

Memorandum

Date: December 19, 2013
To: South Cooper Mountain Project Management Team
From: Becky Hewitt and Joe Dills, APG
cc: South Cooper Mountain Technical Advisory Committee
Re: South Cooper Mountain Scenario Evaluation: Parks & Recreation, Trails and Open Spaces

INTRODUCTION

About the Scenarios

The three scenarios evaluated in this memorandum are described and illustrated in the memorandum titled “Scenarios for Future Growth”, dated September 12, 2013. Background information on the South Cooper Mountain (SCM) Concept and Community Plan project, including reports documenting existing conditions and planning work to date, can be found on the project’s website:

www.beavertonoregon.gov/southcooperplan.

Purpose

The purpose of this memorandum is to provide a summary of findings related to parks, recreation, trails and open space from the evaluation of the three scenarios developed for South Cooper Mountain.

The applicable Guiding Principles are listed below (please see the project website for the full text of the Guiding Principles):

- Create Beaverton’s next great community.
- Create a sustainable community.
- Provide transportation options.
- Provide appropriate protection, enhancement and access to Cooper Mountain’s natural resources and public lands.
- Implement regional requirements and plans.

Performance indicators have been prepared for the above-cited principles. This memo addresses how well each of the scenarios provides for:

- accessible neighborhood parks;
- appropriately located and scaled community parks to provide for active recreation and sports fields;



- high-value, connected natural areas;
- safe and convenient trails for both recreation and active transportation; and
- implementation of regional requirements for natural areas and regional trails.

This memorandum also provides planning-level cost estimates for proposed parks. Other topics, such as land use, transportation, stormwater, and infrastructure, are addressed in separate memoranda.

BACKGROUND AND STANDARDS

The Tualatin Hills Park and Recreation District (THPRD) is anticipated to be the park service provider for the South Cooper Mountain Annexation Area (SCMAA). THPRD’s 2006 Comprehensive Plan recommends level of service standards for the different park types and facilities in the district, shown in Table 1. The service standards are divided into acreage and proximity standards so as to address parks and facilities being provided in sufficient amount and with sufficient access.

Table 1: THPRD Level of Service Standards and Typical Facility Amenities and Sizes

Park / Facility Type	Acreage Standard	Proximity Standard	Typical Facilities	Recommended Size Range
Neighborhood Parks	0.8-1.0 acres / 1,000 residents	All residents within one-half mile	Children’s play areas trails, open grass areas for passive use, outdoor basketball courts, pet areas, and multiuse sports fields; may include natural features but they do not dominate the site.	2 to 5 acres
Community Parks and Special Use Facilities	2.0 acres / 1,000 residents	All residents within two miles	Sports fields, group picnic areas, covered play areas, informal play areas, walking paths, community gardens, skate or BMX bike facilities, pet areas, and support facilities such as on-site parking and permanent restrooms; may include natural features but they do not dominate the site.	10 to 25 acres
Trails and Linear Parks	No standard	All residents / employees within one-half mile	Paved bikeways and walkways; directional and control signage; multi-purpose paved trails; soft-surface trails; boardwalks; gates; benches; overlooks; interpretive facilities; historical features; connections to the city sidewalk and street system; may include natural features but they do not dominate the site.	N/A
Natural Areas	As needed / no standard		Wetland, pond or lake and adjacent riparian area, vegetation and wildlife; coniferous or deciduous trees and	N/A



Park / Facility Type	Acreage Standard	Proximity Standard	Typical Facilities	Recommended Size Range
			ground cover vegetation; may include trails, signage, or interpretive features.	
Recreation and Aquatic Centers	One facility / 50,000 residents	All residents within 1.75 miles	Swimming pools and associated facilities; community meeting rooms, gymnasium, multi-purpose classrooms, fitness rooms, cooking or other specialized instructional/educational facilities, performance spaces, parking and play areas.	65,000-75,000 square feet per facility on 4 to 10 acres of land

THPRD is in the process of updating their Comprehensive Plan, and is considering more flexible standards with less of a distinction between neighborhood and community parks. While the standards above are still in place today, opportunities to better meet the needs of the planning area through increased flexibility, consistent with THPRD’s current thinking, will be explored through scenario refinement and development of the Concept and Community Plans.

ACREAGE

Neighborhood Parks

Based on the standards listed above and the population projections for each scenario, Table 2 identifies the acreage of neighborhood parks that would be needed to satisfy the standards within each subarea for each scenario.

Table 2: Estimated demand for neighborhood parks by subarea and scenario (acres)

Subarea	Scenario 1	Scenario 2	Scenario 3
North Cooper Mountain	<1	2	3
Urban Reserve	7	8	9
SCMAA	6	7	6
Total	14	16	18

All three scenarios identify locations for neighborhood parks, including three within the SCMAA and one to two additional conceptual locations within the Urban Reserve Area (URA). The “future urban” development types used in the Hilltop and Grabhorn Meadow also include set-asides for neighborhood parks that are equivalent to the per-capita standard set by THPRD, but geographic locations for these parks are not identified in the scenarios. THPRD would like to evaluate the potential for a neighborhood park in North Cooper Mountain (NCM); this will be addressed through the scenario refinement process. A neighborhood park would be most appropriate in NCM with scenarios 2 and 3 where more growth is envisioned and densities are higher so that public open space is more important. All neighborhood parks include roughly 1.5 to 3 acres of land for active recreation and in some cases include parts of

adjacent natural resource areas. The total land mapped as neighborhood parks in each scenario is summarized in Table 3. (Note: these acreages include only the area that can be developed for active recreation and can contribute to meeting the demand identified in Table 2. Natural resource areas adjacent to and within areas mapped as parks are assumed to be managed as natural areas and are not counted towards meeting the demand for neighborhood parks.)

Table 3: Total neighborhood park land available for active recreation by subarea and scenario (acres)

Subarea	Scenario 1	Scenario 2	Scenario 3
North Cooper Mountain	0	0	0
Urban Reserve	6	7	7
SCMAA	9	9	9
Total	15	16	16

Scenarios 1 and 2 closely match the total estimated need for neighborhood parks within the planning area; Scenario 3 is slightly short of the recommended acreage overall. All three scenarios have more neighborhood park land in the SCMAA than needed, and less in the URA and NCM than needed. The quantity, size, and location of neighborhood parks throughout the planning area should be revisited during scenario refinement.

Community Parks

Based on the standards listed previously and the population projections for each scenario, Table 4 identifies the acreage of neighborhood parks that would be needed to satisfy the standards within each subarea for each scenario.

Table 4: Estimated demand for community parks by subarea and scenario (acres)

Subarea	Scenario 1	Scenario 2	Scenario 3
North Cooper Mountain	1	4	6
Urban Reserve	16	18	20
SCMAA	14	14	14
Total	31	37	41

All three scenarios identify a community park in the SCMAA, though the size varies greatly between the scenarios – roughly 12 acres in Scenario 1 but 20 to 30 acres in scenarios 2 and 3.

Scenarios 1 and 2 identify a potential expansion of Winkelman Park to provide additional community park resources for the URA. In Scenario 1, the community park location in the SCMAA is identified for expansion into the URA. The total acreage of community parks in the planning area is shown in Table 5. (Note: these acreages include only the area that can be developed for active recreation and can contribute to meeting the demand identified in Table 4. Natural resource areas adjacent to and within areas mapped as parks are assumed to be managed as natural areas and are not counted towards meeting the demand for community parks.)

Table 5: Total community park land available for active recreation by subarea and scenario (acres)

Subarea	Scenario 1	Scenario 2	Scenario 3
North Cooper Mountain	0	0	0
Urban Reserve	13	9	0
SCMAA	12	29	24
Total	25	38	24

Scenario 1 is a few acres short of providing the number of acres of community park land identified by THPRD standards in each of the subareas. Scenario 2 provides close to the right total number of acres, but concentrates them in the SCMAA, providing less than the recommended acreage in both NCM and the URA. Scenario 3 falls short of the total acreage recommended for community parks due to unmet demand from NCM and the URA; the acreage in the SCMAA is more than needed to serve that area, but not enough to compensate for the shortage in NCM and the URA.

LOCATIONS

Neighborhood Parks

THPRD has reviewed the potential locations for the parks in each of the scenarios. Generally, THPRD prioritizes locations adjacent to schools for neighborhood parks, so that parking and other facilities can be shared as much as possible. THPRD also has agreements with the Beaverton School District (BSD) to maintain and provide non-school hours public access to elementary and middle school playing fields. All three scenarios identify one neighborhood park site in the SCMAA that is adjacent to a potential elementary school site. THPRD would like to see park sites adjacent to both elementary school sites if practicable.

THPRD also identified a need for a neighborhood park in the portion of the SCMAA east of 175th Avenue. All three of the scenarios provide a potential location for a neighborhood park in this area. There is potential for an east-west trail connection through this area between a City of Beaverton well site (located near Scholls Heights Elementary School) to the high school site, potentially connecting to the planning area via SW Oystercatcher Lane. A neighborhood park would ideally be located adjacent to this potential future trail connection. Scenarios 1 and 2 both provide parks near where such a trail would be most likely to run. The park location east of 175th in Scenario 2 straddles a riparian area, which would be undesirable for THPRD, since no park facilities would be allowed within the riparian area. Based on these factors, the potential park location east of 175th Avenue in Scenario 1 is the most promising of the three scenarios. An alternative would be a location on the west side of the riparian area, similar to the western half of the park location identified in Scenario 2.

In the URA, Scenario 1 identifies two locations for neighborhood parks – one in the East Hills and one adjacent to McKernan Creek. The site adjacent to McKernan Creek may be too steep to be suitable for the park and the location in the East Hills is directly adjacent to the potential 175th realignment, which is

not ideal for a neighborhood park. In Scenario 2, a neighborhood park location is identified in the East Hills, the site may have challenging slopes, but is centrally located to this landscape area. Scenario 2 also identifies a neighborhood park in the URA Lowlands adjacent to the new arterial road and close to McKernan Creek. This site in Scenario 2 is fairly level but a location along an arterial road is not ideal. Scenario 3 identifies a neighborhood park next to McKernan Creek on a relatively level site, but with some natural resource constraints. No neighborhood parks are mapped in the East Hills in Scenario 3.

Generally speaking, THPRD does not necessarily prefer siting parks that emphasize active recreation adjacent to natural resource areas. Several of the potential park sites identified were selected for their proximity to natural resources; these locations may be revisited during scenario refinement.

Community Parks

All three scenarios identify a location for a community park within the SCMAA that is on the western edge of the planning area, adjacent to Tile Flat Road. This location was identified based on its relatively flat topography and the potential to serve as a buffer to rural areas on the west side of Tile Flat Road. This area does not provide co-location opportunities with the planned high school site; THPRD raised the possibility of locating a community park immediately west of the high school site instead. This site will be explored further through the scenario refinement process.

Scenario 1 shows Winkelman Park expanding to the west.¹ This area has some slope challenges, but is more level than parts of the existing park land. Scenario 2 shows Winkelman Park expanding to the north and northwest, a large expansion that would significantly increase the total land area of the park. This land is comparatively level and may be well suited for active recreation.

Another potential location for a community park has been identified at the southwest corner of the planning area near the intersection of Tile Flat Road and Grabhorn Road, but is not included in any of the scenarios at present. This location could provide a buffer for rural uses in the rural reserve and would have good auto access, however, it may be less accessible on foot for future residents in the planning area .

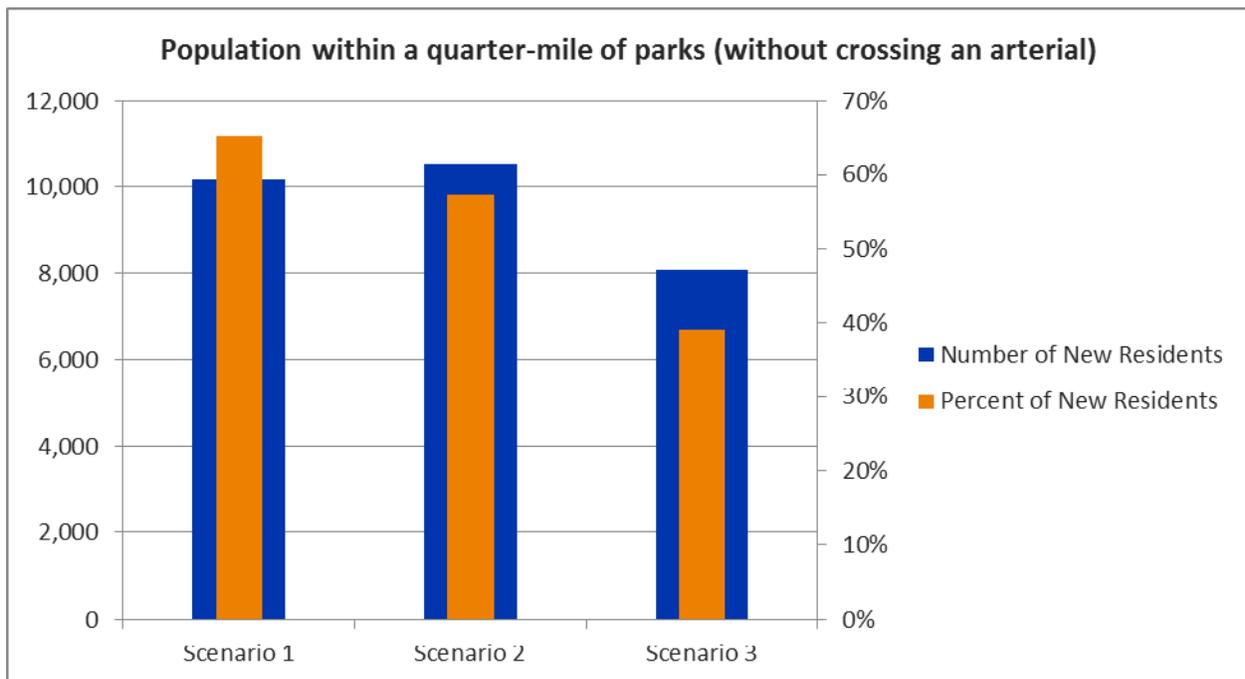
¹ At the time this memorandum was written, THPRD was in negotiations with the owner of one of the properties adjacent to Winkelman Park. If this acquisition effort is successful, it may be that no additional expansions would be needed.

Walkable Access

The population that would be located within a quarter mile of a park without crossing an arterial was calculated for each scenario based on the mapped locations of neighborhood and community parks for each scenario and the anticipated distribution of population given the land use identified in each scenario. The results are shown in Figure 1. Note that this analysis does not distinguish between neighborhood and community parks, does not account for neighborhood parks in the Hilltop and Grabhorn Meadow where specific locations have not yet been identified, and does not include the Cooper Mountain Nature Park.

Scenarios 1 and 2 provide walkable parks access to the highest number of new residents; in Scenario 1 a higher percentage of new residents have walkable parks access based on this analysis. The lack of parks access in Scenario 3 highlights the importance of identifying a neighborhood park location in the East Hills. The performance of Scenarios 1 and 2 shows that a neighborhood park in each of the East Hills and the URA Lowlands helps greatly to increase the number and percentage of new residents who will have walkable parks access.

Figure 1: Access to Parks



COST

Costs for acquiring land for and developing neighborhood and community parks have been estimated based on typical acquisition and development costs per acre provided by THPRD. Acquisition costs have been calculated for the entire area identified for parks, including areas with natural resources within the

parcs that would not be available for active recreation and are not counted in the acreages listed previously. Development costs have been applied only to the area that is unconstrained by natural resources and could be used for active recreation. Total costs for acquisition and development for both neighborhood and community parks are summarized by subarea and scenario below.² The variations in costs are due to differences in the amount of land mapped for parks (these acreages are discussed on pages 3 to 5). Since in scenarios 2 and 3 the community parks are meeting needs of future residents throughout the planning area, not just from the SCMAA, these costs may need to be distributed more broadly.

Table 6: Total Park Cost Estimates by Subarea and Scenario²

Subarea	Scenario 1	Scenario 2	Scenario 3
North Cooper Mountain	\$0	\$0	\$0
Urban Reserve	\$20,981,931	\$15,617,484	\$6,548,026
SCMAA	\$20,680,602	\$40,015,035	\$41,047,085
Total	\$41,662,533	\$55,632,519	\$47,595,111

OPEN SPACES & NATURAL AREAS

Overall Natural Resources Strategy

A key guiding principle for the project is to “Provide appropriate protection, enhancement, and access to Cooper Mountain’s natural resources and public lands.” A condition for designating the South Cooper Mountain Urban Reserve and expanding the Urban Growth Boundary to include the SCMAA was that, “concept planning should be undertaken as a whole in order to offer appropriate protection and enhancement to the public lands and natural features that are located throughout the area.”³

The foundation for fulfilling the above-cited principle and conditional requirement is the overall pattern of land use across the planning area, i.e. where development is focused, and limited, relative to the best natural resources and existing public lands.

² Costs are preliminary and subject to change. They are based on the initial three scenarios. Park needs and costs will be updated as part of the refined scenarios.

³ Intergovernmental Agreement Between Metro and Washington County To Adopt Urban and Rural Reserves, Exhibit A, Principles for Concept Planning of Urban Reserves.

Additionally, various mechanisms to protect and to encourage enhancement of natural resources will be explored as part of developing the Concept and Community Plans for the area. These may include SNRA designation; tree protection standards; hillside/slope protection standards; habitat-friendly standards related to retention of native vegetation, outdoor lighting, fencing, and other issues; development regulations that allow some increased flexibility or development potential on the buildable portion of the site in exchange for protections on the constrained portion; or other strategies. The existing and potential future protections for these resources are not absolute in that they do not entirely prohibit disturbance; road and driveway crossings and some minimal disturbance is allowed when necessary.

Priorities

Priorities for conservation and restoration of natural resources within the entire planning area are listed below, along with the rationale for their identification as a priority and the value provided by each of the resources. The numbering corresponds to the numbers on the attached map (“Natural Resources Protection & Enhancement Priorities”).

HABITAT CONSERVATION PRIORITIES

Among the existing resources within the planning area, the top priorities for conservation have been categorized by the project team as Tier 1 or Tier 2 priorities based on the habitat value they provide.

TIER 1

Tier 1 habitat conservation priority areas represent the best habitats within the planning area and those most important to fish and wildlife. Within areas identified as Tier 1 conservation priorities, disturbance should be kept to the minimum possible, with little or no additional development allowed and carefully sited and designed crossings.

1. This area contains high quality riparian corridors and upland habitats that are connected to the Cooper Mountain Nature Park and are relatively undisturbed. This area likely contains native Oak habitat similar to that found within the Nature Park, which is important for native species.
2. This area contains a diversity of native habitats, including wetland, riparian, and upland habitat. It contains the most intact stream within the SCMAA; human disturbance throughout this resource area appears to be relatively minimal, with the exception of an existing dam (removal of which should be evaluated for feasibility and environmental

impacts). The area is home to a diverse mix of vegetation and frequented by migratory birds.

3. This wetland area covers roughly 4.5 acres, and is contiguous with wetlands on the Churchill Forest subdivision property that have been protected as part of the subdivision approval. This wetland provides intact fish habitat and diverse wildlife habitat, and meets criteria for designation as a locally significant wetland.
4. This location represents the headwaters of a stream that drains into Washington County's Johnson Creek and provides an important connection between two streamsheds. This area includes an existing patch of trees and upland habitat that provides a wildlife connection between the Nature Park and the creek.

TIER 2

Tier 2 habitat conservation priority areas may have a greater level of human disturbance or play a less crucial role in wildlife movement than Tier 1 areas, but they include valuable upland and/or riparian habitats that provide important ecosystem services. Some limited degree of disturbance should be allowed, but the fundamental habitat value and ecosystem services should not be lost or excessively compromised.

5. This stream and riparian corridor is in a steep, forested ravine with limited development potential. It also provides a link to the Summer Creek streamshed and the protected stream corridors to the east.
6. There is some human disturbance in this area, with less tree cover and areas that have been farmed or cleared; however, it is contiguous with the Tier 1 habitat area identified as #1 and connects to the Cooper Mountain Nature Park. The primary value in protecting this area is to prevent impacts on the Nature Park and on habitat area #1.
7. This area includes a mix of natural forested areas, planted wood lots (e.g. christmas tree farm), and very low density housing. Its primary value is in providing upland forest habitat connected to habitat area #1 and to Winkelman Park.
8. This area contains moderate quality upland habitat that provides tree cover connecting from habitat area #1 to drainages and protected corridors to the east.
9. This area provides moderate to high quality upland forest habitat adjacent to the Cooper Mountain Nature Park.

PRIORITY HABITAT CONNECTIONS

The areas identified with arrows on the Natural Resources Protection & Enhancement Priorities map represent key links between stream corridors and priority habitat conservation areas. One of the most important habitat connections is from the Cooper Mountain Nature Park to the Tualatin River Wildlife Refuge along the tributaries to the Tualatin that run south and west from the planning area, including McKernan Creek and the central creek in the SCMAA. While the connections identified on the Natural Resources Protection & Enhancement Priorities map are not intended to preclude development, policies and standards may be crafted to ensure that safe wildlife passage remains possible. Based on reports from area residents, wildlife currently pass through many of the yards in partially developed areas such as NCM and the East Hills. As future development reduces the opportunities for wildlife passage, these connection points will become more important.

HABITAT RESTORATION PRIORITIES

The areas identified as #10 and #11 on the Natural Resources Protection & Enhancement Priorities map represent stream channels that have been impacted and degraded by agricultural activities over time. Because they are central to the South Cooper Mountain Annexation Area, they are important to improve to a state where they can be both ecologically healthy and attractive neighborhood amenities. Within areas identified as restoration priorities, stream restoration may be paired with trail construction and stormwater management facilities to achieve multiple benefits.

Scenario Evaluation: Habitat Protection & Connectivity Impacts

This section evaluates the differences in habitat and natural resources protection, fragmentation of wildlife corridors, and integration with the Cooper Mountain Nature Park for each of the land use and transportation scenarios.

SCENARIO 1

DEVELOPMENT IMPACTS

Scenario 1 envisions allowing low density residential development within portions of habitat areas #6, #7, and #9 subject to habitat-friendly development and/or tree protection standards. It also would allow some single-family residential development in habitat area #8, again subject to habitat-friendly development and/or tree protection standards.

ROADWAY IMPACTS

The road layouts would have minimal impact on priority natural resources. Potential impacts from roadway improvements include:

- minor impacts to habitat areas #7 and #8 from the realignment of 175th Avenue;
- creating more obstacles to wildlife movement due to the realignment and widening of 175th Avenue through both priority habitat connection locations;
- a road crossing at the northern end of habitat area #2 from the realignment of 175th Avenue and the construction of the new east-west collector road; and
- impacts to the ditch adjacent to Grabhorn Road due to roadway improvements on the existing alignment (mitigation of these impacts could possibly include some stream restoration which could improve the state of the waterway).

SCENARIO 2

DEVELOPMENT IMPACTS

Scenario 2 envisions the greatest level of protection for habitat areas #1, #6 and #9, with mechanisms to direct development away from these resources onto unconstrained land. Overall, Scenario 2 does the best job of fulfilling the guiding principle and Metro condition for the areas in/near the Creeks and Cooper Mountain Nature Park. Some standard single-family neighborhood development would be allowed in habitat areas #7 and #8, subject to habitat-friendly development and/or tree protection standards.

ROADWAY IMPACTS

The new road alignments envisioned with this scenario would likely cause some impacts to habitat areas, including:

- a new crossing of the lower reaches of McKernan Creek/habitat area #1 for the new western arterial road;
- minor impacts to habitat area #5 from a new road crossing for the extension of 185th Avenue (assuming this would be a carefully designed bridge crossing, the impacts would be relatively minor and would not prevent habitat movement between streamsheds);
- minor impacts to habitat areas #7 and #8 from the realignment of 175th Avenue;
- creating more obstacles to wildlife movement due to the realignment and widening of 175th Avenue through both priority habitat connection locations;
- a road crossing at the northern end of habitat area #2 from the realignment of 175th Avenue and the construction of a new roadway connecting to Alvord Lane; and

- a road crossing of location #10 (this crossing could be designed to allow for fish passage in order to support restoration efforts for the stream and is not a major concern).

SCENARIO 3

DEVELOPMENT IMPACTS

Scenario 3 would allow housing within portions of habitat areas #6, #7 and #9 as well as adjacent to the southwestern end of habitat area #1, subject to habitat-friendly development and/or tree protection standards. A mix of standard single-family neighborhood development and cluster housing would be allowed in habitat area #8, also subject to habitat-friendly development and/or tree protection standards.

ROADWAY IMPACTS

The new road alignments envisioned with this scenario would likely cause impacts to habitat areas, including:

- moderate impacts to the lower reaches of McKernan Creek/habitat area #1 from the new connection from Tile Flat Road to Grabhorn Road as well as impacts further north from the new collector road from Scholls Ferry Road to Grabhorn Road;
- moderate impacts to habitat areas #1, #6, #7 and #8 from the realignment of 175th Avenue;
- further separating habitat area #4 from the Cooper Mountain Nature Park with a larger at-grade road crossing than Kemmer Road currently requires, which could present a greater obstacle to wildlife movement between streamsheds; and
- a road crossing at the northern end of habitat area #2 from the realignment of 175th Ave.

TRAILS

Metro's conditions of approval for the SCMAA when it was brought into the UGB included a requirement that: "Planning for trails and pedestrian and bicycle travel shall be coordinated with Metro and the county to ensure appropriate access to Cooper Mountain Nature Park."⁴⁴ Preliminary and conceptual trail networks have been identified for each of the three scenarios; however, these require

⁴⁴ Metro ordinance no. 11-1264B for expansion of the UGB, Exhibit B, Conditions on Land Added to UGB, Condition #1 for South Cooper Mountain.

further refinement during the scenario refinement process. There are few significant distinctions between the preliminary trail networks for the three scenarios. The broad concepts for future trails through the planning area include:

- linking key destinations within the planning area (including providing safe routes to neighborhood schools);
- integrating with, and providing appropriate access to, natural areas while minimizing stream crossings and impacts to riparian areas;
- identifying a route for a Cooper Mountain Regional Trail that will ultimately connect the Westside Trail to the proposed Reedville Trail (also known as the BN Powerline Trail);
- providing links to the trail system within the Cooper Mountain Nature Park from the east and the south via nature trails but avoiding bicycle and equestrian trail connections to the Nature Park, since these uses are not permitted in the park's Management Plan;
- providing for pedestrian and bicycle connections to, and between, the parks, schools and green spaces on the plans;
- connecting to the Scholls Ferry Road/Roy Rogers Road intersection, where trail users in the River Terrace area will be able to make the crossing and connect to and from the River Terrace Trail (also known as the 300' Trail);
- improving pedestrian connectivity within and through the East Hills by providing one or more north-south and/or east-west nature trail connections through this area, potentially in combination with a future street network; and
- connecting Winkelman Park and the Hilltop to Grabhorn Meadow and the URA Lowlands with a trail parallel to McKernan Creek.

Proposed trails will include the following categories, as defined by THPRD:

- **Regional Trails:** Regional trails are intended to provide connections between communities and to regionally significant destinations. These are generally paved multi-use trails; however, in some places, they may be accommodated through bike lanes and sidewalks rather than separated paths.
- **Urban Trails:** Urban trails generally provide safe and direct connections to local features, and can be either on-street or off-street facilities, depending on context.
- **Nature Trails:** Nature trails are generally appropriate adjacent to natural resources, and are typically soft surface trails.

In addition to off-street trails, all new and upgraded roads within the planning area will provide sidewalks and bicycle facilities that will connect to the trail network. Separated shared use paths for pedestrians and bicycles adjacent and parallel to the road will be considered on the new and improved arterial roads within the planning area. How separated multi-use paths/trails are coordinated with street cross-sections is a key issue for the refinement phase. Cooper Mountain Regional Trail will likely



parallel street right-of-ways, so this is a priority facility to have a separated trail design that is closely coordinated with THPRD and Metro.