

Natural Area Tree Monitoring

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Mission

Provide high-quality park and recreation facilities, programs, services, and natural areas that meet the needs of the diverse communities it serves

Tualatin Hills Park & Recreation District

CLIMATE ACTION PLAN

Approved: March 13, 2024

Climate Mitigation: Green Space Preservation

- Canopy & native cover in parks & natural areas
- Survey protocols showing change over time
- Tree health program







THPRD Natural Areas

- 1,800 acres
- Over 150 sites
- Management and Stewardship

Changing Landscape



Goal: Tree Monitoring Program

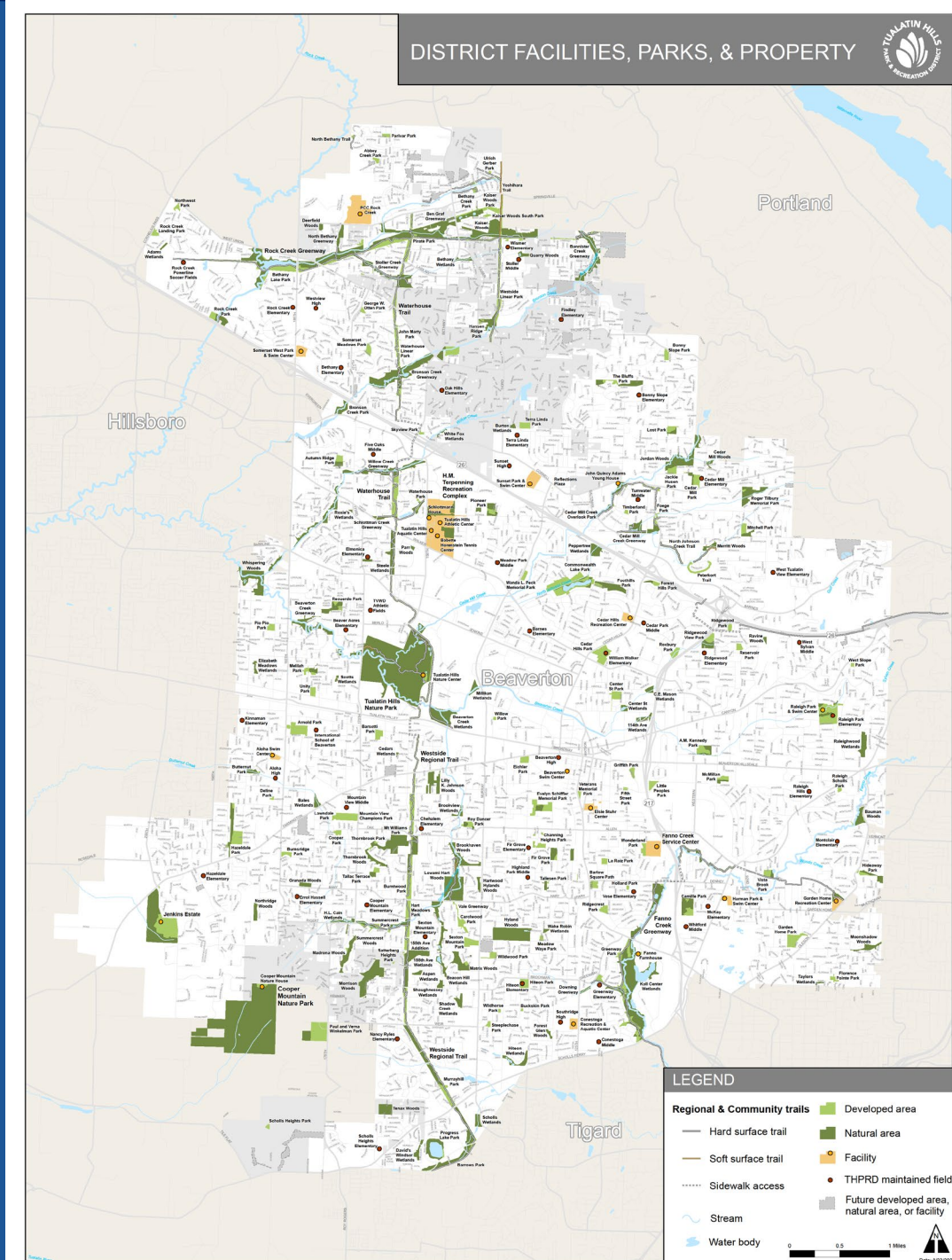
**Develop a monitoring program
that helps inform management
strategies by describing
composition and condition of
trees in natural areas over time**



Objective I

Determine Priority Sites

- Priority Matrix Factors
 - Site Ownership
 - THPRD Workgroup
 - Park Acres
 - Percent Canopy Cover
 - Water Presence
 - Previous Management
 - Park Assets
 - Neighborhood Equity



Priority Sites

- Tier I – 10 Sites
- Tier II – 14 Sites
- Staff assessed
- Representative
- 20% equity factor



Objective II

Tree Monitoring Program

- Tree Plot Protocols
- ArcGIS Field Map application
- Condition assessment



Tree Monitoring Program

- **Tree Plot Protocols**
 - Plot size - fixed radius
 - Location
 - Supplies
 - Staffing
 - Individual tree & overall plot
 - Every 3 years with intervals



Objective II

Tree Monitoring ArcGIS Field Maps



condition Done

Filter

Good tree condition

good - The tree has strong structure and is healthy and vigorous with no apparent problems. Trunks are solid with no bark damage and the crown is full. Roots show no signs of heaving or visible crossing, and there are no major wounds, decay, conks, or cavities.

fair - The tree is in average condition. Structural problems may be present. Tree may have dead branches and some canopy loss. Wounds are minimal and there is no major decay.

poor - The tree is in a general state of decline as indicated by major wounds, root heaving, dead limbs resulting in major canopy loss, and/or visible signs of decay indicated by major rot or fungal growth.

dead - The tree is dead with no live leaves. Dead trees were excluded from data analysis, with the exception of tree condition statistics and tree condition data for the last year.

Objective III

Informed Management Strategies

- Climate Adapted Species
- Monitor decline and regeneration
- Trends over time
- Financial projections



Next Steps

- Application Refinement
- Plot Surveys
- Recommendations moving forward





Lessons Learned

- **Flexibility and project changes**
- **Communication**
- **Decision Making**

THANK YOU!

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Questions

