

# Meeting of the Planning Commission August 22, 2019

Discussion of Public Comments and Final Draft of:

## **Lebanon Hills Regional Park Natural Resource Management Plan**

August 2019

**DRAFT**



# Request of Planning Commission

- Consider the public comments
- Recommend the adoption of the final draft Natural Resource Management Plan for Lebanon Hills Regional Park



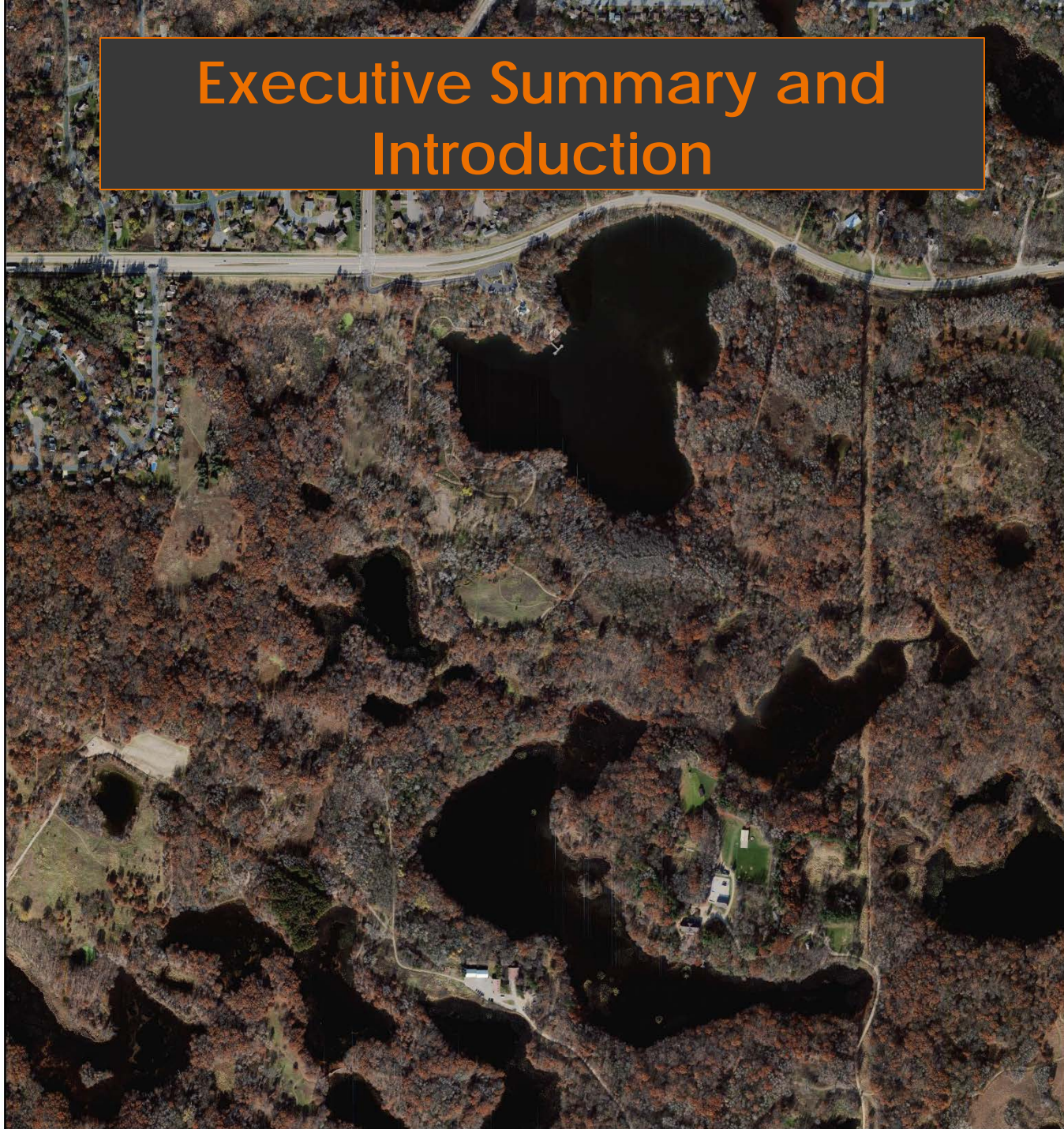
# Purpose of the NRMP



- Goals, approaches, implementation strategies and work plans
- Reverse the downward trend in natural resource quality
- Restore natural communities
- Recreational context of the park.



# Executive Summary and Introduction





# Existing Natural Resources

- Landscape Context
  - Location, regional context, adjacent land use, geology, topography, soils
- Vegetation
  - Historical and current land cover
- Fungi and Forest Pathogens
- Aquatic Resources
- Wildlife
- Rare Natural Features



# Challenges and Opportunities

## Challenges

- Altered Natural Systems
- Reduced Ecological Connectivity
- Climate Change
- Pests and Diseases
- Habitat Fragmentation
- Stormwater Management
- Potentially Impactful Recreational Activities
- Invasive Plants and Animals
- Genetic Isolation of Floral and Faunal Populations
- Loss of Species Diversity

## Opportunities

- Core Habitat Area
- Ecological Connectivity
- Remnant Plant Communities
- Diverse Wildlife
- Rare plant and wildlife species
- Reintroduction of Appropriate Species
- Wetlands
- Lakes
- Community Support
- Parks Natural Resources Program
- Public Use and Engagement
- Contemporary Master Plan



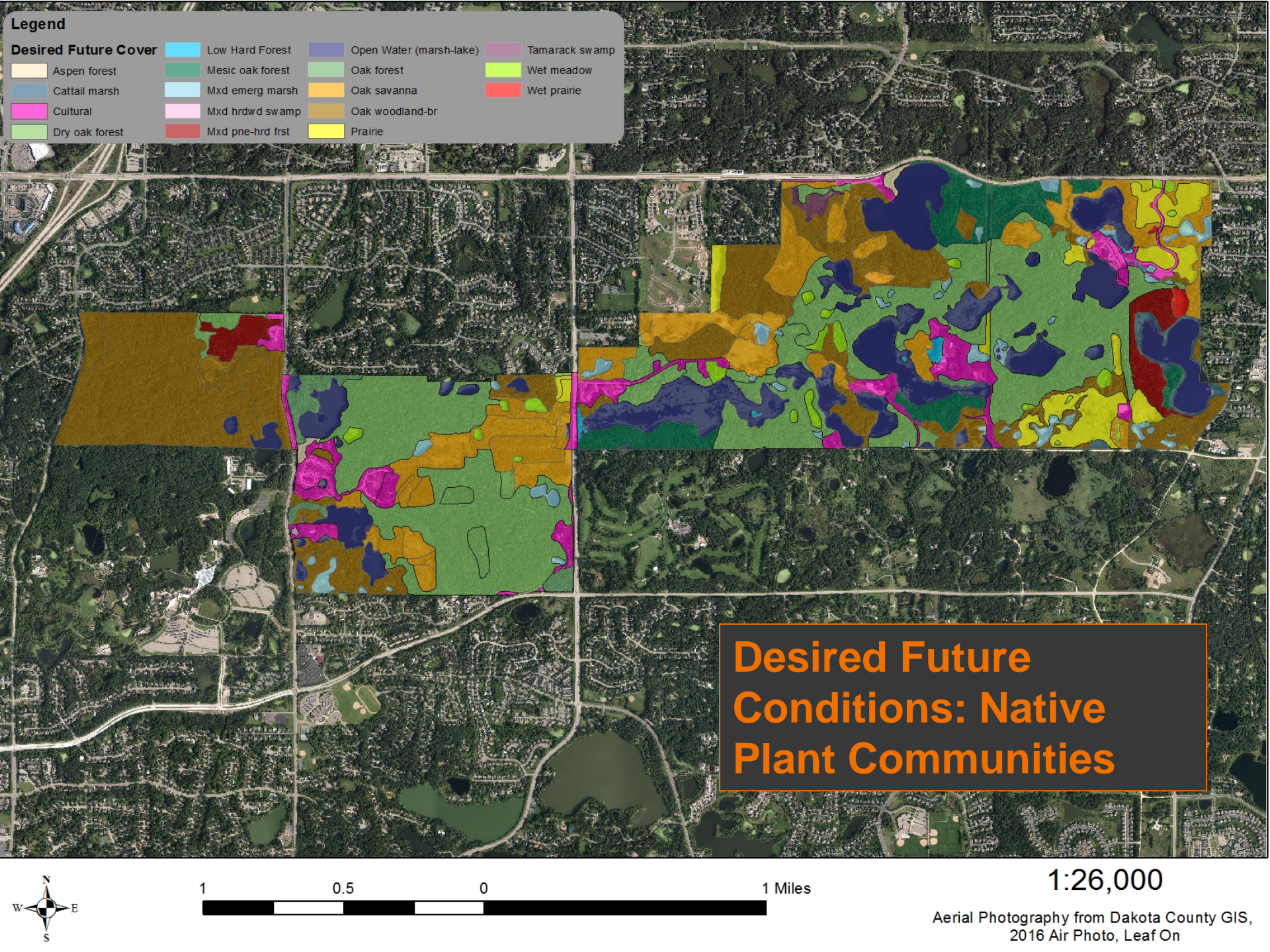
# Vision and Goals

1. Ecological Services
2. Ecosystem Resiliency and Connectivity
3. Biodiversity
4. Restore and Protect Natural Areas and Processes
5. Rare and High Priority Features
6. Balance with Recreation
7. Leverage External Funding



*Prairie Meadow Burning* by George Catlin (1832) depicts Native Americans burning prairie.



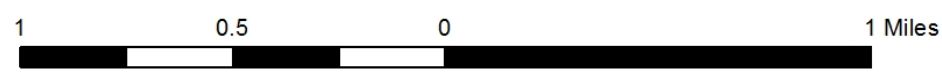




# Management Units

## Legend

- Private Property
- Park Boundary



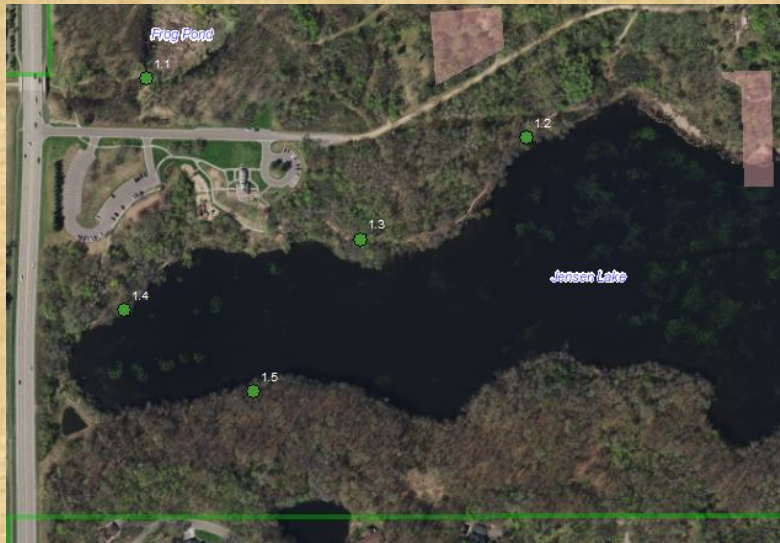
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Aerial Photography from Dakota County GIS,  
2016 Air Photo, Leaf On



# Monitoring and Reporting

- Vegetation
- Wildlife
- Water Resources





# NR Conservation, Management Prioritization, and Recommendations

- Remnant prairies/savannas
- Old-growth, oak-dominated woodlands and forests
- Wetlands
- Lakes and stream channels
- Species of greatest conservation need
- Groundwater infiltration or sensitivity areas
- Steep slopes and areas of high relief
- Restored areas
- Connecting areas
- High-use and significant recreation areas





# Management Recommendations

## Vegetation

- Restore and stabilize the vegetation of the entire park

## Wildlife

- Conserve core habitat; monitor populations; all taxa; species of greatest conservation need

## Water Resources

- Protect; restore hydrology; improve quality; monitor



# Recreation and Natural Resource Management Recommendations

Bring natural resource focus and perspective to all park use areas

- Capital Improvement Projects
- Use Areas and Cultural Areas
- Education and Outreach areas



Visitor Services staff

Promote and allow the fullest expression of the natural communities within the reasonable constraints of a Regional Park setting.



Deal with potential impacts:

1. **Avoid**
2. **Minimize**
3. **Mitigate, Restore, Rehabilitate**





# Vegetation Resources Work Plans

5-Yr Work Plan			(years 1 through 5)				
		Previously Restored Acres	Acres To Be Restored Yrs 1-5	Restore Cost	Enhance Cost	Maintain Cost	Sum Cost
East Segment, restored		600		\$ -	\$ -	\$ 240,000	\$ 240,000
East Segment			180	\$ 900,000	\$ -	\$ 72,000	\$ 972,000
Center Segment		-	100	\$ 500,000	\$ -	\$ 40,000	\$ 540,000
West Segment		-	100	\$ 500,000	\$ -	\$ 40,000	\$ 540,000
<b>Total</b>		<b>600</b>	<b>380</b>	<b>\$ 1,900,000</b>	<b>\$ -</b>	<b>\$ 392,000</b>	<b>\$ 2,292,000</b>
*Maintenance totals assume that all restored acres are in maintenance after five years.							
20-Yr Work Plan			(years 6 through 20)				
		Previously Restored Acres	Acres To Be Restored Yrs 6-20	Restore Cost	Enhance	Maintain Cost	Sum Cost
East Segment		780	189	\$ 945,000	\$ 200,000	\$ 2,286,000	\$ 3,431,000
Center Segment		100	261	\$ 1,305,000	\$ 50,000	\$ 1,008,000	\$ 2,363,000
West Segment		100	123	\$ 615,000	\$ 50,000	\$ 468,000	\$ 1,133,000
<b>Total</b>		<b>980</b>	<b>573</b>	<b>\$ 2,865,000</b>	<b>\$ 300,000</b>	<b>\$ 3,762,000</b>	<b>\$ 6,927,000</b>
		Restored Acres	Remaining Acres	Restore Cost	Enhance	Maintain Cost	Sum Cost
<b>Sum Total</b>		<b>1580</b>	<b>367</b>	<b>\$ 4,765,000</b>	<b>\$ 300,000</b>	<b>\$ 4,154,000</b>	<b>\$ 9,219,000</b>





# Wildlife 5-Yr Work Plan

Manage for the full complement of wildlife requirements in habitat restoration

Include wide spectrum of species, example:

- Grassland birds
- Frogs, toads, and salamanders
- Small mammals
- Pollinators

Consider individual species, example:

- Fisher nest boxes
- Blanding's turtles nest protection
- Monarch butterflies habitat improvement

Focus on declining species (Appendix B)

Consider wildlife species reintroductions

## Funding

- Seek external funding
- Approximately \$300,000 of County funding designated in NRMSP





# Water Resources Management Recommendations

- Subwatershed Assessment projects
  - \$491,250 for first five years
- Monitor all major water bodies
  - ~\$6,000
- Partners outside the park
- Fish surveys
  - Performed in-house
- Wetland Restoration Plan
  - \$20,000 one-time cost
- Sustainable Trails
  - Design and maintenance workshop



# References and Appendices

**Appendix A.** *Plant Species Inventory (including invasives) of LHRP*

**Appendix B.** *Wildlife Species Inventory (including Invasives) of LHRP: Observations/Indications*

**Appendix C.** *Acceptable Source Origin of Native Seed for LHRP*

**Appendix D.** *Summary of MnRAM Wetland Function and Value Ratings for LHRP Wetlands*

**Appendix E.** *Fish Survey 2018 Results*

**Appendix F.** *Herptile Survey Protocol*

**Appendix G.** *Pollinator Survey Protocol*

**Appendix H.** *Fish Survey Protocol*

**Appendix I.** *Public Engagement and Summary of Plan Outreach and Public Comments*

**Appendix J.** *Suggested Native Shrubs for Replacing Common Buckthorn*

**Appendix K.** *Utilities Map*



# LHRP NRMP Public Comments

- Public Comment Period: April 24-June 11, 2019
- Comments are listed at the end of Appendix I
- Comments are shown in their entirety
- We received approximately 40 comments



# Summary of Public Comments

## **Main Themes:**

- Support
- Trails and Additional Visitor Services Improvements
- Lack of Language Protecting Natural Resources
- Natural Resource Funding
- Natural Resource Management
- General Comments



# Draft LHRP NRMP: changes that were made to the document as a result of Public Comments

- Changes are **highlighted in yellow**, throughout the document
  - Formatting, grammar, spelling
  - Result of comments
- Executive Summary
  - Page 1 (electronic version, page 12) (County approach to natural resources)
  - 2-3(13-14), (ten main goals of the NRMP)
  - 7(18) (vegetation management cost summary table—correction on acres)
- Introduction
  - 14(25) (add section on “previous master plans for LHRP, 1980, 2001”)
  - 16-17(28-29) (note on the term “balance” regarding management approaches in parks)
  - 19-21(30-32) (added section called “The Main Problems Currently Facing the Park”)



# Draft LHRP NRMP: changes that were made to the document as a result of Public Comments

- Natural Resources Conservation, Management Prioritization, and Recommendations
  - 209(220) (prioritization)
  - Section 8.2.1.9 High Use and Significant Recreational Areas
    - 221, 222(233,234) (Proposed Capital Improvement Projects)
    - 224(235) (Effects of Trails)
- Work Plans
  - Vegetation Work Plan
    - 238(249)
- Appendix I. Public Engagement and Summary of Plan Outreach and Public Comments
  - Added: Section 10.9.1 Comments that Resulted from the 45-day Public Comment Period (April-June, 2019)
    - Appendix I page 19-38(373-393)



# Request of Commission

Recommend to the County Board to adopt the Natural Resource Management Plan for Lebanon Hills Regional Park

**Questions?**