

Metro Councilors
& Metro Planning
600 NE Grand Avenue
Portland, OR 97232.

09 July 2018

From: Fran Warren (17830 SW Outlook Lane, Beaverton OR 97007)

Re: Written Testimony regarding Urban Growth Boundary Decision for 2018+

I am submitting this written testimony for your consideration as you deliberate whether there is enough land in greater Portland's urban area for 20 years of growth. You will be deciding what areas are best suited to handle future growth if needed. I am providing testimony on those area's proposals – focusing on Cooper Mountain, in particular.

Since my remarks are quite lengthy with documentation, I will have a 2-page letter here with the backup references and data as Attachments. I will also be addressing options on how we might meet the regional forecasted housing needs based on the four cities' proposals.

	Name of urban reserve	Gross acres	Buildable acres	Homes planned
Beaverton	Cooper Mountain	1,242	600	3,760
Hillsboro	Witch Hazel Village South	150	75	850
King City	Beef Bend South	528	400	3,300
Wilsonville	Advance Road (Frog Pond)	271	192	1,325

I am opposing Beaverton's proposal package "as is" at this time based on the following factors:

- 1) The South Cooper Mountain (SCM) High Growth Community is not fully meeting Metro's Regional Urban Growth Goals and Objectives as demonstrated thus far to current community residents
 - 2) Need to protect more Edge Habitat and Significant Natural Resources
 - 3) Serious Current Transportation restrictions cannot support identified additional residents
 - 4) Lack of viable Affordable Housing options in Cooper Mountain area
 - 5) Landslide, soil and other geological challenges especially for identified infrastructure connectivity
 - 6) Inadequate Transportation Infrastructure Funding: Beaverton is proposing 3700+ more homes within 10 years of the 6K homes just added along Scholls Ferry & 175th (not including North Cooper Mountain); and within 4 miles of the 9K homes in South Hillsboro with no North-South Corridor identified or funded.
- ❖ **Alternatives:** Utilize North Cooper Mountain First (no development activity posted since 2014); utilize the other 3 cities' proposals first (excellent transportation, protection of natural resources, and affordable housing in the immediate areas close to services and public transportation); select a single one of the Beaverton proposed neighborhoods which has the least impact on the above issues.

In my capacity as president of 175th Neighborhood Association, a grass-roots organization representing the residents of the 400 homes along 175th which have no other access to the outside world other than 175th. Our group focuses on transportation around Cooper Mountain. I have been approached in large community

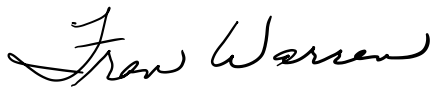
meetings by many of the other current owners/residents living in the current Urban Reserve Area of Cooper Mountain regarding the UGB expansion. They have been expressing their feelings regarding the expansion and I find that virtually all are adamantly opposed to Beaverton's proposal – and likely future annexation. Most residents have no intent of selling their properties for subdivision, so the land would remain idle – much like that of North Cooper Mountain (which was annexed at the same time as SCM but only now has its first permit for 23 sublots). There are a couple of landowners in the Urban Reserve area who purchased in the past decade who might wish to develop for speculative profit, but they definitely are neither the majority of resident taxpayers in number nor the majority in acreage.

I am also a volunteer member of Intertwine working on the Oak & Prairie Strategic Action Plan as well as the Connectivity and Corridors Strategic Action Plan so I have a reasonable background in conservation of the natural resource areas. And I am an active member in the Community-at-large as a leader in the Community Participation Organization. I believe this region-wide exposure provides me with some insights across Washington County as well as across the Portland-Vancouver region and a reasonably pragmatic perspective on needs for the greater public good in the Metro area.

I am hoping that the Metro Council will make a decision that is, indeed, for the greater public good. Please consider all of the attributes and challenges for our region in total and provide the managed growth opportunities that fully match the functional metrics which you have laid down in the past. All growth comes at some cost to everyone in the area, so let's invest wisely and make the decision for the long term as well as for the short term realization. I am a promoter of partnership with our governing agencies and in timely, accurate information dissemination both to the governing agencies and to my neighbors. I will always continue to do my best to assist in this way.

Please note that a large number of the residents have offered to provide signatures at a later date to support this position. These signatories represent a major portion of landowners of the suggested 600 acres of the buildable land in the Urban Reserve of Cooper Mountain.

Thank You,

A handwritten signature in cursive script that reads "Fran Warren". The signature is written in black ink and is positioned below the "Thank You," text.

Fran Warren

❖ Alternatives/Recommendation:

Since I could find no finite target numbers in the “DISCUSSION DRAFT of the 2018 GROWTH MANAGEMENT DECISION Urban Growth Report Published July 3, 2018,” it is hard to know what the alternatives truly are. I would say that there are certainly pro’s and con’s for any city’s expansion requests, but I do feel that the Beaverton request falls short of meeting the Metro Goals and Objectives for expansion for the public good of the region at this time.

- If Beaverton does decide that they need to expand the city limits in the future, I recommend that they look for more substantive ways to protect the true jewels of their community now. These irreplaceable jewels are the natural beauty of these Urban Reserves right within their communities. The current and future residents in this matured Urban Reserve area as it exists today are committed to being the stewards of these natural resources with no added financial burden to the region.
- I suggest that Beaverton look for more infill opportunities closer to public services and transportation with greater flexibility for achievable Affordable Housing.
- For infrastructure connectivity on Cooper Mountain, they need to revise their mapping so as not to plow right through the deepest tree and understory canopies in all of the state in order to put in a sewer line to drain off water that the trees are already retaining and filtering now.
- Until more developments have been realized in SCM and there is more experience as to the actual buildable lots (versus projections) as well as unplanned issues that arise from the topographical challenges of this terrain, we should wait to consider building 3000+ more homes in this hillside area.
- And finally, the City of Beaverton needs to wait a little longer until the funding and actual construction of key parts of the transportation infrastructure catches up with the construction and occupancy of the new homes in the area. Exhibit 4 demonstrates that Washington County is engaged in researching this significant transportation problems in the area but acknowledges that the solutions and funding are on the distant horizon

I believe this is a prime example of where our leadership can provide incentives for building upward in our region or for infill. Until we have at least some of the appropriate transportation and public services infrastructure in place, continuing to expand outward to absorb the additional people is not a strategy that will work indefinitely especially if the area is not planned to absorb them in a smart way. This suburban/rural area of Beaverton will not have this infrastructure in place for decades. Let’s truly plan for the future and look at creating welcoming family communities for all age groups and ethnicities in a very wide range of socio-economic situations. These new communities should be near rail line/mass transit routes which are expandable and where most of the absorption should be focused, not on the fringes where infrastructure is not able to support that kind of population pressure. We have a great resource of strategic planners in our communities who could partner with Metro to design and develop these communities of the future. There’s still time. Lets create communities which truly reflect all 6 of the goals and objectives of Metro and what Oregon really is: a healthy, clean, green, welcoming place with growth opportunities for all.

SUPPORTING INFORMATION/DATA :

1) The South Cooper Mountain (SCM) High Growth Community is currently not fully meeting Metro's Regional Urban Growth Goals and Objectives according to current community residents:

Metro's Urban Growth Report Dated 03 July 2018, Executive Summary, states:

To guide its decision-making, the Metro Council, on the advice of the Metro Policy Advisory Committee (MPAC), adopted six desired outcomes, characteristics of a successful region:

- a) People live, work and play in vibrant communities where their everyday needs are easily accessible.*
- b) Current and future residents benefit from the region's sustained economic competitiveness and prosperity.*
- c) People have safe and reliable transportation choices that enhance their quality of life.*
- d) The region is a leader in minimizing contributions to global warming.*
- e) Current and future generations enjoy clean air, clean water and healthy ecosystems.*
- f) The benefits and burdens of growth and change are distributed equitably.*

Note: There is some confusion in the community about just how much the SCM Concept and Community Plans actually cover. When I speak to community stakeholders, they believe that those plans cover only SCM – but when I hear the City of Beaverton speak about these 2 plans they now infer that the Concept and Community Plans actually take the whole Cooper Mountain area into consideration.

If we were to project the future projects based on the City of Beaverton's demonstrated approvals for South Cooper Mountain development:

- a)* South Cooper Mountain is being constructed as an outlying area (not downtown), more like an urban sprawl, where all residents are dependent upon their automobiles to get to everyday services such as work, doctors' offices, family grocery shopping and even gasoline and automobile services. The Urban Reserves are at least 1-mile away from these daily services and the routes are via 12-24 degree grades – extremely difficult to walk or bike with packages or children in hand.
- b)* The benefits of change are not distributed equally as the current residents of mid-Cooper Mountain have been committed to being stewards of the environment in preserving these natural resources for the benefit of the greater community as well as for themselves. One community leader from Reedville stated, "I wish they'd make the Urban Reserves into a big park for the whole region."
- c)* There is inadequate nearby public transportation. Current roads are inadequate and many commuters are known to be cutting through neighborhood streets to avoid traffic jams.
- d)* The design and location of this expanding suburban area makes the residents heavily dependent on their automobiles as there is a lack of daily services nearby. This, along with logging of the mature trees in the Urban Reserves, impacts clean air and contributes to global warming.
- e)* Reducing the natural resources that are so abundant in the Urban Reserves on Cooper Mountain will further impact the air in the region as well as water and healthy ecosystems as will be demonstrated later in this testimony.
- f)* There is no infrastructure for affordable housing as will be demonstrated later.

2) Need to protect more Edge Habitat and Significant Natural Resources (relates to Metro Goals & Objectives above):

The City of Beaverton has not yet demonstrated that they have committed to the goal: “Current and future generations enjoy clean air, clean water and healthy ecosystems.” We see conflict as the SCM projects progress with City approvals reducing wetlands and open spaces. Now with the new planned Urban Reserves neighborhoods eliminating some of the deepest tree canopy in the Metro area, there is more vagueness in this commitment.

- The wording in the SCM documents is too ambiguous with words such as “Beaverton could do these things” or “the homeowners might do the following,” but there is no Ordinance or documentation to enforce many of the perceived goals as commitments.
- Existing trees are being removed in favor of the convenience and cost-reduction of development. Guidelines and Ordinances for tree removal apply to homeowners but are being circumvented with Conditions of Approval for developers. Staff recommendations have consistently been in favor of the applicants for the removal of trees. New tree plantings do not come close to the benefits of conserving mature tree canopy, tree cavities and understory shrubs as will be demonstrated later in this paper.
- Preservation of wetlands has also come as a secondary priority such as in the application by the Beaverton School District for Mountainside High School. Wetlands are being reduced and compromised with Conditions of Approval. The Ridge, another subdivision being considered in SCM, is set to be built across a documented prime wetland in SCM, with conditions – but still, it will be compromising a valuable natural resource essential to the ecosystem.
- Light and sound pollution caused by the high school design of flagship fields raised on mounds due to water tables have created hardship for existing residents as well as wildlife. Example: when Oregon State University utilized the field for Spring practice. Imagine a university band playing very loudly in the middle of a residential neighborhood when this was never a consideration during permit hearings. The existing residents were impacted significantly.
- When 175th was totally revamped along a ½ mile area at the high school location, there was no provision for a wildlife crossing. It was called to the attention of Beaverton Planning and to Metro that this section of the road was demonstrated to bisect a known wildlife corridor and a request was made to fund a wildlife crossing. There was no support from the City of Beaverton for this request. The revamping would easily have lent itself to a wildlife crossing at that time as the road was torn up completely for major storm water drainage and sewer lines, but this is no longer financially feasible.
- South Cooper Mountain Heights is the first, and likely the largest, of the developments in South Cooper Mountain. Open Spaces have been approved for reduction in each of the first four phases and then deferred until the final phase, at which time it will be left to the homeowners to determine if they will accept responsibility to maintain this area. Now Phase five is being reduced due to construction restraints.
- As homes are being built in SCM and the land is being totally bulldozed and graded, and fences to be put up, there is zero opportunity for connectivity for seeds, large or small wildlife. There are no corridors and the wildlife is now trapped up in mid-Cooper Mountain. We have bobcats, deer, a multitude of coyotes, and unbalanced wildlife already. The screaming hawks and bald eagles were pitiful to hear when their nesting trees were removed to build the artificial turf fields and storm basins for the new high school. Some of the wildlife from the wetlands below have moved up to The Creeks and to the “edge habitat” which supports Cooper Mountain Nature Park.

➤ WHY WE NEED TO DO MORE TO PROTECT EDGE HABITAT AND SIGNIFICANT NATURAL RESOURCES (SNR) - HEAVY NATURAL TREE CANOPY – IN AREAS DESIGNATED FOR 10-15 HOMES/ACRE:

As I have mentioned above, SCM is already encroaching upon the significant natural resources on Cooper Mountain but the Urban Reserves area has even greater impact.

Beaverton has acknowledged that there are 1232 acres in the Urban Reserves with only 600 developable acres due to SNR and slopes. But I also maintain that at least another 100+ should not be made available for development – but rather considered as part of the protected, “Creeks” neighborhood. To this end, Beaverton Planning has unfortunately miscategorized the characteristics of the Urban Reserves on Cooper Mountain. **EXHIBIT 1** shows the proposed neighborhoods in the Urban Reserve area. **EXHIBIT 2** is an analysis of a section within the Urban Reserve area which has, likely, one of the heaviest tree canopies in the Metro region. I used a US Forest Service tool, i-Tree, to measure this canopy – note this is the canopy and not the actual number of trees. The section even includes 175th paved roadway – and some of the ravine by “the kink” in the road (which Beaverton is anxious to straighten – much against the wishes of the 400 residents who live along 175th). The 35-acre section identified as “Outlook Woods+North Cooper Mountain Ln” = 92% tree canopy; even if we include the area including 175th roadway and the ravine known as “the kink,” the tree canopy cover is approximately 88%.

- *One mature tree absorbs carbon dioxide at a rate of 48 pounds per year.*
- *In one year, an acre of forest can absorb twice the CO₂ produced by the average car's annual mileage.*
- *Deforestation accounts for up to 15 percent of global emissions of heat-trapping gases.*
- *Two mature trees provide enough oxygen for one person to breathe over the course of a year.*
- *Forests are the largest forms of carbon storage, or sinks, in the U.S.*
- *In one day, one large tree can absorb up to 100 gallons of water and release it into the air, cooling the surrounding area.*
- *Forests improve public health by keeping pollutants out of our lungs by trapping and removing dust, ash, pollen and smoke.*

<https://www.americanforests.org/explore-forests/forest-facts/>

Outlook Woods is only one of several areas in the Urban Reserves which have Upland Habitat and Riparian Habitat as well as heavy tree canopies – and are not designated as protected within THE CREEKS neighborhood. There are areas which have natural ponds on the properties and other areas which have open meadows and yet others with different forms of natural resources, all of which form a healthy environment for the thousands of residents in South Cooper Mountain. The students of Mountainside High School can view the natural settings to the north of the school and, if left intact, the students will have the opportunity to see wildlife nearby. At this point, the homes at the edge of the SCM boundary are seeing the larger birds of prey demonstrating extreme anxiety. A turkey vulture pair's nest has been removed since last year and they cannot find it for breeding. Same is true for a pair of bald eagles that have lived in in the Alvord Ln forest. These are migratory birds for this area but considered important to the ecosystems of Oregon. They may not be in the riparian counts depending on time of year, etc.

Facts about trees from Metro:

- Value of Portland's public trees: **\$2.3 billion**
- Financial benefit for every \$1 invested in trees in Portland: **\$3.80**
- Amount trees add to average home sale price: **\$7,020**
- Degrees that trees can drop a building temperature in summer: **20**
- Oxygen the average tree produces in a year: **260 pounds** (roughly half of what a person needs)
- Average rainfall a mature tree's leaves can catch in a year: **760 gallons**

- Nesting birds a mature oak can host: **10 to 15 pairs**
- Average life span of an urban tree: **8 years**
- Age when a tree reaches its most productive stage of carbon storage: **10 years**

Sources: [Metro](#) regional government; Portland Parks & Recreation [October 2007 study](#), "Portland's urban forest canopy"; [Friends of Trees](#); [USDA Forest Service](#); [International Society of Arboriculture](#)

- According to the WASHINGTON COUNTY JOINT CPO TREE GROUP Review - In 1991 the Beaverton Board of Design Review defined:

1. An individual tree shall be considered significant if the Board finds:

- (a) *The tree has a distinctive size, shape, or location that warrants a significant status; or*
- (b) *The tree possesses exceptional beauty which warrants a significant status; or*
- (c) *The tree is significant due to a functional or aesthetic relationship to a natural resource.*

2. A grove as defined in Section 90 shall be considered significant if the Board finds that:

- (a) *The grove is relatively mature and evenly aged; and*
- (b) *The grove has a purity of species composition or is of a rare or unusual nature; and*
- (c) *The grove is in a healthy growing condition; or*
- (d) *The grove has a crucial functional and/or aesthetic relationship to a natural resource*

Yet, the “edge habitat” of Outlook Woods and other major stands of trees within the Urban Reserves do not have this protection in the proposal for the UGB expansion. Many of these heavy tree canopies are within areas slated for development in neighborhoods of 10-15 homes/acre which would break down these contiguous groves.

- WATER RETENTION not WATER REDIRECTION –

I will address this later under section 5) regarding soil and erosion. I did walk the woods with Brian Martin, the Beaverton Planner and Project Manager of the Urban Growth Boundary proposal, who gave up his quality time to view the situation first-hand. Our walk was during summertime, so it was difficult to demonstrate the underground water creeks and streams (which are not documented on the maps). One of my neighbors had removed some trees and now they had to install a sump pump due to flooding and another neighbor has a major channel for the flow of water to allow for the winter collection for storm water. Anywhere that anyone has removed any trees, we’ve had to make allowances for water redirection of some sort until the understory catches up. Certainly, pavement and new trees cannot make up for this. I have included in **EXHIBIT 3** on page 4, photos of some plants which typically grow only along waterfalls (and they only bloom here during heavy rainfalls) – and these appear during heavy winters here on Cooper Mountain in the Urban Reserves (alongside my driveway). Note: some of the trees in Outlook Woods are cedars which absorb more water than average.

- “More than half of U.S. drinking water originates in forests. One large tree can capture and filter up to **36,500 gallons** of water per year. On average, a mature tree can absorb 36 percent of the rainfall it comes in contact with. Forests capture rain in the canopy and on the forest floor, reducing stormwater runoff and flooding.” [Forest Facts - American Forests](http://www.americanforests.org/explore-forests/forest-facts/)
www.americanforests.org/explore-forests/forest-facts/

- PROTECT/POPULATE METRO’S COOPER MOUNTAIN NATURE PARK –

“Edge Habitat” is essential to protect nature parks – and not just the 50 feet of protection on each side, but an area for wildlife and plants to rest and to propagate. Outlook Woods, a 25-acre section of the tree canopy identified in **EXHIBIT 2** is such an “edge habitat.” I have lived in this area for 35+ years and have been documenting the wildlife corridors and connectivity and

making available to Metro. It is very clear from the photos, scat and animal trails that wildlife travels from Outlook Woods northwest to the Cooper Mountain Nature Park and then back again (they used to travel down to the National Refuge – but too many have been killed by autos since the construction). **EXHIBIT 3** shows deer/stags and does with their fawns resting on our grassy area under the trees, bobcat, red-legged frog, and a number of bird families that use the tree cavities.

Note: in Florida, I visited a number of regional parks where they built housing developments up to 100 feet of the edge of the park and the endangered bird life was decimated due to feral cats, disease from housing, etc. The Florida Planners told me that if they had to do it over again, they would have insisted on a far greater “edge habitat” of protection to the parks.

➤ **“VOLUNTEER” OAKS -**

Preserving Oregon White Oaks is one of the justifications for the Cooper Mountain Nature Park and now we have 10 “volunteer” Oregon White Oaks appearing on the vacant meadow just north of Outlook Lane. This is likely because of an “oak release” I did in our woods and with help from some of the 6 different species of woodpeckers we have in the edge habitat helping to propagate these seeds. There are only 1% of these disease-resistant, fire-resistant, long-living trees left in our state – and now we have these Oregon White Oaks popping up voluntarily because of the natural state of the Urban Reserve. This particular meadow is also included in East Hills neighborhood and happens to be part of the corridor for the wildlife crossing to the Nature Park and an excellent hunting ground for the raptors in the area – Cooper Hawks, etc.

➤ **OTHER CITIES’ DEMONSTRATED COMMITMENTS –**

Wilsonville has demonstrated commitment to preserving trees, especially oaks as they have done by allocating special taxation (or tax credits) to developers for this purpose. Tigard has a tree credit to developers for preservation of existing trees (rather than clear-cutting and replanting with seedlings).

3) Serious Current Transportation restrictions cannot support identified additional residents

- CURRENT TRAFFIC IS ALREADY BEYOND CAPACITY ON MANY ROADS going over Cooper Mountain even before the High Growth communities and new high school have been built (see **EXHIBIT 4**) – many of these issues may be resolved EVENTUALLY at full build-out, but the traffic resolution will take a period of years, uses MSTIP funding already and is dependent upon the developer completing all phases of the SCM development as planned. Until that time, the residents will be subjected to inadequate roadways and public transportation.
- Current traffic on 175th is a major deterrent to sales of current properties. Real estate agents have advised sellers to drop asking prices by \$30K+ strictly due to negative comments from potential buyers about traffic.
- A VERY KEY TRAFFIC BOTTLENECK IS 175TH AND KEMMER which is currently being reconstructed as a roundabout. But this roundabout has no guarantees of resolving the mobility to meet Oregon standards – and it is constrained, it cannot be enlarged – no new lanes can be added if the mobility does not meet Oregon state standards.
- 175TH HAS TRADITIONALLY BEEN UNSAFE DURING INCLEMENT WEATHER conditions and, fortunately, Washington County has now identified this as a SNOW ZONE. This past winter, we have had far fewer pile-ups and abandoned vehicles. Grabhorn, the other North-South commuter road in

the vicinity of the High Growth Communities of Cooper Mountain is also a winding, steep-sloped road, so there are no safe, flat, all-weather roads in the near vicinity appropriate for cars, buses, bicycles, freight, etc.

- During the SCM Concept and Community Planning approval hearings, members of the Tigard Planning Department had commented on the risks to students walking across the 175th and Scholls Ferry intersection as this is a very wide and very heavily used intersection. Beaverton Planning did not make allowances for this concern. Now a TVF&R Lieutenant is speaking up at public meetings as he has the same concerns on this pedestrian issue and raising the question as to whether a pedestrian skyway is in order to protect the students (especially those who might be distracted and not aware of quiet electric automobiles).

4) Lack of viable Affordable Housing options in Cooper Mountain area:

- While Beaverton has done a great job of developing their downtown area(s) and demonstrating an excellent inviting all-inclusive community, the outlying areas are not lending themselves to the Affordable Housing opportunities.
- The Cooper Mountain area is not conducive to Affordable Housing due to its lack of proximity to public transportation and to public services. The SCM complex has no office spaces, no doctors' offices, no mental health clinics, no shopping and public transportation is difficult at best. These problems are worse as you go up Cooper Mountain – it is steeper and more removed.
- The housing prices in the SCM community may have a viable range, but the Urban Reserves homesites are definitely of the upper price range. Tax Precinct 938 on Cooper Mountain is one of the highest taxpaying precincts in the state. Many of these residents could live in other states, but they chose Cooper Mountain Urban Reserve area for the physical and mental health advantages afforded by the natural surroundings. We would not want to drive them out of this area by hemming them in with dense housing on all four sides manifested by tree clear-cut and elimination of those natural benefits. Kemmer Ridge Estates, currently in development at the 175th and Kemmer intersection is base-priced at \$550-\$650K on R-6 zoned lots.
- Many of the homes in the Urban Reserve area are currently on minimum 1-acre lots and in the \$1 million price range. Mid-Cooper Mountain, the Urban Reserves, has no public transportation now and with it being in a SNOW ZONE, its not a practical route during winter either. Residents who have any disabilities would have challenges with the remoteness as well as the terrain in the Urban Reserve areas.
- Virtually all residents in the Urban Reserve area on Cooper Mountain find it a necessity to have at least one all-wheel drive vehicle so they can get out of their homes during the inclement weather.
- **EACH OF THE OTHER 3 CITIES HAS DEMONSTRATED OPTIONS FOR AFFORDABLE HOUSING WITHIN THEIR UGB option areas, eg Villabois.**

5) Landslide, soil and other geological challenges especially for identified infrastructure connectivity

- SEE **EXHIBIT 5** FOR THE GEOLOGICAL MAPS showing the existing landslide terrain. East Hills has the greatest landslide area, but on the map, you can see a small scarp at the edge of Outlook Woods where the land has slipped due to landslide over time. The tree canopy and understory have saved the erosion.

- One of Beaverton's key arguments for the integration of the Urban Reserves into the City boundaries is the connectivity of infrastructure (namely sewers, etc). Some of their plans show these connections going right through the deepest tree canopy and understory. These areas are preventing the erosion downhill so the net costs and damages would be far greater than the benefits as there are other options and paths.
- **THE THREE OTHER CITIES' OPTIONS HAVE SIMPLER FLATTER LANDS WITH EASILY DRILLABLE SOILS FOR THE INFRASTRUCTURE RATHER THAN THE DIFFICULT SUBSOILS OF COOPER MOUNTAIN.**

6) Inadequate Transportation Infrastructure Funding:

- Beaverton is proposing 3700+ more homes within 10 years of the 6K homes just added along Scholls Ferry & 175th (not including North Cooper Mountain); and within 4 miles of the 9K homes in South Hillsboro with no North-South Corridor identified or funded.
- At the MTAC session of 20 June 2018, the City of Beaverton presented their allotted 25-minute Urban expansion presentation as did the other 3 cities. Of the 25 minutes, Anna Slatinsky focused more than 15 minutes on the benefits of the downtown area and the inclusiveness of the Beaverton community, which is a great accomplishment – no doubt. But she spent no more than 40 seconds on the transportation issues and plans for funding. The only comment made by the presenter was that there will be plans for shared funding. This was a surprising superficial treatment of the transportation issue considering the focus area of the audience.
- As I mentioned earlier, I am committed to being a partner in the region's transportation solutions in whatever way I can. Our group is also committed to being a constructive partner and Washington County calls upon us to assist whenever appropriate. The following excerpt is from our letter of support to request funding for Washington County LUT's Cooper Mountain Transportation Study as invited by LUT. This letter pretty much tells the story here:

"175TH Neighborhood Association was formed due to the strains on 175th Ave, often designated as a "Country Arterial." This traffic strain existed even before the High Growth Communities of South Cooper Mountain, River Terrace and South Hillsboro were built. At this moment, there is neither funding for planning nor for constructing alternate routes for the additional cars which accommodate these new bedroom communities that are removed from public transportation and other services. As of 2014 there were 400 homes on Cooper Mountain which are completely dependent upon 175th as their sole access to the outside world. With the additional traffic from all the new homes and the novice drivers from the new High School located to the south side of Cooper Mountain, this road is becoming even more of a safety risk.

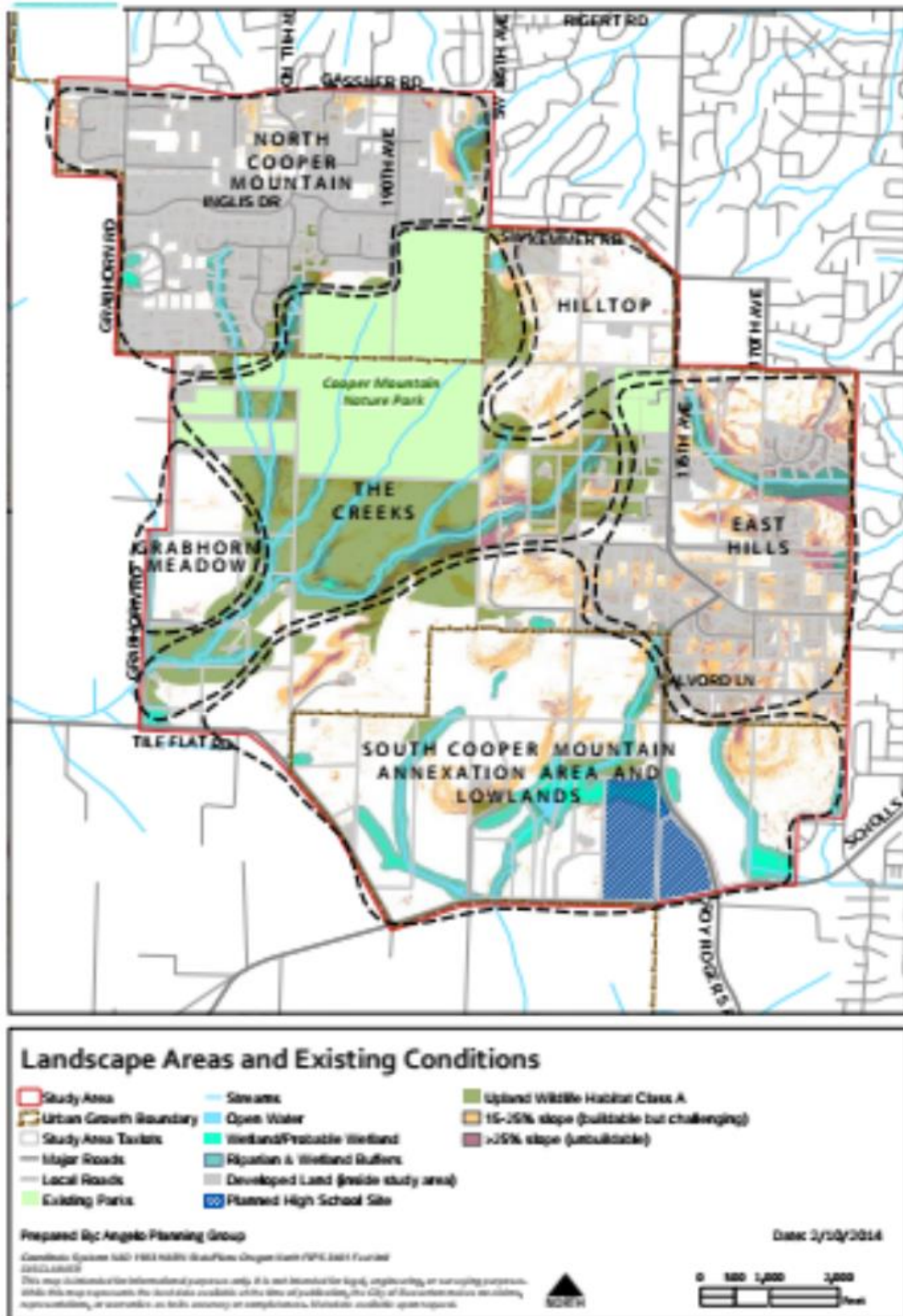
175th Neighborhood Association strongly supports Washington County Planning's application for a Transportation & Growth Management grant to study and analyze the traffic impacts of the High Growth Communities and surrounding areas and look for transportation options. This area needs this study done as soon as possible as some of these new homes are already being occupied.

As of 2014, 175th traffic was estimated at 6K cars/day in 2008; 8.5K cars/day in 2013 and 17/18K cars/day in 2035. 2017 actual counts were 10.5K cars/day and 2035 projections are 20-25K cars/day. In the meantime, due to the steep grade (12-14%), the altitude, number of inclement weather accidents and abandoned vehicles, Washington County LUT has designated 175th as a SNOW ZONE. This road also has blind hills rising which hide congestion when the traffic backs up. We have several avid bicyclists in our group and their clubs will not attempt to go over Cooper Mountain as the steep grades make it virtually impossible. Less than 1% of bicyclists can actually make this grade. The Kemmer intersection was deemed at "below acceptable throughput times" in Traffic Impact Analyses and a roundabout is being constructed there, but it is unclear if this improved throughput will be enough to bring the rate up to Oregon State standards once the area is fully built out. What is clear is that this region needs an alternate safer, flatter, all-weather, North-South corridor to carry cars, trucks (freight as well as lightweight), buses, bicycles, etc. It is for these many reasons that we

enthusiastically support the study for an alternative North-South transportation Corridor as 175th cannot feasibly be modified to accommodate all of this area's current, let alone future, needs."

EXHIBITS 1-5 FOLLOW

Figure 2 - Existing Conditions Map



MEASURING TREE CANOPY

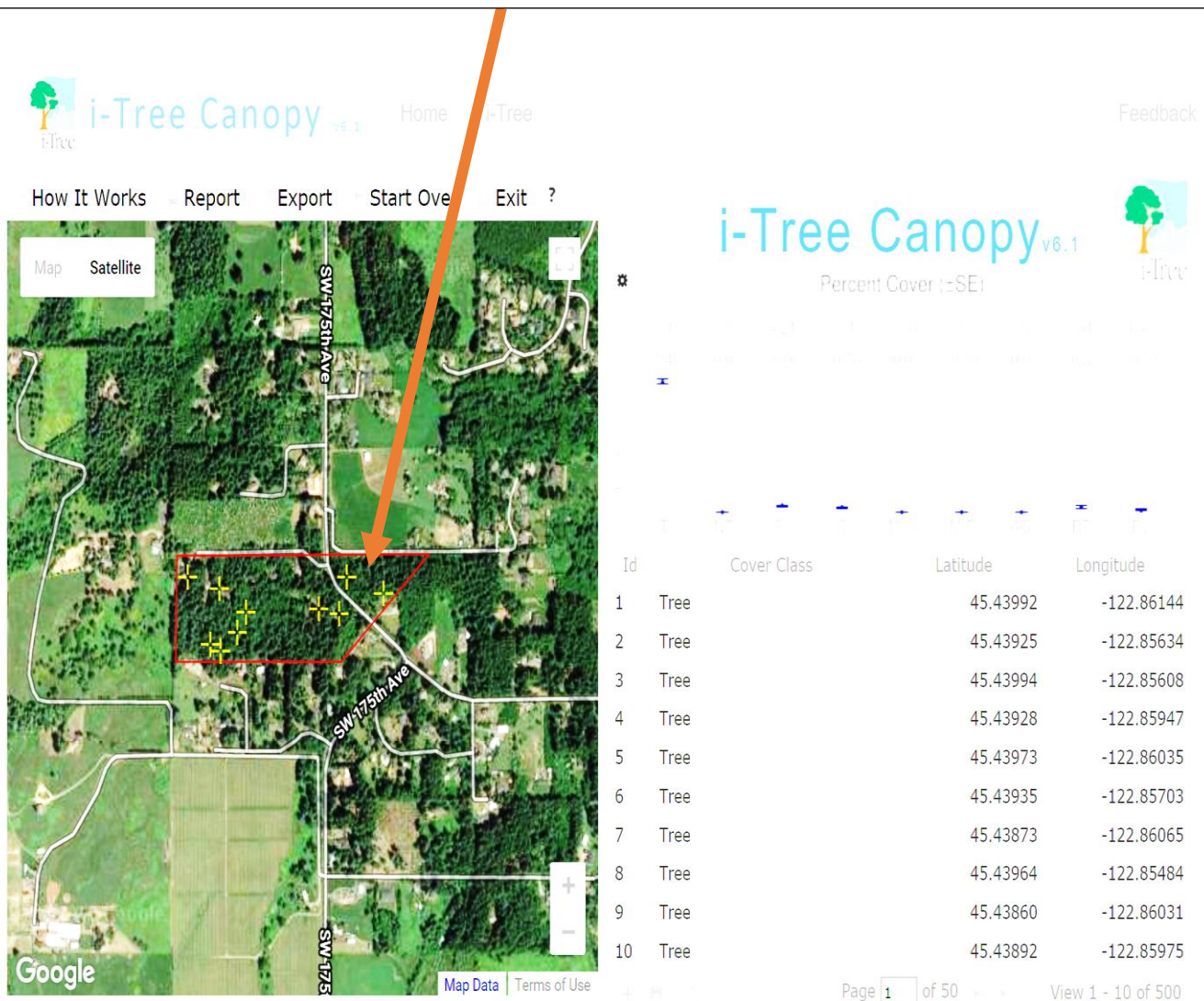
**AREA IDENTIFIED AS PART OF “EAST HILLS” LAND USE – (LOW/MODERATE DENSITY)
AND NOT AS PART OF “THE CREEKS”
 USING US FOREST SERVICE PRODUCT, *i-tool* AND 500 DATA POINTS**

A Cooperative Initiative Between:



Outlook Ln + Cooper Mtn Ln + Ravine at “the kink” – all currently designated on Beaverton Plan as part of EAST HILLS (10-15 homes/acre).

Note: this page only reflects 10 of the 500 data points used in the analysis on the following page.



Remember, the more points you survey, the lower your Standard Error, and the more precise your sampling will be. More points surveyed provide for a better estimation of Land Cover across your study area.

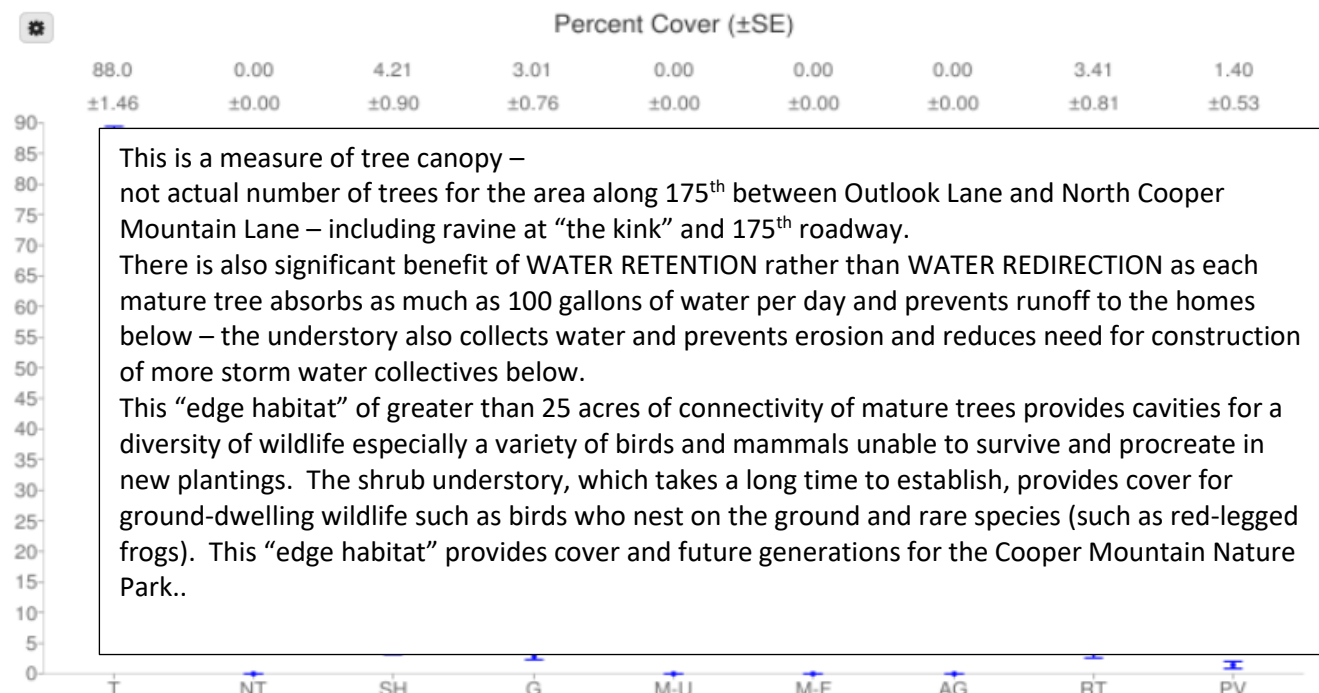
Save Your Data

Save Data Save Early. Save Often. Don't lose your project data!

i-Tree Canopy v6.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 6/30/18



Cover Class	Description	Abbr.	Points	% Cover
Tree	Tree, non-shrub	T	439	88.0 ±1.46
Non-Tree	All other surfaces	NT	0	0.00 ±0.00
Shrub -U	Understory	SH	21	4.21 ±0.90
Garden	Planted Gardens	G	15	3.01 ±0.76
Meadow - U	Meadow - Undeveloped	M-U	0	0.00 ±0.00
Meadow - Farmed	Meadow used for farm animals, etc	M-F	0	0.00 ±0.00
Ag Buildings	Barns, other Agricultural buildings	AG	0	0.00 ±0.00
Rooftops	Houses - other rooftops	RT	17	3.41 ±0.81
Paved	Paved, Driveways	PV	7	1.40 ±0.53

Tree Benefit Estimates

Abbr.	Benefit Description	Value (USD)	±SE	Amount	±SE
CO	Carbon Monoxide removed annually	0.47 USD	±0.01	23.66 lb	±0.39
NO2	Nitrogen Dioxide removed annually	0.47 USD	±0.01	167.95 lb	±2.78
O3	Ozone removed annually	28.17 USD	±0.47	1,230.58 lb	±20.37
PM2.5	Particulate Matter less than 2.5 microns removed annually	134.86 USD	±2.23	78.15 lb	±1.29
SO2	Sulfur Dioxide removed annually	0.05 USD	±0.00	52.43 lb	±0.87
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	26.15 USD	±0.43	334.18 lb	±5.53
CO2seq	Carbon Dioxide sequestered annually in trees	3,536.89 USD	±58.53	100.32 T	±1.66
CO2stor	Carbon Dioxide stored in trees (Note: this benefit is not an annual rate)	112,391.21 USD	±1,860.05	3,187.92 T	±52.76

i-Tree Canopy Annual Tree Benefit Estimates based on these values in lbs/acre/yr and USD/T/yr: CO 0.933 @ 40.29 USD | NO2 6.622 @ 5.67 USD | O3 48.521 @ 45.94 USD | PM2.5 3.082 @ 3,463.40 USD | SO2 2.067 @ 1.85 USD | PM10* 13.177 @ 157.09 USD | CO2seq 7,911.271 @ 35.38 USD | CO2stor is a total biomass amount of 251,395.359 @ 35.38 USD
Note: Currency is in USD
Note: Standard errors of removal amounts and benefits were calculated based on standard errors of sampled and classified points.

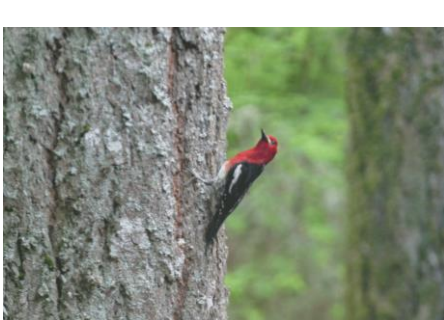
2018 PHOTOS FROM JUST ONE HOME



The deer come to rest in Outlook Woods away from the hustle and bustle of Cooper Mountain Nature Park and other activities. They return to the park through their natural wildlife corridors.



Hairy woodpecker parent feeding juvenile. These birds need mature trees and cavities for nesting. There are also many downy woodpecker families in outlook woods.



Red-breasted sapsuckers are another species of woodpecker. California quail are ground-dwellers who have returned to the woods since their habitat has been disturbed south in SCM.



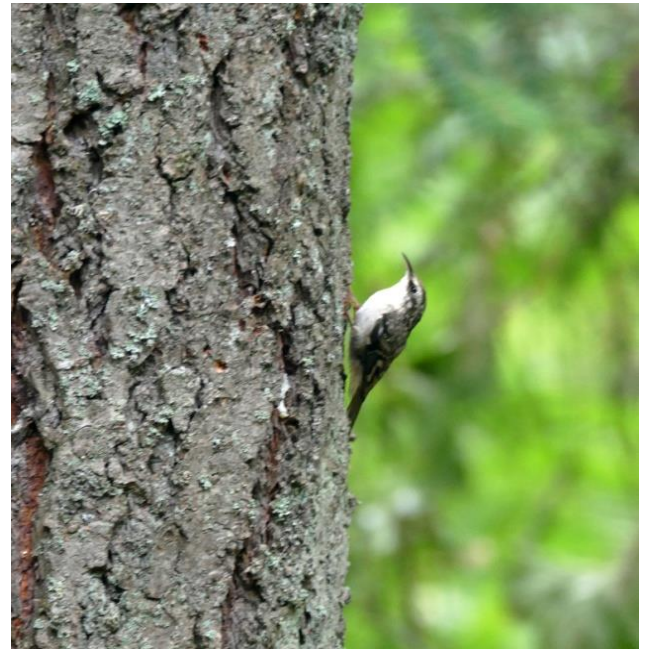
A screech owl came to visit us and take advantage of the heat generated by a lamp during a particularly cold winter night.



This photo is deceptive – this 40+lb bobcat has been displaced and is showing up with mate quite frequently in the Urban Reserves during 2018.



We have many young animals born in the cover of the woods.



Red-breasted sapsuckers, Northern Flickers, Downy & Hairy Woodpeckers, Oregon Juncos, Song sparrows, Annas and Rufus hummingbirds, Steller's Jays and Scrub Jays plus different kinds of Chickadees including the White breasted Nuthatch (of Conservation Concern) are regular visitors – all seeking those tree cavities in the older tree stands here. We have several kinds of owls: Great Horned, Screech and Barred all hunt our woods. Its good to see the indigenous Oregon Gray squirrel instead of all those invasive fox squirrels but the indigenous Douglas Squirrels chase all the larger animals with tenacity. On cold nights, we even see native Night Flying Squirrels on rare occasions. Other raptors that hunt and breed here are Cooper's hawks and Red-tail hawks. But we also frequently see seasonal birds such as Towhees, Pileated Woodpeckers, Goldfinches, Grosbeaks and Thrushes. This year, we just started seeing Brown Creepers as shown above right too – escaping the drought of California, I suspect. Our population has definitely changed since the SCM clear-cut on the lower portion of the mountain with a reduction in a variety of species – hopefully the displaced birds will find solace here. The bobcat is a rarer sighting but coyotes are more frequent and we have also observed a cougar on rare occasion. The native quail are reappearing.

SOME GROUND VIEWS OF THE TREES IN OUTLOOK WOODS



**“VOLUNTEER” OAK IN VACANT MEADOW
SPROUTED FROM ACORN DROPPED BY BIRD.
*No additional water, no fertilizing required!***



**ALDERS, MADRONES, OAKS AND CEDARS
LIVING AMONGST 80ft FIRS**

**THERE ARE ALSO “VOLUNTEER” CEDARS IN THIS
FORESTED AREA AS WELL.**



**TO THE NORTH OF THE MEADOW IS
ANOTHER CONTIGUOUS FOREST AS WELL –
THIS IS PART OF THE WILDLIFE CORRIDOR TO
THE NATURE PARK.**

ALL THE PHOTOS IN EXHIBIT 3 WERE TAKEN FROM THE AREA AROUND MY HOME AT 17830 SW OUTLOOK LANE – IN OUTLOOK WOODS. A TYPICAL LOT ~3 ACRES AMONGST THE 25-35 ACRES.

EXHIBIT 3 – WILDLIFE OUTLOOK
PAGE 4 OF 4



These are native Oregon Trout Lilies which just popped up in 2013 voluntarily in our forest – due to the exceptionally high water table



A Great Horned Owl Chick just days old – later, he learned to hunt from the big firs and cedars in our forest.

AND ALL OF EXHIBIT 3 IS REPRESENTATIVE OF ONE LOT IN AN AREA THAT THE CITY OF BEAVERTON WOULD DESIGNATE AS EAST HILLS NEIGHBORHOOD TO BE DEVELOPED AT 10-15 HOMES PER ACRE – NOT TO BE PROTECTED LIKE “THE CREEKS” OR A SIGNIFICANT NATURAL RESOURCE AREA.

4) WASHINGTON COUNTY TRANSPORTATION ASSESSMENTS

- WASHINGTON COUNTY TRANSPORTATION FUTURES STUDY – excerpt
<http://www.wctransportationfutures.org/>

Final Report



Washington County
Transportation Futures Study
Exploring options • Informing choices



January 2017

➤ Taking Stock: Past and Current Conditions

Figure 3-2: Washington County Population and Employment

Pg 3-3



Washington County's population profile has changed significantly over the past several decades. The county as a whole has become much more ethnically diverse (see Figure 3-3). As the economy has changed, incomes have led to greater disparity between low-income and affluent people, consistent with national trends. This fact, combined with an overall aging population, has **increased demand for affordable housing and accessible transportation options.**

➤ **3.2.4 Where We Work (Pp 3-4, 3-5)**
- **WASHINGTON COUNTY TRANSPORTATION FUTURES STUDY (excerpt continued)**

Washington County is home to over 232,000 jobs, many of which can be found in high concentration employment areas within urban centers and corridors such as the Tualatin-Sherwood Corridor, Tanasbourne-AmberGlen, Hillsboro North, and Washington Square areas. In rural Washington County, agriculture, forestry, and tourism contribute significantly to the regional and state economy. Safe, reliable, and efficient freight connectors for the transport of goods are a key component of the county's economic growth plan. In addition, for Washington County employers, having **safe and efficient access to the regional labor market is just as important as moving goods or services.**

.....

Today there is substantially more daily travel demand. East-west travel demand between Portland/Clark County and Washington County doubled, while north-south travel demand, especially between areas north of US 26 and south to Sherwood, Tualatin, and into Clackamas County grew by over 150 percent. In some locations **Washington County's transportation system has been pushed to its limits, and conditions are anticipated to worsen.** Older arterial streets and highways have limited space to add or expand facility connections for safer pedestrian and bicycle travel. Increasing congestion leads to more traffic through existing neighborhoods, putting cars and trucks on rural roads that were not designed to carry these levels of traffic, and the resulting cut-through traffic creates safety problems and degrades quality of life in the community.

Traffic delay has direct negative impacts on the ability to travel, produce goods, services and jobs with greater fuel consumption, higher vehicle emissions and higher delivery costs.

➤ **Washington County Land Use & Transportation Long Range Planning – Cooper Mountain Study**

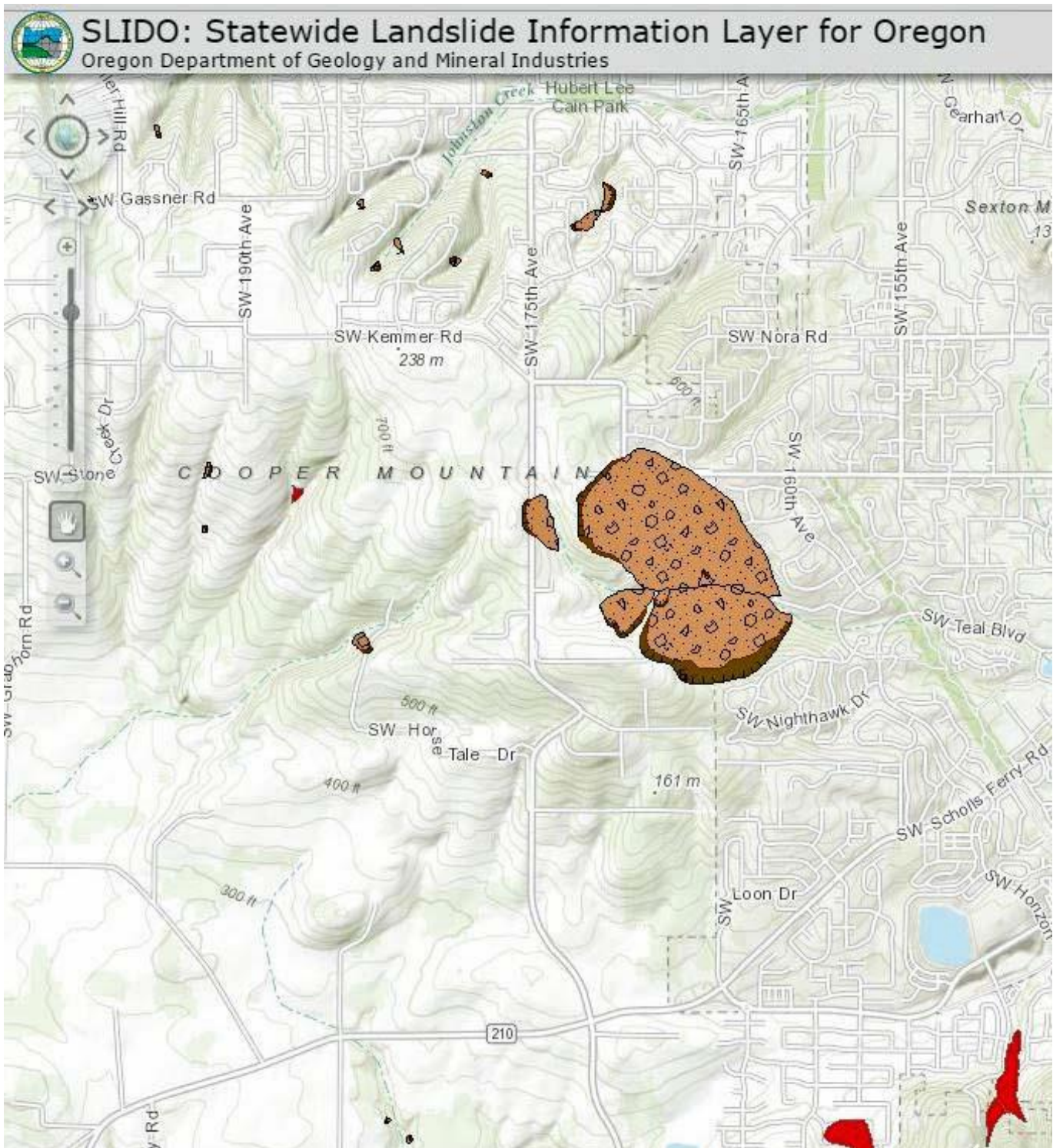
<https://www.co.washington.or.us/LUT/Divisions/LongRangePlanning/PlanningPrograms/TransportationPlanning/cmts.cfm>

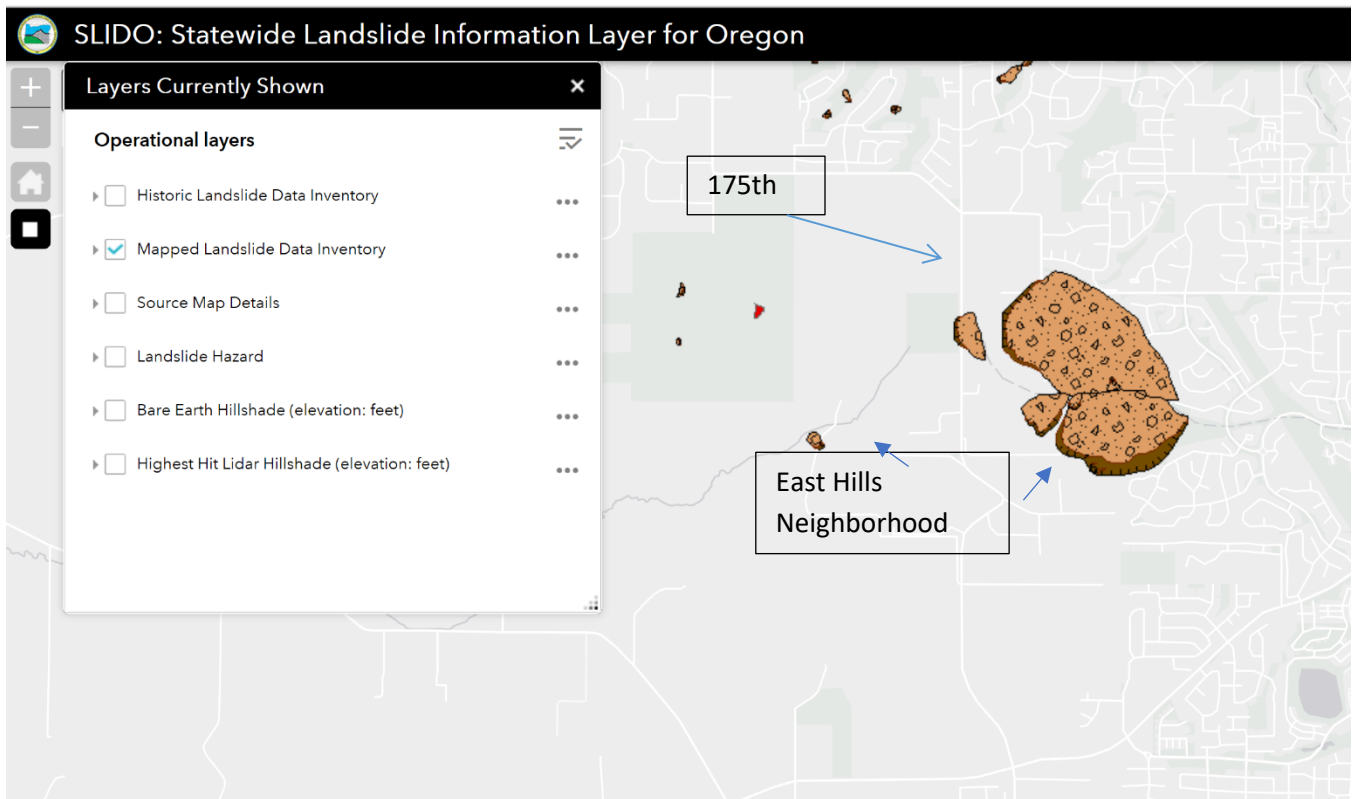
- The Cooper Mountain area is experiencing increased traffic demand from regional growth and nearby developing areas. Building on recommendations from the Washington County Transportation Futures Study, the Cooper Mountain Transportation Study will evaluate roadway network options to disperse traffic through the area.
- This will include assessment of transportation improvements to determine the benefits, costs, opportunities and constraints of the alternatives. The assessment will inform decisions about the long-term multimodal transportation network within the study area and will help prioritize future capital projects.

➤ **NOTE: THERE IS NO FUNDING YET AVAILABLE FOR THIS NEW STUDY.**

Major landslide area in proposed EAST HILLS neighborhood (currently an agricultural meadow). Note minor landslide area along 175th and smaller scarps in several areas where land has slid due unstable geological terrain. Requires contiguous ground cover and/or tree canopy, understory and contiguous landcover to maintain stable surface area.

EXHIBIT 5 – OREGON LANDSLIDE AREA
PAGE 1 OF 1





➤ <http://www.oregongeology.org/slido/>

➤ OREGON NATURAL RESOURCES EXPLORER –

www.oregonexplorer.info/content/landslides-erosion-and-land-use?topic=4129&ptopic=140

Landslides, Erosion and Land Use

In urban areas the human and infrastructure costs of landslides are often mediate and devastating. Their ecological impact is complex. A landslide that causes a local disturbance to a riparian ecosystem may also be a factor in providing a complex stream habitat.

Portions of the Willamette River Basin provide favorable conditions for landslides including steep hillsides and abundant rainfall. The region also experiences common landslide triggering events - freeze/thaw cycles, rapid snowmelt, periods of intense rainfall, and earthquakes. Most triggering events in Oregon are seasonal and occur during the winter and spring. **The conditions that favor landslides may develop over long periods of time and be intensified by human activities (such as road building or clearcutting) that acts on the natural slope and concentration of water.** Common landslide types are slides, flows, spreads and topples/falls.

The more process of erosion is the wearing away of the land surface by running water, wind, ice, gravity, and other geological activities. Rates of erosion are increased by unstable soils and steep slopes. Erosion contributes sediments to the streams of the Willamette River Basin and can cover spawning beds with fine sediment as well as carry nutrients from fertilizers into the water. Dams in the basin serve to trap sediment upstream but at the same time erosion rates are increased downstream. This "downstream" sediment is made up of smaller sized particles which may serve to transport nutrients and toxic constituents more easily.

On a per acre basis, urban areas contribute the greatest amount of this suspended sediment to the Willamette River. Sediment transport varies seasonally. The greatest levels are reported after major storms and the spring snow melt. This rapid water runoff carries pollutants directly into streams without the natural filtration that occurs with slower passage through soil.

➤ <https://gis.dogami.oregon.gov/maps/slido/>

As noted here, much of the area in Urban Reserves along 175th on Cooper Mountain is subject to Landslide Hazard. It is important to leave the existing mature tree roots in the natural areas in the mid-to-upper elevations of Cooper Mountain intact as well as introducing the least amount of paved roadways in that area as this will reduce this risk to the developments at the lower elevations.

