Urban Forestry Management Plan

Phase 3: Plan Development
Canopy Cover

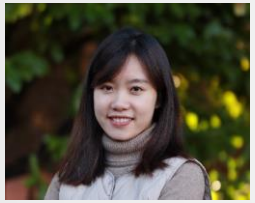
November 20, 2023

Overview

1. Project overview
2. Near-term actions
3. Phase 3 – plan development
4. Tree canopy change
5. Proposed canopy cover target
6. Next steps

A brief introduction to our team

Diamond Head Consulting

Project Manager	Engagement Lead	Urban Forest Planner	Urban Forest Planner	GIS	GIS	Arboriculture lead	Biology/ forestry lead
							
Amelia Needoba	Camille LeFrancois	Dr Cindy Cheng	Tyler Searls	Nguyet-anh Nguyen	Vlad Romanescu	Trevor Cox	Mike Coulthard

Sub-consultants

Equity Consultant - Mary Dumas, Dumas and Associates

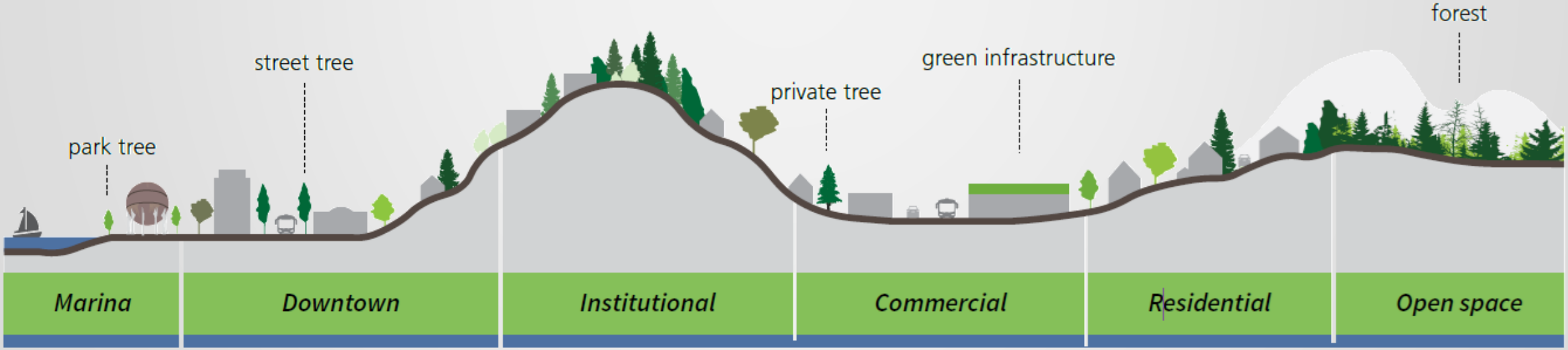
Project Advisor - Dr. Melissa McHale, Associate Professor, Forest Management, UBC

Project overview

What is the urban forest?

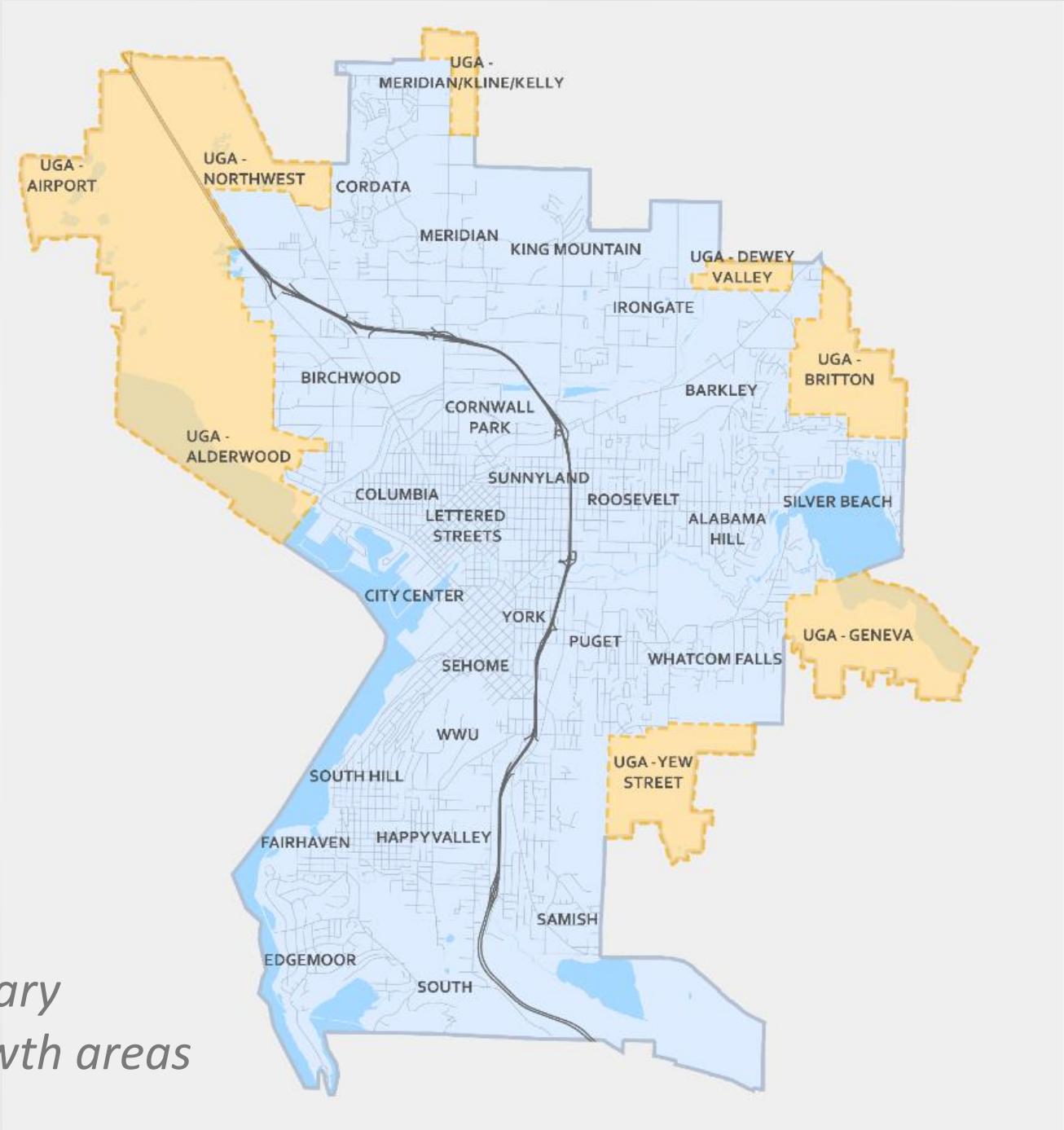
"All trees, vegetation, soils, associated natural processes, and cultural elements, found in towns, cities, and other communities where people reside."

Components of Bellingham's urban forest



Study area

- City boundary
- Urban growth areas
- Public and private property



City boundary

Urban growth areas

Purpose

Create a strategic plan that helps maintain a healthy and desirable urban forest through well-coordinated, consistent, efficient, and sustainable long-term urban forestry management.

Scope of work and timeline

Two rounds of engagement

- Phase 2 – Spring 2022
- Phase 3 – 2024 on draft UFMP

Near-Term Actions - 2024

- Accelerating Draft Plan
- Exceptional Tree Protection Ordinance (for individual, high value trees)
- Tree Incentive Program

Phase 3 – Plan development

Phase 3: Plan development

- Review policies, programs, practices
- Review existing codes
- Develop Vision, Goals, Strategies

Framework for the plan

Vision

Bellingham's healthy and resilient urban forest enhances the quality of life for all residents, supports associated ecological functions, and contributes to the climate mitigation and adaptation needs of our entire community

Goals

A. Protect and expand the urban forest in alignment with community values as established in the Comprehensive Plan

B. Protect and restore priority habitat areas, movement corridors, and forests

C. Manage the urban forest in alignment with best practices to support healthy and safe trees

D. Adapt the urban forest for climate change resilience

E. Collaborate with diverse people and organizations in urban forest management

F. Monitor performance, adapt strategies

Strategies and actions

- Strategies have been drafted to support the goals
  - Strategies define how we will reach the goal
- Next, actions will be drafted
  - Actions specify what will be done when to implement the strategy
- Setting a canopy cover target will inform actions

Tree canopy change

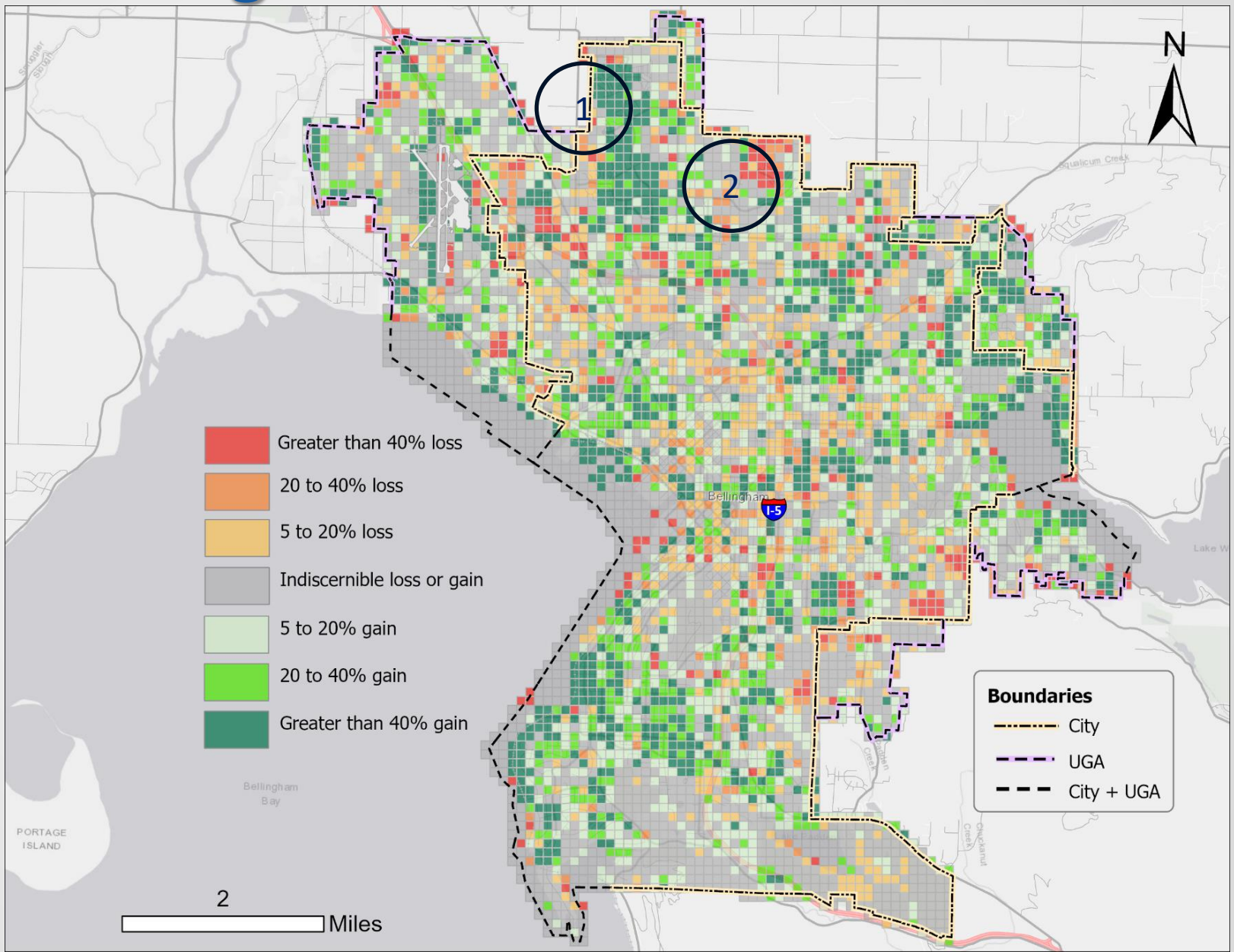
Canopy cover comparisons

BELLINGHAM

CITY	CANOPY COVER	CITY	CANOPY COVER
ABBOTSFORD, BC	22%	RENTON	29%
BELLEVUE	39%	SAMMAMISH	48%
KENT	28%	SEATTLE	28%
KIRKLAND	37%	VANCOUVER, WA	19%

Canopy cover change 2006 - 2018

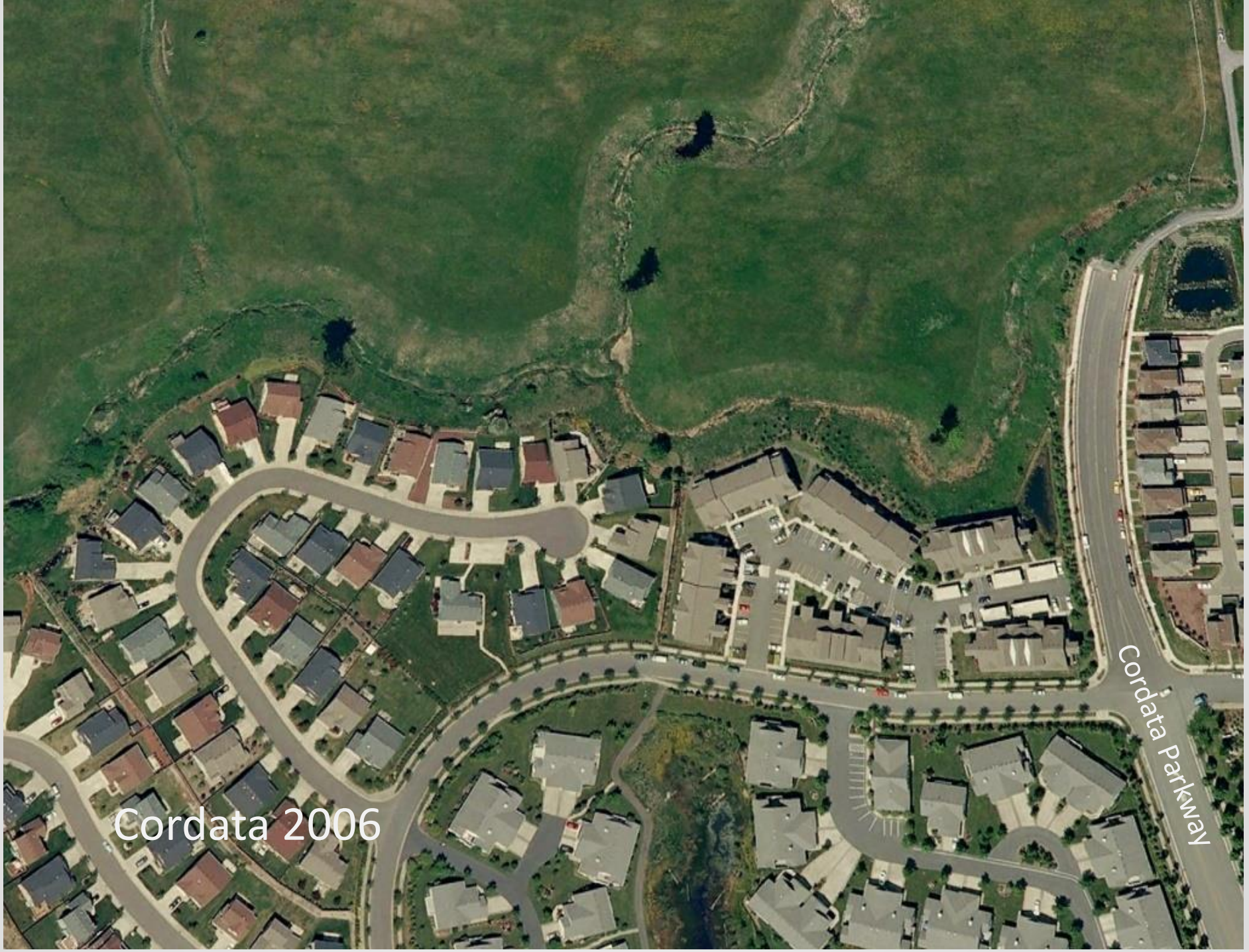
- Individual locations have had gains and losses
- Citywide canopy cover has been stable overall

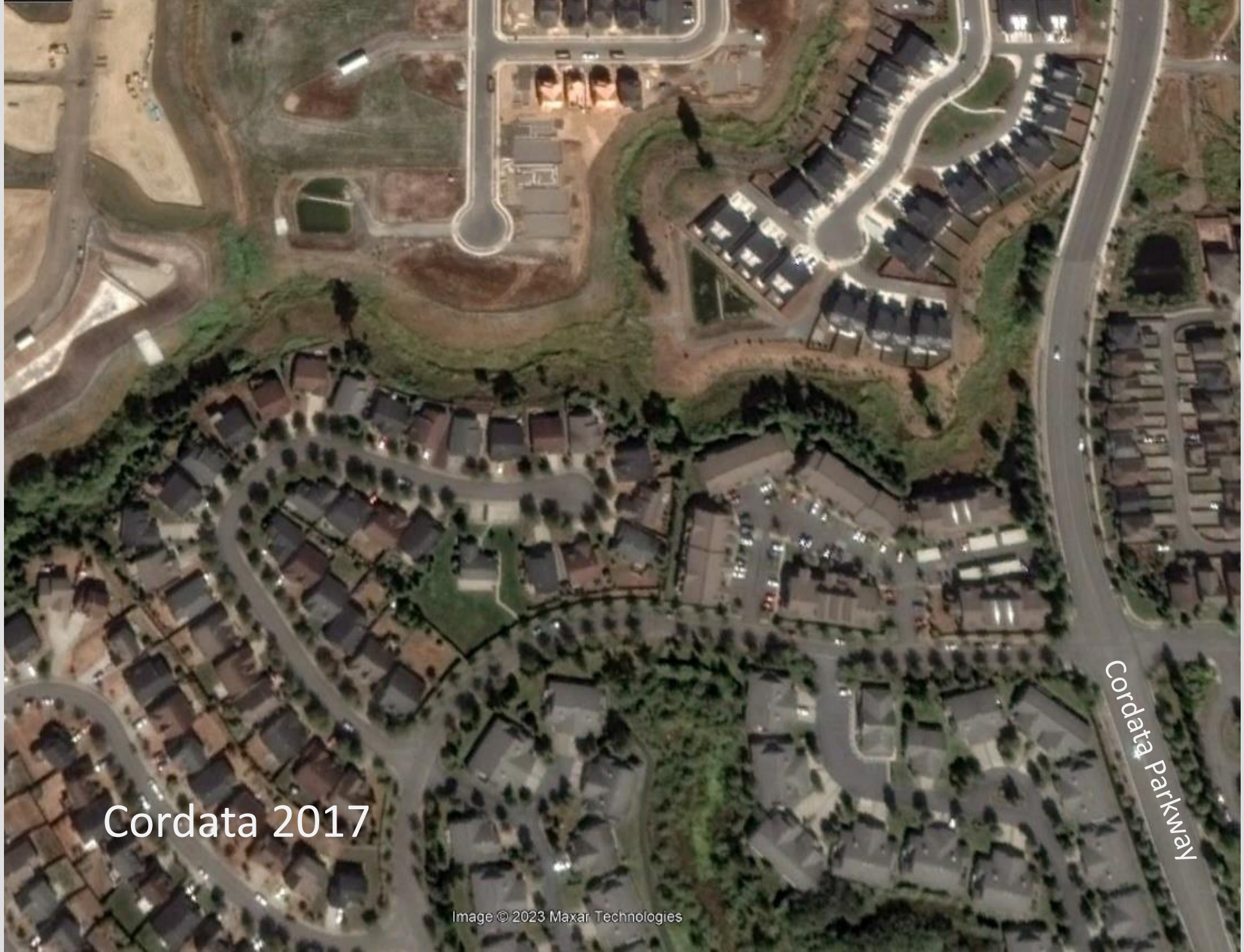


Cordata 1998

*Clearing completed when parcels were outside City regulation

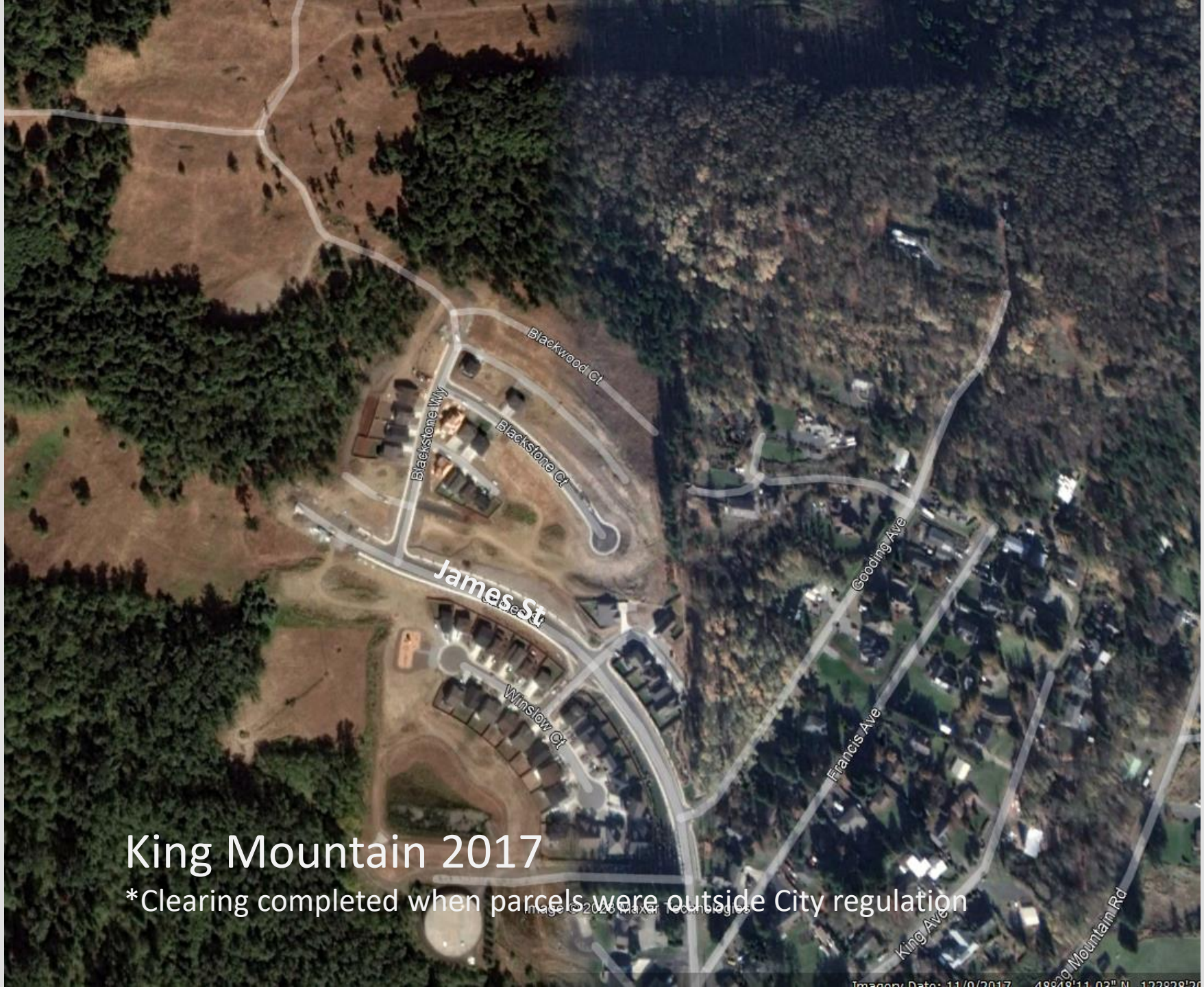
Image U.S. Geological Survey


Cordata Parkway
Cordata 2006


Cordata 2017
Cordata Parkway
Image © 2023 Maxar Technologies


Cordata 2022
Cordata Parkway

King Mountain 1998



King Mountain 2017

*Clearing completed when parcels were outside City regulation

King Mountain 2022

What are the levers of canopy change?

1. Investment in voluntary **tree planting on private land**

2. Investment in voluntary **tree planting on public land**

3. Regulation of tree protection and tree replacement

Levers of canopy change – *Private land planting*

1. Investment in voluntary **tree planting on private land**
   - Education programs
   - Incentive programs
   - Partnerships

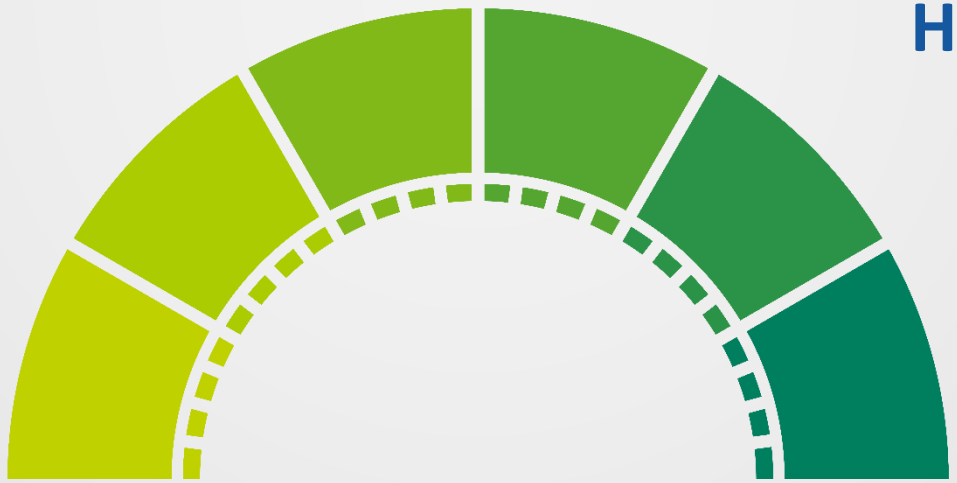
Levers of canopy change – *Private land planting*

Moderate *examples*

- Education materials on how and what to plant
- General incentive program like rebate
- Ad hoc community partnerships

Low *examples*

- No education
- No incentives
- No partnerships



High *examples*

- Materials and workshops
- Targeted incentive programs (e.g., schools, equity-driven etc.)
- Partner non-profit delivering programs

Levers of canopy change – *Private land planting*

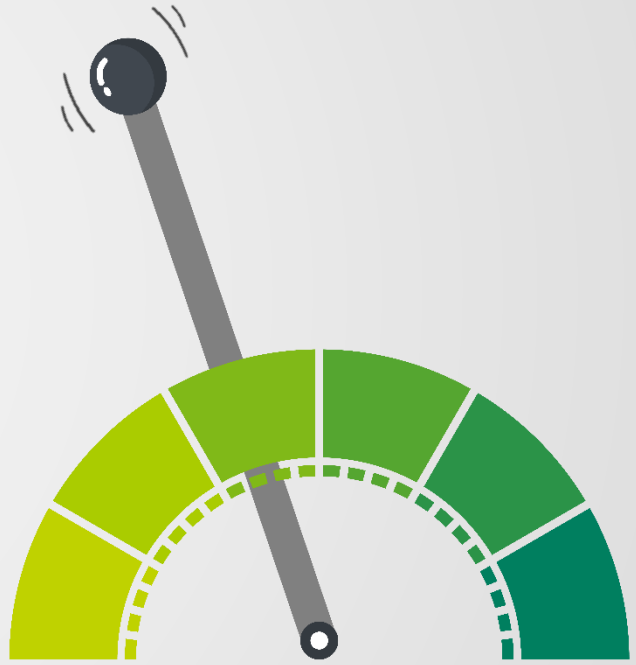
Where does Bellingham sit now?

- Limited education materials
- No incentive programs
- Some community partnerships but most target public land
- In 2024 initiating a Tree Incentive Program for private land

Low level

Levers of canopy change – *Public land planting*

2. Investment in **tree planting on public land**
   - Municipal tree planting projects
   - Replacement tree planting programs
   - Voluntary stewardship programs to plant trees on public land
   - Developer planted trees



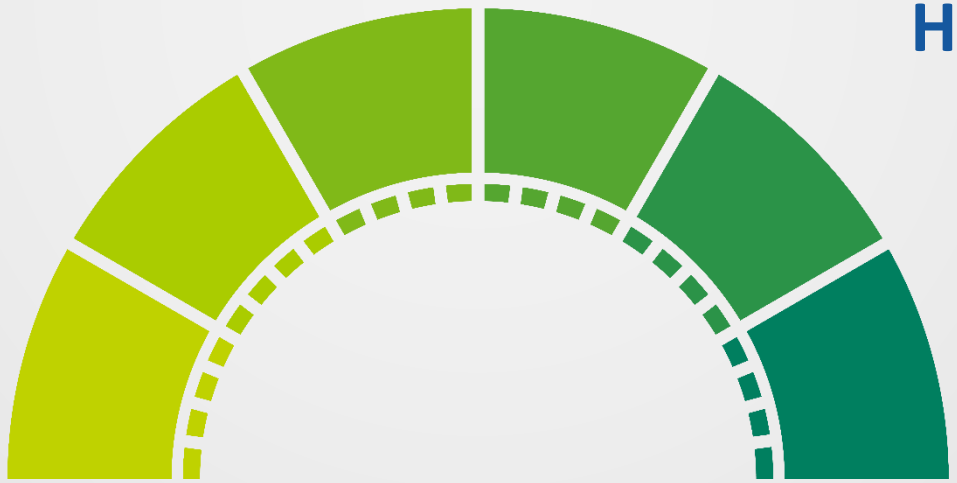
Levers of canopy change – *Public land planting*

Moderate *examples*

- Municipal planting ad hoc
- Replacement planting 1:1
- Developer planting with warranty period, municipal acceptance

Low *examples*

- No municipal planting
- Replacement less than 1:1
- Developer planting has little oversight



High *examples*

- Municipal planting program driven by plan
- Replacement planting >1:1
- Developer pays cost of planting, municipality implements

Levers of canopy change – *Public land planting*

Where does Bellingham sit now?

- Municipal park and street tree planting ad hoc, project-based
- Trees planted in open space for habitat restoration
- Work parties plant trees in parks and open spaces
- Residents can apply for permit to plant a street tree
- Replacement likely less than 1:1
- Developer planting has a warranty but tree maintenance is not always assumed by the municipality

Moderate level

Levers of canopy change - *Regulation*

3. **Regulation** of tree protection and tree replacement
   - Tree protection codified
   - Tree replacement codified
   - Landscaping codified

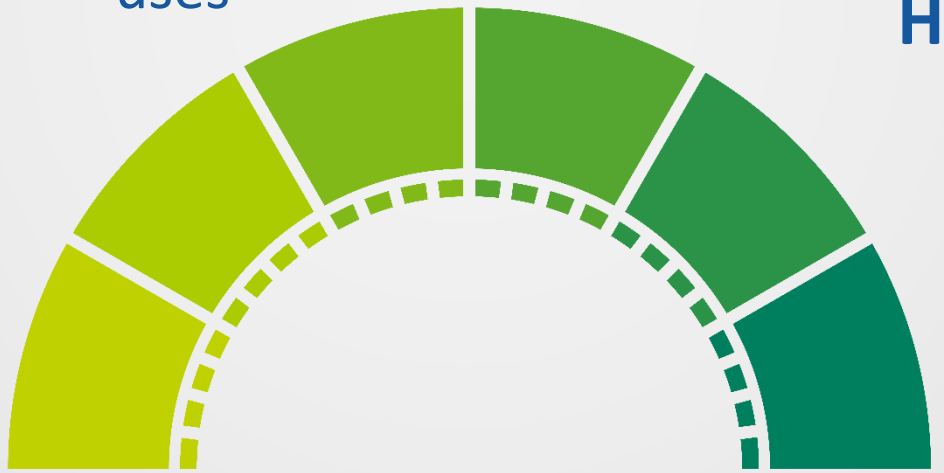
Levers of canopy change - *Regulation*

Moderate *examples*

- Critical areas protected in code
- Replacement/mitigation required
- Landscaping requirements for streetscapes, and certain land uses

Low *examples*

- No tree protection
- No tree replacement
- Minimal landscaping requirements



High *examples*

- Most trees protected in code
- High replacement rate
- Best practices landscaping requirements

Levers of canopy change - *Regulation*

Where does Bellingham sit now?

- Focus is on no net loss of critical and shoreline areas
- Land clearing is only permitted as needed with development
- Tree replacement at the Director's discretion
- Subdivisions must reserve 25% for natural features or recreation
- Stormwater code credits retained trees
- LID requirements for some development
- Single-family development in Lake Whatcom Reservoir must have minimum natural forest cover
- Street trees required with development
- Landscaping requires trees for most new developments
- Green factor must be met in infill development

Moderate level

What will Bellingham change?

Voluntary private land planting

Public land planting

Regulation

Proposed canopy cover target

30-year canopy cover target scenarios

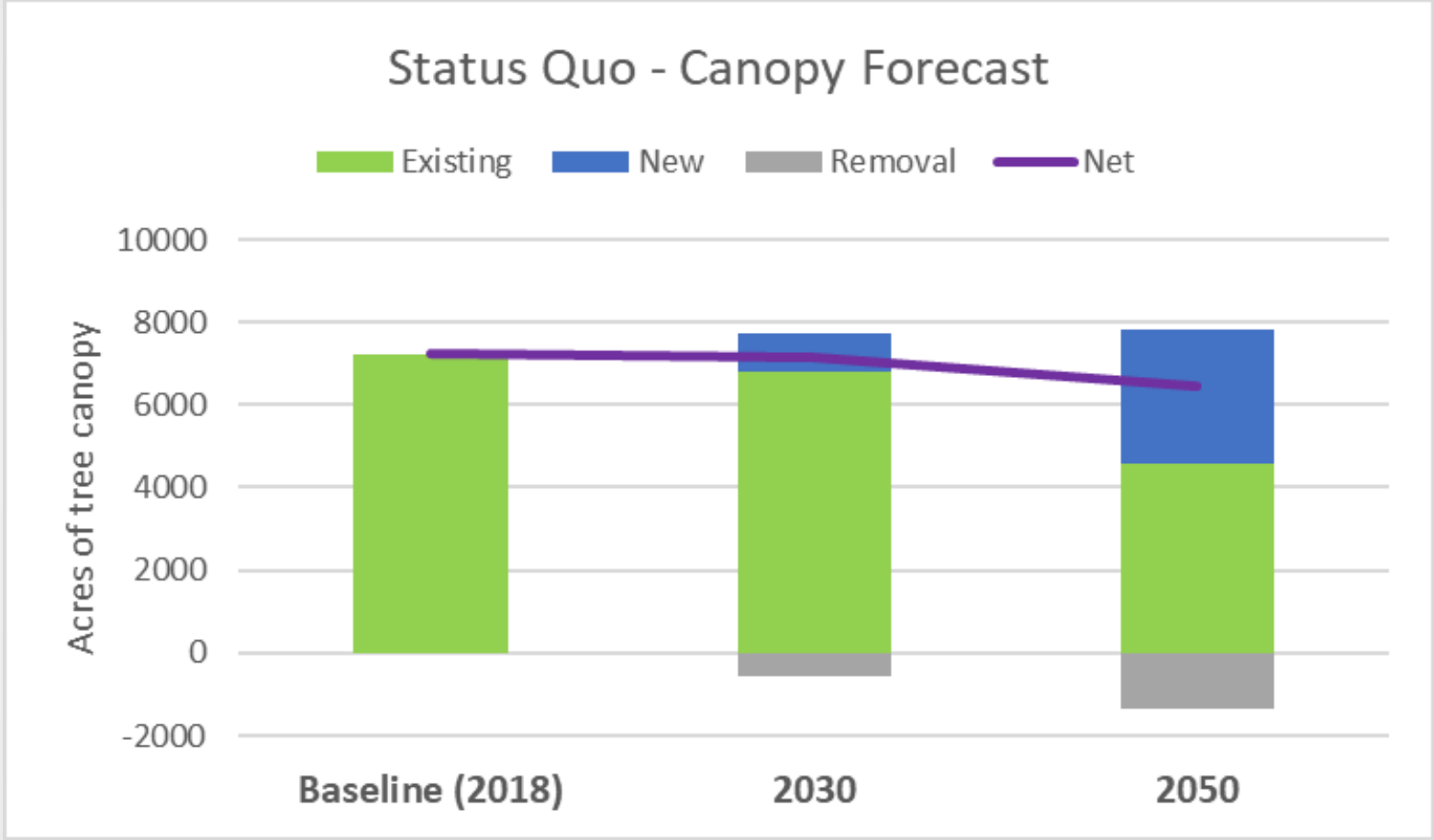
- Three scenarios explored:
  1. **Status Quo:** No change from current practices/policy
  2. **No Net Loss:** Changes needed to stabilize canopy
  3. **Growth:** Changes needed to grow canopy

- Assumptions for all scenarios:
  - Buildable lands quantifies development capacity to 2036
  - Some infill likely in single detached dwelling areas
  - High proportion of critical areas retained or mitigated
  - No new major public land acquisitions beyond existing mechanisms

Status Quo (35%)

Assumptions:

- Same public and private urban land planting (~5,000 trees/yr)
- Same habitat restoration/ mitigation
- Same regulations
- Exceptional Tree Protection Ordinance



CANOPY COVER 40% → 40% → 35%

Status Quo (35%)

Assumptions:

- Same public and private urban land planting (~5,000 trees/yr)
- Same habitat restoration/ mitigation
- Same regulations
- Exceptional Tree Protection Ordinance

Impact:

Staffing: 0-4 staff

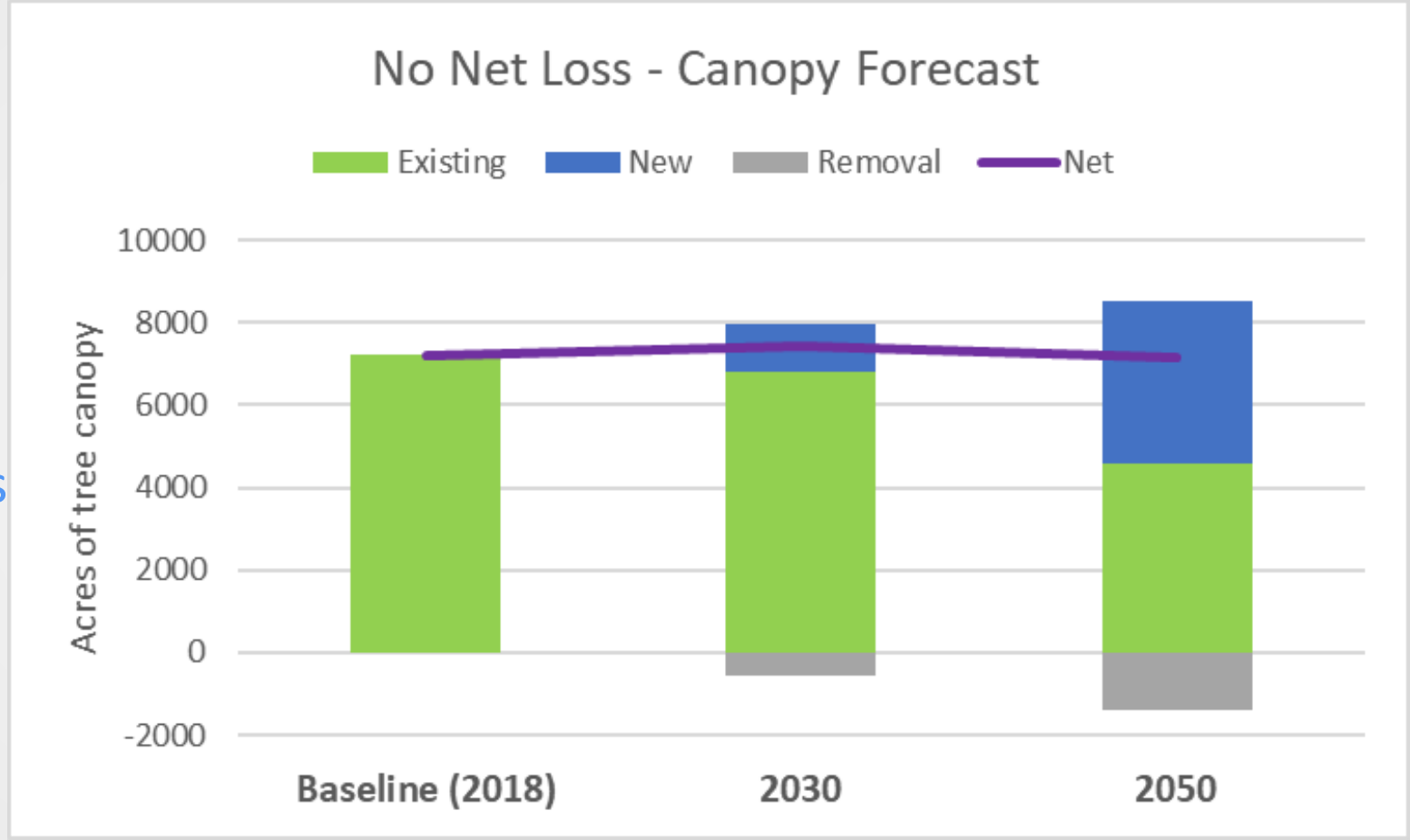
Funding: $100K (in addition to staffing)

Development cost: No change

No Net Loss (40%)

Assumptions:

- 2 X private and public urban land planting (~10,000 trees/yr)
- Same habitat restoration/ mitigation
- Higher landscaping requirements
- Exceptional Tree Protection Ordinance
- Expanded City street tree maintenance responsibility and level of service
- Tree planting incentive program



CANOPY COVER 40% → 40% → 40%

No Net Loss (40%)

Assumptions:

- 2 X private and public urban land planting (~10,000 trees/yr)
- Same habitat restoration/ mitigation
- Higher landscaping requirements
- Exceptional Tree Protection Ordinance
- Expanded City street tree maintenance responsibility and level of service
- Tree planting incentive program

Impact:

Staffing: 4-7 (expanded tree permits, City tree maintenance, private land planting)

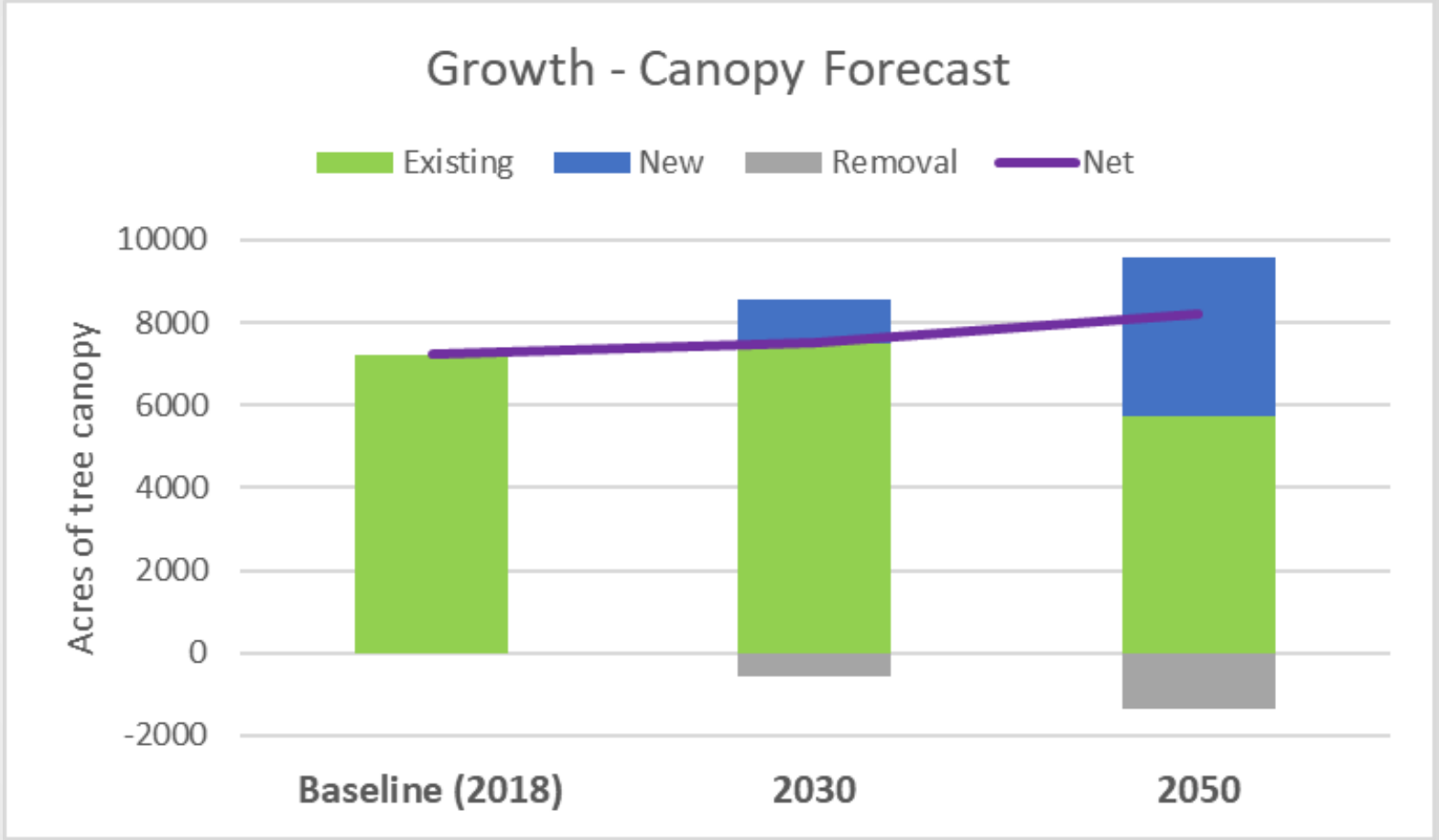
Funding: +$400k voluntary private planting, +$50k public planting, +$150k maintenance (in addition to staffing)

Development impact: 2 x street, 1.2 x landscape trees, permits for Exceptional trees, added cost for tree replacement

Growth (45%)

Assumptions:

- 2 X private and public urban land planting (~10,000 trees/yr)
- Same habitat restoration/ mitigation
- Highest landscaping requirements
- Trees > 8 inches protected/replaced
- Complete assumption of City street tree maintenance
- Tree planting incentive program



CANOPY COVER 40% → 42% → 45%

Growth (45%)

Assumptions:

- 2 X private and public urban land planting (~10,000 trees/yr)
- Same habitat restoration/ mitigation
- Highest landscaping requirements
- Trees > 8 inches protected/replaced
- Complete assumption of City street tree maintenance
- Tree planting incentive program

Impact:

Staffing: 7-10 (expanded tree permits, City tree maintenance, private land planting)

Funding: +$400k voluntary private planting, +$100k public planting, +$1M maintenance (in addition to staffing)

Development impact: 2 x street, 1.2 x landscape trees, more soil volume required, permits for almost every tree, added cost for tree replacement

Recommendation: No Net Loss (40%) target

Why?

- **Balance:** Offset canopy losses and accommodate multiple community values (housing, transportation, recreation)
- **Enhanced standards:** Achieve a higher quantity and quality of greening with development, and improve protection for Exceptional trees
- **More community participation:** Support and incentivize more voluntary planting on private land
- **Reasonable cost:** Fund and resource an excellent urban forestry program for a medium-sized city

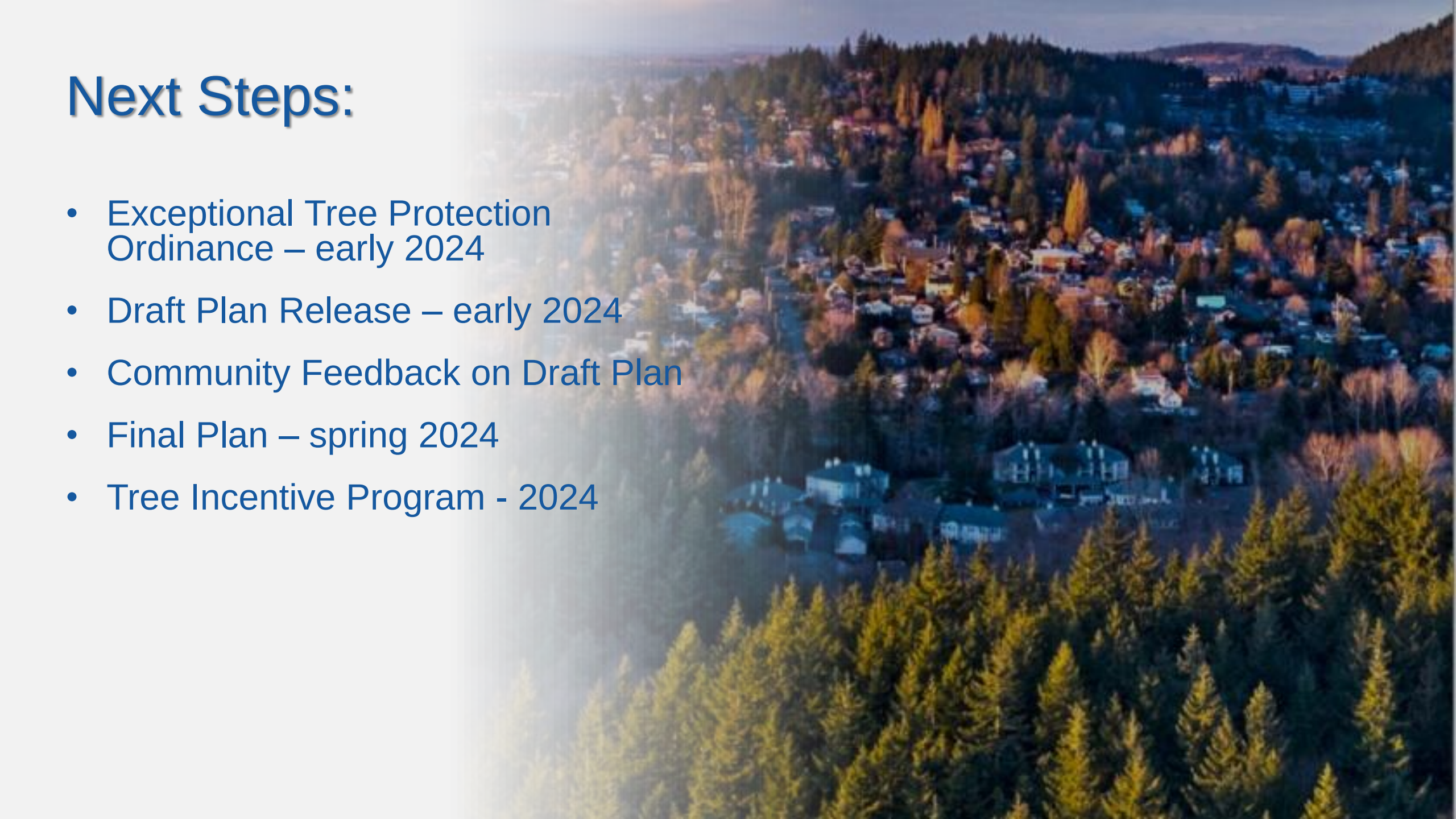
Citywide versus sub-targets

- Urban Forestry Management Plan will set a citywide canopy target
- Sub-targets can assist implementation, for example:
  - Targets by land use
  - Targets by zoning
  - Targets by form of development
- Plan will likely recommend that sub-targets be developed as part of the Comprehensive Plan process

Next steps

Next Steps:

- Exceptional Tree Protection Ordinance – early 2024
- Draft Plan Release – early 2024
- Community Feedback on Draft Plan
- Final Plan – spring 2024
- Tree Incentive Program - 2024



www.cob.org/UFMP

Home > Services > Community Planning > Environmental Plans and Regulations

Urban Forestry Management Plan

The City of Bellingham is creating an Urban Forestry Management Plan (UFMP). The purpose of the UFMP is to create a strategic plan that helps maintain a healthy and desirable urban forest through well-coordinated, consistent, efficient, and sustainable long-term urban forest management. See below to learn more about Bellingham's urban forest.

Project Status

Phase 3 (Plan Development) is underway.

Phase 2 (Community Values) concluded in 2022. The City is in the process of preparing a draft Urban Forestry Management Plan using the input received in Phase 2. There will be opportunities for community feedback on the draft plan before it is finalized and presented to City Council. We expect Phase 3 to continue into 2024. Please sign up to receive email updates about the UFMP process and feedback opportunities.

Recommendation: No Net Loss (40%) target

Why?

- **Balance:** Offset canopy losses and accommodate multiple community values (housing, transportation, recreation)
- **Enhanced standards:** Achieve a higher quantity and quality of greening with development, and improve protection for Exceptional trees
- **More community participation:** Support and incentivize more voluntary planting on private land
- **Reasonable cost:** Fund and resource an excellent urban forestry program for a medium-sized city

Questions?

Public Works Department
Planning and Community Development Department
Parks and Recreation Department
Fire Department

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