Exhibit 3

Angelo planning group

LAND USE PLANNING • TRANSPORTATION PLANNING • PROJECT MANAGEMENT

Memorandum

Date: December 24, 2015

To: David Levitan, Valerie Sutton and Cassera Phipps, City of Beaverton

cc: File

From: Cathy Corliss and Andrew Parish

Re: Goal 5 Analysis – South Cooper Mountain

INTRODUCTION/PURPOSE

Statewide Planning Goal 5 directs local governments to protect natural resources and conserve scenic and historic areas and open spaces. OAR 660-023 establishes procedures and criteria for inventorying and evaluating Goal 5 resources and for developing land use programs to conserve and protect significant Goal 5 resources. The purpose of this analysis is to address the Goal 5 requirements for three type of natural resources (Riparian Corridors, Wetlands, and Wildlife Habitat) within the South Cooper Mountain study area.

The process to comply with Goal 5 follows three main steps.

1. Inventory natural resources and determine which resources are significant. Within the study area inventories include:

    a. Wetlands: the Draft South Cooper Mountain Local Wetlands Inventory (Draft LWI)

    b. Riparian Corridors and Upland Wildlife Habitat: Metro Title 13 Resource Inventory and the South Cooper Mountain Resource Inventory

2. Complete an economic, social, environmental and energy (ESEE) analysis; or, in the case of regional resources, comply with the requirements of Metro's Urban Growth Management Functional Plan (UGMFP). An ESEE Analysis involves evaluating the potential tradeoffs associated with managing significant natural resources relative to the expected use scenario. An ESEE analysis is required for significant wetlands; however, Metro has adopted a regional resources functional plan which addresses Riparian Corridors and Wildlife Habitat, therefore the requirements of UGMFP Title 13 (Title 13), rather than those of OAR 660-023, apply to those resources. This report includes both an evaluation of Title 13 compliance for riparian corridors and wildlife habitat and an ESEE analysis for significant wetlands.

3. Develop a program to protect significant natural resources. Beaverton's existing Goal 5 program relies primarily on programs established by the Tualatin Basin Partners, including Clean Water Services (CWS), to protect and enhance natural resources. The City also employs other tools to help protect and conserve significant resources identified in natural resource inventories, such as flexible development standards (e.g. planned unit developments) and tree protection requirements. This report identifies potential program recommendations.

STUDY AREA

The study area for this analysis is the South Cooper Mountain Annexation Area (SCMAA), which was brought into the urban growth boundary in 2011 and annexed to the City of Beaverton in January 2013. It is anticipated to be developed in the near term. The study area is within the South Cooper Mountain Concept Plan area. The South Cooper Mountain Concept Plan to serve as a long-term guide for future growth and development of the 2,300-acre South Cooper Mountain area which includes three distinct subareas (North Cooper Mountain, the Urban Reserve Area and the South Cooper Mountain Annexation Area). This analysis is limited to the SCMAA as shown in Figure 1, below. Both the South Cooper Mountain Concept Plan and the South Cooper Community Plan, which is specific to the SCMAA, were adopted in February 2015 and provide policy direction for this ESEE.

Applicable Policies from the South Cooper Mountain Community Plan

Natural Resource Policies

1. Locally significant wetlands and protected riparian corridors within the Community Plan area shall be protected and enhanced, consistent with local, state, and federal regulations.

2. Development adjacent to significant natural resource areas shall be designed to provide visual and/or physical access to the resource area and limit continuous rear lot line edges abutting a significant natural resource through one or more of the following treatments of the open space edge.

a. parallel trail along the edge of the vegetated corridor with access points from adjacent roads and community focal points;

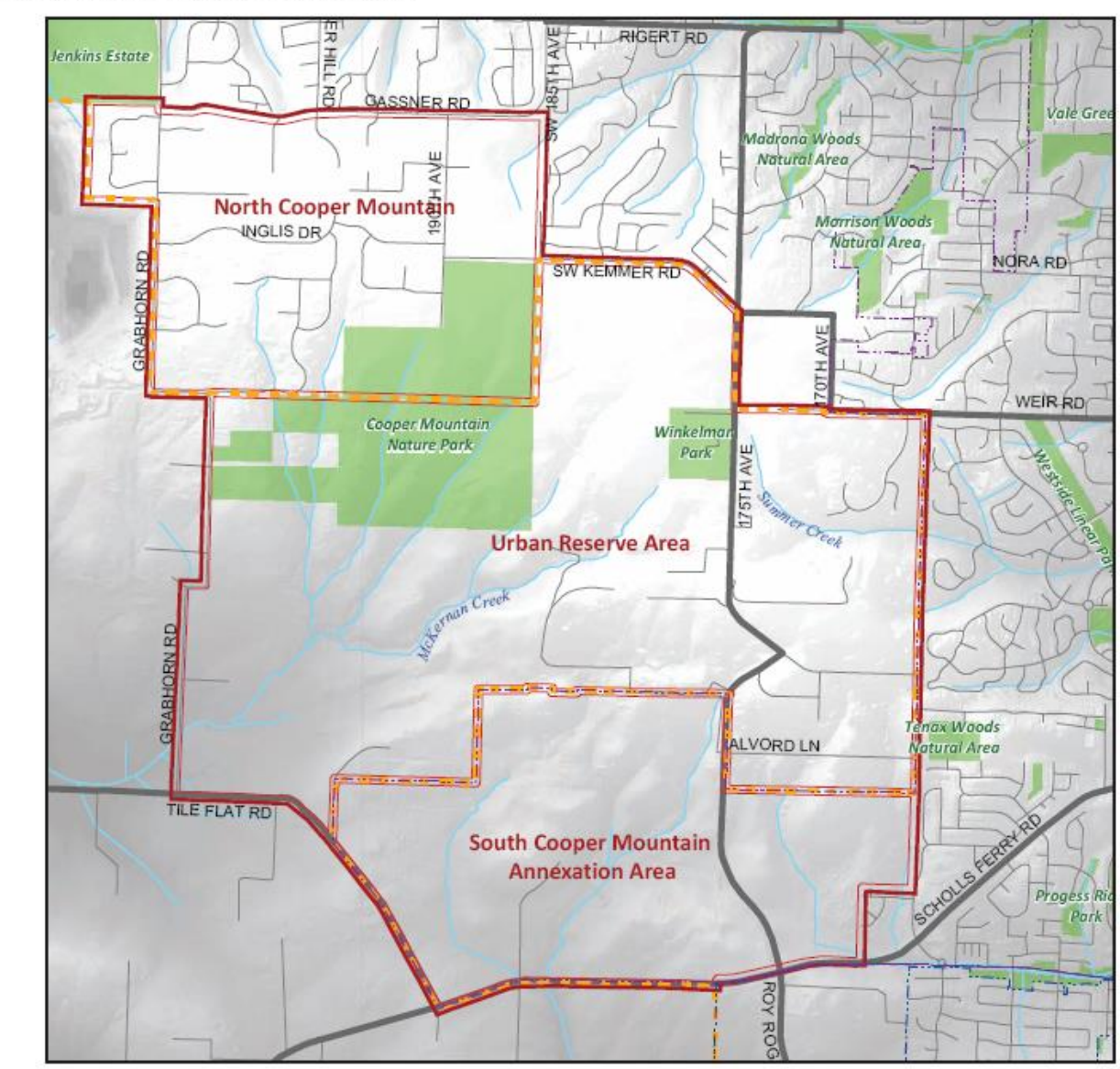
b. local streets that run adjacent to the edge of the vegetated corridor, without development between the street and the vegetated corridor; or

c. neighborhood parks, pocket parks, schools and similar uses that connect to the resource area and provide breaks between developed areas abutting the resource.

Urban Forestry Policies

3. Regionally Significant Upland Habitat within the SCM Community Plan area shall be protected through application of the City's existing tree protection standards and Habitat Benefit Area provisions, as appropriate.

Figure 1: South Cooper Mountain Subareas from the South Cooper Mountain Concept Plan



As noted in the Draft LWI, the study area is bordered to the east by suburban development and to the north, south, and west by rural land. Slopes range from gently rolling in the south half to moderately steep in the north half of the study area. The majority of the land drains to the south, with a portion of the area draining to the southeast. Land use is predominantly agricultural, with a mix of annual crop production, pasture, orchards, and viticulture. However, within the study area these uses are expected to transition to urban development in the near future as described in the Conflicting Uses section of this analysis.

Study area drainages are typically headwater drainages, with much of the stream length likely only flowing intermittently and drying out in the late summer. All streams in the watershed have been modified to varying degrees. Riparian areas are lacking substantial native vegetation, especially trees and

shrubs, along most streams reaches. This results in a lack of stream shading and effective water quality buffers to capture sediment from agricultural fields. These factors are likely to result in reduced water quality. Native plant communities have largely been replaced by agricultural lands. However, several small remnant patches of native forest habitat occur within the area, including mixed upland fir-deciduous forest, Oregon ash dominated wetland forest, and patches of Oregon oak forest. Several fir dominated lots were being logged or had recently been logged as observed during the March 2013 site visits. Wildlife that persist or thrive in agricultural settings, such as deer, coyote, raccoon, etc. are present within the watershed. The South Cooper Mountain Concept Plan notes that "The South Cooper Mountain Annexation Area provides the greatest opportunities for habitat restoration where a number of wetlands and waterways have been degraded by agricultural activities. Primary opportunities include protecting and enhancing native vegetation (in wetlands, riparian areas, and wildlife corridors) and enhancing stream functions and values for fish and other species."

As shown in Figure 2, future land uses within the study area are expected to be primarily residential. There is also a relatively small area of approximately ten acres designated as Main Street. Development of a new high school has been approved within the area designated as high density residential adjacent to 175th Avenue. Table 1 identifies the zones that will implement these designations.

Figure 2: Community Plan Land Use Map from the South Cooper Mountain Community Plan

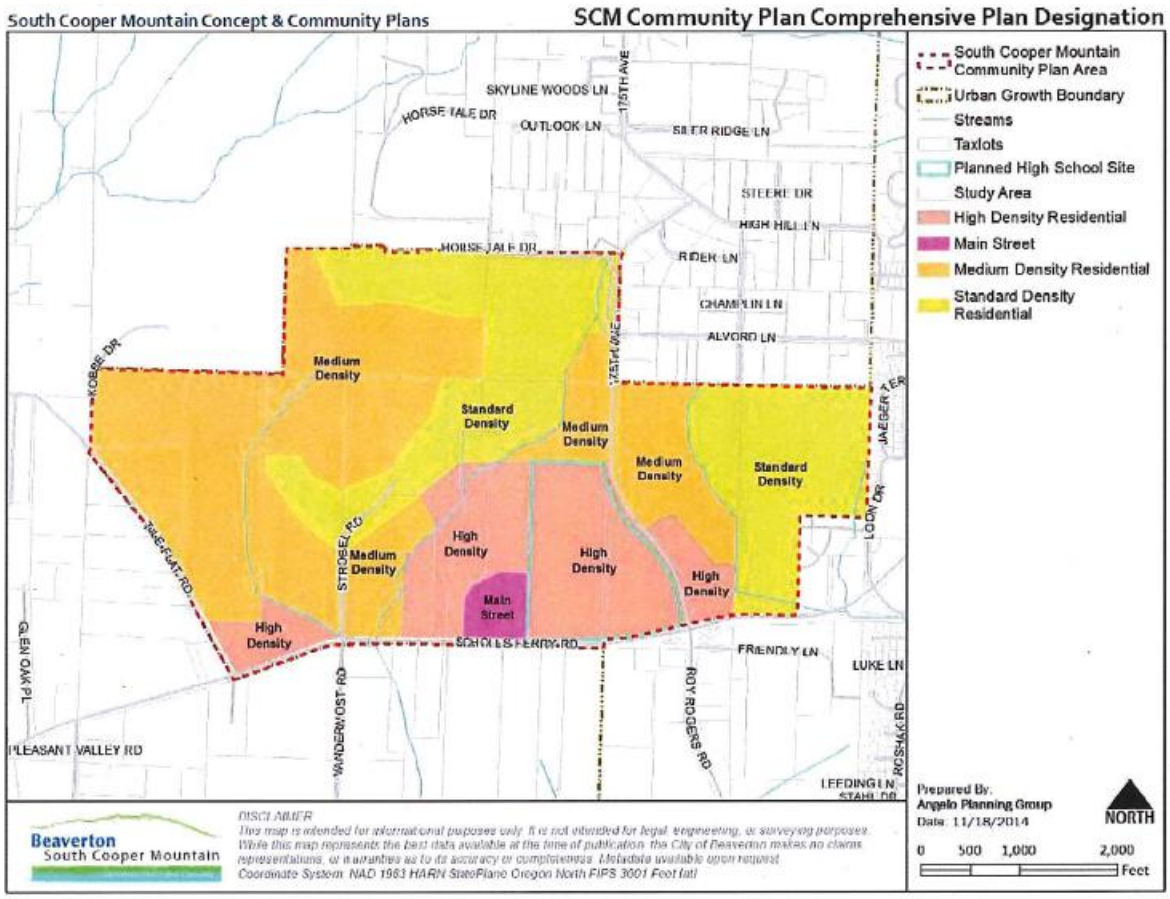


Table 1: Zoning, Allowed Uses & Housing Types by Designation

Comprehensive Plan Designation	Zoning District	Uses & Housing Types Allowed
High Density Residential	R-1	Attached housing, detached housing allowed outright*
Medium Density Residential	R-2	Attached housing, detached housing allowed outright*
	R-4	Detached housing allowed outright, limited attached housing allowed conditionally*
Standard Density Residential	R-5	Detached housing allowed outright, duplexes allowed conditionally*
	R-7	Detached housing allowed outright*
Main Street**	NS	Many commercial uses, including retail, service, eating and drinking establishments, and offices allowed outright; attached and detached housing allowed conditionally; schools and parks allowed outright, churches and certain other civic uses allowed conditionally
* In all residential zones, schools, parks and, churches certain other commercial & civic uses are allowed conditionally. ** Main Street designation will be implemented by a mix of NS, R1 and R2.		

RIPARIAN CORRIDORS AND WILDLIFE HABITAT

INVENTORY AND DETERMINATION OF SIGNIFICANCE

At the regional level, Metro completed the required process to comply with State Land Use Planning Goal 5 in developing the Nature in Neighborhoods program. First, Metro developed an inventory of regionally significant riparian corridors and wildlife habitat based on a scientific assessment of functional values (initial Metro Council endorsement in August 2002). In developing the inventory Metro produced technical reports, GIS data and models, and maps of showing natural resource features and relative quality ranks. Metro then completed an ESEE analysis to assess the tradeoffs of protecting or not protecting the resources identified in the inventory.

The Metro Council established Title 13 through adoption of Ordinance NO. 05-1077C (September 2005) and as amended through Ordinance NO. 05-1097A (December 2005). Through this action the Metro Council adopted the inventory of regionally significant fish and wildlife habitat and its ESEE analysis as the basis for the Nature in Neighborhoods program. Section 2 of this ordinance states: "…Based on Metro's ESEE analysis, Metro has determined to allow some conflicting uses and to limit some conflicting uses, but not to prohibit any conflicting uses." Metro's determination is reflected in Tables 3-07-13a and 3-07-13b, which are contained in Title 13. These tables illustrate Metro's decision to establish different levels of protection based on habitat quality and urban development potential. As noted above, SCMAA was brought into the UGB in 2011; and thus, is subject to Table 3-07-13b, which identifies regionally significant fish and wildlife habitat ("Habitat Conservation Areas") as Riparian Class I and II habitat within

the Metro boundary, and upland wildlife Class A and B habitat on land that is added to Urban Growth Boundary after December 28, 2005.

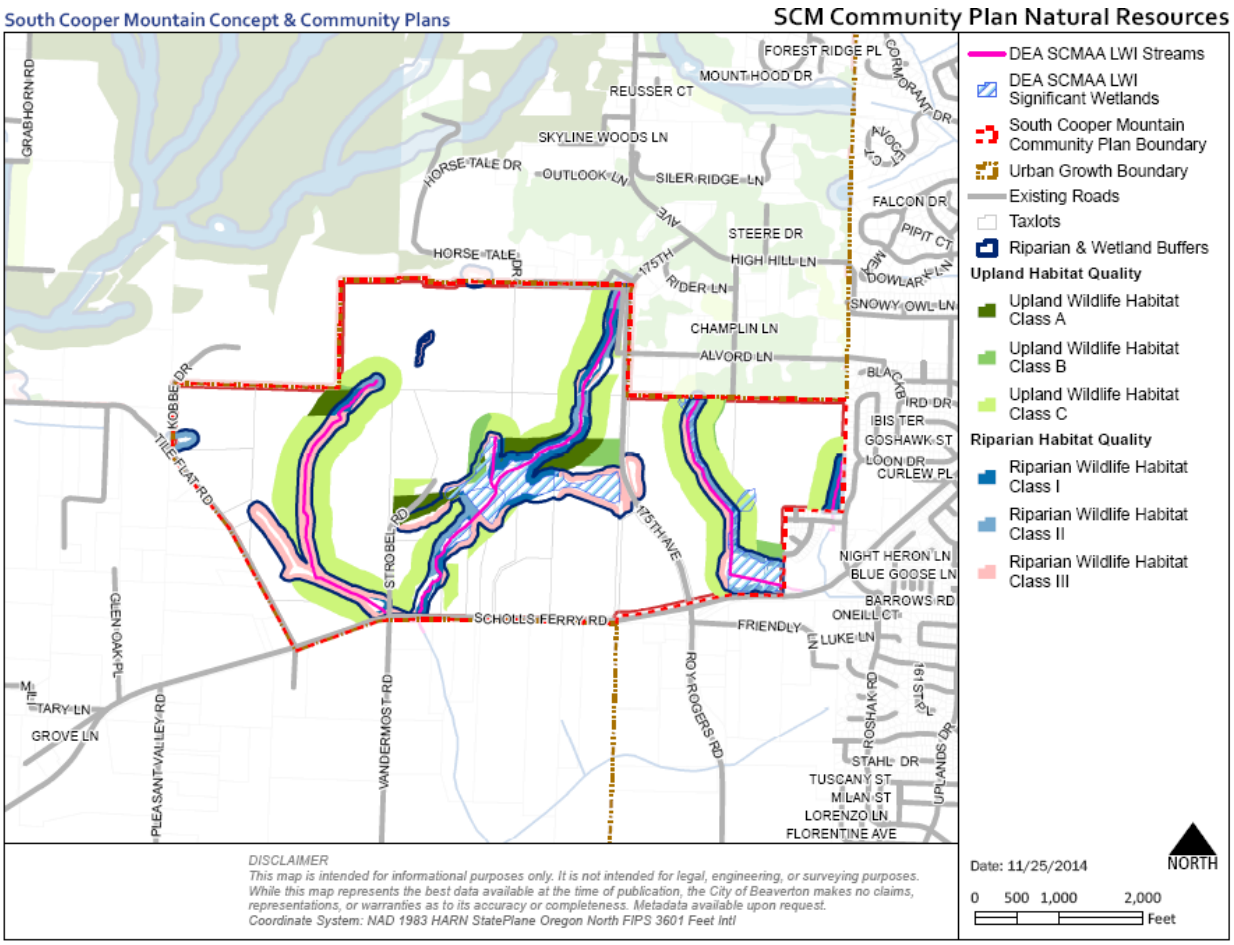
Table 3.07-13b: Method for Identifying Habitat Conservation Areas ("HCA") in Future Metro Urban Growth Boundary Expansion Areas

Fish & wildlife habitat classification	High Urban development value[1]	Medium Urban development value[2]	Low Urban development value[3]	Other areas: Parks and Open Spaces, no design types outside UGB
Class I Riparian	Moderate HCA	High HCA	High HCA	High HCA / High HCA+[4]
Class II Riparian	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA+[4]
Class A Upland Wildlife	Low HCA	Moderate HCA	Moderate HCA	High HCA / High HCA[5] / High HCA+[4]
Class B Upland Wildlife	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA[5] / High HCA+[4]

As part of the South Cooper Mountain planning process, David Evans and Associates (DEA) completed an assessment of riparian corridor and wildlife habitat. Metro's 2005 inventory of regionally significant riparian corridors and wildlife habitat provided the technical basis and starting point for this assessment. By starting with Metro's inventory, DEA was able to incorporate and build on the extensive research, technical analysis, and public review that shaped the regional inventory. DEA updated riparian habitat mapping where updated stream locations created gaps and when habitat appeared to have changed since previous mapping efforts were conducted. Riparian area boundaries were defined in accordance with CWS vegetated corridor width determination methods. Similar to riparian habitats, upland habitat mapping was revised based on site reconnaissance and aerial photo review. Forested areas that had been cut since the 2005 mapping were generally removed from mapping, as were recent residential development areas.

This updated inventory of significant riparian corridors and wildlife habitat was adopted by the City as part of the South Cooper Mountain Concept and Community Plans and generally accepted by Metro as in compliance with the Metro functional plan Metro recognized (letter dated Dec 2, 2014) that further compliance will be achieved as the city completes tasks outlined in the SCM Implementation Plan. Project #12: Urban Forestry Review calls for evaluation of current urban forest conditions, review of the city's existing regulations related to natural resources policies and programs, and determination of whether there is a need to modify current regulations.

Figure 3: Riparian Corridors and Upland Wildlife Habitat



COMPLIANCE WITH TITLE 13

For riparian corridors, the City of Beaverton complied with Title 13 through its participation in the Tualatin Basin Natural Resource Coordinating Committee (TBNRCC), also known as the Tualatin Basin Partners for Natural Places[1]. As a Partner jurisdiction, Beaverton requires compliance with CWS Design and Construction Standards for development in or near a water resource area and also provides incentives through its Habitat Benefit Areas (HBAs) program.

For wildlife habitat, the UGMFP states that the wildlife habitat requirements of Title 13 for new urban areas apply to TBNRCC jurisdictions.

> *UGMFP Section 3.07.1330(B)(5)(f). The city or county complies with the provisions of Metro Code Section 3.07.1330(B)(1) to (B)(3) as those provisions apply to upland wildlife habitat in territory*

[1] Alliance of eight cities and Washington Co. working with Metro, THPRD and CWS to meet federal, state and regional requirements for protecting riparian corridors and wildlife habitat in the Tualatin Basin.

> *added to the Metro urban growth boundary after December 28, 2005. For example, (1) each city and county shall either adopt and apply Metro's Title 13 Model Ordinance to upland wildlife habitat in new urban areas, (2) substantially comply with the requirements of Metro Code Section 3.07.1340 as it applies to upland wildlife habitat in new urban areas, or (3) demonstrate that it has implemented an alternative program that will achieve protection and enhancement of upland wildlife habitat in new urban areas comparable with the protection and restoration that would result from one of the two previous approaches described in this sentence;*

Consistent with the approach described in the UGMFP to implement an alternative program, the City adopted a new action item under Comprehensive Plan Goal 7.3.4.1 which states:

> *Action 2: Use existing or new development regulations to minimize impacts to areas identified by Metro as significant regional upland habitat within areas added to the Urban Growth Boundary after December 28, 2005*.

As shown on Figure 3, there are only small patches of regionally significant (Class A and B) upland wildlife habitat. Nearly all of the upland habitat is within the SCMAA is Class C, which although not designated by Metro as regionally significant, is included in the City's HBA Map.

OVERVIEW OF PROGRAMS

- CWS Design and Construction Standards. As noted above and shown on Figure 3, for the South Cooper Mountain inventory, riparian area boundaries were defined in accordance with CWS vegetated corridor width determination methods. CWS has jurisdiction within the SCMAA and therefore mapped vegetated corridors are assumed to be jurisdictional resources that have development restrictions. CWS requires all degraded vegetated corridors on a parcel to be improved as a condition of issuing development permits regardless of whether the vegetated corridor is impacted. Additionally, mitigation is typically required for unavoidable impacts. While Metro did not find Class III riparian areas to be significant, where they coincide the stream buffers required by CWS' Design and Construction Standards, they will also be protected by CWS.

- Tree protection. Section 60.60 of the City's Development Code establishes regulations and standards for the protection, pruning, removal, replacement, and mitigation for removal of Protected Trees (Significant Individual Trees, Historic Trees, Mitigation Trees and trees within a Significant Natural Resource Area (SNRA) or Significant Grove), Landscape Trees, and Community Trees. Within the SCMAA, Class I and II riparian habitat areas and Class A and B upland wildlife areas were designated by the City as Significant Natural Resource Areas (SNRA). The City has a development review process for proposed removal of trees within a SNRA. Protected trees, including those within a SNRA, are the subject of the highest level of review and mitigation.

- Planned Unit Development (PUD). A PUD is required for residential developments 10 acres or larger in the South Cooper Mountain. As shown on Figure 4, nearly all of the tax lots adjacent to the riparian corridors and wildlife habitat areas appear to be greater than 10 acres; and thus, will likely require a PUD for residential development. Subsection 40.15.15.4.C of the City's

Development Code establishes approval criteria for PUDs. Approval criteria require that the proposal comply with the applicable policies of the Comprehensive Plan and that any "lessening of the Site Development Requirements results in significant benefits to …preservation of natural features." Section 60.35.15 establishes open space requirements for PUDs. Properties within the South Cooper Mountain Community Plan Area are exempt from the 20% open space requirement in Section 60.35.15.1, but must provide all community features, including but not limited to, trails, habitat benefit areas, and scenic views identified in the South Cooper Mountain Community Plan, as identified in Section 60.35.25.

Section 60.35.25.1. Proposals within the South Cooper Mountain Community Plan area shall demonstrate compliance with the following applicable South Cooper Mountain Community Plan policies and figures:

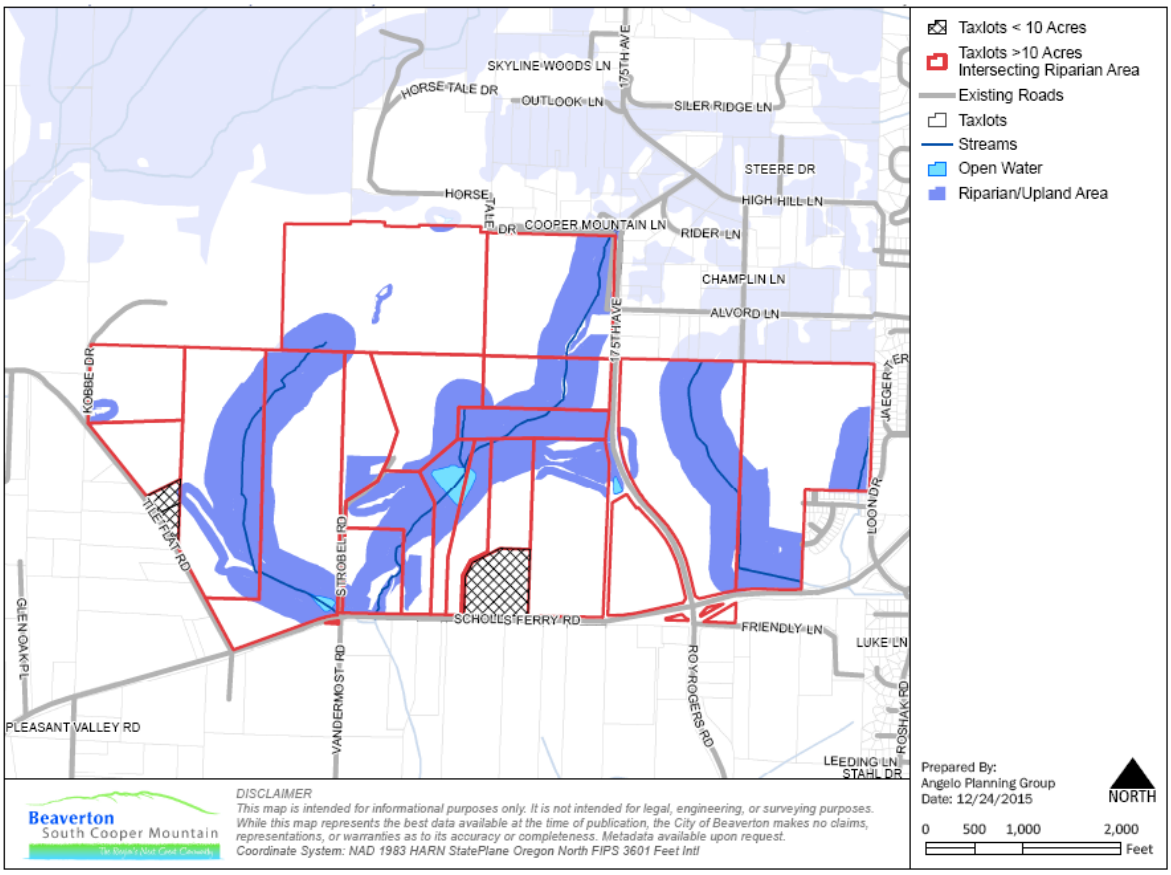
C. Resource Protection and Enhancement:

1. *Figure 12: Natural Resources in the Community Plan area map.*
2. *Natural Resource Policy 1: Local Wetlands and Riparian Areas*
3. *Natural Resource Policy 2: Development adjacent the Significant Natural Resource Areas.*
4. *Urban Forestry Policy 2: Tree Planting.*
5. *Urban Forestry Policy 3: Regionally Significant Upland Habitat.*
6. *Scenic Views Policy 1: Protection of View Corridors.*
7. *Rural Edges and Transitions Policy 1: SW Tile Flat Road Landscape Buffer.*

- Conditional Uses. Most civic and commercial development and parks will be new conditional uses in residential zones. In order to approve a new Conditional Use application, the decision making authority must find that "The proposal will comply with the applicable policies of the Comprehensive Plan." The South Cooper Mountain Community Plan was adopted into Volume V of the Comprehensive Plan. Natural Resource Policies in the Community Plan include: "*Locally significant wetlands and protected riparian corridors within the Community Plan area shall be protected and enhanced, consistent with local, state, and federal regulations."* Implementation of this policy will result in applicants addressing local, state, and federal regulations for "protected riparian corridors" as part of a conditional use application on sites that include such resources.

- Habitat Benefit Areas (HBAs). The HBA program is intended to protect, conserve and restore riparian and upland habitats through a voluntary incentive based program. HBA areas are intended to be the area beyond the areas that are managed or protected through other programs such as CWS Vegetated Corridors. Section 60.12 of the Development Code applies to all of the mapped habitat and riparian classes on the Habitat Benefit Area Map (aka Natural Resources Map) for the SCMAA. The Natural Resources Map/HBA for SCMAA, which was adopted into Vol. III of the Comprehensive Plan, includes Class C Upland Wildlife Habitat as well as Class III riparian. While these resources were not deemed significant under Metro Title 13, including them on the on the map allows applicants to take advantage of the voluntary credit system, thus providing greater opportunity for protection.

Figure 4: Taxlots Greater than 10 Acres Intersecting Riparian and Upland Wildlife Areas



WETLANDS

This memorandum includes an ESEE analysis for significant wetlands within the SCMAA. The Goal 5 rule (OAR 660-015-0050) requires that the ESEE analysis include the following steps:

1. Determine the impact area. The "impact area" is the area in which allowed uses could adversely affect the identified significant natural resources. The impact area defines the geographic limits within which to perform ESEE analysis.

2. Identify conflicting uses. A "conflicting use" is a land use or other activity reasonably and customarily subject to land use regulations, that could adversely affect a significant Goal 5 resource.

3. Analyze the ESEE consequences. This is an analysis of the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The narratives and tables within this analysis include a thorough explanation of the consequences. The final ESEE decision will inform land use actions to address natural resources.

4. Develop a program to achieve Goal 5. Based on and supported by the analysis of ESEE consequences,

the City shall determine whether to allow, limit, or prohibit identified conflicting uses within significant natural resources areas within designated inventory sites.

INVENTORY AND DETERMINATION OF SIGNIFICANCE

A Draft Local Wetlands Inventory (Draft LWI) for the SCMAA was prepared by DEA as a part of the South Cooper Mountain Concept and Community Plan project. The Draft LWI was developed in accordance with OAR 141-086 in accordance with the Goal 5 rule (OAR 660-023):

> *OAR 660-023-0100 Wetlands*
> *(3) For areas inside urban growth boundaries (UGBs) and urban unincorporated communities (UUCs), local governments shall:*
> *(a) Conduct a local wetlands inventory (LWI) using the standards and procedures of OAR 141-086-0110 through 141-086-0240 and adopt the LWI as part of the comprehensive plan or as a land use regulation; and*
> *(b) Determine which wetlands on the LWI are "significant wetlands" using the criteria adopted by the Division of State Lands (DSL) pursuant to ORS 197.279(3)(b) and adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.*
> *(4) For significant wetlands inside UGBs and UUCs, a local government shall:*
> *(a) Complete the Goal 5 process and adopt a program to achieve the goal following the requirements of OAR 660-023-0040 and 660-023-0050; or*
> *(b) Adopt a safe harbor ordinance to protect significant wetlands consistent with this subsection, as follows:…*

As described in the Draft LWI, wetland functions were evaluated for wetlands greater than one half acre using the Oregon Freshwater Wetland Assessment Method (OFWAM). OFWAM results were used to determine if any of the SCMAA wetlands qualify as “locally significant wetlands” in accordance with criteria set forth in OAR 141-086-0350. Table 2 identifies the wetlands which were identified as significant in the Draft LWI. Upon adoption of the Draft LWI, these wetlands will be designated as “significant”. The City has opted to Complete the Goal 5 process and adopt a program to achieve the goal following the requirements of OAR 660-023-0040 and 660-023-0050 (i.e., an ESEE and Program to Achieve Goal 5).

Because these wetlands are hydrologically connected to streams, they are also included within the riparian area boundaries shown on Figure 3, which were defined in accordance with CWS vegetated corridor width determination methods.

Table 2: Significant Wetlands from Draft LWI

Wetland ID	Acres	Wildlife Habitat	Fish Habitat	Water Quality	Hydrologic Control	Meets Locally Significant Criteria
W-A	11.80	Diverse	Intact	Degraded	Intact	Yes
W-C	1.42	Diverse	Intact	Degraded	Degraded	Yes
W-H	10.79	Diverse	Intact	Degraded	Degraded	Yes

The Draft LWI Wetland Characterization Sheets describe these wetlands as follows:

- Wetland W-A: This rather large wetland is fed by groundwater and two small, unnamed tributaries to the Tualatin River (TR-1, TR-1b). The eastern portion has been converted to pasture, and is dominated by non-native grasses Tall fescue (Schedonorus phoenix) and Meadow foxtail (Alopecurus pratensis), while the remainder consists of forested wetland. Site access was granted for only TL0402 and 0800 and representative plots were taken on those lots. The rest was viewed from adjacent lots and appeared to be similar in nature. Vegetative diversity and wildlife use in the wetland was fairly high. [Note: portions of this wetland were formally delineated by Pacific Habitat Services (October 13, 2014), which occurred after DEA's site visit. The delineation was approved by DSL and assigned DSL WD #2014-0497]

- Wetland W-C: This wetland is fed by groundwater and an unnamed tributary to the Tualatin River (TR-1), and lies downslope of a small dam. The dam may have reduced historic extent of the wetland based on hydric soils mapping, and the fact that Himalayan blackberry (Rubus armeniacus) was present in the wetland, indicating drying during the summer months. Blackberry in the wetland was recently cut as a part of the adjacent residential construction.

- Wetland W-H: This wetland is fed by both groundwater and a small, unnamed tributary to Summer Creek. Although the wetland was only visible from Scholls Ferry Road, it appeared to be a mixture of pasture grasses and shrubs, with scattered Oregon ash in the overstory (approximately 50%). The wetland follows along unnamed tributary (SMC) up the hillslope where recent logging activities had removed much of the vegetation but is likely to quickly grow back into a scrub-shrub community and eventually forested wetland if there is no future disturbance. [Note: Wetland areas in tax lot 0103 were formally delineated by AKS Engineering & Forestry, LLC (November 26, 2014) and areas in tax lot 0200 were delineated by Anchor QEA, LLC (2015). Both delineations were concurred with and assigned DSL WD#2015-0063 and #2015-0105, respectively. Both delineations occurred after DEA's off-site reconnaissance visit. The wetland continues off-site to the east, which was previously delineated and assigned DSL WD#2006-0732.]

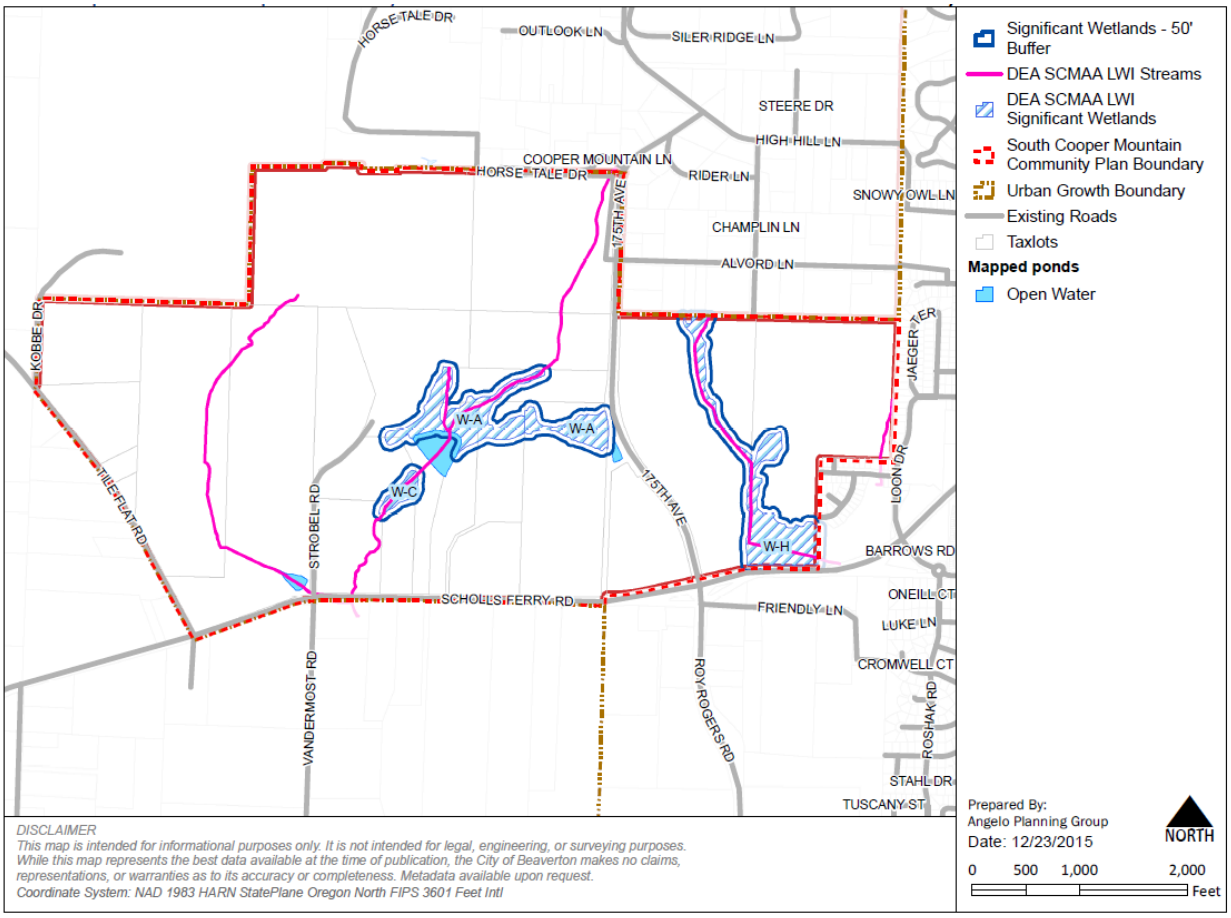
As noted above, there have been three wetland delineations completed within the SCMAA – the high school site west of 175th along Scholls Ferry Road, and two properties east of 175th with concurrence letters received from DSL. These delineations were incorporated into the Draft LWI prepared by DEA.

IMPACT AREA

As noted above, the "Impact area" is a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource. The Clean Water Services Design and Construction Standards Manual (R&O 07-20), defines a "Vegetated Corridor" as "a corridor adjacent to a Sensitive Area that is preserved and maintained to protect the water quality functions of the Sensitive Area." For the purposes of the Draft ESEE analysis, the vegetated corridor has been identified as the impact area. Chapter 3 of the CWS D&C requires that vegetated corridor widths be measured from the "Edge of Sensitive Area". For wetlands, the edge is the delineated boundary of the wetland, per DSL / Corps procedures for wetland

delineation. Vegetated Corridor width for wetlands which are over 0.5 acres in size is 50 feet, unless slopes are over 25% (which is not the case for significant wetlands in the SCMAA. Significant wetlands within the SCMAA total 24.01 acres of land. The total area within the wetland impact area shown on Figure 5 is approximately 43 acres (including wetlands). The significant wetlands and their impact areas are contained within the riparian and upland habitat areas shown on Figures 3 and 4. Figure 5 has been simplified to show only the significant wetlands and associated impact areas.

Figure 5: Significant Wetlands and Impact Areas



CONFLICTING USES

The SCMAA is primarily designated for residential uses on the Comprehensive Plan and none of the impact area is within the area designated as Main Street. Uses which are permitted outright or conditionally within in the residential zones fall into the following general categories:

- Residential development. A mix of densities and housing types are possible within the range of residential zones designated within SCMAA. In all cases a PUD is required for residential developments on sites over 10 acres. As shown on Figure 5, all of the tax lots that include significant wetlands or their impact areas appear to be over 10 acres in size. The potential impacts of residential development include: clearing of vegetation; grading, excavation, filling,

hauling, and soil compaction; adding impervious surfaces by constructing buildings, sidewalks, driveways, parking areas and roads; installing utility connections such as sewers and stormwater pipes; building stormwater control structures; landscaping with non-native vegetation (e.g., establishment of lawns, addition of non-native landscape features – trees, shrubs, groundcover, etc.); using toxins (cleaners, fertilizers, pesticides and herbicides) in households and yards and generating contaminated runoff from household activities; and other general impacts from pets, noise, litter, garbage, etc.

- Limited civic and commercial development (e.g., health care, schools, churches). A limited number of civic and commercial uses are permitted as conditional uses within the residential zones. The potential impacts of these uses are similar to those described for residential uses; however, civic and commercial developments may have larger building footprints and more impervious area due to parking than residential development.
- Parks, open space and trails. Parks, other than community gardens, require conditional use approval. Where parks include buildings or parking areas, the impacts of these activities are similar to those described for civic and commercial uses except that normally a smaller percentage of land area is covered by impervious surfaces. Parks and open areas construction and maintenance practices can cause erosion and damage vegetation. Intensive recreational activity such as cycling also causes erosion, particularly when it occurs off maintained trails. The use of pesticide and fertilizer in maintained areas may impact water quality within wetlands.
- Transportation facilities. Similar to other types of development, constructing streets and sidewalks results in the removal of vegetation, grading, excavation, filling, hauling and new impervious surfaces. The construction of streets can result in concentration of surface water, higher runoff rates, and alteration to groundwater recharge (alteration of area hydrology). Streets also can include impacts associated with crossings and the installation of culverts as well as the building of stormwater control structures. Where stormwater isn't managed, there can be the potential for impacts from runoff.
- Public and private utilities. This category includes water, sewer and storm drainage pipes, telecommunication facilities, electric power lines and substations and gas pipelines. Other than transmission lines, which are permitted outright, these uses require conditional use approval. Although operation of existing facilities may have few adverse environmental effects, construction and maintenance practices for new basic utilities have some adverse effects associated with clearing or grading. Where facilities include a building or parking area, impacts are similar to commercial development.

ESEE CONSEQUENCES

In this section, the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use are analyzed for each category of conflicting uses. Within the SCMAA, significant wetlands represent a total of approximately 24 acres of the area and the area within the wetland impact area (including wetlands) is 43.4. It is within these 43 acres that the consideration of allowing, limiting or prohibiting conflicting uses takes place. Because the existing conditions, environmental conditions and potential conflicting uses from future development are relatively consistent for all three significant wetlands, the analysis considers them together.

As described above, potential conflicting uses can generally be grouped into one of five categories. In the tables that follow each of the five conflicting use categories is considered under each scenario (i.e., Allow, Limit, Prohibit) and the expected net effect of either allowing, limiting or prohibiting the conflicting use is identified as either positive (+1), neutral (0) or negative (-1). In some situations a mix of both positive and negative outcomes is possible. The net effect is intended to reflect the cumulative end result (either positive, neutral or negative) of all potential consequences.

Scenario A - Allowing conflicting uses within the resource and impact areas. In evaluating the consequences of **allowing** conflicting uses, the assumption is that all significant natural resources would be subject to development allowed by existing base zone regulations.

Scenario B - Limiting conflicting uses within the resource and impact areas. In evaluating the consequences of **limiting** conflicting uses, the assumption is that rules would be established to limit the impacts of allowable development in areas containing significant natural resources. Areas containing significant natural resources could still be subject to development, but additional development restrictions would exist in addition to base zone regulations.

Scenario C - Prohibiting conflicting uses within the resource and impact areas. In evaluating the consequences of **prohibiting** conflicting uses the assumption is that rules and/or other mechanisms would be established that preclude all allowable development in significant natural resource areas.

SCENARIO A - ALLOWING CONFLICTING USES WITHIN THE RESOURCE AND IMPACT AREAS

Under this scenario there would be no land use regulations restricting conflicting uses within the Goal 5 resources or impact areas. Tables A-1 through A-4 identify the likely positive and negative consequences to both the resource and the conflicting use of *allowing* the conflicting use (i.e., both the economic goods and services provided by the conflicting uses and the ecosystem services[2] provided by the significant wetland). The expected net effect of allowing the conflicting use, either positive (+1), neutral (0), or negative (-1), is identified in column 4.

[2] Wetlands can provide ecosystem services, which in turn provide economic and social value. Ecosystem services include, but are not limited to, water storage, retention and conveyance, flood control, pollution control and detoxification, groundwater recharge/ discharge, erosion protection and habitat for resident or transient species, and nutrient cycling. Ecosystem services can also include opportunities for tourism and recreational activities, aesthetic appreciation of natural scenery, opportunities for formal and informal education and training. For a detailed review see: Ramsar Technical Report No. 3, CBD Technical Series No. 27, "Valuing wetlands: Guidance for valuing the benefits derived from wetland ecosystem services" by Rudolf de Groot , Mishka Stuip, Max Finlayson, and Nick Davidson, Ramsar Convention Secretariat Gland, Switzerland November 2006. http://www.ramsar.org/sites/default/files/documents/pdf/lib/lib_rtr03.pdf

Table A-1 Economic Consequences of Allowing Conflicting Uses

Use Category	Positive Economic Consequences	Negative Economic Consequences	Net Effect
Residential development	• Property owners realize full development potential of parcels; clustering of residential development is not required. • Residential improvements increase property tax base. • No mitigation is required, which reduces the cost to develop. • Economic development is facilitated by providing additional residential land for relocating/new employees.	• Loss of ecosystem services results in higher costs, either to replace services or repair impacts (e.g., construct storm water storage facilties or repair flood damage). • Amenity/development premium for parcels adjacent to resource areas is eliminated. • Environmental impact costs passed on to City could lead to increased taxes.	0
Limited civic and commercial development	• Development potential of parcels fully realized enhancing potential for local economic development. • Commercial improvements increase property tax base. • Depending on development type, potential increase in property values for adjacent landowners. • Helps to satisfy governmental and school district long-term capital facilities needs.	• Same as residential, but with greater potential for increased costs resulting from lost ecosystem services due to larger development area size associated with civic and commercial development.	+1
Parks, open space and trails	• May create a development premium and amenity for adjacent undeveloped parcels or developed parcels, respectively. • Recreation facilities that are a community attraction may enhance potential for local economic development. • Some ecosystem services could still be provided.	• May decrease property values for adjacent landowners if higher pedestrian traffic or active recreation (e.g., ball fields) create a nuisance. • Higher municipal service costs relating to maintenance, law enforcement, etc.	0
Transportation facilities	• Potential for improved connectivity and movement of people and goods. • No mitigation is required, which reduces the cost to develop streets and roads.	• Loss of ecosystem services (e.g., higher potential costs due to flood damage risk). • Environmental impact costs could be passed on to City, thus increasing taxes.	+1
Public and private utilities	• Placement and maintenance of utilities systems can be maximized for cost effectiveness and efficiency. • No mitigation is required, which reduces the cost to develop utilities.	• Loss of ecosystem services (e.g., higher potential costs due to flood damage risk), although impacts may be temporary. • Depending on use (e.g., substation), property value for adjacent landowners could be negatively impacted.	+1

Table A-2 Social Consequences of Allowing Conflicting Uses

Use Category	Positive Social Consequences	Negative Social Consequences	Net Effect
Residential development	• Affordable housing and mix of housing types would not be impacted by the cost of complying with Goal 5 requirements.	• Potential impact to historic and cultural values. • Potential loss of passive recreational and educational opportunities. • Potential loss of scenic benefits.	-1
Limited civic and commercial development	• Civic and commercial development provide community gathering places.	• Same as residential, but with greater potential for impacts to wetlands due to development size.	-1
Parks, open space and trails	• Parks and open space provide community gathering places. • Opportunities for active recreation provide community health benefits.	• Consequences similar to, but less than, residential, depending on amount of active recreation area and non-native landscaping provided.	0
Transportation facilities	• Small blocks and good connectivity encourage the use of active transportation modes, which can improve public health.	• Same as residential, but with greater potential for impacts to wetlands due to development size.	0
Public and private utilities	• Placement and maintenance of utilities systems can be maximized for safety.	• Consequences similar to residential, could be less or temporary depending on type of utility facility (e.g., underground transmission lines).	0

Table A-3 Environmental Consequences of Allowing Conflicting Uses

Use Category	Positive Environmental Consequences	Negative Environmental Consequences	Net Effect
Residential development	• Opportunities for voluntary good stewardship practices by property owners.	• Loss of ecosystem services including water storage, retention and conveyance, flood control, pollution control and detoxification, groundwater recharge/ discharge, erosion protection and habitat for resident or transient species, and nutrient cycling.	-1
Limited civic and commercial development	• Same as residential development.	• Similar to residential, but with potentially greater impacts from the size of the development and amount of impervious area and fewer impacts from domestic animals.	-1
Parks, open space and trails	• Public ownership may help ensure that resource units are maintained in the future.	• Developed parks and open space may displace native riparian and wildlife habitat. • Maintenance practices may introduce pesticides and fertilizers.	-1

Use Category	Positive Environmental Consequences	Negative Environmental Consequences	Net Effect
Transportation facilities	• Small blocks and good connectivity encourage the use of active transportation modes and lessen travel times and vehicle miles traveled which can reduce greenhouse gas emissions.	• Similar to residential, with potentially greater impact due to light and noise from automobile traffic, introduction of polluted runoff from the transportation facility, and vulnerability that accidents that may introduce high levels of pollutants	-1
Public and private utilities	• Placement and maintenance of utilities systems is maximized for efficiency which reduces waste.	• Similar to residential, but potentially fewer permanent impacts. Installation may introduce impacts (some are temporary) by removing native vegetation and disturbing stable slopes and soil.	0

Table A-4 Energy Consequences of Allowing Conflicting Uses

Use Category	Positive Energy Consequences	Negative Energy Consequences	Net Effect
Residential development	• Opportunities to provide compact development patterns with grid pattern streets and reduce out-of-direction travel are increased.	• Additional energy is required to build and maintain water quality and stormwater facilities, and manage impacts from flooding. • Possible increased energy consumption due to loss of vegetation and microclimate effects.	0
Limited civic and commercial development	• Efficient siting may reduce energy cost due to transportation, solar access, and the provision of infrastructure services. Less energy would then be needed to access and operate the facilities.	• Same as residential development.	0
Parks, open space and trails	• Similar to civic and commercial. In addition, allowing trails encourages non-motorized modes of transportation.	• Similar to residential, although impacts could be less depending on the amount of impervious area.	0
Transportation facilities	• Small blocks and good connectivity encourage the use of active transportation modes and lessen travel times and vehicle miles traveled.	• Same as residential development.	+1
Public and private utilities	• Potential for energy savings as a result of maximizing efficiency of system design.	• Similar to residential development, although impacts may be fewer or temporary depending on the type of utility facility.	+1

Table A-5 summarizes the net effect of allowing the conflicting uses. The cumulative net effect column shows the "strength" of the positive or negative consequences of allowing the conflicting use. The maximum positive score is +4 and the maximum negative score is -4. A strong positive score suggests that, on the whole, allowing the conflicting use would provide a net benefit to the City, whereas a

negative score would suggest that the use should not be allowed outright. Results of this table are carried forward to the Program Recommendation section of this analysis.

As shown in Table A-5, the net effect of allowing conflicting uses is negative for residential development, limited civic and commercial development, parks, open space and trails. This is primarily due to the negative environmental and energy consequences and the fact that the positive economic benefits to property owners are off-set by the costs to the community associated with the loss of ecosystem services. In the case of transportation facilities, the environmental consequences of allowing the conflicting use are balanced with the environmental benefits of creating a compact urban grid in order to reduce vehicle miles traveled and encourage active transportation. Similarly for utilities, allowing the conflicting use within the resource and impact area can result in a more efficient system which could avoid the need for pump stations, or other engineered solutions.

Table A-5 Summary of Consequences of Allowing Conflicting Uses

Use Category	Economic	Social	Environ-mental	Energy	Cumulative Effect
Residential development	0	-1	-1	0	**-2**
Limited civic and commercial development	+1	-1	-1	0	**-1**
Parks, open space and trails	0	0	-1	0	**-1**
Transportation facilities	+1	0	-1	+1	**+1**
Public and private utilities	+1	0	0	+1	**+2**

SCENARIO B - LIMITING CONFLICTING USES WITHIN THE RESOURCE AND IMPACT AREAS

Under this scenario conflicting uses would be limited (by regulations) within the Goal 5 resource or its impact area. The tree protection, planned unit development, habitat benefit area, water quality and wetland standards and regulations implemented by the City, Clean Water Services, the Corps of Engineers and the Division of State Lands would be in effect. Tables B-1 through B-5 identify the likely positive and negative consequences of limiting the conflicting use. The expected net effect of limiting the conflicting use, either positive (+1), neutral (0), or negative (-1), is identified in column 4.

Table B-1 Economic Consequences of Limiting Conflicting Uses

Use Category	Positive Economic Consequences	Negative Economic Consequences	Net Effect
Residential development	• Property owners realize most of the development potential of parcels through clustering of residential development. • Economic development is still facilitated by allowing development of residential land for relocating/new employees. • Most ecosystem services are retained reducing costs to replace services or repair impacts (e.g., construct storm water storage facilities or repair flood damage). • Most of the amenity/development premium for adjacent parcels is preserved and may be enhanced by mitigation.	• Loss of some ecosystem services still possible. • Mitigation is required, which increases the cost to develop.	+1
Limited civic and commercial development	• Some of the development potential of parcels fully realized, but may be difficult to allow larger uses without impacting the resource to some degree. • Enhances potential for local economic development by providing some opportunities for commercial development. • Depending on development type, potential increase in property values for adjacent landowners. • Helps to satisfy governmental and school district long-term capital facilities needs.	• Similar to residential, but with greater potential for increased costs resulting from lost ecosystem services and greater need for mitigation as a result of larger scale facilities.	0
Parks, open space and trails	• To the extent that a limited amount of parks, open space and trail development is allowed within the resource or impact area, these facilities may create a development premium and amenity for adjacent parcels and a community attraction may enhance potential for local economic development. • Most ecosystem services are provided.	• Similar to residential, but to these extent these facilities are allowed, they may decrease property values for adjacent landowners if higher pedestrian traffic or active recreation (e.g., ball fields) create a nuisance. • Higher municipal service costs relating to maintenance, law enforcement, etc.	0

Use Category	Positive Economic Consequences	Negative Economic Consequences	Net Effect
Transportation facilities	• To the extent that some facilities are allowed within resources and impact areas, connectivity can be achieved. • Potential for local economic development is enhanced by providing access for goods and people.	• Loss of some ecosystem services still possible. • Mitigation is required, which increases the cost to develop. • Mitigation costs could be passed on to City, thus increasing taxes.	0
Public and private utilities	• Similar to transportation facilities except that system efficiency rather than connectivity is maintained.	• Similar to transportation facilities except that mitigation costs are passed on to rate payers rather than to tax payers.	0

Table B-2 Social Consequences of Limiting Conflicting Uses

Use Category	Positive Social Consequences	Negative Social Consequences	Net Effect
Residential development	• Affordable housing and mix of housing types could still be achieved through clustering. • Community scenic, historic and cultural values are preserved for the most part and may be enhanced by mitigation. • Mitigation sites can become an amenity.	• Some potential loss of scenic, historic and cultural values could still occur which cannot be offset by mitigation.	+1
Limited civic and commercial development	• To the extent that these uses are permitted within resources and impact areas, they provide community gathering places.	• Similar to residential, but impacts may be more significant due to the larger size of the developments.	+1
Parks, open space and trails	• Same as civic and commercial. • Opportunities for active recreation provide community health benefits.	• Similar to residential, but with potentially less impact depending on amount of active recreation area and non-native landscaping provided.	+1
Transportation facilities	• To the extent that connectivity can be achieved, small blocks can be developed which encourage the use of active transportation modes, which can improve public health.	• Similar to residential, but with greater potential for impacts to wetlands due to development size, potential for noise, light and glare.	+1
Public and private utilities	• The placement and maintenance of utilities systems can still be maximized for safety, provided impacts to resources can be mitigated.	• Similar to residential, but consequences could be less depending on type of utility facility (e.g., transmission lines).	+1

Table B-3 Environmental Consequences of Limiting Conflicting Uses

Use Category	Positive Environmental Consequences	Negative Environmental Consequences	Net Effect
Residential development	• Most ecosystem services including water storage, retention and conveyance, flood control, pollution control and detoxification, groundwater recharge/ discharge, erosion protection and habitat for resident or transient species, and nutrient cycling are retained. • Opportunities for mitigation and restoration of degraded resources.	• Some loss of ecosystem services could still occur which cannot be offset by mitigation.	0
Limited civic and commercial development	• Same as residential development.	• Similar to residential, but with potentially greater impacts from light and glare and fewer impacts from domestic animals.	0
Parks, open space and trails	• Same as residential development. • Public ownership may help ensure that resource units are maintained in the future.	• Similar to residential, but with potentially fewer impacts if limits require native vegetation and limit the use of pesticides and fertilizers.	0
Transportation facilities	• To the extent that connectivity can be achieved, small blocks can be developed which encourage the use of active transportation modes and lessen travel times and vehicle miles traveled which can reduce greenhouse gas emissions.	• Similar to residential, with potentially higher impact due to light and noise from automobile traffic, introduction of polluted runoff from the transportation facility, and vulnerability that accidents that may introduce high levels of pollutants.	+1
Public and private utilities	• Placement and maintenance of utilities systems can still be maximized for efficiency which reduces waste provided impacts can be mitigated. • Mitigation and restoration could improve resource quality where resources are degraded.	• Similar to residential, but potentially with potentially fewer permanent impacts. Installation may introduce impacts (some are temporary) by removing native vegetation and disturbing stable slopes and soil.	+1

Table B-4 Energy Consequences of Limiting Uses

Use Category	Positive Energy Consequences	Negative Energy Consequences	Net Effect
Residential development	• Most ecosystem services are retained reducing the energy needed to build and maintain water quality and stormwater facilities, and manage impacts from flooding. • Opportunities to provide compact development patterns with grid pattern streets and reduce out-of-direction travel are possible with mitigation.	• Some loss of ecosystem services could still occur which cannot be offset by mitigation resulting in possible increased energy consumption due to flood impacts and the loss of vegetation and microclimate effects. • Additional energy is required to construct mitigation.	+1

Use Category	Positive Energy Consequences	Negative Energy Consequences	Net Effect
Limited civic and commercial development	• Efficient siting is possible if impacts can be mitigated. Less energy would then be needed to access and operate the facilities.	• Same as residential development.	+1
Parks, open space and trails	• Similar to residential. In addition, allowing trails encourages non-motorized modes of transportation.	• Similar to residential, although impacts could be less depending on the amount of impervious area.	+1
Transportation facilities	• Small blocks and good connectivity are possible if impacts can be mitigated, thus encouraging the use of active transportation modes and lessen travel times and vehicle miles traveled.	• Similar to residential. In addition, increased energy costs may be associated with facilities that are required to avoid resource areas if mitigation is not possible.	+1
Public and private utilities	• Siting facilities within resources may be possible if impacts can be mitigated, thus producing energy savings by maximizing efficiency of system design	• Same as transportation facilities.	+1

Table B-5 summarizes the net effect of limiting the conflicting uses. The cumulative net effect column shows the "strength" of the positive or negative consequences of prohibiting the conflicting use. The maximum positive score is +4 and the maximum negative score is -4. A strong positive score suggests that on the whole limiting the conflicting use would provide a net benefit to the City, whereas a negative score would suggest that the use should not be limited. Results of this table are carried forward to the program recommendation section of this analysis.

As shown in Table B-5, the net effect of limiting conflicting uses is positive for all categories. This is primarily due to the positive social and energy consequences. The economic and environmental consequences are often neutral in recognition that mitigation may be costly and may not provide all of the ecosystem services that are lost.

Table B-5 Summary of Consequences of Limiting Conflicting Uses

Use Category	Economic	Social	Environ-mental	Energy	Cumulative Effect
Residential development	+1	+1	0	+1	**+3**
Limited civic and commercial development	0	+1	0	+1	**+2**
Parks, open space and trails	0	+1	0	+1	**+2**
Transportation facilities	0	+1	+1	+1	**+3**
Public and private utilities	0	+1	+1	+1	**+3**

SCENARIO C - PROHIBITING CONFLICTING USES WITHIN THE RESOURCE AND IMPACT AREAS

Under this scenario conflicting uses would be completely prohibited within the Goal 5 resource or its impact area. Existing water quality regulations implemented by Clean Water Services, the Corps of Engineers and the Division of State Lands would remain in effect, but would be superseded by the City's stricter regulations. Tables C-1 through C-4 identify the likely positive and negative consequences of prohibiting the conflicting use. The expected net effect of prohibiting the conflicting use, either positive (+1), neutral (0), or negative (-1), is identified in column 4.

Table C-1 Economic Consequences of Prohibiting Conflicting Uses

Use Category	Positive Economic Consequences	Negative Economic Consequences	Net Effect
Residential development	• Existing ecosystem services are preserved eliminating need to replace services or repair impacts (e.g., construct storm water storage facilities or repair flood damage). • Amenity/development premium for adjacent parcels is preserved • Environmental impact costs are avoided.	• Property owners don't realize full development potential of parcels. • Property tax base is not increased • Economic development is impacted by loss of land for housing relocating/new employees.	-1
Limited civic and commercial development	• Same as residential development.	• Development potential of parcels not realized. • Reduces potential for local economic development. • Does not help to satisfy governmental and school district long-term capital facilities needs.	-1
Parks, open space and trails	• Similar to residential. In addition, may increase property values for adjacent landowners if higher pedestrian traffic or active recreation (e.g., ball fields) would have created a nuisance element. • Lower municipal service costs relating to maintenance, law enforcement, etc.	• Recreation facilities, which are a community attraction that may enhance potential for local economic development, are not provided.	0
Transportation facilities	• Existing ecosystem services (e.g., higher potential costs due to flood damage risk) are preserved. • Environmental impact costs are avoided.	• Connectivity and movement of people and goods is restricted, impacting potential for local economic development. • Cost of building transportation facility is increased.	-1
Public and private utilities	• Same as transportation facilities.	• The construction and operating costs of utilities are increased as a result of facilities being designed to avoid resources and impact areas.	-1

Table C-2 Social Consequences of Prohibiting Conflicting Uses

Use Category	Positive Social Consequences	Negative Social Consequences	Net Effect
Residential development	• Scenic, historic and cultural values of existing resources are preserved. • Passive recreational and educational opportunities of existing resources are preserved.	• Affordable housing and mix of housing types would be impacted by the cost of complying with Goal 5 requirements.	0
Limited civic and commercial development	• Same as residential development.	• Civic and commercial developments could be impacted, thus reducing community gathering places.	0
Parks, open space and trails	• Same as residential development.	• Parks and open space, which provide community gathering places, are impacted. • Opportunities for active recreation and outdoor education, which provide community benefits, could be precluded.	-1
Transportation facilities	• Same as residential development.	• Small blocks and good connectivity, which encourage the use of active transportation modes and can improve public health, may not be possible.	-1
Public and private utilities	• Same as residential development	• Placement and maintenance of utilities systems may not be able to be maximized for safety.	-1

Table C-3 Environmental Consequences of Prohibiting Conflicting Uses

Use Category	Positive Environmental Consequences	Negative Environmental Consequences	Net Effect
Residential development	• Ecosystem services including water storage, retention and conveyance, flood control, pollution control and detoxification, groundwater recharge/ discharge, erosion protection and habitat for resident or transient species, and nutrient cycling that are provided by the existing resources are preserved.	• No mitigation would be required; thus opportunities for enhancement of degraded resources may be fewer.	+1
Limited civic and commercial development	• Same as residential development.	• Same as residential development.	+1
Parks, open space and trails	• Developed parks and open space don't displace native riparian and wildlife habitat. • Maintenance practices don't occur which could introduce pesticides and fertilizers.	• Same as residential development.	0

Use Category	Positive Environmental Consequences	Negative Environmental Consequences	Net Effect
Transportation facilities	• Same as residential development. • Impact due to light and noise from automobile traffic, introduction of polluted runoff from the transportation facility, and vulnerability that accidents that may introduce high levels of pollutants are avoided.	• Out-of-direction travel is increased. Small blocks and good connectivity, which encourage the use of active transportation modes and lessen travel times and vehicle miles traveled, thus reducing greenhouse gas emissions, may be precluded.	-1
Public and private utilities	• Same as residential development. • Impacts from installation, which may introduce impacts (some are temporary) by removing native vegetation and disturbing stable slopes and soil, are avoided.	• Placement and maintenance of utilities systems cannot be maximized for efficiency thus increasing the need for additional power lines, pump stations, and other facilities to work around resources and impact areas.	-1

Table C-4 Energy Consequences of Prohibiting Conflicting Uses

Use Category	Positive Energy Consequences	Negative Energy Consequences	Net Effect
Residential development	• Additional energy is not required to build and maintain water quality and stormwater facilities, and manage impacts from flooding • No increased energy consumption due to loss of vegetation and microclimate effects.	• Reduces opportunities to provide compact development patterns with grid pattern streets and reduce out-of-direction travel.	0
Limited civic and commercial development	• Same as residential development.	• Efficient siting may reduce energy cost due to transportation, solar access, and the provision of infrastructure services. Less energy would then be needed to access and operate the facilities.	0
Parks, open space and trails	• Similar to residential, although benefits could be less depending on the amount of impervious area.	• Similar to civic and commercial. • Allowing trails encourages non-motorized modes of transportation.	0
Transportation facilities	• Same as residential development.	• Small blocks and good connectivity encourage the use of active transportation modes and lessen travel times and vehicle miles traveled.	-1
Public and private utilities	• Same as residential development.	• Placement and maintenance of utilities systems cannot be maximized for efficiency thus increasing the need for additional power lines, pump stations, and other facilities to work around resources and impact areas.	-1

Table C-5 summarizes the net effect of prohibiting the conflicting uses. The cumulative net effect column shows the "strength" of the positive or negative consequences of allowing the conflicting use. The maximum positive score is +4 and the maximum negative score is -4. A strong positive score suggests that, on the whole, prohibiting the conflicting use would provide a net benefit to the City, whereas a negative score would suggest that the use should not be prohibited. Results of this table are carried forward to the program recommendation section of this analysis.

Table C-5 Summary of Consequences of Prohibiting Conflicting Uses

Use Category	Economic	Social	Environ-mental	Energy	Cumulative Effect
Residential development	-1	0	+1	0	**0**
Limited civic and commercial development	-1	0	+1	0	**0**
Parks, open space and trails	0	-1	0	0	**-1**
Transportation facilities	-1	-1	-1	-1	**-4**
Public and private utilities	-1	-1	-1	-1	**-4**

As shown in Table A-5, the net effect of prohibiting conflicting uses is neutral for residential development, civic and commercial development. This is primarily due to the positive environmental consequences being off-set by the economic impacts to property owners. The consequences to parks, trails and open space are generally neutral; however, the social consequences would likely be negative as trails and other passive recreation opportunities within the resource and impact area would be precluded. In the case of transportation facilities, the environmental benefits of prohibiting the conflicting use are balanced with the economic consequences of increased out-direction-travel and vehicle miles traveled. Similarly for utilities, prohibiting the conflicting use within the resource and impact area could preclude development of an efficient system thus creating the need for additional pump stations, or other engineered solutions.

PROGRAM RECOMMENDATIONS

This section includes draft recommendations as to whether to allow, limit, or prohibit identified conflicting uses within significant natural resources areas based on the ESEE analysis above. A decision to prohibit or limit conflicting uses protects the natural resources. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a resource site:

(a) The City may decide that a significant natural resource is of such importance compared to the conflicting uses and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource that the conflicting uses should be prohibited.

(b) The City may decide that both the significant natural resource and the conflicting uses are important compared to each other and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource to a desired extent or requires mitigation of loss natural resources and associated values and functions.

(c) The City may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the significant natural resources. The ESEE analysis must demonstrate that the conflicting use is of sufficient importance relative to the resource and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

SUMMARY OF GENERAL RECOMMENDATION

Table 3, below, identifies the "net effect" from Tables A-4, B-4, and C-4 and provides a general recommendation for each use category. The possible numeric values range from -4 to +4. A value of -4 suggests that the scenario (allow, limit, prohibit) would likely result in negative economic, social, environmental and energy consequences. Whereas, a value of +4 suggests that the scenario would likely result in positive consequences. The recommendation is based on encouraging the strongest positive outcome.

The analysis and weighing of the ESEE factors from the three scenarios suggests that overall the limit scenario offers the greatest net benefit in all use categories; thus a general recommendation of "limit" is appropriate. However, the Private and Public Utilities and Facilities and Transportation use categories also received a positive result under the Allow scenario; indicating that a greater degree of flexibility to accommodate these uses under a future protection program may be appropriate.

Table 3: Summary of Net Effect of Allowing, Limiting or Prohibiting Conflicting Uses within Significant Wetlands and Impact Areas

Use Category	Allow (from Table A-1)	Limit (from Table B-1)	Prohibit (from Table C-1)
Residential development	-2	+3	0
Limited civic and commercial development	-1	+2	0
Parks, open space and trails	-1	+2	-1
Transportation facilities	+1	+3	-4
Public and private utilities	+2	+3	-4

PROGRAM RECOMMENDATIONS TO IMPLEMENT LIMIT SCENARIO

As noted above, the limit scenario offers the greatest net benefit in all use categories; thus a program that limits conflicting uses is appropriate. More specifically, the program should accomplish the following objectives in order to achieve the net benefit to the City anticipated by this approach:

- Avoid impacts where possible. Where impacts cannot be avoided require mitigation for resource impacts to help ensure that lost ecosystem services are replaced to the extent possible.
- Support the clustering of residential development away from resources so that the economic and social benefits of providing housing are accomplished in conjunction with environmental benefits of protecting resources.

- Recognize that the Private and Public Utilities and Facilities and Transportation use categories may require a greater degree of flexibility to allow for the crossing of resources and the temporary impacts associated with underground utilities.

There are a number of existing regulations and policies, which apply to significant wetlands, and which address these objectives. These regulations and policies, which are implemented by the City, Clean Water Services, the Corps of Engineers (COE) and the Department of State Lands, include:

- CWS Design and Construction Standards. The City's Development Code (Section 50.25.1.F) requires documentation from Clean Water Services stating that water quality will not be adversely affected by the proposal. As noted above, because these wetlands are hydrologically connected to streams, they are included within the riparian area boundaries shown on Figure 3, which were defined in accordance with CWS vegetated corridor width determination methods. The significant wetlands will be subject to CWS review. . CWS requires all degraded vegetated corridors on a parcel to be improved as a condition of issuing development permits regardless of whether the vegetated corridor is impacted and mitigation is typically required for unavoidable impacts.

- Tree protection. The wetlands designated as "significant" in the Draft LWI were designated by the City as Significant Natural Resource Areas (SNRA). The City has a development review process for proposed removal of trees within a SNRA. Protected trees, including those within a SNRA, are the subject of the highest level of review and mitigation.

- Planned Unit Development (PUD). A PUD is required for residential developments 10 acres or larger in the South Cooper Mountain. All of the properties within SCMAA which are adjacent to wetlands or impact areas appear to be over 10 acres in size. "Local wetlands" are one of the listed community features in Section 60.35.25.1.C that are required to be "provided" by Planned Unit Developments and significant wetlands are shown on Figure 12: Natural Resources in the Community Plan area map.

- Conditional Uses. Most civic and commercial development and parks will be new conditional uses in residential zones. In order to approve a new Conditional Use application, the decision making authority must find that "The proposal will comply with the applicable policies of the Comprehensive Plan." Within South Cooper Mountain Community Plan was adopted into Chapter V of the Comprehensive Plan. Natural Resource Policies include: "*Locally significant wetlands and protected riparian corridors within the Community Plan area shall be protected and enhanced, consistent with local, state, and federal regulations."* Upon adoption of the Draft LWI, three of the wetlands inventoried will be designated as "significant".

- Habitat Benefit Areas (HBAs). The Natural Resources Map/HBA for SCMAA, which was adopted into Vol. III of the Comprehensive Plan, includes the significant wetlands. The HBA program is intended to protect, conserve and restore riparian and upland habitats through a voluntary incentive based program. HBA areas are intended to be the area beyond the areas that are managed or protected through other programs such as CWS Vegetated Corridors.

- Oregon Department of State Lands (DSL). Significant wetlands are subject to the permit requirements of the state Removal -Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands. Under this permit, the ecological functions (biotic and abiotic) that are impacted by the project must be replaced. In addition to determining which ecological functions should be replaced, DSL uses ratios for spatial considerations; ratios are specific to the restoration, creation, or enhancement types of compensatory mitigation. DSL prefers mitigation within the same watershed; payment in lieu of mitigation may be possible or acquisition of mitigation credits from a DSL approved mitigation bank.

- United States Army Corps of Engineers (Corps). The Clean Water Act (CWA) Section 404 establishes a program to regulate the discharge of dredge and fill material into waters of the United States, including wetlands. Responsibility for administering and enforcing Section 404 is shared by the US Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA). Permit review and issuance follow a sequential process that encourages avoidance of impacts first, followed by minimizing impacts and, finally, requiring mitigation for unavoidable impacts to the aquatic environment.

These regulations and policies as applied to significant wetlands would appear to provide an appropriate level of protection to achieve the recommendation for “limit”.