# Passive Open Space ES Briefing

### Infrastructure, Planning and Sustainability Committee August 10, 2016

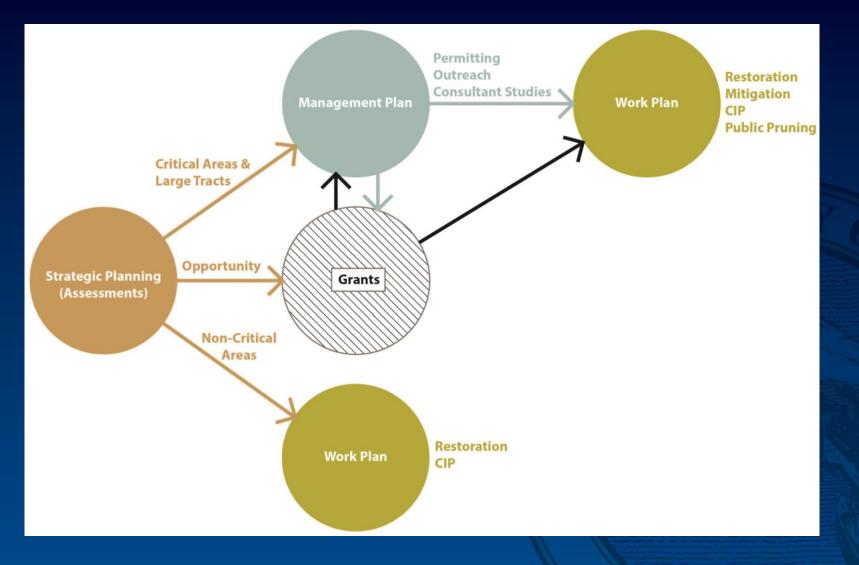
Geoffrey M. Smyth, P.E. Desiree Pooley City of Tacoma Environmental Services Department



## **Passive Open Space**

- Transferred from PDS in 2014
- Stormwater rate funded FY15/16 -1%
  - \$320K
- Approximately 496 available acres
- Most are critical areas
- High invasive vegetation coverage
- Managed for stormwater benefit

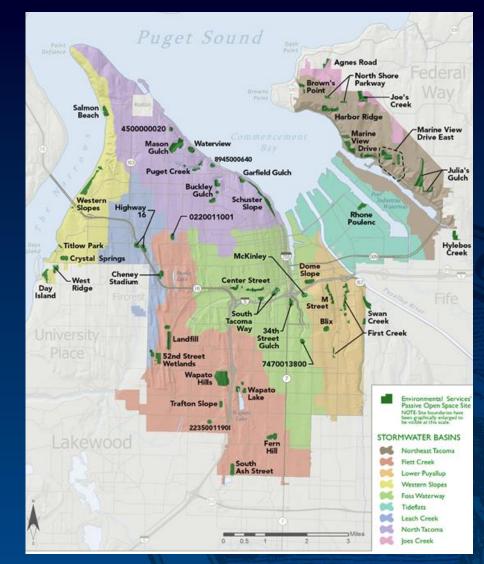
### Passive Open Space Property Management Work Flow



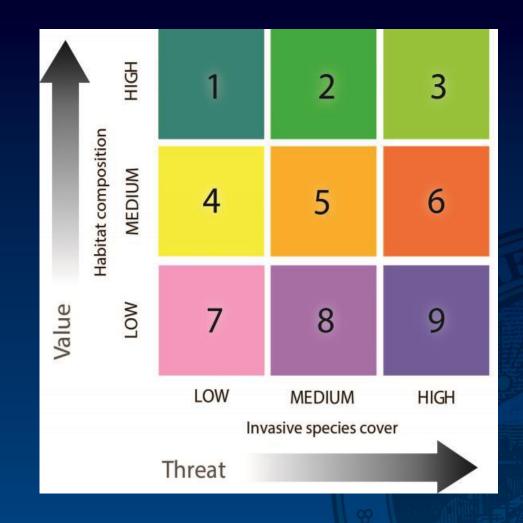
# FLAT Assessment

Strategic Planning

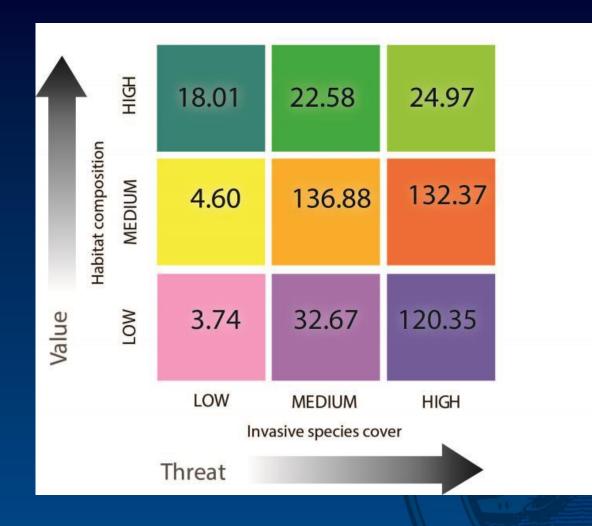
- Tree-iage vegetation assessment
- Restoration cost model
- Public stewardship element
- Prioritizes and guides work



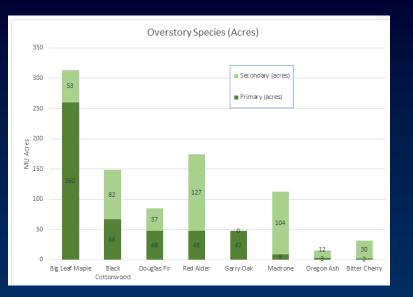
# Tree-iage Matrix



## Acres in Tree-iage Categories



### **FLAT Assessment Results**

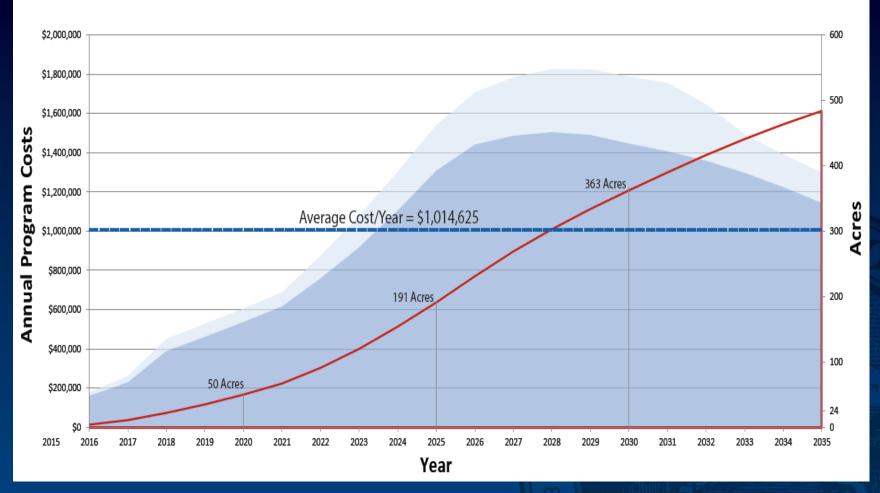


600.00 490.31 500.00 367.19 400.00 Acres 300.00 Ω 230.17 226.39 189.78 186.15 200.00 133.46 124.00 110.76 100.00 0.00 Himalayan English ivy English Scotch reed canary hedge English Bohemian cherry blackberry holly\* broom grass bindweed hawthorn\* knotweed laurel Invasive Species \* Invasive tree

## FLAT Costs

<u>Treeiage</u> Category	Volunteers & Crews (< 40% slopes)			Crews Only (≥ 40% Slopes)			Total Cost
	Acres	Cost per Acre	Subtotal	Acres	Cost per Acre	Subtotal	
1	8.23	<b>\$13,900</b>	\$114,397	9.78	\$22,800	\$222,984	\$337,381
2	18.05	\$25,000	\$451,250	4.53	\$35,800	\$162,174	\$613,424
3	20.64	\$33,000	\$681,120	4.33	\$35,000	\$151,550	\$832,670
4	1.66	\$21,300	\$35,358	2.94	\$28,800	\$84,672	\$120,030
5	50.51	\$27,800	\$1,404,178	86.37	\$41,500	\$3,584,355	\$4,988,533
6	71.77	\$40,300	\$2,892,331	60.60	\$42,700	\$2,587,620	\$5,479,951
7	3.64	\$26,000	\$94,640	0.10	\$37,900	\$3,790	\$98,430
8	17.34	\$37,400	\$648,516	15.33	\$54,000	\$827,820	\$1,476,336
9	69.03	\$51,000	\$3,520,530	51.32	\$63,950	\$3,281,914	\$6,802,444
Totals	260.87		\$9,842,320	235.30		\$10,906,879	\$20,749,199

# FLAT Cost Model Projection



#### Management Plan

## Management Plans

- Permits needed for work in critical areas
- Currently Identified Sites:
  - Schuster Slope Plan Completed and Approved (2015).
  - Mason Gulch Final Draft Plan Complete (2016). Approval anticipated 2017.
  - Salmon Beach Management Plan to begin in 2017.

#### Management Plan

# Management Plans

- Volunteer Management Plans
  - First Creek high level plan
    - Knotweed removal, Native planting
  - Wapato Hills Metro Parks MOU
    - Volunteer led
    - Invasive removal, native planting
  - Julia's Gulch Metro Parks MOU
    - Volunteer led
    - Invasive removal, native planting

#### Work Plan

# Work Plans

- Generated from Approved Management Plans
  - Full execution may extend over 20 years
  - City work plan implementation
    - Additional consultants/permitting
    - WCC planting/removal/treatment
    - Monitoring/maintenance/adaptive management
  - Privately initiated work View Requests
    - Application process/review
    - Work coordination and inspections
    - Monitoring

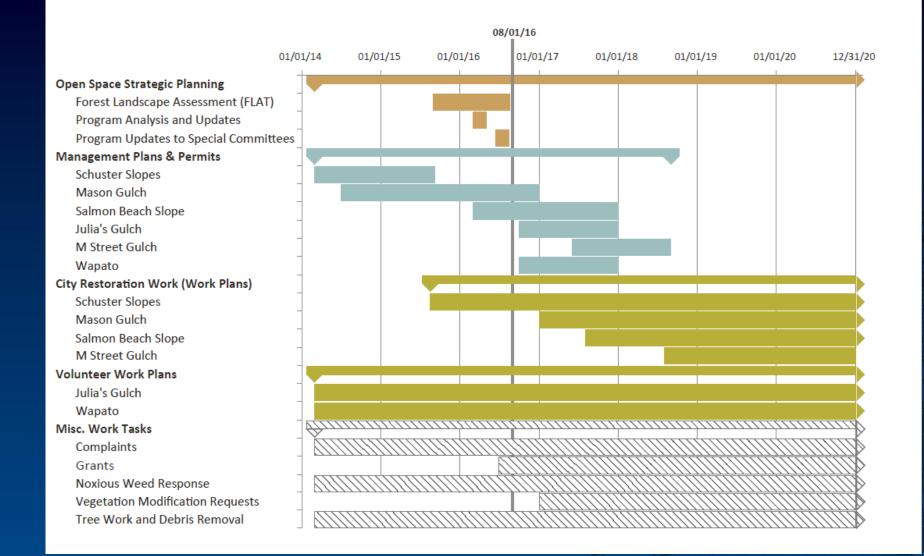
#### Work Plan

# Work Plans

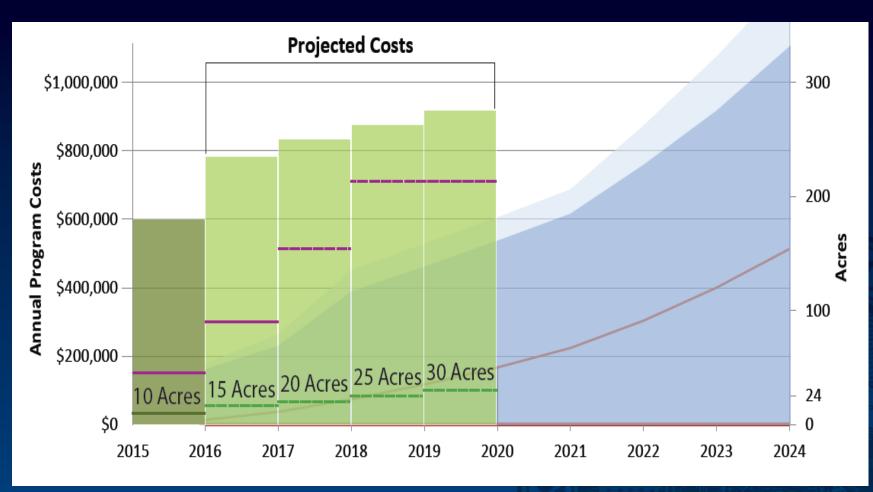
### Status:

- Schuster Slope Work Plan Completed (2015)
  - First work area (2.5 acres) complete and being maintained and monitored
  - Preparing for second work area (2.8 more acres) to be added in fall 2016
- Mason Gulch Work Plan to be completed on approval of Management Plan (2017)
  - First work area initiated in 2017
- Salmon Beach anticipated in 2018

## Tasks and Schedule



# **Cost and Acreage Projection**



# **Budget Alternatives**

- \$371K/yr No Enhancement
- \$710K/yr Requested Enhancement
  - \$\$ at some pt. will limit new acres enrolled
  - Unenrolled acres will continue to decline and costs increase
- \$1M/yr Projected Average Annual Cost per FLAT Assessment
- How can we close the gap?
  Grants, Extend time period, Rate increase

## Passive OS Resources

### • FTEs

- Current 2.3
- Full staffing needed for FLAT 5.3
- WCC 2 Crews
  - 30% in 2014
  - 48% in 2015
  - 60% in 2016 (estimated maximum)
- Additional Resources
  - Public Stewardship
  - Private Participation/Investment
  - Contractors

Increase acres of actively managed open space ecosystem habitat by 52%.

57.5 acres

# Environmental Action Plan Target

Site	Acres
Schuster Slope	3
Julia's Gulch	1.7
Wapato Hills	1.5
Rhone Poulenc	1.73
First Creek	1.5
M Street Slope	0.65
Noxious Weeds/Complaints	4

2020

87.5 acres

\*\*Target acres includes NRDA and Foss Waterway mitigation \*\*Estimate based on resource availability

# Questions?

