

**Revisions to Clarify the ESEE Analysis
for the
Northwest Hills Natural Areas Protection Plan**

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Portland City Council

Vera Katz, Mayor
Earl Blumenauer, Commissioner of Public Works
Charlie Hales, Commissioner of Public Safety
Gretchen Kafoury, Commissioner of Public Utilities
Mike Lindberg, Commissioner of Public Affairs

Portland City Planning Commission

Richard Michaelson, President
Douglas Van Dyk, Vice President
Steve Abel
W. Richard Cooley
Sarah ffitch
Bruce Fong
Paul Schuback
Ruth Scott
Noell Webb

Portland Bureau of Planning

Charlie Hales, Commissioner-in-Charge
David C. Knowles, Planning Director
Robert E. Clay, Chief Planner, Long Range Planning and Urban Design

Project Staff

Tim Brooks, City Planner

Introduction

The following narrative text has been prepared to address deficiencies found by the Land Conservation and Development Commission in its first periodic review of Portland's compliance with Statewide Planning Goal 5, natural resources. This text revises the original analysis prepared for this natural resource plan. The revised text occurs in the second of three steps contained in the Goal 5 Administrative Rule: (1) identification and analysis of economic, social, environmental, and energy consequences of conflicting resources on the resource, and the resource on conflicting uses (ESEE analysis), and (2) decision on the appropriate level of protection, if any, for the resource. This step is called, *Identify Conflicting Uses or ESEE analysis*. The first step is the inventory of Goal 5 resources and the third step is to develop the program to achieve the goal or implementation measures.

The revisions to the analysis for this resource plan have not resulted in any changes to the environmental zone mapping of either environmental protection (ep), or environmental conservation (ec) zones.

Background

On January 20, 1995, the Land Conservation and Development Commission held a hearing on the City's first periodic review of the Comprehensive Plan. At the hearing, the Commission adopted the staff recommendations contained in the director's report, dated November 28, 1994 and the director's supplemental report dated January 13, 1995. The Commission's adopted motion instructed the DLCDC director to issue an order implementing the Commission's action on May 30, 1995. The Commission's pending order permits the City to adopt and submit to DLCDC revisions to the City's final periodic review order of December 1993. Such revisions allow the City to address deficiencies identified in the director's report for the City's Goal 5 natural resources program. The department found that a more specific narrative text was needed "to provide reasons to explain why decisions are made for specific sites." The revisions address Periodic Review Work Program item 1.1.

The director's report showed that a substantial portion of Portland's work complies with Statewide Planning Goal 5. Only the ESEE analyses for Smith and Bybee Lakes (Site #55, Columbia Corridor), Balch Creek, Northwest Hills, and Johnson Creek need to be supplemented with information in the "decision" statements. The report found that, "evidence in the record is likely to be adequate to prepare these statements, without collecting new information or conducting additional analysis."

The ESEE analysis must be received by the department by April 17, 1995 for action at the May 25-26, 1995 LCDC meeting.

Draft ESEE Revisions for the Northwest Hills Natural Areas Protection Plan

Introduction

Unless otherwise indicated, references to page numbers are to the *Northwest Hills Natural Areas Protection Plan*, adopted by Portland City Council July 31, 1991. An example of such a reference is: "Wildlife species and resource areas are identified in the inventory summary and map (pp. 133-135)." The following text revisions will be inserted in that plan at the end of the applicable resource site discussion in Chapter 7.

Resource Site 86

This 272-acre site is composed of several smaller drainage basins which pass through the Blythswood and Willamette Heights Additions. The resources available at this site provide moderately high quality habitat for wildlife and include several rare and sensitive plant and animal species identified in the inventory summary (pp. 109-110). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted near Thurman Street, and the industrial uses permitted along St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Two vacant lots within this site were identified as needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record). Neither of these lots contains Goal 5 resources warranting protection. City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

Most of this site is zoned Open Space and is part of Forest Park. As discussed in more detail below, full protection of this site's high quality resources—its sensitive flora and forest habitat—would have little impact on residential uses because very little residential land contains these resources, and no impact on industrial uses. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the creek and forest resources within the industrial and residential areas are of lower quality and contain fewer resource values than

those located within the park or on small portions of residential lots described below. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential and industrial development.

The developed areas of the site (those areas without creek and forest resources) contain low quality, degraded resources. The economic value of this land for industrial and residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 86 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 30 acres of improved residential and industrial land along Thurman and Aspen Streets and St. Helens Road do not contain resources warranting protection. Though not considered needed for housing or industry, this land can provide opportunities for new development without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 15 acres of forest or creek resources on residential land and 2.5 acres on industrial land in the Blythwood and Willamette Heights Additions warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing and industry without significant resource harm. This land provides the following resource values: habitat for wildlife, surface drainage, slope stabilization, sediment trapping, erosion control, and scenic values. The decision for these areas is to limit conflicting uses through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's sensitive flora and forest habitat located in Forest Park (224 acres) and along a ravine above Alexandra Avenue (0.6 acres) are of high quality and warrants protection. This land provides the following resource values: habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, water purification, groundwater recharge and discharge, and scenic values. The area supporting these resources has limited conflicting uses (through Open Space zoning) or, for the 0.6 acre of high quality forest on residential land, full protection would not preclude development because buildable areas on individual lots remain. The decision for these areas is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) overlay zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
R10(R5)	5	0
R10	4	0.3
R5	5	0.3
R2	1	0
IH	2.5	0

Approximately 15.6 acres of residential and 2.5 acres of industrial land are affected by environmental zones. Resource protection measures limit but do not preclude residential and industrial development within this site; there is no estimated net change in development potential.

Resource Site 87

This 326-acre site forms the basins of one year-round creek ("Express Creek") and one smaller seasonal creek (see Map 87, p. 115). The resources available at this site provide high quality habitat for wildlife and include several sensitive plant and animal species identified in the inventory summary (pp. 113-114). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted along NW 53rd Drive, and the industrial uses permitted along St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Three vacant lots within this site were identified as needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record). These lots have since been fully developed or do not contain Goal 5 resources. City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

Most of this site is zoned Open Space and is part of Forest Park. As discussed in more detail below, this site's high quality resources—forested creeks and tributaries, sensitive flora and fauna, and forest habitat—are located in the park or on small portions of residential lots. Full resource protection therefore not affect industrial uses and would have little impact on residential uses due to the area affected and because all lots remain buildable. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forested slopes and the degraded creek segments within the industrial and residential areas are of lower quality and contain fewer resource values than those located within the park or on small portions of

residential lots described below. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential and industrial development.

The developed areas of the site along St. Helens Road and NW 53rd Drive contain low quality, degraded resources. The economic value of this land for industrial and residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 87 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 23 acres of improved industrial land without forest cover and without drainages along St. Helens Road contain low quality, degraded resources that do not warrant protection. Approximately 2 acres of developed residential land along NW 53rd Drive also do not warrant protection. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 2.5 acres of medium quality forest on three lots along NW 53rd Drive warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. This land provides the following resource values: wildlife habitat, domestic water supply, slope stabilization, sediment trapping, and scenic values. Two degraded creek segments on 4 acres of industrial land along St. Helens Road also warrant conservation because this land contains lower quality resources and can be carefully developed for industry without significant resource harm. This land provides the following resource values: wildlife habitat, surface drainage, erosion control, slope stabilization, sediment trapping, and scenic values. The decision for these areas is to limit conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's high quality seasonal and year-round creeks, tributaries, sensitive flora and fauna, and forest habitat warrant full protection. These resources cover 394 acres, all but about one acre of which is located in Forest Park. The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, water purification, groundwater recharge and discharge, and scenic values. The area supporting these resources has limited conflicting uses (through Open Space zoning) or, for the 0.8 acres of high quality forest and creek habitat located within ravines on two residential lots, full protection would not preclude development since substantial buildable site area remains. The decision

for these areas is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) overlay zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	2.5	0.8
IH	4	0

Approximately 3.3 acres of residential and 4 acres of industrial land are affected by environmental zones. Resource protection measures limit but do not preclude residential and industrial development within this site; there is no estimated net change in development potential.

Resource Site 88

This 418-acre site contains numerous smaller seasonal creeks that drain into culverts near St. Helens Road. The resources available at this site provide moderately high quality habitat for wildlife and include sensitive fauna identified in the inventory summary (pp. 117-119). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The industrial uses permitted along St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

As discussed in more detail below, full protection of high quality resources located above the industrial area along St. Helens Road is appropriate given the significance of the resources and the fact that all but one-half acre of this land is zoned Open Space and is part of Forest Park. Full protection of one-half acre of high quality forest on industrial land would not preclude development since the affected lot retains substantial area for new or expanded uses. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the creek and forest resources at the base of the hillside along St. Helens Road are of lower quality and contain fewer resource values than those located in Forest Park. These resources are also accessible and potentially viable for heavy industrial development. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled expansion of industrial development.

The developed areas of the site along St. Helens Road (those areas without surface drainages and forest resources) contain low quality, degraded resources. The economic value of this land for industrial and residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 88 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 12 acres of developed industrial area without forest or surface drainages along the St. Helens Road contain degraded, low quality resources that do not warrant protection. Though not considered needed for industry, this land can provide beneficial industrial opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 17 acres of forest and drainages on industrial land at the base of the hillside warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for industry without significant resource harm. This land provides the following resource values: wildlife habitat, surface drainage, slope stabilization, sediment trapping, erosion control, and scenic values. The decision for this land is to limit conflicting uses through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's high quality seasonal creeks, wetlands, sensitive fauna, and forested slopes warrant full protection. These resources cover 389 acres, all but one-half acre of which are located in Forest Park. The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, water purification, groundwater recharge and discharge, and scenic values. The land supporting these resources has limited conflicting uses (through Open Space zoning). Approximately one half acre of high quality forest is located on industrial land (Tax Lot 43) immediately north of the Forest Park frontage on St. Helens Road. Full protection would not preclude development since this lot retains substantial area for new or expanded uses. The decision for these resource areas is to prohibit conflicting uses through the application of the environmental protection (EP) overlay zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
IH	17	0.4

Approximately 17 acres of industrial land are affected by environmental zones. Resource protection measures limit but do not preclude industrial development. Potential industrial building area is reduced by 0.4 acres; this resource land is all very steep and is not needed for industrial use.

Resource Site 89

This 365-acre site forms the lower half of the Saltzman Creek basin. The resources available at this site provide high quality habitat for wildlife and additional resource values are described under Decisions, below. Wildlife species and resource types and locations are identified in the inventory summary and map (pp. 121-123). These resources and resource values are described further in Chapter 5 (pp. 31-68). Since the entire site is natural park land and zoned Open Space, conflicting uses are limited to potential new park facilities. No such facilities are planned, and any potential future uses can be addressed through a Natural Resources Management Plan for Forest Park.

Conclusion

Prohibiting conflicting uses would generally have no adverse effects, however, one small (10,000 sq. ft.) developed lot along the creek at Saltzman Road contains less sensitive resources and warrants limited protection. Limiting conflicting uses otherwise does not adequately protect the site's significant resources. Allowing conflicting uses fully would destroy significant resources and is not warranted within this site.

Decisions

The decision for Site 89 is to limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis.

This 365-acre site contains significant year-round creeks, wildlife habitat, forest, open space and groundwater resources. These resources provide the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, water purification, groundwater recharge and discharge, and scenic values. The decision for this site is to prohibit conflicting uses except for the developed lot along Saltzman Road. The resources at this 10,000 sq. ft. lot are degraded and full protection here would eliminate opportunities for building expansion. The decision for this lot is to limit conflicting uses through the application of the environmental conservation (EC) overlay zone. The decision to prohibit (for the balance of the site) is implemented through the application of the environmental protection (EP) overlay zone.

Resource Site 90

This 390-acre site forms the upper basin of Saltzman Creek. The resources available at this site provide high quality habitat for wildlife and include several rare and

sensitive plant and animal species identified in the inventory summary (pp. 125-127). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted along NW Skyline Boulevard conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

On balance, as discussed in more detail below, full protection of high quality resources located along the major creeks in Tax Lot 15 (a residential lot) is more important than even limited future development. More than 90 percent (approximately 200 acres) of the lot would remain buildable. High quality resources are also located in Forest Park, on land zoned Open Space with limited conflicting uses. Even limited development of these high quality resource areas would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest and minor creek tributaries within Tax Lot 15 are of lower quality and contain fewer resource values than the resources described above. These resources are also accessible and potentially viable for residential development. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled expansion of residential development.

Developed residential areas along Skyline Boulevard (without the creek tributary and forest resources described above) contain low quality, highly degraded resources. The economic value of this land for residential use outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 90 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 17 acres of residential land without forest cover and without drainages along Skyline Boulevard contain degraded, low quality resources. Though not considered needed for housing, this land can provide housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 175 acres of residentially-zoned land containing upland forest and creek tributaries east of Skyline Boulevard warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. This land provides the following resource values: habitat for wildlife, groundwater recharge and discharge, surface drainage, slope stabilization, sediment trapping, erosion control, and scenic values. The decision for these resource areas is to limit conflicting uses through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's high quality resources (major creeks, rare flora, and mature forest habitat) are located in areas with limited conflicting uses (due to Open Space zoning) or where full protection would not preclude development because lots retain buildable area. (The Rff zoning within this site requires 20-acre minimum lot sizes, leaving substantial area for on-site redistribution.) These resources cover 198 acres (161 acres in Forest Park and 37 acres in residential) and warrant full protection. The resources provide the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, microclimate amelioration, scenic, recreational and heritage values. The decision for these resource areas is to prohibit conflicting uses through the application of the environmental protection (EP) overlay zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
Rff	175	37

Approximately 212 acres of residentially-zoned land are affected by environmental zones. Resource protection measures limit but do not preclude conflicting uses within this site due to opportunities for on-site redistribution; there is no net change in development potential.

Resource Site 91

This 383-acre site contains the basins of three creeks that pass through Forest Park and into residential areas along St. Helens Road. The resources available at this site provide high quality habitat for wildlife and include several rare and sensitive animal species identified in the inventory summary (pp. 129-131). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R2.5 and R10) uses permitted along Saltzman Road and Willbridge Avenue, and the heavy industrial (IH) uses permitted along St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see 1987 *Vacant Land Report* in record). City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

On balance, as discussed in more detail below, full protection of high quality resources at this site could preclude development of several residential and industrial lots. Limited protection for these lots is therefore proposed, as discussed under Decisions, below. High quality resources on Open Space zoned land in Forest Park warrants full protection due to the absence of major conflicting uses and the quality of the resources.

As noted above, limited protection of significant resources on several residential and industrial lots in the Willbridge Addition near St. Helens Road provides an appropriate balance of creek and forest conservation and controlled development.

The developed areas (without creek and forest resources) along St. Helens Road contain low quality, highly degraded resources. This land can provide beneficial residential and industrial development opportunities and allowing these uses fully is appropriate given the low resource value.

Decisions

The decision for Site 91 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 25 acres of improved residential and industrial areas without drainages in the Willbridge Addition along St. Helens Road contain resources of low significance. Though not considered needed for housing or industry, this land can provide housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 15 acres of residential land above Willbridge Avenue and 2.5 acres of industrial land along St. Helens Road warrant limited protection because creek and forest resources on this land are slightly lower in quality (than in Forest Park) and full protection could preclude development of an estimated 4 residential and 6 industrial properties. This land provides the following resource values: habitat for wildlife, domestic water supply, surface drainage, slope stabilization, sediment trapping, erosion control, and scenic values. This land can be carefully developed for housing and industry provided adverse resource impacts are controlled. The decision to limit conflicting uses is implemented through the application of the environmental conservation (EC) overlay zone.

Prohibit conflicting uses. The site's significant resources (creeks, rare and sensitive fauna, forest habitat, open space and groundwater) located on Open Space land warrant full protection. These resources cover 340 acres and provide the following resource values: moderately high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, air and water purification, groundwater recharge and discharge, microclimate amelioration, scenic, and recreational values. The decision for these resource areas is to prohibit conflicting uses within open space lands through the application of the environmental protection (EP) zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
R10	5	0
R2.5	10	0
IH	2.5	0

Approximately 15 acres of residential and 2.5 acres of industrial land are affected by environmental zones. Resource protection measures limit new industrial and residential development within this site; there is no estimated net change in development potential.

Resource Site 92

This 20-acre site contains an eight-acre pond bordered by scrub-shrub wetlands, a four-acre riparian hardwood forest, and one seasonal (unnamed) creek and one perennial ("Doane") creek. The resources available at this site provide high quality habitat for wildlife and additional resource values described under Decisions, below. Wildlife species and resource types and locations are identified in the inventory summary and map (pp. 133-135). These resources and resource values are described further in Chapter 5 (pp. 31-68). The heavy industrial (IH zone) uses permitted at this site conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

City-wide there is a surplus of industrial land; this surplus includes heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

On balance, as discussed in more detail below, full protection of high quality resources located within the triangular area formed by the railway embankments is more important than even limited future development. As a practical matter, this land is not accessible for heavy industrial development and, as addressed above, the City has no shortage of land available for such development. In addition, even limited heavy industrial development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the wetland resource located east of the railway embankments and on the forest habitat resource located west of the railway embankments are of lower quality and contain fewer resource values than those located in the triangular area described above. These resources are also accessible and potentially viable for heavy industrial development. Limiting conflicting uses here provides an appropriate balance of wetland and forest habitat conservation and controlled expansion of industrial development.

The railway embankments contain low quality, degraded resources. The railway is important to the functioning of Portland's Northwest Industrial area and relocation of the railway would be economically unfeasible. Therefore, allowing conflicting uses fully along the railway embankments is more important to the City than conserving these resources.

Decisions

The decision for Site 92 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Three railway embankments which form a triangle covering approximately five acres of the site do not warrant protection as discussed above. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. An approximately two-acre wetland located east of and adjacent to the eastern railway embankment is of medium significance and is potentially viable for industrial development as discussed above. This wetland provides the following resource values: limited habitat for wildlife, flood storage and desynchronization, sediment trapping and erosion control. An approximately one-half acre forest habitat resource located between the western railway embankment and Hwy. 30 is of medium significance and is also potentially viable for industrial development as discussed above. This resource provides the following resource values: habitat for wildlife, surface drainage, sediment trapping and erosion control.

Under these circumstances, some protection for the wetland and the forest habitat is appropriate. However, some heavy industrial development will also be permitted. The decision for these resources is to balance conflicts by limiting conflicting uses. See Proposed Zoning Map 92 (Appendix A) where the EC zoned areas indicate the ability, with some restrictions, to have industrial development on these two areas of Site 92.

Prohibit conflicting uses. The decision for the high quality wetlands, pond, drainages and riparian forest within the embankments of the railway is to prohibit conflicting uses. These resources total 11.5 acres in area and provide the following resource values: important habitat for wildlife, sediment trapping, erosion control,

surface drainage, air and water purification, flood storage and desynchronization, and groundwater recharge and discharge values. This decision is implemented through the application of the environmental protection (EP) overlay zone (see Proposed Zoning Map 92 (Appendix A)).

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
IH	2.5	11.5

Approximately 14 acres of industrial land are affected by environmental zones. Resource protection measures preclude most development allowed within the embankments; however, this land has no viable access and is not needed for industrial use.

Resource Site 93

This 26-acre site contains a highly disturbed field and a riparian forest and creek that feeds Doane Lake (see Site 92). This site provides generally low quality resources except for the riparian forest and creek which is an important link between the west hills and the lake. Wildlife species and resource types and locations are identified in the inventory summary and map (pp. 137-139). The site's resource values are described under Decisions, below (additional discussion of resources and resource values is in Chapter 5 (pp. 31-68)). The heavy industrial (IH zone) uses permitted at this site conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

City-wide there is a surplus of industrial land; this surplus includes heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

Full protection of the creek and riparian forest would not significantly affect industrial uses since this area is a steep ravine and not needed nor viable for industrial development. Limiting conflicting uses for less sensitive forest areas on the banks of the ravine provides an appropriate balance between resources and industrial use. Allowing conflicting uses fully within the disturbed field adjacent to NW Front Avenue is appropriate given the low quality and highly disturbed nature of the resources located there.

Decisions

The decision for Site 93 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. The disturbed, open field is about 22 acres in size and contains low quality resources. Additionally, north of the ravine are two highly degraded creek tributaries. This land does not warrant protection and can provide beneficial industrial use. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately two acres of moderate quality forest on the banks of the ravine can support limited development so long as adverse impacts are controlled and mitigated. The ravine banks provide the following resource values: habitat for wildlife, sediment trapping and erosion control, surface drainage and slope stabilization. The decision for this land is to limit conflicting uses. See Proposed Zoning Map 93 (Appendix A) where the EC zoned areas indicate the ability, with some restrictions, to have industrial development on these two acres of Site 93.

Prohibit conflicting uses. The approximately two acres of high quality creek and riparian forest within the banks of the ravine at the site's western boundary warrant full protection. These provide the following resource values: important habitat for wildlife, sediment trapping, erosion control, surface drainage, water purification, flood storage and desynchronization. The decision for these resources is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) overlay zone (see Proposed Zoning Map 92 (Appendix A)).

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
IH	3.5	1.7

Approximately 5.2 acres of industrial land are affected by environmental zones. Resource protection measures would preclude development of about 1.7 acres of the site otherwise allowed by zoning; however, this land has severe building constraints and is not needed for industry.

Resource Site 94

This 343-acre site forms the lower portion of the Doane Creek basin and contains an abandoned quarry at its eastern terminus. The boundary of the quarry is located 200 to 300 feet inside of the forest boundary as shown on Map 94 (p. 143). The resources available at this site provide high quality habitat for wildlife including several sensitive species; wildlife species and resource types and locations are identified in the inventory summary and map (pp. 141-143). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The heavy industrial (IH zone) uses permitted at the eastern site boundary along St. Helens Road conflict with the identified Goal 5 resources. Additionally, one residential (RF zoned) lot along the site's northern

boundary conflict with Goal 5 resources. The nature of these conflicting uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record). City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

On balance, as discussed in more detail below, full protection of high quality resources located above the quarry to the west is more important than even limited future development. This land is zoned Open Space and is part of Forest Park, except for one small residential lot. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the creek and forest resources within the abandoned quarry site are of lower quality and contain fewer resource values than those located above the quarry. These resources are also accessible and potentially viable for heavy industrial development. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled expansion of industrial development.

The upland areas of the quarry (those areas without the creek and forest resources described above) contain low quality, highly degraded resources. This land has potential reuse value for industrial development and the economic value outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 94 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. The abandoned quarry site comprises approximately 15 acres of land, about 6 of which is zoned for industrial use. Approximately 7 acres of the quarry (5 acres on industrial land and 2 acres on open space (OS) land) contains highly disturbed (quarried) bedrock of little resource value. This land is divided into two 3.5-acre areas by a small creek that passes through the middle of the industrial land. The decision for these two areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 8 acres of land within the abandoned quarry contain creek and forest resources that, while disturbed, provide several resource values: moderate quality habitat for wildlife, surface drainage, sediment trapping,

and erosion control values. The creek passes through the middle of the quarry and veers east before reaching St. Helens Road (the Natural Features map shows the pre-quarry creek and topography). The forest habitat comprises a 200 to 300 ft. wide band around the boundary of the quarry except along St. Helens Road. Approximately 1.2 acres of this land is zoned industrial and can be carefully developed for industrial use provided adverse resource impacts are controlled. The decision for these creek and forest resource within the quarry is to limit conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone.

Prohibit conflicting uses. The site's more significant resources—Doane Creek, sensitive fauna, upland forest habitat—located above the abandoned quarry to the west warrant full protection. These resources cover 328 acres and provide the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. One residentially-zoned (0.4-acre) lot, landlocked in Forest Park and located along the site's northern border, would be precluded from development. The lot is substandard because the existing zoning requires a 2-acre minimum lot size. The lot is also too small to support agricultural and forestry uses (which are allowed in the zone). Because of their high significance, the decision for the resources located within this lot is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
IH	1.2	0
RF	0	0.4

Approximately 1.2 acres of industrial and 0.4 acres of residential land are affected by environmental zones. The application of protection zoning will reduce development potential by one possible unit; though the lot was excluded from the buildable lands inventory, this loss is nevertheless offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 95

This 462-acre site forms the upper portion of the Doane Creek basin. The resources available at this site provide high quality habitat for wildlife and include sensitive amphibian species identified in the inventory summary (pp. 145-147). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted

on approximately half of the site bordering Skyline Boulevard conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

Approximately half of this site is zoned Open Space and is part of Forest Park. As discussed in more detail below, full protection of this site's high quality resources would have limited impact on residential uses because individual lots all retain buildable areas. In the high quality resource areas, even limited residential development would, due to the delicate and interconnected nature of the resources, have a great negative impact on these resources.

While identified as significant, the upland forest resources (located in the residential areas along the site's secondary ridges above the site's ravines) are of lower quality and contain fewer resource values than those located within the park or within the ravines as described below. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The unforested and developed areas along Skyline Boulevard contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 95 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 58 acres of unforested residential land along the Skyline ridge contain homes and farm fields, and has few resource values. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. The forest and upper creek tributaries located along the site's secondary ridges near Skyline warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. This land provides the following resource values: medium quality wildlife habitat, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, and scenic values. The forest edge near Skyline forms the western border

of these resources while the top of major ravines forms the eastern border. About 195 acres of residential land and 20 acres of open space land containing these resources warrant conservation through the application of the environmental conservation (EC) overlay zone.

Prohibit conflicting uses. The site's most significant resources (Doane Creek and its headwater tributaries, sensitive fauna and high quality forest habitat) are generally located in major ravines where Open Space zoning limits conflicting uses or where full protection would not preclude residential development because buildable areas on individual lots remain. (The Rff zoning within the site requires 20-acre minimum lot sizes, leaving considerable area for redistribution of conflicting uses.) Potential agricultural and forestry operations also would be minimally affected by full protection of these resources because of the steep slopes and limited area affected. These resources cover approximately 25 acres of residential land and provide the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. The decision for these high quality resource areas is to prohibit conflicting uses through the application of the environmental protection (EP) overlay zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
Rff	195	24.5

Approximately 219.5 acres of residential land are affected by environmental zones. Resource protection measures limit but do not preclude residential development within this site due to opportunities for on-site redistribution away from protected drainages; there is no estimated net change in development potential.

Resource Site 96

This 440-acre site forms the forested basins of several smaller creeks with outfalls near the St. John's Bridge. The resources available at this site provide high quality habitat for wildlife and include several protected and sensitive species identified in the inventory summary (pp. 149-151). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R10 and R7) uses permitted at the northern end of the site in the Whitwood Court Addition conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see 1987 Vacant Land Report in record).

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated five potential residential units at the west end of the Whitwood Court Addition. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the creek and forest resources within Whitwood Court Addition and at the base of the hillside along St. John's bridge ramp are of lower quality and contain fewer resource values than those located within the park or on residential lots noted above. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential development.

The developed areas of the site without creek contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 96 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 60 acres of developed residential land without drainageways in the Whitwood Court Addition do not warrant protection. The developed area along Mill Street (southern side of the Addition) contains some trees that do not provide significant resource value and do not warrant protection. Unforested, upland areas east of the St. John's Bridge ramp also do not warrant protection. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 22 acres of moderate quality forest and one creek located within the Whitwood Court Addition warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. This land provides the following resource values: medium quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, and scenic values. The creek passes through the middle of the Addition, while the forest borders the southern boundary of the site (and does not include the trees interspersed on developed lots). These resources are slightly disturbed by forest edge effect and can be carefully developed to avoid or control adverse resource impacts. Small, disturbed drainage outfalls near St. Helens Road, and disturbed forest along the St. John's Bridge ramp

near the bridge (to the north) and near the quarry (to the south) , also warrant conservation. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's more significant resources (creeks, sensitive and protected fauna, interior forested habitat) are located principally in areas zoned Open Space (approximately 335 acres) with limited conflicting uses. Interior forested habitat covers residential land at the top (and far western end) of Whitwood Court and a significant creek crosses three residential lots along the southern end of the Addition. Together, these high quality resource areas total 22.5 acres. Full protection of these areas would generally not affect housing opportunities since buildable areas on individual lots remain; however, development of an estimated five residential units bordering Forest Park would be precluded. The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. Because of the high significance of these resources, full protection is warranted. To mitigate the potential housing loss, a transfer of development rights provision is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RFf	0	8
RF	0	1.5
R10	14.5	13
R7 (R5)	7	0

Approximately 44 acres of residential land are affected by environmental zones. Resource protection measures limit new residential development within this site. The application of protection zoning reduces housing potential by five units; though this land is not needed for housing, the loss is offset by housing transfer provisions contained in the Skyline Plan District.

Resource Site 97

This 315-acre site forms the basin of Springville Creek. The resources available at this site include significant forest habitat with remnant old growth stands and rare plants identified in the inventory summary (pp. 153-155). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted along

lower Springville Road and along Skyline Boulevard conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

Most of this site is zoned Open Space and is part of Forest Park. As discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated seven potential residential units. The property is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest resources along Skyline, Springville and Germantown Roads are of lower quality and contain fewer resource values than those located within the park or on the residential lots noted above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The unforested, residential land adjacent to Skyline, Springville and Germantown Roads contain low quality, degraded resources. The economic value of this land for industrial and residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 97 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 8 acres of unforested land near the intersection of Springville and Germantown Roads and 8 acres of unforested, partially developed land along Skyline Boulevard contain low quality resources that do not warrant protection. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 15 acres of moderate quality upland forest (slightly disturbed due to edge effect) can support controlled housing development which avoids resource disturbance. This land provides the following resource values: habitat for wildlife, slope stabilization, erosion control, and scenic values and warrants conservation. This forest is located between lower Springville and

Germantown Roads, on land above the Springville Creek ravine, and includes the forested portions of the Skyline ridgetop. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (creeks and ravines, rare plants, mature forest habitat) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources cover 284 acres with approximately 11 acres located on residential land (along a forested ravine between lower Springville and Germantown Roads, and along headwater ravines dropping from the Skyline ridge). The resources provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, and scenic values. Full protection generally would not affect residential development opportunities since buildable areas on individual lots remain. However, development of an estimated seven residential units (in the lower Springville ravine) could be precluded. Because of the high significance of this forested ravine, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RFf	4.5	3.5
RF	0.8	0.9
R10	5.5	3
R7(R5)	4.5	3.5

Approximately 26 acres of residential land are affected by environmental zones. Resource protection measures limit new residential development within this site. The application of protection zoning will reduce development potential by seven units; though not considered needed for housing, this loss is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 98

This 300-acre site contains several smaller drainage basins with intermittent creeks, old growth forest remnants, and rare fauna. The resources available at this site are identified in the inventory summary (pp. 157-159). Site resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential uses permitted in the Waldemere and Glen Harbor Additions along St. Helens and lower Germantown Roads and the

heavy industrial use on one lot between the two Additions at St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record). City-wide there is a surplus of industrial land including heavy industrial land which is reserved for such use through industrial sanctuary designation (see p. 73). Resource land within this site is therefore not needed for industrial use.

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated four potential residential units. The property is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the upland forest and drainageways in the Waldemere and Glen Harbor Additions are of lower quality and contain fewer resource values than those located within the park or on the residential lots noted above. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential and industrial development.

The developed or unforested areas without drainages near St. Helens Road contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 98 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 34 acres of unforested uplands and developed residential land (including treed areas along the bottom of Germantown Road) in the Waldemere and Glen Harbor Additions are of low resource value and do not warrant protection. With the exception of three significant creeks which pass through this area, the decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Three creeks and approximately 34 acres (note: different than 34 acres discussed above) of medium quality forest generally located above 200 ft. elevation in the Waldemere and Glen Harbor Additions warrant conservation because, as discussed above, this land contains significant yet lower quality resources

and can be carefully developed for housing and industry without significant resource harm. This land provides the following resource values: wildlife habitat, slope stabilization, sediment trapping, erosion control, surface drainage, and scenic values. The forest is disturbed from human use and edge effect (up to 1,000 ft. along lower Germantown Road). Similar disturbed forest is found on the industrial lot on St. Helens Road at the end of the site's primary drainage. These resources provide Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (creeks, rare fauna, upland forest habitat) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources are generally found at elevations above 300 feet, though the site's primary creek extends all the way to the base of the hillside. The resources provide the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, scenic and recreational values. Approximately 8 acres of these resources lie on residential land, most of which is on lots landlocked within Forest Park. Full protection generally would not affect housing potential since substantial buildable areas on individual lots remain; however, development of an estimated four residential units south of Germantown Road would be precluded. Potential agricultural and forestry operations on this land would also be precluded; however, these uses are not commercially viable given the properties' small area, steep slopes and lack of access. Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	0.3	5
R10	26.5	2
R7(R5)	8	0.8
R5	0.8	0
IH	0.3	0

Approximately 43 acres of residential land and 0.3 acres of industrial land are affected by environmental zones. Resource protection measures limit conflicting uses within this site and will reduce housing potential by four units; though not

considered needed for housing, this loss is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 99

This 206-acre site forms the upper basin of Linnton Creek. The resources available at this site include several headwater tributaries, sensitive fauna and a rare forested wetland identified in the inventory summary (pp. 161-163). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R10 and RF) uses permitted along Skyline Boulevard and one commercial (CN2) use at Skyline and Germantown conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Two vacant lots within this site were identified as needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record). One of these lots (TL 21) was developed in 1990, while the other (TL 22) remains vacant and can support up to eight housing units. The rear portion of Tax Lot 22 contains significant resources and adequate non-resource land remains to support the potential eight units.

Most of this site is zoned Open Space and is part of Forest Park. As discussed in more detail below, full protection of this site's high quality resources would have limited impact on residential land (since resources are located on the far back portions of five lots) and no impact on commercial uses. Even limited residential development (at the backs of the lots) would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest resources along the Skyline ridge are of lower quality and contain fewer resource values than those located within the park or on the residential lots noted above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The unforested, developed residential land adjacent to Skyline Boulevard contain low quality, degraded resources. The social (housing) and economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 99 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 9 acres of unforested or developed residential land bordering Skyline Boulevard contain resources of low significance which do not warrant protection. Additionally, the level, forested front acre of the vacant residential lot (TL 22) is of marginal resource value while being needed for housing. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately 15 acres of moderate quality upland forest (slightly disturbed due to edge effect) warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing and industry without significant resource harm. This land provides the following resource values: habitat for wildlife, slope stabilization, erosion control, and scenic values. This forest covers residential and (0.4 acres of) commercial land, and generally extends north from its edge near Skyline to the top of the nearby ravines. This land, which includes nearly an acre of the vacant TL 22, can be carefully developed in such a way as to avoid or control adverse resource impacts. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (forested wetland, sensitive fauna, creeks and riparian areas, adjacent forested slopes) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources cover 182 acres with approximately 18 acres located on residentially-zoned land in forested ravines north of Skyline and in the forested wetland region off of Newton Road. The resources provides the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, flood storage and desynchronization, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. Full protection would not reduce housing potential because substantial buildable areas on individual lots remain. Agricultural and forestry operations would be precluded within these areas; however, the land is of low productivity for these uses (due to steep slopes and a low projected timber return—\$38 per acre per year). The decision for these significant resource areas is to prohibit conflicting uses through the application of the environmental protection (EP) zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	2.2	18
R10	12.5	0
CN2	0.4	0

Approximately 33 acres of residential and 1/2 acre of commercial land are affected by environmental zones. Resource protection measures limit new conflicting uses within this site. The vacant lot identified as needed for housing remains fully developable; there is no estimated net change in development potential for this site.

Resource Site 100

This 189-acre site forms the lower basin of Linnton Creek (see Site 99). The resources available at this site include a rare, forested wetland and sensitive fauna identified in the inventory summary (pp. 165-167). Site resource values are described under Decisions, below. These resources and values are described further in Chapter 5 (pp. 31-68). Since the entire site is natural park land and zoned Open Space, conflicting uses are limited to potential new park facilities. No such facilities are planned, and any potential future uses will be addressed through a Natural Resources Management Plan for Forest Park.

Conclusion

Prohibiting conflicting uses would have no adverse effects because the site is intended to be preserved in its natural state as part of Forest Park. Limiting or allowing conflicting uses does not adequately protect the site's significant resources. The site's resources warrant full protection.

Decisions

The decision for Site 100 is to prohibit conflicting uses. The entire site contains significant resources—forested seep wetland, sensitive fauna, wildlife habitat, creek, forest, open space and groundwater. These resources provide important values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, air and water purification, groundwater recharge and discharge, recreational and scenic values. This decision is implemented through the application of the environmental protection (EP) overlay zone.

Resource Site 101

This 256-acre site forms the basin of several intermittent creeks which drain into the Willamette River. The resources available at this site include forest habitat with remnant old growth stands and rare and sensitive fauna identified in the inventory summary (pp. 169-171). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R10 and R5) uses permitted in the Clark Terrace Addition and along St. Helens Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated four potential residential units. The

property is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest resources near the boundaries of the Clark Terrace Addition are of lower quality and contain fewer resource values than those located within the park or on the residential lots noted above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The unforested, residential land in the Clark Terrace Addition and along St. Helens Road contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 101 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 22 acres of unforested or developed land in the Clark Terrace Addition, including a narrow band of disturbed land along St. Helens Road contain low quality resources that do not warrant protection. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 18 acres of medium quality forest bordering Forest Park in the Clark Terrace Addition and along St. Helens Road warrant conservation because, as discussed above, this land contains significant yet lower quality resources and controlled development can avoid significant resource harm. This 18-acre forest land provides the following resource values: wildlife habitat, slope stabilization, erosion control, and scenic values. These areas generally extend from the forest edge uphill to Forest Park, except near the western end of the Addition where two creek ravines of high significance cross one large property (TL 13). The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone.

Prohibit conflicting uses. The site's most significant resources (rare and sensitive fauna, creek corridors, forested slopes with old growth) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources cover 216 acres with approximately 6 acres located on several small lots within Forest Park, and along two ravines at the north and south ends of the

large residential lot (TL 13). The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. Full protection generally would not affect housing potential since buildable areas on individual lots remain; however, development of an estimated four housing units on lots surrounded by Forest Park would be precluded. Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
R10	6	5.5
R10(R5)	2.8	0
R5	9	0.3

Approximately 24 acres of residential land are affected by environmental zones. Resource protection measures limit conflicting uses within this site and will reduce housing potential by four units; though not considered needed for housing, this loss is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 102

This 156-acre site forms the upper basin of Newton Creek. The resources available at this site include protected and sensitive species identified in the inventory summary (pp. 173-75). Site resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R10 and RF) uses permitted north of Newton Road conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

As discussed in more detail below, full protection of this site's high quality resources would have little impact on residential uses because little residential land contains these resources and individual lots would remain buildable. Even limited residential development of this land would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest resources along the secondary ridge north of Skyline are of lower quality and contain fewer resource values than those described above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The developed, unforested areas along Skyline Boulevard contain low quality, degraded resources. This land can provide beneficial housing opportunities and its economic value outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 102 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 8 acres of unforested or developed land in the Kruse Heights Addition and along Skyline Boulevard. This land includes a broad ridgetop area near the western bend in Skyline that is forested but developed. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for these areas is to allow conflicting uses fully.

Limit conflicting uses. Approximately 28 acres of residential land along a secondary ridge north of Skyline contain medium quality forest habitat and minor drainageways that warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. This land is roughly triangular in shape and follows the ridge down slope to the confluence of the two primary tributaries to Newton Creek. This land provides the following resource values: wildlife habitat, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, and scenic values. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone.

Prohibit conflicting uses. The site's most significant resources (sensitive and protected fauna, principal creeks and riparian corridors, high quality forest habitat) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources cover 120 acres with approximately 13.5 acres (primarily creek corridors) located on residentially-zoned land. The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, scenic and recreational values. Fully protecting these resources would not reduce housing potential because

opportunities for on-site redistribution of housing sites remain. Agricultural and forestry operations would be excluded from these areas; however, the land is of low productivity for these uses due to steep slopes and low projected timber return (\$38 per acre per year). Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	24	13.5
R10	3.5	0

Approximately 41 acres of residential land are affected by environmental zones. Resource protection measures limit new conflicting uses in resource areas within this site; there is no estimated net change in development potential.

Resource Site 103

This 264-acre site contains the largest known stand of old growth Douglas fir within the City of Portland and provides high quality habitat for wildlife in the area, including five sensitive bird species. These and other site resources are identified in the inventory summary (pp. 177-179). Site resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (R10 and RF) uses permitted along the eastern and western boundaries of the site conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated 25 potential housing units. This residential property along the western boundary of the site is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest and creek resources along St. Helens Road are of lower quality and contain fewer resource values than those located within the park or on the residential property noted above. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential development.

Approximately two acres of developed land along St. Helens Road contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 103 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the conflicting use analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately two acres of developed residential land without drainages along St. Helens Road contain resources of low significance. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately three acres of residential land along the St. Helens Road contain medium quality forest habitat and two creeks. These resources warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can support controlled housing development without significant resource harm. This land provides the following resource values: habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, and scenic values. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (sensitive fauna, two primary creeks and their tributaries, forested upland slopes, old growth forest) are located principally in areas zoned Open Space with limited conflicting uses and warrant full protection. These resources cover 259 acres with approximately 68 acres located on residentially-zoned land along the western boundary of the site. The resources provides the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, scenic and heritage values. Full protection would not affect housing potential within R10 land along St. Helens Road since less than one acre would be affected and substantial buildable area on individual lots remain. Development of an estimated 25 housing units on the RF land within Forest Park would be precluded. Agricultural and forestry operations would be precluded on this same land; however, the land is of low productivity for these uses (steep slopes all but preclude agriculture and projected timber return is low—\$31 per acre per year). Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected

properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
R10	3	1
RF	0	67

Approximately 71 acres of residential land are affected by environmental zones. Resource protection measures limit conflicting uses within this site and will reduce housing potential by an estimated 25 units; though this land is excluded from the buildable lands inventory, the loss of potential housing is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 104

This 164-acre site contains a free-flowing seasonal creek that feeds a large palustrine wetland habitat area. These and other site resources are identified in the inventory summary (pp. 181-183). Site resource values are described under Decisions, below. These resources and values are described further in Chapter 5 (pp. 31-68). The residential (R10 and RF) uses permitted at the northern end of the site near St. Helens Road and in the Harborton and Lambert Additions conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see 1987 *Vacant Land Report* in record).

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated three potential residential units. The property (located off the west end of Harborton Drive) is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest and creek resources in the Harborton and Lambert Additions are of lower quality and contain fewer resource values than those located within the park or on the residential property noted above. Limiting conflicting uses here provides an appropriate balance of creek and forest conservation and controlled residential development.

Approximately 10 acres of developed residential land along Mountain View Road near St. Helens Road contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 104 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the conflicting use analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 10 acres of unforested residential land without drainages along Mountainview Road in the Lambert Addition contain resources of low significance. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately three acres of lowlying residential (R10) land in the Lambert Addition contain medium quality forest habitat and riparian corridors (generally located below 250 ft. elevation). These resources warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can support controlled residential development without significant resource harm. This land provides the following resource values: wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, and scenic values. This land can be carefully developed for housing provided adverse resource impacts are controlled. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources—creek and riparian corridor, forested upland slopes (generally above 250 ft. elevation)—are located principally in areas zoned Open Space with limited conflicting uses. These resources cover 151 acres with approximately 7 acres located on residentially-zoned land located off the west end of Harborton Drive. These resources provide the following values: high quality habitat for wildlife, domestic water supply, surface drainage, slope stabilization, sediment trapping, erosion control, groundwater recharge and discharge, microclimate amelioration, and scenic values. Full protection would not affect housing potential within R10 land along Harborton Road. Development of an estimated three housing units on the RF land within Forest Park would be precluded. This land is generally too small and too steep for viable commercial farm and forestry operations. Because of the high significance of the resources, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented

through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	0	7
R10	3	0

Approximately 10 acres of residential land are affected by environmental zones. Resource protection measures limit conflicting uses within this site and will reduce housing potential by an estimated three units; though this land is excluded from the buildable lands inventory, this loss of potential housing is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 105

This 34-acre site is composed of high quality forested, scrub/shrub and emergent wetlands that provide out-of-channel rearing areas for coho salmon, cutthroat trout and steelhead. The site provides high quality wildlife habitat and a unique link between the Northwest Hills and the Willamette River. These resources are identified in the inventory summary (pp. 185-187) and resource values are identified under Decisions, below. The site has no conflicting uses because it is fully protected with an Open Space base zone and a River Natural overlay zone.

Conclusion

The entire site contains wetlands of high significance which were fully protected through the Willamette Greenway Plan. The site provides the following important resource values: habitat for fish and wildlife, surface drainage, flood storage and desynchronization, sediment trapping, erosion control, water purification, and scenic values.

Decisions

The decision for Site 105 is to prohibit conflicting uses for the entire (34-acre) site. This decision requires no further implementation since existing zoning carries out the full protection program.

Resource Site 106

This 130-acre site forms the lower Miller Creek basin, the only creek system in the plan area that supports fish. The resources available at this site include several sensitive and protected species and remnant old growth stands as identified in the inventory summary (pp. 189-191). Site resource values are described under Decisions, below. These resources and values are described further in Chapter 5 (pp. 31-68). Since the entire site is natural park land and zoned Open Space, conflicting uses are limited to potential new park facilities. No such facilities are planned, and any potential future uses will be addressed through a Natural Resources Management Plan for Forest Park.

Conclusion

Prohibiting conflicting uses would have no adverse effects because the site is intended to be preserved in its natural state as part of Forest Park. Limiting or allowing conflicting uses does not adequately protect the site's significant resources. The site's resources warrant full protection.

Decisions

The decision for Site 106 is to prohibit conflicting uses. The site's significant resources—year-round creek, spawning grounds, sensitive and protected species, forest with old growth stands, and groundwater resources—warrant full protection. These resources provide important values: habitat for fish and wildlife, surface drainage, groundwater recharge and discharge, flood storage and desynchronization,

sediment trapping, erosion control, microclimate amelioration, scenic, educational and heritage values. This decision is implemented through the application of the environmental protection (EP) overlay zone.

Resource Site 107

This 184-acre site forms the headwaters of the southern branch of Miller Creek, a year-round creek supporting anadromous fish. The resources available at this site provide high quality habitat for wildlife and include several sensitive species identified in the inventory summary (pp. 193-195). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (RF) uses permitted along the eastern and southern boundaries of the site conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

Most of this site is zoned Open Space and is part of Forest Park. However, as discussed in more detail below, full protection of this site's high quality resources could preclude development of an estimated 11 potential residential units. The property (along the northeastern boundary of the site) is surrounded by park land containing similar high quality resources and is not needed for housing. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources.

While identified as significant, the forest resources along the Skyline ridge are of lower quality and contain fewer resource values than those located within the park or on the residential property noted above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

Approximately three acres of developed residential land along Skyline Boulevard contain low quality, degraded resources. The economic value of this land for residential development outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 107 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the conflicting use analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately three acres of flat residential land without drainages east of and bordering Skyline Boulevard contain degraded forest resources of low significance. Though not considered needed for housing, this land can provide beneficial housing opportunities without harm to significant resources. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately 19 acres of residential land north of Skyline Boulevard contain medium quality forest and riparian habitat. This land transitions into more significant creek and habitat values at the top of the major ravine (at approximately the 950 ft. elevation). These resources warrant conservation because, as discussed above, this land contains significant resources but can support controlled residential developed without significant resource harm. This land provides the following resource values: habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, and scenic values. This land can be carefully developed for housing provided adverse resource impacts are controlled. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (Miller Creek headwaters, sensitive fauna, forested upland slopes) are located principally in areas zoned Open Space with limited conflicting uses. These resources cover 162 acres with approximately 38 acres located on residentially-zoned land near Skyline Boulevard at the south end of the site and deep within Forest Park in the northeastern corner of the site. The land provides the following resource values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, and scenic values. Full protection would not affect housing potential along Skyline Boulevard since opportunities for on-site redistribution of housing units remain. Development of an estimated 11 potential housing units on the RF land within Forest Park would be precluded. Agricultural and forestry operations would be precluded on this land; however, the land is of low productivity for these uses (steep slopes and low projected timber return—\$31 per acre per year). Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. To mitigate the potential housing loss, a transfer of development rights option is applied to the affected properties. The decision to prohibit conflicting uses is implemented through the application of the environmental protection (EP) zone. The transfer of development rights provision is implemented through creation of the Skyline Plan District for the Northwest Hills area.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	19	38

Approximately 57 acres of residential land are affected by environmental zones. Resource protection measures limit conflicting uses within this site and will reduce housing potential by an estimated 11 units; though this land is excluded from the buildable lands inventory, this loss of potential housing is offset by development transfer provisions contained in the Skyline Plan District.

Resource Site 108

This 194-acre site forms the headwaters of the central branch of Miller Creek, a year-round creek supporting anadromous fish. The resources available at this site provide high quality habitat for wildlife and include several sensitive species identified in the inventory summary (pp. 197-198). Additional resource values are described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (RF) uses permitted north and east of Skyline Boulevard conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

On balance, as discussed in more detail below, full protection of high quality resources located in Forest Park and in major ravines on residential land south of the park is more important than even limited future development. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources. Full resource protection would have limited impact on housing development because substantial buildable areas on the two affected lots remain.

While identified as significant, the upland forest resource bordering the agricultural fields are of lower quality and contain fewer resource values than those located in the park and major ravines noted above. Limiting conflicting uses here provides an appropriate balance of forest conservation and controlled residential development.

The two existing agricultural areas along Skyline Boulevard contain low quality resources. This land is presently farmed and has potential reuse value for housing development which outweighs the natural resource value. Allowing conflicting uses fully is therefore appropriate.

Decisions

The decision for Site 108 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 15 acres of farmed agricultural land along Skyline Boulevard contain resources of low significance. Though not considered needed for housing, this land can provide housing opportunities without harm to significant resources. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately 48 acres of residential (RF) land north and east of Skyline Boulevard contain medium quality upland forest which warrant conservation because, as discussed above, this land contains significant yet lower quality resources and can be carefully developed for housing without significant resource harm. These resources are located between the forest edge and the tops of the site's major ravines. This land provides the following resource values: habitat for wildlife, domestic water supply, groundwater recharge and discharge, slope stabilization, erosion control, and scenic values. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (rare and sensitive fauna, Miller Creek headwaters, high quality upland forest, groundwater) are located principally in areas zoned Open Space with limited conflicting uses. These resources cover 131 acres with approximately 24 acres located along major ravines on residential land near Skyline Boulevard in the central part of the site. These resources provide the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, surface drainage, groundwater recharge and discharge, microclimate amelioration, and scenic values. Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	48	23.5

Approximately 72 acres of residential land are affected by environmental zones. Existing residential development would not be affected by resource protection measures. Resource protection measures limit new conflicting uses in resource areas within this site; there is no estimated net change in development potential.

Resource Site 109

This 119-acre site forms the headwaters of the northern branch of Miller Creek, a year-round creek supporting anadromous fish. The resources available at this site provide high quality habitat for wildlife and include several sensitive species identified in the inventory summary (pp. 201-203). Additional resource values are

described under Decisions, below. These resources and resource values are described further in Chapter 5 (pp. 31-68). The residential (RF) uses permitted east of Skyline Boulevard conflict with the identified Goal 5 resources. The nature of these uses and their resource impacts are described in Chapter 6 (pp. 82-90).

Conclusion

Land within this site is not needed for urban uses based on the buildable lands analysis conducted in 1987 for Goal 10 periodic review (see *1987 Vacant Land Report* in record).

On balance, as discussed in more detail below, full protection of high quality resources located along the western branch of Miller Creek is more important than even limited future development. Even limited residential development would, due to the delicate and interconnected nature of the high quality resources, have a great negative impact on these resources. Full protection would not preclude residential development, however, because all affected residential lots along Skyline Boulevard, Newberry Road and Cedar Street would remain buildable.

While identified as significant, the upland forest resources bordering the high quality Miller Creek resources noted above are of generally lower quality and contain fewer resource values. In addition, a small forested drainage at the intersection of Skyline and McNamee Roads can support controlled development without significant resource harm. Limiting conflicting uses in these areas provides an appropriate balance of forest and drainage conservation and controlled residential development.

The developed, farmed or unforested areas along and south of Cedar Street and, except for the drainageway noted above, in the northwest corner of the site contain low quality, degraded resources. The economic value of this land outweighs the natural resource value. Allowing conflicting uses is therefore appropriate.

Decisions

The decision for Site 109 is to allow, limit and prohibit conflicting uses commensurate with the significance of the identified Goal 5 resources and the findings of the conflicting uses analysis. Following is a review of each decision and affected resource areas within the site.

Allow conflicting uses fully. Approximately 49 acres of developed, farmed or unforested residential land along the Skyline ridge (as described above) contain resources of low significance. Though not considered needed for housing, this land can provide housing opportunities without harm to significant resources. The decision for this land is to allow conflicting uses fully.

Limit conflicting uses. Approximately 52 acres of residential land east of Skyline Boulevard and north of Cedar Street contain medium quality upland forest. A small, 3-acre drainageway east of the intersection of Skyline Boulevard and

McNamee Road is of medium significance. This land warrants conservation because, as discussed above, this land contains significant yet lower quality resources and can support limited housing without significant resource harm. This land provides the following resource values: habitat for wildlife, domestic water supply, groundwater recharge and discharge, surface drainage, slope stabilization, sediment trapping, erosion control, and scenic values. The decision for these resources is to balance conflicts by limiting conflicting uses. This decision is implemented through the application of the environmental conservation (EC) overlay zone which allows development so long as impacts on resources are controlled and mitigated.

Prohibit conflicting uses. The site's most significant resources (Miller Creek headwaters, high quality riparian forest, sensitive fauna) are located on 15 acres of residentially-zoned land; this area consists of the back portions of lots located between Newberry Road and Cedar Street. These resources provide the following values: high quality habitat for wildlife, slope stabilization, sediment trapping, erosion control, domestic water supply, surface drainage, water purification, groundwater recharge and discharge, and scenic values. Full protection of these resources would have limited impact on residential development because substantial buildable areas on individual lots remain. Because of the high significance of these resources, the decision for this land is to prohibit conflicting uses. This decision is implemented through the application of the environmental protection (EP) zone.

Current Zoning	Estimated Acreage Affected by EC Zone	Estimated Acreage Affected by EP Zone
RF	55	15

Approximately 70 acres of residential land are affected by environmental zones. Resource protection measures limit new conflicting uses in resource areas within this site; there is no estimated net change in development potential.