail that remain under water during the rainy season. A trail counter will be installed at the main entrance of the trail to monitor usage of the property for both the District's and NKU REFS records. A fence may be installed to separate those landowners on KY State Road 8 and the wetlands boundary. Wetlands 1 North has a fence around the property and remains locked. The property is available for research and community events. A trail is being developed throughout the wetlands.

A small parking area, with an information kiosk, is a possibility to create access to the Woods off of KY State Road 8. A trail will be developed from the parking area to the existing Woods trail system. This may be done by simply mowing a path for the desired trail. Seasonal wet weather may require that part of the trail be surfaced with wood chips or by other means to protect the soils from erosion. The Woods currently has approximately 4,200 feet of constructed trails. Approximately 800 feet of trail will need to be constructed to complete a loop trail and reroute a trail that currently leads to the old farmstead. There is also an approximate 200 feet of trail in need of repair due to erosion. A small earthen walkway over a stream should be removed and replaced with a bridge.

Educational signage will be developed and installed in strategic locations throughout the property, as appropriate.

No permanent restroom facilities are planned. A refurbished portable restroom will be purchased to provide this needed service, and cleaned out by a local vendor as needed. No trash collection containers will be placed on the property.

4.2. Access:

Access to Wetland 1 would be governed in conjunction with the Northern Kentucky University Research and Education Field Station. Parking access for this area is provided by a neighboring property owner, the Giving Fields (gardens). A small parking pull-off that will accommodate two school buses is located along Anderson Road to provide access to the south portion of the wetland. There are currently approximately 4,250 feet of trails through the wetlands. Trail development in Wetlands 1 North is in progress to be able to walk through the constructed wetlands.

Wetland 2 will not be open to the public. The Sisters of Divine Providence will provide a recorded easement to the tract across their property. This easement would provide for foot traffic to the site, and limited vehicular access for maintenance and research.

A small parking area may be constructed off of KY State Road 8 to permit access to the Woods. A kiosk with a map, information about the project, and project sponsors would be constructed in the parking area. A trail would be designated to the existing Woods trail system from this parking area.

4.3. **Agreements:**

All agreements executed in the future will be in compliance with the requirements of the Kentucky Heritage Land Conservation Fund Board. Current MOAs can be found listed under Exhibit G. Research permits are ongoing and the current permits can be found under Exhibit H.

4.4. Public Use:

Public visitation will be limited to daylight hours. All areas will be assessed for any existing conditions that might pose a hazard to visitors. The intended uses are for education, scientific research, and non-consumptive recreational activities to include hiking and bird and wildlife watching.

Research projects and methods will require prior approval by the Campbell County Conservation District and/or the Kentucky Heritage Land Conservation Fund Board, and any necessary permits from local, state, or federal agencies.

We understand that any other future uses or installation of permanent facilities such as shelter houses and restrooms would require written approval from the Kentucky Heritage Land Conservation Fund Board. A possible future use in Wetland 1 would include establishment of a link in a proposed path along the Ohio River for non-motorized bicycling and walking. Dogs are allowed as long as they are on a leash and owners pick up after them.

4.5. **Restrictions:**

The collection of living and non-living things will be restricted to use for qualified educational and research programs. The use of motorized vehicles (maintenance excluded) and horseback riding will be prohibited. Hunting and open fires of any kind (maintenance excluded, with proper permits) will be prohibited. The South Wetlands 1 are open to the public from dawn to dusk. All other tracts are open by appointment.

5. Monitoring.

5.1 Biological Monitoring

The Conservation District has enlisted the assistance from NKU's Center for Environmental Restoration with similar projects. We hope that with their support, we will continue this relationship with projects affecting the proposed property. The Conservation District staff is prepared for necessary monitoring of the property on a regular basis as needed. We have also partnered with NKU's Research and Education Field Station. They will be assisting with biological monitoring through their research. The CCCD receives copies of all published research studies completed on the property.

5.2 Public Use Monitoring

The proposed trail will abide by the KHLCF trail resource standards listed and trail conditions will be assessed the same. Public use of the property will be regularly monitored and groups visiting the property will be tracked for safety precautions. NKU's Research and Education Field Station will be assisting in monitoring the usage of the property. The District will receive quarterly reports to show the educational, outreach, and research usage. A trail counter has been developed and will be placed at the beginning of the public entrance of Wetlands 1 South and possible trail cams may be erected to monitor. The Campbell County police are aware of the property and will monitor when they can.

6. Identification as KHLCF Site.

A kiosk will be located at the parking lot upon appropriate installation and will acknowledge that the land was purchased with Kentucky Heritage Land Conservation funds. Additional signage has been placed at key points around the property.

Currently, there is a large kiosk with educational information at the head of the trail in the wetlands that are open to the public. The information acknowledges KHLCF and the Conservation District along with listing the logos.

7. Cost Estimate and Funding Sources.

Annual funding from the Conservation District will continue for maintenance. This does not include the Conservation District staff time dedicated to the initial start-up of the project or ongoing maintenance of the property.

The Campbell Conservancy has pledged their continuing support, volunteer services, skills and labor, and some funds for initial start-up costs, as well as continued funding as their finances allow. The Conservancy has also indicated an interest in helping the District to continue seeking both public and private funds for the establishment and maintenance of the property.

The District intends to utilize any local, state, or federal in-kind services or programs that will help implement the restoration and maintenance projects outlined in this project.

8. Priority Schedule.

Summer 2017

Complete Final Resource Management Plan.

Continue invasive species management in the south tract for highly invasive vines and herb species such as lesser celandine, winter creeper, stilt grass, and garlic mustard.

Complete collection of hydrology and vegetation data.

Fall/Winter 2017

Begin managing invasive shrubs.

Some native plantings will begin during invasive shrub management, and additional native plantings will occur after the completion of construction.

Spring/Summer 2018

Partial or full removal or plugging of the abandoned sanitary sewer line, which is partially draining surface and groundwater from the property, to restore natural wetlands hydrology.

Modification of road ditch and culvert drainage, in consultation with the City of Melbourne, to restore wetlands hydrology to the extent practical and protective of neighboring property.

Modification of land surface to restore or enhance wetlands hydrology such as filling artificial drainage swales or constructing low berms.

Fall 2018

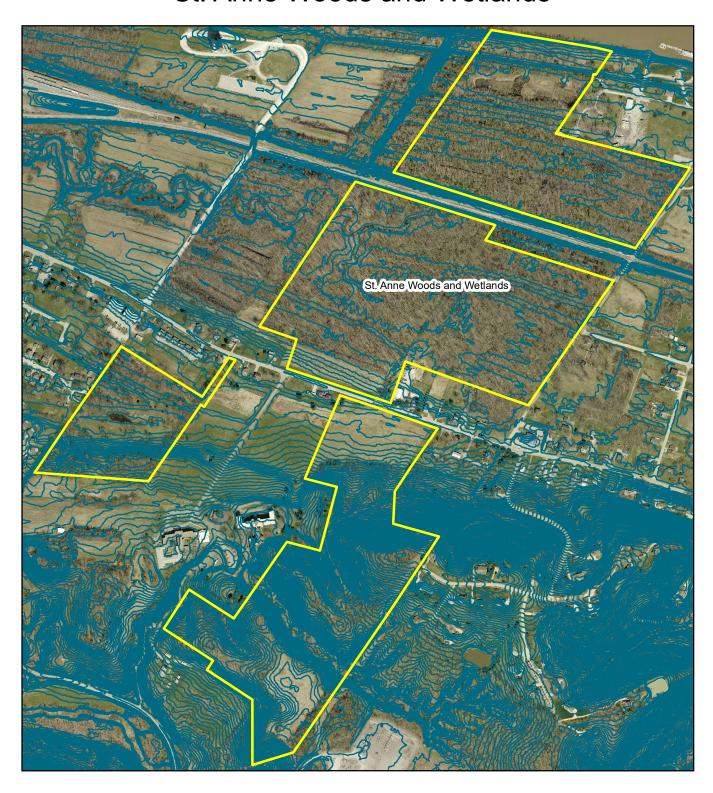
Review parking options.

9. **Exhibits**. Attach the following exhibits to the final RMP:

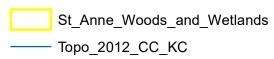
- A. A location map;
- B. A boundary map;
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- D. Biological inventory completed to KHLCF standards;
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- F. Site plans;
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- I. The recorded deed(s) for the project site;
- J. Any conservation easements which pertain to the project site; and
- K. A copy of the preliminary RMP;
- L. Copies of all annual management plans submitted to date.
- M. Any other relevant documents.

^{*}Research and educational programs on the property are ongoing.

St. Anne Woods and Wetlands



Legend



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May 2017 AMW- 2014 Aerials

St. Anne Woods and Wetlands

