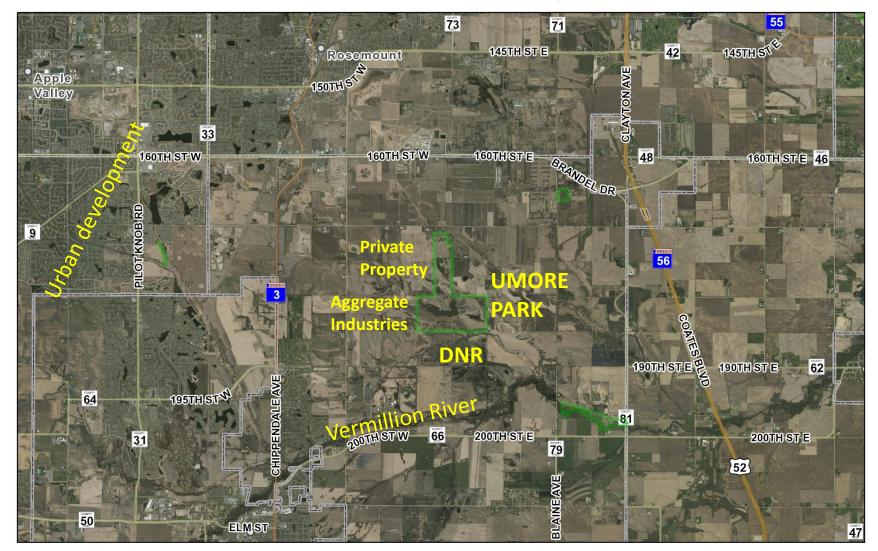
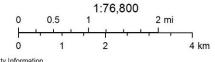


### NATURAL RESOURCES MANAGEMENT PLAN FOR WHITETAIL WOODS REGIONAL PARK: FINAL DRAFT AND RECOMMEND RELEASE FOR PUBLIC REVIEW

Joe Walton, Senior Ecologist
Tom Lewanski, Natural Resource Manager



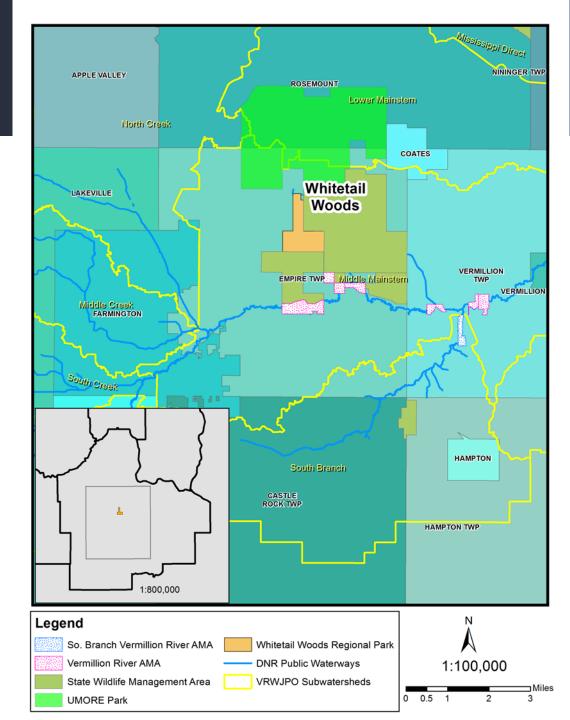
May 26, 2020



Property Information Parks & Recreation

## Highlights from the Plan

- Collaborate with Adjacent Landowners:
  - DNR
  - VermillionJPO
  - University of Minnesota
  - Empire Twp.



## VISION FOR NATURAL RESOURCES





### PROJECT RECAP



- Research & Findings
- Goals
- Recommendations
- Priorities



# Highlights from the Plan: Wildlife Projects







#### At-Risk Wildlife Species

Some Species Observed in the park

Dickcissel
 Red-headed woodpecker

Sandhill Crane Baltimore checker-spot

Some species not observed in the park, but expected

American bittern Eastern fox snake

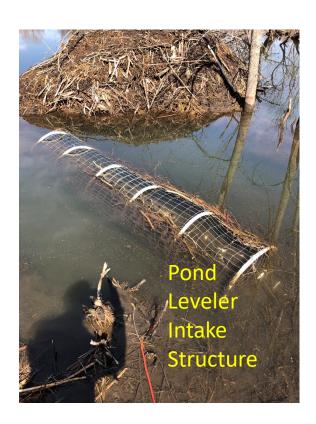
Upland sandpiper Prairie vole

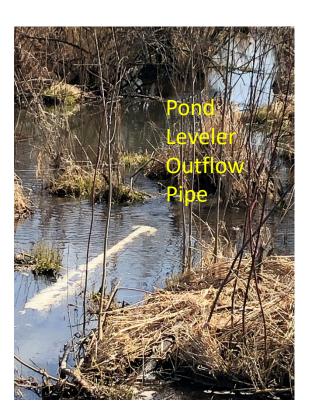
## Highlights from the Plan: Current Wildlife Project



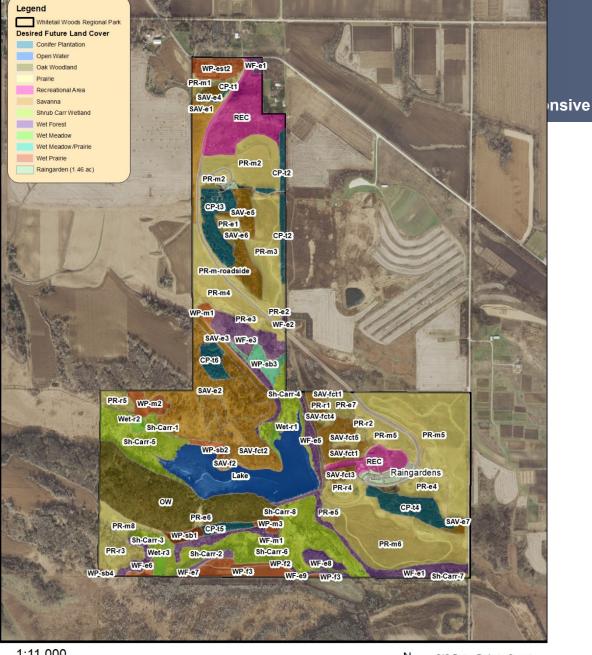
Example: Beavers in the Park—Can We Coexist with Them?







## MANAGEMENT UNITS



1:11,000 625 1,250 2,500 3,750 5,000 Fe

GIS Data: Dakota County. 2018 Aerial Photo (composite).

## WORK PLAN: Vegetation Tasks and Costs per Work Unit



Novel PC Code	Resto Time- line	Unit Description	Old Unit(s) Names	NRMP Unit	Acres	Mgmt Activity 1 Proposed (Year 1)	Cost per acre	Cost 1	Mgmt Activity 2 Proposed (Year x)	i l Cost 2		Mgmt Activity 3 Proposed (Year x)	Cost per acre	Cost 3
16	short l	Small diameter black walnut	-4 (19ECP4	PR-e4		Begin managing with fire (Yrs 1-10)	\$ 500	\$ 590	Seed with diverse prairie mix. (Yrs 2-10)			Plant bur oaks (Yrs 10-20)	\$ 2,500	\$ 2,950
17	short I	Red pine and cottonwood	<sup>-</sup> 4 (19ECP4	PR-e4		Site prep and seed prairie. (Yr 1-5)	\$ 750	\$ 443	Ongoing management (duration)	\$ 300	\$ 177			
		Old field	Н7	PR-e5	1.29	Convert weedy old field to native prairie. Blend into surrounding units as best as possible. (Yrs 1-5)	\$ 500	\$ 647	Broadcast herbicide as many times as necessary to flush out weed seed bank. Include site prep burns as necessary. (Yrs 1-5)			Prepare soil as necessary. Break up clumps. Seed with a medium diverse native savanna mix. (Yr 3)	\$ 500	\$ 647
		Weedy grassland	E1	PR-e6	0.56	Small grassland opening in woodland. Remove woody invasives. Blend into surrounding units as best as possible. (Yrs 1-5)	\$ 1,000	\$ 557	Broadcast herbicide as many times as necessary to flush out weed seed bank. Include site prep burns as necessary. (Yrs 1-5)	\$ 700		Prepare soil as necessary. Break up clumps. Seed with a medium diverse native savanna mix. (Yr 3)	\$ 500	\$ 278
		Walnut plantation	2 (clearcut	PR-e7	1.86	Clearcut B2 segment (Years 1-5)	\$ 5,000	\$ 9,310	Manage with fire (start yrs 1-5)	\$ 500		Site prep and seed native prairie. (Yrs 1-5)	\$ 750	\$ 1,396
		Roadside	25A-East	PR-m- road- side	1.99	Ongoing management- burn on rotation, spot spray occasionally, overseed following burns, monitor. (duration)	\$ 300	\$ 596			\$ -			\$ -

## WORK PLAN: Vegetation



#### Summary Table of the Vegetation Work Plan

Enhancement Cost, Yrs 1-5	Enhacement Cost, Yrs 6-10	Enhancement Cost, Yrs 11-20	Total Enhancement Cost, Yrs 1-20	Ongoing Maintenance (Yrs 1-20)	Sum Total Enhancement + Maintenance (Yrs 1-20)
\$539,243	\$93,340	\$59,643	\$692,226	\$181,708	\$873,934

### Work Plan: Water Resources



- Continue to monitor water quality, AIS, and fish species of Empire Lake
  - \$12,250 per first five years
- Improve and enhance the emergent and submergent vegetation of Empire Lake
  - \$320,000, but depends on many factors
- Restore wetlands and wetland hydrology to the south side of the park.
  - Wetland Restoration Plan, \$10,000-\$40,000
  - Example: plug the ditches south of Empire Lake
    - Costs to be determined

### Work Plan: Wildlife



- Full spectrum of taxa and species
  - Species of Greatest Conservation Need
  - Wildlife-focused projects
  - NRMSP allocated \$180,000 for the first five years
- Monitoring and collecting baseline data
  - \$10,000 for the first five years
- Species Re-introductions
  - To be determined

# Work Plan Summary with Anticipated Funding



_ ,	Estimated External Funding	Estimated County Funding	Total Estimated Funding Years 1-5	Estimated External Funding	Estimated County Funding	Total Estimated Funding Years 6-20	Total Estimated External Funding Years 1-20	Total Estimated County Funding Years 1-20	Total Estimated Funding Years 1-20
Vegetation Resources		6407.040	d500 000	6433.400	dan con	4452.000	dee2 700	6420.440	ACOR 200
Enhancement	\$431,360	\$107,840	\$539,200	\$122,400	\$30,600	\$153,000	\$553,760	\$138,440	\$692,200
Restoration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$36,320	\$0	\$36,320	\$109,040	\$27,260	\$136,300	\$145,360	\$27,260	\$172,620
VEG SUBTOTAL	\$467,680	\$107,840	\$575,520	\$231,440	\$57,860	\$289,300	\$699,120	\$165,700	\$864,820
Water Resources	T	T			_	,			
Empire Lake Enhancement	\$52,500.00	\$17,500.00	\$70,000	\$187,500	\$62,500	\$250,000	\$240,000	\$80,000	\$320,000
Empire Berm	\$0.00	\$1,250.00	\$1,250	\$0	\$3,750	\$3,750	\$0	\$5,000	\$5,000
Wetland Restoration	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Water Monitoring	\$360	\$5,640	\$6,000	\$1,080	\$16,920	\$18,000	\$1,440	\$22,560	\$24,000
AIS Monitoring	\$625	\$625	\$1,250	\$1,875	\$1,875	\$3,750	\$2,500	\$2,500	\$5,000
Fish surveys	\$0	\$5,000	\$5,000	\$0	\$15,000	\$15,000	\$0	\$20,000	\$20,000
Planning	\$0	\$40,000	\$40,000	\$0	\$0	\$0	\$0	\$40,000	\$40,000
WATER SUBTOTAL	\$53,485	\$70,015	\$123,500	\$190,455	\$100,045	\$290,500	\$243,940	\$170,060	\$414,000
Wildlife Resources					•				
Full spectrum of species, plus those of conservation interest	\$126,000	\$54,000	\$180,000	\$0	\$0	\$0	\$126,000	\$54,000	\$180,000
and concern									
Monitor and collect baseline data	\$600	\$9,400	\$10,000	\$0	\$0	\$0	\$600	\$9,400	\$10,000
WILDLIFE SUBTOTAL	\$126,600	\$63,400	\$190,000	\$0	\$0	\$0	\$126,600	\$63,400	\$190,000
SUM TOTAL	\$647,765	\$241,255	\$889,020	\$421,895	\$157,905	\$579,800	\$1,069,660	\$399,160	\$1,468,820

### NEXT STEPS



Planning Commission, May 28

Physical Development Committee, July 7

Release for 30-Day Public Review, July-August

Receive and Incorporate Comments, July-August

Plan Adoption, September 2020

### NEXT STEPS



### **Action Requested:**

Recommend to the Physical Development Committee that the draft Natural Resource Management Plan for Whitetail Woods Regional Park be released to the public for a 30-day review period.



## QUESTIONS?