

CITY OF BELLINGHAM URBAN FOREST PLAN PHASE 3 ENGAGEMENT SUMMARY APPENDICES

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Appendix 1 Survey comments

Q3: Explain why you disagree that the vision, goals, and targets provide a good direction for the management of the City’s urban forest

Comments on disagreement with the draft vision
seems incomplete
We are an urban city, we need to provide housing. No other city in Whatcom county is participating and this will only push development beyond our city limits furthering sprawl. We need regulate trees in regulated critical areas but not beyond.
Urban forestry goals should NOT push new development out of the city or further inhibit housing production. I support increased canopy cover but not at the cost of sprawl or decreased housing.
Bellingham needs a strong tree ordinance to protect trees on private and public land. There are too many "tree services" cutting down beautiful healthy trees. We need protection for trees on private property as well as our street and park land trees.
The goals are unrealistic and there was no objective action plan to implement
There is a section in The urban forest plan where it talks about building for continued growth while planting more trees for increased forest canopy. That section shows some ambiguity about how this actually happens. These ideas contradict each other.
We need housing of all types. This policy stands in opposition to the City of Bellinghams stated goals of increasing housing.
Trees are great, but lack of affordable and available housing is a much larger concern. If there is a stricter tree ordinance put in place, it will limit developers from being able to build as dense and affordably as we desperately need right now.
I understand the goal and value of urban forests. However, the percentage of coverage is far too high. We are in the middle of a housing crisis and are supposed to be increasing housing density. This plan marches in the opposite direction.
Bellingham already has a urban forest ratio that is in the upper levels state wide . This will add to construction costs which will be reflected in higher rents and housing costs. Where is the cost/benefit analyze ? Why is City watershed land not include
In some situations saving mature trees may not be as desireable as planting new trees in the "right location"
The plan and vision does not distinguish between large native trees and the species and saplings being proposed to “replace” them. There is no vision at all to ptotect our natural heritage
I do not think the city should have any control or input of trees on private land.
With affordability of housing issues in the City of Bellingham, we should be focusing on enabling homebuilders/developers to build appropriate housing and not place value on a vanity metric of tree canopy over ensuring housing can be built.
A large part of the plan relies on increasing canopy cover. It does not take into account the huge amount of tree limbing that has been occurring in Bellingham. It feels phony and makes me feel our government is dishonest or unintelligent/not critical.
Housing [For sale and rental] and tree preservation are often at odds. We are building too many rentals and not enough for purchase housing
The plan mentioned the potential for future requirements requiring trees on private property. This seems unreasonable, especially as a new requirement on property that has already been built-on to date. Might work on new builds.

Comments on disagreement with the draft vision
Private property is exactly that. It's not for government regulation and bureaucracy
This comment is worrisome: Some participants suggested better enforcement of tree retention and replacement requirements and incentives for homeowners to maintain trees. "Enforcement" of what homeowners can do with their own property is a negative.
Private property (residential and commercial) should not be dictated by government regulation. Each property/neighborhood has its own flavor/micro environment and is not the business of govt agencies to manage. Protect private property rights from abuse.
Government is in control of way too much. I am against government enacting new laws & regulations on a person's private property.
Stay away from private land.
Does not sufficiently address competing goals such as housing
There are already too many restrictions on private land owners, particularly in the Lake Whatcom watershed. More restrictions and higher property taxes are unwelcome. There are many experiences to support my point of view, but you don't provide room to
The City of Bellingham keeps increasing the amount of authority and control it has over our lives. I strongly disagree with that.
The plan is needless virtue signaling
Leave the trees on the people's property alone!!!
somewhat agree: I feel the goal of 40% to 45% canopy by 2050 is too little and too slow.
I do not believe the city should be regulating trees on private property. City property is fine but not private property.
It eliminates the ability of homeowners to make timely decisions about their own trees on their own property without fear of being cited by the city.
I would put full protections in place for the landmark trees as soon as possible so we still have some.
Several of the goals are meaninglessly non specific like collaborate with diverse people and organizations. How exactly will that be measured?
If this is so important to the city then why are they allowing the possibility of all the old growth to be taken down on meridian, around the gold course for tiny homes and allowing all of the garbage around town ? Seems to defeat the purpose
I didn't disagree. Loved the overall message. More trees in a variety of places benefits everyone! There is a balance needed between tree density and housing density, which seem somewhat at odds with each other
Private property should be completely excluded from government control regarding landscape.
The trees on private property do not belong to anyone besides those who hold title to the property.
It is wrong to control private single family property. Puts people at the mercy of government approval to use their judgment to remove a dangerous tree. It already takes months to get a permit to remove dangerous trees in the watershed that can kill.
You can't dictate tree removal on private property. I'm fine with this on PUBLIC property only.
what the heck is tree equity? explain how it is calculated.
I do not want additional legislation of what I can and cannot do. The native Americans did not own the land and they took fine care of it over centuries. I simply wish to follow suit and only own it to be legally compliant with the existing government.

Comments on disagreement with the draft vision
The plan shows a reduction in canopy by census block in the King Mountain area. In my opinion, plans should be to maintain or increase canopy and more trails than this plan calls for in the King Mountain Area.
This plan makes development of the urban growth area impossible. At some point the city has to take the lack of affordable housing seriously. This plan lacks any common sense by those that drafted it
the Equity approach to private land forest management within the city/urban growth areas is a very subjective evaluation method
There is undue responsibility on landowners who have city trees abutting their property. If mature trees are to be maintained properly, it is a great cost to homeowners. Hiring an arborist, tree trimmer, handling pests in addition to general clean up.
The draft plan states that level of service type standards or metrics to guide the management, maintenance, and replacement of trees has yet to be developed. This is an important part of the plans success, and the success of the urban forest.
I do very much appreciate how thought was given to specific zones and how much forest addition or deletion was to be expected/planned for in different zones, but not enough information was added regarding how this will actually work with a housing plan.
The strategies were closer to goals, they did not provide clear direction on how the City could meet the goals. The 10 year action plan provided more direction on how the goals could be met, but didnt prioritize or ID funds, so did not seem realistic.
Plan does not provide any information of potential negative impacts. cost of housing, we may lose more trees because people elect to clear cut rather than face uncertainty. What happens to ur UGA will all the area around Bham get cut.
I think that this is a wonderful initiative, created by a small staff and probably some volunteers, and that the goal of this plan is necessary and excellent. But with blind spots. I don't have enough space here to elaborate.
I don't agree with the goal of growing the canopy cover to 45% from the existing 40%. I think maintaining 40% is adequate and infill development should be the highest priority.
There's too much bloat in the report.
It is mentioned that the plan is based on "community values." What is not entirely clear is what values are driving the creation of this plan. Is it a desire to mitigate climate change? Is it being crafted with a view toward preserving private property
Seems a little broad and vague, the city should concentrate efforts in neighborhoods with lower canopy rate and it's own parks
There is no mention of how this plan could impact housing costs. Recently the #1 goal by the survey of residents was affordable housing. Planting many trees to mitigate for the loss of one tree adds costs to already very expensive housing in the city.. \
I am concerned about the realism of a 45% canopy goal, and the impacts achieving this will have on housing. I am also concerned about the overall cost of this and the impacts on the City budget. What are we not spending on to achieve this goal?
We need affordable housing this plan will make housing much much much expensive
We already have a better tree canopy than most in our state. Our housing costs are so unaffordable already, all that adopting this will do is make it even more difficult for developers to build therefore driving prices up further.
This is not practical prices will drastically increase
Excellent data analysis and planning based on that data.
It all seems to

Comments on disagreement with the draft vision
We need more housing, not more trees. We can't complain about a housing shortage, and homelessness, and then make it harder to build housing. These contradict each other and place our focuses in the wrong area; prioritizing urban forests over people.
The draft doesn't specify that tree cover will be prioritized for low-income and minority areas of the city. This isn't as large a problem in Bellingham as some cities, but should still be a consideration that is mentioned.
Sources for statistics could be more clearly stated.
This will drive the cost of housing up even further and is not a good idea.
New construction is still needed for housing. I do believe design development should include onsite trees(ground level or greenroofs etc.) or provide an opportunity to buy trees for a suitable location nearby. Development still needs to pencil.
Property owners with trees on their land own the trees so they have the right to determine if it is to be removed or trimmed. Trees that block ocean views reduce property values, doing economic harm. I completely oppose this plan as harmful and wrong..
There is a lot of content to unpack. An executive summary would be helpful.
The city needs more ability keep private plans owners from taking down old and mature trees.
goals for retaining trees is undefined and needs to be done NOW ASAP. we cannot afford to wait and have more trees being taken down
I cannot afford to live in Bellingham my rent has gone up 50% the last 5 years. My landlord showed me there property tax bill & utilities bills they have gone up by more than 50% the last 5 years. I am born & raised in Bellingham.
The 2050 Goal timeline doesn't seem quite aggressive enough.
Permitting and monitoring tree management for home owners is not how I want my tax dollars spent when we have increasing crime in Bellingham.
Retaining mature trees is the most effective and efficient way to reach our goals.
I do not agree in the increase of canopy to 45% in the urban neighborhoods. Economic impacts to this plan have not been accurately reviewed.
Separate goals should be created for private and public property. Robust planting and management goals should occur on public land and moderate goals on private land. Funding should be allocated to encourage voluntary participation in private sector.
The methodologies are not clear and data is obscured by generalities. I expected something more rigorous.
The plan has so much detail, but it's extremely difficult to understand how it will directly affect me as a Bellingham citizen and homeowner. Everybody of course loves trees, at least I'd think so, but at what cost.
I think there are many metrics to consider in city planning and expansion of housing options. This is just one resource as the city makes plans moving ahead for development and I don't think the urban forest should fully direct building development ahead
The affects to housing is not addressed in this urban forestry plan
There needs to be more specifics on how to save large trees on all lands especially restrictions and Benifits
The Urban Forest Plan places a majority of the importance on planting new trees. It takes 20+ years for a tree to grow enough to begin carbon capture, meaning that mature trees must be saved if humans want to live and to help combat climate change.
The most useful thing to add would be case studies for what other cities (of similar size) have done with comparable programs. What have other cities done? What worked? What didn't? What externalities were experienced. The COB strategy should devote time.

Comments on disagreement with the draft vision
The plan is missing information. The plan needs to speak to valuing trees while at the same time speaking to the realization that territorial views are important to a large group of Bellingham residents. This is missing and needed.
The base assumption of the entire plan--that the tree canopy needs to increase from 40% to 45%--is WHOLLY arbitrary, calling into question the entire plan. Also, very little focus is given to tradeoffs such as housing affordability.
Not enough information was given about how the data is generated. For example, tree canopy was last measured in 2018 (6 yrs ago?) in 5-acre swaths? From photos? This can't be the best, most current data available.
Another way to control our property. No thank you
Document was very dense so it was a little difficult to understand.
Spending time to draft a document is much different than implementing the requirements of the document.
I do not think the city of Bellingham should have any say in what happens to trees on individually owned property.
I believe the multiple costs (less in-fill - so higher real estate costs, less affordable housing, just one more restriction on building, etc) will far out weigh the benefits. Growing the forest canopy to 45% in will have zero impact on the climate.e.
The report's Action statements are too fuzzy to be useful. The vast majority of the report could have been written 4 years ago. ACT NOW, not in 1-10 years, to save as many as possible mature trees in our City for climate resilience + urban heat effects.
There could be more emphasis on preserving mature trees.
I already know a lot about urban forestry
Your sites are set lower than optimal. We need more support for urban forest management. Licensing arborists would help. Teaching pruning and tree health would help. Publicity about trees benefits to urban spaces would help.
We need to keep all of our Trees Old New Native and Non-Native
Bellingham's mature trees are super-important for climate change, not just to capture carbon but to keep us cooler in extreme heat spells and less prone to torrential floods. Please follow the WMTP recommendations about this.
I find the inclusion of trees in commercial spaces and some downtown trees to be misleading. I think the older trees and native trees need more protection than just developer planted trees. I also disagree about the long timeframe for meaningful action.
I prefer the actions outlined in the Whatcom Million Trees Project white paper. More trees can be protected while introducing new housing.
I think there needs to be more effort to protect old growth trees and stop cutting them all down!
It is admirable to try to increase tree concentrations in very urban areas. However, prioritizing filling IN the city, rather than developing current full canopy forest is essential. Landscaping can never replace natural forest, and trees do not = forest.
There needs to be explicit protection of mature trees EVERYWHERE! Replacing a 50 year tree with a new one is ridiculous. At a minimum, strong disincentives for cutting down mature trees - high fees AND replacement with multiples perhaps
The city's goals should include protection of mature trees as a priority, including in areas of pending development. It has been shown that the presence of mature trees strengthens associated trees and encourages healthy ecosystems.

Comments on disagreement with the draft vision
Lack of specificity regarding how goals will be met. No recommended policy changes for protecting existing mature trees whether on public or private land.
Mature trees need to be protected at all costs. This was not mentioned in the survey
Bellingham is growing rapidly and there will be inevitable tree loss. Landmark tree protection alone is the bare minimum, the city should require developers to retain as many mature trees on a site as possible. Mature trees must be kept throughout B'ham.
I believe we sidestep an elephant wandering through the room: replacing mature Douglas firs and other large species trees with decorative small trees (e.g., dogwoods or Japanese maples) on private property by residents or developers is not acceptable.
Phase 1 of the plan is based on substantial errors and other serious flaws in its foundational reports. Professor McLaughlin and others have provided you and Public Works with detailed data and documentation about those errors and corrections needed.
There is not enough protection for mature trees.
I dont feel that the plan takes into consideration the value of the old growth that we currently have. I think the old growth should be PROTECTED as a e.g historic monument or such like. There should not be any cutting of old growth/ destruction of canopy
It is vague in the language. It does not take actions now to stop the cutting down of mature tress. Planting trees is very important, but not at the loss of mature trees that currently have no rules/ laws to protect them.
Follow recommendations in white paper, delay bfuture loss of older trees. Hire certified arborists. Require a permit to cut down trees tagged as valuable. Get funding. The white paper points is very reasonable , just do it!! Thank you!
a significant problem lies in cob plan to contract outside business to cut trees for utilities. the city should have its own arborist supporting public and private trees. The draft also doesn't go far enough to protect mature trees,
Areas that currently have more than 60% canopy coverage (fig20) are reduced in coverage are reduced to 45% (fig 21) fore example Clark's Pt and the 100 Acre wood. Also I believe the increases for the core city coverage are highly optimistic.
It is ridiculous to suggest small "urban trees" can replace a mature tree canopy! Trees take a long time to mature and cutting them down or even thinning them out is absolutely counter productive. How could anyone even suggest such a stupid approach!?
It gives developers too much control over our urban environment
There is too much time allocated towards more research. Too many mature trees have the potential to be removed during that time.
Too many mature trees can be cut.
I am in support of planting more trees within our city and the surrounding areas. I'm NOT in support of cutting down any of our mature forests and trees for future development.
not clear enough about need to preserve mature trees
Needs more specific, measurable, and actionable goals
The 6 goals don't seem to line up very well with the visions and priorities that the city heard from the community as described on page 11.
The city should require developers to retain as many older trees as possible. A sapling is not the same tree as a 50-100 year old tree!
With climate shifts already impacting our city, too many years will pass for most of the vague actions to occur. Mature trees by far provide the most benefits to all of us. Max # of mature trees must be retained in all new developments.

Comments on disagreement with the draft vision
Setting tree planting targets for new developments does not seem to work without enforcement. E.g. Meadowbrook Court - the developer did a cheap, fast job of sticking trees in ground, not correctly planted. Awful results. Need to register arborists.
It's too vague, takes studies of up to 10 years, there is no due process for arborists and no oversight, it does not adequately protect mature trees. It does not consider the rapid advancement of climate change and tree's ability to absorb carbon.
More protections for mature trees would improve the plan.
We are concerned with the city's spinning facts to their favor and disfavor of residents. As usual the city's hidden agendas are usually negative, disruptive, and expensive to residents.
5 percent increase (from 40 to 45) is too little increase. As usual in Bellingham, the developers and economic growth lovers are getting their way.
There needs to be a stronger focus on preventing destruction of mature trees on private property. Even when mature trees aren't directly cut down by developers, they are often left isolated which makes them weaker. I can see this in my Highlands II 'hood.
The plans and requirements for developers are not strong enough. The commitment to maintaining and expanding a tree canopy in Bellingham is insufficient.
need to learn more about the finer details of the project and how it will be implemented by different zones within our community.
I didn't learn any new information on urban forest management because I am forester, land manager, and previously work as an arborist.
The mature trees on both public and private land need to be protected. Mature trees have a much greater climate change benefit than young trees. Mature trees give shade and lower temperatures helping everyone.
The graphs were slightly confusing. I think we are solving a non issue. We have amazing tree canopy which I survey frequently as an certified arborist, BS Botany, Master Gardener I see an ever increasing canopy in yards.
The draft has only a limited section about preserving older trees rather than replacing them with new ones. Newly planted trees will not provide support for the environment for decades and by the time they are matured it may be too late.
I don't want to see a drop in canopy cover for residential areas, would like more trees downtown and the waterfront (though that might be a Port decision?). Would like to see regulations to prevent developers from cutting down healthy mature trees.
I actually agree overall. I am disappointed that the total increase goal in canopy is only 5%. That's basically just keeping stasis. I would like to see at least 10% to indicate an investment in overall growth. only
It's a vague plan. Too many old growth confers have already been lost and there is not plan to replace them. Just more crappy deciduous trees. The goal should be on ecosystems not people.
I would like to see something about making sure that people who are developing/building new homes have to keep mature trees and not cut them down. I have seen a number of properties developed in Bellingham and many people cut down all the trees.
It's overkill. Particularly when it comes to vacant lots on which residential homes need to be built in order to create the necessary infill that communities need. A residential lot should be able to remove trees that fall within the footprint of the lot
Concentrating growth within the city of Bellingham fosters economic vitality and overall environmental health. Limiting growth within the City of Bellingham only limits economic vitality and pushes growth to more environmentally sensitive areas outside.

Comments on disagreement with the draft vision
It is a good report, and a good draft plan. Given how goals turn into reality, I would like to see higher goals set. I would also like to see that report card needle pushed far into green territory.
Must retain Bellingham's large trees, limit what trees developers can tear down.
Most of my problem relates to the metrics. that may be my lack of understanding and not a problem with the draft.
Please prioritize saving existing healthy trees. Stormwater infiltration is a vital need. New plantings should be modeled on HIP resource library and include groundcovers & shrubs as well as trees.
Plan not compliant with SEPA/GMA; does not calculate loss of buildable lands to meet population and job growth adopted in Comp Plan; does not document steps taken to notify large parcel property owners; lacks input from housing producers and designers.
I worry that not enough emphasis or leverage can or will be put on either private property canopy coverage or on other local governments (or Public Works) -- this needs to be a holistic, City-wide plan or we will just end up with freakishly over-planted p
Not enough protection for existing mature trees
More must be done to protect our city's mature trees.
As a professional that works in the climate action space, I think the city needs to take a stronger and more proactive stance on protecting our mature forests.
The vision, goals, and targets in the report are very general. To be more effective, specific proposals or actions should be outlined.
All are aspirational, w/out measures to achieve them. Many designed to fail. e.g., 1:1 replacement for public works removed trees would replace mature trees/canopy with saplings. Would cause large canopy reductions. None would address canopy inequities.
The suggested actions are not specific or detailed enough to hold policymakers and municipal workers accountable to the expectations that we will be enhancing our urban forest canopy moving forward. Strong tree protections are vitally important.

Q5 Is there anything you feel would further improve the draft vision statement?

Comments on how to improve the draft vision
improves air, soil and water quality restores diverse and essential flora and fauna
Housing
The main thing Bellingham needs are laws that protect trees. Property owners shouldn't be able to clear a lot of all it's trees without ramifications. Right now there's nothing to protect a healthy tree from being cut down.
I'm a proponent of complex ecosystems so just planting street trees although an incredible help doesn't always hit the mark... we need complex forests/ open spaces linked to each other for EVERY development. IMHO
I like it. Concise!
We need to balance this with a commonsense approach to allow for housing development. Housing supply is far too low. This is yet another example of regulation inadvertently driving housing prices up.

Comments on how to improve the draft vision
Community goals are important but they come with a cost . At this point we have a strong urban canopy and should focus on helping housing providers to reduce costs to hold down rental costs.
Veto it. Send it to the round file
Private Property cannot take down trees of a certain age or certain diameter.
Creating a 'tree bank' that would generate funds for new trees
A resilient forest is a mature forest. Street trees typically have a 25yr lifespan, so protecting 80+yr old trees is key while we continuously replace what is lost.
Remove the part about private property
I think the importance of growth of the tree canopy should be below building more "for purchase" housing options within the city to meet the significant lack of housing within Bellingham.
You are creating only headaches and extreme expense for homeowners. Also increased taxes and only jobs for people to cut them down. Blocking views too. Trees also are damaging for roof and the environment around them. If you want to hug a tree go to the nearest park and see how bad the Park Dept. has maintained the areas. Look to Cornwall Park. It used to be a beautiful place with flowering Rhodies and now they can't even pick up windfall from the trees. How are you going to maintain the mess you plan to create. Just charge the taxpayer with your hands in their pockets. Soon Bellingham will be like California with people leaving.
Does a resilient urban forest improve quality of life for those experiencing homelessness?
simplify it--terse is easier to understand than committeespeak
The council and City staff should focus on enhancing and protecting the trees on public properties but not look for more control over private owners land. I can see someone wanting to remove a tree because of fear it will drop limbs, or they want to expand their house or lawn and being told they can't because of this "needs of our entire community". This isn't a communist society, yet.
Climate mitigation is essential not only for Bellingham, but also for the life of our planet.
Private property is private property. This plan will lead to greater expense to maintain a healthy property with regulation and expense. Isn't it already too expensive to live here?
I don't think there should be a vision statement because I don't think this plan should be imposed on residents. There are too many restrictions and policies as it is.
If you loosen restrictions on private property owners and actually allow them to improve easements and right-of-ways abutting their property without forcing them to pay for 40k geo-engineering to improve property they don't even own, you might see private land owners doing amazing things for reforestation and runoff management.
Stop pretending you are going to change the weather.
Just tell it like it is: "we in Bellingham leadership want to control everything about your life because we are little dictators who like to claim virtue"
Remove climate mitigation. Replace with "contributes to the natural beauty"
This is a very complicated issue as there are many reason for planting trees or cutting trees down. Many different opinions can be correct. While a tree may be beautiful it can also cause damage to a structure or other problems for a property owner. In dealing with the city they always seem pretty strongly one-sided
I would like to see wildlife and salmon named in the statement.

Comments on how to improve the draft vision
I would like to see tax exemptions, provided for people who keep exceptionally large and important trees growing on their property, as well as developers. I think these should be recognized and protected.
To answer this would require a more in-depth reading of the draft plan. The components seem right.
The goals are fine if you already own a single family residence. If you don't or are you, this plane makes a safe livable space less likely. So, it's great for people with money.
Clean up the garbage around town, quit allowing illegal criminal garbage camps around town, basically clean up what is around us first or it s all for nothing. In the mean time I cannot take this seriously. It's a waste of tax money for someone's profit
Nah but it's kinda corny
I agree that trees and green spaces do the above, but I don't agree with a blanket increase across the entire area. I think that a more impactful approach to to continue to create dedicated greenspace and parks that people can use rather than putting the burden on private land owners.
Private property should be excluded from the vision.
Bellingham has no right to usurp the ownership role of the flora on any private parcel.
I'm totally against infringement of property rights. People like trees and if they want them will plant them and remove when dangerous without waiting for government permission.
i am not sure what you mean by the urban forest supporting 'associated ecological functions'. In riparian areas, that makes sense, but outside of them, what do you mean?
I think it should say, "just another way for the city to infringe on property owners, although we already like to stick our toes into every possible aspect of peoples lives and refuse to address real issues like no affordable single family or apartment housing and the rampant homeless issue ❤️"
No
Specific goals for resident contributions. I understand that the arborist using a chainsaw must be insured by the city, but my friend is a Land Steward through Whatcom Land Trust in the areas south of Edgemore. I've volunteered with Whatcom Million Trees & City of Bellingham in transplanting & weeding. I wish the plan specifically listed goals for community volunteering. People support this.
Protection of our environment must take precedence over monetary considerations and development pressures.
It is also good for business because it is beautiful and attractive to people working and utilizing businesses in Bellingham
Honestly stating that Bellingham is focused on forcing residents into small apartments with no future of becoming homeowners
Add, "while respecting private citizen's land evaluations, applicability and rights."
I love the sentiment of the statement and see value in all of it! When I first read the statement before I read the plan, I was worried that the plan wouldn't take into account what effects building healthy urban forests has on housing security of other issues. I love that that was indeed covered in the plan. As a natural resource conservation professional who absolutely values urban canopy, I still think it would be great for the statement to cover the balance between healthy forests and balancing that with social needs.
And the earth
It needs to speak more to safety, and disaster risk reduction and clearly define that the forest will be proactively managed in a way that doesn't lead to the city being destroyed by a

Comments on how to improve the draft vision
wildfire. I like the language about climate change and agree that the first can bring many benefits and mitigate against climate change, but a poorly managed forest close to houses is very risky. Management must be in place. The city already has a lot of distressed trees.
accommodates future residential/commercial/industrial growth and development
No, it's good.
We need larger trees along roads to keep our communities cooler in the summer. The current landscape trees are too small to shade our roads including arterial streets. We need to encourage small trees on apartments patios as seen on n Vienna to decrease overheating in apartment buildings.
It is also critical to create and uphold policies that preserve and protect old growth trees.
engage with the people who own land in these areas and discuss what may happen.
Though the report discusses the importance of "habitat" and wildlife corridors, this initiative focuses on measurable "canopy." A closer look at wildlife habitat that might not be on the radar -- weedy edge environments along alleys, for example, or vegetation on transition areas -- might better capture the meaning of important wildlife habitat in particular places. Especially where canopy is spare or spaced. This might also be important for a realistic equity assessment. I understand how hard it is to create a plan that both captures reality and provides measurable indices for planning purposes, but how "canopy" and even individual trees or the absence or removal of them impact particular "census blocks" within the larger plan, and not just on the neighborhood level, would capture the full meaning of "living with trees" (and living without them) -- for Bellingham humans and also other animals. I see some sensitivity in the report to concentrating planning efforts on neighborhoods with very low canopy levels and tree equity scores -- like York and Sunnyland -- but this needs to be intensified. It's possible that a closer look will reveal that trees and other habitats are getting whacked at a higher rate in neighborhoods that are gentrifying, even by "environmentalists." This is an equity issue, but also presents a potential political challenge to the general orientation of your plan. I hope you'll consider these observations nonetheless.
I'd prefer stronger wording, like instead of "contributes to, the" I'd prefer "prioritizes", but I know, it's safer to use more neutral language. But considering how we humans have altered the climate maybe irrevocably, perhaps we should stop being neutral?
Perhaps, and not to economic benefits, such as tourism.
To simply state "enhances the quality of life" does not impart how the "quality" is improved. If it is recreation, you should mention that, if it's climate mitigation, mention how. The vision statement should be aspirational in nature, this just says what the urban forest does. Perhaps, "Bellingham strives to employ the highest level of urban forestry management practices to preserve existing forest components, cultivate forest coverage equitably across the citizenry, and maintain its urban forest to mitigate the impact of climate cycles on our city and all of its inhabitants."
I think the vision statement lacks a specific reference to preserving existing mature trees. Newly planted trees take decades to provide the level of environmental and economic benefits of a mature tree, and many will never achieve that due to lack of investment in providing proper soil volume and establishment/maintenance.
It is clear and comprehensive.
equitable distribution of tree canopy through out the city
creates beauty for the city
what does "adaptation needs of our entire community" mean?
Where are the studies that justify the claims for reduced carbon emissions and health claims.

Comments on how to improve the draft vision
...healthy, diverse, and resilient...
maybe clarify what "quality of life" means. i understand that it should be a concise statement, but maybe a very short list, or even just "benefits residents both physiologically and psychologically" or something
Something about balance, since the implementation of this Vision will have impacts (not all positive) on other City services and needs.
We have billions of dollars of infrastructure in the City of Bellingham sewer plant, water plant, storm water, electricity, roads , sidewalks & all the utility lines serving those systems. We need density in the City of Bellingham, in order to save farmland & forests outside the City . People will build out in the farmland & forests if you do not allow them to build in the City of Bellingham
I assume there will be an opportunity for comment later in the survey, but we need to consider housing affordability in all of this. We need to have a plan that promotes development of more housing of all types.
This is accurate and I agree fully with it, but do not support the additional canopy proposed.
Make the position of head of Planning Department an elected position.
...provides corridors for wildlife essential to prevent extinction
Get rid of the draft it is hard enough to build in the city limits with the current regulations this will stop all growth
N/A
It's all guidance. What is critical is the action, based on the recent golf course decision to remove mature trees demonstrates to me that when a situation involves developers vs trees, the trees lose. Unless there are teeth in implementation words are worthless
This Vision prioritizes Urban Forests over people, making it harder to build homes and provide affordable housing.
I strongly agree with question 2 above but that option doesn't show
I would say strongly agree to this statement, but can't select that option for some reason.
Doesn't sound like a vision; it sounds like a statement of fact of what currently is. I think that the vision statement should have more vision in it. It currently doesn't have a feeling of working towards something greater. We are looking to increase our tree canopy to get to 45% by 2050, so we need a statement that inspires. We need to have the passion in the statement that aspires to accomplish our goals.
Explicit acknowledgement of non-human residents, though I am not sure how one would say that
better air & health - if that is not included under quality of life?
Clearly outline how the City of Bellingham plans to maintain future funding of urban forested areas to ensure continued care and upkeep. Is this a set line item in the City of Bellingham's budget are we reliant on approved grants and is the maintenance going to be equitable throughout the city including socio economic challenged or underserved areas.w
Mention should be made of prioritizing regions that would be most affected by heat domes and that are low-income where air conditioning and cooling sites would be less available.
Maybe add a couple of immediate benefits to the community such as cleaner water and more water retention.
I agree with the vision statement but do not believe increasing the canopy is necessary.
I think it is too human focused. I would prefer that it centers nature and the outcome is it makes for a better environment for people.

Comments on how to improve the draft vision
I'm sorry but i have been a life time resident of Bellingham and we cant talk urban and forest plan without taking steps to protect what we have. Homeless camps will destroy or reverse any attempt made to better our city. again i apologies but there was a time when this city was a beautiful place to traverse, nature everywhere without planning regulations. Seems that all efforts here are a waste of money.
Maintaining 40% coverage is not adequate. Stormwater is not being properly filtered and neighborhoods are too hot. We need more trees on the landscape to counteract increasing summer heat and increasing winter rainfall.
A blanket percentage of canopy cover is not equitable. We need to look at neighborhoods individually and work to get places where people live and go to school up to 40%. We should keep neighborhoods that have 45% coverage at that level, and focus on those that are further away from 45%.
Not all tree types are ideal for this. Encourage the planting of native, climate-resilient trees that will survive as climate change raises average temperatures.
Strongly support this plan within other Bellingham land use plans (like the Comprehensive Plan) and City Land Use Development Codes. The success of this plan is dependent on integration into other plans, as they will create more accountability together.
Defer decisions on specific trees to those than own them. Allow neighbors to negotiate with each other the best actions to take if trees block others' views which lower their homes' values.
Emphasis improving the canopy inequity in low-coverage neighborhoods especially in Urban Growth Areas.
Needs better better enforcement tools for keeping mature trees in the city.
some details on how funding is to be generated on plans for tree planting would've been helpful. we need to incentivize people keeping their mature trees, not simply replacing one with new seedlings. We need to preserve all tree canopy we have, not just plant to restore it.
affordable housing, I graduated from Bellingham High School & Whatcom Community College and work in the service industry. I cannot afford rent or to ever buy a house, so I will move to a lower cost area. You will have no one to stock your shelves , sell you food, take you blood pressure or clean up.
State unequivocally that trees are definitely a necessity in Bellingham and without them, Bellingham would not be the beautiful place where we live.
smallest percentage of citizens are getting the largest voice in this plan. Targeting the best interested of overall community will best serve the city.
The statement should acknowledge the tradeoffs between the UFP and other land use, such as housing.
This statement isn't aspirational enough. Use of "all" and "entire community" are too general and don't envision an urban forest with a high, wide-reaching level of service.
I think the climate mitigation is a broad concept. Tree retention is just one of many elements that attributes to it.
Language about a healthy urban forest's positive impact on community health and well-being may be nice to include
remove the word "all" for all residents
I do not feel like the urban forestry plan "contributes to climate mitigation and adaptation needs "because mature trees and forests are not protected. Mature trees provide canopy

Comments on how to improve the draft vision
coverage/shade, help prevent erosion and flooding, break strong winds, capture carbon, provide shelter and homes to animals, produce food, support mental health, and so much more. To "support ecological function," we should support the current ecosystems and add diversity through native species.
Although perhaps implicit, I recommend explicitly stating that urban forests provide habitat for wildlife and the occurrence of such provides human pleasure in such areas.
Add "and visitors" to follow "residents".
Quality of life: why? There are studies that have looked at this effect in Korea and Japan. How will this help Bellingham?
The plan ends up being 40% to 45% which, to be frank, is underwhelming. The vision either oversells itself OR the plan doesn't live up to the vision.
The plan definitely needs to speak more about the flexibility of where trees are to be planted as well as the importance of maintaining trees and choosing correct types of trees for diverse areas. Solar panels were mentioned in the plan as something to take into account. The importance of correct placement of street trees was mentioned in the plan. There was no mention of correct placement and pruning of trees in order to maintain valuable views. I support increasing the tree canopy, but feel you are ignoring a large group of people like me who support the canopy increase, but don't support a plan that doesn't mention the importance of maintaining views. Bellingham has beautiful views from many of the hills. Many people have chosen that as one of their top values when choosing where to live. It is not right for the plan not to take this into account. Many people are fearful that the city will encroach on their rights to maintain their view property. My neighbors aren't against trees, but they are fearful codes and laws will be made without taking into account the diversity of Bellingham and how each area is affected differently by tree canopy. Codes and rules will be made based on this plan. Therefore, the plan must have language in it that speaks to the challenges of maintaining views while increasing urban canopy.
I care way more about the people living in our "urban forests" than about the trees growing there.
The climate mitigation piece is overstated. Insofar as more trees in Bellingham will provide shade to cool us on hotter days, great. But there is no meaningful quantifiable benefit from more Bellingham trees on impacting climate change. We could go to 100% tree canopy and not make any impact whatsoever on climate change. This aspect is a disingenuous part of the plan.
Prioritize native, climate resilient plants/trees, and conservation.
I don't agree that it's currently "healthy and resilient." But I could agree to a slightly edited version: "A healthy and resilient urban forest in Bellingham 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."
It doesn't create a vision. It gives reasons an urban forest is good, but it's missing an end state/ideal/direction/etc. towards which to move. Vision statements should include some kind of intention and that's missing here.
No
The draft vision statement for Bellingham's urban forest is comprehensive and effectively conveys the key elements. However, to further enhance it, you could consider adding specific goals or outcomes that align with the vision. For example, mentioning targets for canopy cover percentage, biodiversity enhancement efforts, or community engagement initiatives

Comments on how to improve the draft vision
could provide more clarity on how the vision will be achieved. Additionally, incorporating language that emphasizes the importance of equity and inclusion in urban forest management could strengthen the statement.
I wish there was more specificity about civic/private ownership and preservation of mature trees, particularly regarding future housing development.
The statement needs input from homeowners, builders, architects, and developers.
-AFFORDABLE HOUSING: Increased regulations and rules will further constrict the limited developable land within the city which will further restrict the creation of FOR PURCHASE LIVING UNITS. This will result in homes becoming more expensive within Bellingham AND Whatcom County. DOES THE CITY COUNSEL AND CITY STAFF ACTUALLY VALUE AFFORDABLE HOUSING?!? I think not!
-COST: How much will it cost to MAINTAIN our current tree canopy? Do you even know?! How much will it cost to increase the tree canopy to 45%?! According to the last committee of the whole meeting, CITY STAFF DOESN'T KNOW HOW MUCH IMPLEMENTING THIS TREE PLAN WILL COST! Two weeks ago I was talking with mayor Lund and she stated the city is operating this year in a MULTIMILLION deficit. Why are we considering a tree plan that we don't have any idea how much it will cost to implement?!
-Private Land Owner Rights: The city has the right to increase tree coverage on land owned by the City. They do not have rights to implement legacy or heritage tree rights on private land. It's called taking and has been litigated within WA state before. KEEP OUT OF OUR PRIVATE LAND.
I don't know - the majority of the population now stays inside to watch TV and be on their phones so, the vision statement should reflect reality as I don't believe a 45% canopy will result in enhancing the quality of lives when most people don't enjoy the outdoors.
It's fine as a vision statement, but the remainder of the draft report doesn't really relate to it. MATURE trees are the ones that will most contribute to your lofty vision statement, yet the report does virtually nothing to protect them other than recommending more study for 1-10 years.
Statement needs language about urban forests also supporting urban wildlife, which we have a lot of in Bellingham. Continuity of urban forest habitat is critical for wildlife. Isolated islands of green (like golf courses in the city) are not helpful.
It's vital to consider the health benefits of nature exposure for physical, mental & emotional health. There are lower rates of dementia in people who have exposure to nature on a regular basis
Include all Trees
Allowing development in the name of infill and more housing at the loss of mature trees is unacceptable. This does not solve the affordable housing problem. I live on Chuckanut Bay and look over at the onerous development proposal Woods at Viewcrest that would wipe out that mature forested cliffside. For the city to allow this and in other areas of Bellingham will destroy what we love about living here. Too many people now and too much traffic as well.
A forest is technically not what we have here. We have trees, some of which are alone, others in groups and very few in true forests that include many trees over a sizable acreage and also contain a lower level of bushes, ferns and other ground cover. I think the state should simply and accurately just say "Urban trees." I would also question the word "healthy" since there is no evidence all the trees in Bellingham are healthy nor do all trees in all setting support "ecological functions" or "climate mitigation." It is better to be accurate about the subject

Comments on how to improve the draft vision
rather than to suggest that all trees are providing the same benefits. The most important trees are those in undeveloped forested areas that are rapidly being cut down for development. The trees that developers replace older native trees with are not helpful and the razing of the understory for development creates drainage and other problems.
Please adopt specific tree canopy requirements for different types of developments. Having just an overall 45% goal isn't enough!
Protect old growth trees, stop cutting them down!
It's too wishy-washy. What does "enhances the quality of life" mean? What does "supports associated ecological functions" mean? What does "contributes to . . . needs of our entire community" mean? I know that "vision" statements need to be somewhat broad, but this could mean entirely different things to entirely different people. I prefer something more like this: Bellingham will: prioritize maintaining, protecting, and expanding a healthy and resilient urban forest that enhances the quality of life for all residents, even if that means limiting development and logging; support ecological functions of its urban forest and maximize those functions to the benefit of the forest and all residents, and; reasonably maximize the ability of the urban forest to increase and improve the climate mitigation and adaptation needs of our entire community.
The City should prioritize preservation of mature trees of all types. Special permits should be required for cutting or removal of any tree with a caliper in excess of 18-24 inches and mitigation should be mandatory with replacement of at least 4 new trees for each cut or removed. Use of native trees should be mandatory for all mitigation. And there should be a required obligation to return to mitigated sites after 3years and replace any trees less than an 80% survival rate.
Yes, the development of current full-canopy areas should be clarified. No matter how many trees are planted on sidewalks, having regions of high population density and regions of natural forest are better for habitat and quality of life than sprawled medium-density with no natural forest. It seems that the proposal is suggesting that current areas will be developed and planting trees in yards and parking lots will somehow make up for that. Is the proposal stating that current protected and undeveloped areas will be completely developed into residential areas? And that this is acceptable because trees by roads are 'habitat'? Planting trees in the city is important for reducing heat and pollution, but those trees are incomparable to green space and forest trees.
Leaving mature trees in place and providing arborist support for Bellingham's home owners for exactly that purpose. Droughts are drastically changing the native cedars and Douglas firs in our community. Infilling new home builds drastically change the water runoff which affect close by properties.
While people will always take priority over other living species, please include text in parenthesis as follows:"quality of life for all residents (human and non-)..."
Need to include mature tree protection
The UFMP needs to provide enforceable guidelines to the vision statement. The current version does not do that. We need guidelines for new development to at least maintain 40% urban tree cover necessary in our changing climate.
Needs to include that mature trees contribute, and newly planted trees will contribute 20 years from now. Prioritize existing trees.
No
No

Comments on how to improve the draft vision
Yes, save all the older trees that you can!
Emphasize preserving existing mature trees. These are already providing the cooling and shade needed. Nothing more is required other than to leave them in place. Require developers to work around existing mature trees. New trees can take decades before they can be beneficial.
Preserving existing trees is a critical responsibility for communities as global warming and diminishing biodiversity are challenges we must do our part to address.
Tree planting vs. tree protection and retention. Materials in the canopy cover presentation planned for tomorrow's meeting emphasize tree planting and provide lesser emphasis on tree protection and retention. That is a recipe for increasing climate impacts and deepening environmental inequities. The approach amounts to allowing continued removal of larger trees with replacement of small saplings and seedlings. Saplings do not replace the functions and values of larger trees, and cannot do so for many decades. The replacement timeline is longer than the deadlines for mitigating climate change.
Didn't see this in there, maybe it is....but please add trees to every parking lot, especially big box stores and grocery stores. Everyone wants to park under a tree!!!! Shade for my dog!
It should include PROTECTING the existing old growth we already have.
It is again vague. Beautifully presented but with little specifics.
Include trees and sidewalks on new developments
Best practices should be changed to "best available science"
Planting saplings or even small trees hardly benefits climate mitigation for decades to come. If intended to replace mature trees it certainly would do more harm. Planting trees in relatively small urban lots or along sidewalks would also most likely lift foundations and/or sidewalks a property owner would be liable to repair at his/her own expense. Adding trees to larger urban lots without cutting down and thinning out established woods makes way more sense!
More immediate implementation of saving the existing tree canopy.
Save more mature trees. Make it harder for someone to cut them and easier for them to find other ways to do things
I think trees, a verdant environment like we are honored to have and care for supports mental health of the community.
It's a vague much-mash of feel-good buzz words. Hope about a clear and succinct definition of "Urban Forest" for starters?
More emphasis on preserving mature trees, as young "replacement" tree can take years or decades to reach a size to produce beneficial cooling affects as the climate changes. Also mature trees are more likely to withstand the effects of climate change.
Protection of mature trees is a priority to meeting the definition of a "resilient urban forest"
No
I was unable to complete #2 because the options were cut off midway. You need to fix this.
"mitigation" seems absurd or nonsensical in this context, just in terms of the scale of causes and effects of hypothetical mitigating actions.
I would rather see the vision statement be an action statement. What are the goals? This vision statement does not advocate for positive changes.
Needs to address the issue of constant development and increase in housing within Bellingham, as this is in direct conflict with goal of increasing urban forest. To achieve this goal, there needs to be some kind of regulation limiting amount of land that can be developed - for whatever purpose.

Comments on how to improve the draft vision
Consider replacing the word “enhances” with something that places a higher value on the value of the trees, like with “is essential to.”
add: urban forest must be increased to compensate for growing climate extremes
It would add impact to include more specifics about the Ecological Functions, as identified in the Urban Forest Report (e.g. details in the diagram of a tree + benefits). Many citizens are unaware of these crucial benefits.
The vision statement is the "what" but it is only a wish because it does not address the "how" we will get there. You need to add some means of oversight and enforcement. And metrics that advance the timeline as rapid development is wreaking havoc now. There needs to be urban forest experts on the development team. Master Gardeners from WWU would be an example.
Perhaps expand on the meaning or scope of “ecological functions.”
No
Strongly agree
I think something about protection needs to be added. Like to keep the benefits of our urban forests strong protection matters need to be put into place
Add a time frame component. What can improved management of Bellingham’s urban forest contribute to city climate goals by 2030? By 2050?
Sooner study and sooner action to protect and preserve.
Start with “It is essential to plant and preserve trees because” and then continue with the statement as is.
The urban forest as envisioned in the plan doesn't go anywhere near far enough. Incrementalism will leave us with nothing, because the developers and economic growth lovers will chip away at even the increments. In fact, it seems that they wrote the plan.
it would be great to have something about preserving mature forest and trees.
seems to me that a vision statement should include clear statements about the urban forest protections and enhancements. The vision statement above is way too soft, way to vague.
This is a nicely crafted statement. I only hope the reach is far enough to affect the most people, to raise the number of invested stakeholders in the community.
Insert language stating the importance of maintaining climate resiliency from an equitable standpoint, given that low income and houseless residents are more severely impacted by climate extremes.
Make it simpler, break it down into several surveys instead of one big bulk to read and respond to.
should have more reference to living with Wildlife in a urban setting
MATURE TREES need special and immediate protection as they provide the greatest benefit to climate change, our important tourist economy and our standard of living.
mature Trees are very important in an urban landscape. The quality of life is VERY much improved by mature trees. Also the summer heat is greatly reduced by trees and cools down the urban temperature.
Clearer language. It's too vague .
The forest will not continue to be healthy if plans are not put in place to discourage developers from tearing out old trees to make way for apartment complexes and other forms of housing. Even the act of developing an area can kill trees in the surrounding area if root systems are damaged by heavy machinery treading overhead. As I stated before, it will take decades for a tree to reach maturity (Bastin et al., 2019). With the rate of climate change, by the time the newly planted trees serve as a viable mitigator against climate change, it may be

Comments on how to improve the draft vision
too late.
Bastin, J. F., Finegold, Y., Garcia, C., Mollicone, D., Rezende, M., Routh, D., Zohner, C. M., & Crowther, T. W. (2019). The global tree restoration potential. Science, 365(6448), pp. 76-79. doi: 10.1126/science.aax0848
Setting an example of policy and approach for other cities to adopt.
When building homes in Bellingham mature trees on these sites must be kept.
The Vision Statement needs to have guardrails in place. This statement fails to consider the impacts of residential home sites within the city. Infill is necessary and any efforts that thwart the removal of necessary trees to allow a reasonable footprint, is extremely counterproductive and fails miserably in an effort toward creating infill and can severely devalue any remaining homesites.
1. The usage of the word "all" (residents) isn't totally true. I'm requesting it to be omitted. An urban forest and the shade it creates most definitely DOES have its benefits; however, there are those of us whose lives are made miserable by living in it - enshrouded by tree canopies. Absorbing continual exposure to sunshine has a crucial, positive affect upon us physically and especially, mentally. A number of us specifically avoided purchasing property in dark, tree-shaded neighborhoods to improve mood/lessen depression and reduce the onset of other negative issues. 2. A quick mention of good stewardship of funds (taxpayer dollars) would make it clear to the citizens that, "The sky is the limit," will not apply. This is to mean that a carefully thought out, reasonable, cost effective budget is to be set.Or, perhaps something of this nature regarding the budget be mentioned elsewhere in the UFMP, for I do not recall reading anything about who is absorbing the cost of such a highly extensive project.
Stop cutting down healthy 2nd growth Dog firs on Alabama Hill
I strongly suggest wording like: Bellingham STRIVES to create and protect.
Stormwater infiltrated into healthy soil allows plant communities to thrive. Trees do contribute to climate mitigation, but they will not be able to be resilient to climate instability in compacted, degraded soil. Irrigation of trees will not be an option as the need for potable water increases and Lake Whatcom water levels drop. In my landscape design work I see many people are not enjoying conifers shading homes and deciduous leaf drop on sidewalks . A biodiverse landscape of long-lived, disease resistant trees, with shrubs & groundcovers can make a green city with fewer problems. Plants should be able to withstand drought and at least one zone colder and warmer.
Include GMA mandate to balance the need for urban areas with environmental programs.
It has been shown that increased green space increases physical and mental health, decreases crime and improves water quality
Metrics for how greenery or forests improve citizens mental and physical health in urban areas are really robust, so don't hesitate to add that
Part of statement "Bellingham's healthy and resilient urban forest" is confusing to me. Are you saying that we have a healthy and resilient urban forest at this moment. How is this defined? Where is this urban forest located ? Overall I think this is a too broad and vague statement
No
I think this needs to be backed up by more aggressive action on the part of the city.

Comments on how to improve the draft vision
I would add that the urban forest is crucial, not merely enhances. The urban forest is important in the reversal of Nature-Deficit Disorder. It is what makes Bellingham a premier place to live.
Planting native plants under the trees to help with weed suppression and invasive species.
needs commitment to action
This vision statement neglects to include building and maintaining a healthy environment for nonhuman lifeforms. It's very human centric. Indigenous peoples might take the view that humans are not the only lifeforms that are residents and need to be considered and included.
I like the vision, but just think we are a long ways from being there.
Vision statement is fine, albeit aspirational. UFMP as written would fail to achieve vision.
There should be a statement in there about a goal to protect older growth trees to mitigate climate change as well.
1) I think our urban forest is a key differentiator and *unique* strength of our city - beyond just "enhancing quality of life." Maybe add something to the vision statement that reflects this. 2) What does "climate mitigation and adaptation needs of our entire community" mean? I could guess, but please put in layperson terms.
Mature trees by far provide the most benefits to all of us. Start requiring mature tree to be retained in all new developments!
Bellingham is growing rapidly and there will be inevitable tree loss. However, the city should require developers to retain as many mature trees on a site as possible
While ecological functions does, to some people, convey the improvement for wildlife, I think mentioning the positive impact on wildlife in the area would help clarify that point in the vision statement.
"Action is needed to protect and enhance our urban forest so that future generations may be able to enjoy healthy lives via the many benefits that trees offer."

Q7: Please explain your answer on whether or not you support the canopy cover target

Comments on the canopy cover target
I fear that trees cut down in UGA will exceed the increase of trees within city limits. Measures must be taken to protect UGA trees.
That seems to high given we are in a housing crisis. Also, trees need a lot of space from buildings and development to be generally healthy and safe for community members.
As a growing urban city emphasis should be on housing and workplaces. If we included the UGA we could get there but putting more restrictions on housing with further our housing crisis and we will lose our diverse population.
This is unrealistic. Where are people supposed to live? There is already a housing shortage and housing is so expensive already. this will only increase housing costs by only minimally improving the environment if at all
Canopy cover is a short term look. Let the development community develop and plant trees to mitigate the ones that have to come out. In 20 years you will have significantly more canopy than you will know what to do with
Conceptually, increasing canopy cover is great. But not when it means that it is going to limit developers from building the much needed housing in areas where there may be trees that they will not be allowed to take down because of the new ordinance.

Comments on the canopy cover target
There is no way to do this while also increasing housing density. A lack of housing is at crisis levels. The state is also mandating additional density requirements. This increase in tree canopy will march things in the opposite direction.
It will increase costs . I have not seen a cost / benefit analysis as to what a extra 5 % provides. How much will land supply be reduced ? Will we need to expand or UGA sooner because of reduced land ?
Goes directly against the goal of adding affordable housing
40% canopy is already the 'gold standard' in our state in cities our size
Again your talking about not letting homeowners cut trees they own that they pay taxes on
I think the importance of growth of the tree canopy should be below building more "for purchase" housing options within the city to meet the significant lack of housing within Bellingham.
Sounds like you don't want homes for people to live here. Is this for stopping population growth?
There are more pressing issues to the City than being the most forested city in the US
I do not want government forcing me to plant trees on private property
I agree this is great for the canopy currently under the control of the city or government, but not private lands.
Because I do not want govt agencies in control of private property due to the expanse and cost it will create.
We have far more pressing issues to spend our money on. Fully fund policing. Adequate mental health care, homeless.
I've already said - I don't agree with these regulations & policies on private land.
Maintaining or accepting a lower cover target would be more realistic given our goal to increase affordable infill housing
Depends on how much private property owners are restricted.
Like so many other things the City has done and sadly will continue to do, it will be a lot of wasted resources to produce little if any real beneficial effect, and like everything else will undoubtedly have negative consequences for some. some.
People first
Leave the trees alone!
it should be more, and the urban growth area needs modifying, we should build up not take down trees across areas, i.e. less single dwelling homes.
I only support the increase of trees on city and public land.
Insurance companies are requiring home owners to remove trees near their homes possibly because of climate change and making homes more resilient to fires
Many trees were planed along roads or required for new structdures...sometime later they all had to be removed for differing reasons...buckling sidewalks, sight limitations, etc
I am not certain that is enough or too much.
This question requires expertise that I don't possess.
See previous.
Increasing shade is not an objectively valid goal.
Government needs to stay out of property rights issues.
PUBLIC LAND ONLY. NOT on PRIVATE PROPERTY!
This is such a stupid target it's insane

Comments on the canopy cover target
I object to private mandates, if you wish to address public spaces that is fine and I support that.
The survey conducted by Bellingham prior to establishing this Urban Forest Plan stated that this was 3rd of importance to the people that completed the survey, so why not focusing on reasonable housing costs which was first on the list?!
The cost associated with this and the economic inability for development of urban growth area
Talking in percentages (40%-45%), it is difficult for a public community member to understand what that really means and how it may impact my own home/lot.
It depends on how much the additional canopy cover is maintained at homeowner time and expense.
What are the trade offs the community will face with this goal increase? Affordable and available housing is, by many accounts, the top concern of residents. Will we lose housing opportunities?
I like that it is ambitious but achieving it will be more expensive than our community can afford.
Infill development (housing) should be the highest priority. Ensure appropriate landscaping of new development with trees & installation of curbside street trees to maximize street/sidewalk shading is essential to minimize urban heat island effect.
Has the city contemplated the acreage for 22,000 trees annually? In the midst of a housing crisis, where rents are barely stable, un-housed populations are rising, and housing prices are out of reach, land could be put to better use than planting.
With the current housing shortage and the desperate need to develop available land within the city limits this goal seems to go against that.
We are not addressing any affordable housing issues. Not only that, but increased tree cover will hinder solar panel installation as it will be too shady to be of use. How does that achieve our climate objectives by disincentivizing the use of solar?
45% cover is unrealistic. It is more than any other similar community. It will be very expensive for the City. It will undoubtedly impact our ability to meet our Housing goals and economic development goals.
The City of Bellingham is making housing so expensive nobody can afford to live here.
There are vastly more important issues in our community the City should be spending time and money vs a 5% increase in Canopy
Seems excessive and compete with other more important community needs such as affordable housing.
It is just going to make it more difficult to develop. We have barely any land to begin with that's left, and all this will do is drive costs even further up.
We don't need it current economic factors are already making it next to impossible to build
We don't need more trees. We need more housing
Should be a higher target facilitated by stricter tree removal ordinances
I think urban growth areas also benefit from increased canopy
Going to 45% cover will negatively impact the City budget and overall density. The cost of housing is already too great, and this increase would make housing even more unaffordable.
It will make it more difficult to build homes and therefore will drive the cost of housing up more.
Please read my response above. Lets stop the destruction of what we have before we start adding new.

Comments on the canopy cover target
I like the idea of 45% but it's less expensive to install large healthy trees in existing parks & planting strips with small or dead trees (like Barkley hill to Tweed 20 where I live) than try to make downtown a forest.
The value does not justify the cost and the principle of taking control from owners is deeply flawed. The money could be better spent to house homeless people and increase security provided by the police..
I support maintaining the canopy cover but not increasing. Land in urban spaces is valuable and should be prioritized for housing.
An increased canopy coverage will reduce housing units. These housing units will be constructed elsewhere in the county requiring more trees to be cut down outside of the city. Residents will be forced to drive further distances and sprawl will occur.
I cannot afford to live here. This is crazy we need housing in the City of Bellingham. I can go hike in the National Park they have 97% ownership of Whatcom County
I believe the increase of cover should be more than 45% with the target to keep from the removal of trees, especially old trees for urban growth.
I support the 45% goal if it's achieved by limiting new building permits and by planting trees in existing parking lots and apartment complex areas.
Fifty percent is better and doable.
Maintenance of the current 40% will require a focused Forestry Plan.
I would support the 45% target if the emphasis of implementation is on public land and voluntary private land.
I've never once thought - "boy, we need more trees around this beautiful city". Everyone loves trees, but at what cost, both to the community and the individual homeowner's rights and property value.
Tree retention is important, but as shown in the report, for a city of our size we already have significant tree coverage. I think it is much more important to consider the impact of this 5% increase on preventing affordable housing due to tree protection
We are already heavily forested
The city needs to incentivize development, i'm afraid this is yet another barrier to building when it's already incredibly expensive and time consuming to do so.
The burden will fall on private home owners to make up for the city's mistakes
I have a hard time visualizing what 22,000 tree (minus the Urban Growth Area) would look like. As I mentioned earlier, land that is valued for it's views should be taken into account.
This is absolutely pointless pseudo consultation.
I think it should be more than 45%
It's arbitrary. There is no logic behind picking this number. It greatly exceeds what similar cities target and will reduce housing affordability and increase homelessness if not managed carefully (that said--if costless, yes, more tree canopy is great).
I need to read the plan more to know all the details
More control of our property along with higher taxes is not the way of a free country
Bc I'm sure it will cost more in taxes and/or prevent growth
It is to restrictive. I had a tree that I wanted to cut down but the city said no. There was a freezing ice storm and the tree fell on the house and went through the entire second story. If the occupants had been in the house, 3 people of of died.
AFFORDABLE HOUSING: Increased rules will further constrict the limited developable land within the city which will further restrict the creation of FOR PURCHASE LIVING UNITS. This will result in homes becoming more expensive within Bellingham

Comments on the canopy cover target
The overall costs (both direct and indirect) of requiring a 45% canopy will far out weigh the benefits - with zero impact on the climate.
The Canopy should be increased from 40% to 65% by 2050
It needs to increase more. Areas where I live are at 65% for canopy cover, the proposal would reduce it. Leave mature forest areas alone.
Please adopt specific tree canopy requirements for different types of developments.
COB needs more aggressive annual goals, 1% per year is much more reasonable and measurable. 5% over 25 years is too little too late.
What's the rationale for the 45% target and if it makes practical sense how will the 5% bump be paid for?
I like the idea of an increase. 5% is maybe not enough.
A blanket goal of 45% isn't enough. There should be specific requirements for different types of developments.
Can't we do more?
I agree with planting more trees within the city and surrounding area. Please preserve our mature trees.
A 45% increase is WAY too low a target...so I could NOT answer "yes" or "no". It's a very loaded question
Canopy cover needs to be greater than 45% by 2050
This target number is meaningless and arbitrary. You have an 80 page plan with all kinds of complexity, then negate it with this one stupid number.
what is possible ? can this be increased sooner than 25 years?
Please adopt specific tree canopy requirements for different types of developments. Having just an overall 45% goal isn't enough!
Depends on many things not listed/stated.
It needs to be much, much higher than 45%
NOT ENOUGH!
From my position as a person with no training or expertise in this area, I would say 60% cover would be MY goal. And, perhaps 45% IS a reasonable goal.
the increase to 45% by 2050 is too little too late. Reminds me of what the UPS driver told me when I asked when their fleet will be electric. "Our goal is all electric by 2040." We will all be fighting for our lives in 2040 if we don't act sooner.
I don't agree with excluding Urban Growth Areas. Developers will use this as an excuse to clear cut all trees, including mature trees.
Tree canopy can be a misleading metric. 1 acre of japanese maples, and 1 acre of douglas firs have the area but not the volume.
I'd like to see increase canopy in all areas, not a reduction as noted by some areas in the plan.
Having an overall 45% goal is not enough. Fix the loopholes developers use to clear cut mature trees from a site.
It fails to recognize growth and the necessary infill that needs to take place for a sustainable city. It's overreaching and needs to include viable and necessary exceptions.
1. At what total cost is this increase of 22,000 trees per year? Please provide details BEFORE moving forward. Are tax payers financing this? 2. We paid a premium to live in a house with city & bay views. We do NOT want to lose it due to tree canopies.

Comments on the canopy cover target
I do support having a target increase. But In 25 years, I would like to see that number even higher.
The target for green cover should be higher. Trees fit only in some places, but layers of large to small shrubs & groundcovers, including evergreen plants could increase green cover.
No scientific data has been presented to validate 45%. No calculation provided showing how 45% metric reduces buildable lands for population and job growth targets adopted in the Comprehensive Plan, as approved by the City and State.
Given climate change, shouldn't we try to do more. 5% in 25 years is not much.
It should be much greater of a goal than that. We are expected to have an increase in temperatures and less rainfall. We need to aim WAAAY higher than 5% more by 2050. We should be aiming for a 1% increase PER YEAR through 2050.
Is there space to effectively add 22k more trees? Without risking future root encroachment on buildings and sidewalks for example.

Q10: Is there anything else you would add as a high priority action?

Comments on high priority actions to add
Stop development above Mud Bay Sandstone Cliffs. Recode city so that mature forests like the one on Meridian and Birchwood, across from Cornwall Park, cannot be cut down. Reduce parking minimums, making room for trees. Make it easy to permit ADU's. Instead of pavement in any new developments, use permeable street surfaces treated by rain gardens (with small trees and bushes). Incentivise rain gardens in every neighborhood and near parking lots. Build tiny house villages on parking lots near the mall surrounded by urban trees. Plant willows and other recharging species along all waterways.
I strongly oppose the urban forestry management plan.
Removing parking minimums and density restrictions that lead to decreased canopy cover
A strong tree ordinance that protects all trees on private and public land. Regulation that curbs the actions of "tree services". Tree services should be required to have training. Most people who are cutting down trees in Bellingham don't know what types of trees they are killing. I have witnessed healthy exceptional trees cut down because they drop leaves or needles. We need community education as well as professional education opportunities so the people who are removing our urban forest understand what they are doing and the mistakes that they're making by removing healthy trees on private and public land.
URL links on all parks sign posting to educate park visitors. Better and more explicit sign posting about behavior- sorry but people DON'T do the right thing a lot of the time. Explain why creating social trails destroys delicate understory, introduces foreign species and disturbs wildlife; help create pride in local citizens about how special our town is BECAUSE of our extensive green spaces/park systems.
We don't need to adopt stricter building restrictions when the new energy code, lack of available land, etc. has already made it almost impossible to affordably build housing. Now is not the time for stricter tree restrictions that will only further limit the supply of housing.
Stop getting in the way of reasonable housing development. Not all trees should be held to the same standard. A large Alder, for example, is near the end of its life cycle. Protecting trees that naturally have limited life spans doesn't make sense. That is just creating future falling hazards down the road.

Comments on high priority actions to add
Bellingham citizens are already stressed economically, this will require additional City resources which could be better used in other departments to help our citizens.
Do NOT Adopt
Use volunteers like those with Whatcom Million Trees for Action 33 to reduce budget
Immediately develop protections for large trees, groves of trees and identify forest corridors.
Prevent development, purchase and replanting of forest of Samish Crest which has been clear cut This land is within the city limits...this is a valuable wild space w/i the city for recreation and to improve and help reach the canopy goal
Remove private property owners from your list
This is a stupid, expense plan.
Could one of the incentives for planting and maintaining trees be a coupon for your water bill?
Develop a plan on how this will be financed.
Establish ordinances that disallow tree limbing on trees of a certain age (unless tree health/safety is an issue).
Bellingham already has a 40% tree canopy. It is leading the state in Cities this size. Spend the money helping our citizens PURCHASE houses
This translates to government jobs and more and more taxation. For this reason I do not support this.
What seems to be missing from the draft as a whole is removal of invasive species and planting other plants besides just trees. No forest has trees alone, and a healthy forest needs native plants to help with the filtration of water runoff, absorption of excess rainwater, and habitat creation for native animals, bugs, and pollinators. In order to improve the health of our urban forests, we need to remove English ivy, Himalayan blackberry, and many other invasive non-native plants that are killing native plants so we can plant trees in that space. That is going to be a huge step that should be specifically outlined more clearly in the Plan as a high priority action along with the addition of native plants along with the trees.
Sounds like bigger government which usually results in mismanagement and high costs. I support them trying to improve the areas currently under their control and responsibility but not expanding any authority into the areas of landowners.
Provide meaningful penalties for those who illegally cut on urban properties, especially in the lake Whatcom watershed.
Strongly oppose govt agencies taking a lead role in what a private property owner can do with their property.
Our planning & development department is already beyond capacity to deal with the existing laws, policies and regulations. This is another overreach by government trying to control everything. Only 2% of the population knew about the planning of this and now you plan to enact all of these regulations. The public does not know about it and this is extremely frustrating.
There is very little discussion of property owner's legal rights to use their property. I expect push back. Especially during implementation.
Do not raise property taxes on residents whose areas do not need significant canopy improvement. How are you going to pay for all this? Raising my property taxes again for initiatives that restrict me or have 0 value for me is not going to fly.
Stop the insanity.
Stop what you're trying to do!
Action #4 should take extreme priority in the next 2 months. I have seen in my neighborhood alone in the last three weeks the removal of 2 healthy very

Comments on high priority actions to add
tall trees where no further building is happening, and the shocking del-limbing of 3/4 of a huge Exceptional Sequoia tree which was done because the new owner of a tiny lot wants "more sun" The tree, by expert opinion of a Whatcom Million Trees biologist expert may not survive due to it's radical limb cutting.
City parks - focus on these public spaces for tree planting and beautification.
Please consider making this in collaboration with insurance companies input.
Sounds like a lot of tax money to be spent; other more important problems
I am a teacher in the Bellingham school district and I would love to see a program that is supported by the city and engages school children in learning about and protecting our urban forests
Communicate clearly with private property owners about their rights and responsibilities. There is already panic developing among folks who think the city is inserting itself in their ability to remove trees.
I think the billion or so dollars would be better spent elsewhere.
Clean up the garbage and pollution that is already causing problems. Homeless camps are polluting our creeks that is going into our waterways with human waste, garbage and drugs. Work on that first. Let's educate on illegal dumping otherwise planting a tree is not going to matter. Quit wasting tax money.
I really like when multiple urban forested areas are connected by trails for non motorized use. Creating these (while difficult) encourages recreation and travel that can help achieve climate goals. I think this should be a high priority action. And somewhat separate from urban forest management but bike lanes in general
The management and addition of trees is a positive thing for our community. I just don't like the blanket coverage increase. It is going to limit developers ability to continue to bring housing to our area and will therefore increase the cost of construction.
You are all communists.
All of these proposals increase government and controls and cost taxpayers a lot of money. It will likely increase the cost of building new homes and again decrease affordability.
THIS SHOULD NOT APPLY TO PRIVATE PROPERTY.
balancing the cost of this wonderful idea with financial constraints - buying smaller sizes of the tree to minimize costs
I didn't read about the tree incentive program, but I think we could make great strides by making it more clear to residents where they can plant, and what types of trees are best suited, what constraints exist, etc. Also tree support strategies for residents.
Protect existing urban forested areas such as the Samish Crest Open Space and existing large trees. (Limit cutting large trees for views)
Fixing the insane homeless and property crime issues ❤️ and maybe build some single family homes instead of forcing families of 6 to raise kids in an apartment ❤️
No
Action 58 addresses my prior comment. The public is actively engaged in this. PS my friend who volunteers as a land steward is a late riser. Volunteer opportunities should be offered in both the morning and afternoons to accommodate those amazing people who enjoy sleeping in late. I'm not one of them. LOL
Focus on existing trees that may be unhealthy and potentially unsafe in neighborhoods. Preventing overcrowding of trees.
The timeline needs to be accelerated and given the greatest importance before more damage is done and escalated by climate change.

Comments on high priority actions to add
Work on finding housing for our unhoused population instead of spending money you don't have on a developing a new department we don't need. What are you going to do when people don't want trees planted because it will block their solar panels?
What is an exceptional tree ordinance? I do not support adding trees that could become invasive or too big for their location.
City of Bellingham government has an over abundance of wasteful spending and the answer is not to at more money just to create a larger bureaucracy that give the voters no choice or voice regarding this plan.
"Develop a Tree Incentive Program to support property owners and renters, particularly in low tree equity areas, to plant and care for trees on private property or streets." This statement needs to be explicit about "supporting" vs. "requiring".
Widespread education efforts around the benefits of trees. Collaboration with schools and communities beyond the City of Bellingham.
An Urban Forester position feels like the most essential beginning to get things started effectively
Incentives and/or credits for homeowners with city trees abutting their property. We, for instance, have six mature city trees that require our maintenance in addition to the trees on our property. We receive zero help from the city in general clean up and expensive maintenance to keep the trees healthy. The city will only step in if sidewalks are affected. Incentives instead of red tape paperwork is needed.
Not necessarily as a high priority action, but close communication with land use consultants about how the UFP will affect Critical Areas Reporting and the permitting process will be appreciated during this time.
Not at this time, these seem great!
Don't add anything to the plan that will add to our tax burden.
A number of concerns on this page and the previous page. An exceptional tree program must be implemented with the cooperation and agreement with the current property owner if on private land AND this must be disclosed to future purchasers. Concerned this could get out of hand and limit development, especially in light of middle housing infill that we are working to accomplish. Also, on the previous page, it is alluded to that codes be implemented in line with the community's priorities. Housing is another key priority and it unless you actually provide the public with examples of "here is how this code could work in the real world", it is misleading that one takes priority over another. For example, I have indicated my support of many of these statements here. I am both an environmentalist and I understand the health of our housing market. I can easily say that I support both an increase to 45% AND indicate that we need more housing density throughout the city, yet I can see these two policies being at odds with each other. That is why I am hopeful that the zoned approach addresses this concern. Finally, when we have so many monetary needs tugging at our wallets and with people already literally suffering with inflation and huge increases on our property taxes, adding more expenses is concerning. I see the end goal, but there comes a point in which the result doesn't justify the expense. I didn't see an actual total dollar amount that this would cost other than the representative \$ \$\$ \$\$\$\$. That is an important part of the equation and something I

Comments on high priority actions to add
hope is added in the final draft in order for people to adequately weigh the actions and the need.
These are good.
If other critical data for public health and safety presents itself in areas defined as urban forestry, evaluate how best to preserve the area with additional security and community support.
provide more housing
Action 58 is particularly important -- to stop the removal of medium and big trees and encourage the planing of new ones. In neighborhoods with low tree equity, every tree counts! Some attention to "habitats" on the edge, to the weedier ones, and to the kinds of favorable wildlife they supports (especially bird populations) is an important complement to more obvious habitat preservation or restoration initiatives -- all part of what a "forest" is, and not just a "canopy." Thank you.
Prioritize tree planting along streets where there currently are no street trees and prioritize planting them between the street and sidewalk to maximize shading of hard surfaces. Hard surfaces (streets and sidewalks) retain heat and contribute to the urban heat island effect more than buildings. Investing heavily now in growing tree canopy along streets where there currently is no canopy will pay off greatly in the future in expanded canopy and reduced urban heat island impacts. And then of course if we could plant them in existing treeless parking lots for all the same reasons.
Plant more trees
I would like to see an economic impact analysis on this program to determine whether the money being spent by the city at a time when the city is relying on reserves to meet standard operational costs is justified when so many other priorities are competing for limited dollars. I've always said, "show me your checkbook and I'll show you your priorities." It seems that spending money that could be invested in other priorities at a time when revenues are sparse, putting money into increasing a tree canopy that is already nearly 2 times larger than the nearest comparable city is absurd. This is even more so when you look at the UGAs and the land owned by the City in the Lake Whatcom Watershed.
Prevent any new taxes or fees imposed on property owners to be able to perform routine care and maintenance on their own trees.
Better info to private owners to maintain existing large trees and incentivizing them to keep large trees intact or care for existing ones
Update city development code to require preservation of existing stands of mature trees as a condition of land use permits. Update city code to require development (private or public) projects to explore design alternatives that would protect existing mature trees (e.g., low-impact construction methods or alternative pavement sections to protect tree root zones). Update city code to require minimum soil volumes for streets and urban developments (e.g., use of silva cells under pavement) to allow trees to reach their full potential.
I think the language is broad enough to include this, but I want to name it clearly: maintenance and tree care are critically important to the success of this plan. The benefits of trees increase exponentially as they mature. They become more efficient at delivering all the benefits this plan acknowledges. Whatever we earmark for installation/planting of new trees, we need to be sure to earmark far more for the on going care of new trees and the protection and maintenance of our existing trees and wooded areas. This is a rule of land management and will be all the more relevant as the impacts of climate change continue to stress trees in our region. Care work/maintenance involves no ribbon cutting and therefore is always harder

Comments on high priority actions to add
to appropriately fund. An Urban Forestry Management Plan ought to have the goal of helping trees age in place.
Maintenance and care of trees. Cherry trees were planted by the city on my parking strip over 20 years ago (letter streets) . These trees have grown and now need pruning to stay off the road and sidewalks. This is the owners responsibility at this time. I cannot find someone to prune the tree (tree services say too small a job) also I am a senior on a fixed income and do not need added expenses. The tree leaves need to be raked and blossoms removed so they do not get in storm drains and clutter up sidewalks. I do not know how long I will be able to do this, myself, without having to pay someone. Maybe a grant or some funding could address these issues. Trees are beautiful but they need care.
Affordable housing And jsut where is the money going to come from to pay for all this. Plus, what is the added financial burden to homeowners to take care of those trees? What about increased insurance costs?
Develop standards and procedures to evaluate proposals that cause loss of older trees but mitigate with new planting (ie: BCC project).
- Explore trade-offs that implementing the Urban Forestry Plan will require with other City needs and goals. Implementation of each action should require an analysis of impacts on other City priorities, not just financial.
The City of Bellingham charges outrageous fees to build anything in the City of Bellingham this increases the cost of housing to everyone especially the most vulnerable (that is why we have so many unhoused people in the City of Bellingham & is the direct result of the policies & feed from the City of Bellingham
Marine shorelines (residential, commercial and public) should have requirements for minimum densities of trees. Plan needs to include regulations with enforcement to prevent cutting of trees without professional evaluation of the health of trees. Landowners should not have a right to cut trees to maintain views.
Make necessary changes to code to protect mature trees - especially conifers - on any property being considered for development. Change code so Planning Department and Hearing Examiners must consider the desire and concerns of residents wanting to preserve mature trees as equal to or greater than those of a developer wanting to remove mature trees.
The Planning Department's priority is building housing, which often conflicts with developing the urban forest. Establis an Urban Forestry Department that power equal to the Planning Department.
Incentives for property owners to replace invasive species trees (ie: Holly) with native/non-problem trees.
make sure the tree debris and street drains are cleaned by PW city workers with enough equipment & staff to prevent flooding and property damage. power& cable companies need to buy into this program with additional maintenance of the tree canopies
1) Create and enforce guidelines for preservation, protection and care of trees in areas of new construction, so that forest loss due to development is reduced. 2) Consider the cumulative impacts of piecemeal development on forest ecosystems in areas near city limits, such as Sudden Valley, Northshore Dr, South Fairhaven, etc. 3) Also, establish connections

Comments on high priority actions to add
with the mtn biking community to strongly encourage habitat restoration and preservation volunteerism and education.
Sounds like this all cost money and who is going to pay for it????? More taxes again??? Where is affordable housing???
N/A
Laws that protect trees and require the planting of suitable trees in all new construction enforced by planning department and permitting process
Allow more housing should be a major consideration when determining the right level of tree canopy/protected forests
I believe it is important specifically to plant native trees whenever possible. I suggest incentives be built in to encourage the planting of native tree species that provide the best habitat for local wildlife.
A plan to prevent clear cutting by developers as is happening on former golf course property on Meridian.
Stronger removal and clearing statutes with funding for enforcement. Take strong positions on removal when reviewing construction project submittals
The city should first encourage people to plant their own trees and/or provide trees for people to plant with info on how to do it. That seems like the least expensive way to get started and encourages engagement, excitement and ownership of the project.
Stronger public engagement. One of the biggest hurdles in doing any projects like this is the investment of labor hours, and it would benefit the city to take advantage of a public that is just dying to help make this community more beautiful. We not only need a city volunteer program running on the weekends, we need it running during the week so that other people can participate and possibly be inspired to become a park steward, helping clear out invasive vegetation so that we can plant more trees and native plants so that we can have a better chance at reaching the goal of 45%. There are so many people and a variety of organizations who are ready and willing to do the work. Take advantage of that! Community engagement and action inspires and facilitates more community engagement and action. Make it easier for people and groups to work with the city and the parks so that we can all work towards achieving this goal. Then we can shoot for 50% by 2075.
Fines for people who cut down large trees on their property, if they do not replant ?
Prioritize planting and maintaining big tree species, not little ones. On state street for example, the city recently replaced many of the street trees with little dogwoods that won't get very big. That is a step backwards I think.
I see that my earlier comments were addressed in some of these action steps. Thank you. Probably outside of the CoB bailiwick: Encourage DNR to change their practices around logging state forests, especially mature forest areas.
Collaboration with other professions to ensure priority methodology includes all desires parameters.
I support a diverse mix of trees, focusing on native trees when possible.
How can we also incorporate a food forest and managing and adding to all of the fruit trees around town and utilizing that fruit instead of it all rotting on the ground.
Please do not put more restrictions on property owners
Focus on cost analysis is very important. Property taxes in Bellingham are out of control, mine went up over \$100K in one year. Taxing residents, making new construction projects pay in dollars & unit restrictions(limiting affordable housing even more), and spending on high

Comments on high priority actions to add
dollar low return areas even though trees would be nice in that spot will detract from the quality of life in Bellingham where things continue to get more and more expensive.
Encourage more integrated green infrastructure such as rooftop gardens, bioswales, stormwater parks, and stormwater trees that are multifunctional.
Stopping the program development as it currently exists is a good start.
High-Density neighborhoods like Roosevelt have an inadequate supply of tree coverage. Increasing it neighborhoods like this one will also reduce the Heat Island.
start a program maybe with Options Highschool for education in Urban Forest jobs. Maybe an internship recruiting type position for credit. We need to start building our Arborists now as we will need more over time
You have no clue all the costs you are passing on to the ones that can least afford it. I guess you want a town for rich people & everyone else can leave!!!!!!!
Stop all removal of trees for building houses, condo, townhomes and commercial areas. Also, disallow removal of trees of private persons just for want of more light on their property, etc.
I consider it high priority to respect the rights of home owners to maintain their yards and landscaping the way they want to. No one incurs the expense (hundreds of dollars) to remove a tree from their yard without a reason. It's not up to the city to judge that decision. It's the home owners decision. I do not want my tax dollars spent that way.
Saving the trees that are already here goes a long way in achieving our goals.
no
I would support additional staff to support the UFP with the caveat that the additional staff is focused on planting, care/maintenance, and facilitating voluntary participation programs for the public. I do not support additional HR for solely administrative functions.
Development of a COB Urban Forest Handbook to be referenced by enforcing codes as a single source for all urban forest requirements.
Taking advantage of local volunteer groups and organizations
Assess housing impacts
Protecting mature trees and legacy forests!!
The hypocrisy of allowing clear cuts in the city for development directly challenges an effective urban forestry program. How can there be an increase in forest cover by 2050 if existing forest stands are cleared for development? The ufp should address this hypocrisy if it is to be effective.
Work with local schools to educate re the value of forests and trees
Focus on repairing damaged urban forested areas to increase tree canopy and health of already existing trees. (Example is the small forest above Spyglass neighborhood off of Chandler. Putting attention into increasing canopy in these types of areas is much preferred over creating codes and rules that make maintaining private property more difficult.
Immediately stop using "forest habitat renewal" as an excuse to displace people who have nowhere to live but outside. I will never support any greenwashing campaign by cob as long as you keep planting shrubs in uniform grids where people have been sleeping.
continue to seek community input
Please discourage by all means possible, the reduction/destruction of remaining contiguous natural mature forests in order to create more development. Allowing mature forests to be reduced as a trade off for development with added artificial treed environments intended to mitigate that loss. It will never be the same ecological value.
From the canopy charts in figure 20 and 21, I see a significant future reduction in forest

Comments on high priority actions to add
canopy for Clark's Point, Arroyo Park area, and the surrounding parks and open space areas. This is highly disturbing. I am not opposed to increasing the canopy in urban areas - the more the better - but not at the cost of reducing existing forests? For example, how can Clark's Point, which has a conservation easement on the majority of the property, have a significant reduction in forest canopy?
Think outside of the box. The success of this plan is dependent on integration into other plans (avoid silos). Look at neighborhoods individually and work to get places where people live and go to school up to 40%. Keep neighborhoods that have 45% coverage at that level, and focus on those that are further away from 45%. Maintaining coverage at 40% is not adequate. Storm water is not being properly filtered and neighborhoods are too hot. More trees on the landscape will counteract increasing summer heat and winter rainfall. Encourage more integrated green infrastructure such as rooftop gardens, bioswales, stormwater parks, and stormwater trees that are multifunctional.
I think homeowners and landscaping/arbor businesses need more support and restrictions regarding canopy cover. That is, regarding pruning, removing, planting, education, etc. I hear chain saws all days of the week, every summer. That cannot be sustainable.
Require more oversight of arborists and/or contractors who remove trees to prevent unnecessary or illegal tree removal.
I agree that it's a good idea to get trees going in the forest, but I just wanna make sure that it's not going to affect the housing situation. There's a lot of land in Bellingham that would be good for homes as long as it's managed correctly. I have dealt with building in around Bellingham and it already feels like a lot of the regulations adds very significant due to dealing with wetlands and forested areas. My last project I did added a whole third to the cost of the project. Although it's a great idea, we just need to make sure it doesn't add to the cost of housing or put undo cost on people. we still need to be open to being able to clear land homes and we can also set aside these places for the right trees at the right place.
Considering the importance of biodiversity conservation, ecosystem services provision, and climate resilience in urban forest management, another high-priority action to consider could be: Action: Implement Green Infrastructure Projects to Enhance Urban Forest Connectivity and Functionality (Goal 2 and Goal 4): This action involves the development and implementation of green infrastructure projects aimed at enhancing the connectivity and functionality of the urban forest. By strategically planting native vegetation, creating green corridors, and restoring priority habitat areas, this action can contribute to biodiversity conservation, climate change resilience, and overall ecosystem health. It also provides additional opportunities for community engagement and recreation, further enhancing the benefits derived from the urban forest. Implementing green infrastructure projects aligns with the goals of protecting and expanding the urban forest while also adapting it for climate change resilience. It emphasizes the integration of nature-based solutions into urban planning and development, fostering a more sustainable and livable city for current and future generations. It's hard to judge the merits of the actions without data. It would be opinion based on nothing, so I don't think this is a valuable part of the survey. I think what you need is to hear public concerns. Good financial stewardship is a very important. From my perspective, the highest priority of the city should be to mitigate and manage wildfire risk.

Comments on high priority actions to add
It would be lovely if the government stopped telling us what we must do and take care of the drug and homeless issue.
Cornwall Park. The under story is being destroyed by frisbee player
Aggressive protection strategy for ALL mature healthy trees on private land.
1) we already live in a forest! I'd like to see existing forests preserved. 2) the majority of new tree planting should be native trees, please prioritize native trees as much as possible! 3) I'd like to see the city and businesses take on the bulk of the responsibility for preserving and maintaining our urban forests. Individual residents won't have the kind of impact that larger organizations will because we own/live on smaller plots
Trees along the freeway are in our Comprehensive Plan. Other cities like Olympia and Mercer Island have a beautiful tree buffer next to the freeway. It would greatly enhance Bellingham if we did major tree planting along the freeway.
AFFORDABLE HOUSING Please do not further restrict the limited buildable land we have within the city. I want my kids to be able to purchase a small house within Bellingham but we are so far behind in building FOR PURCHASE housing units. This plan will only put us further behind in building FOR PURCHASE HOUSING units.
The bottom line, IMHO, is that this will continue to promote Bellingham to be a place for only the rich. I can't imagine that is a COB goal.
See the white paper recently developed by Whatcom Million Tress Project about the UFP draft. They have the needed action details figured out far better than your consultant.
All of these statements are missing language about the need to support urban forests for urban wildlife. It's not just humans!
It is not enough to plant and add to the trees. Protection and nurturing of current trees is a must. What's happening at the Bellingham Country Club is sickening.
The maintenance of city owned properties, especially forested ones with large trees that require attention to remain health. As well, maintenance and clearance when necessary of fallen or dead trees that with our changing climate pose a fire risk. The current city management is based on a rain forest model of "leave it where it falls" that is at odds with our present climate, fire suppression and future climate warming.
Arborists, etc. must be registered. And enforcement must prevent illegal cutting. I also think that the goals should be more action-oriented and protect mature trees as much as possible.
Protection for old growth
Protecting old growth trees when at all possible
I've been hearing from the Whatcom Million Trees Project that this plan could benefit from additional protections from mature trees - I'd love to see that added
Protect existing large trees. Require environmental review for removal of more than 5 mature trees and require mitigation as stated earlier with fines and restrictions by individuals and corporations on obtaining any construction permits for two years for proven violations.
The plan as is does not seem to actually support these admirable goals. Increasing equity and climate protection sounds great, as well as protecting current forests. But that doesn't seem to be what the plan actually is. It seems like the plan is about making the city sprawled and suburban, rather than having denser areas and rural areas. I can think of a lot of reasons why the city would want to be more sprawled, but it would be unequivocally worse for forests, habitat, pollution, and natural beauty.

Comments on high priority actions to add
Add protecting mature trees (40-50 years+) to the exceptional tree ordinance proposal
Include more emphasis on the protection of mature trees in each area of the city.
Do it now?
Preserve existing forest, and find ways to do so on land being developed. That means private owners are also restricted. The existing trees are more valuable than more profits.
Need to mention protection for mature trees
RE statement #58, I recommend having a volunteer program to assist these goals. Getting people involved is the best way to create community. Perhaps that is what you mean by stewardship programming. ?
Protecting and preserving existing canopy.
No
Evaluate new developments for their adherence to our forestry goals, particularly in maintaining our mature trees. You cannot replace an existing mature forest such as what is in place on the Jones property in Edgemoor with dozens of newly planted street trees. The effect of taking down those trees is crushing and will stress any trees left standing after they bulldoze the hill.
Change the attitude toward developers - they should not have free rein to clear cut trees. All residents need the benefit of healthy old-growth trees.
Have regulations to protect and preserve existing mature trees as high priority.
Oversight is urgently needed (not 10 years from now!) to preserve existing trees.
These forced choice input devices do not allow for more specific priorities and limit the input to just the choices the city staff have already made. For example are you for or against the 'exceptional tree' preservation. It is a good start but not nearly enough. Reducing tree cover to allow development is foolish. And a goal that promotes not just the preservation of "exceptional trees" but rather entire forests in the city is much better. Allowing small new trees rather than maximal preservation of existing forests is a critical error in this urban forest plan.
The WMTP's white paper has many valuable recommendations. We need to keep as many mature trees as possible!
Prevent removal of mature trees from proposed building sites, or require designs that preserve existing trees to the maximum designable amount. The recent Golf Club project approvals should not set a precedent. They were seriously mistaken.
Trees are a high priority for everyone's health and well being especially facing climate change. Strongly support increasing the budget and increased effective staff even if it means less money being spent on other projects.
public should be encouraged to plant trees
Public Works must replace Eric Johnson who has consistently worked against the Public interest. Any forestry efforts under his watch will inevitably be contracted out to any company willing to take him to dinner.
Saving as much of the urban forested areas as possible.
It's difficult to get excited about any of these goals since it's my understanding the City currently has a 40% average canopy cover which already exceeds all other similar jurisdictions in Washington State.
Maintain the current forested area and protect them from development
Please protect mature trees. I don't think a tree should need to be "exceptional" to be protected. An ordinary mature tree adds a lot to a neighborhood.

Comments on high priority actions to add
Also maybe if we didn't cut down so many trees we would not need an entire bureaucracy to plant new ones. One big Doug fir is going to eat more carbon than a hundred seedlings. We do not need an Urban Forestry Department to figure that out.
Just say no to developers and landlords.
I'm not really inclined to trust the City to come up with a plan that would make any sense. As the proposed UFP clearly shows, the current authors/staff are sadly entirely misdirected!
The majority of Actions outlined in your report are recommended for further study within the next 1-10 years. In the 4 years it took for this report to be completed, our valuable mature tree population has been rapidly diminishing. Urgent action is needed now.
It is vital that we specifically protect MATURE trees in every possible situation, as they have something we can never make up for with planning, and that is time in the ground, growing, sequestering carbon, shading us, cooling soil, reducing evaporation, providing habitat and being generally beautiful. Not allowing mature trees to be removed in the first place reduces the need for urgent, after-the-fact band-aids to address climate resiliency. Please make protecting mature trees a priority of this plan! Thank you!
Protect all mature trees from being cut down and/or require developers to minimize any such action. Save the trees and we will be supporting wildlife in the area as well.
Make it a priority to protect our mature trees and forests
Encourage protection of mature trees in urban areas.
Balancing all new development with mature tree protections
Determine goal metrics that prioritize the preservation of mature trees.
Protect all old growth trees, private or public. For example, the trees on the golf course off Meridian should be saved, not cut down. For heaven's sake!
Most actions in the report are recommended for further study over the next 1-10 years. We've already waited 4 years for this report. Please ACT NOW to save our rapidly disappearing mature trees. I also agree with the Million Trees recommendation that arborists, etc. must be registered. Its too easy for some arborists to shrug their shoulders after removing a tree that should have been protected. They need to be held accountable for their actions.
Mature trees must be kept throughout all neighborhoods, even in high-density urban villages, if Bham is to remain livable in a changing climate. Please make specific recommendations to do this, as suggested in the WMTP report.
Community values is a key phrase - as it involves mixed values, so that term needs to be defined carefully so as to connect ecological stewardship with desirable community traits - otherwise, this term could be a sell out to those who prioritize economic development and land exploitation over conservation ethics
Prioritize protection of larger trees for diverse canopy ecology and climate resiliency.
Crucial to immediately protect Mature Trees (only 5%! currently) extremely important for protecting us all against climate change. It takes too long for Young Trees to grow enough for adequate carbon sequestration, etc. We desperately need more Mature Tree canopy. Don't pit housing goals against trees. Both can be balanced. Crucial to register arborists; some illegally cut down trees without permit and know there is no enforcement. WMTP White Paper should be considered important input. Please adopt specific tree canopy requirements for different types of development. The overall 45% goal is inadequate, although I support that as a step in the right direction. Developers often think that they can cut down all the mature trees

Comments on high priority actions to add
on new development area and just replace them with newly planted young trees. But it takes at least 20 years for a tree to reach any significant carbon sequestration and complexity; much longer to match well established mature trees. Mature trees should be identified in all new developments and a City Urban Forest Manager should analyze them, the possibility of saving them, and how to protect them before a developer is given green light to chop them down. And the CUFM should require a detailed arborist plan from developer that details what trees would be planted and what the tree maintenance plan is - to ensure the new trees are protected, watered properly etc so they can get properly established (unlike Meadowbrook Ct.trees!).
The 45% goal does not mention making up for the loss of mature trees going on right now. That's a big miss. We need to "quick start" the protection of mature trees from developers and others, as well as wait for saplings to develop and grow over decades.
Trees flourish when people take care of them. Prioritize investments in the maintenance, care, and health of existing trees.
The city has demonstrated they are not trustworthy, do not present ALL facts (good and bad). The bike lane project is a prime example of NOT listening to residents, but focusing on ideals that when implemented are not in ALL of the residents best interests, goals, and desires for our community - only a select few.
I want to see stronger tree and canopy protection now, not after 1 to 10 years. Our old growth trees are disappearing now with development, etc. That is unacceptable. They can't be replaced. Please put their survival before development. We have enough area for all needs to be met. Thanks for this opportunity to support what makes Bellingham special and beautiful. Our trees and parks are gems not every community enjoys!!!
I disagreed with the statements about "aligning with community values." On the contrary, trees should be planted and cared for IN OPPOSITION to community values if necessary!!
Give the Urban Forster at least as much authority in city planning as the city's Planning Department Director.
Put things in place NOW to support the retention of mature tress that we currently have. Development that clearcuts the existing mature trees damages the plan's success. On my property, I have 40 year-old trees. I marvel at the LIFE that those trees support. Trees are treasures. Kelp them.
Mandate that developers preserve established trees when developing property. Work around the big trees. Accommodate the big trees. My daughter (tree expert) says that trees don't become carbon sinks until around 20 years of age. Push some responsibility to developers. Don't rely on the city to "fix" what the developers destroy.
Just to emphasize the importance of Action 58 (goal 5) to the overall success of this entire plan. Without an educated and invested community, the necessary follow through will not exist.
Critically look at the continued use of majority of waterfront properties as manufacturing, boat storage, vast impermeable parking lots, etc and consider re-wilding large parts of it via massive tree planting efforts interspersed with dense affordable housing units.
Plant trees where they have the best chance to survive without a lot of maintenance.
Immediate moratorium on cutting of mature and legacy trees, whether public or private land. 4 years already the subject to urban forest has been studied by City of Bellingham. We have lost too many trees already. We need an immediate moratorium, not more studies and not more delays.
Help private Landowners to maintain the trees for safety . And after storms.

Comments on high priority actions to add
Regulating tree services that engage in undocumented/unnecessary removals, topping, thinning, and abuse the term imminent. TRAQ Arborists know that Imminent risk trees make up <1-2% of all removals. All imminent removals should be verified by a TRAQ Arborist. within an hour.
Encouraging stewardship and volunteerism with non-profit organisations that aid in climate change mitigation and habitat restoration.
Goal 3: how can we leverage non-profit, schools to be involved?
Restoration of public greenways with a high percentage of invasive species. Shade corridors for bikers
Education and outreach will be hugely important to developers, building owners, and residents. I would LOVE to work on the urban forest staff!
Mature trees are so important in mitigating effects of climate change. Please protect this valuable resource now! It takes decades to benefit from replanting, please protect the mature ones!!!
Make developers and business pay into this, not residential homeowners.
I would like to see strict protection of mature trees on all building sites. Cutting large and older trees down with the plan to plant young trees is not comparable. We must save these older trees.
this new rule cannot be enacted as it stands. while it poses a partial solution to maintaining a healthy canopy, it needs to consider additional factors - there is and will continue to be situations where tree removal (and replanting) is necessary.
1. Please provide us with a comprehensive list of costs (or best approximations), including the number of new positions (with their salaries) necessary to create to implement the plan. 2. Please write it into the UFMP that the city assures us that they will not plant trees that will eventually obstruct the views we have of the city and of the bay, nor will the city force us to plant trees on our properties or on our streets, that will also do the same. We paid a great deal to live in a home with a view. 3. The city will maintain the low height of existing trees in the neighborhoods with views so as to not restrict the lookout points. 4. The city promises to uphold the pre-existing HOA governing documents (CCRs) set forth to preserve our valuable and cherished views.
Protect as many mature trees in the city as possible.
Stop growing ivy at the office in cornwall park
I live in the Birchwood neighborhood. We need to keep as many mature trees as we can. Planting more is needed, but those won't help us for decades. Please follow the many recommendations in WMTP's white paper. We need to keep as many mature trees as possible!
Infiltrate stormwater into healthy soil & plant systems (rain gardens) and install dispersion trenches for the benefit of tree health. Adapt HIP resources to create a support program. The city should lead the way with implementing low-tech, simple to replicate designs in priority areas as a model for a neighbor-to-neighbor mentorship. Update the COB street tree list, add more native trees with suggested under planting & remove flowering pear, hawthorn w/ 3" thorns, and other problematic plants. Use edits suggested by Whatcom Million Trees Project.
Add incentives to property owners - plant a tree from the approved list, get a credit in your monthly water/sewer bill (credit to watershed acquisition charge). Add landscaping incentives to property development - add more trees to reduce parking requirements, add building height, substitute green-roofs for landscaping, etc.

Comments on high priority actions to add
Make sure that existing trees are cared for properly, make sure permitting process discourages cutting more trees than absolutely necessary for housing and must put more back and that those trees must be of good quality and native
Resiliency should include funding options for urban food forests, assisted species migration, pollinator gardens -- The trees themselves or the canopy aspect should account for related/overlapping aspects of climate change and the differences between our urban settings vs. wilderness areas (for example)
I strongly support an urban forestry department. I have seen firsthand the results of a developer/builder hiring a professional arborist to evaluate property and creating a planting plan There does not seem to be any incentive to keep large trees and their associated plant communities intact. The focus appears to be on replanting and restoration. We don't have any time to waste !
Retaining mature trees, not just exceptional trees.
I strongly recommend having the necessary staff, budget, resources and regulatory measures in place to ensure implementation of the plan. I would also like to see a plan for addressing invasive species such as English Ivy.
Developers needs held responsible for taking into account existing mature trees and take substantial efforts to avoid removal.
Assure collaboration with local non-profits (and for-profits if, it works) that have similar interests, such as Whatcom Million Trees, Nooksack Salmon Enhancement Assoc. and REsources. Also, volunteers!!!
To strengthen tree retention rates, provide private property owners a small tax relief to offset services provided by trees.
Not having read the plan, I don't know what quick action means. But we need to not just evaluate codes but get them amended to provide adequate protection. Housing needs and state mandates to increase housing supply will clash with tree cover. Two worthy goals that need reconciling as soon as possible.
Canopy targets by land category pose false conflict between development and tree retention. Can have both if thoughtful and give tree retention/protection priority, but currently lacking among PCD/PW/enforcement staff and permit review. Canopy targets would perpetuate existing inequities -- as Fig.21 shows.
Stop clear-cutting around town, i.e. area above Samish Way.
Property owners' rights should be considered thoughtfully when making decisions about tree removal. There should be a balance between respecting their autonomy and the collective well-being.
Most of the draft report could have been written 4 years ago. Stop studying the problem -- we need action now to save our dwindling older trees that are so important. Bellingham's mature trees are super-important for climate change, not just to capture carbon but to keep us cooler in extreme heat spells and less prone to torrential floods. Please follow the WMTP recommendations about this.
Nothing at this time.
Prevent or severely limit cutting down mature trees as part of new development!

Comments on high priority actions to add
Protect trees of an exceptional size and age--as in Goal 1. Recently watched a remarkable large sequoia get taken down on Donovan Ave--explore alternatives for removing old yet healthy trees that are encroaching on driveways, sidewalks, roads.
Mature trees should be kept in all neighborhoods. Developers should be stopped from being given a blank check to cut whatever tree they want to—protecting mature trees in new development is essential. Providing more funding to the Parks Volunteer Program’s budget would be wonderful so that they can hire more full-time staff and be better able to continue to expand their role as liaisons between the City and our community via community engagement, stewardship, and tree planting efforts.

Appendix 2 Engage Bellingham Q&A

Questions or comments submitted on Engage Bellingham
I strongly oppose the Urban Forest Plan. I am concerned that this is going to make development and building housing more difficult and unaffordable.
Here are a few random comments that may be addressed in the plan but it's a bit of a complicated read for me. Trees are important for carbon storage but they are also habitat as are large shrubs. Developments also create habitat loss. Is the creation of habitat addressed in another city plan? Is there a plan for 'over mature trees' that could be cut for habitat stumps? Trees and shrubs are also buffers for noise and provide privacy. Are there planting guidelines that suggest planting deciduous trees on the south side of buildings and coniferous trees to the north? Does the idea of using 'best practice forestry' evolve over the 15-25 year life span of this plan. How would this new plan have protected the mature trees that will be lost to the Meridian development?
* Education of the public about tree property value can improve voluntary pro-forest behavior. Renters like trees, as do home buyers. Renters will pay higher rent and property buyers pay higher prices. Of course this is somewhat at odds with housing affordability goals... * Invasive tree threat: horse chestnut trees are on a rapid track to dominate the forest on Chuckanut Creek under the 12th Ave bridge, and spread beyond. * The public could benefit from education about social trails. In the past I often went off-trail in places like the 100 acre wood, seeking a feeling of wilderness escape. Now I know better, but I see how legions of others have done the same thing, and the area is overrun with social trails. The psychology of that process could be shortcut with some public education. * Many street trees suck. I see a trend of increasing dwarf character in new street trees. Small, slow growing trees provide little urban forest value. * People will work for their own self interest. I think that would include forestry work close to home such as planting and tree maintenance. The city could facilitate hyper-local neighborhood involvement (volunteerism) and ownership of common forest resources. * I really don't see why Native Americans are called out specifically in this plan. There are myriad interest groups and I don't see that Native Americans are really much more special than all those other groups. * Action item 18. Tree Incentive Program: Expensive \$\$\$\$\$. Trees are often perceived as only a hassle, due to the required maintenance. I doubt that incentives alone will change much. Owners will plant trees themselves if educated about the economic value of trees. Education is more powerful and less expensive than money incentives. * Action item 30. Urban Forestry department?? \$\$\$\$\$ This is creating a king with no kingdom. A beaurocratic nothingness. * Action item 46. \$\$\$\$\$ Water newly planted trees for 3 years. With correct tree selection and planting, only one summer of watering is needed. * Action item 47. \$\$\$\$\$ Mulch trees in parks or large boulevards. If a tree needs mulch to survive, it is not appropriate for that site: don't waste resources on it. Give resources to trees that will grow on their own after a short establishment period. * Action item 35. \$\$\$\$\$ Expand the City maintenance list to include all street trees. Why so expensive?
We must protect mature trees! They give Bellingham its beauty and character.

Questions or comments submitted on Engage Bellingham

I just took the survey. Would like to add that I think the city needs to do a better job of protecting our mature trees. Key example is the BGCC development, which you approved with NO consideration to the many mature trees on the property which will be lost in order to build a few expensive condos. I question whether there will be affordable housing provided in whatever development comes to pass. And planting new trees as mitigation for the 300+ mature trees that will be lost is not an effective solution. We need clear, enforceable city laws to protect our mature trees.

I strongly feel West Street (a through street) in the Columbia Neighborhood, would benefit greatly from having more trees planted along this street. Many people drive West Street to pass through to Squilicum Way. Beautiful evergreen and deciduous trees along this road could further amplify the appeal/property values of the Columbia neighborhood as a whole.

Appendix 3 Technical workshops

Comment cards

May 13th, 2024, technical workshop:

I heard that 45% tree cover talked about during my recent pre-QPP meeting as a metric to meet. I think it is inappropriate to be discussing this plan until it is implemented.

In what way will this Plan be adopted? By Resolution as a formal policy document? Will it be used as an adopted policy for implementation of SEPA?

DAVID STACHERN

More projects are now exempt from SEPA, so implementation is challenging.

May 15th, 2024, technical workshop #3:

Goals:

Move goal #2 to first priority.

Goal #5: Collaborate with diverse communities and organizations to establish common values in urban forest management.

Urban Food Forestry

- open to the public for harvesting
- operated + maintained by the City
- located in the City Center and accessible to all
- Beacon Hill Food Forest is a great model. - Central fenced/rentable garden beds - perimeter = fruit + nut trees
- Garden Pavilion for Community workshops

Is there a goal to mitigate urban island heat effect?

If so, what ways can this occur & quickly?

Is there an intermediary step to increase vegetation (NDVI)

until a tree can reach full growth?

A Tree Event - annual

large - ski to sea size

give away trees (1 each), rest 50¢ each

promote trees

have arborists

45

Workshop #1 4/24/24, Workshop #2 5/13/24, Workshop #3 5/15/24



CANOPY COVER TARGET

In 2018, Bellingham's canopy cover was 40% (7,252 acres) excluding the Urban Growth Area. Through the Urban Forest Plan, Bellingham is proposing to increase canopy cover from 40% to 45% by 2050, which would require planting or natural regeneration of approximately 22,000 trees per year.

Do you support the target to increase canopy cover from 40% to 45% by 2050 (excluding the Urban Growth Area)?

YES

- Rather than asking a Yes or No question, should we ask the Community what Values they would be willing to sacrifice?
- Does the Community understand the difference between 40% canopy coverage including the UGA vs. 40% canopy coverage excluding the UGA? Does the city?

NO

- Does the Community understand what a "yes" or "no" actually means for our city? This is a very complicated question and I don't believe this will accurately measure what values the city will need to consider when they develop the Urban Forestry Management Plan

maybe - recommend showing the "correct" math to show the left that actually is infra of us it is not just 5% - that is wrong change but not if you look at tree coverage. If we have 40% now and assume 2% will die or be removed and we want 45% it's actually about a 10% not 5% in ~~the~~ coverage - it would also be beneficial to separate the type of land into public, private, park, UGA, private - partner w/ WWU - they have heritage trees and canopy plus most continue to build - be a partner w/ WWU - not just regulate - ~~the~~ connectivity is also important & not currently shown

Workshop # 1 4/24/24 , Workshop # 2 5/13/24 , Workshop # 3 5/15/24

ACTIONS



The Urban Forest Plan's vision and goals are supported by an action plan to guide its implementation. There are 74 actions. To what degree do you support the proposed "quick start" actions? Put a mark in the appropriate box.

Action 4. Evaluate codes to enhance urban forest protection and introduce an Exceptional Tree Ordinance (Goal 1)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure

Action 18. Develop a Tree Incentive Program to support property owners and renters, particularly in low tree equity areas, to plant and care for trees on private property or streets (Goal 1)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure
				• Can we instead ask the community what types of incentives they would like to see?

Action 30. Create an Urban Forester position to lead implementation, establish an Urban Forestry department, and consider adding an interdepartmental staff position to support grant applications, deliverables and budgets (Goal 3)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure
				• Do we ask the community if they would support a 20% increase in property taxes in order to fund these positions? • What is the expected cost to create this department? Does the City know?

Action 31. Develop an annual urban forestry operations budget (Goal 3)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure

Action 33. Evaluate appropriate staffing needs to support planting, protecting and proactively maintaining Bellingham's urban forest (Goal 3)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure

Action 58. Develop a communications and engagement strategy to guide the development of educational materials and stewardship programming, with efforts targeted at increasing canopy cover in neighborhoods with low tree equity (Goal 5)

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure

Workshop #1 4/24/24, Workshop #2 5/13/24, Workshop #3 5/15/24



GOALS

The Urban Forest Plan includes six goals to achieve the City's urban forest vision.
To what degree do you support the proposed?
Put a mark in the appropriate box.

Goal 1: Protect and expand the urban forest in alignment with community values

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Rather than ask if we support community values, should we be asking which values are important to us?

Goal 2: Protect and restore priority habitat areas

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Should we ask the community to identify an area on a map that they believe to be a priority area?

Goal 3: Manage the urban forest in alignment with best practices

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Rather than support or oppose, should we ask what do we feel are the best practices?

Goal 4: Adapt the urban forest for climate change resilience

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Should we ask the community how often they think this plan should be recalculated?

Goal 5: Collaborate with diverse people and organizations

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Can we ask the community to help the City identify which organizations should be at the table?

Goal 6: Monitor performance and adapt strategies

Strongly oppose	Somewhat oppose	Somewhat support	Strongly support	Not sure • Of course we support monitoring performance and the adaptation of strategies, would it be more helpful to ask the community what types of measurement do they think would be relevant are accurate measurement of success?

Appendix 4 Online input session

Vision for the urban forest

Does the vision statement capture all essential elements?

Include mental and physical benefits of trees in communities

Add that urban forest contributes to biodiversity

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

We will record the conversation under each goal to help us determine what priorities, concerns, or improvements need to be addressed in Bellingham's plan.

Goal 1: Protect and expand the urban forest in alignment with community values as established in the Comprehensive Plan

Mature tree protection

Mature trees are particularly important because of carbon sequestration, wildlife value

Currently City can only protect trees near streams or slopes: want to see change of City code

Concern about trees in muddcliff in particular

Views protection concerns

How does this effect HOAs that have view homes, governed by CCRs that have tree height restrictions to protect view? Will the neighborhood trees on streets and on properties not be allowed to be cut, thus our views will be erased?

Concern about losing views if trees can no longer be removed

Tree planting

Tree banks are not referred to, like cities have done, where tree plantings are part of the plan

Tree planting instead of parking near glass beach

Protect the shoreline

Include strong language about benefits to biodiversity/wildlife

Goal 2: Protect and restore priority habitat areas, movement corridors, and forests

Goal 3: Manage the urban forest in alignment with best practices to support healthy and safe trees

Goal 4: Adapt the urban forest for climate resilience

Goal 5: Collaborate in urban forest management with diverse people and organizations

Goal 6: Monitor the urban forest monitor performance, adapt strategies

Partner with schools to have kids plant trees and monitor them as they grow

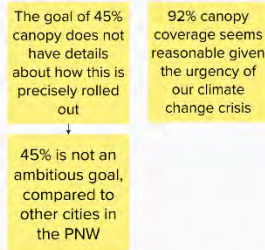
Tree buffer along Lakeway to protect kids from pollution + to get them to connect with nature, bugs, etc.

General feedback on the draft plan

- Do you see anything **missing**?
- Are there things that should be **changed**?
Emphasized?

★ Find the draft plan at:
www.cob.org/ufmp

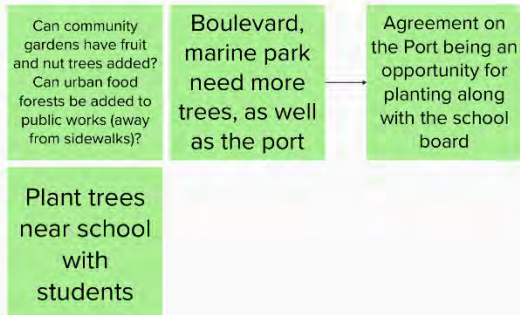
Canopy cover target



Funding structure



Tree planting



Appendix 5 Emails and Letters

Emails

Comments received via email correspondence April 15, 2024 – May 15, 2024

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Dear Analiese Burns,
The Lummi Nation has received notice of the proposed City of Bellingham Urban Forest Plan in Bellingham, Washington and is responding as an affected tribe. The Lummi Nation Tribal Historic Preservation Office (LNTHPO) has facilitated a review of the distributed project information as well as records on file at our office.

Base on this review, the LNTHPO would like to be consulted with on a project by project basis. We would also like to know what archaeological oversight the projects stemming from this plan will have. These comments are based on the information available at the time of the review. The LNTHPO should review any changes related to the proposed project. Should you have any questions or concerns, please do not hesitate to contact me at 360-927-2944 or via email at tamelas@lummi-nsn.gov.

Sincerely,

Tamela S. Smart (she/her)
Deputy THPO/Compliance Officer
Lummi Nation Culture Department
2665 Kwina Road, Bellingham, WA 98226
Cell: 360-927-2944 Email: TamelaS@lummi-nsn.gov

Records, maps, or other information identifying the location of archaeological sites in order to avoid the looting or depredation of such sites are exempt from disclosure (RCW 42.56.300)

.....

Hello
I agree for the most part with the plan. However i feel that there is not enough protection for existing mature trees- the plan does discuss “heritage, large landmark trees “ which is great.
How will the strong large mature trees on private property be saved?
Thanks
Dominique Coulet du Gard
3023 Northwest Ave
Bellingham

.....

firstly i am thankful of the time and effort, people/staff who have worked on developing and implementing this plan..

"I speak for the trees", (in the words of the Lorax) as I'm sure many of you do too.

Here are my own wishes, ideals and effort, working with you, to establish mutual goals. I have done this thus far, by going to outreach citizen planning events, filling out surveys and by attending many of your **parks work parties**, as a volunteer. They are probably the best thing that has happened for the community. Accomplishing the ongoing work, with a group of volunteer citizens of varying ages and varying histories, cultures and socio-economic levels, who are dedicated, to keeping Blhm forested as much as possible, Also working in effort, with other orgs (Conv Corp, NSEA, WMT, Americore, School groups, etc) to attain the same goals ... overall "Building Community" Well done!

The most important aspect to do **NOW**, in my mind, is the preservation of mature trees **both on City and Private property**. **Right now there are no safeguards!** Nearly everyday I am out walking or biking, i hear chainsaws and another tree is felled. **Why?** i can't know...but I assume, some are for construction of an ADU or addition, but does a tree have to be lost? **Are people looking at ways to preserve trees** while making their upgrades? **That has to be addressed!** It says right in your Urban Forest Plan, most city property has been planted with trees.. so that leaves private property and if people aren't **conserving trees on their property** and are just considering their view, or have bought a highly shaded lot and decide they'd like more sunshine (folks maybe should move south to Skagit), **but don't cut down a tree that's 30+ yrs old**, plant a few seedlings and think that's satisfactory. I have addressed this issue several times but see no action.. **You have to enforce something now**, before we have lost more than we can gain back. Even if it's a **temporary ban until you have a true policy in place**. I'm 100% behind you doing **Something** as opposed to "figuring" out all the parameters, as more trees get slaughtered. Set a ban with heavy fines for 8 mnths or until you can fine tune your policy/procedure. **People are going to increase cutting already, as they understand they're going to be a) limited to do whatever they want,**

b) have to either get a permit if allowed, (hopefully site is inspected to see that it is indeed necessary to remove tree), and pay a fee. (hopefully so they'll think twice about cutting a tree down and try to find a different solution) **IT won't stop them. Also without permission should come with an Extreme fine.** (these fees should go straight into a fund toward planting more trees for less canopied neighborhoods, and/or to hire more Arborists for COB.)

Seedlings cannot replace mature trees in shade or carbon capture until they become mature in future decades, but don't take my word for it.

<https://environment-review.yale.edu/carbon-capture-tree-size-matters-0>

Your tree give aways and coupons are an excellent strategy (in theory). Are you monitoring how they are planted and where, so that they will survive well into the future. Will they become street trees? do they have enough room to mature? are they the right type for that persons property? I wasn't there when you were passing them out, but have to wonder if this will actually help? Im 100%, all in for the idea of helping to supplement people, especially in low canopy areas. What might work better, is to spend a few weeks in those specific neighborhoods, educating and assisting people. Getting them planted in most desirable place, which needs shade or which can tolerate sun, watering information especially while they are youngsters, how big an area they'll need, so they live into the future. Parks Interns, with a staff person? Volunteer arborist from one of our tree cutting groups.... there's an idea. 💡 (requiring the tree cutting businesses, having to

offset in volunteer hours, to help replace trees they cut down.) Maybe that would get them rethinking on saving trees as opposed to making \$\$\$ out of supporting removing.

thank you

mickey McDiarmid

Hundreds of studies verify that urban tree canopy is our best, most cost-effective tool to:

- reduce climate impacts such as deadly urban heat island effects and flooding;
- provide eco-system services such as cleaner air, habitat support, carbon capture, etc. -- slow biodiversity loss due to urban invasives and climate stresses;
- provide relieving buffers from traffic and noise as our growing City densifies, and
- counter health problems such as a cardiovascular, mental health, and anxiety disorders.

Bellingham’s mature trees by far provide the majority of these benefits to our community. Yet mature tree retention is not required currently by the City for any new developments unless the trees are within an already protected critical land or wetland buffer.

The UFP draft report does recommend (action 4; page 57) an Exceptional Tree Ordinance, but that will only protect only a few hundred of the largest or most special trees city-wide. All other Actions that impact mature trees are recommended for further study over the next 1-10 years.

This must change to better protect mature trees which are ultra-valuable natural assets for our community.

I stand with implement changes recommended by WMTF that will affect the livability, health, and resilience of our community for many years. Let’s work together to get it right!

April Garza

Thank you for your work on behalf of Bellingham and tree canopy.

Did you hire or solicit advice from Lummi and Nooksack Tribal Leaders local arborists and tree advocates (Whatcom Million Trees) while drafting Urban Forest Plan? It seemed that the consultants were largely from out of town.

Janet

Comment Letter

City of Bellingham Draft Urban Forest Management Plan

James D. Smith

May 9, 2024

Dear Mayor Lund, members of the City Council and staff of the Planning, Parks and Public Works Departments:

I support the comments and suggestions for changes made by the Whatcom Million Trees Project in its White Paper on the Draft Urban Forest Management Plan (the Draft Plan).

I write to amplify one point and make my own suggestions for specific actions.

The Draft Plan fails its own stated objective of mitigating climate change by failing even to suggest meaningful measures to conserve existing trees on private land.

Planting new trees does not compensate for the loss of existing trees in any time frame relevant to our climate emergency. Under the Draft Plan, any developer or property owner who destroys an unlimited number of established trees can make up for it by planting new tree seedlings. **This is wrong thinking. New planting is not mitigation for the loss of carbon metabolism and sequestration by existing trees.**^[1] In fact, for the first approximately 20 years of life, seedlings release more carbon into the atmosphere thru respiration than they sequester thru photosynthesis and growth.^[2] Even after trees start to become net metabolizers, it will take many additional decades to reach true mitigation for what was lost due to tree removal.

I urge that the Draft Plan be amended to require the City to develop and enact clear legal standards that preserve existing trees located on private land to the maximum extent feasible. These standards must allow for removal of diseased or unsafe trees, but preserve healthy trees that are net metabolizers of atmospheric carbon.

Tree girth standards on a species by species basis can be used as an appropriate proxy for the age at which a tree becomes a net carbon metabolizer. The objective is to develop standards to recognize and preserve net carbon metabolizers to the maximum extent feasible. This would include young trees (20-25 years old) as well as mature trees.

The following actions are necessary to meet this objective:

1. Enact an ordinance regulating all new development projects which involve any removal of net metabolizer trees by requiring project designs to maximize actual preservation of these trees. This ordinance must include a requirement that any proposed removal be justified based on safety, necessary engineering constraints or demonstrated financial infeasibility of the project.

This ordinance should also require all development projects to maintain appropriate protection from the construction process for trees to be retained on site, such as recommended by the Pacific Northwest Chapter of the International Society of Arboriculture. (<https://pnwisa.org/page/protecting-trees-from-damage>).

2. Enact an ordinance regulating removal of net metabolizer trees on all property in Bellingham by application for removal permit which would allow property owners to remove such trees only due to tree injury, tree disease, human safety or structure safety.

3. Provide updated and clear guidance about appropriate tree care, including limits on crown removal by percentage by species.

These ordinances should be enacted on an emergency basis consistent with the existence of a climate emergency.

Thank you for considering these comments.

Sincerely,

James D. Smith

^[1] The science of carbon accounting by forest and by species is evolving. But I was able to find no source indicating that tree planting will solve or even meaningfully mitigate climate change. This is in part because there is a considerable time lag for trees to grow large enough to become net metabolizers of carbon. See note 2 below.

^[2] There is a developing body of carbon accounting research, pioneered by Professor Beverly Law, director of the Forest Ecosystems and Society program at Oregon State University, which shows that a forest of young seedlings and saplings releases more carbon into the atmosphere than they sequester for approximately the first 20 years of tree life. This PBS video is a short and concise summary of her research. <https://www.youtube.com/watch?v=LDdK0mvlKyg>. See also “Carbon Storage and Fluxes in Ponderosa Pine Forests at Different Developmental Stages.” B.E. Law, P.E. Thornton, J. Irvine, P.M. Anthoni, S. Van Tuyl (2001). <https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1354-1013.2001.00439.x> Greeting, Ms. Burns, Mr. Janiszewski, Mt. Nabbefeld, and Mr. Linville,

It is great that COB is finally taking a look at our urban forest, and doing so for all the right reasons. I imagine we all wish we’d done this many years ago.

I filled out the online survey, but also wanted to strongly encourage you to read the report written by the Whatcom Million Trees Project in response to your draft Urban Forest Plan. It is attached here. In general, I agree with WMTP’s recommendations for improvements to the plan, especially insofar as the urgent and obvious need to protect existing mature trees on both public, and specifically, private lands. Planting new trees is great, an effort I’ve been involved in with multiple local organizations, but the benefits of protecting existing trees is paramount.

Thank you,

Jamie K. Donaldson
Fairhaven

.....

(1) Tree planting vs. tree protection and retention. Materials in the canopy cover presentation planned for tomorrow's meeting emphasize tree planting and provide lesser emphasis on tree protection and retention. That is a recipe for increasing climate impacts and deepening environmental inequities. The approach amounts to allowing continued removal of larger trees with replacement of small saplings and seedlings. Saplings do not replace the functions and values of larger trees, and cannot do so for many decades. The replacement timeline is longer than the deadlines for mitigating climate change that we must meet.

Bellingham's existing tree protections are weak and poorly enforced. If the UFMP perpetuates weak protection and achieves canopy cover goals through planting, forest inequities will grow worse. Areas of the city with low canopy cover will continue to lose existing trees, causing disproportionate canopy losses. New plantings will not compensate these losses for generations. This approach would perpetuate environmental racism and injustice.

(2) The canopy cover goal is too low. There is a substantial scientific literature documenting forest extent needed to mitigate impacts of climate change for people, salmon, wildlife, and urban environments. That literature calls for canopy cover far exceeding 40% or 45%. This is simply a false choice. Comparisons with lower canopy cover in other cities are disingenuous. We should aim to achieve what is needed in our home, not compare ourselves with others in a race to the bottom.

Further, establishing a canopy cover goal equal to the 40% or 45% would bake in current inequities. We need to ensure all city residents live near large trees. That will require increasing canopy cover substantially in underserved neighborhoods. Doing so will require a canopy cover goal larger than the current those proposed.

(3) There are substantial errors and other serious flaws in its foundational reports. Chuckanut Community Forest Park District has provided you and Public Works with detailed data and documentation about those errors and corrections needed. After multiple cycles of communication, UFMP's authors have refused to recognize the errors, refused to acknowledge the veracity of evidence we have provided, and doubled down on science denial. Science denial is unacceptable, and risks undermining credibility of City leadership. Corrections would be easy to implement, and we have described corrective steps at no cost to the City. I urge you to reject continued science denial and instead insist that the UFMP correct errors in Phase 1 reports.

[Click to Download](#)

tree.equity.urban.NG.2021.pdf

20.4 MB

[Click to Download](#)

racism.urban.ecol.Sci.2020.pdf

1.3 MB

Frank James

360 303-7436

.....

How an ISA Certified Arborist would do it.

I'd identify what level of liability the City wants to take upon themselves. As a TRAQ Certified Arborist, every consideration and mitigation recommendation I provide to property owners/managers is done with care. While I love trees I can not recommend a tree stay that is a high risk as I would be making myself liable. I would encourage the city to consider the following situations concerning liability regarding denial of tree removal as it pertains to firewise BMP and TRAQ Recommended removal of high-risk trees.

1. Make a policy for the WUI -

- All Trees requested for removal be approved by a TRAQ Arborist.
- Property Owners will be required to have trees assessed with an Arborist report.
- Ban all dumping of green material in the green space (fire issue)
- Clarify the firewise allowances.
- - This could be made equitable by streamlining a report that requires
 - a. Photo
 - b. Site map
 - c. ISA - TRAQ # -
 - d. brief description to justify mitigation recommendations

A key Portion of this would be follow-up by City paid TRAQ Arborists to spot-check recommended removals.

2. On-Call Arborist for Imminent Risk Trees

TRAQ-rated trees at the level of 'Imminent' are extremely rare. (more common 1-2 days after a storm) This is a loophole that is often abused. The city should have a TRAQ arborist on call for all imminent tree removals. (This would be a free service for all trees that are at imminent risk. Removal would be permitted on the spot for all imminent trees. All other trees including high risk would require a formal permit process to be considered.)

3. Tree Removal is an equity issue. a. Permitting homeowners to only remove trees when they are high risk is also only permitting homeowners to remove trees when they are their most expensive. Preventative removals are critical as some trees will increase in price at the rate of \$400+ a year.

b. Landlords don't like trees, because they don't get to enjoy them. Trees should be a requirement for any/all rentals. Parking strips should not be allowed to be cemented over. Maybe the city takes possession of all street trees in front of rentals.

4. A city-approved tree company. (only city-approved companies that verify the following issues can do tree work.

- a. Licenced (for tree work)
- b. Bonded
- c. Insured (for tree work - landscapers will often remove trees that they are not insured to work on which is any tree over 9')
- d. Pay L and I for their full crew (a common loophole is a tree crew will only pay workman comp for one guy.)
- e. Tree Companies inappropriately removing trees will be removed from the list for a set period or penalty.

f. As a manager of a tree company, we operate on the work available rather than city codes and regulations, I am constantly talking customers out of topping/wind sailing/thinning trees. If the city had a tree code enforcement plan that was effective it would be easier to steer people in the right direction and know they won't go find the 'tree surgeon/wizard' to maim their tree.

5. Legacy Tree Options

- a. Have them become the responsibility of the city
- b. Homeowners get a pruning stipend for tree care done by approved tree companies
- c. Homeowners get a tax break of some sort based on tree canopy

6. Banned plant list

- a. Poplars, Siberian Elms, Norway Maples,
- b. Trees with terminal heights over 100' within 30' of homes or on lots under a certain square footage.
- c. Banning of invasive clematis and Ivies.

7. Change of road/street tree design. (Especially in Rental Areas)

Option #1 - Increase the minimum size of parking strips by 20+%. This would permit larger trees to be installed farther from homes. In most neighborhoods, the safest place to plant a large tree is the furthest from the home which is the parking strip. Making this area larger would permit for larger canopies.

Option #2 - Eliminate parking strips and instead place that real estate into the center of the street creating a city tree location in the middle of the street. This would stop homeowners/landlords from cutting down their trees and replacing it with gravel/rock/concrete. This would be similar to the Cordata Parkway.

8. Require nurseries/garden centers to inform customers not only of the 10-year height/width (as seen on most tags), but also the terminal height/width to prevent future removals.

9. Consider that a 15' Vine Maple and a 110' Douglas Fir can have the same canopy area, but not the same canopy volume. While I understand the canopy area factor is easier to communicate to the public, our 5% canopy goal might accidentally be achieved while the canopy volume decreases.

--

Christopher Hunsaker |BS Botany | ISA Certified Arborist PN -8658A

Earthworks Tree Service | 1137 Falls Dr, Bellingham WA 98229

christopher@earthworkstreeservice.com | Phone: 360.393.5463

Dear UFMP, Mayor Lund, and City Council Member Daniel Hammill,

I feel strongly that the City of Bellingham must follow the recommendations of the Whatcom Million Trees Project.

Thank you for all those involved with UFMP; this is extremely important work. Climate change is happening now with drastic and costly effects. Last summer 2023 was the world's warmest summer in 2,000 years. Insurance rates are rising which will negatively effect the entire US economy. Our local floods, forest fires, and storms are at dangerous and unprecedented levels. We must take immediate action.

I strongly believe that our local mature trees must be immediately protected. The city should requires all developers to retain as many mature trees on a site as possible. Fix the loopholes that developers and unregistered arborists use. Yes Bellingham is growing and there will be forest loss

but mature, legacy, and large trees can not be replaced. Landmark tree protection is not enough. Clearcutting mature trees on a building site must be stopped.

Bellingham's mature trees are crucial for climate change, not just to capture carbon. Legacy and mature trees keep us cooler in extreme heat spells. Big trees stabilize banks and slopes threatened by torrential floods and wind storms.

Please follow the recommendations of the Whatcom Million Trees Project. Your report's suggested Actions are too vague to be meaningful and we'll have to wait years for most of them to occur.

Stop pitting housing against trees. Both can be solved together in a balanced way as the WMTP explains.

Get moving to protect our mature trees now!

Sincerely Yours,

Cynthia Rogers

Parcel # 380332025095

Thank you for the opportunity to enter this document into the Urban Forest Management Plan. It has been previously submitted to Planning and Development.

I have been on-site previously with Analiese Burns and representatives from Public Works in 2018, and I am in contact with Amy Dearborne at Planning and Development. On May 24, 2021 the neighbours installed provided a Native Growth Protection Area (see thread below) which we all believed would confer existing 2021 riparian setbacks over this Ashley Street parcel. The NGPS sign is on City property and its approved location lies physically in front of Parcel # 380332025095. Please drive-by the alley and inspect the location of the NGPA sign and confirm its location. Parcel # 380332025095 was recently purchased for \$45K by a developer threatening appeal to grandfather 25' creek setback requirements, and appeal to modify Ashley Street setback requirements.

I have been in contact with the owner and have shared my concerns. I also showed them the location on Parcel # 380332025095 immediately adjacent to Lincoln Creek site with abundant intact bottles and artifacts from the 1950's or earlier.

George F. Sanders

4062 Consolidation Ave

Bellingham, WA 98229

(360) 393-5145

gsaunders@openaccess.org

.....

We must protect mature trees! They give Bellingham its beauty and character.

.....

I just took the survey. Would like to add that I think the city needs to do a better job of protecting our mature trees. Key example is the BGCC development, which you approved with NO consideration to the many mature trees on the property which will be lost in order to build a few expensive condos. I question whether there will be affordable housing provided in whatever development comes to pass. And planting new trees as mitigation for the 300+ mature trees that will be lost is not an effective solution. We need clear, enforceable city laws to protect our mature trees.

.....

* Education of the public about tree property value can improve voluntary pro-forest behavior. Renters like trees, as do home buyers. Renters will pay higher rent and property buyers pay higher prices. Of course this is somewhat at odds with housing affordability goals... * Invasive tree threat: horse chestnut trees are on a rapid track to dominate the forest on Chuckanut Creek under the 12th Ave bridge, and spread beyond. * The public could benefit from education about social trails. In the past I often went off-trail in places like the 100 acre wood, seeking a feeling of wilderness escape. Now I know better, but I see how legions of others have done the same thing, and the area is overrun with social trails. The psychology of that process could be shortcut with some public education. * Many street trees suck. I see a trend of increasing dwarf character in new street trees. Small, slow growing trees provide little urban forest value. * People will work for their own self interest. I think that would include forestry work close to home such as planting and tree maintenance. The city could facilitate hyper-local neighborhood involvement (volunteerism) and ownership of common forest resources. * I really don't see why Native Americans are called out specifically in this plan. There are myriad interest groups and I don't see that Native Americans are really much more special than all those other groups. * Action item 18. Tree Incentive Program: Expensive \$\$\$\$\$. Trees are often perceived as only a hassle, due to the required maintenance. I doubt that incentives alone will change much. Owners will plant trees themselves if educated about the economic value of trees. Education is more powerful and less expensive than money incentives. * Action item 30. Urban Forestry department?? \$\$\$\$\$ This is creating a king with no kingdom. A beaurocratic nothingness. * Action item 46. \$\$\$\$\$ Water newly planted trees for 3 years. With correct tree selection and planting, only one summer of watering is needed. * Action item 47. \$\$\$\$ Mulch trees in parks or large boulevards. If a tree needs mulch to survive, it is not appropriate for that site: don't waste resources on it. Give resources to trees that will grow on their own after a short establishment period. * Action item 35. \$\$\$\$\$ Expand the City maintenance list to include all street trees. Why so expensive?

.....

Here are a few random comments that may be addressed in the plan but it's a bit of a complicated read for me. Trees are important for carbon storage but they are also habitat as are large shrubs. Developments also create habitat loss. Is the creation of habitat addressed in another city plan? Is there a plan for 'over mature trees' that could be cut for habitat stumps? Trees and shrubs are also buffers for noise and provide privacy. Are there planting guidelines that suggest planting deciduous

trees on the south side of buildings and coniferous trees to the north? Does the idea of using 'best practice forestry' evolve over the 15-25 year life span of this plan. How would this new plan have protected the mature trees that will be lost to the Meridian development?

I strongly oppose the Urban Forest Plan. I am concerned that this is going to make development and building housing more difficult and unaffordable.

I strongly feel West Street (a through street) in the Columbia Neighborhood, would benefit greatly from having more trees planted along this street. Many people drive West Street to pass through to Squalicum Way. Beautiful evergreen and deciduous trees along this road could further amplify the appeal/property values of the Columbia neighborhood as a whole.

Hello,

While listening to Eric Johnston deliver a presentation on the Urban Forest Management Plan, an excellent suggestion was shared by Louise Bjornson. She asked that more trees be planted along the freeway.

Thank you for your consideration,

Kerri

Hello.

I am COMPLETELY in support of WMTP's recommended changes to the UFP.

I am sad that this wasn't implemented sooner. We don't have time to wait any longer :(

If this plan had been implemented perhaps we wouldn't be losing the 8 large (30+year old) healthy oaks that the Franklin Academy Project will cut down FOR MORE PARKING SPACES! This is extremely counter intuitive and should NOT have been permitted (CUP application was just approved a few days ago. WHY is this being allowed?)

It was kind of a "funny" co-incidence that the same day I was talking to S.Ullman about said project and my concerns about the loss of the trees, the COB newsletter about the UFP plan came in the mail. It made a mockery of the legitimacy of city planners to stand up for our trees, imo.

In the last few years I have seen SO many big beautiful trees (primarily healthy, large douglas firs) cut down by new purchasers of a home only to have said purchasers move within a few years. Seems they buy the house, cut down the trees, do "improvements" then sell or move. Meanwhile, trees that are older than their grandparents are simply gone forever. This MUST stop!

We are beyond fortunate to live here primarily BECAUSE of our trees and natural beauty so please act like you REALLY mean it and act boldly and bravely. <3

Sincerely,

Wendy Walton

I have lived in Bellingham for

over 30 years on South Hill. I

also have worked as an Environmental Engineer during this time. I think the plan is missing a “major component” which is to save our mature trees. These trees should be saved no matter if the property is public or private. The mature trees are far more beneficial as we face Climate Change.

I continue to see mature trees taken down all over town and at WWU when with the proper planning they could be saved.

Urban planners can work around

the trees when designing a building or area. We can have both additional housing and save these trees if we choose to plan better. This will put our city in a much better position from Climate Change impacts.

Thank you for listening.

Lynn Billington, MS, PE

Letters

Letters received by the City about the draft UFP.

4/24/2024 BELLINGHAM URBAN FOREST “TECHNICAL WORKSHOP” COMMENTS

1. Document how the proposed Urban Forest Plan complies with the adopted Bellingham Comprehensive Plan, the current Comp Plan amendment process, and the State Growth Management Plan, both in substance and adoption requirements. Show your work.
2. To comply with the GMA, incorporate the proposed Urban Forest Plan into the City Comprehensive Plan amendment process. A stand-alone Urban Forest Plan is not coordinated and inter-related to other comp plan components as required by the GMA.
3. Initiate the SEPA process to consider viable alternatives. Publish the checklist for open discussion and consideration prior to making a SEPA determination. Include GMA and SEPA required documentation to legally achieve this task.
4. The proposed tree canopy metric reduces developable lands adopted in the Comp Plan to meet population and job projections. Define the residential acreage removed from developable lands, calculate the number of residential units lost. Define the commercial & industrial lands removed from developable lands, calculate the number of jobs lost.
5. The Urban Forest Plan says it “includes everything from street trees, parks and forested open spaces to trees on private property.” Document and publish the acreage of each category. The City GIS exists for this task. Notify each private property owner directly.
6. Be transparent. Publish all draft reports, technical documents, public comments, and agency comments on one website.

Bill Geyer, AICP

Geyer & Associates, Inc.

Bellingham, WA

Dear Mayor Lund and City of Bellingham,

5-11-24

Thank you for the hard work you do to protect the people and the natural environment in our area. I am writing because I have reviewed your Urban Forest Plan and have some concerns that I would like to share with you.

With demand for housing on the rise, the city faces a crossroads, and I beg you to make the right choice for the long-term health of the city, its residents, and the Earth. I ask you to respect the natural world above all things, as it is our source and best protection.

Bellingham is growing rapidly and there will be inevitable tree loss. However, the city should require developers to retain as many mature trees on a site as possible. Landmark tree protection alone is not enough, as that will only save a few hundred trees! Please stop developers from getting a free pass to clearcut mature trees on their project sites. We need balance instead of maxed out profits! Mature trees must be kept throughout all neighborhoods, even in high-density urban villages, if Bham is to remain livable in a changing climate.

Your report's suggested actions are too fuzzy to be meaningful, and we'll have to wait years for most of them to occur. Indeed most actions in your report are recommended for further study over the next 1-10 years, yet we've already waited 4 years for this report! Most of the draft report could have been written 4 years ago. Please stop studying the problem and ACT NOW to save our rapidly disappearing mature trees, which provide the most benefits to all of us.

I ask that you read the Whatcom Million Trees Project's white paper, which is loaded with actions that should be added to the City's report. For example, please adopt specific tree canopy requirements for different types of developments. Having just an overall 45% goal isn't enough! Please fix the loopholes that developers use to clearcut mature trees from a site. This problem is deeply harming our city. I really like the Million Trees recommendation that arborists, etc. must be registered. A few bad apples are illegally cutting so much. They don't even bother with getting a permit. Why not? There's no enforcement!

Again, I beg you to make sure the UFP (and Comp Plan Update) better protects our city's existing trees as much as possible – and please be specific about this! Bellingham's mature trees are crucial mitigation to climate change, not just to capture carbon but to keep us cooler in extreme heat spells and less prone to torrential floods.

Thank you for reading and considering this appeal.
Sarah Gardam

Comment Letter

City of Bellingham Draft Urban Forest Management Plan

Kyleigh N. Kuehnis

May 12, 2024

Dear Mayor Lund, members of the City Council and staff of the Planning, Parks, and Public Works Departments:

I support the comments by the Whatcom Million Trees Project in its White Paper on the Draft Urban Forest Management Plan (the Draft Plan). I am writing with grave concern about how The Urban Draft Plan fails its own stated objective of mitigating climate change by choosing to not protect established trees.

Failing to conserve legacy forests, mature trees, and existing trees will only amplify the effects of climate change and will further plunge us into our climate emergency. The Urban Draft Plan allows developers and private landowners to log unlimited trees on their property and justifies such actions by encouraging the planting of new seedlings and saplings. **Planting new trees instead of protecting established ones will have disastrous consequences for decades. Trees have to survive for approximately 20 years before they begin to capture more carbon than they release during respiration, photosynthesis, and general growth.**¹ Even if we reach the point where the newly planted trees can carbon capture on an impactful scale, we will be decades behind where we need to be if we want to survive climate change.

I, along with many other Bellingham residents, strongly urge that the Urban Draft Plan be amended to establish clear standards and legal requirements to protect existing trees on private, public, and developing land. Established trees are one of our greatest defenses against climate change and they should only be removed when they become diseased or unsafe to people or plants around them.

¹ The science of carbon accounting by forest and by species is evolving. I did not find source indicating that tree planting will solve or even meaningfully mitigate climate change. This is in part because there is a considerable time lag for trees to grow large enough to become net metabolizers of carbon.

Tree girth standards on a species-by-species basis can be used as an appropriate proxy for the age at which a tree becomes a net carbon metabolizer. The objective is to develop standards to recognize and preserve net carbon metabolizers to the maximum extent feasible. This would include young trees (20-25 years old) as well as mature trees.

The following actions are necessary to meet this objective:

1. Enact an ordinance regulating all new development projects which involve any removal of net metabolizer trees by requiring project designs to maximize the actual preservation of these trees. This ordinance must include a requirement that any proposed removal be justified based on safety, necessary engineering constraints, or demonstrated financial infeasibility of the project.

This ordinance should also require all development projects to maintain appropriate protection from the construction process for trees to be retained on site, such as recommended by the Pacific Northwest Chapter of the International Society of Arboriculture. (<https://pnwisa.org/page/protecting-trees-from-damage>).

2. Enact an ordinance regulating the removal of net metabolizer trees on all property in Bellingham by application for a removal permit which would allow property owners to remove such trees only due to tree injury, tree disease, human safety, or structure safety.
3. Provide updated and clear guidance about appropriate tree care, including limits on crown removal by percentage by species.

These ordinances should be enacted on an emergency basis and must be included in The Urban Forest Management Plan.

Thank you for considering these comments on the Urban Forest Management Plan.

Sincerely,

Kyleigh N. Kuehnis

5/13/2024 BELLINGHAM URBAN FOREST "TECHNICAL WORKSHOP" COMMENTS

1. Bellingham Municipal Code 16.20 adopted by reference the SEPA requirements including WAC 197-11-055 Timing of the SEPA process. Key requirements for the City:
 - A. SEPA shall be integrated with the agency activities at the earliest possible time to ensure that planning and decisions reflect environmental values;
 - B. City shall prepare the threshold determination and EIS, if required, at the earliest point in the planning process when principal features can be reasonably identified;
 - C. a proposal exists when an agency is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the environmental effects can be meaningfully evaluated;
 - D. the fact that proposals may require future agency approvals or environmental review shall not preclude current consideration; and
 - E. appropriate consideration of environmental information shall be completed before an agency commits to a particular course of action (WAC 197-11-070)

Question: What specific steps did staff take for the Urban Forestry Plan to meet the legal SEPA requirements? What specific responses have been provided by the City SEPA Responsible Official Kurt Nabbefeld?

2. At the April 24, 2024, Technical Workshop, City staff were informed of Growth Management Act and Bellingham Municipal Code (BMC 20.20) thresholds that need to be met to continue consideration of the proposed Urban Forestry Plan.

Question: What steps did staff take to identify and comply with these legal mandates?

3. At the April 24, 2024, Technical Workshop, staff were informed that each property owner of every parcel effected by the Urban Forestry Plan should receive direct notification by the City of the pending change.

Question: When will the notification be sent?

4. The proposed 45% tree canopy reduces developable lands adopted in the Comp Plan to meet State GMA population and job projections. At the April 24, 2024, Technical Workshop, staff were asked to calculate the residential acreage and residential units removed from developable lands and calculate the commercial/industrial lands and number of jobs lost.

Question: What mathematical model will be used? Have the calculations been made? If not, when will the calculations be published?

Bill Geyer, AICP
Geyer & Associates, Inc.
Bellingham, WA



City of Bellingham,

The Whatcom Housing Alliance (WHA) is writing to share our opinion on the Draft Urban Forest Plan (UFP) and its potential impact on housing development in Bellingham. Tree canopy cover not only offers ecological benefits but fosters equity and community well-being by providing shade, and green spaces, enhancing livability and social cohesion across diverse neighborhoods. We want to find a way to support an implementation plan for tree canopy cover that does not threaten housing development. First and foremost, we urge a steady and measured approach to assessing the draft and we ask you to consider the following concerns:

- **Priority Setting** - Bellingham needs to build nearly 35,000 new homes by 2045 to house its community and meet the state requirements outlined in HB 1220. The council has prioritized increased canopy coverage and is deliberating parking reform. These priorities do not need to be at odds with each other, but we only have so much room. Lastly, the UFP will cost on average \$6.5 million a year, for a total cost of nearly \$195 million. We question how this will be paid for and it raises concerns given our other priorities.
- **Implementation & Goal Setting** - Nowhere in the Draft Urban Forest Plan is it articulated how tree canopy cover will integrate with the housing development goals set forth above. In the 5.6.24 work session, the council acknowledged that the draft would impact housing development on a project-by-project basis and that there was no clear way to mitigate this. The UFP has no language on housing goals to meet this concern.
- **Discourage Development & Increase Housing Costs** - The WHA has concerns that the plan will discourage housing development and increase housing costs. Tree preservation regulations will increase development costs, thereby negatively impacting the cost of housing. The formulation of tree preservation should accommodate both tree preservation and housing goals. Further, we question how this plan can identify canopy cover targets when we have yet to answer key housing

policy questions that will be defined by forthcoming middle housing implementation. Those questions involve topics like green space and how we will define parking, both of which are crucial to meeting Bellingham's housing goals. More specifically, throughout the plan certain targets and percentages don't add up. In the 5.6.24 work session, we were encouraged to hear that city staff acknowledged more work needs to be done to rectify this.

In conclusion, thank you for grappling with these difficult issues and taking the time to come to thoughtful conclusions. We urge the City of Bellingham to carefully consider these concerns and ensure that the UFP supports, rather than hinders, housing development in Bellingham. We look forward to further collaboration on this important issue.

Sincerely,

Whatcom Housing Alliance



Bellingham's Urban Forest Plan

Key Changes Urgently Needed in the Draft Report

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[Executive Summary -- to be added in an update soon]

Introduction: Why Are UFP Revisions Needed?

We all know Bellingham is growing rapidly and will be challenged to provide new housing at higher densities, as well as other forms of development. There will be inevitable tree loss from growth. If in the name of growth and density we create essentially a sea of hardscape and reflective surfaces, however, we put our residents in many neighborhoods at risk.

Hundreds of studies verify that urban tree canopy is our best, most cost-effective tool to:

- **reduce climate impacts** such as deadly urban heat island effects and flooding;
- **provide eco-system services** such as cleaner air, habitat support, carbon capture, etc.
- **slow biodiversity loss** due to urban invasives and climate stresses;
- **provide relieving buffers** from traffic and noise as our growing City densifies, and
- **counter health problems** such as a cardiovascular, mental health, and anxiety disorders.

Bellingham's *mature* trees by far provide the majority of these benefits to our community. Yet mature tree retention is *not* required currently by the City for any new developments unless the trees are within an already protected critical land or wetland buffer. The UFP draft report does recommend (action 4; page 57) an Exceptional Tree Ordinance, but that will only protect only a few

hundred of the largest or most special trees city-wide. All other Actions that impact mature trees are recommended for further study over the next 1-10 years. **This must change.** In this white paper, we outline several Actions that can be implemented immediately – and without additional fiscal impact to the City -- to better protect mature trees which are ultra-valuable natural assets for our community.

WMTP strongly supports the UFP's development. Our critique and suggestions in this white paper are not meant to diminish the City's report but instead to strengthen and improve it. It is a pivotal document that will affect the livability, health, and resilience of our community for many years. Let's work together to get it right!

Housing Versus Trees is a False Battle

The draft UFP already subtracts from its tree canopy coverage calculations all of the land area needed to increase Bellingham's urban density as projected by the Growth Management Act. There is nothing about the UFP's goals and strategies therefore that will prevent infill housing needs from being reached. We agree with this approach since Bellingham is a high-growth city.

Although housing and retained mature trees both require site space, pitting one need against the other is a false dichotomy. Both often can be solved in a balanced way. As the draft UFP briefly portrays, mature tree retention is not a cost burden to the City. It is a cost-effective asset that saves the City millions of dollars annually in other costs.

We believe a three-pronged approach will be most effective to retain as many mature trees as possible within a proposed project site:

- (a) **Financial Incentives.** Provide potent incentives (reduced fees, variances that reduce costs, etc.) to reward developers/builders who choose to retain more Significant trees than required within a project site.
- (b) **Site Plan Alternatives.** During the development review process, require applicants to examine conceptual site plan alternatives (and justify their choice in writing) when existing mature trees (especially Landmark trees) are potentially threatened, and
- (c) **Clear Regulations.** Develop clear regulations and ordinances about trees that are not burdensome or difficult to understand and not prone to misinformation among citizens.

Our suggested changes in this white paper aim to build a foundation for all three elements.

Some landowners may object to community priorities overriding absolute landowner autonomy and freedom to do whatever they want with trees on their land. However, most Washington coastal cities (including all cities listed in our table on page 4 -- except for Bellingham) have had mature tree retention policies and ordinances for years. They model how private property rights can be successfully balanced with meaningful tree protection.

An Attainable, Balanced Mature Tree Strategy

Public presentations by City staff about the Phase 3 UFP draft report have stated that most of the burden of increasing tree canopy coverage towards the 45% City-wide goal by 2050 must fall on private lands. Currently, private land within COB has 38% canopy coverage (p19).

To lift that average higher over time, new trees must be planted (especially in canopy-poor inner neighborhoods) **and** a significant portion of mature trees must be retained throughout the city.

Saving a few hundred largest/special trees via a new Landmark Tree Ordinance will *barely dent* the canopy figures. Without creating adequate protections for a wide array of remaining mature trees in Bellingham, the City is creating/increasing further environmental injustice within our community while claiming we are combating it.

So how can Bellingham effectively **retain** a significant portion of its mature trees on private (and public) land? The draft UFP recommends **deferring** those decisions to later analysis and studies over the next 1-5 years. We and thousands of concerned citizens strongly believe **the City's overarching mature tree strategy should be decided clearly now, not later.**

The way to set an overarching mature tree strategy now is by adding missing pieces of information and Actions to the UFP report. The remainder of this white paper details several elements that should be included into the final report.

UFP Missing Pieces -- Overall

The draft UFP report does not include but should have...

- ◆ **Specific, measurable Actions.** We understand the UFP is not intended to define every policy or ordinance, but well-written, useful actions are *specific* and *measurable*. Vague statements will be difficult to translate (now or later) into policies, ordinances, and incentives that will meet the City's overarching canopy goals.
- ◆ **More canopy targets.** Other than the "aspirational" overall goal of attaining 45% tree canopy coverage in the entire City by year 2050, **the report *doesn't recommend adoption of any other canopy targets*.** See the first few of our *Ten UFP Actions to Add* on page 6 of this white paper for what we suggest should also be adopted by City Council.
- ◆ **Clarity about Urban Growth Areas.** The UFP should clearly state that tree canopy within an Urban Growth Area (UGA) should not be used to counterbalance canopy inequities in other Bellingham neighborhoods. This includes "Tree Banks" that the City may establish in a UGA for replacement tree plantings. Hundreds of studies confirm that **tree canopy must be woven within or located very nearby to positively benefit a neighborhood** in all of the ways stated at the beginning of this white paper. Likewise, if/when a Urban Growth Area is eventually incorporated into the City's boundary, any temporary boost in overall canopy percentages for the City *should not diminish* efforts in the remainder of the City to enhance and retain tree canopy.

- ◆ **Wider canopy cover comparisons.** The draft UFP report (p.16, Figure 11) misses many cities which have higher canopy cover levels than Bellingham, as well as a few useful metrics to see comparative size and urbanization extent.

Tree Canopy Cover Comparison of PNW Cities				
City	Population 2022	Land Area square miles	Pop. Density 1,000s per square mile	Tree Canopy Coverage
Lake Oswego, OR	40,100	11.5	3.5	53%
Lake Forest Park	13,600	4.1	3.3	50%
Bonney Lake	22,900	8.0	2.9	50%
Sammamish	65,800	24.0	2.7	48%
Mercer Island	25,800	12.9	2.0	48%
Bothell	49,000	13.6	3.6	45%
Woodinville	13,300	5.6	2.4	45%
Snoqualmie	13,600	7.2	1.9	44%
Olympia	55,700	20.1	2.8	43%
Kirkland	92,100	22.7	4.1	41%
Bellingham	96,000	30.5	3.1	40%
Bellevue	152,800	37.5	4.1	39%
Redmond	76,700	17.2	4.5	38%

* The UFP draft report's figure of 37% for Kirkland is incorrect.

Tree canopy cover comparisons between cities have limited usefulness since the opportunities for tree canopy vary per city. However, the UFP should make clear (such as by including the above data) that *many* urbanized and semi-urbanized cities in our region have 40% or greater tree canopy. Bellingham at 40% is not an outlier, nor is its 45% goal.

- **Clarified Higher Costs.** Ten-year cost projections are shown each Action in the draft report. WTMP have concerns about six of the estimates (listed below). These Actions appear to largely involve creating more studies or revising existing lists. Their costs seem way too high (even accounting for a new staff position and/or consultant to do such analyses) – *especially* when similar studies and lists have already been developed by numerous other cities in our region which Bellingham can cost-effectively learn from and adapt as desired.

\$\$\$\$ (\$150,000 to \$1 million) EACH:

- **Action 19** (Develop a capital 'streetscape adaptation' strategy)
- **Action 26** (Develop effective standards to mitigate damage from encroachment)
- **Action 31** (Develop an annual urban forestry operations budget)
- **Action 33** (Evaluate appropriate staffing needs to support planting, protecting, etc.)

\$\$\$\$\$ (>\$1 million) EACH:

- **Action 34** (Expand the City street tree maintenance list)
- **Action 35** (Expand the City maintenance list to include all street trees)

- ◆ **Monitoring Plan details.** Section 6.2 (p. 62) of the draft UFP report is missing performance indicators. This should be published well before a final UFP report is presented to Council so that

the community (including stakeholders like WMTP) can offer feedback about this important content, if needed.

All of the above changes can be relatively quickly completed by the City's UFP team. We urge that the revised UFP be released to the community at least **two weeks** before any public presentation occurs that asks for City Council approval.

The remainder of our white paper focuses on UFP Actions to add or revise. More could have been proposed, but we limited this document to the most essential Actions affecting mature tree retention. We hope as the City implements UFP Actions that WMTP and other stakeholders will be brought into the process *early* during the conceptual stage. Collaborating with a tree-focused non-profit like WMTP can also potentially speed up implementation and reduce costs of the Urban Forest Plan.

Eight UFP Actions to Add

WMTP strongly recommends adding eight Actions below to the UFP report. Many create no additional fiscal impact to the City; a few have relatively small cost impacts that may be already covered by the UFP's cost projections.

1. **Adopt Tree Canopy Coverage Goals by Land Category.**
2. **Establish a Mature Tree Retention Policy for New Developments.**
3. **Establish a Low-Density Residential Tree Retention Formula.**
4. **Prioritize Inner Neighborhoods Impacted by Urban Heat Islands.**
5. **Set Overall Tree Canopy Goals for At-Risk Inner Neighborhoods.**
6. **Require Tree Service Provider Registration.**
7. **Establish a Replacement Tree Location/Care Standard.**
8. **Amend the Infill Toolkit's Green Factor Calculation.**

The timing of these Actions is important. Several we recommend becoming policy immediately when the UFP final report is adopted. They are labeled **Adopt With UFP**. Others are Quickstart, meaning implemented later in 2024.

1. Adopt Tree Canopy Coverage Goals by Land Category.

Added Action 1: Adopt the 2050 Canopy Coverage Goals by Land Category shown on page 36 (Table 2) of the report (with revisions; see Discussion below) to guide Planning Department tree-related interactions with development applicants -- and City projects on public land.

Timeframe: Adopt With UFP

Discussion:

Canopy goals per land category -- to be met by retaining existing mature trees and planting new trees -- can ensure the City's overall 45% canopy coverage goal will be reached. Land use/category canopy standards are common in other Urban Forest Plans and are fairly standardized in their

percentage recommendations. Further study is not needed. **Upon adoption of the UFP, such percentages should set the total canopy coverage goal for every new development application – on projects one acre or larger that are *not* a single-family home lot – see note below).**

With the above in mind, Table 2 should include the following revisions for clarity:

- Include a new column that establishes the tree canopy coverage goal per new development project that is one acre or larger in *total* size.
- The *Residential Low Density* goal per new project should not be a single percentage. This category is complex, especially with small lot sizes and varying degrees of existing canopy. By end of 2024, the City should adopt a tree canopy formula for single-family residential lots that accommodates mandated middle housing growth, fair use, etc. but also encourages the retention of a portion of existing mature trees when present.
- Break out *Non-residential High/Medium/Low Density* categories into High-Density Commercial (10%), Medium Density Commercial (15%), Low Density Commercial (20%), Light Industrial (15%), Heavy Industrial (10%), and Institutional (15%).
- For clarity, add a *Greenways/trail corridors (non-critical areas)* category (90%), separating it out from wherever it is currently embedded in the chart. Also add a *Civic Facilities* category (20%) for City fire stations, libraries, community/senior center, etc. parcels, separating it out from wherever it is currently embedded in the chart.
- Adjust the *Road Right-of-Way* category, which is projected for 0% canopy change. Although 0% may be appropriate for ROWs located in front of parcels, there are other ROW parcels that are potentially could add tree canopy (i.e., miscellaneous-shaped residual lands after street widening, development, etc.) Call it *Plantable Right-of-Ways* and assign an appropriate 2050 canopy target.
- Organize all listings by *Private lands* and *Public lands*, with subtotals shown for each.

We show these changes in the revised chart on the next page, with blanks left for missing values to be added by the City's UFP team. The draft report's existing chart is also shown for easy comparison.

Table 2. Land categories and canopy cover targets to achieve 45% citywide

Buildable lands category	Land Area (acres)	2018 Canopy Cover	2050 Canopy Target	Net Change in Canopy Cover (percentage points)
Community/neighborhood Parks	1252	81%	81%	0%
Critical Areas	5423	49%	57%	8%
Future Arterial	51	64%	20%	-44%
Mixed-Use High Density	132	12%	10%	-2%
Mixed-Use Low Density	2	8%	20%	12%
Mixed-Use Medium Density	154	39%	15%	-24%
Already Developed*	5193	23%	35%	12%
Non-Residential High Density	2	9%	10%	1%
Non-Residential Low Density	735	23%	20%	-3%
Non-Residential Medium Density	6	9%	15%	6%
Other city-owned Property	1358	69%	77%	8%
Residential High Density	118	41%	15%	-26%
Residential Low Density	745	48%	35%	-13%
Residential Medium Density	431	55%	25%	-30%
Road Right-of-Way	2380	22%	22%	0%
Total (City excluding UGA)	17982	40%	45%	5%

*Already developed but infill development is possible

Revised Table 2 (page 36)

Land Category (excluding UGAs)	Land Area (acres)	2018 Canopy Cover	Canopy Goal Per New Project	2050 Canopy Cover	Net Change in Canopy Cover by 2050
Private lands					
Mixed-Use High Density	132	12%	10%	10%	-2%
Mixed-Use Medium Density	154	39%	15%	15%	-24%
Mixed-Use Low Density	2	8%	25%	20%	12%
Already Developed*	5193	23%	***	35%	12%
High-Density Commercial			10%	10%	
Medium Density Commercial			15%	15%	
Low Density Commercial			20%	20%	
Light Industrial			15%	15%	
Heavy Industrial			10%	10%	
Institutional**			15%	15%	
Other Non-Residential High Density			10%	10%	
Other Non-Residential Medium Density			15%	23%	
Other Non-Residential Low Density			20%	20%	
Residential High Density	118	41%	15%	15%	-26%
Residential Medium Density	431	55%	12%	25%	-30%
Residential Low Density	745	48%	***	40%	-8%
Total for private lands					
Public lands					
Community/neighborhood Parks	1252	81%		81%	0%
Greenways/Trail Corridors (non-critical)				90%	
Critical Areas (public)		49%		57%	8%
Civic Facilities				20%	
Other City-owned Property				77%	
Future Arterial	51	64%		20%	-44%
Plantable Road Right-of-Ways				40%	
Road Right-of-Ways		22%		22%	0%
Total for public lands					
Grand Total (City excluding UGAs)	17982	40%		45%	5%

* Already developed but infill development is possible ** i.e. campuses, schools, health care

*** Tree canopy formulas for new or existing single-family residential lots undergoing development should be separately developed by COB by end of 2024.

2. Establish a Mature Tree Retention Policy for New Developments.

Added Action 2: For developments one acre or larger in *total* size, the UFP should explicitly affirm the following over-arching tree retention policy:

- (a) The Canopy Goal is met on-site.** The Canopy Goals Per New Project (see our revised Table 2 on the prior page) should determine a project's required total canopy coverage on-site. This is the combined coverage of retained existing trees plus newly planted trees on-site.
- (b) Clarity about which trees meaningfully count.** Immediately adjacent trees planted in associated street right-of-way's, plazas, and parking lots to a new development may be included in the total canopy calculation. Retained non-native trees, trees located within 12' of new construction, and trees confirmed by the City's Urban Forester as diseased or in poor condition should *not* count for a site's canopy coverage.
- (c) Exceptions should be rare.** Only under unusual, well-documented circumstances should a waiver from the total canopy target be granted by the Planning & Community Development Department, subject to Hearing Examiner review. Off-site replacement tree requirements only then should be considered as a last resort (See Added Action 7 on page 7 of this white paper for more details about replacement trees.)
- (d) Landmark trees are specially considered.** Landmark trees on a site should be separately reviewed as defined by the City's upcoming Landmark Tree Ordinance.
- (e) Conceptual alternatives are examined.** When three or more Significant trees (8" dbh or larger) will be potentially removed by a new development, applicants must compare conceptual site plan alternatives that could retain more trees on-site. With Planning Department staff, variations to development standards also should be considered to save more trees.
- (f) Multiple decision criteria are used.** Lower cost/higher profit by a development applicant is not sufficient justification to cause Landmark or Significant tree loss when site planning alternatives reasonably exist.
- (g) Transparency occurs in public processing/review.** Conceptual site plan alternatives, written justification, and comparative impacts on a site's existing trees should be presented as part of the project's public review process as well as subject to Hearing Examiner ruling.

Timeframe: Adopt With UFP

Discussion:

Although details of potential tree retention regulations for new developments can be worked out during Action 4's implementation, the UFP should explicitly set an overarching policy standard and threshold now for this issue. This will explicitly affirm that mature trees (particularly groves of mature

trees) located on private property are considered as valuable community assets for the many reasons stated in the introduction of this white paper.

3. Establish a Low-Density Residential Tree Retention Formula.

Added Action 3: By end of 2024, adopt a separate mature tree retention formula for tree retention within low density single-family residential projects that can accommodate middle housing growth as well as fair use.

Timeframe: Quickstart

Discussion:

As mentioned in Added Action 1 (page 6), individual low-density residential development – i.e. a single-family lot adding an ADU or other middle housing unit(s) -- should have its own tree retention formula due to the relatively small size and varied canopy contexts of such urban parcels. Tree retention on such lots are should not reduce maximum allowed density, maximum allowed Floor Area Ratio (FAR) or Lot Coverage, preclude the ability to construct ADUs or other secondary housing, or prevent required access and utility connections.

Incentives should be available for homeowners who retain more tree canopy than required in their development proposal. Incentives could include fee reductions, setback or other requested variances that can reduce construction costs, and/or other rewards/incentives.

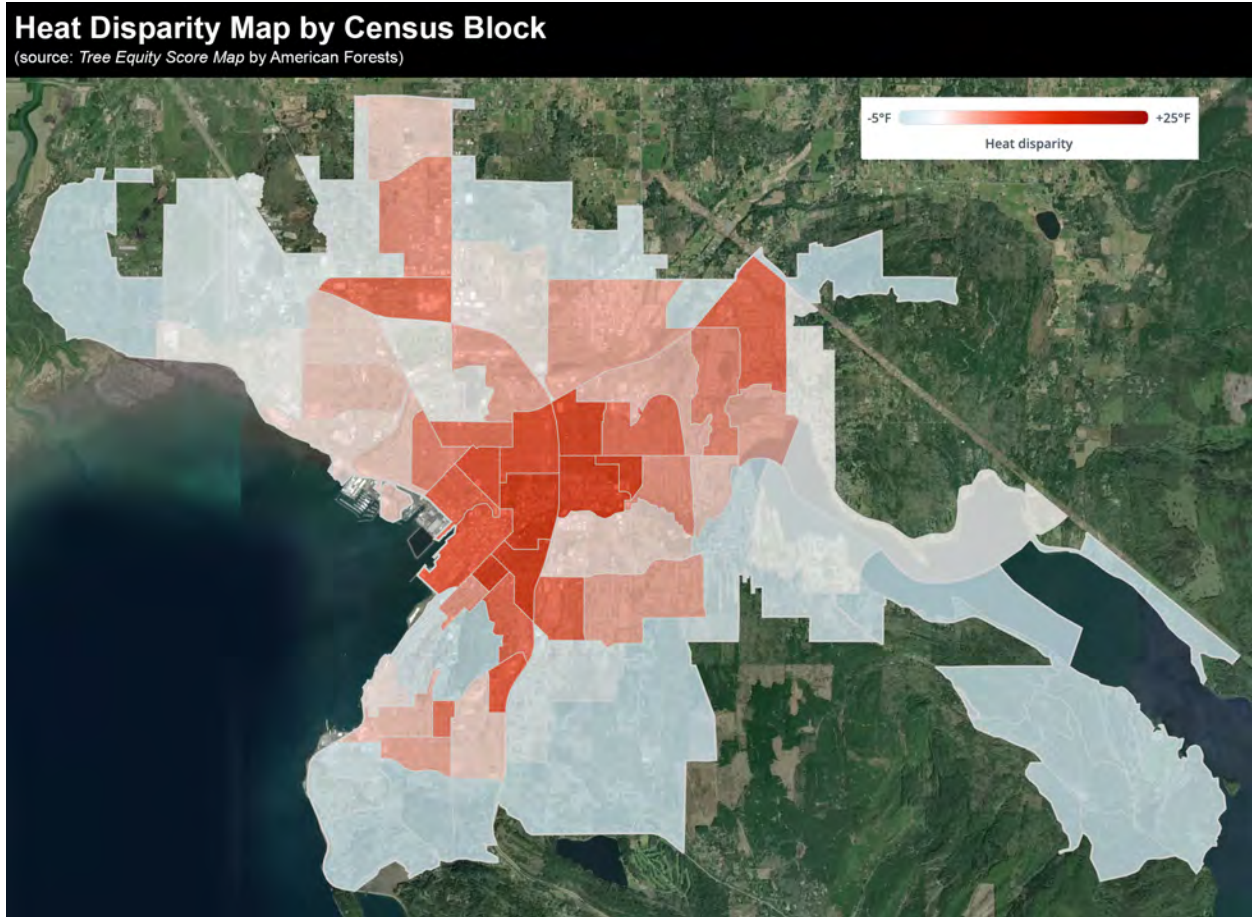
4. Prioritize Inner Neighborhoods Impacted by Urban Heat Islands.

Added Action 4: By end of 2025, identify “heat island nodes” within each at-risk inner neighborhood of Bellingham. Within a 300-yard radius of each node, prioritize tree canopy coverage (retaining mature tree canopy and/or planting new trees) that will effectively shade and offer relief from hardscapes.

Timeframe: Urgent

Discussion:

Steadily increasing urban heat island effects already impact thousands of residents within Bellingham in inner neighborhoods with less tree canopy, as shown by the *Tree Equity Map* developed by the national non-profit American Forests which also shows heat disparity ratings per census block.



Over time, this will arguably become the most health threatening climate change issue for our city besides periodic bouts of wildfire smoke. Summer temperatures, especially during “heat dome” days can climb *much* higher in the hottest nodes within these neighborhoods around hardscape/paving dominated areas that offer little or no tree canopy or other sources of shade. Worse, these nodes usually remain hot at night, which can be especially deadly for people who have limited mobility to get to a cooler space. During 2021, over 600 residents in Washington coastal cities died of excessive heat in this way.

The most cost-effective answer is to increase shade-giving tree canopy and other vegetation in at-risk heat areas. Many cities worldwide are working urgently to do that. Among several strategies, developments are being required to include more shade-giving trees within large expanses of hardscape as well as less hardscape overall.

The draft report’s Action 54 states: *Consider urban forest and green infrastructure benefits when developing strategies to reduce vulnerability to urban heat.* Its time frame is “Build” which means **6-10 years** from now.

We believe the above Action statement is too fuzzy and not urgent enough. All census blocks within the City that are already experiencing significant heat disparity should be assessed with high-resolution heat island maps to identify their heat node locations. These nodes should then be

prioritized for tree canopy growth (and reduced hardscape if possible). **Note that trees must be within ~300 yards of heat island nodes to have a cooling impact** – the closer the better. Remote tree banks do *not* address this problem.

5. Set Overall Tree Canopy Goals for At-Risk Inner Neighborhoods.

Added Action 5: For all heat island at-risk inner urban neighborhoods of Bellingham, adopt an overall, realistic 2050 tree canopy coverage goal per neighborhood to guide and prioritize City tree-related Actions there as well as to attract external grants to partially fund the needed work.

Timeframe: Adopt With UFP

Discussion:

To galvanize needed canopy growth in at-risk, heat-impacted inner Bellingham neighborhoods, we strongly recommend that the UFP set overall 2050 canopy cover goals for the neighborhoods. The goal should realistically reflect the neighborhood's urban fabric and land use mix. To address environmental/social inequity, neighborhoods with a lower Tree Equity Score should be prioritized for implementation within this group. Below are our suggested goals.

Set Tree Canopy Goals for At-Risk Inner Neighborhoods					
Bellingham Neighborhood	Square Miles of Land	2018 Canopy Cover %	Heat Disparity Index	Tree Equity Score	2050 Canopy Cover % Goal
City Center	1.761	10%	+9.7°F	74.7	12%
Columbia	0.685	25%	+6.6°F	87.6	35%
Lettered Streets	0.386	16%	+9.7°F	79.8	35%
Roosevelt	1.160	18%	+14.0°F	73.6	35%
Sunnyland	0.618	14%	+12.4°F	84.9	35%
York	0.355	18%	+13.8°F	82.2	35%

6. Require Tree Service Provider Registration.

Added Action 6: To reduce widespread 'shadow' unauthorized tree cutting in our City, require all tree service providers (arborists, landscapers, tree removal companies, etc.) wishing to practice within Bellingham to register with COB at low-cost.

Timeframe: Urgent

Discussion:

Requiring low-cost registration of all tree service providers is a well-proven step that many cities in the Pacific Northwest have taken to reduce unauthorized tree removals. **Without this Action, the City's Landmark Tree Ordinance will be ineffective.**

Typically, registration is a one-page signed form which includes a statement that they have read the City's current tree regulations, understand what is required, and understand the financial penalties --

and possible license revocation for up to 3 years – which may apply if they repeatedly violate those regulations.

This also helps: Clear communication to the public about the City's tree regulations, and having large enough financial penalties as a deterrent (for tree service providers or landowners who knowingly remove protected trees). Any imposed fines can go into a new Urban Trees Fund which can help to pay for an education/permitting/enforcement staff position.

7. Establish a Replacement Tree Location/Care Standard.

Added Action 7: By end of 2025, map all suitable replacement tree planting locations within the City. When off-site replacement trees are required for permit approval, allow the applicant to optionally pay into to a new *Bellingham Urban Tree Fund* at an amount equaling the 5-year average cost per replacement tree seedling, necessary mulch and deer fencing, planting and monitoring labor, watering, and other aftercare. (Other cities typically set that amount at \$30-\$75 per seedling.)

Timeframe: Urgent

Discussion:

Replacement tree requirements/ratios are currently determined on a discretionary basis by the Planning & Community Development Department. The Urban Forest Plan should formalize what has been an ad hoc approach.

It's tempting to rely on replacement trees planted as a way to mitigate mature tree loss by development. However, this is poor public policy. Here's why: Newly planted young trees will not *begin* to provide significant eco-system services and most other benefits for **15-20 years or longer** (depending on species). **And at even at higher replacement ratios, they cannot match what a retained healthy mature tree provides as it continues to grow. Replacement tree planting should be a last resort to be relied on *only* after examining several site plan options reveals that retaining existing mature trees is not feasible.**

For off-site replacement trees plantings to be meaningful in our climate change era, we recommend that they should be...

- planted at a ratio of 3:1 per Significant tree (8" or larger dbh), or 8:1 per Landmark tree removed⁶;
- a diverse mix of medium and large native tree species well-matched to soil/sun conditions;
- planted at sites based on a City-wide locational policy (see below); and
- correctly planted and then monitored/nurtured for 5 years.

We also strongly recommend that off-site replacement trees should *always* be planted in *perpetually protected* lands (in public parcels, or private parcels via a conservation easement) in the following order of locational priority:

- (a) adjacent to the site if possible,
- (b) within the same neighborhood,
- (c) within lower-canopy inner COB neighborhoods,
- (d) within City parks or Greenways,
- (e) within any other COB neighborhood, or

(f) within a City UGA or nearby County parcel.

8. Amend the Infill Toolkit's Green Factor Calculation.

Added Action 8: Slightly revise the Infill Toolkit's Green Factor ordinance to ensure that the following trees are not counted in an applicant's required Green Factor score: (a) any tree retained – or new tree planted -- within 12' of new construction (due to root ball damage), and (b) trees confirmed by the Urban Forester as diseased or in poor condition such that they are unlikely to survive for 5 years after adjacent construction activity.

Timeframe: Quickstart

Discussion:

The Green Factor worksheet in the City's existing Infill Toolkit ordinance gives a much higher score for retained mature trees than other types of landscape required to meet required Green Factor totals. (See BMC) Unfortunately, this has created a loophole that has been taken advantage of by some applicants. Mature trees are shown as retained in a submitted landscape plan even if they are likely to die soon after construction from root ball loss/compression and/or the tree was diseased or in poor condition in the first place. This Action corrects this loophole.

Seven Existing UFP Actions to Revise

Several existing Actions in the draft report which most impact mature trees are fuzzy in their wording and have an assigned timeframe that infers years of additional delay. **Further deferral (after nearly 4 years for the UFP's development) will continue to cause significant harm to our community, resulting in continued often-unnecessary loss of our community's valuable, cost-effective mature trees.**

We therefore strongly recommend creating a 1 to 2-year "Urgent" timeframe within the "Establish" 1 to 5-year timeframe. We recognize that COB has only limited funds to ramp into an expanded urban forestry program, and that this process will take time. Choices should be made *now*, however, as to which of the **38** "Establish" Actions in the draft report have most urgency.

Existing Action 1

Existing draft UFP wording:

Consider adding policies in the Comprehensive Plan update to address tree canopy goals and strategies to achieve those goals.

Better:

Include policies in the Comprehensive Plan update -- both overall for COB and tailored per neighborhood -- that support and relate to the UFP's tree canopy goals and strategies.

Timeframe: ~~Establish~~ **Urgent**

Discussion:

Due to HB 1181 passed in 2023, the Bellingham Plan (aka Comprehensive Plan Update) must address infill housing growth in our community a way that is consistent with a mandatory climate element. This climate element should include Resilience and Mitigation goals and policies that:

- Improve community resilience to climate change
- Prioritize climate justice
- Reduce carbon emissions from buildings and transportation
- Support renewable energy

Urban trees woven throughout our city play an important role in all of the above as does enhancing the urban tree canopy in neighborhoods with low tree equity.

Existing Action 2

Existing draft UFP wording:

Consider adding canopy cover goals by park in the Parks, Recreation & Open Space Plan update.

Better:

By end of 2025, develop tree canopy cover goals per COB park, identifying where pockets of additional trees could be planted in peripheral areas (such as where Himalayan blackberry could be cleared – see below) that are consistent with each park's master plan. Prioritize the earliest park plantings in neighborhoods with low tree equity. Include all goals and findings in the next Parks, Recreation & Open Space Plan update.

Timeframe: ~~Establish~~ Urgent

Existing Action 3

Existing draft UFP wording:

Evaluate codes to enhance urban forest expansion.

Better:

By end of 2025, assess the lack of natural regeneration in Bellingham's urban forests due to invasives, deer browsing, and climate stresses. Identify where within COB's public forests and Greenways additional trees could be planted (such as where Himalayan blackberry could be cleared – see below). Prioritize the earliest plantings in neighborhoods with low tree equity.

Timeframe: ~~Establish~~ Urgent

Existing Action 4

Existing draft UFP wording:

Evaluate codes to enhance urban forest protection and introduce an Exceptional Tree Ordinance.

Better:

By end of 2024, develop revised codes and ordinances that will require a percentage of mature tree retention based on land use and project size. Include incentives for developers to protect additional trees than required. Also establish a Landmark Tree Ordinance to protect our City's largest, most special trees, which include sliding-scale subsidized arborist care for homeowners who cannot afford to maintain such trees.

Timeframe: Quickstart

Existing Action 6

Existing draft UFP wording:

Update street tree permit standards and policies to clarify information for the public, and proactively identify streets/locations that can and cannot support planting by residents

Better:

By end of 2024, identify which streets/locations can support tree planting by residents. By end of 2025, broaden the new Community Tree Program to include incentives for such plantings by residents.

Timeframe: ~~Establish~~ **Quickstart/Urgent**

Existing Action 8

Existing draft UFP wording:

Replace City trees removed for public works at 1:1 or paying cash in lieu of planting if a Tree Bank is available

Better:

By end of 2024, evaluate the City's replacement tree ratios required for tree removal by the City or by private developers/contractors.

Timeframe: ~~Establish~~ **Quickstart/Urgent**

Discussion:

See page 12 of this white paper for our specific replacement tree recommendations.

Existing Action 30

Existing draft UFP wording:

Create an Urban Forester position to lead implementation, establish an Urban Forestry department, and consider adding an interdepartmental staff position to support grant applications, deliverables and budgets.

Better:

By end of 2024, create an Urban Forester position to lead UFP implementation, including education/outreach to the community about trees, and reviewing on-site any application to remove a Landmark tree. Later, add more staff to develop grant applications, budgets, etc.

Timeframe: ~~Establish~~ **Quickstart/Urgent**

Discussion:

Creating an Urban Forester position is urgent. This person should be actively out in the community coordinating UFP outreach and implementation, not stuck in an office creating budgets and more reports. Other staff added later to an Urban Forestry department can be more administrative.

Crucially, the Urban Forester should review *on-site* any application to remove a Landmark tree. Their independent evaluation of a tree's hazard potential and disease status is essential to counter inherent conflict of interests by commercial arborists and tree service providers, which leads to much unauthorized large tree removal in our City. For healthy trees, the Urban Forester can encourage moderate pruning as an alternative to complete removal. **Without the Urban Forester position being created this year, any Landmark Tree ordinance the City adopts may not be fully effective.**

Minor Corrections/Changes To Do

- ◆ **Birchwood Tree Equity Error.** The Birchwood neighborhood's Tree Equity score is incorrectly shown in Figure 16 as 95-100. Actually, Birchwood encompasses four census blocks that have [Tree Equity scores](#) of 72-91. Combined by area, the neighborhood's overall score is 80.
- ◆ **Add More Data Per Management Unit.** A small chart on page 19 of the draft report only shows how many acres of tree canopy currently exist per management unit. To be more insightful, the City's consultant should also show how the figures relate to *total acres* per management unit -- and anticipated changes in those figures by 2050.

May 14, 2024

To ufmp@cob.org hahuthman@cob.org, mayorsoffice@cob.org

Dear Mayor Lund and City of Bellingham,

Thank you for the opportunity to comment on a new Urban Forest Plan for Bellingham. This plan comes at a perfect time to help our city gracefully weather climate change and growth and development.

- In its Urban Forest Plan the city of Bellingham must add absolute and permanent protections for all older and mature trees.
- Mature trees are the working heroes of our town. The services they provide are precious, economic to the nth degree, and irreplaceable.
- COB must require developers to retain all mature trees on a site, or as many as possible. The burden of proof for cutting any tree must be on the developer and never on the city for striving to protect our green canopies.
- Preserving and taking careful care of our mature trees is the only responsible action. Why? *Because we cannot get these trees back.* It takes decades to grow out a mature tree. Older trees are “gold in the ground.”
- Risks to new saplings are high and so are mortality rates as the young trees establish healthy root systems. Especially with a harsher, rapidly changing Northwest climate, planting new trees is far more uncertain than simply keeping the trees that are already there, these old trees that we are already graced with.
- Protection for a few designated landmark trees is never enough. We must stop developers from a free pass to cut existing mature trees. In the plan, consider spelling this retention out by species, age, density, and diameter so there can be no wiggle room.
- Trees must be considered part of the designs of any new projects, as well as part of plans for redoing or renewing older projects. Any building development plan that contains zero retention of older trees goes into the trash can till the next round. Make the process competitive for developers. Those with the best plans incorporating existing trees “win.”
- Make developers protect and incorporate as much green understory, established small trees, shrubs, and perennial vegetation and natives, as possible.
- With matured, bigger trees, the project gains, clean air and water gain, wildlife from bees to squirrels gain. And people gain big time, families and entire communities, from cooler streets and housing! There is nothing that replaces the cooling shade and other public services lent by mature trees.
- Mature trees have “proven themselves” (by surviving in place). Established, older trees are tremendously wind resilient, they need little water, basically no nitrogen fertilizer (most tree species evolved for scarcity of N in soils), and very little ongoing care. They take care of themselves. (How many of us can say the same?)
- Having developers plant young and tiny “replacement trees” is a finger in the dike fix and a drop in the huge stream that represents mature trees. It is not a fix.
- Trees are our friends, fixing tons more carbon than much younger trees. They are “free” engines for mitigating our weather and climate.
- Keeping older trees is smart. Allowing them to be cut without proof or need is stupid.

- Mature trees must be kept throughout all neighborhoods, even in high-density urban villages. Housing without trees is deplorable and completely unnecessary. Plans for housing must include trees in the design. Period.
- We need concrete requirements in the plan, not platitudes or “wish sandwiches.” Require developers to produce plans that maintain mature trees and make those requirements bombproof. The planning office needs to be empowered to require new permits to account and incorporate or design around trees. They need that clarity and power because planning agents work hard and they need support from the city. There are many ways to incorporate and retain trees, including inner courtyards, Miyawaki forests, privacy hedges, and small shelterbelts.
- Losing a few units from a monotonous block is easy and well worth it to allow an L or two for trees to occupy. (See the downtown Whatcom County Sheriff's Office and Courthouse cut-out where a marvelous dawn redwood was saved by the city demanding that the building be designed to allow space for it.)
- All arborists hired by developers must be registered with the ISA, the International Society for Arboriculture <https://www.isa-arbor.com/>. They know best practices and are trained to think about the whole tree, its health, and services. All city-hired arborists must be practiced and licensed in best practices for pruning trees before they are allowed to work on Bellingham's mature trees. Any permits to cut trees must be rarely given, follow rigorous rules and standards, and be consistently enforced.
- While we're on the subject of urban development that applauds and adds old trees, also require permeable surfaces near the trees. Rein in the amount of impermeable concrete allowed for parking or more within a development, which creates disastrous “heat islands,” is hard on vegetation and people nearby, greatly magnifies run-off in storm events, and gives no habitat for flowering plants for bees and pollinators.

Thank you for your thought and care in creating this plan. I urge you to take bold, no-nonsense measures to honor and conserve mature trees in Bellingham. What a legacy our trees are and what a future retaining them brings!

Thank you, Erin Moore
2835 Broadway
Bellingham, WA 98225

Comment Letter

City of Bellingham Draft Urban Forest Management Plan

Logan W. Dúnlaing

May 15, 2024

Dear Mayor Lund, members of the City Council, and Planning, Parks, and Public Works Department staff,

I am in support of the comments by the Whatcom Million Trees Project in its White Paper submission on the Draft Urban Forest Management Plan. I share the same concerns as the Whatcom Million Trees Project and have submitted this letter to note a specific aspect of the Draft Plan.

Throughout the Draft Plan, the document reads that, while there are many things the city would like to do in order to increase the canopy coverage, a lack of funding and staff prevents the City from making promises. This concerns me because if this root issue is not targeted, no aspects of the Draft Plan will be successful. If the City is unable to fund this project, it should increasingly encourage stewardship and volunteerism through projects such as the Nooksack Salmon Enhancement Association, RE Sources, and other non-profit organisations.

I am also not confident that the City will be able to replace existing trees that take damage from development in a manner that mitigates harm to our climate. Bastin et al. (2019) state that trees may take up to a century to mature and in that time must be given time and resources to survive. Replacing existing trees with seedlings will only harm our planet. If it takes even a decade for a tree to begin capturing carbon, it may be too late. Developers who face no consequences for removing existing trees will only continue to press for the wanton removal of existing trees.

I press that the City amend the Draft Plan to set legal standards for development that preserve the maximum number of trees and percentage of healthy canopy cover possible. There must also be consequences for removing trees unnecessarily and harming trees during the development process. For example, the City should require perimeter fences around root systems as identified by an arborist to prevent development companies from compacting the soil around trees and damaging the root systems.

We only have one chance to protect our homes. If the Draft Plan is not amended, everyone will lose in our fight against climate change.

Thank you for considering these comments.

Sincerely,

Logan W. Dúnlaing

Reference:

Bastin, J. F., Finegold, Y., Garcia, C., Mollicone, D., Rezende, M., Routh, D., Zohner, C. M., & Crowther, T. W. (2019). The global tree restoration potential. *Science*, 365(6448), pp. 76-79. doi: 10.1126/science.aax0848

To:

Ms. Burns: Habitat and Restoration Manager
Mr. Janiszweski: Parks Operations Manager
Mr. Nabbefeld: Development Services Manager
Mr. Linville: Life Safety Division Chief
City of Bellingham
210 Lottie Hall, Bellingham WA. 98225

Transmitted Via Email to: ufmp@cob.org

RE: Draft City of Bellingham Urban Forestry Plan

15 May 2024

Dear Ms. Burns, Mr. Janiszweski, Mr. Nabbefeld, and Mr. Linville,

Thank you for taking the time to consider our comments on the Draft Urban Forestry Plan (the Plan). We thank the City for choosing the more ambitious and protective goal of growing a 45% canopy cover in Bellingham. Bellingham's current 40% canopy cover is on par with many other cities in western Washington and we feel the higher 45% canopy is warranted, aspiration, yet feasible.

RE Sources is a non-profit organization located in northwest Washington and founded in 1982. We mobilize people in Northwest Washington to build just and thriving communities and to protect the land, water and climate on which we all depend. Our priority programs include Protecting the Salish Sea, Freshwater Restoration, Climate Action, and Fighting Pollution—all critical issues affecting our region. Our North Sound Waterkeeper is also a member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has thousands of supporters in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

As discussed in the draft Plan, mature trees are the cheapest and easiest trees to maintain on the landscape because the very young and the very old require much more maintenance and resources to grow and maintain. Mature trees are also the work horses in regards to the ecosystem functions they perform; they are simply the best at carbon sequestration, heat mitigation, water filtration and absorption. ***We would like to see specific, concrete actions in the Plan that address mature tree retention.*** Addressing this need immediately (quickstart) will ensure that mature trees are not lost carelessly before other regulations are put into place. Financial incentives followed by strong regulations need to be put in place soon to make sure that these trees stay alive and thrive. Replacing

a grove of old and mature trees with a grove of saplings as premitigation, which is commonly done, will be a net loss of ecosystem function for the near future.

We agree with the overall messaging and goals of the Plan but are concerned that the language is vague and susceptible to different interpretations. ***We would like a “quickstart” in the implementation of strong language to support this plan in the Land Use Plans (ie Comp Plan) and City Codes and Standards (ie Land Use Development Codes).*** The success of this plan is dependent on these crucial plans as they will create accountability. We understand that this process is intended to occur in the future and look forward to seeing strong Urban Forestry Plans woven into other overarching plans soon.

We can build houses and grow our urban canopy simultaneously. As Bellingham’s population grows, it is essential to promote density and infill while strategically protecting and restoring the city’s canopy cover. Skilled urban foresters and developers can find unique solutions to make sure that the infilling retains existing trees and forests. ***If done right, infill can provide affordable housing opportunities that allow our community to grow while protecting urban canopy as well as surrounding farmland and forests.***

We agree that a focused effort needs to be made in areas with lower tree equity scores such as Roosevelt and City Center neighborhoods. Average canopy cover across different neighborhoods does not provide the whole story, however, we need to look at areas within neighborhoods such as low income housing complexes and neighborhoods throughout the city that are often depauperate of trees. ***We encourage the city to use a finer lens than the Urban Growth Boundaries and the Neighborhood Boundaries to determine the most needed areas for planting trees.*** Other areas to consider are bus stops, popular walking and biking routes, and areas with dense housing.

Additionally, ***we believe it's important for neighborhoods within the Lake Whatcom watershed to be targeted for additional tree planting, as increased canopy cover will help mitigate phosphorus loading into the lake.*** We understand that the city and county have canopy cover requirements within the watershed, however, these rules relate to *removal of existing canopy* and do not address the need to proactively plant additional trees in city neighborhoods in Lake Whatcom watershed.

Cross programmatic integration and creativity can also be implemented into the Plan more. ***Strategic development and restoration can have multifunctional benefits,*** for example, a stormwater park that is encircled by trees can filter stormwater, provide valuable habitat, create canopy cover, and provide places for people to gather and enjoy being outside. Other types of green infrastructure such as rooftop gardens, bioswales, food forest, and stormwater trees can also be multi purposeful.

Fostering collaboration and partnerships with diverse groups in Bellingham could help to elevate and expedite this work and we are glad that this is one of the goals of the Plan.

This includes environmental groups, developers, tribal members, and other community members. Person to person rapport and trust must be built to develop these relationships, however, especially with the tribes. ***We hope that the City invests the necessary time and resources to develop these partnerships and relationships.*** A potential strategy is to hire a tribal liaison that can help pave the way for meaningful dialogue between the Tribes and City with this Plan as well as other City work.

We applaud the City for creating this road map to build Bellingham's Urban Canopy up to 45% and we are hopeful that the necessary incentives, regulations, and collaboration will be put in place to make this a reality. Thank you for providing several opportunities for community members and organizations to review and comment on this draft Plan.

Sincerely,

Kirsten McDade
North Sound Waterkeeper
kirstenm@re-sources.org

Alexander Harris
Land and Policy Manager
Alexanderh@re-sources.org

A photograph of a forest stream with mossy rocks and ferns. The stream flows over dark, moss-covered rocks. The surrounding forest is dense with tall trees and lush green ferns. Sunlight filters through the canopy, creating dappled light on the forest floor.

Lincoln Falls Conservation Area Bellingham, Washington

draft

George F. Sanders

4062 Consolidation Ave.

Bellingham, WA 98229

Licensed Engineering Geologist WADOL #400

updated May 2022

Narrative Summary

Parcel # 380332025095 was recently sold for \$25K. The low sale price reflects advice from Planning and Development that creek setback and front yard setback would make it very difficult to build on Parcel # 380332025095. The City should have acquired Parcel # 380332025095 at the same time it acquired the City of Bellingham Byron Ave Open Space property in order to protect the entire Lincoln Falls canyon area. The low value presents an opportunity to save a whole lot of trees!

This document lays out the case that Parcel # 380332025095 ties directly with a nearby property, City of Bellingham Byron Ave Open Space, (covering a unique geological feature at Lincoln Falls), via an existing primitive foot trail on Parcel # 380332025095 linking Ashley Street with Byron Ave. There are future public safety concerns about this trail because the City of Bellingham Byron Ave Open Space lies in a steep canyon and is not visible from anyone's front windows, nor is it visible from the street. When the City of Bellingham Byron Ave Open Space begins to attract people camping, the trail across Parcel # 380332025095 will become a shortcut to Ashley Street. The City of Bellingham Byron Ave Open Space is not currently patrolled by BPD, and illegal camping here could become established without the neighbors noticing until trespassers begin transiting Parcel # 380332025095 from Ashley Street.

Parcel # 380332025095 lies completely on a Critical Area Slope. There is essentially no level ground on Parcel # 380332025095. The LIDAR trace of Lincoln Creek on updated City topo maps shows Parcel # 380332025095 to be almost entirely within the 75' riparian setback. The rest of this document highlights the fragility of the ecosystem in the Lincoln Falls canyon, showing that any development of Parcel # 380332025095 will cause irreparable harm to this ecosystem and negate 20 years of neighborhood conservation efforts along Lincoln Creek between Byron Ave and Ashley Street. Parcel # 380332025095 must remain as mature forest. There is no case to be made for cutting down mature trees and destroying this Critical Area Slope. There is also no case for any private use of the City right-of-way along Ashley Street in front of Parcel # 380332025095 simply because the adjacent properties are prohibited from similar use and must remain in Conservation Easement. Evergreens growing within City right-of-way along Ashley Street are also threatened by future road improvements by the City. These vulnerable trees lie in the City right-of-way in front of Parcel # 380332025095, and in front of five other properties to the N along Ashley Street. A new drainage pipe recently installed in front of Parcel # 380332025095 eliminated check dams in the stormwater drainage ditch and now restricts water recharge onto the conservation easements downhill.

The neighbors acknowledge the support of the Planning and Development Department in protecting our evergreens and *Salix sp.* deciduous trees growing along Lincoln Creek. The City mower crews continue to respect these maturing trees – thanks! Planning and Development provided the neighborhood with two NGPA signs which are greatly appreciated. Twenty years have been spent planting, watering, fertilizing and protecting evergreens from deer browse across this entire stretch of Lincoln Creek. The future of many trees lies in the balance on Parcel # 380332025095 .



Lincoln Falls canyon is a unique feature within Bellingham city limits

doubly-incised pothole in sandstone,
Chuckanut Fm. (Eocene), Lincoln Falls
conservation area

LIDAR Image



Lincoln Falls

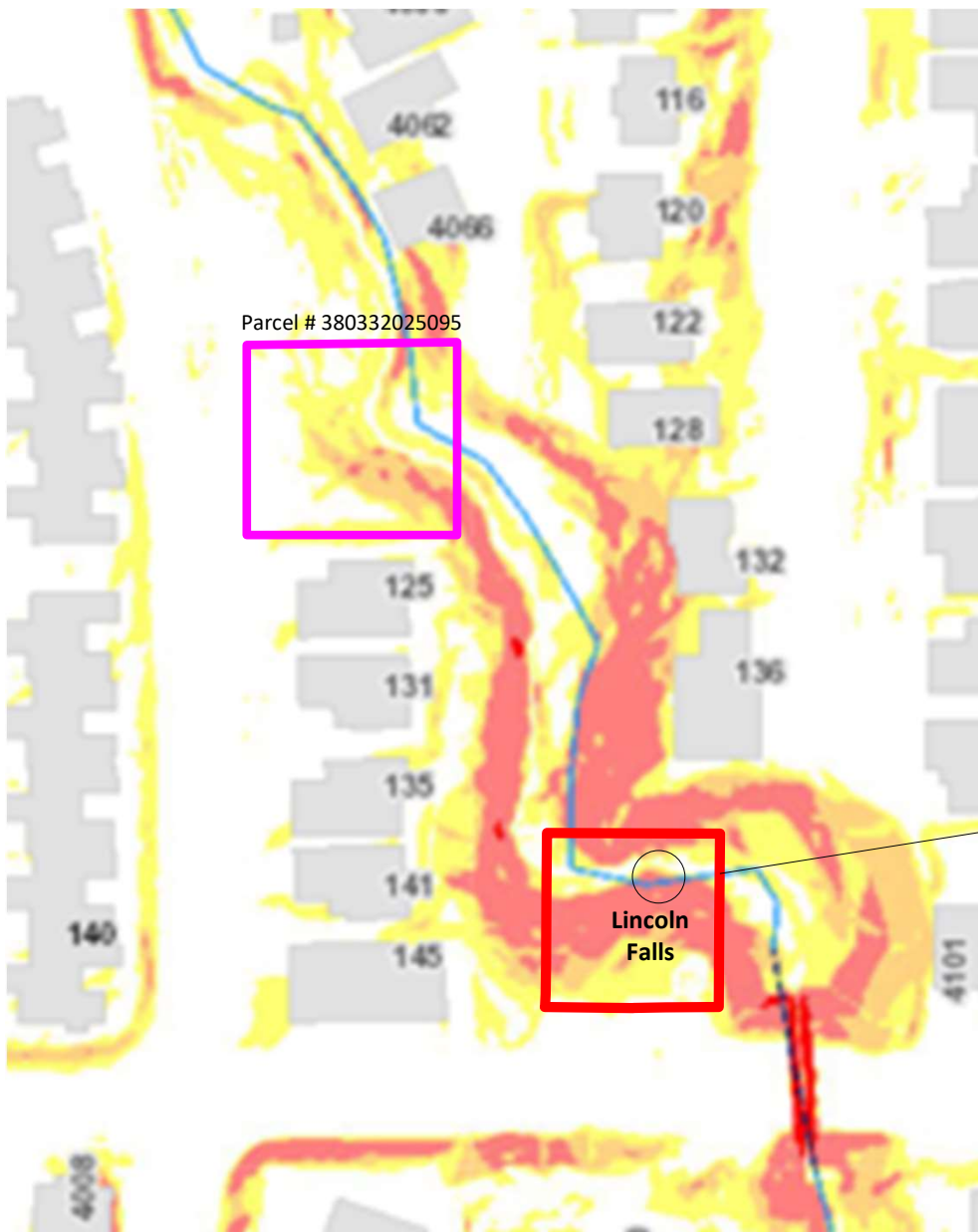
Critical Area Slope



City of Bellingham

Byron Ave Open Space

City Property Byron Ave “OPEN SPACE”



doubly-incised pothole in sandstone,
Chuckanut Fm. (Eocene), Lincoln Falls
conservation area

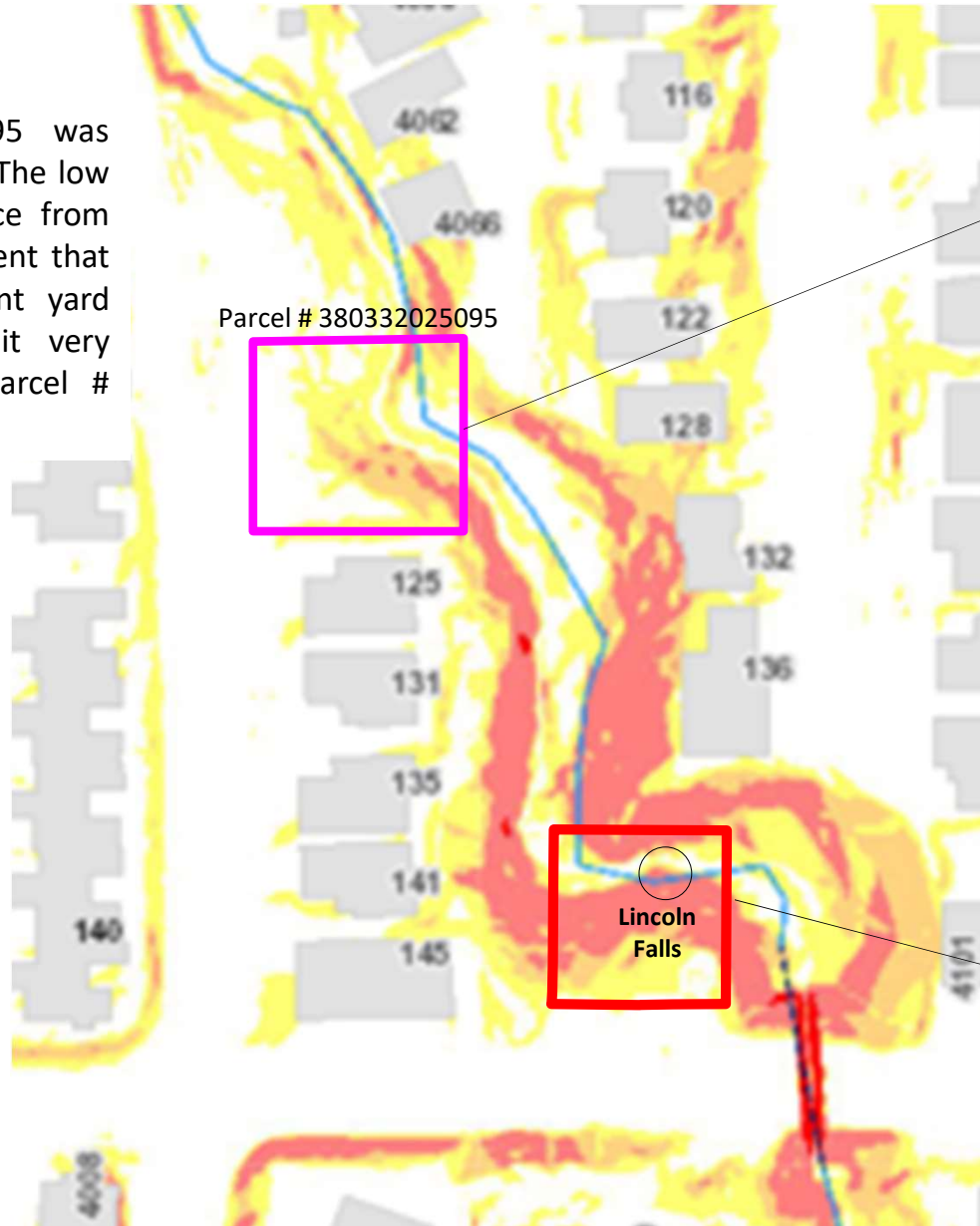
The geological feature at Lincoln Falls is protected by one parcel of the subdivision dedicated to the City of Bellingham as Byron Ave “Open Space”

“Un-Buildable”

Parcel # 380332025095

Parcel # 380332025095 is not protected

Parcel # 380332025095 was recently sold for \$25K. The low sale price reflects advice from Planning and Development that creek setback and front yard setback would make it very difficult to build on Parcel # 380332025095.



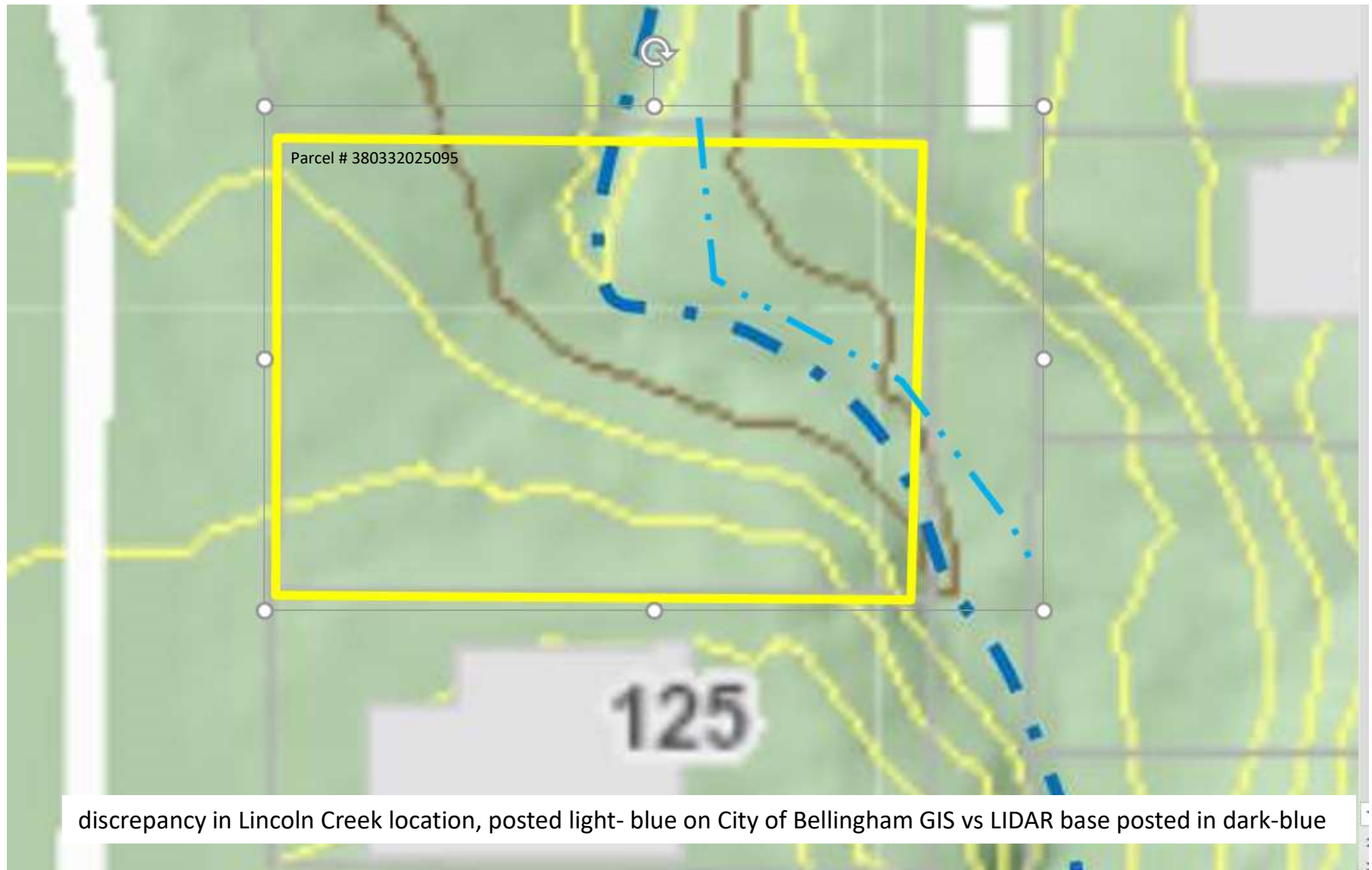
this entire lot is an environmentally sensitive area:

- critical area slope
- designated mature forest
- protected native growth extends to City right-of-way along Ashley Street

**City of Bellingham
Byron Ave
“OPEN SPACE”**

Lincoln Creek is shown to lie much closer to Ashley Street on the LIDAR topo base!

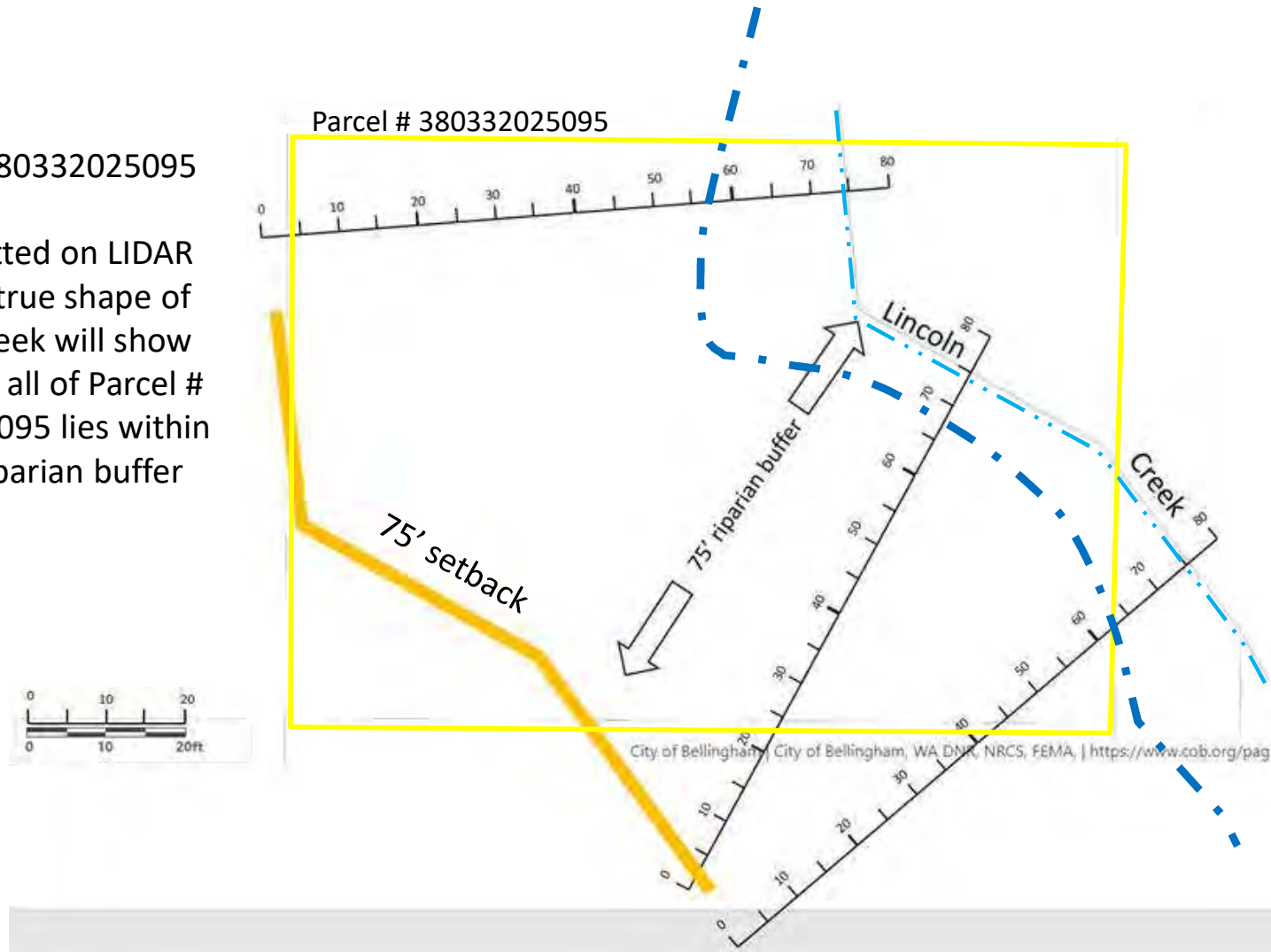
-  LIDAR base topo map trace of Lincoln Creek
-  trace of Lincoln Creek on some City documents



trace of Lincoln Creek is not accurate on some City documents

Parcel # 380332025095

When plotted on LIDAR base, the true shape of Lincoln Creek will show that nearly all of Parcel # 380332025095 lies within the 75' riparian buffer



LIDAR base topo map trace of Lincoln Creek



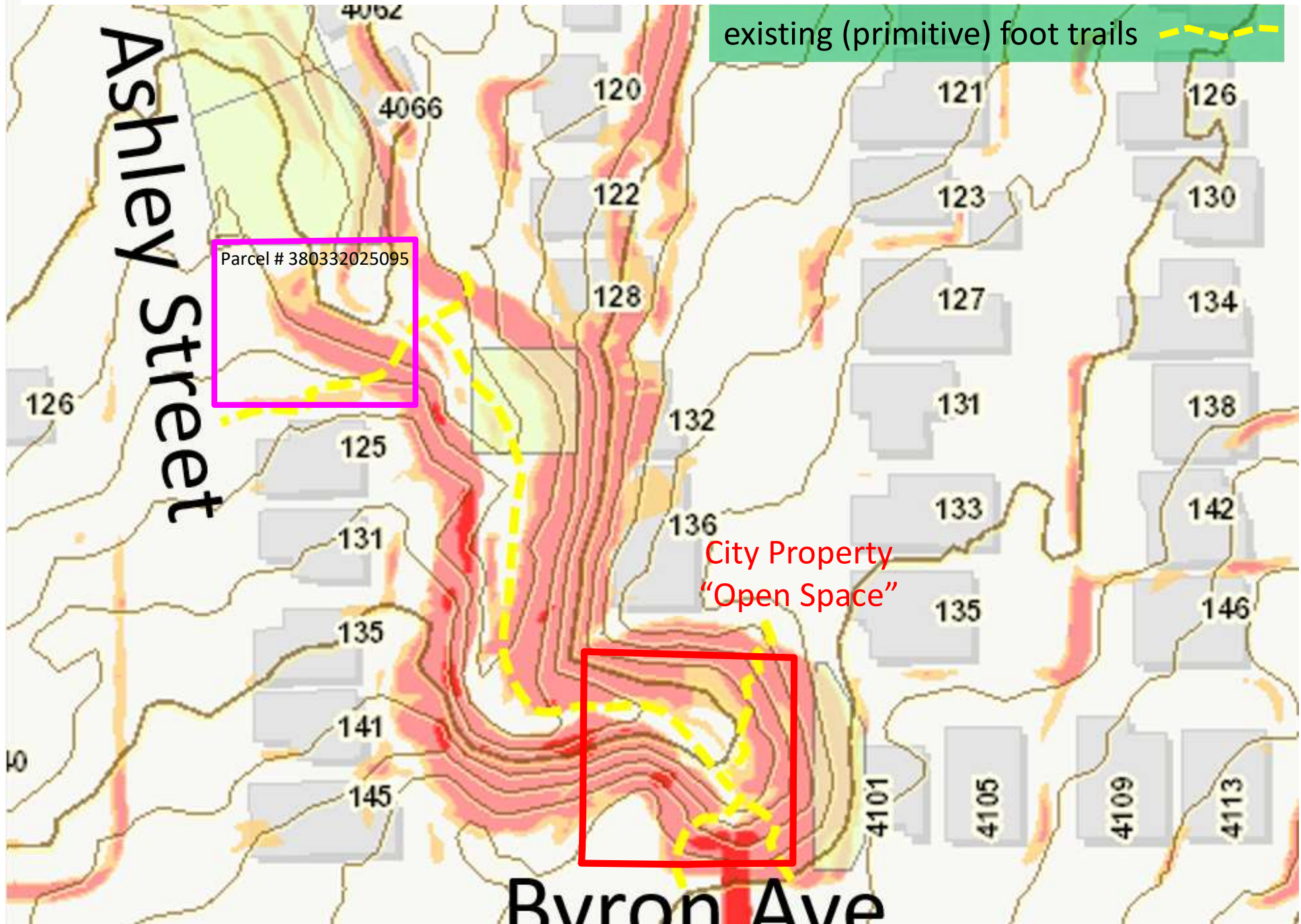
trace of Lincoln Creek on some City documents

neighbors along this
alley expect the trees
to be protected along
this Critical Area Slope

Public Safety

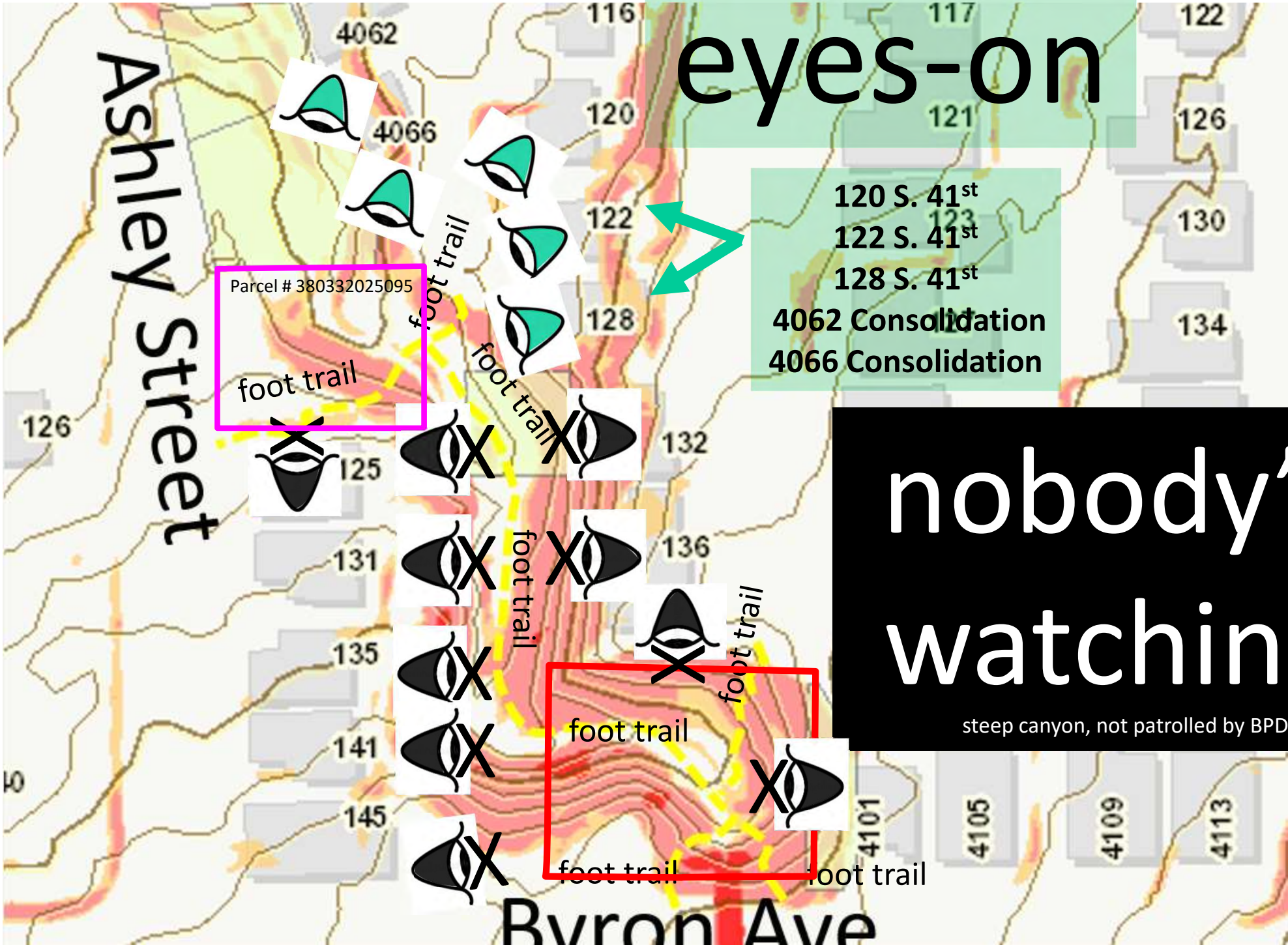
existing primitive
foot trails

existing (primitive) foot trails



nobody's watching

The City of Bellingham Byron Ave Open Space lies in a steep canyon and is not visible from anyone's front windows, nor is it visible from the street. When the City of Bellingham Byron Ave Open Space begins to attract people camping, the trail across Parcel # 380332025095 will become a shortcut to Ashley Street. The City of Bellingham Byron Ave Open Space is not currently patrolled by BPD, and illegal camping here could become established without the neighbors noticing until trespassers begin transiting Parcel # 380332025095 from Ashley Street.



eyes-on

120 S. 41st
122 S. 41st
128 S. 41st
4062 Consolidation
4066 Consolidation

nobody's
watching

steep canyon, not patrolled by BPD

The public has already made primitive foot trails from Ashley Street across Parcel # 380332025095 linking directly to Byron Ave COB Open Space.

Trespassing will only get worse with more residents.

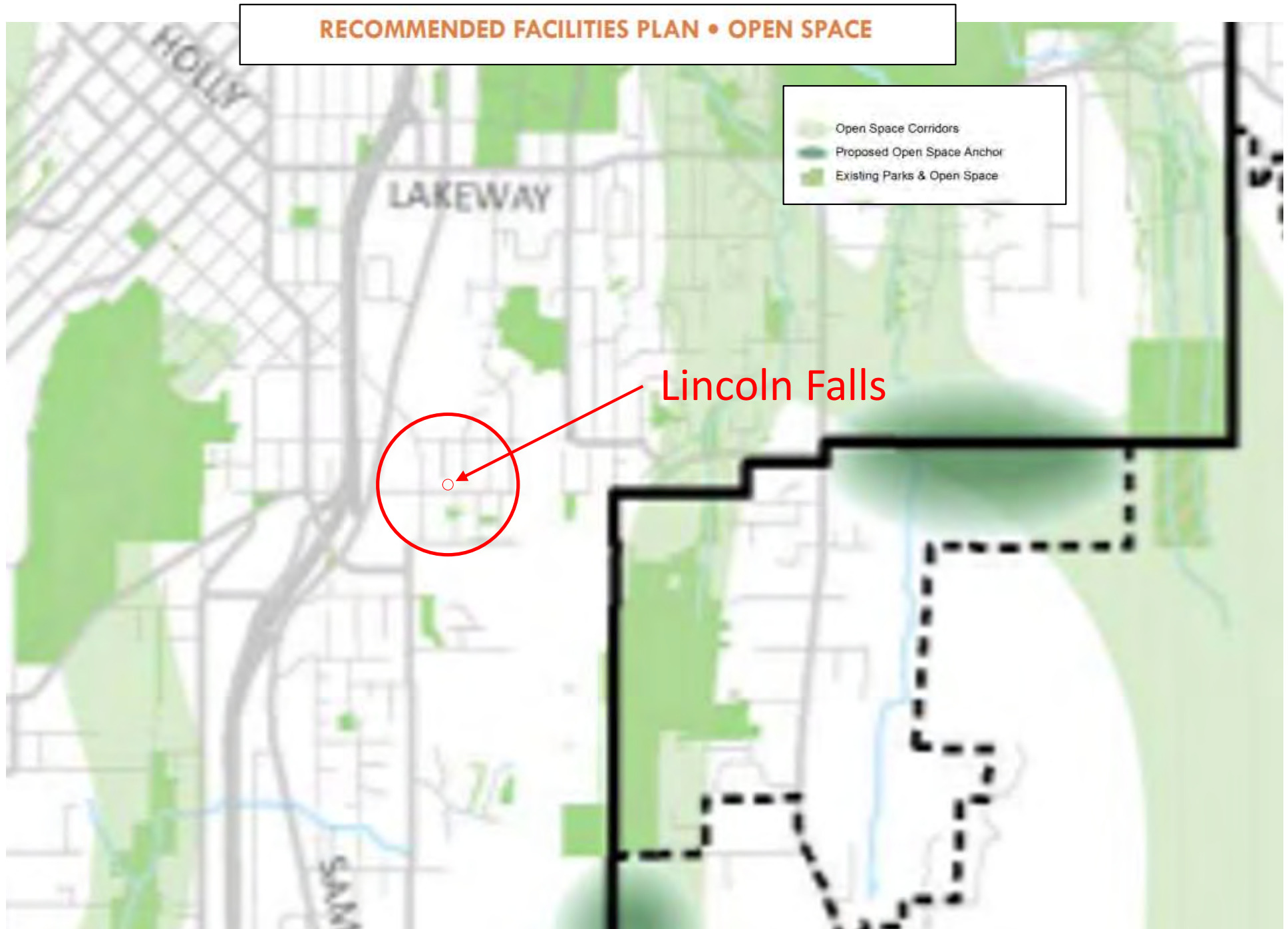
If Parcel # 380332025095 is ever developed, it will force re-alignment of the primitive foot trail from Ashley Street to a position right under our living room windows.

Access issues across
Parcel # 380332025095
are inevitable

Future Open Space

Lincoln Falls
missing from
consideration as
Open Space

existing Byron Ave City Property protecting Lincoln Falls is missing
from consideration as Open Space



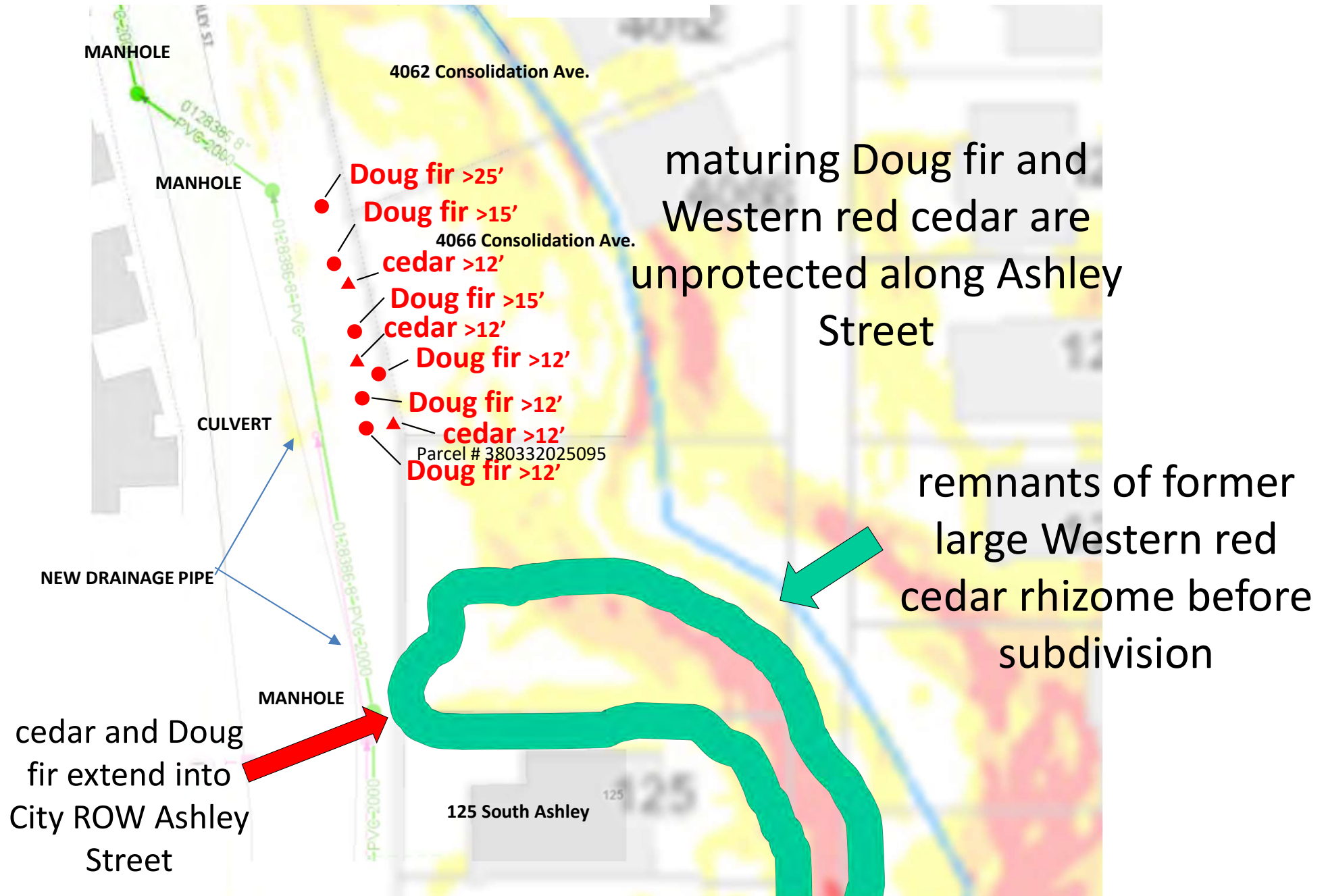
An aerial photograph of a residential neighborhood. A yellow rectangular text box is positioned in the upper right quadrant. Three black arrows originate from the bottom left corner of this box and point towards a cluster of trees in the center of the image. The trees appear to be large conifers. The surrounding area includes streets, lawns, and other smaller trees.

big conifers over
native soil

extend all the way to Ashley Street

unprotected
evergreens

unprotected evergreens



mature Doug fir and Western red cedar

Parcel # 380332025095

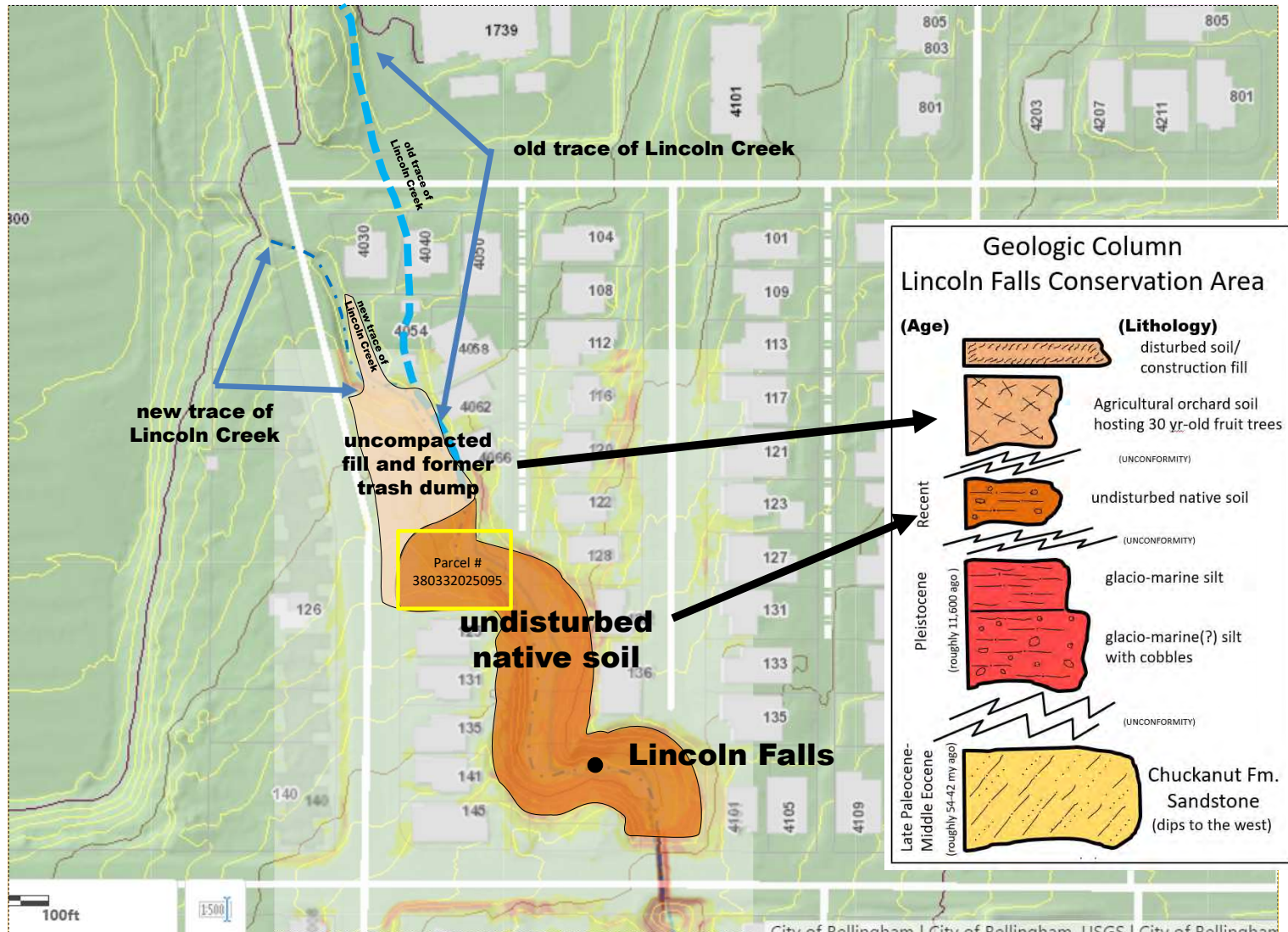


ancient Western red cedar rhizome extends along
Critical Area Slope all the way into City ROW along
Ashley Street on Parcel # 380332025095



Lincoln Falls Conservation Area

Undisturbed Native Soil



Water starvation due to Ashley Street shoulder improvements

Water supply to Conservation Easements downhill was negatively impacted by recent Ashley Street shoulder improvements:

check dams eliminated

storm drainage pipe installed

BEFORE



AFTER



New stormwater culvert installation along South Ashley Street. This construction now blocks water recharge to conservation easements downhill



Critical Habitat

Red-Legged Frog

Red-Legged Frog Breeding Site, Lincoln Creek Ashley Street



There is a deep pool here where these two watercourses meet.

This is the only Red-Legged Frog breeding site on the east side of Ashley Street



Connectivity Importance (dPC)
Habitat A, Focal Species:
Red-legged Frog

Is Parcel # 380332025095
the reason this stretch of
Lincoln Creek is at lowest
habitat connectivity
designation?

Ashley Street

Consolidation Ave.

Lincoln Falls

Pileated Woodpecker

Bird sightings on Ashley Street Parcel # 380332025095

May 2020 – Audubon's Warbler *Dendroica audoboni*

October 4, 2020 – Pileated Woodpecker *Drycopus pileatus*

October 20, 2020 – Western Tanager *Piranga ludoviciana*

Doug firs planted by neighbors in Consolidation Ave. conservation easements 20 years ago have attracted new resident fauna including Douglas squirrel, pygmy nuthatch and silver-sided tiger moth

This new maturing forest consists of over 35 Doug fir and Western red cedar trees, some exceeding 50 feet tall, spread over 4 conservation easements adjacent to Lincoln Creek. These new trees now host resident barred owl and sharp-shinned hawk apex fauna. This maturing forest is contiguous with mature forest on Parcel # 380332025095.

Barred owl



Douglas squirrel



Sharp-shinned hawk, Ashley Street Apartments in background



if Parcel # 380332025095 is
developed it will negate 20
years of neighborhood
conservation efforts on the
adjoining Conservation
Easements

END

Review comments submitted by
Bill Geyer, AICP
05.15.2024

City of Bellingham

URBAN FOREST PLAN

Draft April 2024



ACKNOWLEDGEMENTS

Diamond Head Consulting Ltd. (DHC) has prepared this Plan for the City of Bellingham. DHC acknowledges the participation and support of City of Bellingham departments and staff in preparing this document

Prepared by



Date

April 2024 DRAFT



PLAN AT A GLANCE

Correlation to 20 year
GMA horizon?

Bellingham's Urban Forest Plan will guide urban forest management over the next 10 years. It establishes a vision and includes goals, strategies and actions to support a healthy and resilient urban forest through well-coordinated, consistent, efficient, and sustainable long-term urban forestry management.

THE 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

SIX GOALS

The vision is supported by six goals:



Goal 1. Protect and expand the urban forest in alignment with community values as established in the Comprehensive Plan



Goal 2. Protect and restore priority habitat areas, movement corridors, and forests



Goal 3. Manage the urban forest in alignment with best practices to support healthy and safe trees



Goal 4. Adapt the urban forest for climate change resilience



Goal 5. Collaborate with diverse people and organizations in urban forest management



Goal 6. Monitor performance, adapt strategies

2050 TARGET

Scientific basis for metric?

Grow canopy cover from 40% to 45% by 2050

KEY CHALLENGES

QUICK START ACTIONS

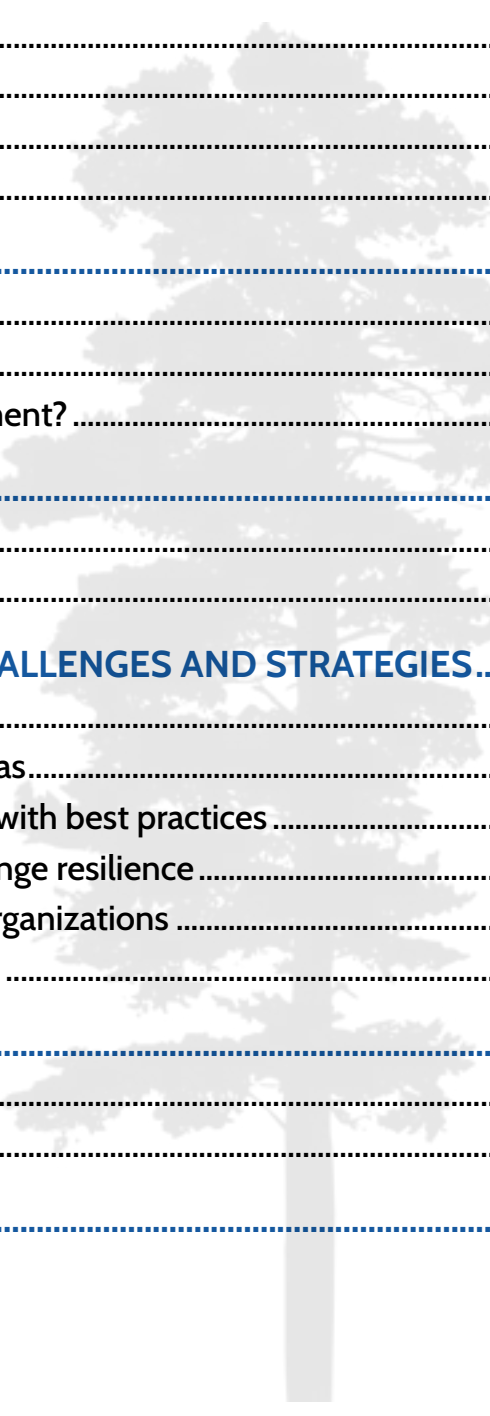
PRIORITY PLAN ACTIONS

Priority actions include: to be entered when finalized

Not consistent with SEPA requirements in WAC 197-11.



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1. INTRODUCTION

Boundary should include entire UGA's adjacent to City plus all City owned land in the Lake Whatcom Watershed and other areas.

Bellingham's urban forest includes all trees within the city boundary, whether located on public or private land. The City manages an expansive urban forest including several thousands of acres of forest and thousands of street trees. Trees and forests are an integral part of Bellingham's identity and culture and provide the local community with a wide variety of benefits. They provide shade, reduce stormwater runoff, provide wildlife habitat, absorb, and store carbon, increase property values, and improve well-being. However, urban forests are facing increasing challenges due to climate change, urbanization, and declining forest health.

The City of Bellingham is a community of more than 90,000 residents that stretches over 28 square miles, with an additional 8 square miles of Urban Growth Area (UGA). As a member of Tree City USA, Bellingham has demonstrated a commitment to the health and management of its urban forest. This commitment is reflected in the city's Comprehensive Plan and Climate Protection Action Plan, which both underscore the importance of the urban forest in the broader context of the city's environmental and community goals.

The Urban Forest Plan is designed to achieve a long term vision for a healthy and resilient urban forest that enhances the quality of life for all residents, supports associated ecological functions, and contributes to community climate mitigation and adaptation needs. This document includes the strategic direction and clear guidance on the implementation of a program to protect, expand, manage and monitor Bellingham's urban forest in collaboration with the community over the next 10 years.

The City's urban forest should be managed in a way that optimizes the environmental, economic and social benefits it provides. An urban forest management plan is the best tool for maintaining a healthy and desirable urban forest.

- City of Bellingham Comprehensive Plan (2016, p. 12)

1.1 Urban Forestry 101

What is the urban forest?

The urban forest includes all trees, vegetation, soils, associated natural processes, and cultural elements found in towns, cities, and other communities where people reside. Bellingham's urban forest can be found along streets and parks, within forested open spaces, institutional campuses, and private properties such as parking lots and backyards (Figure 1).



Figure 1. Components of Bellingham's urban forest

Should include consistent with the Bellingham Comprehensive Plan to achieve population growth and required residential units and job growth to accommodate same per the State GMA.

What is urban forest management?

Urban forest management involves the strategic care of trees within city environments for the benefit of people. Urban forest management aims to maximize the environmental, social, and economic benefits that trees provide in urban areas, such as improving air quality, reducing urban heat islands, enhancing biodiversity, and improving the overall quality of life for city residents. Management also involves minimizing risk from the urban forest, such as tree failures, storm damage or wildfire risk.

“Urban forestry is the sustained planning, planting, protection, maintenance, and care of trees, forests, greenspace and related resources in and around cities and communities for economic, environmental, social, and public health benefits for people.”

- Deneke, 1993

Why do urban forests need management?

Urban forests require management to maintain their health and safety, maximize their environmental benefits, and enhance their aesthetic and social value in urban environments. Management is needed because of the unique challenges urban trees face, including limited space, soil compaction, and pollution. It ensures the longevity of the trees, fosters their adaptation and resilience to climate change, and controls diseases and pests. Proper care and maintenance of urban forests are essential for extending the life of urban trees and sustaining the numerous benefits they provide to urban communities.

Maximizing benefits

Research indicates that mature, healthy trees offer the most benefits, and proper management can extend their lifespan and maximize these benefits¹. Without adequate management, urban trees may die prematurely, posing hazards and incurring higher costs, while losing potential benefits. Effective urban forest management is crucial for maximizing a return on investment in tree planting (Figure 3). Size of tree also makes a significant difference to the benefits provided. A study by the US Forest Service found that a large tree produces 60 to 70 times the ecological services of a small tree²³(Figure 2). Good practice in urban forestry includes planting the largest tree appropriate for the site in order to maximize benefits.

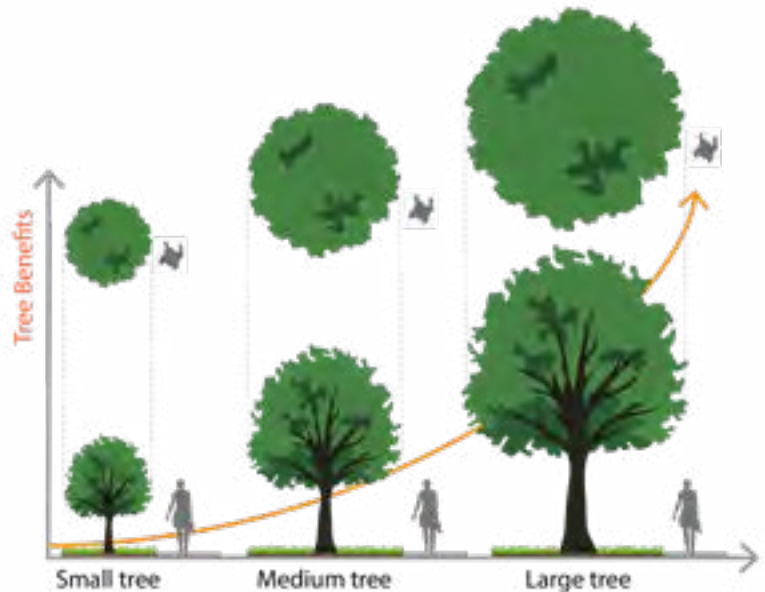


Figure 2. Large trees provide the greatest benefit

Minimizing risks

While urban forests offer many benefits, they also present certain risks or disservices. Instances of trees or their branches falling can lead to property damage or personal injury, albeit infrequently. Tree pollen can exacerbate allergies and respiratory issues. In wildfire-prone areas, trees and vegetation may increase the risk of fires. Additionally, trees can conflict with urban infrastructure. Despite these risks, the advantages of urban forests significantly outweigh the drawbacks. Planning and design, proactive maintenance and risk management are important activities for minimizing risks from the urban forest.

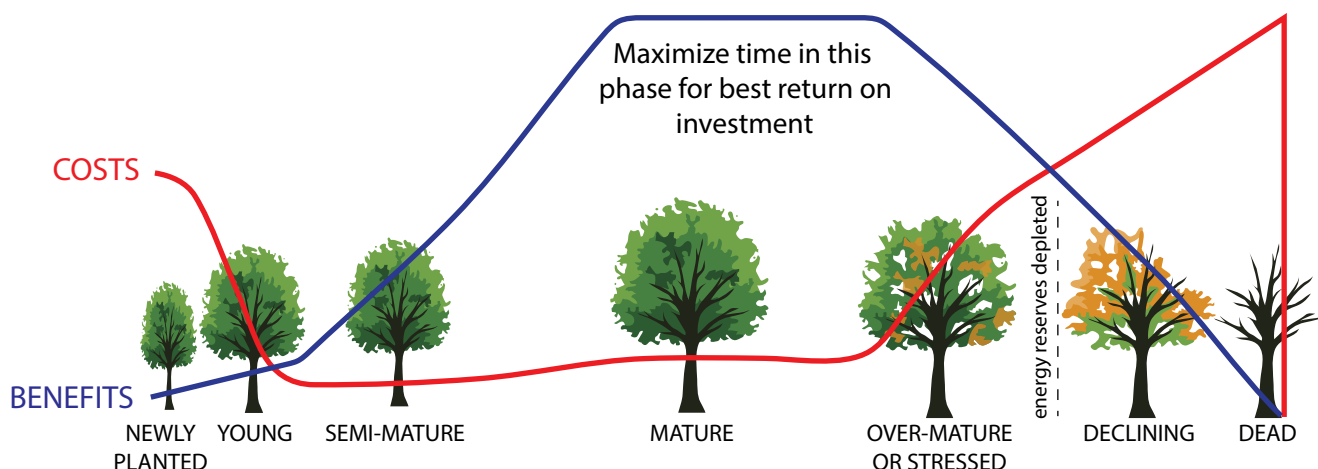


Figure 3. Trees life-cycle cost and benefit phases

1.2 Importance of the urban forest

Bellingham's Comprehensive Plan emphasizes that the city's urban forest should be managed to optimize its environmental, economic, and social benefits, acknowledging the various ways trees contribute to the community (Figure 4). Tree benefits, often called 'ecosystem services', can be categorized into four main areas:

Must recognize population and job growth and resulting acreage to achieve same.

1. **Provisioning Services:** Trees are sources of various products like fruits, nuts, and wood, contributing to local food security and resources.
2. **Regulating Services:** They play a pivotal role in regulating environmental conditions. This includes air quality improvement through pollutant filtration, carbon sequestration to combat climate change, temperature regulation through shade and transpiration, and stormwater management.
3. **Supporting Services:** Trees support biodiversity by offering habitats to various wildlife species. They also contribute to soil health and stability, thus supporting other vegetation and ecosystems.
4. **Cultural Services:** Beyond tangible benefits, trees provide significant cultural and recreational value. They enhance the aesthetic appeal of urban areas, offer spaces for relaxation and recreation, and contribute to the mental and physical well-being of residents, thus enriching the overall quality of urban life.

These ecosystem services flow into numerous benefit areas that improve quality of life for people and animals living in cities.

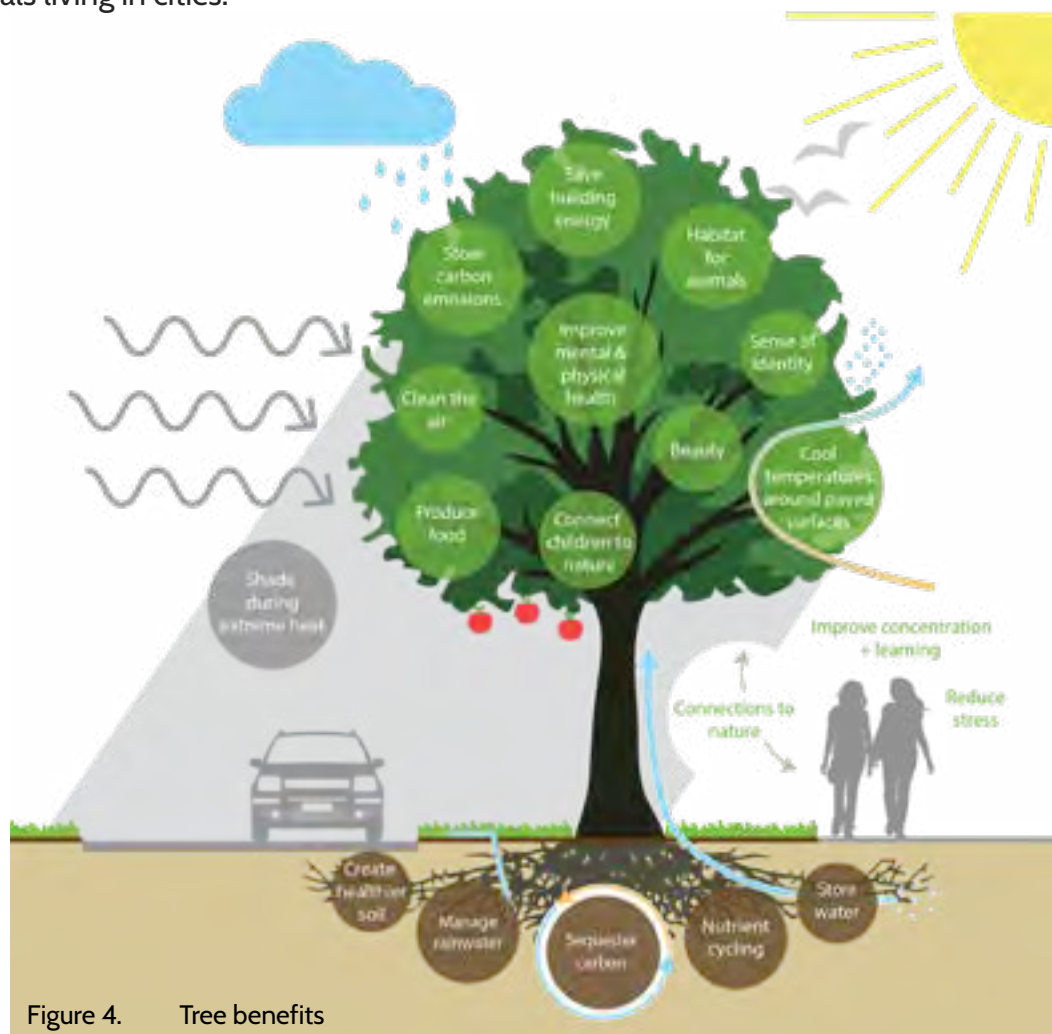


Figure 4. Tree benefits

Health and social benefits

Trees promote mental and physical health. Being out in the forest helps people recover from stress and mental fatigue, and improves immune responses (Figure 5). Exposure to greenery has been found to lower stress levels, improve work performance, and even shorten hospital recovery times^{4,5,6}. Even 5 minutes in nature can reduce stress levels, but big doses of nature have a larger impact. For example, 2-hour forest walks on consecutive days increased the number of anti-cancer natural killer cells in people's immune systems by 50%, and the effect lasted for up to 1 month⁷. Recent research in California found that people living near greenspaces have, on average, \$374 lower annual health care costs than those in areas with the least greenspace, underscoring the significant health savings of planning nature into cities⁸.

Trees in parks, along trails, and in forested areas provide abundant recreational opportunities and promote more active and healthier lifestyles. Landmark trees and trees with special cultural and spiritual significance help form the distinctive character of a place and create a sense of community and identity. Urban forests can also strengthen social ties among the community, by providing places to meet and socialize or opportunities to work together to care for the environment.

Include analysis of social "costs" from increased crime and environmental degradation of green spaces by homeless.

People living near greenspaces have, on average, \$374 lower annual health care costs.

NATURE IMPROVES HEALTH OUTCOMES

ADHD
Diabetes
Cardiovascular disease
Anxiety
Migraines
Depression
Cancer
Birthweights
Respiratory disease
Healing

BY SUPPORTING PHYSIOLOGICAL AND PSYCHOLOGICAL STATES AND BEHAVIOURS

Relaxation
Normalized blood glucose
Better sleep
Attention restoration
Immune function
Stronger social ties
Awe
Vitality
More exercise

THROUGH EXPOSURE TO

Heat
Nature sights and sounds
Air pollution
Phytoncides
Biodiversity

WHILE SPENDING TIME IN NATURE

Residential green
Distance to park
Walks in nature
Park quality
Playspace green

Figure 5. The nature-health link (illustration created using summary by Kuo, 2015)

Climate change benefits

Bellingham's urban forest plays a vital role in combating climate change. Apart from sequestering and storing carbon, trees help local communities cope with increasingly intensified climate change impacts. By transpiring (releasing water into the air) and shading streets, buildings and fish-bearing streams, trees cool the surrounding environment, reduce cooling-related energy use in buildings and associated emissions, and protect vulnerable people and wildlife from heat-related illnesses during hot summer days. As illustrated by the greener areas in Figure 7, areas with higher tree canopy, such as Sehome Hill Arboretum and Whatcom Falls Park, are among the coolest spots in the City (Figure 6). Areas with low canopy cover and more impervious, paved area like City Center are hot compared to areas with more tree canopy. Trees also stabilize steep slopes and capture stormwater from the heavier rainfall events anticipated due to climate change, reducing pressure on our stormwater systems and keeping waterways healthy. Trees and forest ecosystems are also vulnerable to climate change impacts but increasing their resilience will ensure their continued capacity to provide vital benefits to the community.

Climate change will impact trees and forest ecosystems



Warmer temperatures: more hot days and heat waves will expose vulnerable people to more extreme heat.



Drier summers: longer summer dry spells causes declining forest health and species shifts. Parts of the region that historically were habitat for certain tree species will no longer be suitable for these species as the temperatures warm.



More precipitation in fall and winter: The region will receive more water in the fall, winter and early spring, and less in the summer. More rain in fall and winter will increase flooding.



Decreased snowpack and meltwater: less snowpack will result in drier forests by mid-summer.



Longer growing season: growing seasons will reach almost 340 days per year, allowing new plants and pests to live here.



More extreme rainfall events: Heavier rainfalls are expected to occur, causing storm damage.

Hotter parts of the city tend to have low canopy cover and more impervious, paved areas.

Figure 6.
Land surface
temperature
using Landsat
data from June
23, 2021

Snapshot on 1st day
of summer. Show
time series of each
month for a fair
analysis.

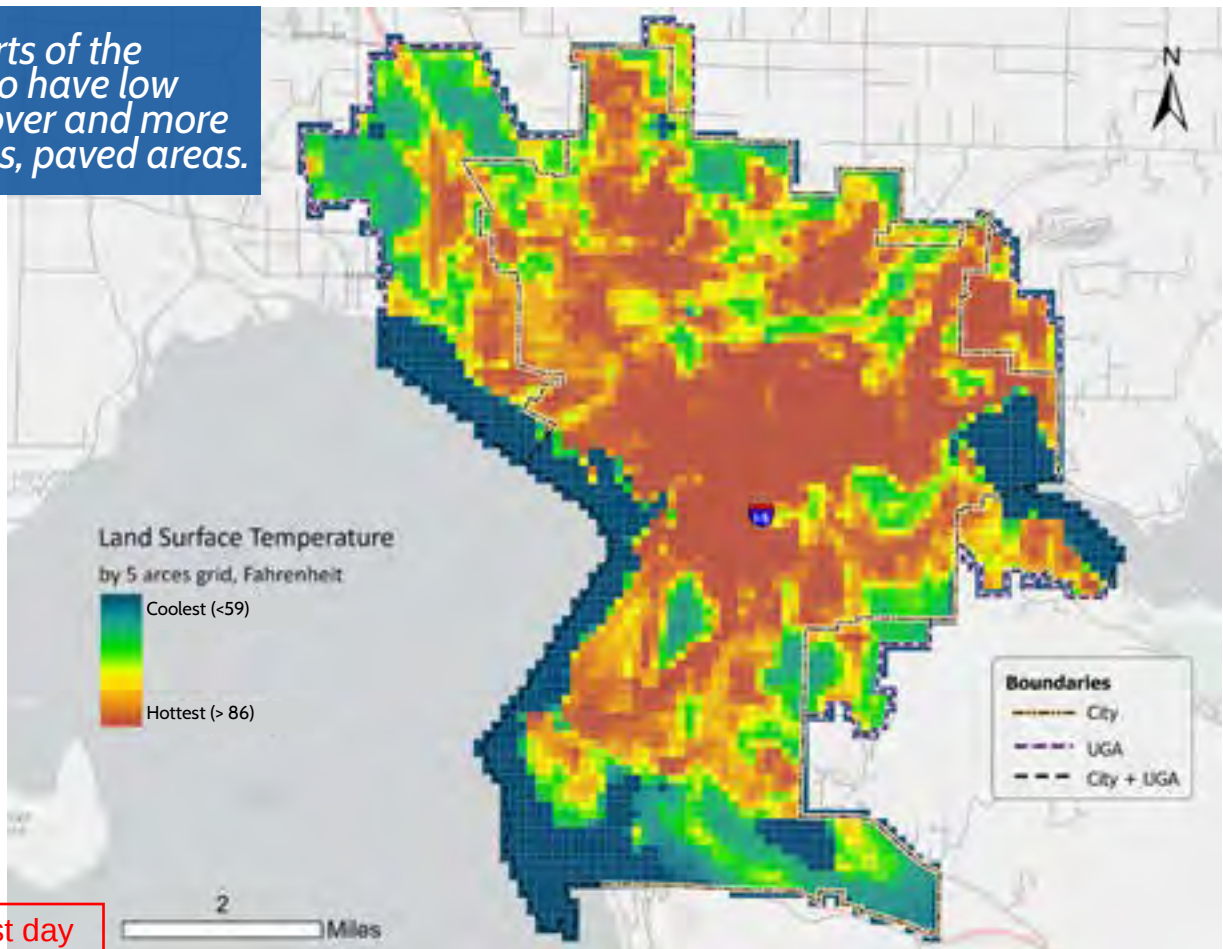
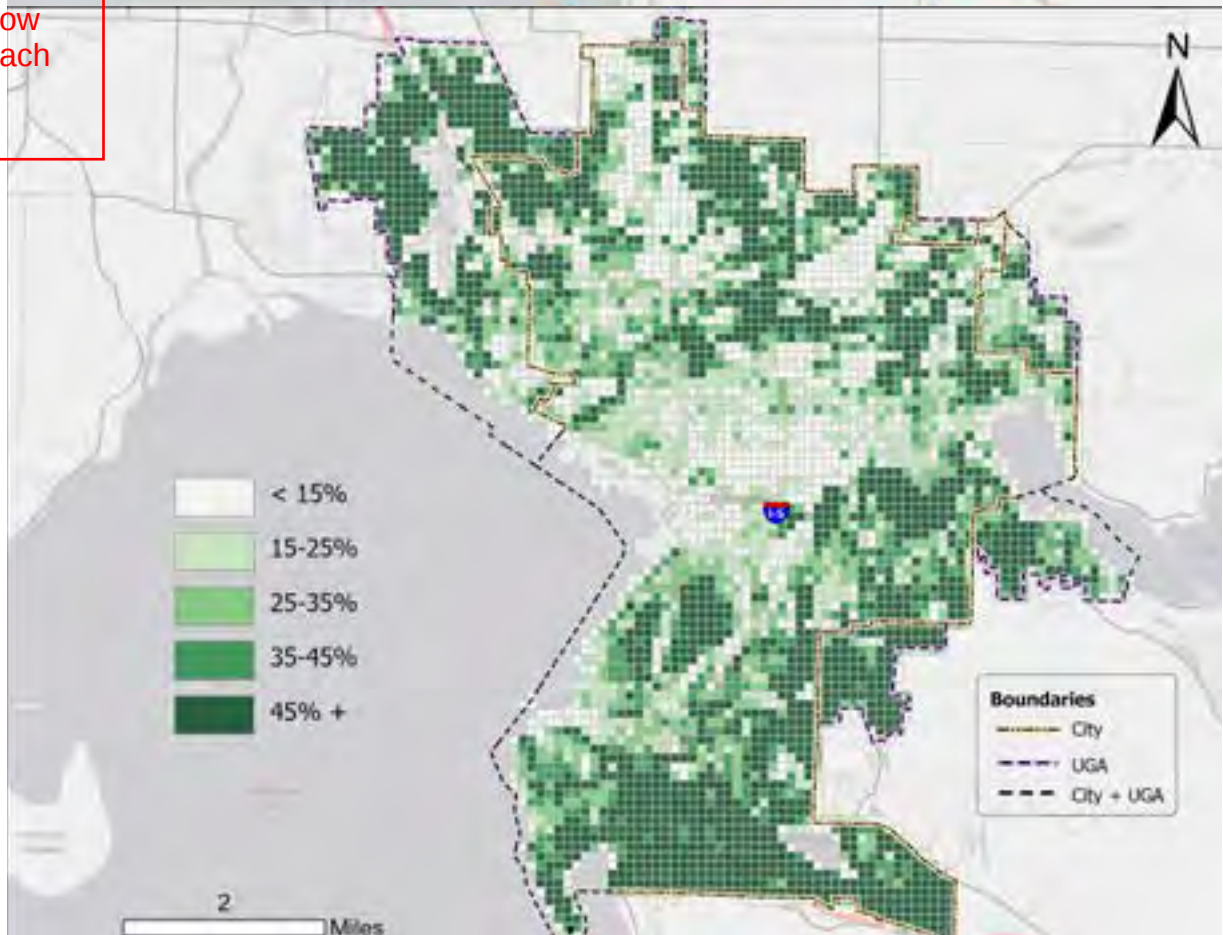


Figure 7.
Tree canopy
by 5-acre grid
using the 2018
Landsat data



Stormwater benefits

Trees and the soil associated with them reduce stormwater runoff by intercepting and absorbing rainwater. Studies have shown that forests can intercept and evaporate up to 40% of annual rainfall⁹. Roots of trees and plants create porous structures in soil that facilitate water infiltration. When it rains, soils act as sponges, absorbing and storing significant amounts of stormwater. In a highly paved urban area, the lack of porous pockets can cause stormwater runoff, resulting in soil erosion and sedimentation entering streams.

Most importantly, the urban forest acts as a natural filter to improve the quality of stormwater entering streams, rivers, and groundwater. As stormwater flows across urban yards, roads, and sidewalks, it accumulates pollutants such as oil, heavy metals, pesticides, and bacteria from pet waste. Stormwater from Bellingham discharges into lakes, streams, and Bellingham Bay, where keystone species such as salmon and resident Orca live. When stormwater passes through the urban forest, the vegetation and soil filter harmful substances and excess nutrients out before they reach nearby waterbodies.

Bellingham's urban forest is a living utility that complements other city utilities like wastewater, water and transportation systems. Trees and vegetation can reduce peak water flows during storms, reducing the strain on grey stormwater infrastructure. The urban forest canopy is estimated to mitigate 216 million gallons of stormwater runoff per year according to iTree Canopy. This is equivalent to \$1.9 million worth of services through traditional grey infrastructure such as pipes, drains and basins. Urban forests offer a nature-based solution for cost-effective and sustainable stormwater management.

Is this Plan intending to integrate the "Urban Forest" into the existing City stormwater utility?

Forests can intercept and evaporate up to 40% of annual rainfall.

Economic benefits

What are the costs to housing production and new commercial or industrial buildings?

Healthy trees in urban areas can significantly contribute to the local economy. The aesthetic appeal of well-maintained trees attracts visitors to local businesses and tourist destinations, thereby boosting economic activity. Beyond their visual appeal, trees offer valuable ecosystem services, some of which can be quantified in economic terms. As reported in the State of the Urban Forest¹⁰, Bellingham's urban forest delivers approximately \$6.3 million equivalent value of services per year for carbon sequestration, air pollutant removal, and runoff mitigation. It also provides a cumulative benefit of \$42.4 million for carbon storage (Table 1). These dollar values capture just a fraction of the benefits the urban forest provides to the community, many of which cannot be valued easily.

Table 1. Valuation of selected ecosystem services provided by Bellingham's urban forest

Ecosystem service	Value (USD, 2022)	Amount
Carbon stored in trees	\$42,399,626	248.61 kT
Carbon sequestered annually in trees	\$1,423,587	8.35 kT
Total air pollution removed annually	\$2,964,408	302.37 T
Annual avoided runoff	\$1,924,401	215.93 Mgal
Total annual benefits	\$6,312,395	
Total benefits	\$48,712,020	

Habitat and biodiversity benefits

Biodiversity encompasses the variety of genes, life forms, and ecosystems present on Earth, and it plays a crucial role in supporting the many essential ecosystem services provided by urban forests¹¹. Trees, in particular, are critical to maintaining high levels of biodiversity as they provide structural support and diverse habitats, including valuable nesting sites, habitat corridors, and foraging opportunities. Bellingham's urban forest is home to critical fish and wildlife habitat found throughout our forests. Wildlife and ecosystems benefit from the same urban forest ecosystem services as humans, such as clean air and water, shade, and forage. For example, trees shade streams, which regulates water temperature and improves water quality critical for salmon health and survival.

Urban forests in Bellingham serve as ecological hubs and green corridors, facilitating wildlife movement and genetic exchange, which enhances the resilience and adaptability of species in urban landscapes. The integration of forest habitats into the urban fabric supports biodiversity, benefiting wildlife and improving the quality of life for residents. These urban forests provide ecological functions that improve climate regulation, water and air quality, and carbon sequestration in urban environments, contributing significantly to the health and resilience of the community. These benefits are crucial for protecting humans and our infrastructure, as well as the birds, fish, insects, and other wildlife that live in urban areas.

1.3 The planning process

Bellingham's Urban Forest Plan was developed in three phases (Figure 8). The first phase, completed in 2021, involved an urban forest assessment and the release of the State of the Urban Forest Report in 2022¹². The second phase, completed in fall 2022, focused on gathering community values. The public engagement results were released in an engagement summary report in 2022¹³. The final phase, completed in 2023, concluded with the development of the plan.

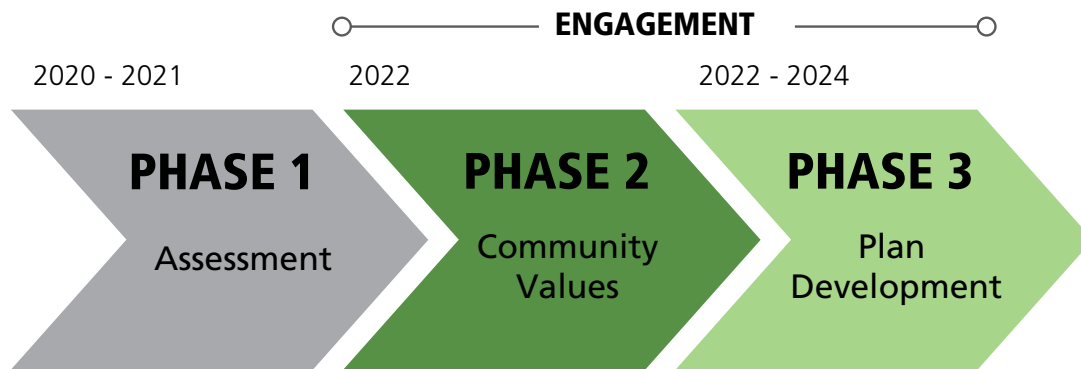


Figure 8. The UFP planning process

Were the owners of large vacant parcels (> 5 acres) in the City interviewed? Why? Why not?

What we heard from the community

The community values phase (Phase 2) took place in 2022 and focused on community engagement to learn about community values and priorities for the management of Bellingham's urban forest. The primary purpose was to obtain input from community members on their values, concerns, and aspirations for Bellingham's urban forest to inform the development of the vision, goals, objectives and recommendations in the Urban Forest Plan. More than 2,000 residents and technical community members were engaged through both in person and online events and tools.

What we heard about the vision and priorities

Survey participants valued the ecological (e.g., water and habitat), climate (e.g., carbon sequestration), and health benefits (e.g., noise reduction) provided by the urban forest. Most participants would like to increase the urban forest canopy above 40%. Open house and listening session participants highlighted:

- More trees and urban forest benefits
- More equitable access for all community members to forested areas
- Preservation and integration of larger and more mature trees
- Increase climate resiliency achieved with more tree species diversity and better selection
- Preservation of existing trees while accommodating affordable housing and planting more trees in low-canopied areas
- Management of water resources with tree protection and planting

Participants in the survey and online open house considered the urban forest as "very important" compared to other services the City provides, such as utilities, transportation, and library. Survey participants considered affordable housing (ranked as the top three priorities by 71% of participants), climate resilience (61%), and the urban forest (58%) to be their top priorities.

Were the following interviewed: vacant property owners, housing providers, professional designers, engineers, tree management companies, arborists, companies that deal with trees on a daily basis?

What we heard about urban forest levels of service

Survey participants expressed varied levels of satisfaction with the City's current urban forest services on public land including tree pruning and maintenance, tree planting, tree protection and community public education. Participants were most satisfied with tree pruning and maintenance and tree planting but expressed the need to improve tree protection during development and public education. Survey and open house participants contributed to suggestions on planting, managing, and protecting the urban forest:

- **Planting:** Participants would prefer living by a street with medium to large trees with mixed spacing and species and would prefer to see more tree planting where spaces are available. Participants also suggested prioritizing planting in low-equity and high-vulnerability areas and in streetscapes with new developments.
- **Management and protection:** Survey participants emphasized the importance of protecting existing trees (especially heritage trees). Some participants suggested better enforcement of tree retention and replacement requirements and incentives for homeowners to maintain trees. Participants were also willing to pay more for better levels of service from the City.
- **Partnership and stewardship:** Participants expressed a desire to expand partnerships, education, and volunteer opportunities for public and private tree planting and maintenance. They also identified barriers to attending City-run work parties related to information sharing, timing, and locations.

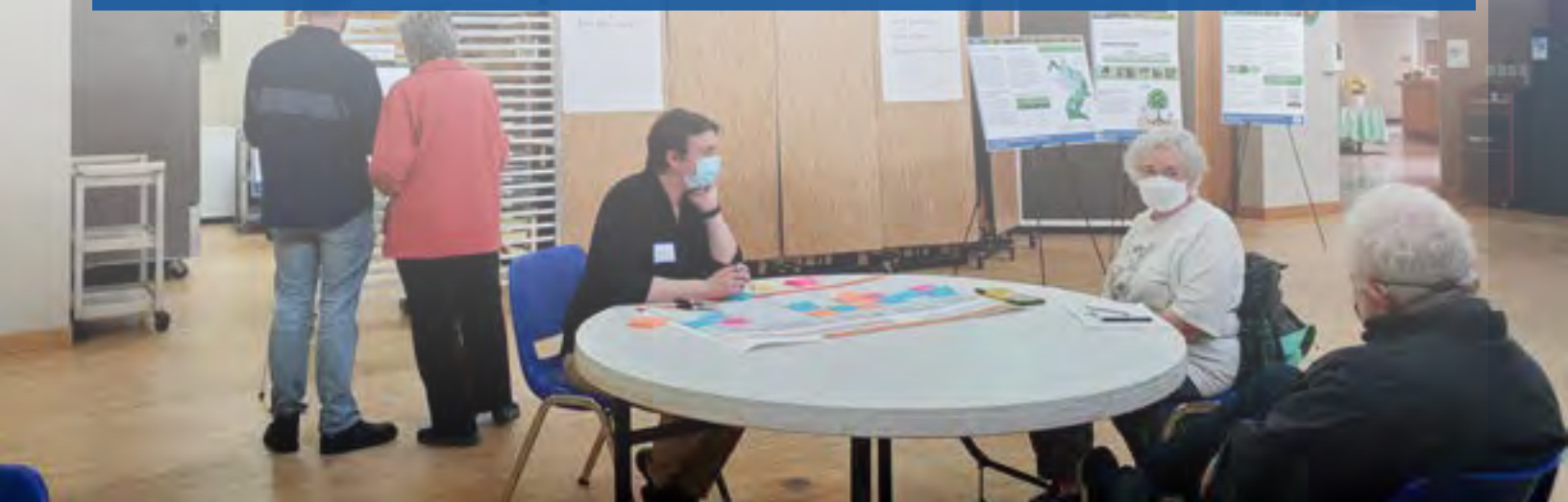
More results can be found in the Urban Forest Plan Phase 2 Engagement Summary¹⁴.

"I'd like the urban forest to be diverse enough to handle changes from climate shifts"

— In-person open house participant

"We are truly blessed to live in a lush forested part of the world BUT the very thing that attracts people to this area often ends up being the thing that is sacrificed in order to build homes/facilities to accommodate this growth."

- Comment from participant story



2. BELLINGHAM'S URBAN FOREST

Bellingham's urban forest today is a product of historic land management practices, contemporary land uses and actions taken to preserve and plant trees as Bellingham became a city. This section provides information about the urban forest's history, extent, location, and how it is changing. Urban forest managers can gain insights by understanding current status and identifying emerging trends, to inform future targets and management actions.

2.1 A brief history of forest management in Bellingham

The lands and waters of Bellingham have been cared for by the peoples of the Lhaq'temish (Lummi) Nation and Nuxwsa'7aq (Nooksack) Tribe since before remembered time. The forest was once dominated by towering and dense old-growth Douglas fir, hemlock, spruce, and western redcedar. However, in the last century, Euro-American settlements significantly altered the forest landscape with logging, agriculture and urban development.

The first industry in Bellingham Bay was the Whatcom Mill, a lumber mill established in 1853. The logging industry expanded with the introduction of steam-powered engines and the expansion of railroads that allowed a more efficient transportation of timber and other forest products. Bellingham Bay attracted more settlers because of its abundant natural resources - dense old-growth forests, easily accessible coal seams, viable waterpower at Whatcom Falls, and a deep-water port for shipping. Development to support a growing population led to more clearing of forested land. In 1903, four adjacent towns joined and became one city called Bellingham, with an aim to "make one of the greatest cities on Puget Sound on the shores of Bellingham Bay".

In the 1890s, people began to realize the importance of natural resources and called for better forest management and conservation efforts. Congress passed several acts to protect watersheds and forests from overexploitation. In the 1950s, the Washington State legislature established the Department of

Include narrative from WA State Constitution and Forest Practices Act regarding property owner forestry rights.

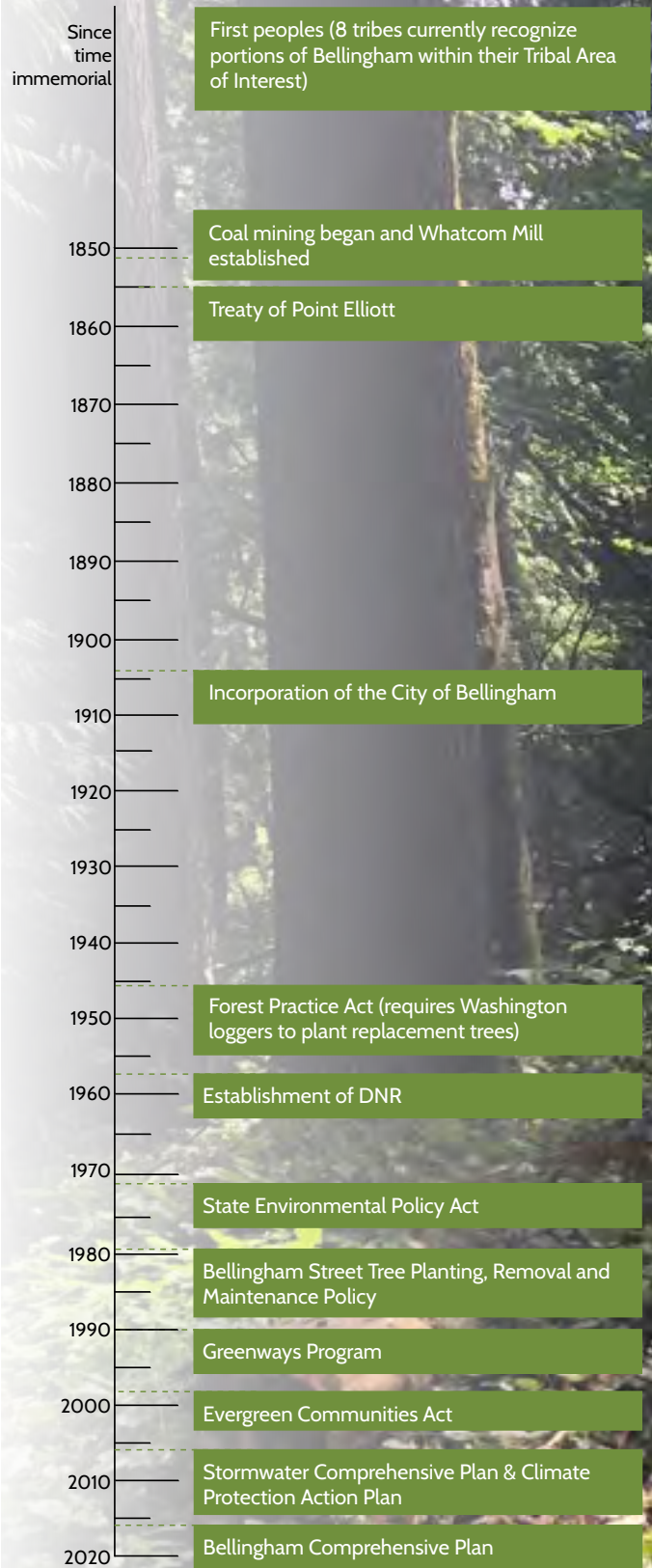


Figure 9. A timeline of environmental policy in Bellingham

In their own words:

Nooksack territory, within which we had direct access to resources, extended into Skagit County on the south, into British Columbia on the north, and from Georgia Strait on the west to the area around Mt. Baker on the east. The territory included a primary Nooksack area, not open to free use by members of other groups, and joint-use areas, which were shared with neighboring groups.

Nooksack Indian history goes back thousands of years. According to Native tradition, the people have been here from time immemorial—basically since the beginning of human existence on this land. There is nothing in Nooksack tradition of ever living anywhere else.

- <https://nooksacktribe.org/about/>

We are the Lhaq'temish, "The Lummi People". We are survivors of the great flood. With a sharpened sense of resilience and tenacity we carry on. We pursue the way of life that our past leaders hoped to preserve with the rights reserved by our treaty. We will witness and continue to carry on our Sche langen. We are fishers, hunters, gatherers, and harvesters of nature's abundance and have been so since time immemorial.

The Lummi People traditionally lived near the sea and in the mountain areas... Smoking and sundrying were used to preserve many kinds of foods including camas bulbs, berries, clams, oysters, crab, salmon, trout, elk, deer, bear, and many other land and sea plants and animals. Western red cedar trees were used to fashion art, clothing, longhouses, baskets, canoes, and cookware.

- https://lummi-nsn.gov/userfiles/63_2016LummiAtlas.pdf

"Logging scene, date unknown. Three men are undercutting a large fir tree on the right." Whatcom Museum

Natural Resources to consolidate efforts related to forest management and preservation. Since then, various regulations and initiatives to preserve and restore forests and trees in Washington State have been introduced, including the recent Evergreen Communities Act aimed at assisting municipalities to better manage existing urban forests and plan for improvements to increase the ecological, social, and economic benefits provided by urban trees.

In 1979, Bellingham developed the Street Tree Planting, Removal and Maintenance Policy to acknowledge the importance of street trees and provide clear guidance for street tree planting and management. Since the 1990s, Bellingham voters have consistently supported the Greenway Program to fund the acquisition and maintenance of land for parks, trails, and natural areas for recreational and conservation purposes. The City of Bellingham also has a long history of restoration projects to improve water quality, habitat, and floodplain functions.

Squalicum Creek Park once included a gravel pit, an airport, and a concrete plant. A century of development throughout the Squalicum Creek watershed resulted in poor water quality and loss of fish and wildlife habitat. Willow Spring site from Squalicum Creek Park. In 2010, the City completed the first phase of the Willow Spring project by creating approximately 1,000 lineal feet of new stream for off-channel salmon rearing habitat and refuge, nearly 1/3 of an acre of new wetlands, and nearly 1.5 acres of riparian (stream-side) forest. The remaining elements of the project were completed in 2018 to connect the new channel with the creek.



2010 before
construction



2010 after
construction



2019

2.2 Canopy cover

Canopy cover is a commonly used metric to measure the quantity of a municipality's urban forest. Canopy cover measures the amount of land area covered by tree crowns (leaves and branches) when viewed from. Bellingham's canopy cover was measured with and without the Urban Growth Areas (UGAs) for 2006, 2013, and 2018, using the LiDAR (Light Detection and Ranging) data and aerial imagery.

In 2018, 40% of the land within Bellingham's city boundary (without the Urban Growth Area) was covered by tree canopy (7,252 acres of canopy area). With the Urban Growth Area included, canopy cover is 42%, representing 9,613 acres of canopy area (Figure 11). Bellingham's canopy cover is higher than more urbanized cities like Vancouver and Seattle, and similar to Bellevue and Kirkland.

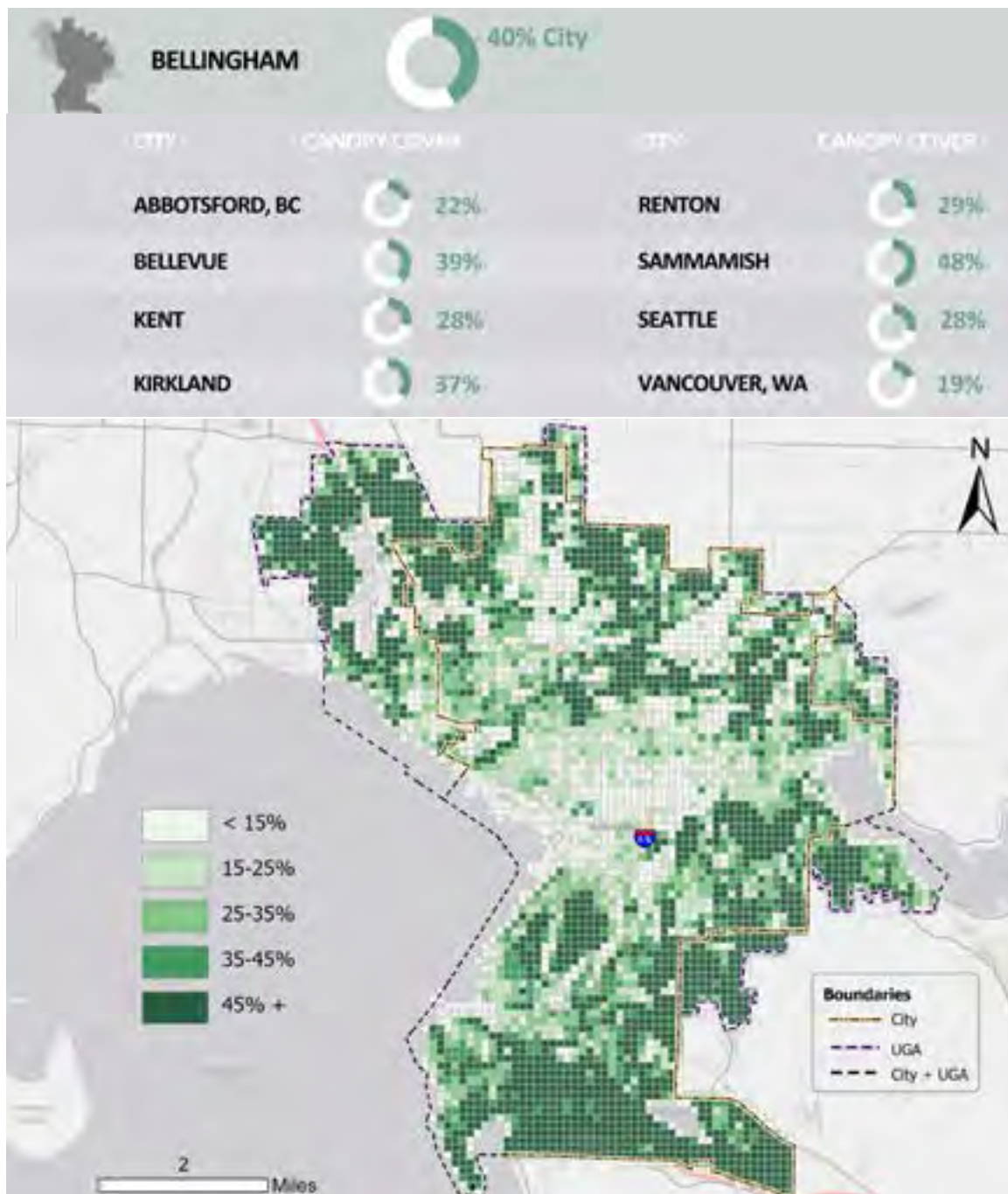


Figure 11. 2018 cover of Bellingham by 5-acre grid (bottom), canopy compared to other WA municipalities (top)

Canopy changes 2006-2018

Compare a 2000 subdivision to 2024 canopy cover showing net coverage at tree maturity.

Canopy gain and loss was compared between 2006 and 2018. Bellingham's overall canopy cover was relatively stable between 2006 and 2018. Urban tree canopy cover is dynamic, changing over time as trees are planted, grow and die. While stable overall, individual locations had gains and losses. Some parts of the city gained canopy cover as new trees were planted or existing trees grew, other areas lost tree canopy due to land clearing for development or timber harvesting (Figure 12). Two examples of canopy change including net gain (1) and net loss (2) through time are shown on the following page.

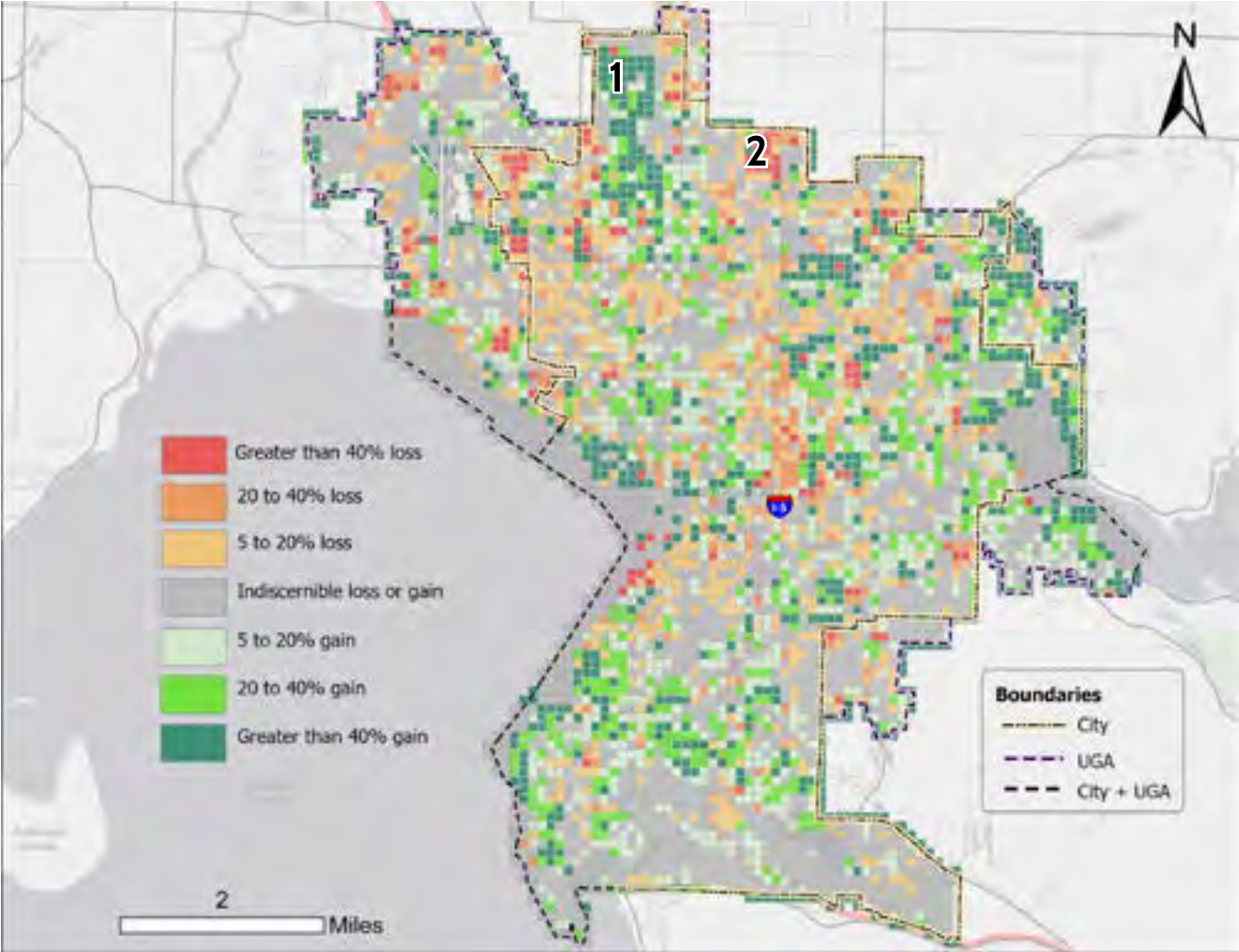


Figure 12. Canopy gain and loss between 2006 and 2018, summarized by a 5-acre grid



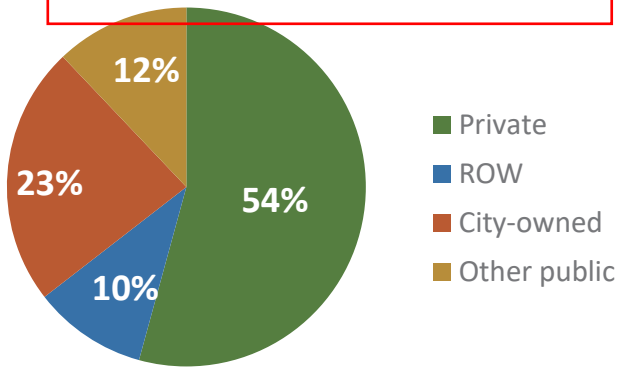
Complete results of the Phase 1 analysis can be found in the City of Bellingham State of the Urban Forest Report.

PLACEHOLDER: Canopy change examples will be included in final version

Canopy by management unit

The majority (54%) of tree canopy within the City and Urban Growth Area was found on private land (Figure 13, Figure 14). The average canopy coverage on private land was 38%. The second highest contributor to City canopy cover was City-owned property (23%). Average canopy coverage on cityowned property was 75%.

Add UGA and City owned Lake Whatcom Watershed property.



2.3 Street trees

Thousands of trees grow alongside Bellingham's streets, contributing about 982 acres of tree canopy in the City and Urban Growth Area (Figure 14). Most street trees are maintained by the adjacent landowner in accordance with the City's Street Tree Planting, Removal and Maintenance Policy. However, the City maintains approximately 4,500 street trees listed on the City maintenance responsibility list. The median size of City maintained street trees is 9 inches. The most common types of street trees are maples, cherries and oaks.

Figure 13. Percentage of canopy contribution to overall canopy cover by management unit in the City boundary and Urban Growth Areas



Tree Canopy (acres)

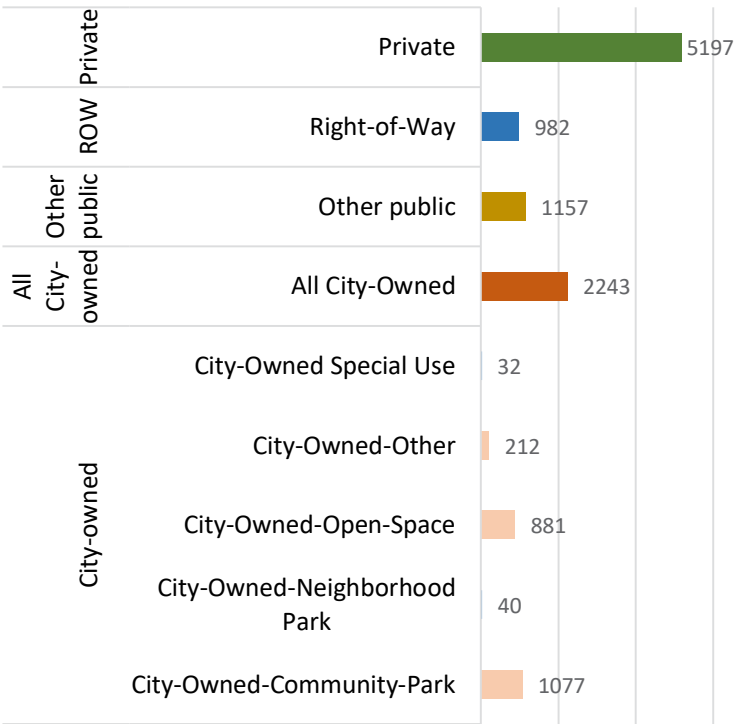


Figure 14. Canopy area by management unit in the City boundary and Urban Growth Areas

2.4 Forested areas

Add UGA and City owned Lake Whatcom Watershed property.

Forested areas provide vital ecosystem services to Bellingham's local communities and urban wildlife. Currently, 37% of Bellingham is covered by forests (i.e. forested land of 5 acres or more) (Figure 15). That is approximately 6,120 acres of land area supporting natural or semi-natural forests within the city boundary and an additional 2,325 acres within the Urban Growth Areas. Bellingham's forests are primarily young and deciduous, especially in the northern part of the city. More mature coniferous stands are found in the south. The common tree species include western redcedar, Douglas-fir, big-leaf maple, vine maple, red alder, black cottonwood, crab-apple, willow species and Sitka spruce.

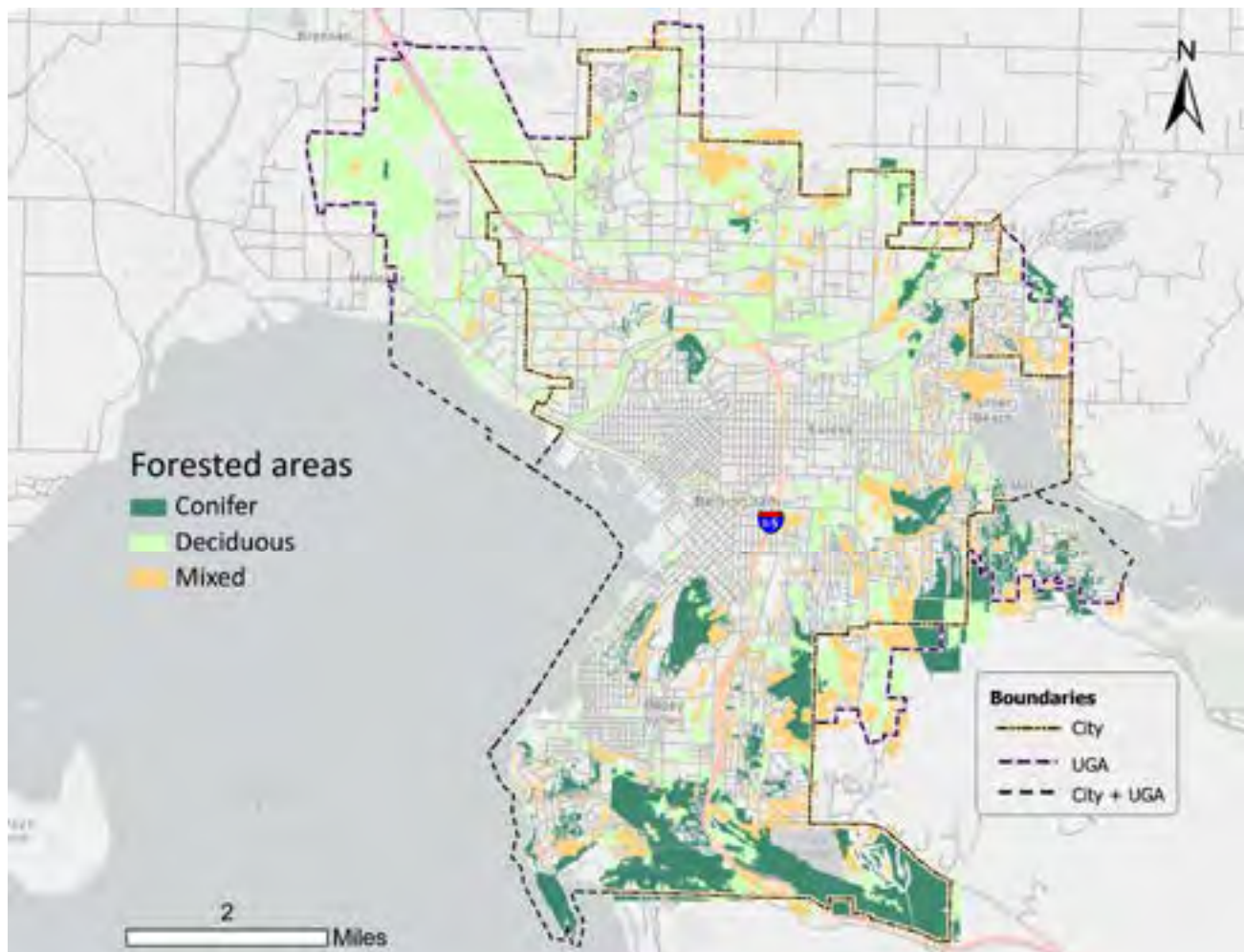
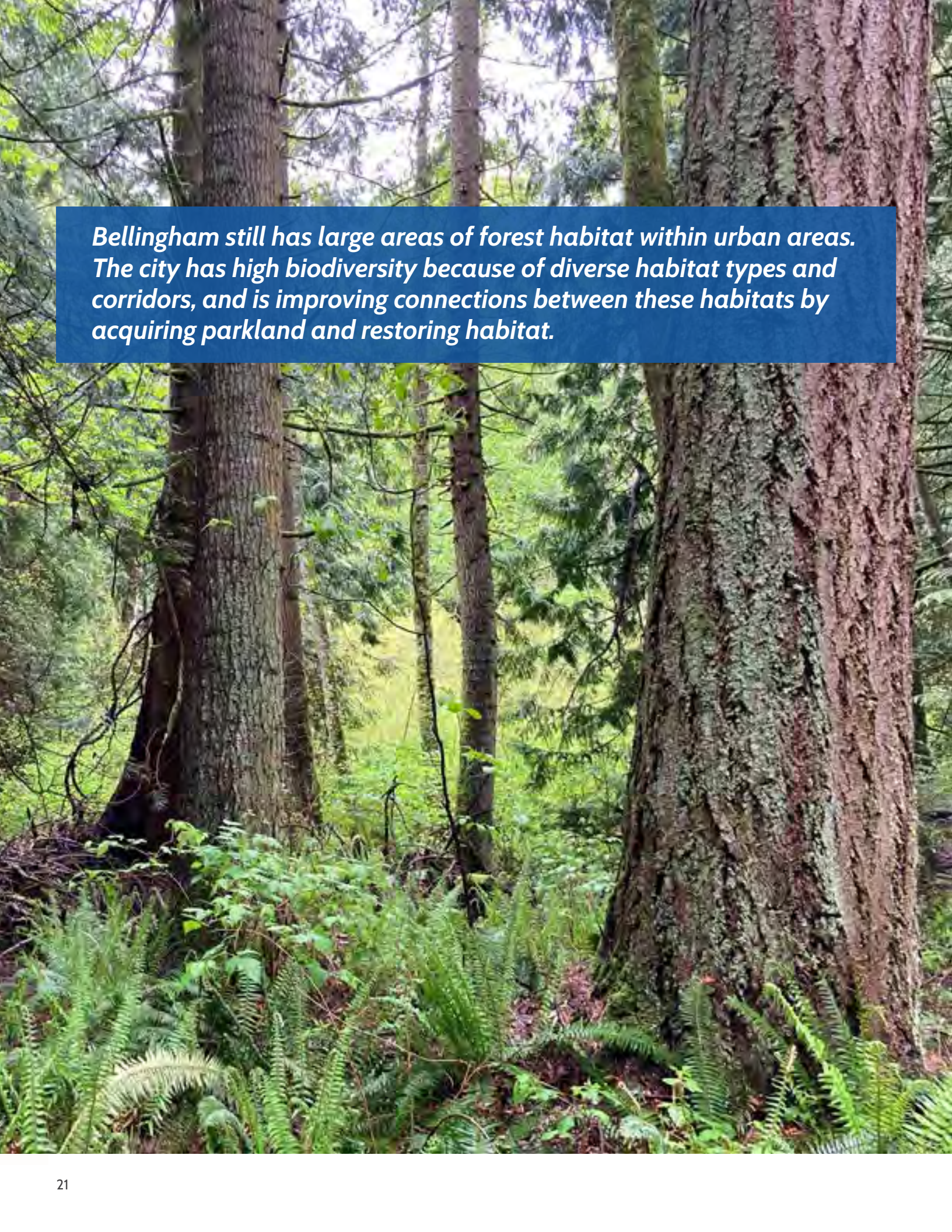


Figure 15. Forested areas by composition of conifer, deciduous or mixed forest

A photograph of a forest scene. In the foreground, there are several large, thick tree trunks with rough, textured bark. The ground is covered with a dense layer of green ferns and other low-lying vegetation. In the background, more trees are visible, their branches and leaves creating a canopy of green. The lighting is soft, suggesting a shaded forest environment.

Bellingham still has large areas of forest habitat within urban areas. The city has high biodiversity because of diverse habitat types and corridors, and is improving connections between these habitats by acquiring parkland and restoring habitat.

2.5 Tree equity

Not all people experience the benefits from trees and forests equally in Bellingham. Tree equity has health and wellbeing consequences for people living in low canopy areas, particularly when it comes to benefits that are important from community climate adaptation such as shade and cooling on hot summer days, air quality improvements, and flood reduction. Households with lower incomes, minority groups, seniors, and unemployed people are more vulnerable to the effects of climate change. Figure 16 shows the tree equity score by neighborhood. Areas with higher tree canopy, such as open spaces in city fringes, tend to have a higher tree equity score. In contrast, the more developed areas from the center to the northern parts of the City seem to have lower tree equity scores.

Neighborhood as unit of analysis is not meaningful. Analyze according to land uses with buffer areas, similar to Parks PRO Plan analyzing Community vs Neighborhood Park service areas.

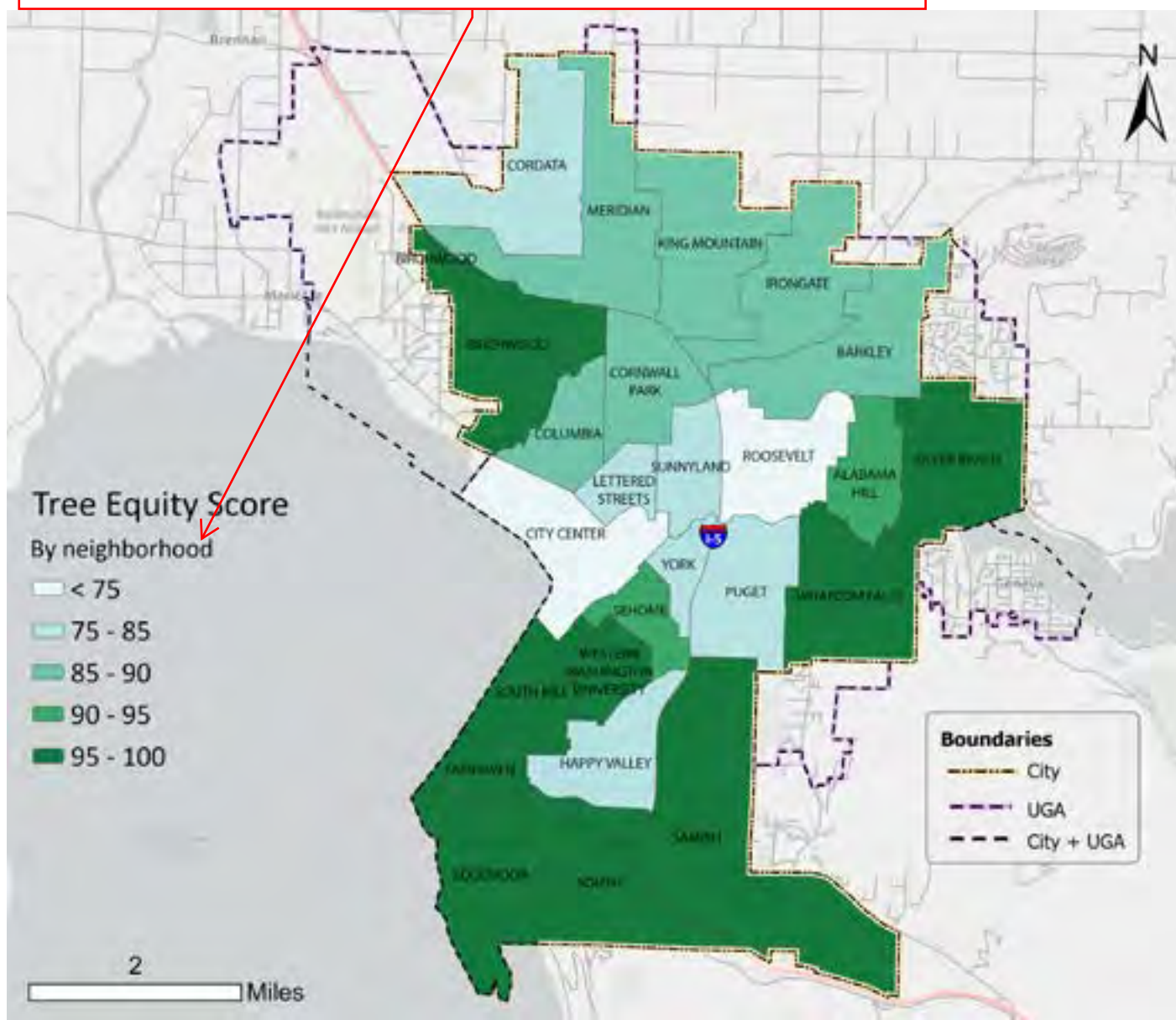


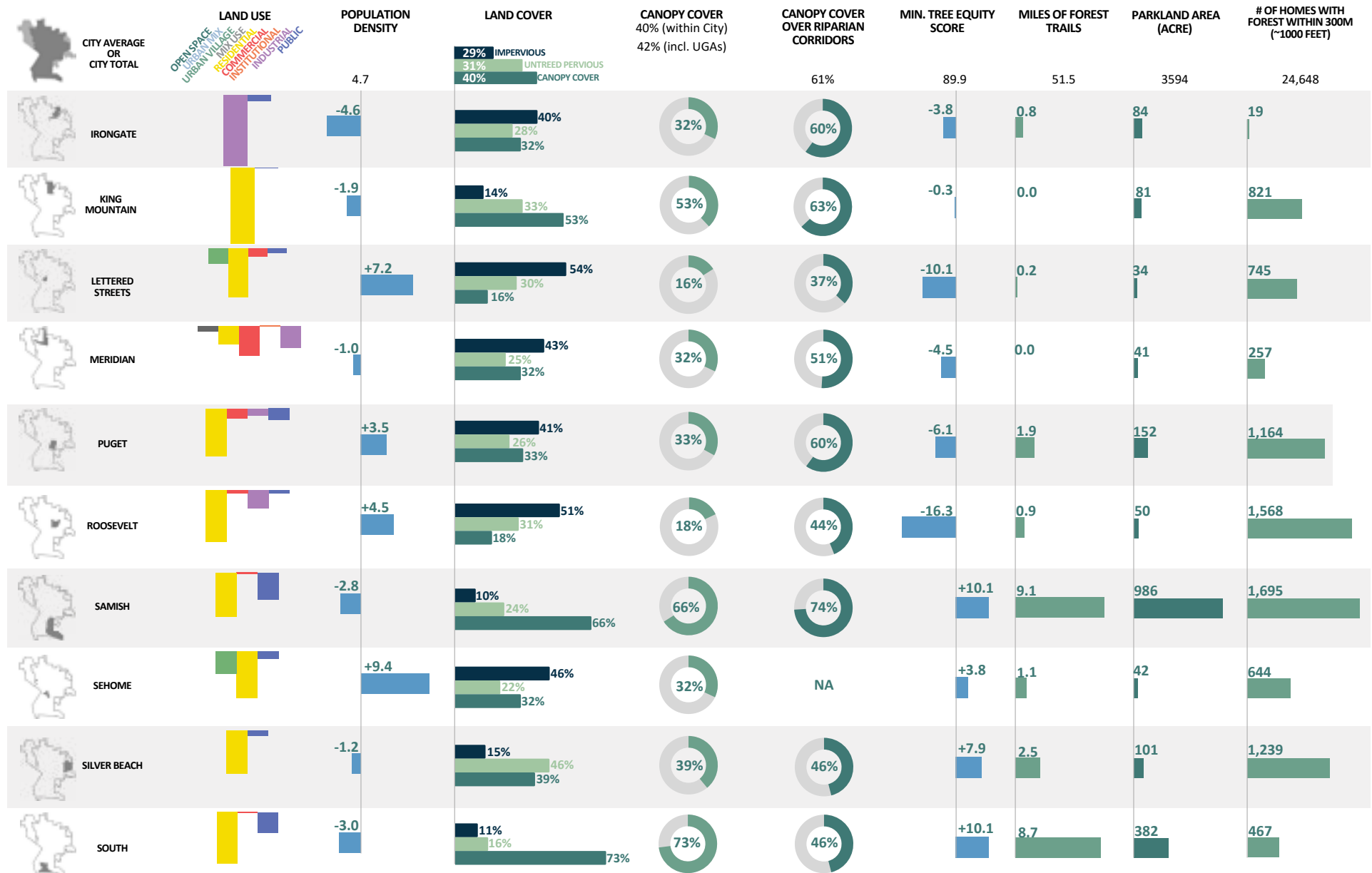
Figure 16. Tree Equity Score for Bellingham by neighborhood as adapted from American Forest's Tree Equity Score methodology using 2018 canopy cover and 2020 census data.

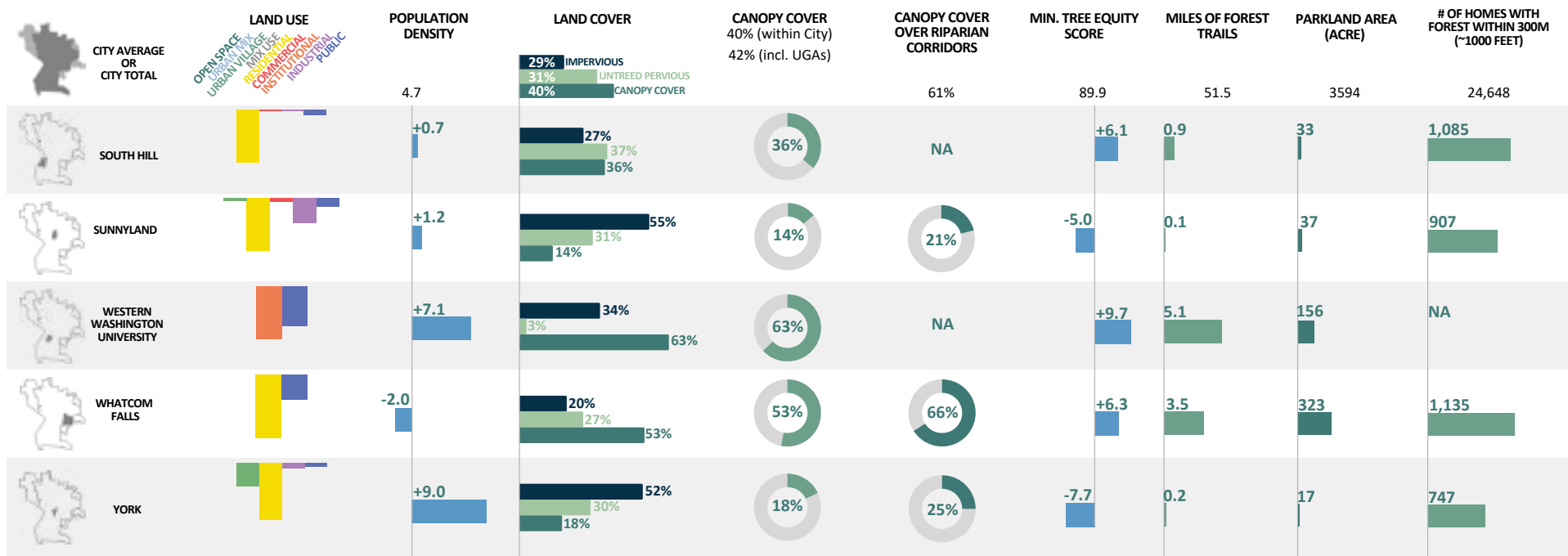
2.6 The urban forest in your neighborhood

Urban forest characteristics differ among Bellingham's neighborhoods. The provided tables illustrate factors affecting the urban forest, such as land use and population density, and provide a summary of the urban forest's extent in each neighborhood.



The information in these summaries can be used to identify greening needs and the relevance of different greening strategies to different neighborhoods. For example, Lettered Streets has a low tree equity score and high population density indicating a high need for increased tree canopy cover. The land use is dominated by single family and urban village land uses therefore strategies focused on greening residential properties and streets are likely to have the greatest impact on tree canopy cover.





3. EXISTING MANAGEMENT CONTEXT

Urban forest management involves the planning, planting, protection, maintenance, and care of trees, forests, greenspace and related resources in and around cities. The City of Bellingham has various policies, programs and regulations that influence urban forest management. This section describes the role of the City departments that implement management and summarizes existing policies programs and regulations that guide the existing management approach.

3.1 Roles and responsibilities

➤ The Parks and Recreation, Public Works and Planning and Community Development departments collectively manage the urban forest in the municipality. Parks and Recreation maintains trees on the City maintenance responsibility list and in City-owned parks and open space. Parks and Recreation also runs volunteer programs to engage the community in urban forestry on public land. Public Works oversees habitat restoration and preservation on City-owned land outside parks and works with Parks and Recreation on street tree services. Planning and Community Development handles permits for street trees and sensitive areas, and plays a role in land use planning and developing codes that affect tree planting, preservation, and replacement. Private property owners are responsible for managing all private trees and street trees abutting their property.

Reverse the presentation order and edit to:
"Private property owners are responsible for 54%
of all private trees and street trees abutting their
property."



3.2 Existing regulations and policies

Federal, state and municipal laws and policies influence and enable the City's urban forest management program (Figure 17). These include:

- **Enabling legislation** that gives the City the authority to act on issues relating to urban forest management
- **Guiding policies and plans** that provide key directions for land use and establish the high level vision for managing Bellingham's forests, trees, and lands
- **City codes, ordinances, policies and standards** that guide the implementation of City policies to fulfill the vision of guiding policies and plans
- **Plans and programs** that guide or influence urban forest management directly or indirectly by addressing related themes such as climate change, parks and greenways management

Enabling legislation

Include WA State Constitution and Forest Practices Act.

In Washington State, urban forest management is guided by various state and local legislations and plans. The Washington Administrative Code (WAC) and the Growth Management Act (GMA) provide statewide guidelines, while the State Environmental Policy Act (SEPA) and the Evergreen Communities Act (ECA), recently updated by House Bill 1216, offer frameworks for managing environmental impacts and improving urban forest management.

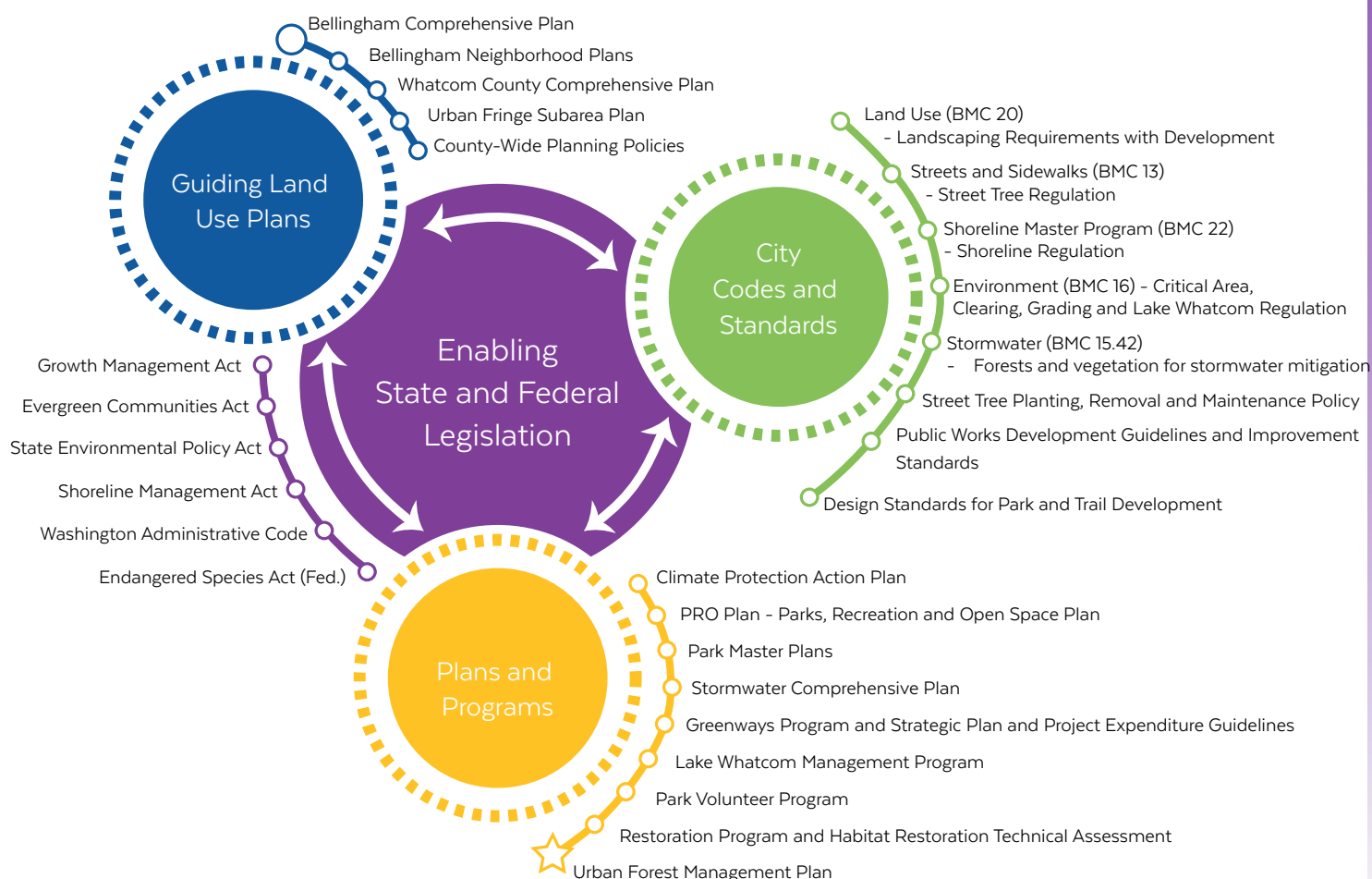


Figure 17. Summary of existing policies and regulations that influence the urban forest management in Bellingham

Guiding land use plans

Bellingham's urban forest strategy is further shaped by the Bellingham Comprehensive Plan and neighborhood plans, focusing on long-term goals and development visions, including enhancing urban forest management.

City codes and standards

City codes, ordinances, and standards, like the Stormwater Management Code, Land Use Development Code, and others, detail the implementation of tree preservation and planting policies. They cover aspects like tree planting in new developments and street tree management.

Plans and programs

The Climate Protection Action Plan and the Parks, Recreation, and Open Space Plan (Pro Plan), along with the Greenways Strategic Plan, emphasize the role of urban forests in carbon sequestration and in the parks, recreation and open space system. The Stormwater Comprehensive Plan integrates tree preservation in its approach to managing stormwater and flood risks. Technical reports, such as the Restoration Program and Habitat Restoration Technical Assessment, guide restoration and preservation of critical habitats.

Bellingham also runs programs to support these plans and policies, such as the Park Volunteer Program and Restoration Program. The Park Volunteer Program provides opportunities for local communities to participate in various park projects. Volunteers can help remove invasive species, trail cleanup, tree planting and maintenance, and more. The Restoration Program aims to restore natural habitats and ecosystems in parks and open spaces.

The various policies and programs that regulate trees in Bellingham's urban areas and open space are illustrated in Figure 19 and Figure 18. Several opportunities for improving tree planting, protection and maintenance are described in the diagram, and acted on in the Urban Forest Plan.

Urban Forestry Program Quick Facts

- *Five core staff (3 arborists, 2 workers)*
- *4,260 city-managed street trees and 180 missing or dead trees*
- *Approximately 50 street/park trees planted per year*
- *Tens of thousands of native plants planted per year*
- *80 miles of trails*
- *40 parks*
- *1,998 acres of tree canopy in city parks and open space*
- *982 acres of tree canopy in ROW*
- *7,252 acres of tree canopy inside the City boundary*

Regulation of Trees in Open Space Areas



Trees in watershed, shoreline or critical areas and other open space

Planting new trees and forests

Bellingham's environment code (BMC16) requires single family development in the Lake Whatcom Reservoir to have a minimum proportion of the site area in 'natural forested condition', or else new trees will be planted as part of a restoration plan. The stormwater management code (BMC15.42) requires new development over a certain size to mitigate stormwater runoff, which can include new tree planting. Critical areas (BMC16.55) and Shoreline areas (BMC22) require no net loss of function, which can lead to new tree planting as part of mitigation requirements. New trees are planted into sensitive areas or open space on City lands through restoration, mitigation and stewardship programs run by the City or in partnership with local non-profit organizations, and are often funded by grants. New City open space is acquired through City's mitigation and greenways programs.

Outside of code requirements, trees are voluntarily planted by landowners. Several landowner conservation programs in the region provide funding for habitat enhancement and ecosystem restoration.

Protecting or replacing existing trees and forests

Bellingham's land use and development code (BMC20) contains statements supportive of tree preservation for some types of developments and in some neighborhoods. The land division ordinance (BMC23) requires subdivisions to reserve 25 percent of sites for open space that is either for preservation of natural features or recreational open space. Bellingham's environment code (BMC16) requires single family development in the Lake Whatcom Reservoir to have a minimum proportion of the site area in 'natural forested condition' and to implement tree protection consistent with the Design Standards for Parks and Trail Development. The stormwater management code (BMC15.42) provides flow credit reductions for retained trees and requires protection for tree retention areas during development. Retained critical areas (BMC16.55) and shoreline areas (BMC22) require no net loss and must be protected and fenced during development. The clearing ordinance (BMC16.60) requires a permit with development for clearing more than 500 square feet, minimal clearing until the final site plan, and a tree retention and replacement plan for trees 6 inches or larger in diameter.

Maintaining trees and forests

Trees planted as a condition of a permit related to the environment code (BMC16) and shoreline code (BMC22) require monitoring and maintenance for a minimum of 5 years. The stormwater code (BMC15.42) requires a financial surety be held for 2 years (growing seasons) after installation.

Outside of code requirements, trees and forests are voluntarily maintained by landowners. Several landowner conservation programs in the region provide funding for habitat enhancement and ecosystem restoration. The DNR has also expanded its financial assistance program for wildfire resilience and forest health to small forest landowners in western Washington.

Opportunities for improvement

- Targets and tools to prioritize forest restoration planting in open space areas
- Establishing levels of service for maintaining open space trees
- Incentives for tree planting, forest health and wildfire fuel management on private land
- Tools to protect, replace or acquire more open space trees outside of watershed, shoreline or critical areas
- Updates to standards for planting and tree protection

Figure 18. Summary of regulation of trees in open space areas

Regulation of Trees in Urban Areas

Why does the narrative lack a reference to the landscaping requirements of BMC 20?



City Landscaped Park trees

Bellingham's impact fees code (BMC19), requires that residential development pay fees for parks, recreation and opens space improvements. The PRO Plan guides the projected park and recreation facilities requirements to which fees are directed. Trees are then planted in new parks as part of park development, and in existing parks through restoration, mitigation and stewardship programs, and tree donations. Standards for park tree planting are guided by the Design Standards for Parks and Trail Development.

City street trees planted with development

Bellingham's land use and development code (BMC20) requires 1 tree per 50 feet of frontage of residential multi, commercial, industrial and planned general use areas. Along freeways, 1 tree per 25 feet is required. In some urban village area, landscaping strips or tree wells at least 4 ft wide are required. Some neighborhood guidelines speak to incorporating more and larger trees. The land division ordinance (BMC23) requires subdivisions to include 1 tree per 50 feet of frontage. Standards for street tree planting are established through the Public Works Development Guidelines and Improvement Standards and the City maintains a List of Approved Street Trees.

City street trees planted by abutting property owners

Bellingham's streets and sidewalks code (BMC13) establishes the basis for how street trees can be planted into streets by abutting property owners. The details of the process are contained in the City's Street Tree Planting, Removal and Maintenance Policy. If applications meet the City's policy requirements, then a permit is issued to plant a tree of an approved species in the approved location in the street. The City maintains a List of Approved Street Trees and planting standards are outlined in the City's Tree Planting Guide.

Private landscape trees

Bellingham's land use and development code (BMC20) outlines the landscaping requirements for different types of development. New development, except for manufactured or single family homes, requires a minimum percentage of landscaped open space area or yard space. One tree must be planted for every 300 square feet of landscape area. Walls of trees are required between incompatible land uses. Surface parking lots must have 1 tree per 10 parking spaces planted around the perimeter. Most types of infill development must meet a minimum 'Green Factor' score. Planting standards are also included. Outside of code requirements, trees are voluntarily planted by property owners and land managers.

Planting new trees

Protecting and replacing trees

Bellingham's parks, cemeteries and public places code (BMC13) prohibits damage to park property, including trees. Unlawful damage can incur penalties. Standards for park tree protection are guided by the Design Standards for Parks and Trail Development.

Bellingham's streets and sidewalks code (BMC13) establishes the basis for how street trees are protected, removed and replaced. The details of the process are contained in the City's Street Tree Planting, Removal and Maintenance Policy. If applications for removal meet the City's policy requirements, then a permit is issued to remove the tree and replacement 'may' be required. If construction is occurring near street trees, tree protection is required. Unlawful damage to a City street tree can incur penalties or corrective action.

Bellingham's land use and development code (BMC20) enables landscape requirements to be met with existing trees, and contain statements supportive of tree preservation for some types of developments and in some neighborhoods. Few requirements apply to cutting trees on fully developed land, except where other permits (e.g., critical areas) or SEPA review are required.

Maintaining trees

Bellingham's PRO Plan guides the level of service standard for park, recreation and open space land. The plan also includes a prioritization tool that incorporates socio-economic factors to prioritize maintenance. Levels of service for maintaining new parks are determined in individual park maintenance management plans.

Bellingham's streets and sidewalks code (BMC13) establishes the basis for how street trees are maintained. The details are contained in the City's Street Tree Planting, Removal and Maintenance Policy. Street trees are maintained either by the City or the abutting property owner. The City maintenance responsibility list includes just over 4,000 trees on main arterials, where streetscape improvements have occurred and, in some cases, where street trees were planted as a requirement of development. All remaining street trees are maintained by the abutting property owner. Property owners must maintain trees to prevent obstructions, or to address pest infestations. Hazard trees will be cut by the City, but the property owner is responsible for removal and cleanup. Tree trimming requires a permit from the City.

Bellingham's land use and development code (BMC20) requires that maintenance of landscaping installed according to an approved maintenance plan be a continuing obligation. In other cases trees are voluntarily maintained by property owners and land managers.

Opportunities for improvement

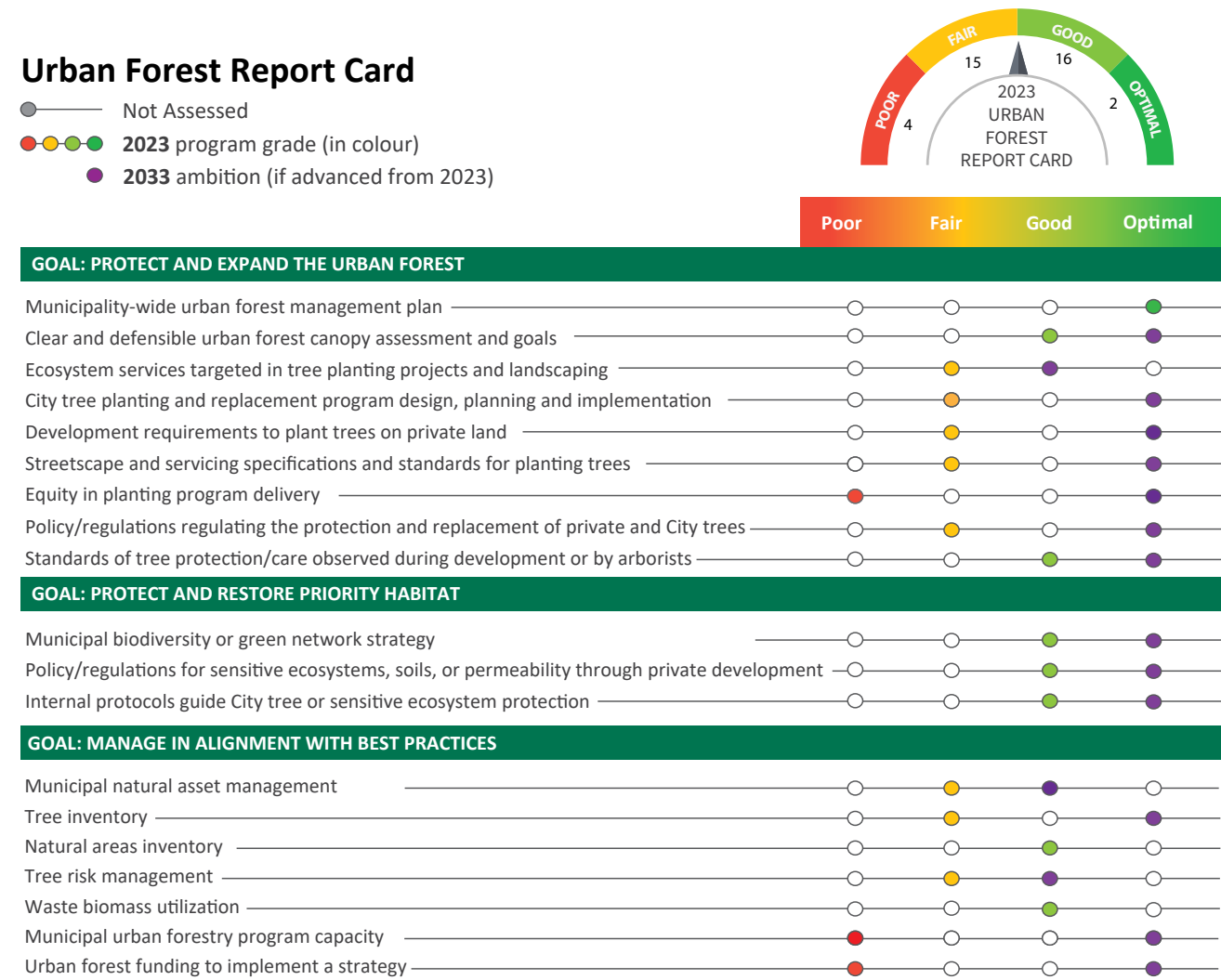
- Targets and tools to prioritize tree planting in parks
- Establishing levels of service for maintaining park trees
- Updates to the City maintenance responsibility list
- Establishing levels of service for maintaining street trees
- Updates to planting requirements
- Updates to the street tree permit process or supporting programs
- Targets and tools to prioritize planting in streets
- Updates to standards for planting, protection, soil volume and alternative construction areas
- Incentives or requirements for tree planting and maintenance on single family properties
- Updates to the quantity and standard of landscaping required with development
- Tools to protect or replace more trees on private property

Figure 19. Summary of regulation of trees in urban areas

3.3 How are we doing with urban forest management?

The Urban Forest Report Card for 2023 assesses Bellingham’s urban forest program using a “criteria and indicators” method, based on a sustainable urban forest management framework¹⁵. Best practice guidelines, urban forestry academic research, and the Sustainable Forestry Initiative’s Community Forestry Standards¹⁶ were used to expand on the original criteria. The complete set of criteria is included in Appendix 1.

Bellingham’s performance is between fair and good overall, with some areas of particular strength and some areas for improvement. The City now has a plan and robust inventory data to support urban forest management. The assessment found existing strengths in habitat planning and restoration and in community collaboration and monitoring. However, there is still room for improvement in a number of areas to strengthen urban forest management. In particular, strategic planning for tree planting through development regulation, incentives or capital projects should be improved. In addition, tree asset management services levels, and dedicated resourcing and budgets need to be increased to implement the strategy.



	Poor	Fair	Good	Optimal
GOAL: ADAPT THE URBAN FOREST FOR CLIMATE CHANGE RESILIENCE				
Maintenance of intensively managed trees	☐	☒	☐	☒
Forest restoration and native species planting	☐	☐	☐	☒
Selection and procurement of nursery stock	☐	☒	☐	☒
Emergency response planning	☐	☐	☒	☐
Pest and Disease management	☐	☒	☒	☐
Tracking carbon footprint	☐	☒	☐	☒
GOAL: COLLABORATE WITH DIVERSE PEOPLE AND ORGANIZATIONS				
Awareness of the urban forest as a community resource	☐	☐	☒	☒
Interdepartmental and municipal agency cooperation in urban forest strategy implementation	☐	☐	☒	☒
Cooperation with utilities on protection (and pruning) of City trees	☐	☒	☐	☒
Citizen involvement and neighbourhood action	☐	☐	☒	☒
Involvement of large private land and institutional land holders	☐	☒	☒	☐
Regional collaboration	☐	☐	☒	☒
Recognition of Indigenous rights and perspectives	☒	☐	☐	☒
GOAL: MONITOR PERFORMANCE AND ADAPT STRATEGIES				
Knowledge of trees on private property	☐	☐	☒	☒
Relative tree canopy cover	☐	☐	☒	☒
Species diversity	☐	☐	☒	☒
Age diversity (size class distribution)	☐	☒	☒	☐
Species suitability	☐	☐	☒	☐
Urban forest research	☐	☒	☒	☒
Publicly owned tree species condition assessment	☐	☒	☐	☐



4. VISION, GOALS AND TARGETS

Bellingham's urban forest vision was developed in consultation with Council, City staff and members of the community. This is a long-term vision, which will be achieved by implementing the 10-year action plan, and continuing to monitor progress and update plans to adapt management as needed.

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



4.1 Six Goals

Six goals underpin the Urban Forest Plan. These goals encompass thematic areas where the Plan will outline specific strategies and actions for implementation.

Explain how this reconciles to the mandates in providing sufficient lands to meet the population and job growth targets adopted in the Comprehensive Plan.



Goal 1. Protect and expand the urban forest in alignment with community values as established in the Comprehensive Plan



Goal 2. Protect and restore priority habitat areas, movement corridors, and forests



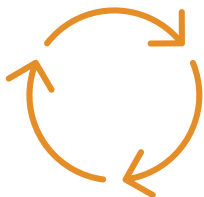
Goal 3. Manage the urban forest in alignment with best practices to support healthy and safe trees



Goal 4. Adapt the urban forest for climate change resilience



Goal 5. Collaborate with diverse people and organizations in urban forest management



Goal 6. Monitor performance, adapt strategies

4.2 Setting a canopy cover target

Municipalities commonly adopt tree canopy cover targets to track progress in implementing Urban Forest Plans. There is no single best practices for setting a tree canopy cover target. While initially a 40% target was suggested by American Forests in 1997, it was withdrawn in 2017 recognizing that local factors like development density and climate are different for each municipality. American Forests now promotes the Tree Equity Score. The Nature Based Solutions Institute's 3-30-300 rule recommends 3 trees visible from every home, 30% neighborhood canopy cover, and proximity to green spaces targets. The target is based on evidence linking the health benefits of tree and greenspaces to their proximity to homes and workplaces. Using the rule can help municipalities plan for canopy cover at the neighborhood scale; however, overall canopy cover targets for a city should consider local context.

Document the scientific reason for 45% and show calculations of how this impacts the buildable lands required to meet population and job growth targets adopted in the Comprehensive Plan.

Bellingham's Canopy Cover Target

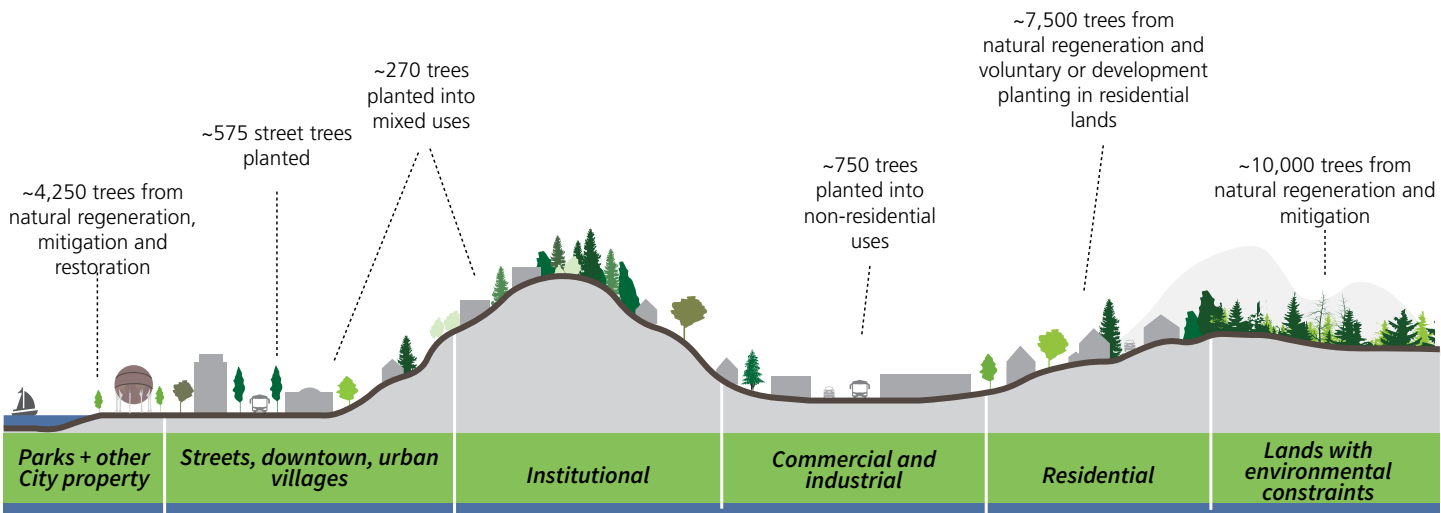
Bellingham has set a target to increase canopy cover from 40% to 45% by 2050

The City of Bellingham has set a target to increase canopy cover from 40% to 45% by 2050. Bellingham would need to add approximately 900 acres of new tree canopy, or approximately 87,500 trees based on the current average tree canopy of 450 ft² per tree (42 m² per tree). However, development within buildable lands and infill are anticipated to remove approximately 1,350 acres of canopy over 20 years, equivalent to losing about 6,500 trees annually. Balancing canopy growth with anticipated development poses a significant challenge for the city's tree canopy goals.

The annual tree planting rates needed to reach 45% by 2050 were estimated using a canopy forecasting model, which factored in growth of existing trees, background mortality rates of 3.3% per year, and potential canopy loss due to full build out over 20 years. The model indicated that **growing canopy cover to 45% while offsetting canopy loss would require the planting or natural regeneration of approximately 22,000 trees in urban and forested areas each year.** It is assumed that 60% of these losses would be replaced by natural regeneration, and approximately 9,000 would need to be planted. As with all models, this forecast is subject to limitations and assumptions. Monitoring canopy cover over time will be needed to verify that planting rates are appropriate to achieve the canopy cover target.

Annual planting or regeneration needed* to reach 45% canopy cover

*Tree mortality rates have a significant impact on the number of trees needed, therefore actions to reduce mortality could reduce planting required. It is assumed that natural regeneration will replace the majority of trees in parks, forested residential lands and lands with environmental constraints.



Canopy targets by land category

Table 2 presents the baseline canopy cover, canopy cover target and the net canopy cover change anticipated as the city develops and plants trees out to 2050. The buildable lands categories indicate the mixed-use, non-residential and residential areas where future development is expected to occur. Future development assumes **full build-out**. Canopy cover targets were developed based on assumptions about the canopy loss in each land category with future development, the number of new and replacement trees that would be planted because of policies and programs, and the modeled growth and mortality of existing trees.

Include UGAs and City owned land in the Lake Whatcom Watershed.

Meeting canopy cover targets will result in an increase in citywide canopy cover from 40% to 45% by 2050. However, canopy increases will not be uniformly distributed across different land categories. Lands including critical areas and already developed lands are expected to see canopy growth, but many of the land categories that will be developed in the future are expected to see some canopy loss, even though policies will increase retention requirements for individual, high value trees.

Table 2. Land categories and canopy cover targets to achieve 45% citywide

Buildable lands category	Land Area (acres)	2018 Canopy Cover	2050 Canopy Target	Net Change in Canopy Cover (percentage points)
Community/neighborhood Parks	1252	81%	81%	0%
Critical Areas	5423	49%	57%	8%
Future Arterial	51	64%	20%	-44%
Mixed-Use High Density	132	12%	10%	-2%
Mixed-Use Low Density	2	8%	20%	12%
Mixed-Use Medium Density	154	39%	15%	-24%
Already Developed*	5193	23%	35%	12%
Non-Residential High Density	2	9%	10%	1%
Non-Residential Low Density	735	23%	20%	-3%
Non-Residential Medium Density	6	9%	15%	6%
Other city-owned Property	1358	69%	77%	8%
Residential High Density	118	41%	15%	-26%
Residential Low Density	745	48%	35%	-13%
Residential Medium Density	431	55%	25%	-30%
Road Right-of-Way	2380	22%	22%	0%
Total (City excluding UGA)	17982	40%	45%	5%

*Already developed but infill development is possible

What targets will mean for different parts of Bellingham?

Closing canopy cover gaps in each Census block would change canopy distribution from the current pattern in Figure 20, to the projected pattern in Figure 21.

Figure 20. Canopy cover by Census blocks based in 2018

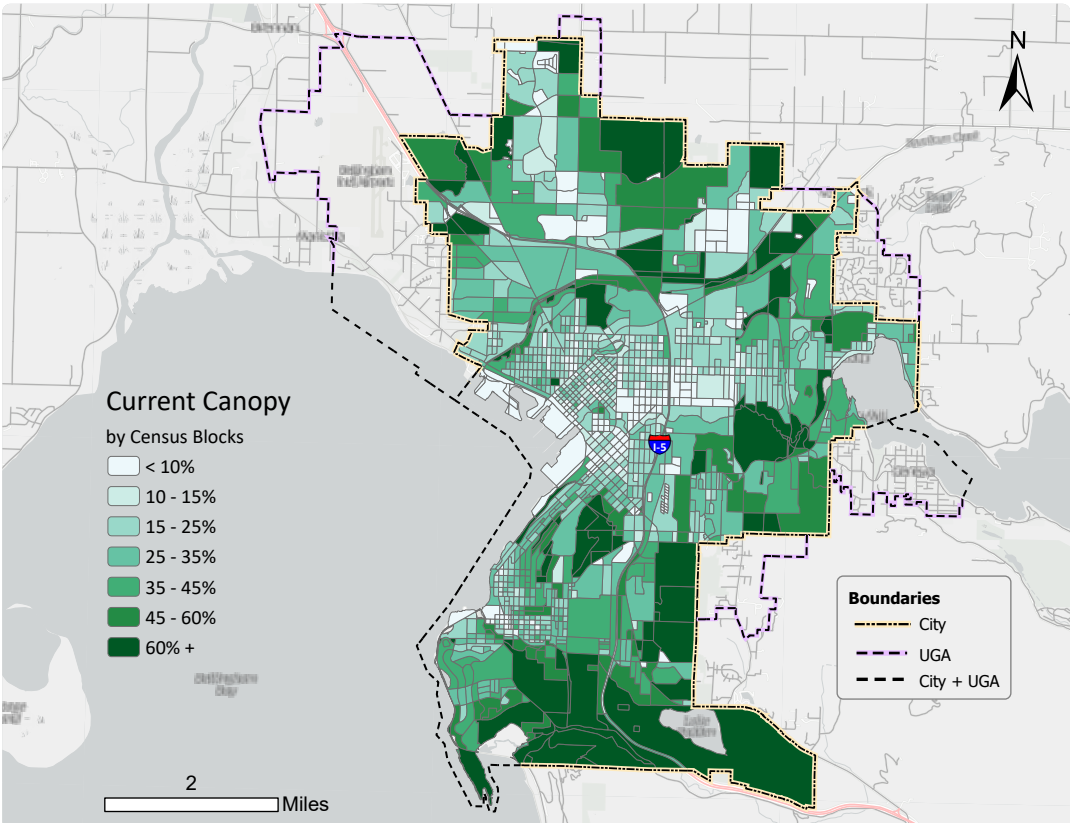
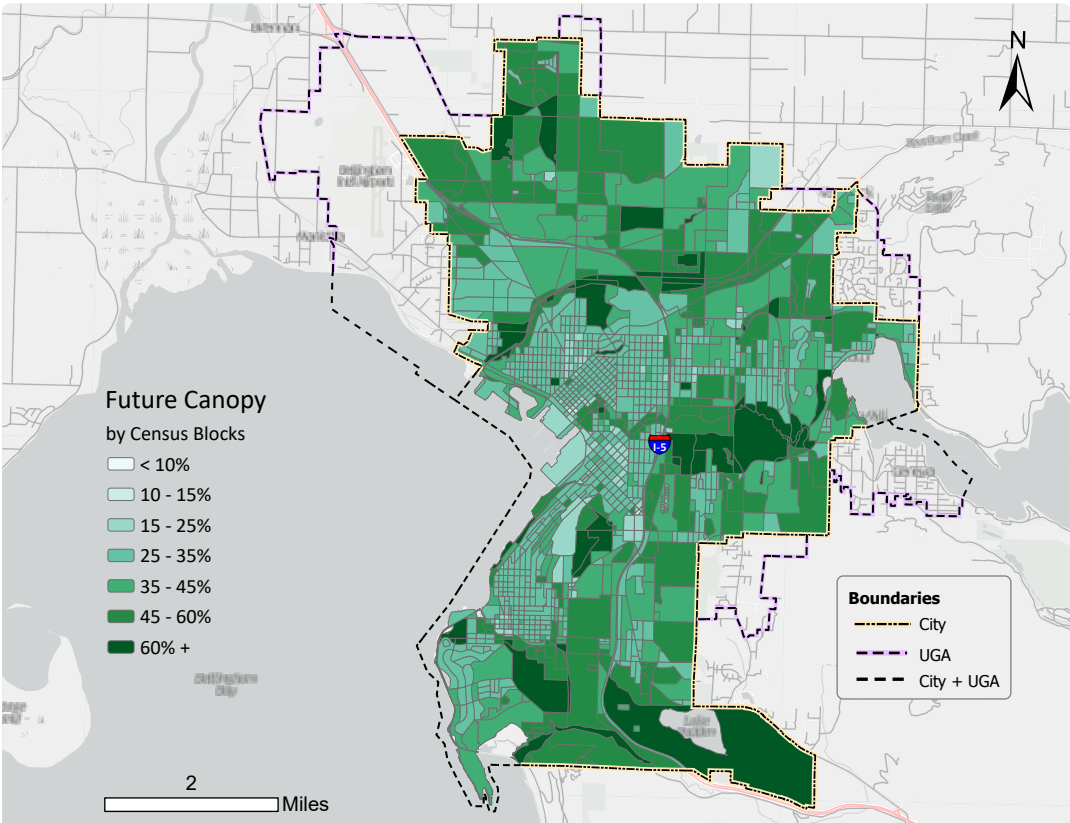


Figure 21. Canopy cover by Census block in 2050 if 45% canopy target is achieved



5. ACHIEVING OUR GOALS: STRENGTHS, CHALLENGES AND STRATEGIES

Expanding Bellingham's canopy cover to 45% with a healthy and resilient urban forest will enhance the quality of life for all residents, supports associated ecological functions, and contributes to the climate mitigation and adaptation needs of our entire community. The Urban Forest Plan will achieve this vision for the urban forest using strategies that harness the City's strengths and address its challenges. This section describes the strengths, challenges and strategies under each goal, and the 10-year Action Plan (Section 6) details the actions to implement the Plan.

The proposed Urban Forest Plan is a significant policy that can only be adopted as part of the Comprehensive Plan amendment process, which the City has begun to meet the 2025 deadline. Adopting this proposed plan outside of that process does not comply with the State GMA for Plan amendments nor does it comply with SEPA requirements.

Document the steps required to achieve GMA compliance.
Document the steps required to achieve SEPA compliance.

5.1 Goal 1: Protect and expand the urban forest

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

Document how Plan adoption complies with the GMA requirements for adoption.

Bellingham's Urban Forest Plan aims to protect and expand the city's urban forest in line with community values established in the Comprehensive Plan. Trees, landscape character and nearby access to nature make Bellingham a desirable place to live and visit. Trees in urban environments serve as vital connectors between natural areas and urban land use, softening the hard edges of built structures and enhancing the visual appeal of streets with dappled light and diverse textures. The city's urban densification, particularly in seven urban village areas and through small lot infill development, and development into previously forested areas often leads to tree removal. However, development can also create opportunities to increase canopy cover, particularly when sites previously had few or no trees. Urban planners and decision-makers must strike a delicate balance between accommodating development needs, such as housing and infrastructure, and preserving the green spaces that support the city's urban forest.

Our Strengths

Greening standards with urban development: Bellingham already requires landscaping with most urban development and has some enhanced landscaping requirements for infill. The City also requires low impact development and limits forest clearing with development in certain parts of the city. There are opportunities to further enhance landscaping requirements and guidelines to achieve more greening in streets and more tree planting in the private realm.

Leveraging canopy abundance and exceptional trees: The city's high canopy cover provides a foundation for targeted tree retention to enhance stormwater management, habitat connectivity and biodiversity. Bellingham also has many individual, high-value trees scattered through urban areas. Exceptional trees can have cultural significance and add to the landscape character of a place and these values can be targeted for retention.

Document how Plan adoption complies with the GMA requirements for adoption.

Integrated planning across City departments: Adopting comprehensive planning and policy approaches, and continuing to have strong interdepartmental collaboration, improves the likelihood that the Urban Forest Plan will be implemented successfully.

Feature Bellingham's infill toolkit

Our Challenges

Retaining trees, soils and forest corridors: With the city's expansion, development needs to be balanced with green space preservation. As Bellingham densifies, larger plots that once housed single-family units with yards will give way to multi-unit developments. This transition challenges the retention of existing trees and soils because of limited space. As urban development expands outwards, prioritizing the retention or restoration of forested habitat corridors is essential for maintaining biodiversity and promoting connectivity. The City's tools for strategic planning of green spaces and the integration of nature into urban designs are vital to preserving the urban forest.

Equity and access to tree benefits: Neighborhoods with low tree equity need more equitable access to the benefits of urban trees and forests. Lower-income and marginalized communities are often disproportionately impacted by climate change, and extreme heat in particular. The City's Tree Equity Score identifies neighborhoods including City Centre, Lettered Streets and York as having low tree canopy and populations with high need for the benefits of greening. These neighborhoods also have relatively high impervious land cover, which means that planting areas are limited, and the cost and complexity of retrofitting trees into landscapes will be higher than in other neighborhoods.

Designing space for urban trees: Ensuring trees thrive in urban environments without causing damage or clearance conflicts becomes increasingly challenging as the density of buildings and services increases to support growth. Cities must meet a broad range of objectives to plan and build functional and healthy environments for people to live. Objectives sometimes compete with each other when space is limited. For example, a street may need new accessible sidewalks in the same space where trees would grow. Where objectives collide, the City must decide what need takes priority; creative solutions are needed to obtain the best outcome possible. Selecting appropriate species and placement is also critical to avoid conflicts and maximize tree life expectancy.

Strategies for the future ← Calculate impact on buildable lands for population and job growth adopted in the Comprehensive Plan.

Strategies to achieve the protect and expand the urban forest goal:

- 1.1 Improve policy, regulations and processes guiding tree protection and planting, including protection of individual, valued trees
- 1.2 Develop urban forest design guidelines and improve standards for planting sites and right tree, right place
- 1.3 Expand the urban forest, prioritizing areas with low tree equity and high impervious cover

Cordata Parkway is green and densely planted but many trees are too close to the curb, which may lead to conflicts in the future (planting occurred prior to City annexation)

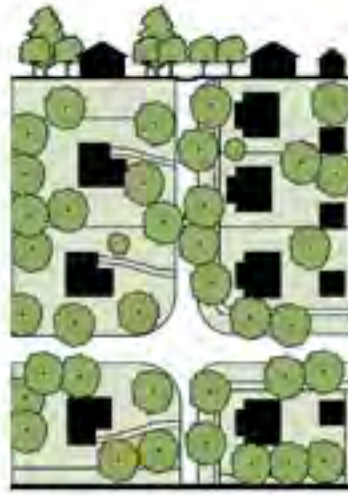
Where can trees fit?

It depends on land use...



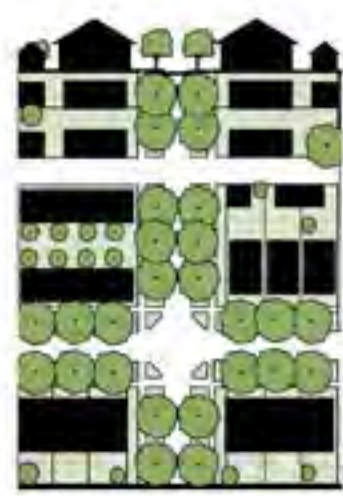
Rural

Trees in forests, windbreaks, yards
Canopy typically >40%



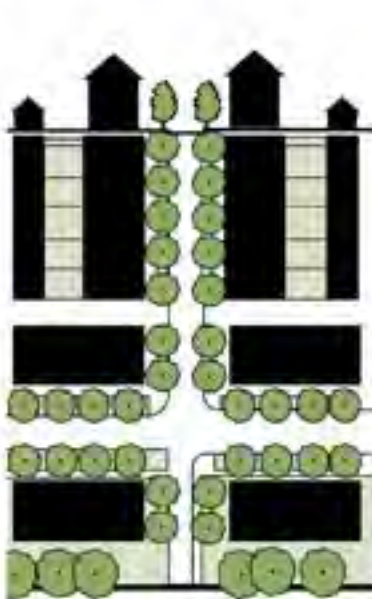
Suburban single-family

Trees in yards, parks, sometimes street trees
Canopy typically 30 - 40%



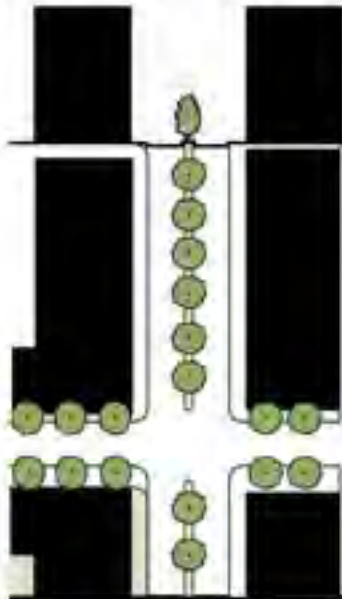
Urban infill

Trees in streets, parks, sometimes yards
Canopy typically 20 - 30%



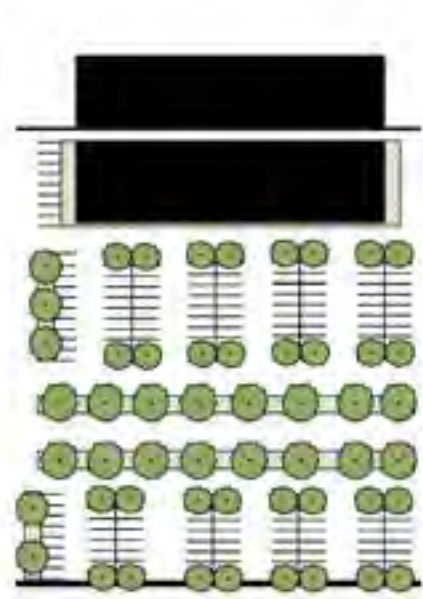
Urban multi-family

Trees in streets, parks, common areas
Canopy typically 15 - 25%



Urban village mixed-use

Trees in streets, plazas
Canopy typically 10 - 15%



Commercial

Trees in streets, surface parking
Canopy typically 10- 20%

Urbanization increases the cost and difficulty of planting trees but urban areas are also where people most need their benefits

5.2 Goal 2: Protect and restore priority habitat areas

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

Trees play a critical role in maintaining healthy forest ecosystems, contributing to soil health, water retention, and providing habitats for diverse plants and animals. Bellingham still has large forest habitats in urban areas but, like all cities, habitat loss and fragmentation due to human activities such as deforestation, urbanization, and agriculture are ongoing. The city's biodiversity is further threatened by invasive species, which alter the composition and function of native ecosystems, and climate change impacts, such as extreme weather events and temperature changes. Habitat management and biodiversity conservation are relative strengths for the City of Bellingham, but there are opportunities to protect more priority habitats, and restore forest areas, outside critical areas or shorelines.

Our Strengths

Environmental plans and regulations: Bellingham has comprehensive plans and regulations to protect habitat, including the Critical Areas Ordinance and Silver Beach Ordinance, focusing on development near sensitive areas and in the Lake Whatcom Watershed, and the Shoreline Master Program for shoreline management. The City has a comprehensive Stormwater Plan and a Stormwater Management Program, complying with national standards. The City's Habitat Restoration Technical Assessment prioritizes areas for habitat restoration.

Habitat restoration program: Bellingham has over 75 miles of shoreline, 1,000 acres of wetlands, and over 7,000 acres of forest, emphasizing the importance of these habitats for fish, wildlife, and ecosystem functions. Managed by the Public Works Department's Natural Resources Division, Bellingham's Restoration Program focuses on protecting and restoring these vital habitats. The city uses science-based assessments to guide its restoration work, with a history of projects improving shorelines, streams, wetlands, and forests. The program also involves community engagement, offering volunteer opportunities and updates on habitat restoration projects.

BMC 16.55 included mitigation methods for +20 years.

Mitigation program: The City of Bellingham is developing a mitigation program aimed at addressing the impacts of growth and infrastructure improvements on local wetlands and streams. The program's goals are to enhance the success of mitigation projects, reduce associated costs, coordinate efforts, and streamline the process. Resources are available to assist in identifying and evaluating mitigation sites for watershed benefits. A key component is the Mitigation Bank, which includes extensive analysis for ecologically appropriate and functional mitigation over the next decade.

Remediation program: The City of Bellingham's Environmental Remediation Projects aim to eliminate health and environmental threats from legacy contamination. Managed under the Model Toxics Control Act by the Washington State Department of Ecology, these projects involve remediation at various sites to clean up areas contaminated by historical industrial and municipal activities.

Greenways program: Bellingham's Greenways Program, initiated in 1990, focuses on creating a network of parks, forests, and greenbelts linked through trails, ridgetops, and shoreline corridors. Supported by property tax levies and overseen by the Parks & Recreation Department, this program has facilitated land acquisitions and the development of parks and trails. Greenways projects are defined through voter-approved initiatives and City Council approval. The Greenways Advisory Committee, comprising local residents, advises on the expenditure of Greenways funds, underscoring the program's community-driven approach.

Our Challenges

Cite the GMA mandates for balanced planning for urban development in cities along with environmental goals.

Habitat fragmentation: Urban development, infrastructure expansion, and land use changes are causing habitat fragmentation, leading to biodiversity loss and disrupted ecological processes. Existing tools to protect or acquire forest areas are limited when they fall outside critical areas or are not a priority for acquisition through existing City programs. Creating and maintaining habitat corridors support native species and enhance connectivity is essential to limit the impacts of fragmentation.

Damaging use: Unsanctioned activities in forested areas, like unauthorized trails and encampments, result in habitat degradation, erosion, and wildlife disturbance, necessitating management strategies to mitigate these impacts.

Invasive species and climate change: The city's biodiversity is under threat from invasive species and the impacts of climate change, such as extreme weather and temperature fluctuations. Urban forests are susceptible to impacts from summer drought, heat waves, windstorms, and new pests and diseases. Increased frequency of summer drought has increased mortality of young and old trees. Species such as western redcedar and western hemlock are dying throughout western Washington and Oregon as they become less suited the climate. Warmer temperatures and stressed trees also favor insect pests, which may lead to more frequent and severe pest outbreaks.

Strategies for the future

Strategies to achieve the protect and restore priority habitat areas goal:

- 2.1 Protect and expand priority habitat areas and movement corridors, and forest
- 2.2 Restore priority habitat areas and movement corridors, and forest

Feature on terrestrial wildlife corridor analysis

5.3 Goal 3: Manage the urban forest in alignment with best practices

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

Managing the urban forest in alignment with best practices is crucial for supporting healthy and safe trees. The management of urban forests, particularly public tree assets, focuses on maximizing the benefits derived from trees while minimizing risks in a financially sustainable manner. A sustainable urban forest management program should include both reactive (service request driven) and proactive components of asset management to maintain monitor and replace tree assets. Bellingham currently has limited staff resources and operational budget to sustain an urban forest management program aligned with best practices. To overcome these challenges, actions such as creating dedicated urban forestry positions, developing a comprehensive budget, applying for grants, expanding maintenance lists, and establishing clear operational and risk management procedures are necessary.

Our Strengths

Shift towards asset management: Shifting to urban forest asset management with the Cityworks software program enables more efficient and effective tracking, maintenance, and planning of urban forestry assets. By leveraging Cityworks, urban forest managers will be able to streamline workflows, improve data accuracy, and make more informed decisions.

State and Federal funding and resources: Bellingham can leverage resources from state and federal funding. The Washington State Department of Natural Resources (DNR) Urban and Community Forestry Program provides resources and guidance to assist cities like Bellingham in developing and enhancing their urban forestry programs. This support can include technical, financial, and educational assistance, enabling effective urban forest management, improved tree canopy cover, and addressing urban forestry challenges. Additionally, Federal urban forestry funding is available for inventorying and expanding Bellingham's urban forest, particularly in areas with lower equity.



Our Challenges

Current program resources: Currently, urban forestry lacks dedicated staffing or budgets, and the management of trees on city land is dispersed among various city departments and adjacent landowners. This lack of dedicated resources can lead to gaps in standards for tree inventory, planting, care, protection, and replacement.

Climate change: As climate change impacts intensify and Bellingham urbanizes, the demand and complexity of tree maintenance are expected to increase, potentially leading to inadequate maintenance, insufficient tree planting, and delayed response to pressing issues.

Increasing maintenance needs and cost of management: As Bellingham densifies, the distance between trees, roads, buildings, and people diminishes, meaning trees need regular clearance pruning and risk inspection. Currently, the City's annual budget for maintenance of the urban forest is insufficient to provide proactive maintenance of street and park trees.

Strategies for the future

Strategies to achieve the manage the urban forest in alignment with best practices goal:

- 3.1 Establish a sustainable urban forestry program aligned with best practices
- 3.2 Establish asset management systems for urban forestry

5.4 Goal 4: Adapt the urban forest for climate change resilience

Adapt the urban forest for climate change resilience

Climate change is already impacting Bellingham's urban and native forests, exacerbating challenges such as increased summer temperatures, longer dry seasons, higher fire risks, and frequent extreme weather events. This changing climate, along with urban stressors like limited soil volume and low permeability, is negatively impacting urban tree health in urban areas. Warmer temperatures and more frequent drought conditions are leading to declines in species like the western redcedar. Such shifts in tree species composition in native forests have broader ecological impacts, including altered wildlife habitat and cultural use. For instance, the loss of mature tree canopy over salmon-bearing streams could elevate water temperatures, posing a threat to salmon populations. Bellingham's urban forest has a vital role in climate change mitigation and adaptation, but it is also threatened by climate impacts.

Our Strengths

Integrating stormwater management with urban forest management: Trees play a significant role in stormwater management. They can help reduce runoff by intercepting rainfall in their canopy and absorbing water through their roots. Trees also improve soil permeability, which enhances the ground's ability to absorb and filter rainwater. Additionally, trees can mitigate the effects of urban heat islands, which can exacerbate stormwater runoff. Urban trees and forests have the potential to play a greater role in stormwater mitigation throughout the city.

Climate adaptation planning for natural resources: The City has begun to actively incorporate climate adaptation into urban forestry, focusing on plant material selection and collaboration with nurseries. The City has Native Plant Materials Selection Guidelines to exclusively use native plants from the Bellingham watersheds, grown in the Puget Trough Ecoregion. Noticing a decline in Western red cedar, the City has started to explore seed collection from locations in southern and drier regions in collaboration with local nurseries. Additionally, the City established a Forest Adaptation Working Group that will meet biannually and will be expanded to invite outside governments, tribes, and non-profits.

Feature climate based seed transfer zone trial results

Our Challenges

Threats to urban forest health: Climate change poses significant challenges to the health and resilience of Bellingham's urban forest. Increasing temperatures, more frequent and severe weather events, and altered precipitation patterns can lead to increased tree stress, vulnerability to pests and diseases, and reduced survival rates. Urban forest management must adapt to these changing conditions by selecting tree species that are better suited to a changing climate and implementing proactive pruning and maintenance that enhances the resilience of the urban forest ecosystem.

Risk of major disturbance events: The increase in frequency and intensity of major disturbance events like heatwaves, extended droughts and wildfires pose significant risks to the urban forest. Heatwaves and drought can stress and weaken trees, making them more susceptible to damage during windstorms and to attack from diseases and pests. Wildfires, becoming more common in many regions due to warmer and drier conditions are a concern for the community and the urban forest. The risk of these events needs to be managed to sustain forest ecosystems, urban trees and the benefits they provide.

Availability of climate-adapted nursery stock: In selecting and procuring climate-adapted nursery stock, cities face the challenge of predicting future climate conditions and trialing tree species expected to thrive in these conditions. Limited availability of diverse, climate-resilient nursery stock can be a barrier, as nurseries may not always grow the needed varieties.

Strategies for the future

Strategies to achieve the adapt the urban forest for climate change resilience goal:

- 4.1 Increase resilience in the urban forest population
- 4.2 Prepare for disturbance events
- 4.3 Align urban forest management with City climate adaptation and stormwater management initiatives

Is the intent to merge the Urban Forest Plan
into the current City stormwater utility?



Feature on integrating trees with stormwater management

5.5 Goal 5: Collaborate with diverse people and organizations

Collaborate with diverse people and organizations in urban forest management

This goal area focuses on enhancing community education and involvement in urban forest management, empowering residents in environmental stewardship, and building partnerships for implementing urban forest strategies. Bellingham has several successful stewardship programs that the City can build on and expand to implement the Urban Forest Plan, particularly on private land. Applying an equity lens to community stewardship programs and engagement ensures that the benefits of urban forestry are accessible to all residents, regardless of their socioeconomic background. This approach promotes inclusivity and addresses disparities in access to green spaces and the associated benefits. Furthermore, this goal seeks to strengthen relationships with Native American Nations, Tribes, and urban Indigenous people, recognizing the importance of their traditional knowledge and unique perspectives in urban forest management.

Our Strengths

Parks volunteers program: The Bellingham Parks Volunteer Program offers small-scale community work parties during fall, winter, and spring at parks and trails throughout the city. The City provides tools, gloves, hand sanitizer, and instructions to plant, pull invasive species or provide other care at parks and restoration sites.

Parks stewards program: The Bellingham Park Steward Program involves volunteers adopting park lands, including trails, open spaces, and greenways. Volunteers perform various duties like litter pickup, trail repair, invasive species removal, mulching, and planting native plants. The program provides training and necessary materials, although volunteers often bring their own tools. The program is flexible, allowing volunteers to choose their activities and locations.

Environmental education: The City of Bellingham's environmental education initiatives focus on three key areas: school programs, community programs, and internal city practices. These programs aim to enhance knowledge about watersheds, water conservation, and sustainable practices. Additionally, they encourage community participation in environmental stewardship, emphasizing the importance of a healthy environment and a strong sense of place.

Feature on what we heard through equity focused engagement

Our Challenges

Document past steps to interview large parcel owners in Bellingham, and actual interviews. Detail future steps to remain in contact with them.

Increasing involvement of private landowners: Engaging private landowners and institutional landholders in urban forest management is essential to expanding Bellingham's urban forest. Many of Bellingham's existing education and stewardship programs focus on public land rather than private land. Private and institutional landowners need to be encouraged to adopt practices that support urban forest health and sustainability, such as preserving mature trees, planting native species, and implementing bee-friendly landscaping practices. Collaborative efforts, education, and policy incentives are needed to integrate these private and institutional lands into the overall urban forestry strategy.

Improving equity in access to stewardship opportunities: Improving equity in access to stewardship opportunities involves creating inclusive programs that ensure all community members, regardless of background, can participate. Typically, communities actively participating in stewardship possess the resources and free time to do so. These advantaged groups often have better access to City staff and programs. In contrast, systematically marginalized communities are more vulnerable to climate change effects and face significant barriers to advocating for and accessing urban forest benefits.

Cooperation with third party utilities: Utilities often need to prune or remove trees to maintain clearances from power lines and infrastructure for safety and reliability. The challenge lies in aligning utility maintenance practices with urban tree preservation goals, ensuring tree health while maintaining public safety and utility service reliability. This often involves negotiating tree trimming methods, schedules, and decisions about tree removal.

Integrating Indigenous perspectives: Indigenous communities have deep-rooted connections and traditional knowledge about local ecosystems, including urban forests. However, their perspectives and rights have often been overlooked in urban planning and forestry management. Recognizing and incorporating Indigenous knowledge and practices can enhance urban forestry efforts, but this requires respectful engagement and a willingness to meaningfully incorporate Indigenous perspectives.

Strategies for the future

Strategies to achieve the collaborate with diverse people and organizations goal:

- 5.1 Expand community education and involvement in urban forest management
- 5.2 Strengthen relationships with Native American Tribes and urban Indigenous people

Feature on how people can contribute to tree planting and backyard biodiversity (bees)

5.6 Goal 6: Monitor performance, adapt strategies

Monitor performance, adapt strategies

The goal of monitoring performance and adapting strategies focuses on evaluating the progress of plan implementation, identifying areas for improvement, and adapting strategies as needed. An iterative process will ensure that the Urban Forest Plan remains relevant and responsive to ever-changing urban environment and climate challenges.

Our Strengths

Advanced measurement technologies: LiDAR remeasurement has enabled precise monitoring of the urban forest's extent and structure. Multiple canopy cover datasets collected over time provide an accurate understanding of the urban forest's current status and how it has changed.

Existing monitoring programs: The City of Bellingham conducts various studies and assessments to monitor habitat restoration. These include fish studies, macroinvertebrate analysis, culvert assessments, and water quality and quantity data collection. Additionally, the city has a community photo monitoring project to track changes at restoration sites. This monitoring ensures the city's restoration goals are met. Experience and learnings from existing monitoring programs can be built on to expand monitoring of the urban forest.

Our Challenges

Lack of dedicated staff resources: Urban forest monitoring faces challenges due to limited dedicated staff resources to consistently track and manage various aspects of implementing the Urban Forest Plan.

Lack of established program: While some elements like canopy cover are well-monitored, there is no formalized program for the collection of data to track performance on implementation or monitor change in the urban forest.

Strategies for the future

Strategies to achieve the monitor performance, adapt strategies goal:

- 6.1 Monitor performance on plan implementation
- 6.2 Monitor and research change in the urban forest

Feature on community monitoring - habitat photos

6. 10 YEAR IMPLEMENTATION PLAN

6.1 Action Plan

This is the implementation plan for the City of Bellingham's Urban Forest Plan. Specific actions are itemized and assigned a cost, time frame and responsibility.

— Add cost to produce housing.

GOAL 1. PROTECT AND EXPAND THE URBAN FOREST	
1.1 Improve policy, regulations and processes guiding tree protection and planting, including protection of individual, valued trees	Cost to Municipality
1.2 Develop urban forest design guidelines and improve standards for planting sites and right tree, right place	\$ Staff time or < \$10,000
1.3 Expand the urban forest, prioritizing areas with low tree equity and high impervious cover	\$ \$ \$10,000 - \$50,000
	\$ \$ \$ \$50,000 - \$150,000
	\$ \$ \$ \$ \$150,000 - \$1,000,000
	\$ \$ \$ \$ \$ >\$1,000,000
GOAL 2. PROTECT AND RESTORE PRIORITY HABITAT	
2.1 Protect and expand priority habitat areas and movement corridors, and forest	Timeframe
2.2 Restore priority habitat areas and movement corridors, and forest	Quickstart Critical first step
	Establish 1 - 5 years
	Build 6 - 10 years
	Strengthen >10 years
GOAL 3. MANAGE THE URBAN FOREST IN ALIGNMENT WITH BEST PRACTICES	
3.1 Establish a sustainable urban forestry program aligned with best practices	Responsibility
3.2 Establish asset management systems for urban forestry	PWD Public Works Department
	PRD Parks and Recreation Department
	PCD Planning and Community Development Department
	FD Fire Department
GOAL 4. ADAPT THE URBAN FOREST FOR CLIMATE CHANGE RESILIENCE	
4.1 Increase resilience in the urban forest population	
4.2 Prepare for disturbance events	
4.3 Align urban forest management with City climate adaptation and stormwater management initiatives	
GOAL 5. COLLABORATE WITH THE DIVERSE PEOPLE AND ORGANIZATIONS	
5.1 Expand community education and involvement in urban forest management	
5.2 Strengthen relationships with Native American Tribes and urban Indigenous people	
GOAL 6. MONITOR PERFORMANCE, ADAPT STRATEGIES	
6.1 Monitor performance on plan implementation	
6.2 Monitor and research change in the urban forest	

Goals, Strategies, and Actions	Cost	Timeframe	Responsibility
1. PROTECT AND EXPAND THE URBAN FOREST			
1.1 Improve policy, regulations and processes guiding tree protection and planting, including protection of individual, valued trees			
1. Consider adding policies in the Comprehensive Plan update to address tree canopy goals and strategies to achieve those goals	\$	Establish	PCD
2. Consider adding canopy cover goals by park in the Parks, Recreation & Open Space Plan update	\$	Establish	PRD
3. Evaluate codes to enhance urban forest expansion	\$	Establish	PCD
4. Evaluate codes to enhance urban forest protection and introduce an Exceptional Tree Ordinance	\$	Quickstart	PCD
5. Update tree protection standards for park trees, street trees and trees protected through development to improve consistency and reflect best practices	\$	Establish	PCD/PRD
6. Update street tree permit standards and policies to clarify information for the public, and proactively identify streets/locations that can and cannot support planting by residents	\$	Establish	PCD/PRD
7. Consider the impacts to the urban forest when updating Fire Code or if Wildland Urban Interface Code is implemented	\$	Establish	PCD/FD
8. Replace City trees removed for public works at 1:1 or paying cash in lieu of planting if a Tree Bank is available	\$\$\$	Establish	PWD/PRD
9. Expand communication of updated urban forest expansion- and protection-related code requirements and standards to other departments, contractors and the community	\$	Establish	PCD/PWD/ PRD
1.2 Develop urban forest design guidelines and improve standards for planting sites and right tree, right place			
10. Develop landscape design and species selection guidelines for streetscapes in downtown, urban villages, and arterial roads including considerations for soil volume and stormwater integration	\$\$	Build	PCD/PWD
11. Integrate tree planting considerations to maximize tree canopy potential in streetscape upgrade projects from the earliest stages of planning	\$\$	Establish	PWD
12. Develop preferred road cross sections that indicate where to locate underground utilities to avoid sterilizing tree planting, and require those utilities to be placed under the road or sidewalk, or at greater depth or to be installed with protective covers that would still allow for street tree planting adjacent	\$\$	Build	PWD
13. Develop an urban forest manual that consolidates existing policies on tree protection, tree planting, and tree maintenance for the development community and residents	\$\$	Build	PCD
14. Develop a decision-framework and toolkit to assist ROW managers in determining appropriate solutions and mitigation measures to resolve infrastructure conflicts	\$\$	Build	PWD
15. Work with neighborhood/community associations to improve species selection guidelines and support communities to proactively address emerging infrastructure conflicts due to trees planted too close to each other and to paved surfaces	\$	Build	PWD

Goals, Strategies, and Actions	Cost	Timeframe	Responsibility
1.3 Expand the urban forest, prioritizing areas with low tree equity and high impervious cover			
16. Perform GIS analysis and ground truthing to inventory vacant or plantable sites for banked trees and for residents requesting street tree permits, and prioritize areas planting locations with low tree equity	\$\$	Establish	PWD
17. Develop a 10-year street and park tree planting program guided by strategic priorities, parks master plans, and canopy goals for parks and public lands, and prioritize planting locations with low tree equity	\$\$	Establish	PWD
18. Develop a Tree Incentive Program to support property owners and renters, particularly in low tree equity areas, to plant and care for trees on private property or streets	\$\$\$\$\$	Quickstart, Establish, Build, and Strengthen	PCD/PWD
19. Develop a capital 'streetscape adaptation' strategy to retrofit trees and pervious surfaces into low tree equity blocks	\$\$\$\$	Build and Strengthen	PWD
2. PROTECT AND RESTORE PRIORITY HABITAT			
2.1 Protect and expand priority habitat areas and movement corridors, and forest			
20. Consider opportunities to acquire priority terrestrial habitat areas not protected by critical areas or shoreline ordinances to support ecological linkages, and prioritizing improving access and linkages to forest areas in areas with low tree equity	\$	Establish	PWD/PRD
21. Prioritize the protection of lands with reliable soil moisture (low vulnerability to drought) that have the highest likelihood of continuing to support representative forest types	\$	Strengthen	PWD/PRD
22. Consider refining trail guidelines and standards to include trail classifications, guidelines by trail type and address off-road cycling	\$\$	Strengthen	PRD
23. Update the City's planting lists for natural areas to reflect the use of more drought-tolerant native species in locations that do not have a high-water table	\$	Establish	PWD
2.2 Restore priority habitat areas and movement corridors, and forest			
24. Perform GIS analysis and ground truthing to inventory potential planting and restoration areas in parks to receive banked trees, and prioritize planting in areas with low tree equity	\$	Establish	PRD
25. Establish internal level of service goals and a rapid assessment process for restoration areas considering tree cover over riparian corridors, forest structure, habitat features, invasive species abundance and other relevant factors to prioritize restoration activities and maintenance	\$\$	Strengthen	PWD/PRD
26. Develop effective standards to mitigate damage from encroachment into City-owned forested areas from unauthorized trails, dumping and encampments	\$\$\$\$\$	Build and Strengthen	PWD/PRD
27. Support citywide efforts to find long-term solutions to homeless encampments in urban forests	\$\$	Strengthen	PWD/PRD
28. Explore methodologies to assess and value natural assets for inclusion in municipal asset management planning, and to establish levels of service and lifecycle costs for their maintenance.	\$\$	Build	PWD/PRD
29. Consider opportunities to restore forest areas for carbon sequestration	\$\$	Strengthen	PWD/PRD

Goals, Strategies, and Actions	Cost	Timeframe	Responsibility
3. MANAGE THE URBAN FOREST IN ALIGNMENT WITH BEST PRACTICES			
3.1 Establish a sustainable urban forestry program aligned with best practices			
30. Create an Urban Forester position to lead implementation, establish an Urban Forestry department, and consider adding an interdepartmental staff position to support grant applications, deliverables and budgets	\$\$\$\$\$	Establish, Build, and Strengthen	PWD/PRD
31. Develop an annual urban forestry operations budget	\$\$\$\$	Establish, Build, and Strengthen	PWD/PRD
32. Apply for available State and Federal grants to support urban forest inventory, risk assessment and planting initiatives, prioritizing areas with low tree equity	\$	Establish	PWD/PRD
33. Evaluate appropriate staffing needs to support planting, protecting and proactively maintaining Bellingham's urban forest.	\$\$\$\$	Establish, Build, and Strengthen	PWD/PRD
34. Expand the City street tree maintenance list to include street trees in low Tree Equity, areas that have issues related to public safety and tree health, and trees installed as a requirement of development.	\$\$\$\$\$	Establish, Build, and Strengthen	PRD
35. Expand the City maintenance list to include all street trees.	\$\$\$\$\$	Build, and Strengthen	PRD
36. Explore the feasibility of expanding nursery capacity, and having a stockpile of trees ready to plant each year in the fall	\$	Establish	PWD /PRD
37. Develop a risk management policy and operational procedures to reflect ISA BMPS and ANSI A300 standards and ensure that the policy is implemented operationally and inspection and mitigation is documented	\$	Strengthen	PWD/PRD
38. Ensure that all tree work within the city is performed safely, professional, and according to ANSI A300 as the standard for care, and review and update City contracts and standard construction specifications to comply with industry standards.	\$	Establish	PWD/PRD
39. Continue to ensure that urban forestry staff maintain industry certifications and qualifications, and access workshops through the Washington DNR's Urban and Community Forestry Program	\$	Establish	PWD/PRD
40. Develop a Memorandum of Understanding with non-City agencies working in public right-of-way or other public properties for tree protection and mitigation	\$	Build	PWD
41. Maintain Tree City Status and pursue Evergreen Communities Designation	\$	Establish	PWD/PRD
3.2 Establish asset management systems for urban forestry			
42. Develop an asset management plan for City maintained street and park trees, and evaluate urban forest levels of service for inspection, preventative maintenance, tree planting and protection	\$	Build	PWD/PRD
43. Develop arboricultural specifications for tree maintenance, and establish an annual maintenance calendar of activities by season to support scheduling	\$	Establish	PRD
44. Maintain the City's tree inventory in Cityworks in alignment with the pruning cycle	\$\$	Build and Strengthen	PRD

Goals, Strategies, and Actions	Cost	Timeframe	Responsibility
4. ADAPT THE URBAN FOREST FOR CLIMATE CHANGE RESILIENCE			
4.1 Increase resilience in the urban forest population			
45. Update the species presented in the City's list of street trees to expand options and optimize native and climate adapted species	\$	Establish	PWD/PCD
46. Water newly planted trees for 3 years and establish a 5-year pruning cycle (more frequent where clearance is needed) for all street trees on the City Maintenance Responsibility list to reduce the severity of damage due to extreme wind, heat, drought, ice or heavy wet snow	\$\$\$\$\$	Establish, Build, Strengthen	PWD
47. Mulch trees in parks or large boulevards to improve soil health and moisture retention	\$\$\$\$	Establish, Build, Strengthen	PRD/PWD
4.2 Prepare for disturbance events			
48. Periodically review storm and disaster response plans for events that would cause substantial forest destruction and debris	\$	Build	PWD/PCD/FD
49. Maintain City ability to implement post-disaster restoration procedures to support rapid revegetation of disturbed areas	\$	Establish	PWD/PCD
50. Work with Federal, State, and local agencies and entities to coordinate wildfire response	\$	Establish	FD/PRD
51. Develop recommendations for community members to reduce property fire risk	\$	Establish	FD/PWD/PRD
52. Update the Integrated Pest Management Plan that considers best practices from Washington's Pest Readiness Playbook, with input from the Washington State University Extension Forester	\$\$	Strengthen	PWD/PRD
4.3 Align urban forest management with City climate adaptation and stormwater management initiatives			
53. Explore options for balancing solar access and urban forest management, including consideration of solar access in landscaping plans	\$	Build	PWD/PCD
54. Consider urban forest and green infrastructure benefits when developing strategies to reduce vulnerability to urban heat	\$	Build	PWD/PCD
55. Reduce GHG emissions from urban forestry operations	\$	Build	PWD/PCD
56. Consider developing an urban wood utilization plan that minimizes GHG emissions from wood waste	\$	Strengthen	PWD/PCD
5. COLLABORATE WITH DIVERSE PEOPLE AND ORGANIZATIONS			
5.1 Expand community education and involvement in urban forest management			
57. Continue to support community work parties, the parks volunteer program, and parks ambassador program and explore community monitoring and maintenance opportunities	\$\$	Establish, Build, Strengthen	PRD/PWD
58. Develop a communications and engagement strategy to guide the development of education materials and stewardship programming, with efforts targeted at increasing canopy cover in neighborhoods with low tree equity	\$\$	Quickstart	PWD/PRD/PCD
59. Make information about the urban forest and Plan implementation broadly available to the public in various formats	\$	Establish	PWD

Goals, Strategies, and Actions	Cost	Timeframe	Responsibility
60. Collaborate with the Washington DNR to establish a regional network of urban forestry professionals including municipal staff, nurseries, consulting professionals and academics to share knowledge and work together to solve key issues, such as limitations in nursery stock or emerging forest health concerns	\$	Build	PWD/PRD
5.2 Strengthen relationships with Native American Tribes and urban Indigenous people			
61. Continue to send notifications and invitations to all Native American Nations and Tribes in the planning area	\$	Quickstart	PWD/PRD
62. Translate key indigenous place names and tribal names where appropriate as determined with the Native American Nations and Tribes	\$\$	Strengthen	PRD
63. Partner with Native American Nations and Tribes to develop species lists for restoration sites that are culturally appropriate and factor in climate adaptation	\$	Establish	PWD/PRD
64. Strengthen relationships with Native American Nations and Tribes and urban Indigenous people to work towards respecting Indigenous knowledge and practices in urban forest programs, policy, and operations	\$	Establish	PWD/PRD
65. Build connections between the urban forest program and cultural resource use, such as by using tree removals to provide access to culturally relevant wood and plant fibres	\$	Build	PWD/PRD
6. MONITOR PERFORMANCE, ADAPT STRATEGIES			
6.1 Monitor performance on plan implementation			
66. Reassess canopy cover at least every five years using LiDAR or other accurate methods as technology advances	\$\$	Establish	CPD/PWD
67. Reassess the public's perceptions and levels of satisfaction toward tree management services by the City every 10 years	\$	Strengthen	PWD/PRD
68. Refer relevant draft ordinance updates to Washington DNR Urban and Community Forestry staff for review and comment	\$	Establish	CPD
69. Review implementation progress and modify the Implementation Action Plan after 5 years, and update the Urban Forest Plan every 10 years	\$\$	Build	PWD
70. Report on performance annually	\$	Establish	PWD/PRD
6.2 Monitor and research change in the urban forest			
71. Explore opportunities for collaboration with the Washington DNR toward a multi city forest monitoring network in western Washington to report changes in forest structure and composition and forest health	\$	Build	PWD/PRD
72. Establish permanent plots in forested parks and City-owned natural areas to monitor changes in forest structure and composition and forest health	\$\$	Build	PWD/PRD
73. Conduct research with academic research institutes to understand the impacts of climate change on the urban forest and the effectiveness of best planting and management practices	\$\$	Strengthen	PWD/PRD
74. Monitor rainwater interception and water pollution reduction by the urban forest and integrate the calculation into the future flood analysis and stormwater management planning	\$\$	Strengthen	PWD

6.2 Monitoring Plan See all prior comments for changes prior to writing monitoring plan.

The Urban Forest Management Strategy sets one target: **Increase citywide canopy cover to 45% by 2050**

The target is measurable using the same methods that have been used to prepare the State of the Urban Forest Report. To complement the target, the table below provides additional performance indicators to guide implementation and help measure progress on the Strategies and Actions. The Implementation Plan should be reviewed every year and updated at least once every five years to ensure indicators of performance remain relevant and reflective of the six Plan goals.

Performance indicators still in development

Target	Measurement Frequency	Method	Related Goal
Increase citywide canopy cover to 45% by 2050	5 years	LiDAR tree canopy capture, GIS summary	
Performance Indicator	Measurement Frequency	Method	
Achieve Tree Equity Scores of at least 83/100 (2019 average) in all census dissemination blocks by 2050	5 years (uses output from LiDAR tree canopy capture)		
Trees removed: trees replaced (public and private land)	Annual		
Estimated volume (Mgal) and monetary value (\$) of avoided runoff by trees per year	Annual		
Terrestrial habitat restored: terrestrial habitat removed	Annual		
Forest maturity (lidar frequency diagram for forest areas and neighborhoods)	5 years with LiDAR		
Canopy cover over riparian corridors	5 years with LiDAR		
Pruning cycle for street trees	Annual		
Inventoried tree condition	Annual		
Evergreen community designation	Annual		
Species suitability for future climate	Annual		
GHG emission from urban forestry operations	Annual		
Number and diversity of people engaged in urban forest stewardship	Annual		

7. REFERENCES

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To be updated

Endnotes

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- 13 City of Bellingham. 2022. Urban Forest Management Plan Phase 2 Engagement Summary. Web. Accessed 2023. https://cob.org/wp-content/uploads/221110_UFMP-Phase-2-Engagement-Summary_FINAL_reduced.pdf
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APPENDIX 1 - URBAN FOREST CRITERIA AND INDICATORS

The criteria and indicators table is based on the following resources:

- Davey Institute / USDA Forest Service: The Sustainable Urban Forest Step-by-Step Approach (2016). Available online at www.itreetools.org/resources/content/Sustainable_Urban_Forest_Guide_14Nov2016.pdf
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Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Goal area: Protect and expand the urban forest in alignment with community values as established in the Comprehensive Plan					
Municipality-wide urban forest management plan	Develop and implement a comprehensive urban forest management plan for public and private property.	No plan	Existing plan limited in scope and implementation	Recent comprehensive plan developed and implemented for publicly owned forest resources, including trees managed intensively (or individually) and those managed extensively, as a population (e.g., trees in natural areas)	Strategic, multi-tiered plan with built-in adaptive management mechanisms developed and implemented for public and private resources

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Clear and defensible urban forest canopy assessment and goals	Urban forest policy and practice is driven by comprehensive goals municipality-wide and at the neighborhood or land use scale informed by accurate, high resolution assessments of	No assessment or goals.	Low-resolution and/or point-based sampling of canopy cover using aerial photographs or satellite imagery – and limited or no goal setting.	Complete, detailed, and spatially explicit, high-resolution Urban Tree Canopy (UTC) assessment based on enhanced data (such as LiDAR) – accompanied by comprehensive set of goals by land use and other parameters.	The City has a complete, detailed, and spatially explicit high-resolution Urban Tree Canopy (UTC) assessment accompanied by a comprehensive set of goals, all utilized effectively to drive urban forest policy and practice municipality-wide and at neighborhood or smaller management level.
Ecosystem services targeted in tree planting projects and landscaping	Incorporate ecosystem services objectives into public and private tree planting projects to improve urban tree health and resilience, carbon sequestration, stormwater management and cooling.	Ecosystem services not considered in planting projects or intentionally designed into vegetated landscapes	Ecosystem services, such as stormwater interception, occasionally incorporated into City or private land planting projects and land-scape designs.	Guidelines in place for planting projects and land-scape designs on public and private land to deliver specific ecosystem services.	Ecosystem services targets are defined for the urban forest and policy requires planting project and land-scape designs on public and private land to contribute to meeting targets.
City tree planting and replacement program design, planning and implementation	Comprehensive and effective tree selection, planting and establishment program that is driven by canopy cover goals and other considerations according to the urban forest plan.	Tree replacement and establishment is ad hoc.	Some tree planting and replacement occurs, but with limited overall municipality-wide planning and insufficient to meet replacement requirements.	Tree replacement and establishment is directed by needs derived from an opportunities assessment and species selection is guided by site conditions, tree health and climate adaptation considerations.	Tree planting and replacement is guided by strategic priorities and is planned out to make progress towards targets set for canopy cover, diversity, tree health and climate adaptation within the timeframe of the strategy.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Development requirements to plant trees on private land	Ensure that new trees are required in landscaping for new development or, where space is lacking, there is an equivalent contribution to tree planting in the public realm.	Landscaping requirements do not address trees on private land.	Developments are generally required to provide replacement but the outcomes are often in conflict with public trees and other infrastructure due to space limitations and not connected to meeting canopy cover targets. City-wide Tree Bylaw does implement replacement policy but not for all zones.	Developments are required to provide replacement trees or, where space is not adequate according to soil volume available, provide cash-in-lieu for equivalent tree planting on public land. The requirement is not connected to meeting canopy cover targets.	Developments are required to provide a minimum density of trees per unit measure or, where space is not adequate according to soil volume available, provide adequate cash-in-lieu for equivalent tree planting on public land. Planting density is determined based on meeting a municipal-wide canopy cover target.
Streetscape and servicing specifications and standards for planting trees	Ensure all publicly owned trees are planted into conditions that meet requirements for survival and maximize current and future tree benefits.	No or very few specifications and standards for growing sites.	Specifications and standards for growing sites exist but are inadequate to meet urban forest goals.	Specifications and standards exist and are adequate to meet urban forest goals but are not always achieved.	All trees planted are in sites with adequate soil quality and quantity, and with sufficient growing space to achieve their genetic potential and life expectancy, and thus provide maximum ecosystem services.
Equity in planting program delivery	Ensure that the benefits of urban forests are made available to all, especially to those in greatest need of tree benefits.	Tree planting and outreach are not determined equitably by canopy cover or need for benefits.	Planting and outreach includes attention to low canopy neighborhoods or areas.	Planting and outreach targets neighborhoods with low canopy and a high need for tree benefits.	Equitable planting and outreach at the neighbourhood level are guided by strong citizen engagement in identified low-canopy/high-need areas.
Policy or regulations regulating the protection and replacement of private and City trees	Secure the benefits derived from trees on public and private land by enforcement of municipality-wide policies and practices including tree protection.	No or very limited tree protection policy.	Policies in place to protect public trees and employ industry best management practice.	Policies in place to protect public and private trees with enforcement but lack integration with other municipal policy to enable effective tree retention.	Urban forest strategy and integrated municipal-wide policies that guide the protection of trees on public and private land, and ensure they are consistently applied and enforced.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Standards of tree protection and tree care observed during development or by local arborists and tree care companies	Consulting arborists and tree care companies understand city-wide urban forest goals and objectives and adhere to high professional standards.	Limited understanding or support for tree protection requirements.	General understanding or support for tree protection requirements but large variation in the quality of information and services provided.	General understanding or support for tree protection requirements and generally consistent quality of information and services provided.	Advocacy for tree protection requirements, engagement with City staff on improving processes and standards, and generally consistent quality of information and services provided to high professional standards.
Goal area: Protect and restore priority habitat areas, movement corridors, and forests					
Municipal-wide biodiversity or green network strategy	Acquire and restore publicly-owned natural areas in pursuit of meeting municipal-wide biodiversity and connectivity goals.	No or very limited planning and stewardship of natural areas.	Area specific management plans focused on management, restoration, and protection of natural areas.	Municipal-wide urban forest, parks or natural areas strategy guiding management, restoration, and protection of the existing natural areas network.	Biodiversity strategy or equivalent in effect to manage, restore and existing and acquire future natural areas network throughout the municipality.
Policy or regulations for conservation of sensitive ecosystems, soils, or permeability on private property through development	Secure the benefits derived from environmentally sensitive areas by enforcement of municipality-wide policies in pursuit of meeting biodiversity and connectivity goals.	No or very limited natural areas protection policy.	Policies in place to protect privately-owned natural areas without enforcement.	Policies in place to protect privately-owned natural areas with enforcement but lack integration with other municipal policy to enable effective tree retention.	Biodiversity strategy or equivalent and integrated municipal-wide policies that guide privately-owned natural area protection and ensure they are consistently applied.
Internal protocols guide City tree or sensitive ecosystem protection	Ensure all relevant municipal departments follow consistent tree or ecosystem protection protocols for capital design and construction activities.	No protocols guiding City tree or ecosystem protection for capital design and construction activities.	Informal and inconsistent processes followed for City tree or ecosystem protection for capital design and construction activities.	Established protocols for City tree or ecosystem protection for capital design and construction activities but outcomes are inconsistent or sometimes unachievable.	Established protocols for City tree or ecosystem protection for capital design and construction activities are consistently followed and outcomes are successful.
Goal Area: Manage the urban forest in alignment with best practices to support healthy and safe trees					

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Municipal natural asset management	Integrate green infrastructure assets into the municipal asset management system to support valuing and accounting for natural assets in the City's financial planning to build climate resilient infrastructure.	No recognition of value of natural or human-made elements that provide ecological and hydrological functions (green infrastructure)	Local government recognizes the value of green infrastructure but does not yet have information to include them in an asset management system.	Green infrastructure assets have been partially or fully inventoried and some assets are included in an asset management system, with the intent to ultimately capture all assets in the consolidated financial statements of the municipality.	Green infrastructure assets are inventoried and included in an asset management system and on the consolidated financial statement of the municipality.
Tree inventory	A current and comprehensive inventory of intensively managed trees to guide management, including data such as age distribution, species mix, tree condition and risk assessment.	No inventory.	Partial inventory of publicly-owned trees in GIS.	Complete inventory of in-tensively managed street trees and park trees in GIS but inconsistently updated.	The municipal tree inventory is complete, is GIS-based, supported by mapping, and is continuously updated to record growth, work history and tree condition.
Natural areas inventory	A current and comprehensive inventory of sensitive and modified natural ecosystems and their quality mapped to Provincial standards to provide standardized ecological information to support decision-making.	No inventory.	Partial inventory of publicly-owned trees in GIS.	Complete inventory of in-tensively managed street trees and park trees in GIS but inconsistently updated.	The municipal tree inventory is complete, is GIS-based, supported by mapping, and is continuously updated to record growth, work history and tree condition.
Tree risk management	Comprehensive tree risk management program fully implemented, according to ANSI A300 (Part 9) "Tree Risk Assessment" standards, and supporting industry best management practices.	No coordinated tree risk assessment or risk management program. Response is on a reactive basis only.	Some areas within the city are prioritized for risk assessment and management. Little annual budget is available to develop a more proactive inspection program.	Priority areas of the City are inspected on a regular schedule and operational standards and budgets are in place for responding to and managing tree risks within an appropriate timeframe.	A comprehensive risk management program is in place, with all public lands inspected on defined schedules and operational standards and budgets in place for responding to and managing tree risks within an appropriate timeframe.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Waste biomass utilization	A closed system diverts all urban wood and green waste through reuse and recycling.	Wood waste from the urban forest is not utilized.	Wood waste from the urban forest is utilized as mulch or biofuel.	Wood waste from the urban forest is utilized as mulch or biofuel and sometimes high value pieces are milled and stored for later use or sold on to local value-added industries.	Low value wood waste from the urban forest is utilized as mulch or biofuel and all high value pieces are milled and stored for later use or sold on to local value-added industries.
Municipal urban forestry program capacity	Maintain sufficient well-trained personnel and equipment – whether in-house or through contracted or volunteer services – to implement municipality-wide urban forest management plan	Team severely limited by lack of personnel and/or access to adequate equipment. Unable to perform adequate maintenance, let alone implement new goals.	Team limited by lack of staff and/or access to adequate equipment to implement new goals.	Team able to implement many of the goals and objectives of the urban forest management plan.	Team able to implement all of the goals and objectives of the urban forest management plan.
Urban forest funding to implement a strategy	Maintain adequate funding to implement the urban forest strategy.	Little or no dedicated fund-ing.	Dedicated funding but insufficient to implement the urban forest strategy or maintain new assets as they are added to the inventory.	Dedicated funding sufficient to partially implement the urban forest strategy and maintain new assets as they are added to the inventory.	
Goal Area: Adapt the urban forest for climate change resilience					
Maintenance of intensively managed trees	Maintain all publicly owned intensively managed trees for optimal health and condition in order to extend longevity and maximize current and future benefits	Intensively managed trees are maintained on a request/reactive basis.	Intensively managed trees are maintained on a request/reactive basis. Limited systematic (block) pruning and/or immature trees are structurally pruned.	All intensively managed trees are systematically maintained on a cycle determined by workload and resource limitations. All immature trees are structurally pruned.	All mature intensively managed trees are maintained on an optimal pruning cycle. All immature trees are structurally pruned.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Forest restoration and native species planting	Encourage the appreciation of climate suitable native vegetation by the community and ensure native species are widely planted to enhance native biodiversity and connectivity	Voluntary use of climate suitable native species on publicly and privately-owned lands.	The use of climate suitable native species is encouraged on a site-appropriate basis in public and private land development projects.	Policies require the use of climate suitable native species and management of invasive species on a site-appropriate basis in public and private land development projects but are not integrated across all policy or guided by a connectivity analysis.	Policies require the use of climate suitable native species and management of invasive species on a site-appropriate basis in public and private land development projects and through tree bylaw.
Selection and procurement of stock in cooperation with nursery industry	Diversity targets and climate adaptation/mitigation objectives guide tree species selection and nurseries proactively grow stock based on municipal requirements.	Species selection is not guided by diversity targets or climate adaptation/mitigation objectives.	Species selection is guided by diversity and climate adaptation/mitigation but required stock is rarely available from nurseries and acceptable substitutes reduce diversity.	Species selection is guided by targets for diversity and climate adaptation/mitigation and required stock or acceptable substitutes are usually available from nurseries.	Species selection is guided by targets for diversity and climate adaptation/mitigation and required stock is secured ahead of the planned planting year from contract or in-house nurseries.
Emergency response planning	A response plan guides call-out procedures, resources available and the clean-up response for extreme weather and earthquake.	Response plan not documented or not current.	Response plan is documented and includes call-out procedures, roles and responsibilities but lacks details to prioritize hazards and clean-up.	Response plan includes call-out procedure, roles and responsibilities, and criteria for prioritizing tree hazards and removing debris is in place.	A comprehensive response plan is in place and a response drill occurs annually.
Pest and Disease Management	An Integrated Pest Management (IPM) plan guides treatment responses to existing and potential pest, disease and invasive species threats to the urban forest.	No integrated pest management plan and no pest management.	No integrated pest management plan and reactive pest management.	An integrated pest management plan is in place and implemented.	A comprehensive pest management program is in place, with detection, communication, rapid response and IPM practiced.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Tracking of operational carbon footprints and urban forest carbon-cycle balance	Organization will actively track their operational carbon footprints and their community-wide urban forest carbon-cycle balance and work with community partners to minimize greenhouse gas emissions (GHG) emissions while maximizing carbon sequestration and avoided GHG emissions.	Basic CO2/GHG accounting not considered for urban forestry operations	Basic CO2/GHG accounting and carbon cycle assessment and climate action plan undertaken for urban forestry operations and for the entire community with general goals and objectives to minimize community emissions.	Basic CO2/GHG accounting and carbon cycle assessment and climate action plan undertaken with specific goals and objectives for urban forestry and formal policies in place to encourage use of trees and green infrastructure for carbon sequestration and energy conservation in buildings.	Basic CO2/GHG accounting and carbon cycle assessment and climate action plan undertaken for urban forestry operations and for the entire community with specific goals and objectives for urban forestry and formal policies in place to encourage use of trees and green infrastructure for carbon sequestration and energy conservation in buildings, and to maximize urban wood and woody biomass utilization.
Goal Area: Collaborate with diverse people and organizations in urban forest management					

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Awareness of the urban forest as a community resource	The urban forest is recognized as vital to the community's environmental, social, and economic well-being.	General ambivalence or negative attitudes about trees, which are perceived as neutral at best or as the source of problems. Actions harmful to trees may be taken deliberately.	Trees are widely acknowledged as providing environmental, social, and economic services but are not widely integrated in corporate strategies and policies.	Trees are widely acknowledged as providing environmental, social, and economic services and urban forest objectives are integrated into other corporate strategies and policies.	Urban forest recognized as vital to the community's environmental, social, and economic well-being. Wide-spread public and political support and advocacy for trees, resulting in strong policies and plans that advance the viability and sustainability of the entire urban forest.
Interdepartmental and municipal agency cooperation on urban forest strategy implementation	Ensure all relevant municipal departments and agencies cooperate to advance goals related to urban forest issues and opportunities.		Sustained funding to fully implement the urban forest strategy and maintain new assets as they are added to the inventory.	Municipal departments, affected agencies and urban forest managers recognize potential conflicts and reach out to each other on an informal but regular basis.	Formal interdepartmental working agreements or protocols for all projects that could impact municipal trees.
Cooperation with utilities on protection (and pruning) of City trees	All 3rd party utilities employ best management practices and cooperate with the City to advance goals and objectives related to urban forest issues and opportunities.	Utilities take actions impacting urban forest with no municipal coordination or consideration of the urban forest resource.	Utilities inconsistently employ best management practices, rarely recognizing potential municipal conflicts or reaching out to urban forest managers and vice versa.	Utilities employ best management practices, recognize potential municipal conflicts, and reach out to urban forest managers on an ad hoc basis – and vice versa.	Utilities employ best management practices, recognize potential municipal conflicts, and consistently reach out to urban forest managers and vice versa.

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Citizen involvement and neighbourhood action	Citizens and groups participate and collaborate at the neighbourhood level with the municipality and/or its partnering NGOs in urban forest management activities to advance municipality-wide plans	Little or no citizen involvement or neighborhood action.	Community groups are active and willing to partner in urban forest management, but involvement and opportunities are ad hoc.	Several active neighborhood groups engaged across the community, with actions coordinated or led by municipality and/or its partnering NGOs.	Proactive outreach and coordination efforts by the City and NGO partners result in widespread citizen involvement and collaboration among active neighbourhood groups engaged in urban forest management
Involvement of large private land and institutional land holders (e.g., schools)	Large private landholders to embrace and advance city-wide urban forest goals and objectives by implementing specific resource management plans.	Large private landholders are generally uninformed about urban forest issues and opportunities.	Landholders manage their tree resource but are not engaged in meeting municipality-wide urban forest goals.	Landholders develop comprehensive tree management plans (including funding strategies) that advance municipality-wide urban forest goals.	As described in "Good" rating, plus active community engagement and access to the property's forest resource.
Regional collaboration	There is cooperation and interaction on urban forest plans among neighbouring municipalities within the region, and/or within regional agencies.	Municipalities have no interaction with each other or the broader region for planning or coordination on urban forestry.	Some neighboring municipalities and regional agencies share similar policies and plans related to trees and urban forest.	Some urban forest planning and cooperation across municipalities and regional agencies.	Widespread regional cooperation resulting in development and implementation of regional urban forest strategy.
Recognition of Indigenous rights and perspectives	Organization recognizes Indigenous rights and perspectives	Organization acknowledges land rights, treaties in communications, plans, policies, and provides access to education and training for employees and volunteers.	Organization upholds Indigenous rights through meaningful engagement, access to decision making and a culturally safe place to share (in addition to previous).	Organization uses a mechanism to embrace and welcome and prioritize local Indigenous ways of knowledge into urban and community forest planning and management. Organization facilitates multiple knowledge systems related to biodiversity, conservation, and stewardship (in addition to previous)	Organization has active projects that increase access to land and water for healing, celebration, learning, and growth (in addition to previous).

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Goal Area: Monitor performance, adapt and innovate					
Knowledge of trees on private property	No information about privately owned trees.	Aerial, point-based or low-resolution assessment of tree canopy on private property, capturing broad extent.	Detailed Urban Tree Canopy analysis of the urban forest on private land, including extent and location, integrated into a municipality-wide GIS system	The tracks removal and planting on private land, and has a detailed Urban Tree Canopy analysis of the entire urban forest integrated into a municipality-wide GIS system.	Complete tree inventory that is GIS-based and includes detailed tree condition as well as risk ratings
Relative tree canopy cover	Achieve desired degree of tree cover, based on potential or according to goals set for entire municipality and for each neighborhood or land use.	The existing canopy cover for entire municipality is <50% of the desired canopy	The existing canopy is 50%-75% of desired	The existing canopy is >75%-100% of desired	The existing canopy is >75%-100% of desired at the individual neighborhood level as well as overall municipality
Species diversity	Establish a genetically diverse population across the municipality as well as at the neighborhood scale	Five or fewer species dominate the entire tree population across municipality	No single species represents more than 10% of the total tree population; no genus more than 20%, and no family more than 30%	No single species represents more than 5% of total tree population; no genus more than 10%; and no family more than 15%	At least as diverse as “Good” rating (5/10/15) municipality-wide - and at least as diverse as “fair” (10/20/30) at the neighborhood level
Age diversity (size class distribution)	Provide for ideal uneven age distribution of all “intensively” (or individually) managed trees – municipality-wide as well as at neighborhood level	Even-age distribution, or highly skewed toward a single age class (maturity stage) across entire population	Some uneven distribution, but most of the tree population falls into a single age class	Total tree population across municipality approaches an ideal age distribution of 40% juvenile, 30% semi-mature, 20% mature, and 10% senescent	Total population approaches that ideal distribution municipality-wide as well as at the neighborhood level
Species suitability	Establish a tree population suited to the urban environment and adapted to the overall region	Fewer than 50% of all trees are from species considered suitable for the area	>50%-75% of trees are from species suitable for the area	More than 75% of trees are suitable for the area	Virtually all trees are suitable for the area

Assessment Criteria	Objective	Indicators for Urban Forestry Performance			
		Poor	Fair	Good	Optimal
Urban forest research	Research is active and ongoing towards improving our understanding of the urban forest resource, the benefits it produces, and the impacts of planning, policy, design and management initiatives.	No urban forest research.	Isolated academic research occurs in the municipality's urban forest.	The municipality supports and has input on academic research occurring in its urban forest and knowledge transfer occurs.	The urban forest is a living laboratory - in collaboration with public, private, NGO and academic institutions - integrating research and innovation into managing urban forest health, distribution, and abundance.
Publicly owned tree species condition	Current and detailed understanding of condition and risk potential of all publicly owned trees that are managed intensively (or individually)	Condition of urban forest is unknown	Sample-based tree inventory indicating tree condition and risk level	Complete tree inventory that includes detailed tree condition ratings	Complete tree inventory that is GIS-based and includes detailed tree condition as well as risk ratings

City of Bellingham

