Urban Forestry

Tree Management & Tree Maintenance on San Francisco Parklands

October 14, 2021

Trees on Parkland

- San Francisco lacks a native forest
- Most of the mature trees in the City's parks were planted in the late 1800s and early 1900s
 - Large stands of even-aged trees
 - Monocultures in unmaintained open space
- We have an estimated 131,000 trees on San Francisco parkland

Urban Forestry Resources -- Staffing

- 1 Chief Urban Forester
- 4 Arborist Supervisors
- 11 Arborist Technicians
- 2 Reforestation Supervisors
- 12 Reforestation Gardeners
- 4 Laborers
- <u>Total FTE</u>: 34 positions

Urban Forestry Resources – Funding

Operating (salaries, benefits):	\$5,640,000	
Equipment:	\$	170,000
Materials & Supplies:	\$	173,000

Total Operating Budget:\$5,983,000

Contracting funds:\$1,000,000Urban Forestry Bond Program:\$2,000,000

Urban Forestry Tree Management

- <u>Goal: 15-year Tree Management Cycle</u>
 - Perform programmatic tree maintenance on each park tree in maintained open space on a scheduled 15-year program
 - *Proactive* tree management
 - Current tree maintenance is primarily reactive, with larger programmatic tree maintenance projects performed by contract based on tree assessment data.

Tree Assessments

- Tree Assessments accomplish the following:
 - Survey and inventory all trees on a park site
 - Assess suitability for preservation
 - (health, structural integrity, species response, age & longevity, invasiveness)
 - Assign risk rating
 - (Risk Rating = failure potential + size of defective part + target rating)
 - Make tree maintenance recommendations

Tree Assessments - continued

RPD compiles Tree Assessments from 3 sources

- Commissioned by Operations for ongoing maintenance planning
- Commissioned by Capital for specific capital projects
- Received from 'Friends of ...' groups associated with various parks

Since 2004, we have compiled nearly 100 Tree Assessments

In our Strategic Plan, we commit to annually commissioning Tree Assessments commensurate with our capacity to complete all recommended tree work within the following fiscal year

Tree Assessments -- continued

Tree Assessments have a shelf life -- trees are living organisms affected by

- Age
- Health -- pathogens and insects
- Weather storms and drought
- Topography slope and erosion
- Individual structural integrity within their stand of trees

Tree maintenance recommendations made in a Tree Assessment should be completed relatively soon after publication.

Progress in our 15-year Tree Maintenance Cycle

- **RPD** Tree Crews perform *reactive* tree maintenance
- RPD Tree Crews perform all tree maintenance recommendations from annual Tree Assessments
- Contract out programmatic (proactive) tree maintenance managed by RPD Chief Urban Forester
- Coordinate with RPD Capital to complete all programmatic tree work at Capital renovation sites at the beginning of each Capital project.
- Tree Management database tool in development to document and manage all tree work – completed and planned – using GIS technology

Reforestation

- Goal is two-for-one replacement for tree removals
- Our tree management goals for Reforestation are
 - Diversified species
 - Staggered age spread
 - Management of pathogens
 - Cultivating the under-story
 - Large-plot tree plantation in Golden Gate Park west end

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Thank you

Questions?

Park Trees vs. Street Trees

- A very different maintenance challenge
- Difficult access for arborists and equipment
 Not curbside
 - Uneven terrain often steep
 - Much wider variety of tree species
 - Much older and taller trees with expansive canopies and crowns