

1 1256 (1994), the Court explained: "The lead agency shall discuss impacts and alternatives in the
2 level of detail appropriate to the scope of the nonproject proposal and to the level of planning for the
3 proposal. WAC 197-11-442(2). *See Cathcart-Maltby-Clearview Comm'ty Council v. Snohomish*
4 *Cy.*, 96 Wash.2d 201, 211, 634 P.2d 853 (1981)... Even at the more generalized level, however,
5 '[s]ignificant impacts on both the natural environment and the built environment *must* be analyzed, if
6 relevant,' in an environmental impact statement. (Italics ours.) WAC197-11-440(6)(a). " See also
7 Settle, *Washington State Environmental Policy*, §14.01[3] at 14-7:

9 Here this nonproject EIS addresses not an abstraction, but a very specific and far reaching proposal. Zoning
10 maps for every corner of the City are proposed to be amended parcel-by-parcel. Zoning code text is to be
11 changed word-by-word and number by number (e.g. building heights; density) . This is anything but an abstract
12 proposal, more detail is required in the EIS for a nonproject proposal that might include, for instance, only the
13 development of broadly stated land use policies."

14 The City's mantra throughout this appeal is that the project is a programmatic EIS involving
15 the whole city, and a lesser level of detail suffices. But the City ignores the level of detail required
16 to analyze the impacts in upzoning parcel-by-parcel 27 urban villages, expansion areas, and other
17 areas. These zoning changes are proposed without regard to actual conditions on the ground even
18 though in many instances the City has more than adequate information and can easily provide the
19 level of detail that would enable a decision-maker to make a knowledgeable decision. There are
20 several categories of deficiencies in this FEIS: (1) deficiencies that arise because the City has
21 adequate detailed information which would adequately inform the decision-maker, at low cost, but
22 chose not to do so (*e.g.* historic resources), (2) biting off more than it can chew because the impact
23 analysis requires the City to "ground truth" the actual site or area (*e.g.*, Ravenna Park and
24 height/bulk/scale issues unique to each neighborhood), and (3) inadequacy because the City fails to
25 evaluate the cumulative impact of the proposed upzones. These deficiencies are further compounded
26 due to:

- 1 (a) a predetermined, top-down, upzone-everywhere "planning," in disregard of the actual
environment on the ground;
2 (b) disregard of the residents' suggestions who know best their community and its resources;
3 (c) disregard for the goals and policies adopted in the 2035 Comprehensive Plan to the extent
these conflict with MHA FEIS proposals;
4 (d) denial or minimization of real adverse impacts that will occur;
5 (e) lack of data and faulty data so that conclusions made are factually baseless;
6 (f) insufficient data and/or insufficient presentation of data to enable decision makers to
make knowledgeable decisions;
7 (g) obfuscation, rather than data and clear presentation applicable to each neighborhood's
unique circumstances, resulting in the public's and decision-makers' inability to evaluate the
consequences and real impacts of these zoning proposals.

8
9 This brief next examines the MHA FEIS inadequacy of the FEIS with respect to Ravenna
10 Park.

11 **I. The Undisputed Evidence Establishes that the MHA FEIS Is Inadequate with**
12 **Respect to the Impacts on Ravenna Park, An Environmentally Critical Area.**

13 A. Definitions of Terms Used

14 Section 3.6 of the MHA FEIS (Ex. 2) is titled Biological Resources and addresses
15 Environmentally Critical Areas (ECAs) and the City's urban forest and tree canopy. This section
16 states at 3.321, "Direct and indirect impacts to ECAs would be evaluated on a project by project
17 basis as a condition of permitting." The first page, 3.315, specifically references regulations that
18 apply to ECAs, Chapter SMC 25.09. SMC 25.09.015 states, "This Chapter 25.09 applies to any
19 development, as defined in 25.09.520, or platting carried out by any person on publicly or privately
20 owned *parcels containing an environmentally critical area or buffer* (emphasis added)." The
21 cumulative impact of upzoning an entire area is non-reviewable if this FEIS goes forward.

22 SMC 25.09.012 and .520 define terms used in the hearing related to ECAs. Steep slope
23 erosion hazard areas are areas with a slope described in subsection 25.09.012A.3.b.5 and,
24 25.09.012A.4 (an incline of 40 percent or more within a vertical elevation change of at least 10 feet.)
25
26 "Wetlands are those areas that are inundated or saturated by surface water or ground water at a

1 frequency and duration sufficient to support, and that under normal circumstances do support, a
2 prevalence of vegetation typically adapted for life in saturated soil conditions." 25.09.012C. SMC
3 25.09.160 sets out development standards for wetland buffers. "The term "buffer" "means a defined
4 area adjacent to and/or a part of an environmentally critical area and intended to protect the
5 environmentally critical area. "'Development' means all components and activities related to
6 construction or disturbance *of a site* [emphasis added], including but not limited to land disturbing
7 activities." 25.09.520. " SMC 25.160 The code also defines impervious surfaces, SMC 22.801.100:
8 "Impervious surface" means any surface exposed to rainwater from which most water runs off. Impervious surfaces
9 include, but are not limited to, roof tops, walkways, patios, driveways, formal planters, parking lots or storage areas,
10 concrete or asphalt paving, areas with underdrains designed to remove stormwater from subgrade (e.g. playfields, athletic
11 fields, rail yards), gravel surfaces subjected to vehicular traffic, compact gravel, packed earthen materials, and oiled
12 macadam or other surfaces which similarly impede the natural infiltration of stormwater.

12 B. Based On The Undisputed Testimony re ECAs/Ravenna Park, There Will Be Significant
13 Adverse Impacts to Ravenna Park.

14 Friends of Ravenna-Cowen called Professor Kern Ewing as a witness by to address the
15 inadequacy of the MHA FEIS with respect to Ravenna Park. In 1990 Prof. Ewing became a faculty
16 member at the University of Washington's Department of Botany. As of June 15, 2018, when he
17 retired, Prof. Ewing was the Rachel Woods Professor of Environmental and Forest Sciences the
18 University of Washington, College of the Environment. Additionally, he has a degree in civil
19 engineering and has been a registered engineer for over 50 years. Ex. 109, *curriculum vita*.

20 Ravenna Parks contains three ECAs - steep slopes, a riparian stream and wetlands. Ex. 110.
21 Prof. Ewing explained that although the Ravenna Creek flow is now less, the creek still remains part
22 of a watershed that joins with two other streams, Yesler Creek and water from the Kincaid ravine.
23 These meet at Union Bay. This watershed is the second largest remaining lakeside system on Lake
24 Washington, and this drainage is important for salmon habitat. Ravenna Creek's water purity is an
25 essential element to the health of Lake Washington. Prof. Ewing has overseen eight restoration
26

FRIENDS OF RAVENNA COWEN'S CLOSING ARGUMENT - 11 JUDITH E. BENDICH, WSBA #3754

AUTHORIZED REPRESENTATIVE
1754 N.E. 62ND St., Seattle, WA 98115
(206) 525-5914

1 projects in Ravenna Park, five of them since 2010, to reestablish mature forest habitat with native
2 plant species. (*See, e.g.*, Ex. 111.) He testified the purpose of restoration is to provide improved
3 water quality, improve hydrology, prevent sediment coming off the steep sides, and improve habitat
4 for birds and other wildlife. Restoration is critical to maintaining the purity of Ravenna Creek.
5

6 Prof. Ewing explained Ravenna Creek lies at the low point of a hill that rises steeply to NE
7 62nd St. and then gradually slopes north continuously for several miles. Geologically, these hills
8 originated with glaciers; and as the glaciers receded, the underlying glacial layering includes gravel
9 and sand layers. Groundwater collects from rainwater, percolates through the glacial layers, and
10 seeps into the sides of Ravenna Park. The source of Ravenna Creek now is this seep and rainwater.
11

12 The area along NE 62nd street and throughout the RUV expansion area east to 17th Ave. NE
13 is single family residential. This area is verdant - mature large trees, shrubs and ground cover. Prof.
14 Ewing explained that these trees, shrubs and ground cover are essential in order to preserve Ravenna
15 Creek's water quality and steep banks. In addition to its riparian corridor to Lake Washington,
16 Ravenna Park is also habitat for 87 bird species, including migratory species, as well as other
17 wildlife. (Woodrow Wheeler; Ex. 190, chart identifying bird species; photos of other wildlife.)
18

19 Prof. Ewing also explained that there are restrictions known as buffers to protect wetland,
20 riparian areas and steep slopes (*see* Ex. 112 [scientific article discussing buffers]). The area
21 contiguous, to the park, NE 62nd St., and the neighborhood to the north, serve as the buffer for
22 Ravenna Park's steep sides, riparian stream, and wetlands (ECAs):

23 Ewing: What a buffer is a collection of different layers of vegetation - canopy, sub-canopy shrubs, ground species. ... It
24 provides a number of environmental functions in that separates one area, in this case wetland or riparian over a park, from
25 more intensive uses and it diminishes the impact of light heat sound odors and particulate matter that might get from one
26 side of the buffer to the other and impinge upon the natural area. Buffers also can act as habitat.

Bendich: So I think the hearing examiner has heard a description today of the area. That's along NE 62nd Street and due
north [of] northeast 62nd street. Could you describe it for us?

1 A: Well Ravenna Park has trees that come right up to the edge of the street 62nd, and the canopy of those trees is in
2 contact with the canopy of trees that currently exist in neighborhoods north of 62nd Street. It's quite dense quite a dense
canopy in some places.

3 Q: But in addition to trees what about the other elements you're talking about?

4 A: Big shrubs or tree like species rhododendrons, a lot of leaf area. The leaf areas is a very important element of the
5 buffer because that's one element decreasing the passage of sound or light is also an element that's important in retaining
rainwater when it rains and retaining pollutants from air pollution.

6 Q: Okay so in terms of retaining, helping prevent pollution are you taking that into the ground soil or are in the air what
are you talking about?

7 A: Well if the pollution is in solution and it falls as rainfall it will probably be captured at least some part of it will be
8 captured by the leaves or the area of the canopy.

9 Q: And once that water makes it to the ground and there in this neighborhood what happens to it?

10 A: Well, there are generally a couple of things that happen to rainwater. The first part of it is called interception. That's
11 when the rains caught in the canopy of trees and on the on the trunks of trees when it starts appearing on the ground and it
12 starts raining you might not feel the rain drops for 15 or 20 minutes because they've been caught by the canopy then that
saturates and it begins to flow down to the ground which point is absorbed in the soil or begins to form puddles and some
of it moves into the soil and proceeds towards groundwater. After that if it's still raining, those compartments are
saturated, and it begins as surface water.

13 Q: So in this particular instance with Ravenna Park is that important in your view to maintain the kind of buffer area that
14 you have right now?

15 A: It's been shown in restoration projects that it's more difficult to achieve a good solution or a good outcome for your
restoration if the surroundings are less like the system you're trying to recreate.

16 Q: So in terms of that groundwater that's seeping through where is that going with respect to Ravenna Creek?

17 A: The groundwater that seeps into the park goes from the side of the slope into the stream and then the stream goes to
18 the south boundary of Ravenna Park at which point it enters a drop box and then it goes in a pipe underneath the 45th
Street Viaduct which takes a left turn and then it goes into what's called University slough. University slough is an open
19 body of water which runs down between the sports fields at University of Washington and Union Bay natural area at that
point if it enters into Lake Washington.

20 A factor material to the proposed upzone is the infrastructure adjacent to the park along
21 NE 62nd St, the combined sewer line. Prof. Ewing, a civil engineer, reviewed SPU's sewer maps
22 in preparation for the hearing, Ex.113:

23 Q: And when you saw this sewer map what struck you about it?

24 A: Well the size of the pipe. It's running through 62nd and it is an eight-inch pipe [in height] and eight inches wide. It's
25 rather standard for sanitary sewers but it's also a combined sewer. So it's still a wastewater facility. It seems to me that
26 eight inches might not be an adequate size... I looked up the pipe size... aided by the last engineering place I worked,
we didn't design storm water conveyances any smaller than 10 inches.

1 Q: And when was this built ...?

2 A: 1912...

3 Q: So this area I wanted to clarify what this area meant between 15th and 17th avenues northeast. Would you be
4 concerned about these sewers if the density is increased in that area?

5 A: If it's near capacity, increased density that would mean you would increase the flow.

6 Q: And what's the likely outcome – would you expect there to be any overflow or anything? Let's say you have storm
7 water coming in here too. What would you expect to happen?

8 A: The capacity of the system would be reached. I don't know the particular location what would happen to that water.

9 Q: If this storm water - let's just make this a hypothetical – if this storm water overflowed along the steep banks, what
10 would happen to them?

11 A: You would likely get erosion.

12 Prof. Ewing explained that in preparation for his testimony, he reviewed the MHA FEIS
13 Ex. 2, §3.6, the proposed upzone map (*id.*, App. H, p. H-71), the section titled "MHA
14 Housing Affordability Urban Design and Neighborhood Study." He observed that that with the
15 upzoning to RSL, which is the predominant upzone in the proposed RUV expansion area, "There
16 would be a very large increase in impermeable area – there's a decrease in plantable area between
17 the RSL and single family home." He said, "If you're trying to preserve the buffer...this won't
18 do." In reviewing §3.6, he stated that he had a general concern in maintaining the
19 integrity of the existing vegetation as a buffer to Ravenna Park, that the EIS was not
20 neighborhood-specific with respect to ECAs. He explained that there would be impacts if
21 upzoning occurred:

22 I think there'd be two impacts. One would be loss of vegetative buffer which would have a negative impact on
23 maturation of existing forest in Ravenna restoration projects there. The second would be an increase in impermeable area
24 and building mass which would result in greater heat retention by concrete pavement and buildings' greater heat
25 generation – heating and cooling installations in the buildings. Second would be more heat kept and then released in the
26 general vicinity of Ravenna Park.

27 Q: Why does that matter?

28 A: Well it matters because the system that people are trying to restore or create within the park is a system - which is
29 based on a unique microsite kind of humidity, temperature -high temp, low temps, and medium temperatures. And so if

1 you modify that, you're not having the kind of vegetation, the kind of animals, or the food chain in that system that you
2 would have if it were more natural.

3 Q: And do you have any concerns about the water quality that would seep into Ravenna Creek as a result of upzoning?

4 A: I think upzoning would create more potential for pollution in terms of air pollution which was transferred to the soil
5 and potential water pollution and direct runoff onto the streets. If that got into the park, that would be a problem.

6 Prof. Ewing pointed out that the buffer area includes exceptional trees and upzoning,
7 due to the increased permissible land cover for buildings and driveways, would violate the
8 buffer - "[Y]ou're going to have less functioning ecosystem which is less able to provide
9 environmental functions - water quality, improved hydrology."

10 Prof. Ewing criticized the lack of data in the FEIS. §3.6 pp. 3.318 - 3.319 (end of
11 last paragraph), which states:

12 Tree cover for a given zone was assumed to remain constant over time if the zoning designation stayed the same. For
13 example, a zone change from LR to LR would not represent a change. The one exception was the percent cover for RSL.
14 There is currently only one area zoned RSL in the Study area. *This did not provide a large enough sample size to
15 accurately estimate the percentage coverage for all current and future RSL zones.* [Emphasis added]

16 In an understatement, Prof. Ewing pointed out the data and analysis are inadequate, "I guess if
17 you're making a decision about tree removal, that would be difficult to do without data." He
18 said that even with the proposed mitigation - that a tree be planted in RSL zones, if
19 one were removed - is inadequate:

20 It's hard to grow a tree where it doesn't want to grow. And so I don't know why the residential small lot didn't have a tree
21 planting requirement initially, but looking at those lots, there's not a whole lot of space to put trees into. If you put trees
22 into the mix, that can't be the kind of trees that would develop a very large canopy because in that particular zone there's a
23 30-foot high allowance and so some fairly tall walls adjacent to the tree planting areas. We have a fairly low sun angle;
24 so there would be lack of available sunlight, and a lot of the root systems in the trees would probably be under
25 impermeable areas which would be difficult... The root system would probably suffer from lack of oxygen and
26 potentially would not reach the size they would reach somewhere else.

27 Prof. Ewing also explained that it would not be possible to see the effects that would actually
28 occur in Ravenna Park using only LIDAR or Google maps. "It would be very difficult to see below
29 the canopy layer. So on-site investigation would probably be more appropriate if you're looking at
30 the facts and impacts and inventory of shrubs and sub-canopy trees or larger trees."

1 Lastly, he disagreed with the FEIS's conclusion that there would be "no significant
2 unavoidable adverse impacts to ECAs or to tree canopy)(*id.* at 3.342, last paragraph, 3.6.4). In his
3 opinion this was not accurate, and the proposed upzones would have significant adverse impacts
4 even with the proposed mitigation. "Certainly the park is on a trajectory to become a much more
5 mature forest ecosystem. Changes like urbanization to it probably put the trees under more stress
6 and they will reach an end point ..."

8 On cross examination, Mr. Mitchell pointed to language in the FEIS addressing potential
9 impacts to streams during construction, with which Prof. Ewing agreed. (*Id.* at 3.23, first and second
10 full paragraphs). He also pointed to language in the next paragraph that "future development in
11 properties without ECA's could indirectly lead to adverse effects upon critical areas such as natural
12 ravine drainages that lie in downstream locations." And then he read the remainder of the paragraph
13 which gives specific examples – "landscaping involving earth movement, improper tree cutting that
14 violates City rules, paving without appropriate storm water control or the cumulative effects of
15 multiple parties' actions that could potentially alter drainage patterns and/or affect soil and slope
16 stability." Prof Ewing agreed with that paragraph, but none of this language addresses the
17 cumulative impact of the upzoning itself. This language is limited to impacts during site construction
18 and ordinance violations.

21 On redirect, Prof. Ewing elaborated on the relationship between upzoning and water runoff
22 and the effects on the riparian basin below. "Well if you have less buffering capacity at the top of
23 Ravenna Park, that means you're going to have more precipitation having an impact of the landscape
24 in Ravenna Park and potentially more surface runoff coming into the park which could result in
25 movement of sediment down towards the stream bed." And the water quality can deteriorate and the
26 sediment can "alter the course of the stream..." He also pointed out that p. 3.336, to which the City's

1 counsel referred, addresses impacts only within the urban villages, not contiguous to urban villages.
2 Prof. Ewing was asked whether in his opinion the last statement in §3.6. statement at p. 3.342 – there
3 is "no significant adverse impacts to ECAs or tree canopy" – was true. His unequivocal answer: "No
4 ...Because there will be adverse impacts to tree canopy cover and to environmentally critical
5 areas... in the wetlands at the bottom of [Ravenna Park], the slopes."

7 In rebuttal, the City called Ilon Logan, a wetland ecologist with a focus on wetland science,
8 wildlife ecology and a consultant with ESA. Ex.89. Ms. Logan authored the MHA FEIS biological
9 resources impact analysis. Within a few minutes of Ms. Logan's testimony, the City's attorney,
10 Daniel Mitchell, asked, "Were you here for the testimony of Professor Kern Ewing who spoke about
11 buffering of Ravenna Park?" Ms. Logan said, "I was." Mr. Mitchell also asked, "The study area
12 doesn't extend into Ravenna Park, is that correct?" Ms. Logan said, "Not to my knowledge." From
13 that point on, Mr. Mitchell never asked if Ms. Logan disagreed with any of Prof. Ewing's testimony.
14 Ms. Logan proceeded to address ECAs *within* urban villages and urban village expansion areas, and
15 proceeded page-by-page through §3.6. Ms. Logan also noted several provisions from Chapter SMC
16 25.11 "Tree protection," and several SDCI Director Rules about trees. (Exs, 224, 225 and 226)

18 On direct, Ms. Logan was not asked about and did not address cumulative impacts caused by
19 upzoning an entire buffer area or the increased runoff from impervious surfaces on ECAs contiguous
20 to proposed upzone areas. Nor did not she address the impacts on ECAs from ground water overflow
21 due to inadequate sewer line capacity.

23 Because Prof. Ewing's testimony was not rebutted, cross examination was limited.
24 Ms. Logan's resume indicated she had some familiarity with sewage lines and she was asked
25 about the eight-inch combined sewer overflow line in the expansion area, but she said she
26 was unfamiliar with that. Ms. Logan was asked whether the MHA FEIS discussed

1
2 cumulative impacts of upzoning on ECAs outside the urban village. She identified p. 3.3.23, the
3 last sentence, which states:

4 The proposed changes in zoning may result in increased density and activity levels for residential or commercial purposes
5 and the associated use of automobiles and other activities, which could contribute to additional increments of adverse
6 water quality impacts to ECAs. For example, wetland and streams may be impacted from runoff from street surfaces and
7 discharge of pollutants into drains. However, the City's current level of requirements for stormwater and water quality
8 controls mean that future development would in most cases be expected to lead to net increases in protection of nearby
9 ECAs or other natural resources, due to the slowing, redirection and treatment of stormwater and surface runoff by on site
10 systems.

11 Since this paragraph does not discuss at all the impact of increased impermeable surfaces, such
12 as increase in heat, or the inadequate sewer line capacity, Ms. Logan was then asked whether there
13 was anything in the EIS that addresses the cumulative impacts on ECAs of increased
14 impermeable surface area from future development and the loss of groundcover. She said, "No it
15 [the EIS] does not."

16 In summary, Prof. Ewing's testimony was unrebutted. There will be significant
17 adverse impacts to Ravenna Park due to upzoning. These impacts are cumulative and
18 irreversible. Upzoning to RSL (splitting a SF lot with a building on each small lot) will result in
19 significantly greater impermeable surfaces. This in turn has multiple adverse impacts:

20 1. Increased rise in temperatures due to greater building mass; the Ravenna Park ecosystem,
21 which is based on a unique microsite humidity and temperatures, would be modified resulting in loss
22 of vegetation and animal diversity.

23 2. Reduced tree canopy, reduced shrubs and groundcover, all of which are essential buffers
24 for Ravenna Park and all of which help reduce pollution.

25 3. Greater runoff from rain due to reduced tree canopy, shrubbery, and groundcover resulting
26 in (a) greater pollution in Ravenna Creek, (b) erosion of the steep banks and (c) sediment in Ravenna
27 Creek.

28 Because these cumulative impacts are not addressed in the MHA FEIS, decision-makers
29 have no basis to make knowledgeable decisions regarding these impacts, and the EIS is inadequate.

1 **II. The Evidence Establishes that the MHA FEIS Fails to Adequately Analyze Tree**
2 **Canopy Loss in the Proposed Upzones in the Expansion Area Because The**
3 **Calculation of the Loss of Tree Canopy Is Fatally Flawed, and the Presentation in**
4 **the FEIS, Using Four Zones, Rather Than Urban Village-By-Urban Village, Masks**
5 **the Real Neighborhood Impacts.**

6 A. Testimony of Appellant's Witness, Woodrow Wheeler, re The Importance of Tree
7 Canopy, Shrubs and Groundcover in the Roosevelt Urban Village Proposed
8 Expansion Area and the Impact to Wildlife Corridors If These Are Reduced.

9 In addition to Prof. Ewing's testimony about the impact to Ravenna Park due to decreased
10 tree cover, shrubbery and groundcover, Friends of Ravenna-Cowen called Woodrow Wheeler to
11 testify about these and wildlife in the proposed RUV expansion area. Mr. Wheeler has worked for
12 the Seattle Parks Foundation, the Audubon Society, the Nature Conservancy, and presently conducts
13 nature and natural history tours, teaches classes, and provides land conservation consulting services.
14 He is a Master Birder and Certified Interpretative Guide. Ex.188. Mr. Wheeler lives in the Ravenna
15 neighborhood. Mr. Wheeler began with the importance of tree and shrub canopy – capturing,
16 filtering and removing pollution, reducing stormwater runoff by interception, providing wildlife
17 habitat and wildlife corridors, improved public health and well-being, and even crime reduction.¹³
18 He cited Ex. 189 (*Seattle's Urban Forestry Plan*), pp. 1-3, which states that Seattle's trees and shrubs
19 provide the equivalent of \$5.9 million in energy reduction costs annually, \$10.9 million saved by
20 carbon sequestration, and pollution removal valued at \$5.6 million annually.

21 Mr. Wheeler then presented a PowerPoint slide show (Ex. 190), largely photographs of the
22 proposed RUV expansion area in which Mr. Wheeler presents tree and shrub survey data, describes
23 the flora and fauna, and explains their importance. Within a relatively small area (NE 62nd St. to NE

24 ¹³ In the FEIS the City did not refer to the 2035 Comprehensive Plan, LU 17.20 (Ex. 3, p.70): "Regulate
25 development in environmentally critical areas that contain vegetative cover and physical space for habitat, and seek to •
26 protect contiguous wildlife-habitat areas; • maintain wildlife corridors that connect functions; • conserve soil and ground
conditions that support native vegetation; • prevent siltation and high water temperatures in downstream habitats; •
dampen fluctuations in surface-water flows, which are typically problematic in urbanized areas... (Emphasis added)

1 70th St. between 15th Ave. NE to 17th Ave.), there are 425 trees. Ex. 190, p. titled "Nmbner of Trees
2 and Shrubs." Of these, about 225 are 20-39 years old, about 90 are over 40 years old (with four
3 western red cedars over 80-years old), and about 110 are under 20 years old. Ex. 190, see chart
4 titled "Relative Ages of Tree Species." Additionally, there are over 110 shrubs 10-feet tall or more.
5 Ex. 190, p. titled "Number of Trees and Shrubs." (Mr. Wheeler limited his documentation to 10-feet
6 and greater.) Mr. Wheeler stressed the particular importance of evergreen trees and evergreen
7 shrubs, such as rhododendrons, because these provide year-round carbon and pollution sequestration
8 and ameliorate stormwater run-off. They also serve as year-round habitat for birds and food for
9 wildlife. He also pointed out tree conservation priorities from *Seattle's Urban Forestry Plan* (Ex.
10 189) – (a) preserve existing trees since it takes decades for trees to grow to their ultimate size and
11 benefits cannot be matched by small replacement trees; (b) focus on evergreen trees; and (c) focus
12 on larger trees because these provide more environmental, cultural, and economic functions than
13 smaller ones. Ex. 190, titled "Tree Conservation Priorities from Urban Forestry Plan."

16 Several of Mr. Wheeler's photos show buffer area along NE 62nd St., described by Prof.
17 Ewing – NE 62nd between 15th and 17th NE, "looking west on NE 62nd from 17th NE," "1520 NE
18 62nd looking north." These photos show dense shrub cover, ground cover, large evergreen trees, as
19 well as established deciduous trees. While some are street trees, there are a significant number of
20 trees on these SF lots. The photos continue north (which Prof. Ewing testified also said serves as
21 buffer for Ravenna Park to moderate heat, pollution and runoff from rain), a few with overviews
22 from above that show green cover throughout the proposed expansion area. Some rhododendrons
23 exceed 25-30 feet (*id.*, e.g. 6559 17th NE; 6559 16th NE; 6822 15th NE).

25 Mr. Wheeler explained that the flora in the neighborhoods (trees, shrubs and low-growing
26 plants) protects wildlife, provides habitat, and maintains wildlife corridors for wildlife in Ravenna